N1 (8), 2025

Journal of modern medicine

Zamonaviy tibbiyot jurnali

Журнал современной медицины

ISSN: 2992-8958 (online)

ZAMONAVIY TIBBIYOT JURNALI

ЖУРНАЛ СОВРЕМЕННОЙ МЕДИЦИНЫ

JOURNAL OF MODERN MEDICINE

Choraklik ilmiy amaliy jurnal
2023 yildan buyon nashr etiladi

№1(8) Tom 2, 2025

Bosh muharrir: M.M. Madazimov
Bosh muharrir o'rinbosari: K.Z. Salohiddinov
Mas'ul kotib: A.B. Mamadaliyev
Texnik kotib: M.N. Xakimov

TAHRIRIYAT KENGASHI:
Z.S. Salohiddinov, Q.T. Xudayberdiev, X.T. Musashayxov, N.S. Xakimov, M.F. Nishonov

TAHRIRIYAT HAY'ATI:

Michael Vaiman (Tel Aviv)
MD, professor

Wolfgang Sharek (Rostok)
DSc, professor

D.B. Asranqulova (Andijon)
t.f.d., professor

Sh.N. Eranov (Samarqand)
PhD, dotsent

A.A. Gofurov (Andijon)
t.f.d., professor

M.E. Irismetov (Toshkent)
t.f.d., professor

G.M. Kariyev (Toshkent)
t.f.d., professor

M.Yu. Karimov (Toshkent)
t.f.d., professor

U.X. Musashayxov (Andijon)
DSc, dotsent

D.A. Nabieva (Toshkent)
t.f.d., professor

M.M. Nosirov (Andijon)
DSc, dotsent

U.M. Rustamova (Toshkent)
t.f.d., dotsent

Q.Q. Tursunov (Andijon)
PhD, dotsent

D.D. Usmonova (Toshkent)
t.f.d., professor

D.M. Xakimov (Andijon)
t.f.d., professor

R.A. Xakimova (Andijon)
t.f.n., dotsent

TA'SISCHILAR:
ANDIJON DAVLAT TIBBIYOT INSTITUTI
VA "NASHR MATBAA UYI" MChJ
Jurnal O'zbekiston Respublikasi Prezidenti Administratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan ro'yxatga olingan (26.06.2023-son №095109).
Tahririyat manzili: O'zbekiston Respublikasi, 170100,
Andijon, Yu.Otabekov ko;chasi, 1-uy.
Telefon: +998335157555
Email: nashruzjournals@gmail.com
Sayt: nashruz.uz
t.me: @nashruzjournals

O'zbekiston Respublikasi Oliy ta'lim, fan va innovatsiyalar vazirligi huzuridagi Oliy attestatsiya komissiyasi Rayosatining 2024 yil 7 iundagi 355/6-son qarori bilan tibbiyot fanlari bo'yicha milliy ilmiy nashrlar ro'yxatiga kiritilgan

ISSN: 2992-8958 (online)

JOURNAL OF MODERN MEDICINE

ЖУРНАЛ СОВРЕМЕННОЙ МЕДИЦИНЫ

ZAMONAVIY TIBBIYOT JURNALI

Quarterly scientific and practical journal
Published since 2023

№1(8) Volume 2, 2025

Chief editor: M.M. Madazimov
Deputy Chief Editor: K.Z. Salokhiddinov
Executive secretary: A.B. Mamadaliev
Technical processing and layout: M.N. Khakimov

EDITORIAL BOARD:
Z.S. Salokhiddinov, K.T. Khudayberdiev, H.T. Musashaykhov, N.S. Khakimov, M.F. Nishonov

EDITORIAL COUNCIL:

Michael Vaiman (Tel Aviv)
MD, PhD

Wolfgang Scharek (Rostock)
DSc, professor

D.B. Asrankulova (Andijan)
DSc, professor

Sh.N. Eranov (Samarqand)
PhD, associate professor

A.A. Gofurov (Andijan)
DSc, professor

M.E. Irismetov (Tashkent)
DSc, professor

G.M. Kariev (Tashkent)
DSc, professor

M.Yu. Karimov (Tashkent)
DSc, professor

U.H. Musashaykhov (Andijan)
DSc, associate professor

D.A. Nabieva (Tashkent)
DSc, professor

M.M. Nosirov (Andijan)
DSc, dotsent

U.M. Rustamova (Tashkent)
DSc, associate professor

K.K. Tursunov (Andijan)
PhD, associate professor

D.D. Usmanova (Tashkent)
DSc, professor

D.M. Khakimov (Andijan)
DSc, professor

R.A. Khakimova (Andijan)
PhD, associate professor

FOUNDERS:
ANDIJAN STATE MEDICAL INSTITUTE
AND "NASHR MATBAA UYI" LLC
The journal is registered by the Agency for Information and Mass Communications under the Administration of the President of the Republic of Uzbekistan (№095109 dated 26.06.2023).
Editorial address: Republic of Uzbekistan, 170100,
Andijan, st. Yu. Otabekova, house 1.
Phone: +998335157555
Email: nashruzjournals@gmail.com
Website: nashruz.uz
t.me: @nashruzjournals

The journal is included in the list of national scientific publications on medical sciences by decision of the Higher Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan No. 355/6 dated June 7, 2024.

ISSN: 2992-8958 (online)

ЖУРНАЛ СОВРЕМЕННОЙ МЕДИЦИНЫ

JOURNAL OF MODERN MEDICINE

ZAMONAVIY TIBBIYOT JURNALI

Ежеквартальный научно-практический журнал
Издается с 2023 года

№1(8) Том 2, 2025

Главный редактор: М.М. Мадазимов
Заместитель главного редактора: К.З. Салохиддинов
Ответственный секретарь: А.Б. Мамадалиев
Технический секретарь: М.Н. Хакимов

РЕДАКЦИОННАЯ КОЛЛЕГИЯ:
З.С. Салохиддинов, К.Т. Худайбердиев, Х.Т. Мусашайхов, Н.С. Хакимов, М.Ф. Нишонов

РЕДАКЦИОННЫЙ СОВЕТ:

Michael Vaiman (Tel Aviv)
MD, PhD

Wolfgang Scharek (Rostock)
DSc, professor

Д.Б. Асранкулова (Андижан)
д.м.н., доцент

Ш.Н. Эранов (Самарканд)
к.м.н., доцент

А.А. Гофуров (Андижан)
д.м.н., профессор

М.Э. Ирисметов (Ташкент)
д.м.н., профессор

Г.М. Кариев (Ташкент)
д.м.н., профессор

М.Ю. Каримов (Ташкент)
д.м.н., профессор

У.Х. Мусашайхов (Андижан)
д.м.н., доцент

Д.А. Набиева (Ташкент)
д.м.н., профессор

М.М. Носиров (Андижан)
д.м.н., доцент

У.М. Рустамова (Ташкент)
д.м.н., доцент

К.К. Турсунов (Андижан)
к.м.н., доцент

Д.М. Хакимов (Андижан)
д.м.н., профессор

Д.Д. Усманова (Ташкент)
д.м.н., профессор

Р.А. Хакимова (Андижан)
к.м.н., доцент

УЧРЕДИТЕЛИ:
АНДИЖАНСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ ИНСТИТУТ И ООО «NASHR MATBAA UYI»
Журнал зарегистрирован Агентством информации и массовых коммуникаций при Администрации Президента Республики Узбекистан (№095109 от 26.06.2023).
Адрес редакции: Республика Узбекистан, 170100,
г. Андижан, ул. Ю. Отабекова, дом 1.
Телефон: +998335157555
Email: nashruzjournals@gmail.com
Сайт: nashruz.uz
t.me: @nashruzjournals

Журнал включен в перечень национальных научных изданий по медицинским наукам решением ВАК при Министерстве высшего образования, науки и инноваций Республики Узбекистан № 355/6 от 7 июня 2024 год

UDC: 616-08-035

STAGES OF ATHEROSCLEROTIC FOCUS DEVELOPMENT AND TYPES OF UNSTABLE PLAQUES – PATHOPHYSIOLOGICAL AND HISTOLOGICAL CHARACTERISTICS

Muydinov J. I.
Fergana Institute of Public Health Medicine

Abstract. The literature review is devoted to the current state of the problem of atherosclerotic plaque, the stages of its formation from a lipid spot to an unstable atherosclerotic plaque and different types of instability (lipid, inflammatory, dystrophic-necrotic), including pathophysiological (mechanisms of formation and development) and pathomorphological (histological description with illustrations) characteristics of the process.

Keywords: *unstable plaque, pathophysiology, atherosclerotic lesions of coronary arteries, types of instability, histology.*

ATEROSKLEROTIK FOKUSNING RIVOJLANISH BOSQICHLARI VA BEQAROR BLYASHKA TURLARI-PATOFIZIOLOGIK VA GISTOLOGIK XUSUSIYATLAR

Muydinov J.I.
Farg'ona Sog'liqni saqlash tibbiyot instituti

Annotatsiya. Adabiyotlarni ko'rib chiqish aterosklerotik blyashka muammosining hozirgi holatiga, uning lipid nuqtasidan beqaror aterosklerotik blyashka hosil bo'lish bosqichlariga va beqarorlikning turli turlariga (lipid, yallig'lanish, distrofik-nekrotik), shu jumladan patofiziologik (shakllanish va rivojlanish mexanizmlari) va patomorfologik (gistologik tavsif bilan) bag'ishlangan. illyustratsiyalar) jarayonning xususiyatlari.

Kalit so'zlar: *beqaror blyashka, patofiziologiya, koronar arteriyalarning aterosklerotik shikastlanishi, beqarorlik turlari, gistologiya.*

СТАДИИ РАЗВИТИЯ АТЕРОСКЛЕРОТИЧЕСКОГО ОЧАГА И ТИПЫ НЕСТАБИЛЬНЫХ БЛЯШЕК – ПАТОФИЗИОЛОГИЧЕСКИЕ И ГИСТОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ

Муйдинов Ж.И.
Ферганский институт общественного здравоохранения

Абстрактный. Обзор литературы посвящен современному состоянию проблемы атеросклеротической бляшки, этапам ее формирования от липидного пятна до нестабильной атеросклеротической бляшки и различным типам нестабильности (липидной, воспалительной, дистрофически-некротической), включая патофизиологические (механизмы образования и развития) и патоморфологические (гистологическое описание с указанием иллюстрации) характеристики процесса.

Ключевые слова: *нестабильная бляшка, патофизиология, атеросклеротические поражения коронарных артерий, типы нестабильности, гистология.*

Introduction. According to many studies, the development of atherosclerosis is based on the consistent interaction of many etiopathogenetic factors, ultimately leading to the formation of an atherosclerotic plaque [1,3]. The initial stage of atherosclerosis is characterized by the appearance of spots and stripes containing lipids in the intima of the arteries. [5,6] Lipid spots appear in the arteries from early childhood. At the age of 10, lipid spots occupy about 10% of the

aortic intima, and by the age of 25 – from 30% to 50%. In the coronary arteries, lipoidosis occurs from 10–15 years, in the arteries of the brain – at the end of the third decade of life (by 35–45 years) [2,4].

Materials and methods. Lipid spots are small yellowish areas (up to 1.0–1.5 mm) in the intima of the aorta or large arteries. Lipid spots consist mainly of foam cells containing a large amount of lipids, especially cholesterol (CS), and T-lymphocytes (T-LY). Macrophages (MF) and smooth muscle cells (SMC) are also present in lipid spots. Lipid spots are characterized by predominantly intracellular accumulation of CS esters. Connective tissue formation is observed around lipid spots. As the pathological process progresses, connective tissue grows in the areas of lipid deposition, which leads to the formation of fibrous plaques, in the center of which a lipid core is formed. This is facilitated by an increase in the amount of lipids released as a result of apoptosis of SMC, MF and foam cells overloaded with cholesterol. Extracellularly located lipids impregnate the intima, forming a lipid core, which is an accumulation of atheromatous masses (lipid-protein detritus). Around the lipid core, a zone of connective tissue appears, initially rich in cellular elements (MF, foam cells, SMC, T-LF), collagen and elastin.

Results and discussion. A modern concept of 6 successive stages of atherosclerotic plaque development has been formulated [1]. The initial stages are characterized by gradual accumulation of lipids (stage 1), first intracellularly (stage 2), then extracellularly and formation of a lipid spot/strip (stage 3) and, further, a young atherosclerotic plaque (stage 4); then comes stage 5, characterized by development of fibrous plaque stroma with formation of fibrous capsule and fibrous cap of plaque; then stage 6 develops – unstable vulnerable plaque, which, in case of unfavorable outcome, is complicated by crack, rupture or rupture of fibrous cap and development of thrombosis with acute clinical manifestations. At the initial stage of formation of an atherosclerotic lesion, modification and, in general, dysfunction of endothelial cells occurs, manifested by: a) an increase in the permeability of the endothelium, especially for atherogenic, cholesterol-rich low-density lipoproteins (LDL), b) an increase in the adhesive properties of the endothelium, enhancing chemotaxis and migration of monocytes into the subendothelial space, c) a decrease in the vasodilating properties of the endothelium, which leads to a violation of local hemodynamics.

At the stage of lipid spot development, monocytes that have migrated to the subendothelial space are gradually transformed into MFs, which are activated and, via scavenger receptors, unregulatedly capture oxidized LDLs rich in cholesterol. The subsequent transformation of macrophages into cholesterol-loaded foam cells (FCs) leads to a gradual increase in first intracellular and then extracellular lipid accumulation in the subendothelial space, which is the morphological basis of the lipid spot/stripe [2]. At the stage of young plaque development, a lipid core is formed, which is then isolated from the surrounding tissues by a fibrous capsule containing collagen, proteoglycans, and activated SMCs that synthesize them. The area of the fibrous plaque capsule covering it from the side of the vessel lumen and called the "fibrous cap of the plaque" is the most vulnerable area in terms of the development of thinning, cracks, rupture and rupture. The progressive increase in the plaque collagenization process, observed at the next stage of the development of the atherosclerotic lesion – the stage of the fibrous plaque, occurs in parallel with the progressive accumulation of PC in the plaque core and the beginning of the development of their apoptosis. Activated MFs play an important role in the development of inflammation in fibrous plaque and the formation of unstable plaque, since they: a) secrete a significant amount of inflammatory cytokines that trigger a cascade of inflammatory changes in the lesion, b)

themselves actively produce and stimulate the production of tissue factor by endothelial cells, which enhances the penetration of monocytes, T-LF, neutrophils and other cells into the subendothelial space and into the plaque, c) produce a large number of active oxygen metabolites that activate oxidative changes in the plaque, especially the processes of lipid oxidation, cholesterol, through cytokines and chemokines, and also by increasing apoptosis processes in the plaque core, contribute to a decrease in the resistance of the fibrous cap of the plaque [3].

At the stage of development of unstable vulnerable plaque, the secretion of destructive metalloproteinases, which break down collagen and elastin of the fibrous cap of the plaque and aggravate destructive processes in the plaque core, becomes the dominant function of activated macrophages. The clinical and prognostic significance of the formed atherosclerotic plaque largely depends on the structure of its fibrous cap and the size of the lipid core. According to modern concepts [4], mature, formed atherosclerotic plaques are divided depending on their morphological structure into stable and unstable. Stable plaques are characterized by the presence of a well-defined dense fibrous cap, without its thinning throughout the entire length of the plaque and a small atheromatous core. Some plaques have calcium salt deposits at their base instead of an atheromatous core. A thickened fibrous cover of the plaque indicates a good reparative function of the intimal SMC. The cover of stable plaques consists of dense connective tissue, a significant part of which is made up of compactly located collagen fibers with a small amount of lipids and cellular elements - monocytes/MF, T-LF, SMC [5]. It is believed that the fibrous component of a stable plaque stenotic to the lumen of the artery predominates in volume over the lipid part and makes up more than 70% of the plaque [3]. There is data on a linear relationship between the degree of stenosis of the vessel lumen and the % content of acellular fibrous tissue and the lipid core of the plaque. Over time, a stable plaque can become fibrotic across almost its entire thickness, leading to critical stenosis of the vessel lumen.

A vulnerable unstable atherosclerotic plaque is a plaque in which a thrombogenic site is likely to form [4]. An unstable plaque or a plaque with a tendency to ulcerate and rupture has a cap of less than 65 μm with infiltration of MF and T-LF, a large lipid core relative to the entire plaque area of more than 40%. Increased neovascularization and a large number of PCs are observed around the core [2]. Currently, several histological types of vulnerable unstable plaques are distinguished [4], including fibroatheroma with a thin fibrous cap (lipid type), plaques with an increased content of proteoglycan or inflammation leading to erosion and thrombosis (inflammatory-erosive type) and plaques with necrosis/calcification (dystrophic-necrotic type). In the work of Naghavi M. et al., the results on different types of instability of atherosclerotic plaques are summarized and presented, among which, nevertheless, three main types are clearly distinguished - lipid, inflammatory and dystrophic-necrotic [5]. The lipid type of unstable plaques is characterized by the presence of a large atheromatous core (circular or eccentrically located) and thinning of the fibrous cap from 15 to 45 μm. The atheromatous core, occupying from 39.3% to 85.4% of the plaque area, is represented by atheronecrotic detritus with a high content of lipids, cholesterol crystals and accumulation of PC at the periphery. The fibrous cap often contains a significant amount of inflammatory cells (MF and T-LF) and single SMCs [6]. The degree of cap infiltration by inflammatory cells can vary widely from case to case and in different plaques in the same deceased. In the lipid type of unstable plaques, the most frequently observed degree of inflammatory cell infiltration of the fibrous cap is moderate and severe. The uneven distribution of MF and T-LF in different areas of the plaque, revealed by immunomorphological research

methods, indicates the activity of the inflammatory process in those areas of the fibrous cap where its ruptures are most frequently observed. The content of collagen fibers (the main component of the extracellular matrix, which determines the strength of the fibrous cap) in lipid type plaques is reduced. In most cases, an abundance of inflammatory cellular elements is observed between the loosely located and thinned collagen fibers [2].

Conclusion.Thus, an atherosclerotic plaque goes through a number of stages in the process of its development – from a lipid spot to atheromatosis, calcification and fibrosis with the development of complications in the form of ulceration, hemorrhage, thrombosis. In this case, the size of the plaque and the degree of stenosis of the vessel lumen can fluctuate significantly, regardless of its internal structure. At the same time, an indication for surgical treatment, regardless of the morphological heterogeneity of the atherosclerotic plaque, which determines its stability or instability, is the degree of stenosis of the vessel of more than 50%, causing significant local and systemic hemodynamic disturbances. In this regard, the morphology of an atherosclerotic plaque can determine not only the development of early postoperative complications, but also their nature (rupture, vessel thrombosis, embolic syndrome), as well as the possibility of carrying out differentiated corrective therapy in the rehabilitation period after surgical treatment [6].

Used literature:

1. Oganov R. G., Fomina I. G., Aronov D. M. et al. Cardiology: A guide for physicians. M.: Medicine, 2014; 847 p.
2. Donald D., Heistad H. Unstable Coronary-Artery Plaques. N. Engl. J. Med., 2013; 24 (11): 2285–2288.
3. Steinberg D. Atherogenesis in perspective: hypercholesterolemia and inflammation as partners in crime. Nature Medicine, 2012; 8: 1211–18.
4. Virmani R., Burke A. P., Farb A. et al. Pathology of the vulnerable plaque. J. Am. Coll. Cardiol., 2016; 47 (8 Suppl): C13-C18.
5. Gonzalez M. A., Selwyn A. P. Endothelial function, inflammation, and prognosis in cardiovascular disease. Am. J. Med., 2013; 115 (Suppl. 8A): 99S-106S.
6. Mas S., Touboul D., Brunelle A. et al. Lipid cartography of atherosclerotic plaque by cluster-TOF-SIMS imaging. The Analyst, 2017; 132:24.

UDC: 616-08-035

MODERN CONCEPTS OF THE MECHANISMS OF ATHEROSCLEROSIS DEVELOPMENT

Muydinov J.I.
Fergana Institute of Public Health Medicine

Abstract. Atherosclerosis is a chronic disease resulting from a disorder of lipid and protein metabolism, characterized by damage to the integrity of the vascular wall of elastic and muscular-elastic arteries in the form of progressive focal deposition of lipids and proteins in the intima, as well as overactivation of fibrocytes with subsequent reactive proliferation of connective tissue. The main morphological expression of atherosclerosis is an atherosclerotic plaque (atheroma). An atherosclerotic plaque, narrowing the lumen of the artery, leads to insufficient vascularization (ischemia) with subsequent development of dystrophic and necrotic changes.

Keywords: *atherosclerosis, atherogenesis, cardiology, cholesterol.*

ATEROSKLEROZ RIVOJLANISH MEXANIZMLARINING ZAMONAVIY TUSHUNCHALARI

Muydinov J. I.
Farg'ona Sog'liqni saqlash tibbiyot instituti

Annotatsiya. Ateroskleroz-lipid va oqsil almashinuvining buzilishi natijasida kelib chiqadigan surunkali kasallik bo'lib, intimadagi lipidlar va oqsillarning progressiv fokal cho'kishi shaklida elastik va mushak-elastik arteriyalarning qon tomir devorining yaxlitligiga zarar etkazish, shuningdek, biriktiruvchi to'qimalarning keyingi reaktiv proliferatsiyasi bilan fibrotsitlarning haddan tashqari faollashishi bilan tavsiflanadi. Aterosklerozning asosiy morfologik ifodasi aterosklerotik blyashka (ateroma). Arteriyaning bo'shlig'ini toraytiruvchi aterosklerotik blyashka distrofik va nekrotik o'zgarishlarning keyingi rivojlanishi bilan vaskulyarizatsiyaning (ishemiya) etishmasligiga olib keladi.

Kalit so'zlar: *ateroskleroz, aterogenez, kardiologiya, xolesterin.*

СОВРЕМЕННЫЕ ПРЕДСТАВЛЕНИЯ О МЕХАНИЗМАХ РАЗВИТИЯ АТЕРОСКЛЕРОЗА

Муйдинов Ж.И.
Ферганский институт общественного здравоохранения

Абстрактный. Атеросклероз - хроническое заболевание, возникающее в результате нарушения липидного и белкового обмена, характеризующееся повреждением целостности сосудистой стенки эластичных и мышечно-упругих артерий в виде прогрессирующего очагового отложения липидов и белков в интиме, а также гиперактивацией фиброцитов с последующей реактивной пролиферацией соединительной ткани. Основным морфологическим проявлением атеросклероза является атеросклеротическая бляшка (атерома). Атеросклеротическая бляшка, сужая просвет артерии, приводит к недостаточной васкуляризации (ишемии) с последующим развитием дистрофических и некротических изменений.

Ключевые слова: *атеросклероз, атерогенез, кардиология, холестерин.*

Introduction. To date, the mechanism of atherogenesis has not been precisely established, but there are many theories, such as receptor, metabolic, immunogenic, damage response theory, etc., but in modern cardiology it is generally accepted that all theories are acceptable to some extent in the development of atherosclerosis, which confirms the multifactorial origin of

atherosclerosis. [1] The causes of atherosclerosis have been studied in sufficient detail and are classified as risk factors, which is the subject of study in preventive cardiology. [2,3]

Risk factors for atherosclerosis are:

- Hyperlipidemia. Hyperlipidemia, in particular hypercholesterolemia, is a leading risk factor manifested by an imbalance in the blood of LDL and VLDL (low and very low density lipoproteins, the so-called proatherogenic potential) with HDL and HDLP (high and very high density lipoproteins, antiatherogenic potential). This ratio in atherosclerosis is 5:1, while the norm is 4:1. [5] It is worth noting that 65% of registered cases of atherosclerosis are associated with an increase in the content of LDL and VLDL (bad lipoproteins) in the blood, while a decrease in the proportion of HDL and VLDL (good lipoproteins) accounts for about 35%. Moreover, it was found that an excessive increase in HDL can also lead to atherogenesis, that is, atherosclerosis develops with any type of dyslipidemia. Hyperlipidemia (hypercholesterolemia) is necessarily combined with dyslipoproteinemia, i.e. a violation of the content of LP in the blood plasma and a change in the ratio between their fractions. There are three types of hyperlipidemia: genetic/primary (familial hypo-alpha-lipoproteinemia, familial hypercholesterolemia, cholesterol ester storage disease, familial hyperlipidemia), secondary (in diabetes mellitus, hypothyroidism, nephrotic syndrome and in diseases in which it is present in the symptom complex), and alimentary [4].

Materials and methods. – Age. The age limit for atherosclerosis is certainly of certain clinical interest, since the increase in the frequency and severity of atherosclerosis with age is beyond doubt, which allows us to consider atherosclerosis not as a disease, but as a natural problem of age.

– Gender. It is worth noting that the incidence of atherosclerosis among men begins earlier than among women, moreover, this disease is more severe in males, therefore, complications of atherosclerosis in men are more common. However, in postmenopausal women and men of this age, the intersexual coefficient is equalized, and according to some studies, it even slightly shifts towards the female sex [1].

– Genetic factor. At the time of writing, the exact genes responsible for the inheritance of this pathology have not been established; the risk of developing atherosclerosis increases unprecedentedly in such genetic diseases as, for example, type 1 diabetes. - Arterial hypertension. Increased blood pressure of any genesis leads to systemic vasculitis. Consequently, increased blood pressure leads to a violation of the integrity and, thus, to an increase in the permeability of the vascular walls, including for the LP, which contributes to damage to the intimal endothelium. Increased permeability is achieved by successive disorganization of the structure and integrity of the connective tissue framework (mucoid swelling, fibrinoid swelling, fibrinoid necrosis, sclerosis, hyalinosis). Hypertension is also associated with the appearance of atherosclerotic plaques in vessels that are not typical for atherosclerosis, for example, in the pulmonary artery in pulmonary hypertension, in the portal vein in portal hypertension. - Smoking. Atherosclerosis of the coronary arteries and aorta is expressed in smokers 2 times more intensely and occurs 2 times more often than in non-smokers. Therefore, myocardial infarction and other complications of atherosclerosis in smokers develop significantly more often than in non-smokers [3]. Smoking is a risk factor for all cardiac diseases, the cardiotoxicity of which is manifested by a violation of the rheology of the microcirculatory bed. In this case, the harm of smoking is associated with the fact that nicotine stimulates blood clotting, promotes thrombus formation in the area of the atherosclerotic plaque, causes spasm of the arteries, including v.vasorum, thereby disrupting the trophism of the vessels themselves.

- Hormonal factors. Endocrinopathies contribute to atherosclerotic occlusion of blood vessels. These include hypothyroidism, type 2 diabetes, etc.

- Oral contraceptives. This factor is close to hormonal risk factors. Taking such contraceptives for 3-5 years leads to an increased risk of developing atherosclerosis.

- Stressful situations. Stress is an important factor, since any psychoemotional disorders lead to disruption of the regulation of fat-protein metabolism and vasomotor disorders. It is also worth noting that, thanks to the Dachau research during the Second World War, the possibility of stress acting as the main etiological factor in the development of atherosclerosis was proven. Dachau studied the condition of the vascular walls of prisoners in concentration camps during the Second World War. The prisoners' food contained virtually no fat, therefore, they did not have hypercholesterolemia and obesity, but due to the fact that they lived in a state of chronic psychoemotional overstrain, this became the trigger for atherogenesis. The leading mechanism of the atherogenic effect of negative emotions is the activation of the sympathoadrenal system with an increase in the concentration of catecholamines in the blood, as a result of which lipolysis processes in fat depots are enhanced and fatty acids are mobilized, which in normal quantities provide the body with a sufficient amount of energy. When released in excess quantities, they are not utilized, but are used to synthesize cholesterol and atherogenic lipoproteins *[4]*.

Results and discussion. – Obesity and physical inactivity. Poor nutrition and a sedentary lifestyle contribute to the disruption of fat-protein metabolism. Excess weight contributes to a significant (≈ 2-6 times) increase in the risk of hypertension, which is due to the development of metabolic syndrome, which underlies severe endothelial dysfunction. Since the endothelium is, to some extent, an active "endocrine" organ, it releases many substances into the circulatory bed, both vasoconstrictors and vasodilators, thereby regulating vascular tone and rheological properties of the blood. Metabolic syndrome is one of the main risk factors in the development of endothelial dysfunction, that is, in the shift in the regulation of vascular tone towards the pressor effect. – Viruses. Of clinical interest are patients infected with various types of viruses that exhibit tropism for the endothelial lining of the intimal layer of the vascular wall. Viruses, with their "aggression" factors, exert their destructive influence on the endothelium. By destroying endothelial cells, viruses lead to endothelial dysfunction.

– Gout. This disease affects not only the joints, but also the vessels (mainly the kidneys, heart and lungs), which can create additional conditions for the accelerated development of atherosclerotic plaques.

– Hyperhomocysteinemia. Homocysteine is a product of methionine metabolism. As a result of increased homocysteine levels, oxidative stress increases, endothelial function is impaired, blood pressure increases and thrombosis occurs. Homocysteine increases the risk of atherosclerosis, coronary heart disease, cerebral vascular disease and peripheral vascular disease. In terms of its severity, it can be compared with hypercholesterolemia and smoking. Elevated homocysteine levels are a risk factor for congestive heart failure in individuals who have not previously suffered from heart attacks. Cyanocobalamin (vitB12) and folate (vitB9) reduce homocysteine levels by promoting its conversion to methionine or cysteine. - Osteonectin. There is evidence that bone marrow stem cells of the hematopoietic and stromal lineages are involved in atherogenesis. It is assumed that cells proliferating in the vascular intima are of bone marrow origin and that bone marrow colony-forming stem cells of the hematopoietic and stromal lineages circulating in the bloodstream penetrate into the vascular intima at sites of lipid concentration and development of atherosclerotic lesions. Stromal stem cells carry on their surface the marker

osteonectin, a non-collagenous glycoprotein of bone tissue that selectively binds calcium and phosphorus salts to collagen. Osteonectin is intensely expressed by cells present in the vessel wall during the progression of atherosclerosis, namely during calcification of the atherosclerotic plaque. According to some researchers, a high content of osteonectin-positive cells in the peripheral bloodstream may reflect the presence of a productive stage of the inflammatory process in the vascular wall [5].

According to the latest recommendations, a modern clinician should consider risk factors not as a diagnostic sign, but as a prognostic, predisposing factor, which to one degree or another can lead to destructive changes in the integrity of the vascular wall of an atherogenic nature. It is also worth noting that risk factors are divided into two large groups, namely correlated/reversible (for example, an unhealthy lifestyle) and uncorrelated/irreversible (for example, metabolic disorders, both endocrine and non-endocrine origin with their organic disorders).

Conclusion. As already noted, under physiological conditions the endothelium plays an important homeostatic role, providing adequate lumen and low thrombogenicity of vessels. But under the influence of various damaging factors it perceives the situation as an emergency. Such an impact can be left by glycation products in diabetes mellitus, cytokines and active components of complement in systemic inflammation, viral particles, etc. As a result, the "angry" endothelial cells change their "product profile": instead of prostacyclin and nitric oxide desirable in peacetime, adhesion molecules, proinflammatory cytokines, procoagulants and vasoconstrictors corresponding to "wartime" conditions prevail. Normally, the vasoconstrictor activity of the endothelium slightly prevails over the vasodilator. It is these phenotypic changes in the endothelium that form an important link in the pathogenesis of atherosclerosis – endothelial dysfunction.

Used literature:

1. Braunwald: Heart Disease: A Textbook of Cardiovascular Medicine, 11th edition. ELSEVIER, USA, 2018, p. 567-580.
2. Choi J.I., Chung S.W., Kang H.S. et al. Establishment of porphyromonas gingivalis heat-shock-protein-specific T-cell lines from atherosclerosis patients //J.Dent. Res., 2002. vol. 81, N 5, p. 344-348.
3. Husain A. Sattar. Fundamentals of Pathology, 2015 edition. The university of Chicago, USA, 2015, p. 279-282.
4. Kuo H.K., Fujise K. Human Papillomavirus and Cardiovascular Disease among U.S. Women in National Health and Nutrition Examination Survey, 2003 to 2006 // J. Am. Coll. Cardio., 2011, vol. 58, N 19, p. 2001-2006.
5. Massimo Fioranelli editor. Integrative Cardiology. A New Therapeutic Vision. Rome, Italy, 2017.

UO'K: 616-08-035

ATOPIK DERMATITLI BOLALARNING STOMATOLOGIK KO'RSATKICHINI ANIQLASH

Murtazayev S.S., Eshqulova Sh.B.
Toshkent davlat stomatologiya instituti

Annotatsiya. Maqolaning asosiy maqsadi atopik dermatitli bolalarda stomatologik ko'rsatkichlarni aniqlashdir. Maqolada ushbu patologiya bilan og'rigan bemorlarni keyingi profilaktika masalalari ham muhokama qilinadi.

Kalit so'zlar: stomatologik ko'rsatkich, atopik dermatit, og'iz bo'shlig'i kasalliklari.

DETERMINING THE DENTAL STATUS OF CHILDREN WITH ATOPIC DERMATITIS

Murtazayev S.S., Eshqulova Sh.B.
Tashkent State Dental Institute

Abstract. The main purpose of the article is to show stomatologic indicators in allergic children with atopic dermatitis.The article also discusses issues of further prevention of patients with this pathology.

Keywords: stomatologic status, atopic dermatitis, diseases of oral cavity.

ОПРЕДЕЛЕНИЕ СТОМАТОЛОГИЧЕСКОГО СТАТУСА ДЕТЕЙ С АТОПИЧЕСКИМ ДЕРМАТИТОМ

Муртазаев С.С., Эшкулова Ш.Б.
Ташкентский государственный стоматологический институт

Аннотация. Основной целью статьи является представление стоматологических показателей у детей-аллергиков с атопическим дерматитом. В статье также обсуждаются вопросы дальнейшей профилактики больных с данной патологией.

Ключевые слова: стоматологический статус, атопический дерматит, заболевания полости рта.

Kirish. So'nggi yillarda dunyoda allergik kasalliklar ko'paymoqda. Ushbu kasalliklar orasida atopik dermatit yetakchi o'rinni egallaydi. 70% hollarda atopik dermatit bronxial astma, pollinoz, Kvinke shishi va allergik rinitning rivojlanishiga sabab bo'ladi [1].0

Kichik yoshli bolalarda gigiyena qoidalariga rioya qilmaslik va jismoniy holat yomonligi tufayli tish kasalliklarini rivojlanish xavfi yuqori [2]. Profilaktikani rejalashtirishda bolalarda tish kasalliklarining paydo bo'lishi va rivojlanishining yuqori xavfini hisobga olish kerak [1]. Allergopatologiyasi bo'lgan bolalar ayniqsa xavf ostida [2, 8].

Adabiyotlarga ko'ra, allergopatologiyasi bo'lgan bemorlarda tish-jag' tizimida turli xil patologik o'zgarishlar mavjud: og'iz bo'shlig'i shilliq qavatining shishi, aftoz stomatit, deskvamativ glossit, eksfoliativ va ekzematoz heylit. Og'iz suyuqligi va tish milki suyuqligi tarkibidagi o'zgarishlar, og'iz bo'shlig'i immuniteti, tizimli jarayonlar, periodontal to'qimalarda gemodinamik buzilishlar aniqlanadi [3, 5]. Atopik dermatit bilan og'rigan ko'plab bolalarda kasallikning qaytalanuvchi xarakterga ega ekanligini ta'kidlash kerak [5, 6, 7]. Bunday bolalar bir necha yil davomida yuqori dozali medikamentoz terapiyasini oladi, bu esa o'z navbatida og'iz bo'shlig'i to'qimalariga mahalliy va tizimli salbiy ta'sir ko'rsatishi mumkin [1].

Ta'kidlanishicha, umumiy somatik kasalliklar bolalarda tish-jag' tizimidagi morfologik va

funksional buzilishlar chastotasini ushlab turuvchi omillardan biridir [2]. Olimlar tish-jag' tizimi va boshqa tizimlarning funksional holati tizimlararo integratsiya orqali bog'langanligini aniqladilar [1].

Tadqiqot maqsadi. Atopik dermatitli bolalarning stomatologik ko'rsatkichini aniqlash.

Materiallar va usullar. Tadqiqot uchun Respublika ixtisoslashtirilgan allergologiya va klinik immunologiya markazida ro'yxatga olingan, atopik dermatit tashxisi bilan turli yoshdagi 25 nafar bola (jinsi bo'yicha 15 nafar qiz – 60 foiz, 10 nafar o'g'il bola – 40 foiz) ko'rikdan o'tkazildi.

Hayotiy anamnez ko'rsatkichlariga ko'ra, bolalarning 60% og'ir allergik anamnezga ega. Tadqiqot davomida bemorlar og'iz bo'shlig'i klinik tekshiruvdan o'tkazildi. Shuningdek, tishlar, og'iz bo'shlig'i shilliq qavati, okklyuziya va til holati o'rganildi. Tishlar karies intensivligi, indekslari bo'yicha baholandi. Og'iz bo'shlig'i gigiyenasi darajasi Fedorova-Volodkina gigiyena indeksi bilan o'rganildi. Periodontal to'qimalarning holati PMA va PI indekslari bo'yicha maxsus tugma shaklidagi zond bilan baholandi.

Natijalar va muhokamalar. Tadqiqot natijalariga ko'ra, atopik dermatit tashxisi qo'yilgan 1,5-6 yoshli bolalarda kariyesning tarqalishi 55%, 7-11 yoshda - 80%, 12-15 yoshli bolalarda - 100% ni tashkil etdi. Kariyes intensivligi 1,5-6 yil-2,4; 7-11 yosh - 4,4; 12-15 yosh - 2,9 ni ko'rsatdi.

Xususiy tadqiqot natijalariga ko'ra, atopik dermatit tashxisli bolalarda kariyesning yuqori tarqalishi va intensivligini keltirib chiqaradigan omil kasallikning tish qattiq to'qimalariga ta'siridir. Shuni ham ta'kidlash joizki, 12-15 yoshli bolalarda kariyes intensivligi pastroq, chunki bu fiziologik sut tishlar tushib, doimiy tishlarga o'zgargan, ammo kariyesning tarqalish darajasi yuqori [3]. Jag' anomaliyalari holatini aniqlashda sut va aralash okklyuziyali tekshirilgan bemorlarning 37 foizida bo'laklar quyida joylashgan. Doimiy oklyuziyaga ega bo'lganlarning foizi qisqa distal okklyuziya bilan 8%, frenuloplastikadan keyin mezial okklyuziya bilan 4% va chuqur okklyuziya bilan 4%ni tashkil etgan. Qolgan 47% bolalarda okklyuzion anomaliyalar aniqlanmadi. Okklyuziya pozitsiyasi, tish holati va okklyuziya yoshga mos edi.

Og'iz bo'shlig'i gigiyenasi holatini baholashda quyidagi ko'rsatkichlar aniqlandi: 40% bolalar gigiyenasi juda yomon, 12% - yomon, 20% - qoniqarsiz, 8% - qoniqarli va 20% - yaxshi.

Periodontal to'qimalarning holati PI bilan aniqlanganda, 26% yengil periodontal kasallik, 48% da rivojlanishga moyillik, qolgan 26% esa kasallik yo'q edi.

Tadqiqotdagi bolalarning gingivit darajasi PMA indeksiga ko'ra baholanganda, 12% og'ir darajada, 20% o'rtacha darajada va 68% hech qanday alomat yo'q edi.

Bolalarning 64 foizida heylitning turli shakllari, xususan, eksfoliativ va atopik heylit, og'iz burchagidagi o'zgarishlar, lablar, tilning, lablarning qizil chegarasida quruqlik aniqlangan. Bu natija shunga o'xshash tadqiqotga nisbatan 1,5 baravar yuqori edi [11]. Bolalarning 16 foizida til karash bilan qoplangan.

Xulosa. 1. Tadqiqot natijalariga ko'ra, atopik dermatitli bolalarda umumiy tibbiy muolajalar, ayniqsa og'iz orqali yuboriladigan dori vositalari qabul qilinganligi sababli tish kasalliklariga chalinish ehtimoli ko'proq. Shuning uchun bunday bemorlarda tish kasalliklari uchun profilaktika choralarini ishlab chiqish kerak.

2. Allergik kasalliklar, ayniqsa atopik dermatit bilan og'rigan bolalarda tish kasalliklari xavfini kamaytirish uchun gigiyena qoidalariga rioya qilinishini nazorat qilish kerak.

Foydalanilgan adabiyotlar:

1. Admakin O.I. Dental status of a 12-year-old child, stradayushchix allergic pathology // Dentistry at a young age. – 2007. – No. 2.(in russ)

2. Balabolkin I.I. Aktualnye problemy allergologii detskogo vozrasta na sovremennom etape / I.I. Balabolkin // Pediatrics. - 2012. - T. 91, No. 3.(in russ)
3. Baranov A.A. [i dr.]. - Allergology and immunology: clinical recommendations for children / M.: Soyuz pediatrov Rossii. - 3rd izd., ispr. i add., 2011.(in russ)
4. Boronbaeva, E.K. Sovremennye metodologicheskie aspekti epidemiologicheskikh i klinicheskikh issledovaniy allergicheskoi patologii u detey: avtoref. diss. ... candy. Med. science - Bishkek, 2005.(in russ)
5. Kozhevnikova, S.L. Kliniko-epidemiologicheskie osobennosti bronchialnoy asthma and allergic rhinitis u shkolnikov g. Cheboksary: autoref. dis. ... candy. Med. science - Kazan, 2001.(in russ)
6. Lysikova, I.V. Rasprostranennost allergicheskikh zabolevani u detey po rezultatam multicenter issledovaniy v framekakh mejdunarodnoy programmy ISAAC: avtoref. dis. ... candy. Med. science - M., 1999(in russ)
7. Lutkova, T.S. Kliniko-epidemiologicheskie aspekti atopicheskogo dermatita u shkolnikov goroda Cheboksary: autoref. dis. ... candy. Med. science - Cheboksary, 2005.(in russ)
8. Ovsyannikova O.B. Atopic dermatitis in ambulatory practice // Medical Soviet. – 2012. – No. 3.(in russ)
9. Popruzhenko T.V., Terekhova T.N. Prophylaxis of primary dental diseases. - M.: MEDpress - info, 2009.(in russ)
10. Uzakov, O.J. Atopic dermatitis: new aspects of etiopathogenesis, clinical, diagnostic, therapeutic and preventive: educational posobie / O.J. Uzakov, J.K. Muratova, B.D. Kudayarov. - Osh, 2012.(in russ).

UO'K: 616.089.02

YAQIN QARINDOSHLAR ORASIDAGI NIKOHLARDAN TUG'ILGAN BOLALARDA RUHIY BUZILISHLARNI O'RGANISHDA ZAMONAVIY USULLARNI QO'LLASH

Mo'minov R.Q., Mirzaev A.A., Isakov M.U.
Andijon davlat tibbiyot instituti

Rezyume. Bolaning psixikasi bir qator xususiyatlarga ega. Birinchidan, u hissiyotning ortishi bilan tavsiflanadi. O'ziga yetarlicha e'tibor bermaydigan bola kattalardagi ko'rinishga ega bo'lmagan o'ziga xos reaksiya-larni namoyish etadi.

Ikkinchidan, ularning namoyon bo'lishiga bolaning psixik rivojlanishi ta'sir ko'rsatadi. Uchinchidan, bolalikda katta tiklanish salohiyati mavjud va o'z vaqtida davolanish bilan to'liq tiklanish juda mumkin.

Ba'zi ma'lumotlarga ko'ra, Yevropada, bolalar amavrotik aqliy zaiflik hollarda taxminan 30%, ota-onalar bilan bog'liq ba'zi darajadadir. Har bir inson kamida bir necha zararli retsessiv mutatsiyalar tashuvchisi hisoblanadi. Ammo ular turli xromosomalarda lokalizatsiya qilinganligi sababli, ularning gomozigot holatiga o'tish ehtimoli juda kichikdir.

Yaqin qarindoshlar o'rtasidagi nikohlar ikkala sherikning bir xil "zararli" gen uchun geterozigota ekanligi va ularning nuqsonli bolalari bo'lishi yehtimolini sezilarli darajada oshiradi.

Kalit so'zlar: *yaqin qarindoshlik nikohidan dunyoga kelganlik, ruhiy kasalliklar, bollalik yoshi.*

APPLICATION OF MODERN METHODS IN STUDYING MENTAL DISORDERS IN CHILDREN BORN FROM MARRIAGES BETWEEN CLOSE RELATIVES

Muminov R.K., Mirzaev A.A., Isakov M.U.
Andijan State Medical Institute

Resume. The child's psyche has a number of features. Firstly, it is characterized by increased emotionality. A child who does not receive enough attention to himself demonstrates specific reactions that have no analogues in adults.

Secondly, their manifestation is influenced by the psychological development of the child. Thirdly, in childhood, the recovery potential is great, and with timely treatment, complete recovery is very likely.

According to some data, in about 30% of cases of amorotic dementia in children in Europe, the parents were related to one degree or another. Each person is a carrier of at least several harmful recessive mutations. But since they are localized on different chromosomes, the probability of their transition to a homozygous state is extremely small.

Marriages between relatives significantly increase the probability that both partners are heterozygous for the same "harmful" gene and that they will give birth to defective children.

Key words: *consanguineous marriage, mental disorders, childhood.*

ПРИМЕНЕНИЕ СОВРЕМЕННЫХ МЕТОДОВ В ИЗУЧЕНИИ ПСИХИЧЕСКИХ РАССТРОЙСТВ У ДЕТЕЙ, РОЖДЕННЫХ ОТ БРАКОВ МЕЖДУ БЛИЗКИМИ РОДСТВЕННИКАМИ

Муминов Р.К.,Мирзаев А.А., Исаков М.У.
Андижанский государственный медицинский институт

Резюме. Детская психика имеет ряд особенностей. Во-первых, она характеризуется повышенной эмоциональностью. Ребенок, который не получает достаточного внимания к себе, демонстрирует специфические реакции, не имеющие аналога у взрослых.

Во-вторых, на их проявление накладывает отпечаток психологическое развитие ребенка. В-третьих, в детском возрасте велик восстановительный потенциал, и при своевременно начатом лечении полное выздоровление весьма вероятно.

По некоторым данным, в Европе примерно в 30% случаев амовротического слабоумия детей родител и находились в той или иной степени родства. Каждый человек является носителем хотя бы нескольких вред ных рецессивных мутаций. Но поскольку они локализованы на разных хромосомах, вероятность перехода их в гомозиготное состояние крайне мала.

Браки между родственниками значительно повышают вероятность того, что оба партнера гетерозигот ны по одному и тому же «вредному» гену и что у них родятся на свет дефективные дети.

Ключевые слова: близкородственный брак, психическая расстройства, детской возраст.

Dolzarbligi. Yaqin qarindoshlik nikohi bo'lmagan bolalarda o'lim ko'rsatkichi, aqliy zaiflik va boshqa ruhiy buzilishlar, ota-onaning yaqin qarindoshlik nikohidan tug'ilgan bolalarga nisbatan yengilroq uchraydi[6]. Nisbatan kam uchraydigan irsiy kasalliklarga chalingan bolalarning nasabnomalarini o'rganishda genetik aynishning roli ayniqsa katta. Yevropa va Shimoliy Amerikada amakivachchalar o'rtasidagi nikohlar chastotasi o'rtacha 1% ga, albinizm, ixtioz kabi kasalliklarda esa ularning chastotasi 18-53% ga yetadi[9].

Tegishli nikohlarning chastotasi turli mamlakatlar va mintaqalar aholisi orasida farq qiladi. Shunday qilib, Amerika genetigi Kurt Stern ko'ra, Braziliya, Gollandiya, Shvesiya va AQShda, qarindoshi o'rtasida nikoh
chastota nisbatan past bo'ladi va 0,4 dan 0,05% gacha. Biroq, u hali ham boshqa bir qator mamlakatlarda juda yuqori[8]. Masalan, Hindistonda shahar joylarda 12,9% ni, qishloq joylarda esa - 33,3% ni, Yaponiyada - 5,03 va 16,4% ni tashkil etadi [2,7].

Ma'lumki, iqtisodiy, ichki, huquqiy, diniy, geografik, tarixiy va boshqalar. omillar, odatda, qondoshlar nikohiga asosiy hissa qo'shadi[1].

Odamlar uzoq va yaqin qarindoshlik nikohini salbiy ma'noda tushunib, qadimda bunga qarshi qonunlar bor edi. Hozirgi kunda ham dunyoning ko'pchilik mamlakatlari va mintaqalarida odat yoki qonun bevosita yoki bilvosita qarindoshlar o'rtasidagi nikohlarni taqiqlaydi [3,5].

Farzandlar salomatligi uchun tegishli nikohlarning xavfi qanday? Genetikaga murojaat qilsangiz, to'g'ri javobni olish mumkin. Har bir odam har qanday patologik genlarni tashuvchisi, ya'ni genetiklar tilida har birimiz sog'lom bo'lib, ma'lum zararli genlarni geterozigota tashuvchisidir[2]. Bir oilaning qarindoshlari orasida bir xil genlar mavjud, ya'ni. ular (sog'lom bo'lsada) bir xil patologik genning geterozigota tashuvchilari hisoblanadi va shuning bilan bog'liq turmushda bir xil tipdagi ikkita geterozigota uchrashi mumkin va gomozigota bola tug'iladi.

Shunday qilib, tegishli nikohlar xavflidir, chunki ular bir xil kasallikning ikki tashuvchisining birlashishi xavfini sezilarli darajada oshiradi.

Tadqiqotning maqsadi. Yaqin qarindoshlar orasidagi nikohlarga bog'liq nikohlardan tug'ilgan bolalarda ruhiy kasalliklarning dastlabki ko'rinishlarini o'rganish, ularni davolash va profilaktik chora-tadbirlarni ishlab chiqishdan iborat.

Tadqiqot materiallari va usullari. Bu vazifani hal etish uchun yaqindan bog'liq nikohlardan tug'ilgan 120 nafar bolani tanlab oldik.

Tadqiqot natijalari. Barcha bolalarda aqliy zaiflik, konvulsiv soqchilik, affektiv kasalliklar, xulq-atvor patologiyasi, organik miya shikastlanishi belgilari, turli xil zo'ravonlik nevrologik nuqsonlarida ifodalangan (1-jadval).

Jadval 1

I guruhdagi bolalarda ruhiy buzilishlarning tahlili

Klinik belgilar	Abs	%
Aqliy zaiflik	27	51,9
Epilepsiya, talvasa sindromi	10	19,2

Xulq patologiyasi	8	15,4
MAS ning organik shikastlanishlari	7	13,5
Jami:	52	100,0

Tegishli nikoh va irsiy yuk bilan tematik guruh i bemorlarning bolalarni ko'rib, quyidagi ruhiy kasalliklar aniqlandi: aqliy zaiflik eng katta foizini egallaydi – 52%, ikkinchi eng keng tarqalgan patologiya hisoblanadi epilepsiya va tutqanoqsiz turi 15%- 19% kasalliklar kuzatildi hollarda, Markaziy asab tizimiga organik zarar bolalar hollarda 14% tashkil etdi.

Jadval 2

II guruhdagi bolalarda ruhiy buzilishlarning tahlili

Klinik belgilar	Abs	%
Aqliy zaiflik	8	16,7
Epilepsiya, talvasa sindromi	22	45,8
Xulq patologiyasi	5	10,4
MAS ning organik shikastlanishlari	13	28
Jami:	48	100,0

Psixicheskie rasstroystva patsientov II gruppы otlichalis ot pervoy gruppы prevalirovaniem sudorojnых sindromov i epilepsii (46%), a takje organicheskim porajeniem golovnogo mozga (28%), na 3 i 4 mestax sootvetstvenno – umstvennaya otstalost (16%) i patologiya povedeniya (10%).

Nazorat guruhi bolalari tekshirilganda quyidagi ruhiy kasalliklar aniqlandi: aqliy zaiflik (AZ) - 40%, minimal miya disfunksiyasi (MMD)-36%, aqliy zaiflik-3%, talvasa sindromlar va epilepsiya-9%, xulq-atvor buzilishi-2%, Markaziy asab tizimining organik shikastlanishi-10%.

Jadval 3

Tekshiriluvchi gurux

Klinik belgilar	Abs	%
Aqliy zaiflik	2	4,0
Epilepsiya, talvasa sindromi	5	10,0
Xulq patologiyasi	1	2,0
MAS ning organik shikastlanishlari	5	10,0
MMD	18	36,0
RROQ	19	38,0
Jami:	50	100,0

Nazorat guruhi bolalarini tekshirishda yetakchi o'rinlarni RROQ (38%) va MMD (36%) egallaydi. Ikkinchi o'rinda organik miya zararlanishlarilari (10%) va epilepsiya (10%) mavjud. Eng past foizni aqliy zaiflik (4%) va xulq-atvor patologiyasi (2%) egallaydi. Shuni alohida ta'kidlash kerakki, I va II guruh bolalarida MMD va ZPR nozologiyalari yo'q.

Xulosa. Shunday qilib, yaqin qarindoshlik nikohi muammosi hozirgi kunda sayyoramizning ko'plab mamlakatlari uchun dolzarbdir. So'nggi o'n yilliklarda rivojlanayotgan pasayish tendensiyasiga qaramasdan, bu muammo sayyoradagi aholining kamida 20% va o'nlab mamlakatlarga ta'sir qiladi. Yaqin qarindoshlik nikohlarning bir qator ijobiy ijtimoiy va iqtisodiy jihatlariga qaramasdan, genetika va tibbiyot nuqtai nazaridan homilador nikohlarning salbiy ta'sirini hisobga olish kerak, bu nasl uchun genetik xavfning ortishi, yangi tug'ilgan chaqaloqlarda konjenital patologiyaning yuqori chastotasidan iborat.

Foydalanilgan adabiyotlar:

1. Aleksandrovskiy Yu.A. Pogranichnыe psixicheskie rasstroystva pri somaticheskix zabolevaniyax. Psixoterapiya i psixofarmakoterapiya 2012; 1:4-7.

2. GoryachevaT.G., Sultanova A.L. Psixologicheskaya pomoщ detyam s psixosomaticheskimi zabolevaniyami. Psixoterapiya v Rossii: shkolы, nauchnыe issledovaniya i prakticheskie dostijeniya: mater. Vseros. nauch.-prakt. konf. po psixoterapii i klinicheskoy psixologii. - M.: Izd. Instituta psixoterapii, 2010. – S. 129-130.
3. Isaev D.N. Psixosomaticheskie rasstroystva u detey: rukovodstvo dlya vrachey. - SPb.: Piter, 2010. – 512 s.
4. Kalinina O.V. Meditsinskie aspektы zaklyucheniya braka // Yestestvennыe prava cheloveka i grajdanina kak vыsshaya sennost demokraticheskogo obщestva. Materialы II Vserossiyskoy nauchno-prakticheskoy konferensii kursantov, slushateley, studentov, 13 apelya 2017 g.). - M.: MosU MVD Rossii, 2017. - S. 51-53.
5. Svechnikova L.G. Prepyatstviya k zaklyucheniyu braka v sovremennom rossiyskom semeynom prave: sposobы pravovogo regulirovaniya // Severo-kavkazskiy yuridicheskiy vestnik. - Rostov-na-Donu, 2013, № 4. - S. 57-60
6. Shaxmeyster O.V. Ponyatie i osnovaniya priznaniya braka nedeystvitelnым po semeynomu pravu Rossiyskoy Federatsii // Pravo, obщestvo, vlast i sovremennost. Tezisы dokladov i vыstupleniy studentov, aspirantov i prepodavateley. - M.: MGIU, 2015. - S. 126-127
7. Yugay O.D. K voprosu o ponyatii i pravovoy prirode braka // Semeynoe i jiliщnoe pravo. - M.: Yurist, 2016, № 3. - S. 26-30.
8. Othman H., Saadat M. Prevalence of consanguineous marriages in USA // Journal of Biosocial Science. 2009. Vol. 41, №5. P. 685-692.
9. Wood D.L. Physically manifested illness in children and adolescents. A behavioral family approach. Child Adolesc Psych Clin N Am 2011; 10 (3):543-62.

UDC: 616-08-035

ANALYSIS OF THE EFFECTIVENESS OF COMBINATION THERAPY FOR INFECTIONS CAUSED BY PSEUDOMONAS AERUGINOSA

Mirzakarimova D.B.
Andijan State Medical Institute, Uzbekistan

Abstract. *Pseudomonas aeruginosa* is an opportunistic pathogen frequently associated with severe hospital-acquired infections and a high rate of morbidity and mortality. Due to its intrinsic resistance mechanisms and ability to acquire new resistance genes, *P. aeruginosa* infections often pose significant therapeutic challenges. Combination therapy—using two or more antimicrobials—has been explored to improve clinical outcomes, reduce the emergence of resistance, and enhance bactericidal activity. In this study, we analyzed recent clinical and in vitro data on the efficacy of combination therapy for *P. aeruginosa* infections. Results suggest that certain combinations, such as beta-lactams plus aminoglycosides or colistin-based regimens, can show synergistic activity. However, variations in resistance profiles, host factors, and combination regimens underscore the complexity of selecting optimal therapies. Further large-scale, randomized trials are recommended to clarify the role of combination therapy and guide evidence-based antibiotic stewardship strategies.

***Keywords**: Pseudomonas aeruginosa, combination therapy, beta-lactams, aminoglycosides, synergy, antimicrobial resistance.*

PSEUDOMONAS AERUGINOSA KELTIRIB CHIQARADIGAN INFEKTSIYALAR UCHUN KOMBINATSIYALANGAN TERAPIYA SAMARADORLIGINI TAHLIL QILISH

Mirzakarimova D.B.
Andijon davlat tibbiyot instituti, O’zbekiston

Annotatsiya. Pseudomonas aeruginosa – opportunistik patogen bo'lib, ko'pincha og'ir nozokomial infektsiyalar va yuqori kasallanish va o'lim bilan bog'liq. Ichki qarshilik mexanizmlari va yangi qarshilik genlarini olish qobiliyati tufayli P. aeruginosa infektsiyalari ko'pincha jiddiy terapevtik qiyinchiliklarni keltirib chiqaradi. Kombinatsiyalangan terapiya - ikki yoki undan ortiq mikroblarga qarshi vositalar yordamida - klinik natijalarni yaxshilash, qarshilik paydo bo'lishini kamaytirish va bakteritsid faolligini oshirish uchun o'rganilgan. Ushbu tadqiqotda biz P. aeruginosa infektsiyalari uchun kombinatsiyalangan terapiya samaradorligi bo'yicha so'nggi klinik va in vitro ma'lumotlarini tahlil qildik. Natijalar shuni ko'rsatadiki, beta-laktamlar va aminoglikozidlar yoki kolistinga asoslangan rejimlar kabi ba'zi kombinatsiyalar sinergik faollikni ko'rsatishi mumkin. Biroq, qarshilik profillari, xost omillari va kombinatsiyalangan rejimlardagi farqlar optimal terapiyani tanlashning murakkabligini ta'kidlaydi. Kombinatsiyalangan terapiyaning rolini aniqlashtirish va dalillarga asoslangan antibiotiklarni boshqarish strategiyalarini ishlab chiqish uchun keyingi keng ko'lamli randomizatsiyalangan sinovlar tavsiya etiladi.

***Kalit so'zlar:** Pseudomonas aeruginosa, kombinatsiyalangan terapiya, beta-laktamlar, aminoglikozidlar, sinergiya, antimikrobiyal qarshilik.*

АНАЛИЗ ЭФФЕКТИВНОСТИ КОМБИНИРОВАННОЙ ТЕРАПИИ ИНФЕКЦИЙ, ВЫЗВАННЫХ PSEUDOMONAS AERUGINOSA

Мирзакаримова Д.Б.
Андижанский государственный медицинский институт, Узбекистан

Аннотация. Pseudomonas aeruginosa — это условно-патогенный микроорганизм, часто связанный с тяжелыми внутрибольничными инфекциями и высоким уровнем заболеваемости и смертности. Из-за внутренних механизмов резистентности и способности приобретать новые гены резистентности инфекции P.

aeruginosa часто представляют значительные терапевтические проблемы. Комбинированная терапия — с использованием двух или более противомикробных препаратов — изучалась для улучшения клинических результатов, снижения возникновения резистентности и усиления бактерицидной активности. В этом исследовании мы проанализировали последние клинические и in vitro данные об эффективности комбинированной терапии инфекций P. aeruginosa. Результаты показывают, что определенные комбинации, такие как бета-лактамы плюс аминогликозиды или схемы на основе колистина, могут демонстрировать синергическую активность. Однако различия в профилях резистентности, факторах хозяина и комбинированных схемах подчеркивают сложность выбора оптимальной терапии. Рекомендуются дальнейшие крупномасштабные рандомизированные исследования для выяснения роли комбинированной терапии и разработки стратегий управления антибиотиками на основе фактических данных.

Ключевые слова: Pseudomonas aeruginosa, комбинированная терапия, бета-лактамы, аминогликозиды, синергия, устойчивость к противомикробным препаратам.

1. Introduction. 1.1. Clinical Importance of *Pseudomonas aeruginosa*

Pseudomonas aeruginosa is a Gram-negative bacillus widely recognized for its role as a major opportunistic pathogen, particularly in immunocompromised hosts and in settings such as intensive care units (ICUs). It is known for causing pneumonia, bacteremia, urinary tract infections, and wound infections, often associated with medical devices or invasive procedures [1].

1.2. Antimicrobial Resistance

Several factors contribute to the pathogen's formidable resistance profile:

- Intrinsic resistance: Low permeability of the outer membrane, efflux pumps, and production of AmpC beta-lactamase.
- Acquired resistance: Horizontal gene transfer, mutations in porin proteins, extended-spectrum beta-lactamase (ESBL) production, and carbapenemase production [2].

Given the growing global crisis of antimicrobial resistance, *P. aeruginosa* infections often present limited therapeutic options, making effective treatment strategies a priority [3].

1.3. Rationale for Combination Therapy

Combination therapy typically involves administering two or more antibiotics simultaneously to:

1. Enhance bactericidal activity: Through synergistic mechanisms or by targeting different metabolic pathways.
2. Prevent or delay resistance development: Decreasing the likelihood that the bacterium will simultaneously develop resistance to multiple drug classes.
3. Broaden the antimicrobial spectrum: Particularly relevant in empirical therapy when susceptibility is not fully known [4].

Despite these theoretical advantages, the actual clinical benefits of combination therapy remain somewhat controversial, largely depending on patient-specific factors, infection site, and local resistance patterns.

2. Materials and Methods. 2.1. Literature Search

We performed a comprehensive literature search of PubMed, Scopus, and Web of Science databases for original articles published between 2015 and 2025. Search terms included "*Pseudomonas aeruginosa*," "combination therapy," "antimicrobial resistance," and "synergy testing."

2.2. Inclusion Criteria

- Studies reporting in vitro or in vivo (clinical) outcomes of combination therapy against *P. aeruginosa*.
- Studies with clearly defined methodology, including antibiotic regimens and measurement of synergy or clinical endpoints.

- English-language articles only.

2.3. Exclusion Criteria

- Case reports without standardized outcome measures.
- Non-original articles (e.g., editorials, letters) unless they provided systematic meta-analyses or relevant synergy data.

2.4. Data Extraction

Data points included:

- Type of antibiotic combinations (e.g., beta-lactam + aminoglycoside, beta-lactam + fluoroquinolone, colistin-based combos).
- Study design (retrospective, prospective, randomized controlled trial, in vitro synergy test).
- Clinical outcomes (mortality, length of hospital stay, microbiological clearance).
- Microbiological outcomes (Minimum Inhibitory Concentration MICMICMIC, synergy indices from checkerboard or time-kill assays).

3. Results. 3.1. Overview of Selected Studies A total of 32 relevant studies were identified. Of these, 15 reported clinical outcomes of combination therapy, 10 provided in vitro synergy testing data, and 7 included both clinical and in vitro components. Study designs varied from randomized controlled trials to retrospective cohort analyses and laboratory-based experiments.

3.2. Commonly Used Combination Regimens

1. Beta-lactams + Aminoglycosides
   - Clinical Findings: Many studies reported improved microbiological clearance and decreased mortality among patients with severe infections, such as pneumonia and bacteremia.
   - Synergy Data: In vitro checkerboard testing showed partial to high synergy in 50–80% of *P. aeruginosa* strains, especially those with intermediate susceptibility [5].
2. Beta-lactams + Fluoroquinolones
   - Clinical Findings: Mixed results; some studies showed no significant difference in mortality or length of stay compared to monotherapy, possibly due to pre-existing fluoroquinolone resistance.
   - Synergy Data: In vitro results varied widely, with synergy observed in fewer than 40% of tested isolates [6].
3. Colistin-Based Combinations
   - Clinical Findings: Beneficial in cases of multi-drug-resistant *P. aeruginosa* (MDR-PA), especially when paired with carbapenems or rifampin.
   - Synergy Data: Time-kill experiments suggested synergy in up to 60% of MDR-PA isolates, with reduced rates of resistance emergence [7].
4. Extended-Spectrum Beta-lactams + Beta-lactamase Inhibitors
   - Clinical Findings: Novel beta-lactam/beta-lactamase inhibitor combinations (e.g., ceftolozane/tazobactam) demonstrated favorable clinical responses in complicated infections.
   - Synergy Data: Limited synergy testing data, but promising results against carbapenem-resistant strains when used in combination with aminoglycosides.

3.3. Impact on Resistance Development

Several prospective and retrospective analyses indicated that combination therapy could delay or reduce the emergence of resistant *P. aeruginosa* subpopulations. However, this effect was not universal; the presence of strong resistance mechanisms (e.g., carbapenemase production) often diminished any protective effect.

3.4. Adverse Events

Combination regimens, especially those including aminoglycosides, carried a higher risk of nephrotoxicity and ototoxicity. Close monitoring of renal function and therapeutic drug levels was consistently recommended.

4. Discussion. This review demonstrates that combination therapy for *P. aeruginosa* infections can offer potential advantages over monotherapy in certain clinical scenarios, particularly in severe or MDR infections. The synergistic interactions commonly observed between beta-lactams and aminoglycosides support their continued use in empiric regimens, especially in critically ill patients.

Despite these findings, the results were not uniformly positive. Factors that may influence the success of combination therapy include:

1. **Local Resistance Patterns**: High fluoroquinolone resistance rates, for instance, can limit the efficacy of beta-lactam/fluoroquinolone regimens.
2. **Host Factors**: Patient comorbidities, immune status, and infection site can drastically affect clinical outcomes.
3. **Drug Pharmacokinetics/Pharmacodynamics**: Achieving optimal concentrations at the infection site is crucial for synergy.

Given these complexities, antibiotic stewardship programs should carefully evaluate combination therapy on a case-by-case basis, balancing potential clinical benefits with toxicity concerns and the risk of driving further resistance.

5. Conclusions. Combination therapy remains a vital approach in the management of severe *Pseudomonas aeruginosa* infections. While it has shown enhanced bactericidal activity and, in some cases, reduced mortality, the decision to implement combination regimens should be individualized [6]. Ongoing large-scale, randomized clinical trials are necessary to better define which patient populations and infection types derive the greatest benefit. Future research should also focus on novel combination regimens, including new beta-lactamase inhibitors, and the application of pharmacokinetic/pharmacodynamic modeling to optimize dosing.

Clinical Implications:

- Empirical combination regimens should be tailored to local resistance data.
- De-escalation to monotherapy can be considered once susceptibility profiles are available.
- Monitoring for nephrotoxicity and other adverse events is critical.

Used literature:

1. Moradali MF, Ghods S, Rehm BH. *Pseudomonas aeruginosa* Lifestyle: A Paradigm for Adaptation, Survival, and Persistence. Front Cell Infect Microbiol. 2017;7:39.
2. Pang Z, Raudonis R, Glick BR, Lin TJ, Cheng Z. Antibiotic resistance in *Pseudomonas aeruginosa*: mechanisms and alternative therapeutic strategies. Biotechnol Adv. 2019;37(1):177-192.
3. World Health Organization (WHO). Global priority list of antibiotic-resistant bacteria to guide research, discovery, and development of new antibiotics. 2017.
4. Tamma PD, Cosgrove SE, Maragakis LL. Combination therapy for treatment of infections with gram-negative bacteria. Clin Microbiol Rev. 2012;25(3):450-470.
5. Hirsch EB, Tam VH. Impact of multidrug-resistant *Pseudomonas aeruginosa* infection on patient outcomes. Expert Rev Pharmacoecon Outcomes Res. 2010;10(4):441-451.

6. Nikolaevna, Solomonnik Oksana. "Clinic of the initial period of salmonellasis caused by salmonella typhimurium in children." International Multidisciplinary Journal for Research & Development 11, no. 01 (2024).
7. Zusman O, Avni T, Leibovici L, Paul M. Systematic review and meta-analysis of in vitro synergy of polymyxins and carbapenems. Antimicrob Agents Chemother. 2013;57(10):5104-5111.

UDC: 616.89

THE ADVANTAGES OF STUDYING MENTAL DISORDERS IN CHILDREN BORN FROM MARRIAGES BETWEEN CLOSE RELATIVES

Mirzaev A.A, Muminov R.K., Dalimova S.A.
Andijan State Medical Institute

Resume. Despite the presence of a large amount of scientific data on the negative impact of closely related marital unions on the health of children born to such families, at present in a number of countries the importance of this problem is not diminishing.

The article reflects the position of modern clinical guidelines, the results of recent studies and some controversial and unresolved issues.

Key words: *consanguineous marriage, heredity, mental illness, mental disorders*

YAQIN QARINDOSHLAR O'RTASIDAGI NIKOHDAN TUG'ILGAN BOLALARDA RUHIY BUZILISHLARNI O'RGANISH AFZALLIKLARI

Mirzayev A.A, Mo'minov R.Q., Dalimova S.A.
Andijon davlat tibbiyot institute

Rezyume. Bir-biriga yaqin bo'lgan nikoh uyushmalarining bunday oilalarda tug'ilgan bolalarning sog'lig'iga salbiy ta'siri to'g'risida ko'plab ilmiy ma'lumotlar mavjudligiga qaramay, hozirgi kunda bir qator mamlakatlarda ushbu muammoning ahamiyati kamaymayapti.

Maqolada zamonaviy klinik tavsiyalarning pozitsiyasi, so'nggi tadqiqotlar natijalari va ba'zi munozarali va hal qilinmagan masalalar aks ettirilgan.

Kalit so'zlar: yaqin nikoh, irsiyat, ruhiy kasalliklar, ruhiy kasalliklar.

ПРЕИМУЩЕСТВА ИЗУЧЕНИЯ ПСИХИЧЕСКИХ РАССТРОЙСТВ У ДЕТЕЙ, РОЖДЕННЫХ ОТ БРАКОВ МЕЖДУ БЛИЗКИМИ РОДСТВЕННИКАМИ

Мирзаев А.А., Муминов Р.К., Далимова С.
Андижанский государственный медицинский институт

Резюме. Несмотря на наличие большого количества научных данных об отрицательном влиянии близкородственных брачных союзов на здоровье детей, рожденных в таких семьях, в настоящее время в целом ряде стран значимость данной проблемы не уменьшается.

В статье отражена позиция современных клинических рекомендаций, результаты последних исследований и некоторые спорные и нерешенные вопросы.

Ключевые слова: *близкородственный брак, наследственность, психические заболевания, психические расстройства.*

Relevance. Despite the emerging downward trend in related marriages in recent decades, this problem affects at least 20% of the world's population and dozens of countries.

The prevalence of consanguineous marriages in the world varies significantly, ranging from 0.1-0.4% in the United States and European countries to more than 50% in North Africa, the Middle East and Western Asia.

The most common form of kinship marriage is a marriage alliance between cousins. In general, rural residents with a lower level of education are more likely to enter into a family

marriage. Consanguineous marriages can be of various types in communities: most often they are between cousins and second cousins, less often between uncle and niece [3,5].

Marriage between siblings (incest) is considered unacceptable and prohibited by law in most world cultures. To assess the degree of kinship between representatives of different populations, the inbreeding coefficient is used, which determines the probability with which a particular locus will contain two genes descended from a common ancestor in a descendant from a related marriage [4]. The inbreeding coefficient is a quantitative measure of inbreeding, designed to assess kinship between parents, although it is estimated by offspring [3].

The adverse effects of inbreeding are manifested in the fact that recessive genes of hereditary diseases will be found in a set of genes inherited from common ancestors. Accordingly, in children of parents who are blood relatives, they can go into a homozygous state. Therefore, with an increase in the degree of parental kinship, a part of the genome of common ancestors may increase, which will pass into a homozygous state.

This, in turn, increases the likelihood of developing recessive hereditary diseases. In most cases, the rarer the frequency of the recessive disease gene in a population, the higher the chances that such a disease will manifest itself in consanguineous marriage [1].

For example, if the frequency of the recessive disease gene in a population is 0.001, the probability of husband and wife heterozygosity for this gene will be 0.000004. However, if one of the spouses in such a marriage is a carrier of this gene, the probability for the second spouse to have this gene is equal to the coefficient of kinship between the spouses.

Thus, for siblings, this value will be equal to 0.125, i.e. it will exceed the population value by 125 times [3]. At the same time, marriage between cousins does not always imply the occurrence of genetic diseases [2]. Children from such marriages will be at increased risk only if both parents carry the same mutant gene at a given locus. Since relatives are more likely to be heterozygous for the same mutant gene (identical in origin) than non-relatives, consanguineous marriages have a higher probability of producing offspring affected by an autosomal recessive trait. If the frequency of harmful alleles is very low, the probability of these alleles appearing in a homozygous state in panmictic populations will also be lower.If the mutant gene causing the disease is widespread in the population, then in such marriages there will be no risk of having a child with this pathology [5].

The purpose of the study. Analysis of the modern scientific base on the problem of related marriages, assessment of their impact on the development of a particular pathology in children.

Research methods. The subject and method of our scientific research are clinical, statistical and epidemiological methods. In our study, we mainly analyzed statistical indicators in Central Asia.

The results of the study. Despite the fact that in most Western countries there is a negative attitude towards related marriages, assessed in terms of increased genetic risk to offspring, the following are considered positive social and economic aspects of related marriages:: -strengthening family ties and preserving property within the family clan; -Improving the status of women by reducing the risk of abuse by a husband related to her and reducing the likelihood of divorce; -consanguinity ensures the unity of lands (inheritance of land by men and women is carried out within the same family, and this is of great importance for peasants, since small plots of land are inefficient in agriculture; this model is common among Lebanese, Egyptians, Palestinians and Jordanians); -consanguinity presupposes the best relationship and compatibility between husband and wife, daughter-in-law and mother-in-law, and undisclosed problems

concerning the health or other unfavorable social characteristics of the bride or groom are also effectively avoided.; -consanguineous marriages create a certain balance in the bloodline within the family clan, guaranteeing the marriage of young women with men within the family, which means reducing the problems of celibacy.; -anthropologists have long agreed that the main achievement of consanguineous marriages is the inheritance of a peculiar family structure (specific features of thinking) and property; - The most important and fundamental reasons for related marriages in both South Asia and the Middle East are social and cultural considerations.

Despite the increasing urbanization and separation of families, as well as the increase in women's literacy, in a number of countries the choice of marriage is still the prerogative of parents, supported by the explicit or indirect support of older married brothers and sisters. Related marriages are traditional for at least 20% of the world's population. In a number of countries, choosing a spouse is traditionally a decision not only of the couple, but also of the family or family clan, although the frequency of arranged marriages has been decreasing in recent years due to an increase in the number of women receiving higher education, which provides greater opportunities to choose a marriage partner. As a result of studying and summarizing the results of more than 100 scientific studies, data on the global prevalence of marriages between blood relatives have been obtained.

From this point of view, populations can be divided into four main categories: populations in which consanguinity accounts for less than 1% of marriages; from 1 to 10%; from 20% or more, and those in which the level of consanguinity is unknown due to the lack or insufficient reliability of data. In this case, the division of the world's population will look like this: 1,061 billion. people belong to the population with less than 1% of related marriages; 2,811 billion – from 1 to 10%; 991 million – more than 20% and for 1,064 billion this frequency is not known.

Conclusion. Despite a number of positive social and economic aspects of related marriages, from the point of view of genetics and medicine, the negative impact of consanguineous marriages should be taken into account, consisting in an increased genetic risk to offspring and a high incidence of congenital pathology in newborns. An assessment of the socio-demographic aspects of closely related marriages shows that their wider spread is in many cases due to poor economic conditions, lack of education and low levels of social security.

Used literature:

1. Ivanov A.G. Medical and social approaches to improving the reproductive potential of modern youth // Russian Medical and Biological Bulletin named after academician I.P. Pavlov. 2004. No.3-4. pp. 105-107.
1. Moskovkina A.G., Orlova N.I.; Seliverstov V.I., ed. Clinical and genetic foundations of pediatric defectology. Moscow: GITS VLADOS; 2015.
2. Panfilova T.N., Medvedeva O.V. Family as an object of modern demographic policy // Russian Medical and Biological Bulletin named after academician I.P. Pavlov. 2009. Vol. 17, No. 2. pp. 67-70.
3. Hamamy H. Consanguineous Marriages Preconception Consultation in Primary Health Care Settings // Journal of Community Genetics. 2012. Vol. 3, №3. P. 185-192.
4. Lefranc M.-P., Lefranc G. Consanguinity. In: Brenner's Encyclopedia of Genetics. 2nd ed. 2013. P. 158-162.

UO'K: 616.895.8-072.8

SHIZOFRENIYADA NEGATIV BUZILISHLARNI DAVOLASH VA OLDINI OLISHGA ZAMONAVIY YONDASHUV

Maxmudova X.H., Islomov Sh. X., Dolimova M. A.
Andijon davlat tibbiyot institute

Rezyume. Endogen prosessual patologiyada negativ buzilishlar muammosining nazariy jihatlari dolzarb tadqiqot vazifasidir. Agar progradientli shizofreniyadagi nuqson sezilarli darajada o'rganilgan bo'lsa, shizofreniya spektri buzilishlarida defisit buzilishlarining tuzilishi qo'shimcha tekshirishni talab qiladi.

Ushbu maqolada shizofreniyaning asosiy alomati hisoblangan negativ sindromning xususiyatlari, uning paydo bo'lishi va rad etilishi haqida fikr keltirilgan.

Kalit so'zlar: *negativ alomatlar, shizofreniya, buzilishlar, progressiv shakl.*

A MODERN APPROACH TO THE TREATMENT AND PREVENTION OF NEGATIVE DISORDERS IN SCHIZOPHRENIA

Makhmudova X.X., Islamov Sh.Kh., Dolimova M.A.
Andijan State Medical Institute

Resume. Theoretical aspects of the problem of negative disorders in endogenous procedural pathology are an actual research task. If the defect in progressive schizophrenia has been studied to a significant extent, then the structure of deficit disorders in schizophrenic spectrum diseases needs further investigation.

This article presents an opinion on the features of the negative syndrome, its occurrence and rejection, which is considered the main symptomatology in schizophrenia

Key words: *negative symptoms, schizophrenia, disorders, progressive form.*

СОВРЕМЕННЫЙ ПОДХОД К ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ НЕГАТИВНЫХ РАССТРОЙСТВ ПРИ ШИЗОФРЕНИИ

Махмудова Х.Х., Исламов Ш.Х., Долимова М.А.
Андижанский государственный медицинский институт

Резюме. Обоснование: теоретические аспекты проблемы негативных расстройств при эндогенно-процессуальной патологии - актуальная исследовательская задача. Если дефект при прогредиентной шизофрении изучен в значительной степени, то структура дефицитарных нарушений при заболеваниях шизофренического спектра нуждается в дальнейшем исследовании.

В данной статье представлено мнение об особенностях негативного синдрома, его возникновении и отвержении, который считается основной симптоматикой при шизофрении.

Ключевые слова: *негативная симптоматика, шизофрения, расстройства, проградиентная форма.*

Dolzarblik. Shizofreniya kursining barcha asosiy turlarida negativ buzilishlarning ulushi (mo'ynali kiyimlardan yasalgan, takrorlanuvchi, uzluksiz, paranoiddan tashqari) 29-40% ni tashkil qiladi [4]. Shizofreniya va shizofreniya spektridagi buzilishlarning negativ buzilishlari muammosi hisoblanadi yaxshi tushunilmagan.

Negativ buzilishlarning zamonaviy psixopatologiyasi donozologik davrda o'rnatilgan uzoq tarixiy tajribaga asoslanadi. J. Jeksonning ta'kidlashicha, negativ alomatlar yuqori kognitiv, hissiy va psixologik funktsiyalar darajasida reflekslarning "yo'qolishini" aks ettiradi, ijobiy alomatlar esa

"bo'shatish fenomeni" ni anglatadi (ya'ni ular birlamchi — negativ buzilishlardan ikkilamchi — A. S.) va faqat normal ishlashni buzadi yoki giperbolizatsiya qiladi.

Shu bilan birga, negativ alomatlar doimiy bo'lib, shizofreniyaning birinchi epizodidan keyin 20-40% da davom etadi [2,7] va 16-35% da — uning o'tishi bilan bir yil davomida [1,3,4] va 35% da — hatto birinchi kasalxonaga yotqizilganidan 2 yil o'tgach. Yana bir dalil-shizofreniya nuqsonini klinik tahlil qilishning to'liq emasligi, negativ simptomatologiyani "shizofreniya psixopatologiyasining asosiy sohasi" sifatida tushunishiga qaramay [6,8].

Shunday qilib, ushbu tadqiqot mavzusini tashkil etgan holatlarni negativ shizofreniya doirasida bir qator zamonaviy nashrlarda kontseptsiyalashtirilgan defitsit buzilishlari makoniga kiritish qonuniydir.

Tadqiqotning maqsadi. Shizofreniya va shizofreniya spektrlari buzilishlarida negativ buzilishlarning kontseptual tahlilini o'tkazish.

Tadqiqot natijalari. Tadqiqot natijalari shuni ko'rsatadiki, bunday taqsimot tasodifan emas, balki "umumiy sindromlar"ning asosiy belgilarining dixotomiyasiga bo'ysunadi. Psixometrik baholashga muvofiq, ko'rib chiqilayotgan har bir umumiy sindromning tuzilishida ham ixtiyoriy nuqson — abuliya/abuliya giyohvandlik fenomeni bilan, ham nuqson hissiy, ya'ni shizofreniya nuqsonining dixotomik tuzilishini aks ettiruvchi ikkala komponent ham mavjud bo'lsa-da, ushbu negativ buzilish naqshlarining umumiy sindromlarning klinik makonida taqsimlanishi notekis.

Bizning ixtiyorimizda bo'lgan kasuistikani tahlil qilish (yuqorida aytib o'tilganidek) psixopatga o'xshash buzilishlarni asosiy nuqson dixotomiyasiga muvofiq tartiblash nafaqat bitta, bitta RL klasteri doirasida mumkin (va mumkin), balki ko'proq universal xususiyatga ega bo'ladi va barcha psixopatga o'xshash buzilishlarni taqsimlash uchun amal qiladi. ular tegishli.

Uni ifodalovchi barcha defensiv qutb sindromlariga ekstrapolyatsiya qilingan ixtiyoriy nuqson turidagi defitsit o'zgarishlarining umumiy tuzilishi psixofizik chidamlilikning qo'pol pasayishi (ixtiyoriy buzilishlar astenik alomatlar bilan bir-biriga mos kelganda) va/yoki aqliy faoliyatni ixtiyoriy tartibga solish bilan tavsiflanadi (apatiya-abuliya sans bo'yicha-4,3±0,7 ball; panss bo'yicha ixtiyoriy buzilishlar-5,1±0,3 ball; MFI bo'yicha asteniya-20 — 77±15,3 ball), passivlik, vedomost va qat'iyatsizlikning kuchayishi, astenik autizm xususiyatlarining qo'shilishi va muhim boshqalarning tor doirasiga bog'liqlik (PANSS bo'yicha muloqotning pasayishi-3,5±0,5 ball; SPQ-a bo'yicha yaqin do'stlarning yo'qligi-5,6±0,4 ball; hamkasblar va yaqinlar bilan munosabatlar SANS bo'yicha-3,2±0,2 ball; SPQ — a bo'yicha ortiqcha ijtimoiy tashvish — 6,2±1,3 ball; panss bo'yicha passiv ijtimoiy izolyatsiya-5,2±0,4 ball; SCL-90 — R bo'yicha shaxslararo tashvish-1,5±0,3 ball; p≤0,01). Ushbu guruhdagi hissiy buzilishlar haddan tashqari darajada ifodalanadi va ijtimoiy faollikning umumiy darajasining pasayishini aks ettiradi (birinchi navbatda astenik alomatlar, keskin refleksiv mexanizmlar, shuningdek bemorlarning sezgir munosabat g'oyalarini shakllantirishga moyilligi bilan bog'liq) va qarindoshlar yoki turmush o'rtoqlar bilan simbiotik aloqalar chegaralariga qadar hissiy bog'lanishlar doirasining torayishi (anhedoniya-sans-ga ko'ra asotsiallik 3,0±0,2 ball, SPQ-A bo'yicha tekislangan affekt 3,7±0,4 ball). Kengaytirilgan qutbning barcha "umumiy sindromlari" uchun yagona (hissiy tipdagi nuqson tasviri bilan) defitsit o'zgarishlarning tuzilishi statistik jihatdan ahamiyatli asosda (irodaviy tipdagi defitsit buzilishlaridan farqli o'laroq) umumiy psixofizik bosimni saqlab qolish bilan ajralib turadi, bunda energiya potentsialining pasayishi hodisalari ruhiy energiya darajasining pasayishi bilan emas, balki uning buzilishi bilan namoyon bo'ladi. tartibsiz, maqsadga muvofiqligini yo'qotgan va faoliyatni ixtiyoriy nazorat qilish. Bu, ayniqsa, bemorlarning mehnat holati xususiyatlarini apatoabulyar o'zgarishlar shkalasi ko'rsatkichlari bilan taqqoslashda

yaqqol namoyon bo'ladi (apatiya-abuliya — SANS — 3,6±0,3 ball; panss bo'yicha ixtiyoriy buzilishlar — 2,7±1,2 ball; MFI bo'yicha asteniya-20 — 25±11,2 ball).

Hissiy tipdagi negativ buzilishlarning butun guruhi uchun umumiy bo'lgan birinchi o'ringa haqiqiy hissiylikning aniq o'zgarishlari kiradi (anhedoniya — sans-4,3±0,2 ball bo'yicha asosiylik, SPQ-a — 6,8±0,4 ball bo'yicha yassilangan ta'sir), uning regressiv sintoniklik xususiyatlarini shakllantirish, empatiya qobiliyatini yo'qotish va chuqur hissiy qo'shimchalarni shakllantirish bilan, ratsionalizm, egosentriklik va pragmatizm xususiyatlarini patologik keskinlashtirish (yaqin do'stlarning yo'qligi SPQ-a bo'yicha 8,3±0,4 ball; panss bo'yicha muloqotning pasayishi 5,1±1,2 ball; sans bo'yicha hamkasblar va yaqinlar bilan munosabatlar — 4,5±0,3 ball; SPQ-a bo'yicha ekssentrik xatti — harakatlar-5,7±1,8 ball; ortiqcha ijtimoiy tashvish (SPQ-A) — 0,9±0,2 ball; SCL-90 bo'yicha shaxslararo tashvish — 0,2±0,5 ball; SCL-90 bo'yicha dushmanlik — 1,9±0,3 ball ball).

Shizofreniya spektrining buzilishlarida nuqsonning psixopatologik namoyon bo'lishi psixopatik registrning (psixopatoga o'xshash buzilishlar) nuqsonli simptom komplekslari bilan ifodalanganligi, cheklangan (sirkumskriptiv) xarakterga ega ekanligi, monosindromal tuzilishga ega ekanligi, prodromal buzilishlar darajasida allaqachon topilganligi va premorbid patoxarakterologik dimensiyalar bilan bog'liqligi aniqlandi. Shizofreniya spektrining cheklangan progredientligi bilan ajralib turadigan, prodromal bosqichda prodromal yoki fazli kurs bilan yakunlanadigan buzilishlarda negativ buzilishlar traektoriyasi aniqlandi. Shuningdek, zamonaviy avlod dori-darmonlari bilan negativ buzilishlarning psixofarmakoterapiyasining jihatlari muhokama qilinadi.

Xulosa. Shunday qilib, "umumiy sindromlar" makonida ishlaydigan psixopatoga o'xshash simptom komplekslari asosiy etishmovchilik buzilishlaridan keyin ikkinchi darajali bo'lishi mumkin. Shunga ko'ra, psixopatga o'xshash nuqsonni negativ buzilishlarning sindromli (boshqalar tomonidan tayinlangan) shakli sifatida ajratish, bizning tadqiqotlarimizga ko'ra, noqonuniy ko'rinadi.

Foydalanilgan adabiyotlar:

1. Бархатова, А. Н. Клинико-психопатологические аспекты дефицитарных расстройств в структуре начальных этапов юношеского эндогенного психоза /А. Н. Бархатова // Журнал неврологии и психиатрии им. С. С. Корсакова. - 2015. - №9. - С. 8-16.
2. Иванов, С. В. Типология нозогенных реакций с явлениями аутоагрессии (феномен откладывания) при злокачественных новообразованиях / С. В. Иванов, Д. С. Петелин // Психические расстройства в общей медицине. - 2016. - №3. - С.17-25.
3. Каледа, В. Г. Юношеская шизофрения: особенности психопатологии, клиники и терапии / В. Г. Каледа // Журнал неврологии и психиатрии им. С.С. Корсакова. - 2015. - Т.115. - №11. - С. 26-33.
4. Мосолов, С. Н. Алгоритмы биологической терапии шизофрении / С. Н. Мосолов, Э. Э. Цукарзи, П. В. Алфимов // Журнал Современная терапия психических расстройств. 2014. - №1.
5. Сергеев, И. И. Патологические интересы и увлечения при шизофрении / И. И. Сергеев, С. А. Малиночка // Журнал неврологии и психиатрии имени С. С. Корсакова. - 2008. - Т. 108. - № 3. - С. 11-17.
6. Ashton, M.C. The maladaptive personality traits of the personality inventory for DSM-5 (PID-5) in relation to the HEXACO personality factors and schizotypy/dissociation / M.C.

Ashton, K. Lee, R. E. de Vries, J. Hendrickse, M. Ph. Born // Journal of Personality Disorders. - 2012. -Vol.26. - №5. - P. 641-659.

7. Bolinskey P. K. Revisiting the blurry boundaries of schizophrenia: Spectrum disorders in psychometrically identified schizotypes / P. K. Bolinskey, A. V. James, D. Cooper-Bolinskey, J.H. Novi, H. K. Hunter, D.V. Hudak, K.M. Schuder, K.R. Myers, C.A. Iati, M. F. Lenzenweger // Psychiatry research. - 2015. - Vol. 225. - №3. - P.335-40.
8. Watson, D. Structures of personality and their relevance to psychopathology: II. Further articulation of a comprehensive unified trait structure. / D. Watson, L. A.Clark, M. Chmielewski // Journal of Personality. - 2008. - 76. - P. 1545-1585.

UDC: 616-08-035

A RETROSPECTIVE ANALYSIS OF CONGENITAL HEART DEFECTS IN TASHKENT'S PEDIATRIC POPULATION

Saloni S.M., Tulyaganova D.S., Akramhujaeva A.B.
Tashkent Medical Academy, Uzbekistan.

Abstract. This study investigates the prevalence of congenital malformations (ICD codes Q20-Q28) in children treated at a polyclinic in Tashkent, aged under 18 years. The data includes hospital stay durations, age - gender distributions, number of operations, and specific congenital malformations. We used Microsoft Excel 2007 to calculate the prevalence, and to present the data effectively. The results highlight the prevalence of different congenital anomalies and provide insights into healthcare needs and strategies for improvement

***Keywords**: Congenital malformations, ICD codes, Q20 Q28, children, Tashkent, prevalence, gender disparities, surgical intervention.*

TOSHKENT SHAHRIDAGI BOLALAR POPULYATSIYASIDAGI TUG'MA YURAK NUQSONLARINING RETROSPEKTIV TAHLILI

Saloni S.M., Tulaganova D.S., Akramxujaeva A.B.
Toshkent tibbiyot akademiyasi, O'zbekiston.

Annotatsiya. Ushbu tadqiqot Toshkent shahridagi poliklinikalarda davolanayotgan 18 yoshgacha bo'lgan bolalarda tug'ma nuqsonlar (ICD kodlari Q20-Q28) tarqalishini o'rganadi. Ma'lumotlar kasalxonada qolish muddati, yosh-jins taqsimoti, operatsiyalar soni va o'ziga xos tug'ma nuqsonlarni o'z ichiga oladi. Tarqoqlikni hisoblash va ma'lumotlarni samarali taqdim etish uchun biz Microsoft Excel 2007 dasturidan foydalandik. Natijalar turli tug'ma anomaliyalarning tarqalishini ta'kidlaydi va sog'liqni saqlash ehtiyojlari va yaxshilash strategiyalari haqida tushuncha beradi.

***Kalit so'zlar:** Tug'ma nuqsonlar, ICD kodlari, Q20 Q28, bolalar, Toshkent, tarqalish, gender nomutanosibligi, jarrohlik aralashuv.*

РЕТРОСПЕКТИВНЫЙ АНАЛИЗ ВРОЖДЕННЫХ ПОРОКОВ СЕРДЦА У ДЕТСКОГО НАСЕЛЕНИЯ ТАШКЕНТА

Салони С.М., Туляганова Д.С., Акрамхуджаева А.Б.
Ташкентская медицинская академия, Узбекистан.

Аннотация. В этом исследовании изучается распространенность врожденных пороков развития (коды МКБ Q20-Q28) у детей в возрасте до 18 лет, лечившихся в поликлинике в Ташкенте. Данные включают длительность пребывания в больнице, распределение по возрасту и полу, количество операций и конкретные врожденные пороки развития. Мы использовали Microsoft Excel 2007 для расчета распространенности и эффективного представления данных. Результаты подчеркивают распространенность различных врожденных аномалий и дают представление о потребностях здравоохранения и стратегиях для улучшения.

***Ключевые слова:** Врожденные пороки развития, коды МКБ, Q20 Q28, дети, Ташкент, распространенность, гендерные различия, хирургическое вмешательство.*

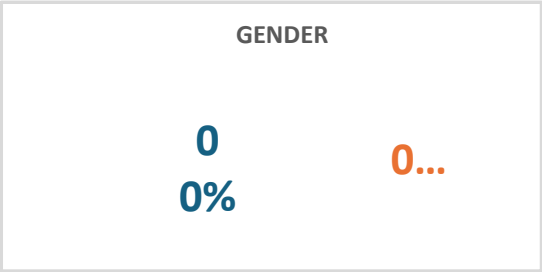
Abbreviations: - ICD: International Classification of Diseases

Introduction: -Congenital anomalies, also known as birth defects, are structural or functional abnormalities that occur during intrauterine development and can be identified prenatally, at birth, or sometimes later in infancy (3, 12). These anomalies represent a significant global health challenge, affecting approximately 8 million newborns annually (12). They contribute to 240,000

newborn deaths within 28 days of birth and 170,000 deaths among children aged 1 month to 5 years each year (12). One in 120 children is born with congenital heart defects (CHDs) annually (13). By 2030, congenital anomalies will be the fifth leading cause of neonatal death (12). The most common severe congenital disorders include heart defects, neural tube defects, and Down syndrome (3, 13). Factors contributing to congenital anomalies include genetic, environmental, nutritional, and socioeconomic elements (3, 14, 20). For instance, consanguineous marriages (marriages between blood relatives) are associated with a higher prevalence of congenital anomalies (3). In low- and middle-income countries, the burden of congenital anomalies is more pronounced due to limited access to healthcare, inadequate nutritional support, and higher exposure to environmental risk factors (3, 14, 20). In these regions, congenital anomalies account for a significant proportion of neonatal and under-five mortality (12, 20). Recent studies emphasize the need for preventive measures such as adequate maternal nutrition (especially folic acid intake), vaccination against infections like rubella, and proper management of maternal health conditions like diabetes (3, 14, 20). Moreover, universal access to prenatal screening and genetic counseling can help identify and manage risks associated with congenital anomalies (8, 17). Congenital heart defects (CHDs) represent the most common birth defects globally, with significant variations in prevalence and management across different regions (13, 17). According to a meta-analysis covering studies from 1970 to 2017, the global prevalence of CHDs has been increasing, largely due to improved detection techniques such as echocardiography (13). The prevalence of "mild lesions" like ventricular septal defect (VSD) and atrial septal defect (ASD) has risen, while severe anomalies like left ventricular outflow tract obstruction (LVOTO) have decreased, possibly due to better prenatal diagnosis and subsequent terminations (13). Regional differences are notable, with Africa reporting the lowest CHD prevalence and Asia the highest (13, 17). The prevalence of CHDs also correlates with national income levels, being higher in low- and middle-income countries compared to high-income nations (13, 17). Advances in diagnostic techniques, such as fetal echocardiography, pulse oximetry screening, and non-invasive imaging, have significantly improved the identification and management of CHDs, enhancing outcomes for affected children (13, 17). Congenital malformations represent a significant public health concern that affects the pediatric population worldwide (3, 12). Recent research has highlighted the multifactorial origins of congenital anomalies (3, 14, 20). Scientists like Dr. Diana Bianchi, a renowned researcher in prenatal genetics, have emphasized the importance of early detection and intervention (7). Dr. Bianchi's work on non-invasive prenatal testing has revolutionized the way congenital anomalies are diagnosed, allowing for earlier and more accurate detection (7). Another significant contributor to this field is Dr. John C. Carey, known for his extensive research on the epidemiology and genetic causes of congenital anomalies (8). Dr. Carey's studies have provided valuable insights into the prevention and management of these conditions (8).

Objective and tasks: - This study aims to analyse the prevalence of congenital anomalies (Q20-Q28) among children at polyclinic in Tashkent. Understanding this pattern is crucial for improving diagnostic and treatment strategies and optimising healthcare resource allocation.

Method and materials: - Data Collection- The data was collected from medical records of children admitted to polyclinic, was analysed using Microsoft excel (2007). Children under 18 were initially admitted to the hospital, but since 20-year-olds also arrived, we now only accept patients under 18 years. Few patients were also from Tajikistan and Kyrgyzstan region. A total of 2060 cases were included in the study, with a gender distribution of 1124 males (54%) and 936 females (46%) (Table 1) respectively from Tashkent and other regions of republic of Uzbekistan. The hospital stays were categorised into different durations and the patients were divided into four age groups (table 3): 0 to 5 years, 6 to 10 years, 11 to 15 years and 16 to 20 years. Congenital



malformations were classified based on the Q20-Q28 ICD Codes. We calculated the prevalence and frequency of each malformation type.

Table 1(Gender distribution)

Results: - The year 2023 data reveal a steady increase in the number of cases over the year, with a significant spike in age group of 0 to 5 years 6 to 10 years. The majority of children required surgical intervention, highlighting the severity of these conditions. The most common malformation was Q21.0 with prevalence = 24.46% followed by Q21.1 with prevalence =11.55% (table 2)

Table 2 (Prevalence)

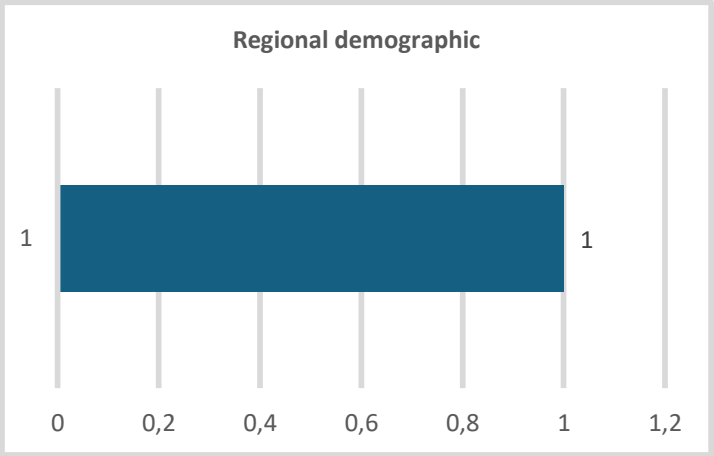
ICD codes	Cases	Prevalence (%)
Q20.1	128	6.21
Q20.2	7	0.34
Q20.3	150	7.28
Q20.4	9	0.44
Q20.5	5	0.24
Q20.6	0	0
Q20.8	4	0.19
Q20.9	0	0
Q21.0	504	24.46
Q21.1	238	11.55
Q21.2	104	5.05
Q21.3	215	10.44
Q21.4	156	7.57
Q21.5	0	0
Q21.6	0	0
Q22.0	7	0.34
Q22.1	48	2.33
Q22.2	0	0
Q22.3	0	0
Q22.4	12	0.58
Q22.5	4	0.19
Q22.6	15	0.73
Q22.8	2	0.10
Q22.9	1	0.05

Q23.0	32	1.55
Q23.1	5	0.24
Q23.2	5	0.24
Q23.3	9	0.44
Q23.4	8	0.39
Q23.8	1	0.05
Q24.2	1	0.05
Q24.5	10	0.49
Q25.0	178	8.64
Q25.1	24	1.17
Q25.2	3	0.15
Q25.3	17	0.82
Q25.4	2	0.10
Q25.5	14	0.68
Q25.6	53	2.57
Q25.7	1	0.05
Q25.8	4	0.19
Total	2060	100

Table 3

Age group	No of patients
0- 5 yrs	1545
6-10yrs	303
11 - 15 yrs	164
16 - 20 yrs	48
Total	2060

Table 4



History: - The history and prevalence of congenital anomalies of the circulatory system, particularly congenital heart defects (CHDs), in children of the Republic of Uzbekistan, reflect global trends influenced by regional factors. Congenital heart anomalies include conditions like ventricular septal defects (VSDs), atrial septal defects (ASDs), tetralogy of Fallot, and transposition of the great arteries. In Uzbekistan, as in many other countries, the prevalence of CHDs has been influenced by advances in medical diagnostics and healthcare access. Historically, CHDs may have gone under-diagnosed or untreated due to limited healthcare resources. Recent improvements in prenatal screening and neonatal care have enhanced the detection and management of these conditions. The introduction of echocardiography and other diagnostic tools has allowed for earlier and more accurate diagnosis of congenital heart defects, leading to better outcomes for affected children. Socioeconomic factors also play a significant role. In regions with limited access to healthcare, such as rural areas of Uzbekistan, there may still be challenges in diagnosing and treating congenital heart defects effectively.

Etiology: - The etiology of congenital anomalies of the circulatory system, particularly congenital heart defects (CHDs), is multifactorial, involving genetic, environmental, and maternal factors (diagram no 1). Certain chromosomal anomalies are strongly associated with CHDs. For

example, Down syndrome (trisomy 21) is frequently linked to defects such as atrioventricular septal defects. Other chromosomal conditions include Turner syndrome (monosomy X), which often involves coarctation of the aorta, and DiGeorge syndrome (22q11.2 deletion), associated with conotruncal heart defects like tetralogy of Fallot and interrupted aortic arch. Mutations in specific genes can also cause congenital heart defects. For instance, mutations in the NKX2-5 gene are linked to atrial septal defects and other cardiac malformations. The GATA4 and TBX5 genes are other examples where mutations can lead to septal defects and complex heart anomalies. Certain maternal conditions during pregnancy increase the risk of CHDs. Maternal diabetes, particularly if poorly controlled, is a significant risk factor for a range of congenital heart defects. Rubella infection during the first trimester can lead to patent ductus arteriosus and pulmonary artery stenosis.

Exposure to certain medications and substances during pregnancy can cause CHDs. For instance, anticonvulsants like valproic acid, lithium (used to treat bipolar disorder), and isotretinoin (used for severe acne) are known teratogens. Additionally, alcohol consumption and smoking during pregnancy are associated with an increased risk of heart defects. Deficiencies in essential nutrients, particularly folic acid, during pregnancy are linked to an increased risk of CHDs. Proper maternal nutrition, including adequate intake of folic acid, can help reduce the incidence of neural tube defects and some heart anomalies. Advanced maternal age is associated with a higher risk of chromosomal abnormalities, which in turn can lead to congenital heart defects. Additionally, maternal health conditions such as obesity and hypertension can increase the risk of CHDs in the offspring. Infections during pregnancy, especially those that occur in the first trimester, can significantly impact fetal development. Beyond rubella, other infections like cytomegalovirus and toxoplasmosis have been implicated in the development of congenital anomalies, including those affecting the heart.

Many congenital heart defects arise from a combination of genetic predispositions and environmental exposures, known as multifactorial inheritance. This complex interplay means that while a child may inherit a susceptibility to heart defects, the manifestation of these defects often depends on specific environmental triggers encountered during pregnancy.

Surgical Interventions: - 1630 children (78.6%) had at least one operation.

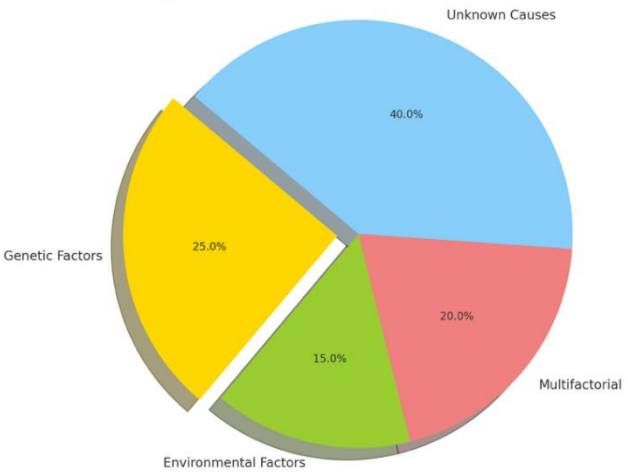


Diagram no 1

Quality of life: - Many children with CHDs experience limitations in cardiac function, which can affect their physical capabilities and endurance. This often results in restrictions on physical

activities and exercise, impacting overall fitness and health. Multiple surgeries are common for complex CHDs, which can lead to prolonged hospital stays and recovery periods. While these surgeries can significantly improve heart function and survival, they can also introduce risks and complications that affect quality of life. Many children with CHDs also have other health issues, such as developmental delays or syndromic conditions, which can further impact their overall health. Chronic illness and frequent hospital visits can lead to increased anxiety and stress for both the child and their family. Issues such as fear of medical procedures, coping with physical limitations, and social isolation can significantly affect emotional well-being. Children with CHDs may face developmental challenges, including delays in reaching milestones, learning difficulties, and behavioral issues. These challenges can impact self-esteem and social interactions. The demands of caring for a child with a CHD can place significant stress on families, affecting their emotional and financial well-being. Support systems and counselling can be crucial in managing this stress. Children with CHDs may have difficulties with school attendance and performance due to frequent medical appointments and hospitalisations. They may require special educational support to keep up with their peers. Physical limitations and medical needs can make it challenging for children with CHDs to participate in typical social activities, potentially leading to feelings of isolation and differences from peers. Participation in support groups and communities of families with similar experiences can provide crucial emotional support and improve social integration. As medical care improves, many individuals with CHDs are living into adulthood. Transitioning from pediatric to adult care requires careful planning to ensure continued health and well-being. Adult CHD patients may face unique challenges, including issues related to employment, insurance, and independent living. Advances in medical care, including surgical techniques and long-term management strategies, have significantly improved the quality of life for many individuals with CHDs.

Conclusion- This study highlights the rising prevalence of congenital malformations in children. The overall prevalence of congenital malformations (Q20-Q28) among children at a polyclinic in Tashkent is approximately 96.55%. Specific conditions such as Q21.0 (Congenital malformations of cardiac septa) have a higher prevalence (24.46%) compared to other conditions. The majority of cases are from the Kashkadarya region (14.85%), Andijan region (12.52%), and Surxondaryo region (9.56%), with the lowest prevalence from the Syrdarya region (2.18%) (table 4).

Findings: - The findings of this study underscore a critical public health concern regarding the high prevalence of congenital malformations among children in Tashkent, particularly emphasizing the significant occurrence of cardiac anomalies such as Q21.0 (Congenital malformations of cardiac septa). The alarmingly high overall prevalence rate of 96.55% among children at the polyclinic signals a pressing need for targeted interventions and resource allocation to address this issue. The data reveal notable regional disparities in the prevalence of congenital malformations, with the highest rates observed in the Kashkadarya, Andijan, and Surxondaryo regions. This geographical variability suggests potential regional risk factors that may be contributing to the higher incidence of these conditions. These factors could include environmental influences, genetic predispositions, or socio-economic determinants that warrant further investigation. The relatively lower prevalence in the Syrdarya region, at 2.18%, highlights the necessity for comparative studies to identify protective factors or effective interventions in this region that could be applied elsewhere.

Recommendation: -From the conclusion, there should be comprehensive prenatal screening and counselling programs in regions with higher prevalence in order to detect congenital malformations early. There should also be genetic counselling services to assist families in understanding the risks and management options for congenital conditions. Increasing public health programs to raise awareness about the prevention and early detection of congenital malformations, focusing on areas with the highest prevalence. Further research to identify potential environmental and genetic factors contributing to the high prevalence in specific regions. Continuous surveillance should be maintained to monitor trends and evaluate the effectiveness of interventions. Providing accurate information regarding nutrition and healthy lifestyle to pregnant women can help them avoid the risk factors during pregnancy. strengthen healthcare infrastructure in high-prevalence regions to ensure that affected children receive timely and adequate medical care. Providing specialized training for healthcare professionals in the detection and management of congenital malformations to improve patient outcomes.

Used literature:

1. Al-Sheikh G, Al-Rumaih Z, et al. Prevalence of congenital heart disease in neonates and children in the Middle East. Pediatr Cardiol. 2023;44(3):674-83.
2. American Heart Association (AHA). What are congenital heart defects? Available from: https://www.heart.org/en/health-topics/congenital-heart-defects.
3. Auger N, et al. Risk of congenital anomalies in children who have a sibling with cancer: A matched cohort study. Ann Epidemiol. 2024;94:27-32.
4. Bianchi DW, Chudova D, Sehnert AJ, Bhatt S, Murray K, Prosen TL, et al. Noninvasive prenatal testing and incidental detection of occult maternal malignancies. JAMA. 2015;314(2):162-9.
5. Bianchi DW, Oepkes D, Ghidini A. Current controversies in prenatal diagnosis 1: should noninvasive DNA testing be the standard screening test for Down syndrome in all pregnant women? Prenat Diagn. 2014;34(1):6-11.
6. Bianchi DW, Platt LD, Goldberg JD, Abuhamad AZ, Sehnert AJ, Rava RP. Genome-wide fetal aneuploidy detection by maternal plasma DNA sequencing. Obstet Gynecol. 2012;119(5):890-901.
7. Bianchi DW, Parker RL, Wentworth J, Madankumar R, Saffer C, Das AF, et al. DNA sequencing versus standard prenatal aneuploidy screening. N Engl J Med. 2014;370(9):799-808.
8. Carey JC, McLeod R. Genetic counseling and risk assessment. Pediatr Clin North Am. 2014;61(4):805-17.
9. de Andrade KC, Strande NT, Kim J, Haley JS, Hatton JN, Frone MN, et al. Genome-first approach of the prevalence and cancer phenotypes of pathogenic or likely pathogenic germline TP53 variants. Hum Genet Genomics Adv. 2024;5(1).
10. Dong WH, et al. Trend of mortality due to congenital anomalies in children younger than 5 years in Eastern China, 2012-2021: Surveillance data analysis. JMIR Public Health Surveill. 2024;10:e53860.
11. Goodman LF, Yu PT, Guner Y, Awan S, Mohan A, Ge K, et al. Congenital anomalies and predisposition to severe COVID-19 among pediatric patients in the United States. Pediatr Res. 2024;1-7.

12. Li X, Hou MJ, Kong XM, Lv JJ, Yang CH, Li DT, et al. The congenital birth defects burden in children younger than 14 years of age, 1990-2019: An age-period-cohort analysis of the global burden of disease study. J Glob Health. 2024;14:04012.
13. Li Z, He C, Zhu J, et al. Prevalence and trends of congenital heart disease in children: A global systematic review and meta-analysis. Lancet Child Adolesc Health. 2024;8(1):45-54.
14. Maner SS, Shaikh AA. Environmental factors affecting neonatal health: Addressing pollution, climate change, and other risk. Int J Pediatr Genet. 2024;2(3):16-9.
10. Mogess WN, Mihretie TB. Prevalence and associated factors of congenital anomalies in Ethiopia: A systematic review and meta-analysis. PLoS One. 2024;19(4):e0302393.
11. Morris JK, et al. Hospital care in the first 10 years of life of children with congenital anomalies in six European countries: Data from the EUROlinkCAT cohort linkage study. Arch Dis Child. 2024;109(5):402-8.
12. Mustafina S, Zhumasheva S, et al. Congenital heart defects in Central Asia: Epidemiological overview and health care challenges. J Cardiol Res. 2024;11(2):89-102.
13. Narapureddy BR, et al. Examining the prevalence of congenital anomalies in newborns: A cross-sectional study at a tertiary care maternity hospital in Saudi Arabia. Children (Basel). 2024;11(2):188.
14. Nelson JL, Furst DE, Maloney S, Gooley T, Evans PC, Smith A, et al. Microchimerism and HLA-compatible relationships of pregnancy in scleroderma. Lancet. 1998;351(9102):559-62.
15. Niyazov M, Rashidov M, et al. Socioeconomic and environmental determinants of congenital anomalies in Uzbekistan: A case-control study. Asian J Pediatr. 2023;34(3):233-43.

UDC: 616-08-035

VASOPRESSOR AND INOTROPE USE IN CARDIOGENIC SHOCK: WHY AND WHEN?

Mamasodiqov A.A., Rakhmatova F.U.
Fergana Medical institute of Public Health

Annotation. Cardiogenic shock is a life-threatening condition in which the heart suddenly cannot pump enough blood to meet the body's needs. It is usually caused by severe heart damage, most commonly from a massive heart attack (myocardial infarction). Other causes include heart failure (example, due to dilated cardiomyopathy), arrhythmias (irregular rhythms), infections, heart valve diseases (example,aortic stenosis, mitral regurgitation), cardiac tamponade (fluid buildup around the heart) or conditions that weaken the heart muscle.Cardiogenic shock is a medical emergency that require immediate treatment.It has a high mortality rate if not treated quickly, so immediate medical attention is crucial.Without treatment, mortality is 70-90%.With rapid treatment, survival improves to 50-60%. Extracorporeal Membrane Oxygenation and mechanical support further increase survival rates.Early recognition and intervention are critical to improving outcomes. Despite increasing interest in the management of cardiogenic shock, mortality rates remain unacceptably high. The mainstay of supportive treatment includes vasopressors and inotropes. These medications are recommended in international guidelines and are widely used despite limited evidence supporting safety and efficacy in cardiogenic shock.

Keywords: *Inotrope, Cardiogenic shock, ejaction fraction, vasopressor*

KARDIOGEN SHOK HOLATLARIDA VAZOPRESSOR VA INOTROP PREPARATLARINING QO'LLANILISHI NIMA UCHUN VA QACHON?

Mamasodiqov A.A., Rahmatova F.U.
Farg'ona Jamoat Salomatligi Tibbiyot institute

Annotatsiya. Kardiogenik shok – bu hayot uchun xavfli holat bo'lib, yurak to'satdan organizm ehtiyojini qondirish uchun yetarli darajada qon hayday olmay qoladi.Odatda, bu yurakning jiddiy shikastlanishi, eng ko'p hollarda esa miokard infarkti (yurak xuruji) natijasida yuzaga keladi. Boshqa sabablar orasida yurak yetishmovchiligi (masalan, dilatatsion kardiomiopatiya tufayli), aritmiyalar (noto'g'ri yurak ritmlari), infeksiyalar, yurak klapinlari kasalliklari (masalan, aorta stenozasi, mitral regurgitatsiya), yurak tamponadasi (yurak atrofida suyuqlik to'planishi) yoki yurak mushagini zaiflashtiradigan boshqa holatlar ham kardiogenik shokga sabab bo'la oladi. Kardiogenik shok shoshilinch tibbiy yordamni talab qiladigan favqulodda holatdir.Agar tezkor davolanmasa, o'lim darajasi 70-90% gacha yetadi. Biroq, tezkor tibbiy yordam vaqtida ko'rsatilsa, tirik qolish imkoniyati 50-60% gacha yaxshilanadi. Ekstrakorporal membranali oksigenatsiya va mexanik qo'llab-quvvatlash usullari esa omon qolish ko'rsatkichlarini yanada oshiradi. Erta aniqlash va tezkor aralashuv natijalarni yaxshilash uchun juda muhimdir. Kardiogenik shokni davolash bo'yicha izlanishlar olib borilayotganiga qaramay, o'lim darajasi hanuz yuqori bo'lib qolmoqda. Qo'llab-quvvatlovchi davolashning asosiy usullari orasida vazopressorlar va inotrop dorilar mavjud. Ushbu dorilar xalqaro tavsiyalarga kiritilgan va keng qo'llaniladi, ammo kardiogenik shokda ularning xavfsizligi va samaradorligini tasdiqlovchi dalillar cheklangan.

Kalit so'zlar: *Inotrop, kardiogenik shok, qorinchalar qisqaruvchanligi, vazopressor*

ПРИМЕНЕНИЕ ВАЗОПРЕССОРОВ И ИНОТРОПОВ ПРИ КАРДИОГЕННОМ ШОКЕ: ПОЧЕМУ И КОГДА?

Мамасодиков А.А.
Студент Ферганского медицинского института общественного здоровья

г.Фергана Республика Узбекистан
Научный руководитель: Рахматова Ф.У.
Ассистент кафедры госпитальной терапии

Аннотация. Кардиогенный шок — это опасное для жизни состояние, при котором сердце внезапно не может перекачивать достаточно крови для удовлетворения потребностей организма.Обычно это вызвано тяжелым повреждением сердца, чаще всего обширным сердечным приступом (инфарктом миокарда).Другие причины включают сердечную недостаточность (например, из-за дилатационной кардиомиопатии), аритмии (нерегулярные ритмы), инфекции, заболевания сердечных клапанов (например, аортальный стеноз, митральная регургитация), тампонаду сердца (накопление жидкости вокруг сердца) или состояния, которые ослабляют сердечную мышцу. Кардиогенный шок — это неотложная медицинская ситуация, требующая немедленного лечения. Он имеет высокий уровень смертности, если его не лечить быстро, поэтому немедленное медицинское обслуживание имеет решающее значение. Без лечения смертность составляет 70-90%. При быстром лечении выживаемость улучшается до 50-60%. Экстракорпоральная мембранная оксигенация и механическая поддержка еще больше повышают показатели выживаемости. Раннее распознавание и вмешательство имеют решающее значение для улучшения результатов. Несмотря на растущий интерес к лечению кардиогенного шока, показатели смертности остаются неприемлемо высокими. Основой поддерживающего лечения являются вазопрессоры и инотропы. Эти препараты рекомендованы в международных руководствах и широко используются, несмотря на ограниченные доказательства, подтверждающие безопасность и эффективность при кардиогенном шоке.

***Ключевые слова**: инотроп, кардиогенный шок, фракция выброса, вазопрессор*

Introduction. Cardiogenic shock is a primary cardiac disorder of low cardiac output resulting in clinical and biochemical findings of end-organ hypoperfusion. Pathophysiological changes include impaired myocardial contractility and reduced cardiac output, associated with systemic vasoconstriction and coronary ischemia. The complex cardiogenic shock spiral can be worsened by concomitant systemic inflammation, vasodilation and abnormal nitric oxide handling.Cardiogenic shock complicates approximately 5 to 10% of acute myocardial infarction presentation. Non acute myocardial infarction etiologies of cardiogenic shock include acute decompensation of heart failure, severe valvular disease, arrhythmias and myocarditis.Cardiogenic shock was historically defined hemodynamically, with persistent hypotension of systolic blood pressure less than 90mmHg associated with a severe reduction in cardiac index (less than 1,8L/min/m^2 without support or less than 2,2L/min/m^2 with support), and adequate or elevated filling pressures(left ventricular end-diastolic pressure of greater than 15-18mmHg). The Society for Cardiovascular Angiography and Interventions recently updated an expert consensus statement on the classification of Cardiogenic shock [1,2].

Physiological Basis Of Inotropes.

The body's adrenergic receptors, divided into alpha and beta receptors, are responsible for performing the function of the sympathetic nervous system. The alpha-1 receptors are linked to vascular smooth muscle activity, and activation produces systemic vasoconstriction, increasing peripheral vascular resistanse and arterial blood pressure. The alpha-2 receptors are located within presynaptic nerve terminals and inhibit the release of endogenous norepinephrine. Activation of beta-1 receptors leads to increased inotropy and chronotrophy whereas activation of the beta-2 receptors leads to smooth muscle and vascular resistance.Most medications used in cardiogenic shock resuscitation have both inotropic and vasopressor properties and take advantage of excitatory and inhibitory effects on the aforementioned receptors to exert their effects on the heart, peripheral vascular system and autonomic nervous to augment cardiac output and restore end-organ perfusion [7,14].

Dobutamine

Dobutamine is a medication primarily used to treat acute heart failure and cardigenic shock. It is a beta-adrenergic agonist that stimulates beta-1 receptors in the heart, leading to increased heart rate and stronger contractions. This improves cardiac output and helps maintain blood flow to vital organs. Site effect is $B_1 > B_2$. Hemodynamic changes are blood pressure may be normal or decreased, increased heart rate and cardiac output. Applications are cardiac stress testing, acute decompensated heart failure with cardiogenic shock (inotrope). A concern with dobutamine, particularly in the post acute myocardial infarction population, is the purported increase in myocardial oxygen consumption, ischemia and tachyarrhythmias. Among post acute myocardial infarction patients with severe heart failure, dobutamine was associated with higher supraventricular and ventricular arrhythmic burden compared to enoximone.Nevertheless, dobutamine is widely used and the combination of dobutamine-norepinephrine is commonly seen in cardiogenic shock patients requiring both vasopressor and inotrope support. Therapeutic dose of dobutomine is 10 mg/min. A study comparing dobutamine-norepinephrine against epinephrine found that both interventions were similary effective but epinephrine was associated with more adverse events, including transient lactic acidosis, increased heart rate and arrhythmias, and inadequate gastric perfusion. The advantages of dobutamine over epinephrine were confirmed in the Cardio center in Fergana trial, which randomized 100 patients with Acute Myocardial Infarction-Cardiogenic shock to this agent [11,13] .

Norepinephrine is preferred over epinephrine in cardiogenic shock

The most commonly used vasopressor in cardiogenic shock is norepinephrine, a potent vasopressor acting on alpha-1 adrenergic receptors to cause vasoconstriction and on beta-1 adrenergic receptors in the myocardium, augmenting cardiac contractility. Norepinephrine increases mean arterial pressure without an associated increase in heart rate. This may be due to increased afterload from alpha-1 stimulation causing reflex bradycardia.Therapeutic dosing of norepinephrine ranges from 0,05 to 1 mg/min. This prove to be potentially advantageous since tachycardia can worsen myocardial oxygen demand. Furthermore, norephinephrine does not act on the beta-2 adrenergic receptors, preventing the cited epinephrine-induced rise in serum lactate, and allowing lactate to be used as a more reliable marker of end-organ perfusion.In contrast, epinephrine has a more potent beta-1 adrenergic effect than norepinephrine, along with moderate beta-2 and alpha-1 adrenergic effects. Therapeutic dosing of epinephrine ranges from 0,1 to 1 mg/min. At lower doses, epinephrine increases cardiac output due to its beta-1 adrenergic inotropic and chronotropic effects, whereas the alpha-1 adrenergic induced vasoconstriction is balanced by the beta-2 adrenergic vasodilatation.At higher doses, the alpha-adrenergic receptors effect predominates, resulting in increased systemic vascular resistance. Epinephrine is not commonly used as first-line in shock states due to increased risk of tachyarrhythmias, splanchnic vasoconstriction, and hyperlactemia. In a rewiev of several vasopressors and inotropes in cardiogenic shock, only epinephrine was independently associated with profound worsening in cardiac and renal biomarkers. The advantages of norepinephrine over dobutamine were confirmed in the Emergency Hospital in Fergana trial, which randomized 100 patients with Acute Myocardial Infarction-Cardiogenic shock to these two agents. Both drugs increased Mean Arterial Pressure, but epinephrine-treated patients showed higher rates of lactic acidosis, marked and sustained increases heart rate, and increases cardiac double product-a marker of myocardial oxygen consumption. Although epinephrine is efficacious in increasing Mean Arterial Pressure, it does so at higher energy costs and lower cardiac efficiency. These effects may be due to the

diffrences in receptor affinity, as only epinephrine acts on beta-2 adrenergic receptors. Most importantly, patients in the epinephrine group had an increased occurance of refractory shock, but there was no significant difference in mortality between the two groups (60-day mortality of 52% in the epinephrine group and 37% in norepinephrine group). Several limitations must be taken note of in Cardio Center Fergana, including the small sample size, lack of clarification regarding maximum dose reached and the short duration of follow-up. Although epinephrine is still often used as "push-dose or bolus-dose vasopressor" in peri-arrest situation, sustained infusions for hemodynamic support should be avoided among patients with cardiogenic shock [4,6,7,9,8,10].

Dopamine is not recommended in Cardiogenic Shock

Dopamine is another commonly used vasopressor in shock states and acts on beta-1 and alpha-1 adrenergic receptors. Therapeutic dosing is of dopamine 8 mg/min.However, dopamine is not routinely used in cardiogenic shock. These results were solidified in a recent meta- analysis of randomized control trials, which concluded that norepinephrine is associated with decreased 28-day mortality, fewer arrhythmic events, and lower incidence of gastrointestinal reactions when compared to dopamine in patients with cardiogenic shock, regardless of etiology. However, questions have been raised regarding the external validity and applicability of the results as the Emergency Hospital in Fegana trial did not have a standard definition of cardiogenic shock and included obstructive, valvular and postcardiotomy states. The varying hemodynamic profiles may have resulted in treatment-related differences, which were not formally evaluated. As a result, Emergency Hospital in Fergana also Cardio center in Fergana suggest that the optimal first-line vasopressor agent remains unclear but guidelines support norepinephrine to be the vasopressor of choice due to its efficacy and lower risk of adverse events.Further larger scale and high quality randomized controlled trials are needed to investigate other agents in different phenotypes of cardiogenic shock, and better guide these decisions in an vidence-based manner [3,5].

Milrinone

Milrinone is a positive inotropic agent widely used in patients with end-stage heart failure and cardiogenic shock. Originally approved for use in the 1980s, there is significant experience and comfort with this agent. Milrinone is a phosphodiesterase-3 inhibitor, limiting the breakdown of cyclic adenosine mono-phosphate, increasing activation of protein kinase A, and transporting calcium intracellularly, which ultimately promotes improved contractility. Dosing ranges from 0,0625 to upwards of 0,5 mg/min, with some clinicians choosing to provide a loading dose at initiation, usually reserved to its intra-operative use. Amongst decompensated heart failure patients, similar steady-state plasma levels and hemodynamic benefits were seen regardless of initial bolus prior to infusion initiation by the 3-h mark.Although the bolus group showed hemodynamic benefits earlier, these patients had more hypotension and tachycardia compared to the infusion alone group.Milrinone has been most extensively studied in the chronic heart failure population, with randomized data demonstrating no differences in morbidity or mortality in patients treated with a 48-h milrinone infusion compared to placebo. However, milrinone-treated patients had increased rates of new atrial arrhythmias and sustained hypotension requiring intervention. Interestingly, the authors noted worse outcomes among milrinone-treated patients with ischemic cardiomyopathy compared to nonischemic cardiomyopathy emphasizing the need for dedicated clinicals trials segregated by cardiogenic shock etiology [10,11].

Agent	Therapeutic dosing range	Receptor binding	Hemodynamic effects	Adverse effects
Norepinephrine	0,05-1 mg/min	B1 and a1(alpha)	+contractility ++vasoconstriction	Arrhythmias,peripheral ischemia,increased pulmonary vascular resistance
Epinephrine	0,1-1 mg/min	B1,B2 and a1	+contractility ++vasoconstriction	Ventricular arrhythmias, severe hypertension, cardiac ischemia
Dobutamine	8 mg/min	B1	+contractility +vasodilation	Hypotension,cardiac ischemia,tachycardia
Milrinone	0,5 mg/min	PDE-3 inhibitor	+contractility +vasodilation	Torsades de pointes,cardiac ischemia,hypotension

Summary. Cardiogenic shock continues to carry a high risk of morbidity and mortality. The mainstay of pharmacotherapy lies with vasopressors and inotropes, although dedicated and comparative evidence in the cardiogenic shock population remains sparse. Common inotrope agents include dobutamine, milrinone each with their own hemodynamic and clinical benefits and risks. The next most urgent question to be answered regarding inotrope therapy is if agents are equally effective, ineffective or harmful. Further research is also necessary to determine how inotrope therapy fits into a model of cardiogenic shock with escalatinguse of cardiogenic shock.Ultimately, inotrope selection must be guided by physician experience, availability, cost, and most importantly, individual patients' response to therapy.

Used literature:

1. Reynolds HR, Hochman JS. Cardiogenic shock. Circulation 2008; 117: P 686-697
2. Kira Hu and Rebecca Mathew's article. Cadiogenic shock 2023
3. Allwood MJ, Cobbold AF, Ginsburg J. Peripheral vascular effects of norepinephrine, isopropylnorepinephrine and dopamine. Br Med Bull 1969; 19: P 132-136
4. Levy B, Klein T, Kimmoun A. Vasopressoruse in cardiogenic shock. P 324-326
5. Levy B, Gibot S, Franck P.Relation between muscle Na +K+ ATPase activity andraised lactate concentrations in septic shock: a prospective study. Lancet 2005; 365: P 871-875
6. Russell JA. Vasopressor therapy in critically ill patients with shock 2019.45: P 1503-1517
7. Tarvasmäki T, Lassus J, Varpula M. Current real-life use of vasopressors and inotropes in cardiogenic shock adrenaline use is associated with excess organ injury and mortality.Crit Care 2016; 20:208.
8. Levy B, Clere-Jehl R, Legras A et al.Epinephrine versus norepinephrine for cardiogenic shock after acute myocardial infarction. J Am Coll Cardiol 2018.72: P 173-182
9. Wallace AW, Tunin CM, Shoukas AA. Effects of vasopressin on pulmonary and systemic vascular mechanics. Am J Physiol-Heart Circ Physiol 1989; 257:H1228-H1234
10. Jeon Y, Ryu JH, Lim YJ et al.Comparative hemodynamic effects of vasopressin and norepinephrine after milrinone-induced hypotension in off-pump. P 502-506

11. Caldicott LD, Hawley K, Heppell R et al.Intravenous milrinone or dobutamine for severe heart failure after acute myocardial infarction: a randomized double-blind trial.Eur heart J 1993; 14: P 696-700
12. Jentzer JC, Hollenberg SM. Vasopressor and inotrope therapy in cardiac critical care. J Intensive Care Med 2021; 36: P 843-856
13. Lewis TC, Aberle C, Altshuler D et al. Comparative effectiveness and safety between milrinone or dobutamine as initial inotrope therapy in cardiogenic shock. J.Cardiovasc Pharmacol Ther 2019. 24: P 130-138
14. Di Santo P, Mathew R, Jung RG, et al. Impact of baseline beta-blocker use on inotrope response and clinical outcomes in cardiogenic shock: a subgroup analysis of the DOREMI trial. Crit Care 2021; 25:289.

UO'K: 616-08-035

BOLALARDA STAFILOKOKK ENTRAKOLITINING RIVOJLANISH XUSUSIYATLARI.

Mamarasulova N.I., Jurayev B.S.
Samarqand davlat tibbiyot universiteti.

Annotatsiya. Ko'pgina yuqumli kasalliklar bo'yicha kasallanish va o'lim ko'rsatkichlarining pasayishiga qaramay, bolalar patologiyasida tobora muhim ahamiyat kasb etayotgan stafilokokk infeksiyalarining tarqalishi ortib borayotgani kuzatilmoqda [1]. Sepsis fonida ikkilamchi stafilokokk enterokoliti rivojlangan 1 yoshgacha bo'lgan 60 nafar bola (asosan, 6 oylikkacha bo'lgan 46 nafar bola) kuzatildi. Tashxis anamnez, klinik ko'rinish va laboratoriya tekshiruvlari asosida qo'yildi. Najas, qon va yiringli o'choqlardan olingan namunalar bakteriologik tekshiruvdan o'tkazilganda, bemorlarning 67 foizida stafilokokk (patogen yoki shartli patogen) ajratib olindi. Ajratib olingan shtammlar asosan sefotaksimga, kamroq darajada esa azitromitsin va klaritromitsinga sezgirlikni namoyon etdi.

Kalit so'zlar. *Stafilokokk, sefotaksimga, azitromitsin, sepsis, enterokolit, kolibakterin, ekzoz, antibiotik, rezistentlik.*

FEATURES OF THE DEVELOPMENT OF STAPHYLOCOCCAL ENTEROCOLITIS IN CHILDREN.

Mamarasulova N.I., Zhuraev B.S.
Samarkand State Medical University.

Annotation. Despite the decrease in morbidity and mortality from many infectious diseases, there is an increase in the prevalence of staphylococcal infections, which are becoming increasingly important in pediatric pathology [1]. Against the background of sepsis, 60 children under the age of 1 year (mainly 46 children under the age of 6 months) with the development of secondary staphylococcal enterocolitis were observed. The diagnosis was made based on the medical history, clinical manifestations and laboratory tests. Bacteriological examination of samples from faeces, blood and purulent foci in 67% of patients revealed staphylococcus (causative agent or opportunistic). The isolated strains mainly showed sensitivity to cefotaxime and, to a lesser extent, to azithromycin and clarithromycin.

Keywords. *Staphylococcus, cefotaxime, Azithromycin, sepsis, enterocolitis, colibacteria, eczema, antibiotic, resistance.*

ОСОБЕННОСТИ РАЗВИТИЯ СТАФИЛОКОККОВОГО ЭНТЕРОКОЛИТА У ДЕТЕЙ.

Мамарасулова Н.И., Жураев Б.С.
Самаркандский государственный медицинский университет.

Аннотация. Несмотря на снижение заболеваемости и смертности от многих инфекционных заболеваний, наблюдается рост распространенности стафилококковых инфекций, которые становятся все более важными в детской патологии [1]. На фоне сепсиса наблюдалось 60 детей в возрасте до 1 года (в основном 46 детей в возрасте до 6 месяцев) с развитием вторичного стафилококкового энтероколита. Диагноз был поставлен на основании истории болезни, клинических проявлений и лабораторных исследований. При бактериологическом исследовании образцов из фекалий, крови и гнойных очагов у 67% больных был выделен стафилококк (возбудитель или условно-патогенный). Выделенные штаммы в основном проявляли чувствительность к цефотаксиму и, в меньшей степени, к азитромицину и кларитромицину.

Ключевые слова. *Стафилококк, цефотаксима, Азитромицин, сепсис, энтероколит, колибактерии, экзоз, антибиотик, резистентность.*

Kirish. So'nggi o'n yilliklarda ko'plab yuqumli kasalliklar bo'yicha kasallanish va o'lim darajasining pasayishiga erishilganiga qaramay, bolalar patologiyasi tarkibida stafilokokk infeksiyalarining o'rni ortib borayotgani dolzarb muammo bo'lib qolmoqda [1]. Klinik kuzatuvlar stafilokokk infeksiyalari turli xil klinik ko'rinishlarda namoyon bo'lishi, deyarli barcha a'zolar va to'qimalarni zararlashi mumkinligini ko'rsatadi. Bunda mikroorganizmning ko'plab qo'llaniladigan antibiotiklarga nisbatan rezistentlikka ega bo'lishi, virulentlik va toksiklik xususiyatlarining kuchayishi kuzatiladi [2]. Stafilokokk etiologiyali kasalliklar orasida stafilokokk sepsisi alohida xavf tug'diradi. Zamonaviy davolash usullarining qo'llanilishiga qaramay, ushbu patologiya bo'yicha o'lim ko'rsatkichlari yuqori darajada saqlanib qolmoqda [3, 5]. Stafilokokk sepsisining klinik manzarasi xilma-xil bo'lib, kasallik kechishining o'ziga xosligi a'zolar va tizimlarning zararlanish darajasi bilan belgilanadi [1]. O'tkir yoki surunkali kechadigan septik jarayon fonida me'da-ichak yo'llarining zararlanishi kasallikning boshlanishidan turli vaqt oralig'ida kuzatilishi mumkin [5]. Tadqiqotchilarning fikricha, so'nggi yillarda stafilokokk sepsisining o'ziga xos xususiyatlaridan biri yarali-gemorragik enterokolitning ko'payishi hisoblanadi. Shuningdek, qaytalanuvchi yoki surunkali enterokolit shaklidagi me'da-ichak yo'llarining zararlanishi stafilokokk infeksiyasining turli variantlarida kuzatilishi mumkin [1, 4].

Materiallar va usullar. Mazkur tadqiqotda sepsis fonida ikkilamchi stafilokokk enterokoliti tashxisi qo'yilgan 1 yoshgacha bo'lgan 60 nafar bola ishtirok etdi (46 nafari 6 oylikkacha bo'lgan). Barcha bemorlarda tashxis anamnez ma'lumotlari, klinik ko'rinishi va quyidagi laboratoriya tekshiruvlari natijalariga asoslangan holda qo'yilgan: najas, qon va yiringli ajralmalarning bakteriologik tekshiruvi. Tekshiruv natijalariga ko'ra, bemorlarning 67 foizida stafilokokk (patogen yoki shartli-patogen) ajratib olindi. Ajratib olingan stafilokokk shtammlari odatda sefotaksimga yuqori sezuvchanlikni namoyon etgan bo'lsa, azitromitsin va klaritromitsinga nisbatan sezgirlik darajasi pastroq bo'lgan.

Natijalar va muhokamalar. Tadqiqot natijalariga ko'ra, kasalxonaga yotqizilgan 46 nafar bemorning ahvoli og'ir, 14 nafarining ahvoli o'rtacha og'irlikda deb baholangan. Bemorlarning klinik ko'rinishida me'da-ichak trakti zararlanishi belgilari bilan bir qatorda 50 nafar bolada pnevmoniya simptomlari ham aniqlandi. Anamnez ma'lumotlariga ko'ra, me'da-ichak traktining zararlanishi asosiy kasallikning boshlanishidan so'ng turli muddatlarda kuzatilgan. 29 nafar bolada enterokolit statsionar davolanish jarayonida rivojlangan. Enterokolitning paydo bo'lishi bemor ahvolining keskin yomonlashuvi, turli darajadagi toksinlanish bilan kechuvchi intoksikatsiya rivojlanishi, shuningdek, me'da-ichak traktining zararlanish simptomlarining kuchayishi bilan xarakterlangan. Bemorlarda quyidagi klinik belgilar qayd etilgan: tana haroratining 39°C dan yuqori darajaga ko'tarilishi, regurgitatsiya, ba'zida qusish, bezovtalik, anoreksiya, meteorizm va vazn yo'qotish. Shuningdek, najasning xarakteri va chastotasida ham o'zgarishlar kuzatilgan: 25 nafar bolada najas tez-tez (sutkasiga 7-15 martagacha), suyuq, sariq rangda, yashil rangli shilimshiq aralashmalar bilan ajralgan bo'lsa, 35 nafar bemorda - sutkasiga 5-6 martagacha, to'q sariq yoki sariq rangda, shilimshiq bilan, ba'zan 1-2 marta qon aralashmalari kuzatilgan. Koprologik tekshiruvda najas namunalarida leykotsitlar miqdorining oshishi, kamroq hollarda yangi eritrotsitlar aniqlangan. 14 nafar bolada yashirin qonga reaktsiya ijobiy natijani ko'rsatgan. Ba'zi hollarda, yara perforatsiyasi natijasida peritonit rivojlanishi kuzatilib, o'ta og'ir ahvol, gipertermiya, tez sur'atlar bilan rivojlanayotgan intoksikatsiya, o't suyuqligi bilan qusish, ba'zan najas massalari bilan qusish va intensiv detoksikatsiya terapiyasiga javob bermaydigan ichak parezi bilan namoyon bo'lgan. Ushbu asoratni tashxislashda rentgen tekshiruvi har doim ham samarali bo'lmagan. Barcha bemorlarga kompleks davolash choralari qo'llanilgan bo'lib, ular quyidagilarni o'z ichiga

olgan: glyukoza-tuz eritmalari va plazma infuziyalari, donor qoni (shu jumladan, to'g'ridan-to'g'ri) quyish, antibiotiklar, immunomodulyator dorilar, shuningdek, kolibakterin va bifidumbakterin kabi biologik preparatlar. To'g'ri tashkil etilgan davolash va bolalarni kislotali aralashmalar bilan ratsional oziqlantirish ijobiy natijalarni ta'minladi.

Xulosa. Davolash natijasida bemorlarning umumiy ahvoli yaxshilanishi, intaksikatsiya belgilari yengil holatlarda 5-6 kunda, og'ir holatlarda esa 8-10 kunda bartaraf etilganligi kuzatildi. Shuningdek, ishtaha tiklanishi, tana haroratining normallashuvi, bolalarning xotirjam va faol holatga qaytishi, atrof-muhitga adekvat munosabat bildira boshlaganligi qayd etildi. Shunga qaramay, qoniqarli umumiy ahvolga qaramay, najasning normallashuvi sekin kechdi, uning beqarorligi saqlanib qoldi, ba'zida shilimshiq va yashil rangli aralashmalar kuzatildi. Kuzatuv ostida bo'lgan 60 nafar bemordan 53 nafari klinik remissiya holatida kasalxonadan chiqarildi, 5 nafarida enterokolitning qoldiq belgilari saqlanib qoldi, 2 nafar bemor esa yara perforatsiyasi asorati hisoblangan peritonit oqibatida vafot etdi.

Foydalanilgan adabiyotlar:

1. Одилова, Г. М., Рустамова, Ш. А., Мамарасулова, Н. И., & Болтаев, К. С. (2019). Клинические особенности течения ветряной оспы у взрослых в современных климатических условиях. Вопросы науки и образования, (28 (77)), 70-78.
2. Саъдинов П. и др. Клинико-эпидемиологическая характеристика стафилококковых энтероколитов у детей раннего возраста //Журнал проблемы биологии и медицины. – 2014. – №. 3 (79). – С. 151-152.
3. Юсупов, М., Шайкулов, Х., Одилова, Г., & Мамарасулова, Н. (2023). Раннее выявление ротавирусной инфекции у детей. Каталог монографий, (1), 1-68.
4. Mamarasulova, N. I. (2024). Jarrohlik bo'limidagi tibbiy xodimlaridan ajratilgan stafilokokklarning tarqalishi va biologik xususiyatlari. Экономика и социум, (1 (116)), 285-288.
5. Одилова Г. М., Исокулова М. М. Характеристика показателей иммунитета и факторов неспецифической защиты у детей раннего возраста //International journal of recently scientific researcher's theory. – 2024. – Т. 2. – №. 4. – С. 86-89.

UO'K: 615.322.616.38/618.13-004.0

EKSPERIMENTAL GIPERXOLESTERINEMIYA SHAROITIDA LADIGINOZIDNING JIGAR MORFOMETRIK KO'RSATKICHLARIGA TA'SIRI

Maxmudova B.Sh.
Andijon davlat tibbiyot instituti, O'zbekiston

Annotastiya: Ushbu tadqiqotda quyonlarga xolesterin(0.3g/kg), xolesterin (0.3g/kg) bilan birga ladiginozid (2.5mg/kg) 30, 60, 90kun mobaynida berilganda jigarda giperxolesterinemiya sharoitida yuzaga keladigan morfologik, gistokimyoviy o'zgarishlar, morfometrik ko'rsatkichlari o'zgarishi o'rganilgan. Tadqiqotda ladiginozidni "xolesterinli zo'riqishda" gepatostitlarda yuzaga keladigan distrofik o'zgarishlarni kamaytirishi, bu o'zgarishlarni to'lqinsimon kechishi aniqlangan.

Kalit so'zlari: *Eksperiment, giperxolesterinemiya, ladiginozid, jigar, gepatostit, distrofik o'zgarishlar.*

THE EFFECT OF LADYINOSIDE ON LIVER MORPHOMETRIC PARAMETERS IN CONDITIONS OF EXPERIMENTAL HYPERCHOLESTEROLEMIA

Makhmudova B.Sh.
Andijan State Medical Institute, Uzbekistan

Abstract: In this study, morphological, histochemical changes, and morphometric parameters of the liver under hypercholesterolemia were studied when rabbits were given cholesterol (0.3 g/kg), cholesterol (0.3 g/kg) and ladyinoside (2.5 mg/kg) for 30, 60, and 90 days. The study revealed that ladyinoside reduces dystrophic changes in hepatocytes under "cholesterol stress" and smoothes these changes.

Keywords: *Experiment, hypercholesterolemia, ladyinoside, liver, hepatocyte, dystrophic changes.*

ВЛИЯНИЕ ЛАДИГИНОЗИДА НА МОРФОМЕТРИЧЕСКИЕ ПОКАЗАТЕЛИ ПЕЧЕНИ В УСЛОВИЯХ ЭКСПЕРИМЕНТАЛЬНОЙ ГИПЕРХОЛЕСТЕРИНЕМИИ

Махмудова Б.Ш.
Андижанский государственный медицинский институт, Узбекистан

Аннотация: В данном исследовании изучались морфологические, гистохимические и морфометрические изменения в печени при гиперхолестеринемии, когда кроликам давали холестерин (0,3 г/кг) и холестерин (0,3 г/кг) с ладигинозидом (2,5 мг/кг) в течение 30, 60 и 90 дней. Исследование показало, что ладигинозид уменьшает дистрофические изменения, возникающие в гепатоцитах при «холестериновом стрессе», и волнообразное течение этих процессов.

Ключевые слова: *Эксперимент, гиперхолестеринемия, лединизозид, печень, гепатоцит, дистрофические изменения.*

Dolzarbligi: Ateroskleroz patogenezida lipidlarning bevosita ishtirokini hisobga olgan holda, xastalikning ilk bosqichlarida gipolipidemik moddalarning qo'llanishi ateroskleroz va uning asoratlari bo'lgan miokard infarkti, insult kabi kasalliklar bilan og'rish xavfini kamaytirishga olib keladi [2,3,8].

Ko'pchilik klinik, eksperimental va morfologik tekshirishlarda aterosklerozning taraqqiy etishida va uning patogenezida jigardagi biokimyoviy o'zgarishlar, ya'ni xolesterin - dan yog'

kislotalarining hosil bo'lishi, xolesterin sintezi va esterifikastiyasi, oqsillar sintezi, oqsillar xususiyatlarining o'zgarishi, lipidlarning oqsillar bilan kompleks birikmalar hosil qilishining buzilishlari kabi jarayonlar o'rganilgan [3].

Zamonaviy sintetik gipolipidemik va antiaterosklerotik preparatlarni uzoq muddat qo'llanilganda kuzatiladigan toksiko-allergik va kansterogenezli asoratlarini hisobga olib, keyingi yillarda tadqiqotchilar e'tiborini o'simliklar dunyosidan olinadigan biologik faol moddalar, xususan saponinlar – «tirik organizmning tabiiy metabolitlariga yaqin turuvchi moddalar» tortmoqda [4,5,7,9].

Jigarning aterogenezdagi o'rnini va jigar bo'lakchalari har xil sohalarida gepatostitlarning geterogen morfofunkstional holatga ega ekanligini inobatga olib, ladiginozid ta'sirida jigarning har xil sohalarida rivojlanadigan morfologik va morfometrik o'zgarishlarni o'rganish, bu preparatlarni ateroskleroz rivojlanishini pasaytiruvchi omil sifatida baholashga asos bo'ladi.

Ladiginozid kam zaharli moddalar bo'lib, quyonlarda chaqirilgan eksperimental giperxolesterinemiya paytida qondagi umumiy xolesterin va aterogen β-lipoproteidlar, triglisteridlar miqdorini kamaytiradi, va giperxolesterinemiya sababli kuzatiladigan qon ivishi xavfini pasaytiradi [1,9].

Tadqiqot maqsadi: quyonlarda giperxolesterinemiya sharoitida jigardagi morfologik, gistokimyoviy va morfometrik ko'rsatkichlarida o'zgarishlarni o'rganish.

Tadqiqot materiallari va usullari: Qo'yilgan vazifalarni echish uchun 50ta zotsiz, dastlabki vazni 2,0 -3,0 kg bo'lgan erkak quyonlarda tajribalar o'tkazdik. I-guruxda (30 ta) quyonlarga har kuni 2.5 mg/kg miqdorda ladiginozid og'iz orqali berildi, muddati bo'yicha tajribalar: 30 kunlik (5 ta), 60 kunlik (5ta) va 90 kunlik (5 ta) guruhlarga bo'linib davom etkazildi. I seriya uchun nazorat bo'lib, tadqiqotdagi hayvonlar bilan bir xil sharoitda saqlangan (alohida katak, vivariyaning oddiy ovqat rastioni, tabiiy yorug'lik) distillangan suv berilgan 5 ta intakt quyon bo'ldi. P-guruxda (15 ta) quyonlarga har kuni 0,3 g/kg miqdorda xolesterin sabzavot bilan birga berildi, ular ham 30 kunlik (5 ta), 60 kunlik (5 ta) va 90 (65 ta) kunlik guruhlarga bo'lindi. Sh-guruxda (15 ta) quyonlarga har kuni 0,3 g/kg miqdorda xolesterin sabzavot bilan va bir soatdan so'ng ladiginozid 2.5 mg/kg miqdorda berilib, tajribaning xar bir (30, 60, 90 kunlik) guruhiga 5 tadan bo'lindi. Tajribaning P-guruxi uchun 111-guruhi nazorat guruhi bo'lib hisoblandi. Jigardagi morfologik o'zgarishlarni o'rganish uchun hayvonlar tajribaning 31, 61 va 91-kunlari efir narkozida uxlatilib, dekapitastiya usulida o'ldirildi. Sistemali morfologik tekshirishlar tekshirilayotgan ob'ektlarning morfofunkstional xususiyatlari yig'indisini bir butun yaxlitlikda o'rganishni va ular o'rtasidagi bog'liqliklarni aniqlashni hisobga olib, biostrukturalarda turli sharoitlarda yuzaga keladigan o'zgarishlar haqida ob'ektiv tushunchalarni beradi. Morfometriya jigar hujayrasi va to'qimasini tekshirishda qo'llanilsa, muhim ma'lumotlar beradi. Makroskopik tekshiruvlarda jigarning vazni, konsistenstiyasi, rangi, shuningdek yuzasi hisobga olindi. µuyonlar jigarining absolyut va nisbiy (umumiy vaznining g/100 g nisbatida) og'irliklari o'lchandi. Jigar to'qimasi bo'lakchalari 10% li neytral formalin eritmasida saqlandi, so'ngra spirt va xloroformlarda suvsizlantirilgandan keyin parafin quyildi. 5-10 mkm qalinlikdagi kesmalar gematoksilin – eozin, Van Gizon, Mak-Manus bo'yicha ShIK reakstiya bo'yash usulida, yoglar Sudan Sh buyogi bilan, RNK Brashe usulida, DNK Felgen usulida bo'yaldi. Kario- va stitometrik tekshirishlar jigar bo'lagining geterogenligi, stentrolobulyar va periportal sohasidagi gepatostitlarning morfofunkstional uyushmasi, angioarxitektonikasi xisobga olib, uning stentrolobulyar va periportal sohasidagi gepatostitlarning morfometrik ko'rsatkichlarini alohida holda tekshirish maqsadga muvofiq bo'ldi. Tekshiruv materiallarining statistik tahlili quyidagi ko'rsatkichlar bo'yicha bajarildi: Gepatostitlar yadrosining hajmi (mkm^3-da), gepatostitlarning

hajmi (mkm^3-da),yadro-stitoplazma nisbati ,sinusoid-to'qima va kapillyar-to'qima nisbati, ikki yadroli gepatostitlarning nisbiy miqdori (%), jigarning nisbiy massasi (tajribadagi hayvon vaznini g/100 g hisobida).

Tadqiqot natijalari: Jigardagi morfologik, morfometrik tekshiruvlar giperxolesterinemiya sharoitida dastlabki oyda hayvonlarda jigari bo'lagining stentrolobulyar va periportal sohalarida yadro hajmini (R<0,05), yadro – stitoplazma nisbati (R<0,01), ikki yadroli gepatostitlarning nisbiy miqdorlarining ortishi, shu bilan birga kapillyar – to'qima nisbatini (R<0,05) kamayishi kuzatildi. 2-oyda esa jigar bo'lagining stentrolobulyar va periportal sohalari gepatostitlar hajmi va yadro – stitoplazma nisbatini ko'rsatkichi (R<0,01), ikki yadroli gepatostitlar nisbiy miqdorini kamayishi va sinus – to'qima nisbati (R<0,05) ortishi aniklandi. 3-oyda esa jigar bo'lagining stentrolobulyar va periportal soxalarida morfometrik ko'rsatkichlarining yanada pasayishi kuzatildi.

Giperxolesterinemiya sharoitida tajriba hayvonlari jigaridagi gistokimyoviy o'zgarishlar - gepatostitlarda ribonukleoproteidlar va glikogenni miqdorlarini, stitoplazma bazofilligini kamayishi, neytral yog' kislotalari va XS cho'kishini kuchayishi namoyon bo'ldi. Giperxolesterinemiyada jigarda kuzatiladigan davriy o'zgarishlar kasallikga qarshi yo'naltirilgan kompensator – moslashtiruvchi himoya reakstiyasi xisoblanadi.

Ladiginozid (2.5mg/kg vaznida) olgan quyonlar jigarini gistologik va morfometrik kuzatishlar intakt quyonlar guruhi natijalari bilan solishtirilganda, jigar nisbiy massasining ortishi kuzatildi. Jigar nisbiy massasining statistik xaqiqiy darajada ortishi ladiginozid olgan quyonlar guruhida kuzatuvning 30 va 60 kunlarda aniklandi.

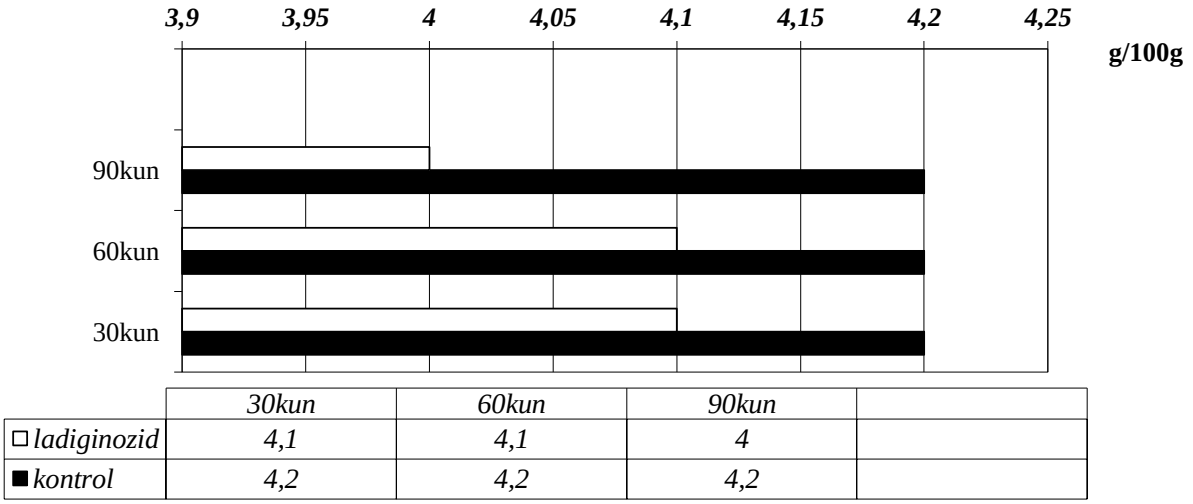


Diagramma -1.

Ladiginozid (2.5mg/kg vaznida) olgan intakt quyonlar jigarining nisbiy og'irligi (g/100g tana vazni hisobida)

Ladiginozid olgan quyonlarda stentrolobulyar sohasida sinusoid – to'qima nisbati ko'rsatkichlari(R<0,05), periportal sohasidagi kapillyar – to'qima nisbati 30 va 60 kunlariga nisbatan 90 kunida statistik haqiqiy (R<0,001) ortdi.

Ladiginozid jigar bo'lagining stentrolobulyar va periportal sohalaridagi gepatostitlar yadrosi hajmining statistik xaqiqiy ortishi kuzatuvning 60 kunida belgilandi, 30, 60 va 90 kunida yadrolar hajmi taqsimlanishi sinflari tahlilidagi qiya chizig'i bir cho'qqili bo'lib, yirik yadroli III – IV sinf yadrolari soni ortishi kuzatildi.

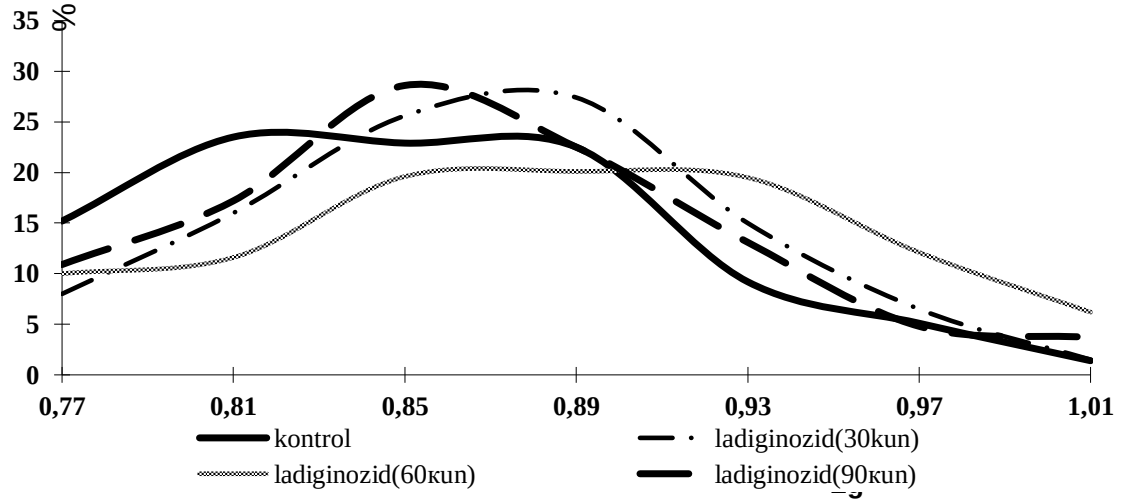


Diagramma - 2.

Jigar bo'lagining stentrolobulyar sohasidagi gepatostitlar yadrolari hajmining sinflar bo'yicha taqsimlanishi (%)

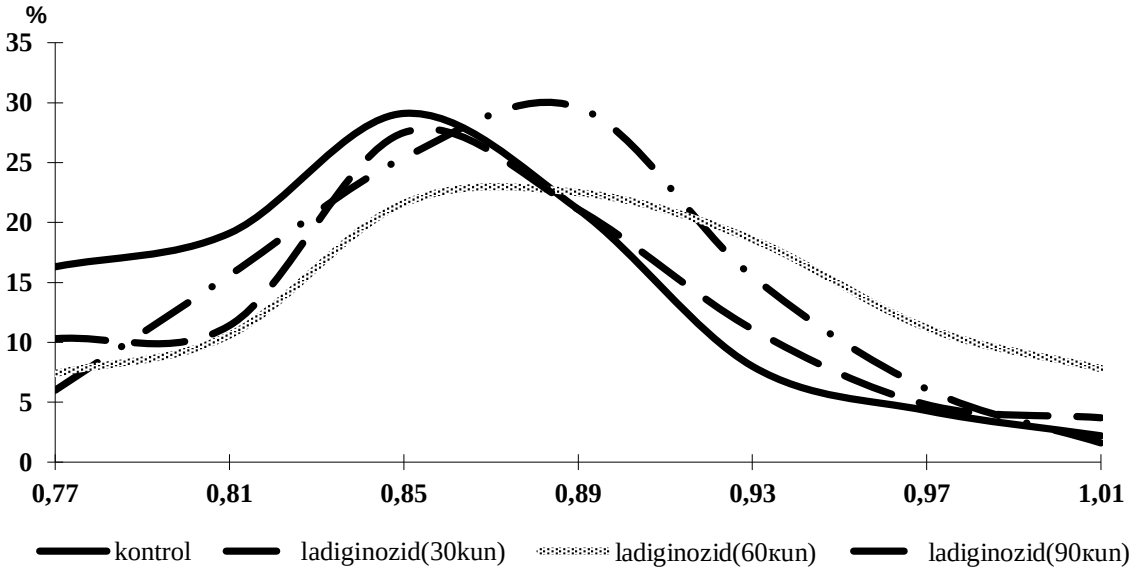


Diagramma -3.

Jigar bo'lagining periportal sohasidagi gepatostitlar yadrolar hajmining sinflar bo'yicha taqsimlanishi (%)

Bo'lakning stentrolobulyar va periportal sohalarida ikki yadroli gepatostitlar nisbiy miqdori kuzatuvning 30 - kuni davomida, leontozid olgan guruhda esa kuzatuvning hamma muddatlarida namoyon bo'ldi.

Kariogramma ko'rsatkichlari ladiginozid ta'sirida yirik yadroli gepatostitlar miqdorining ortishini, ya'ni kariogrammaning o'ngga siljishini ko'rsatdi. Adabiyotlardagi ma'lumotlarni [32, 85], jigar parenximasidagi yadrolar ploidligi va hajmi o'rtasida korrelyativ bog'liklik hisobga olinib, bizning kuzatuvlarda jigardagi yirik yadroli hujayralar sonining ortishi, gepatostitlar yadrosi poliploidastiya darajasi ortishi ko'rsatkichi deb izohlandi.

Yadro – stitoplazma nisbati ko'rsatkichini (intakt xayvonlarga nisbatan) ladiginozid oshirdi. Bu ko'rsatkichga kuzatuvni 30-kunida stentrolobulyar sohada ($R<0,01$) va periportal sohada

(R<0,05), 60 va 90 kunlarida esa (R<0,01) bo'ldi.

Ladiginozid gepatostitlar hajmi ko'rsatkichini oshirdi. Statistik tahlil natijalari shundan dalolat berdiki, ladiginozid berilganda gepatostitlar hajmi kuzatuvning 30 va 90 kunlarida (R<0,001) va (R<0,01) ta'sir kuchi bilan statistik haqiqiy oshgan.

Yadro – stitoplazma nisbati intakt hayvonlar ko'rsatkichiga nisbatan ortdi, kuzatuvning 30 kunida maksimal (mos ravishda R<0,01 va R<0,05), 60 va 90 kunlarida esa yadro – stitoplazma nisbati sinov (nazorat) quyonlar guruhi ko'rsatkichlariga teng bo'ldi.

Olingan natijalar va ularning statistik tahlili jigardagi morfometrik ko'rsatkichlarini o'zgarishlari davriy xarakterga ega ekanligini ko'rsatdi.

Tajriba guruhi (davolash va profilaktika maksadida ladiginozid yuborilayotgan) quyonlar jigarini gistologik va morfometrik tekshirish, sinov guruhi (sabzovat bilan 0,3g/kg xolesterin olayotgan quyonlar) natijalari bilan solishtirish tahlili - tajriba guruhi quyonlari jigari nisbiy massasining ortganligini ko'rsatdi, bu ko'rsatkich kuzatuvning 60 - kunida statistik haqiqiy (R<0,001) bo'ldi.

Ladiginozid jigarning sinusoid – to'qima ko'rsatkichining dinamik o'zgarishiga sabab bo'ldi. Bu ko'rsatkich kuzatuvning 30 - kuni statistik haqiqiy (R<0,01) kamaydi. Miqdoriy ko'rsatkichlar markaziy vena atrofidagi gepatostitlarda bu ko'rsatkich kuzatuvning 60 – kunida, periferik qismida 30 va 60 – kunlarida yuqori darajada bo'ldi.

	30кun	60кun	90кun	
□ Xol.+ladiginozid	4,6	4,8	4,9	
■ Xolesterin	4,2	4	4,3	

Diagramma -4.

Xolesterin (0,3 g/kg vaznida), xolesterin va ladiginozid (2,5mg/kg vazniga) olgan quyonlar jigarining nisbiy og'irligi (g/100g tana vazni hisobida).

Yadrolar hajmi taqsimlanishi sinflari tahlilidagi qiya chizig'i nazorat guruhi hayvonlarga nisbatan ladiginozid va xolesterin berilgan guruhlarda tajribaning 30 va 60 kunlarida modaning o'ngga, 90 kunida esa modaning chapga siljishi, ya'ni mayda yadrolar miqdorining ortishi tomoniga siljishi kuzatildi. Ikki yadroli gepatostitlarning nisbiy miqdori xolesterin olgan quyonlar jigari bo'lagi stentrolobulyar va periportal sohalardagi eng yuqori ko'rsatkichi kuzatuvning 1-oyida (R<0,001), minimal 2 - oyida (R<0,01) bo'ldi, ladiginozid va xolesterin olgan guruh quyonlarda esa bu ko'rsatkich tajriba muddatiga parallel ortib bordi, eng yuqori ko'rsatkich tajriba oxirida kuzatildi. Xolesterinni 3 – oy davomida qabul qilgan quyonlar jigari gepatostitlari stitoplazmasida mayda tomchili yog' distrofiyasi kuzatildi.

Tajribaning 60 kunida gepatostitlarning o'rtacha hajmi bo'lak stentrolobulyar va periportal sohalarda statistik xaqiqiy darajada ko'paydi. 2-guruhda kuzatuvning 2 – oyida gepatostitlarning o'rtacha hajmi mos ravishda – 5321mkm^3 va - 5350 mkm^3, nazorat guruhda esa - 4850 mkm^3 va - 4890 mkm^3 teng bo'ldi.

Yadrolar hajmini taqsimlanishi sinflari tahlilidagi qiya chizig'i nazorat hayvonlarga nisbatan

ladiginozid va xolesterin berilgan guruhlarda tajribani 30 va 60 kunlarida modani o'ngga, 90 kunida esa chapga, ya'ni mayda yadrolar miqdorining ortishi tomoniga siljishi kuzatildi. Ikki yadroli gepatostitlarning nisbiy miqdori XS va tekshirilayotgan moddalar olgan tajriba guruh quyonlarida tajriba muddatiga parallel tarzda ortib bordi, va eng yuqori ko'rsatkich tajribani oxirida kuzatildi. Xolesterinni 3 – oy mobaynida qabul qilgan quyonlar jigari gepatostitlari stitoplazmasida mayda tomchili semirish kuzatildi. Jigar bo'lagining stentrolobulyar va periportal sohalaridagi gepatostitlarning o'rtacha hajmi 60 va 90 kunlarda statistik xaqiqiy ortishi bilan xarakterlandi. Ushbu muddatlarda gepatostitlarni o'rtacha hajmi 60 kunlik va 90 kunlik guruhda mos ravishda - 5201 mkm^3 va – 5225 mkm^3 bo'lib, bu ko'rsatkich nazorat quyonlarda mos ravishda 2- oyda - 4890 mkm^3 va - 4912 mkm^3, 3-oyda esa – 4751 mkm^3 va - 5065 mkm^3 bo'ldi.

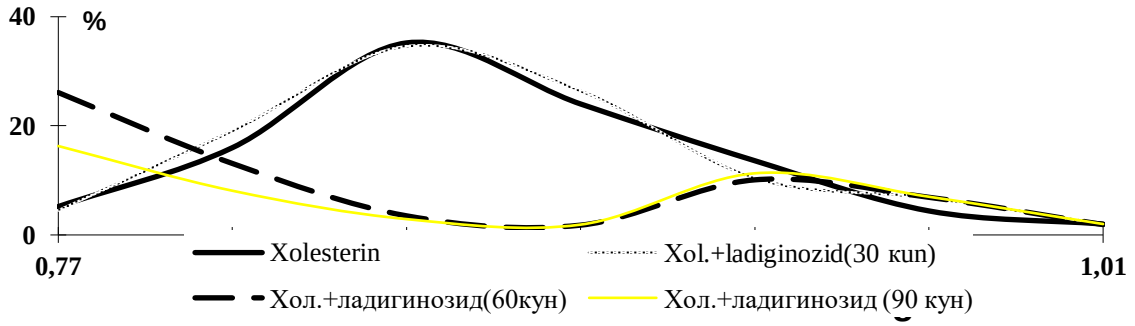


Diagramma - 5.

Jigar bo'lagining stentrolobulyar sohasidagi gepatostitlar yadrolari hajmining sinflar bo'yicha taqsimlanishi (%)

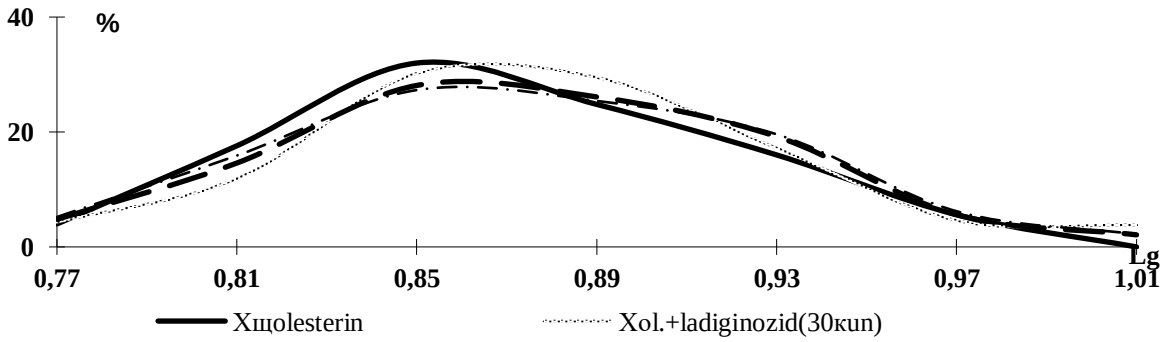


Diagramma -6 .

Jigar bo'lagining periportal sohasidagi gepatostitlar yadrolari hajmining sinflar bo'yicha taqsimlanishi (%)

Xulosa: Kuzatuvlarimiz natijalari va adabiyotlardagi triterpen glikozid - ladiginozidni farmakologik o'rganish xaqidagi ma'lumotlarga asoslanib aytish mumkinki - ladiginozid intakt, ayniqsa «xolesterinli zo'riqish» sharoitidagi quyonlarda «davo – profilaktik» maqsadlarda yuborilganda, jigarda himoya faolligi ortganligini ko'rsatuvchi miqdoriy va sifat o'zgarishlarga sabab bo'ladi.

Foydalanilgan adabiyotlar:

1. Абубакиров Н.К. и др. Авторское свидетельство №1130348, 1984., 28. Описание изобретения к патенту РФ. Авторское свидетельство СССР №1700003.1989.

2. Баглай Ю. С. Немедикаментозные методы профилактики и лечения атеросклероза //Национальная ассоциация ученых. –2019. – №.15-1 (42). – С.4-8
3. Жумалиева Н.Ж. и др. Экспериментальное исследование, характеризующее специфическую активность дипсакозида и гепадипа. // Международный журнал прикладных и фундаментальных исследований.- 2017. - №12-1. - С. 63- 68.
4. Столетов Ю. В. и др. Обоснование целесообразности создания новых препаратов антиатеросклеротического и антиангинального действия на основе льна посевного (Linum usitatissimum L.) // Le tendenzee modelli di sviluppo della ricerche scientifici: Raccolta di articoli scientifici «ΛΌΓΟΣ» con gli atti della Conferenza scientifica e pratica internazionale, Roma, 13 marzo 2020. - Roma, 2020. - Т. 2.- P.38-41.
5. Смусева С. О. И др. Тенденции и перспективы научных исследований в области извлечения, анализа и применения гликозидных соединений пентациклического и тетрациклического ряда. (Обзор). Вестник ВГУ, серия: Химия. Биология. Фармация, 2020, №1.- С.18-28.
6. Сыров В.Н. и др. Гиполипидемическая и антисклеротическая активность сесквитерпеновых лактонов леукомизина, аустрицина и бадхизина // Вестник Ташкентской медицинской академии. – 2018. - №2. – С.57–60.
7. Охундедаев Б.С. и др. Терпеноиды и флавоноиды Artemisia juncea – потенциальная основа для создания лекарственных средств. Разработка лекарственных средств – традиции и перспективы. Международная научно-практическая конференция. (г. Томск, 13-16 сентября 2021 г.): сборник материалов – Томск: Изд-во СибГМУ,2021. –(260 с.) С.145.
8. Информационный бюллетень ВОЗ от 09.12.2020.
9. Исмаилов И.И. и др. Способ получения сапонина, обладающего гиполипидемической активностью. Патент на изобретение SU 1130348 A. Бюллетень изобретений СССР №47,23.12.1984.

UDC: 616-08-035

USE OF MOBILE APPLICATIONS IN CHILDREN'S OPHTHALMOLOGY
(Literature review)

Makhkamova D.K.

Republican Specialized Scientific and Practical Medical Center for Eye Microsurgery

Annotation. Mobile applications in ophthalmology show great potential in diagnosis, monitoring and education, improving the accessibility of medical services, and also open new horizons for pediatric ophthalmology, improving access to information and quality of treatment. However, their successful implementation requires further research regarding safety, effectiveness and integration with traditional treatments. The development of standards and guidelines for the use of such technologies will be an important step toward improving patient care.

Key words. Mobile applications, ophthalmology, pediatric ophthalmology, diagnosis of eye diseases, monitoring of eye diseases.

BOLALAR OFTALMOLOGIYASIDA MOBIL ILOVALARDAN FOYDALANISH.
(Adabiyot sharhi)

Maxkamova D.K.

Respublika ixtisoslashtirilgan ko‘z mikroxirurgiyasi ilmiy-amaliy tibbiyot markazi

Izoh. Oftalmologiyadagi mobil ilovalar diagnostika, monitoring va o'qitish, tibbiy xizmatlardan foydalanish imkoniyatlarini oshirish, shuningdek, bolalar oftalmologiyasi uchun yangi ufqlarni ochish, ma'lumotlardan foydalanish va davolash sifatini oshirishda katta imkoniyatlarni namoyish etadi. Biroq, ularni muvaffaqiyatli amalga oshirish uchun xavfsizlik, samaradorlik va an'anaviy davolash usullari bilan integratsiya bo'yicha keyingi tadqiqotlar talab etiladi. Bunday texnologiyalardan foydalanish bo'yicha standartlar va yo'riqnomalarni ishlab chiqish bemorlarga yordam ko'rsatishni yaxshilash yo'lidagi muhim qadam bo'ladi.

Kalit so'zlar. *Mobil ilovalar, oftalmologiya, bolalar oftalmologiyasi, ko'z kasalliklari diagnostikasi, ko'z kasalliklari monitoringi.*

ИСПОЛЬЗОВАНИЕ МОБИЛЬНЫХ ПРИЛОЖЕНИЙ В ДЕТСКОЙ ОФТАЛЬМОЛОГИИ
(Обзор литературы)

Махкамова Д.К.

Республиканский специализированный научно-практический медицинский центр микрохирургии глаза

Аннотация. Мобильные приложения в офтальмологии демонстрируют большой потенциал в диагностике, мониторинге и обучении, повышении доступности медицинских услуг, а также открывают новые горизонты для детской офтальмологии, улучшая доступ к информации и качество лечения. Однако для их успешного внедрения необходимы дальнейшие исследования в части безопасности, эффективности и интеграции с традиционными методами лечения. Разработка стандартов и рекомендаций по использованию таких технологий станет важным шагом на пути к улучшению ухода за пациентами.

Ключевые слова. *Мобильные приложения, офтальмология, детская офтальмология, диагностика заболеваний глаз, мониторинг заболеваний глаз.*

In recent years, mobile applications have become an important tool in medicine, including pediatric ophthalmology. They provide new opportunities for diagnosis, treatment and monitoring of the visual system in children. The development of solutions such as an application for diagnosing eye diseases in children shows the promise of using technologies based on artificial intelligence. This application has the ability to analyze more than 50 thousand photographs and identify diseases at an early stage, ahead of ophthalmologists

However, despite their high effectiveness, such applications do not replace professional medical opinion and require further verification by specialists. The article discusses examples of such applications, their functionality, as well as the pros and cons of using mobile technologies in the diagnosis and treatment of eye diseases in children.

With the growing popularity of mobile technologies in medicine, research into the use of mobile applications in ophthalmology is becoming increasingly relevant. Below is an overview of key trends and findings based on existing scientific articles.

Diagnostics

Research shows that mobile applications can be effectively used for the initial diagnosis of various ophthalmological diseases[2].

For example, several articles describe applications that can detect strabismus and amblyopia in children using simple visual acuity and color perception tests. One article demonstrated the high sensitivity and specificity of such applications compared to traditional methods.

Some apps offer tests to measure visual acuity, color perception, and squint assessment. For example, apps can use augmented reality technology to perform interactive tests, making the experience more engaging for children[3].

Education and awareness

Educational apps aimed at teaching children and their parents about eye health have also found their way into the scientific literature. Research shows that such apps increase awareness of diseases and how to prevent them[4].

One study notes that interactive elements such as games and quizzes significantly increase children's engagement. They also offer information about common ophthalmic diseases such as amblyopia and astigmatism, as well as methods for their prevention[5].

Vision Monitoring and Treatment Management

Using mobile applications, parents can track the progress of treatment, record data on procedures performed and schedule visits to the doctor. Some apps offer reminders to take medications or do eye exercises, which is especially important for children who need regular care.

Some studies focus on the potential for monitoring chronic diseases such as diabetic retinopathy.

Mobile apps can allow patients to track symptoms and take photographs of the retina, which are then analyzed by ophthalmologists. This allows for improved monitoring of the patient’s condition and timely adjustment of treatment[6].

Telemedicine and accessibility

With the advent of the COVID-19 pandemic, telemedicine has become especially relevant. Mobile applications for consultations with ophthalmologists can significantly reduce the burden on healthcare systems and improve access to medical care for patients in remote areas. Research shows that telemedicine consultations in ophthalmology have comparable effectiveness to traditional office visits[7].

Problems and challenges

Despite the advantages, the use of mobile applications in pediatric ophthalmology is associated with a number of challenges. Issues of data confidentiality, the need to fine-tune diagnostic algorithms, and the diversity of hardware require careful consideration. Additionally, it is important to remember the role of the ophthalmologist in the diagnosis and treatment process, as apps cannot completely replace professional judgment [8].

Conclusion. Mobile applications in ophthalmology show great potential in diagnosis, monitoring and education, improving the accessibility of medical services, and also open new horizons for pediatric ophthalmology, improving access to information and quality of treatment. However, their successful implementation requires further research regarding safety, effectiveness and integration with traditional treatments. The development of standards and guidelines for the use of such technologies will be an important step toward improving patient care.

Used literature:

1. Arnold, R.W. · O'Neil, J.W. · Cooper, K.L. ...Evaluation of a smartphone photoscreening app to detect refractive amblyopia risk factors in children aged 1-6 years Clinical Ophthalmology. 2018; 12:1533-1537
2. Bastawrous, A. · Rono, H.K. · Livingstone, I.A. ...Development and Validation of a smartphone-based visual acuity test (Peek Acuity) for clinical practice and community-based fieldwork JAMA Ophthalmology. 2015; 133:930-937
3. Davis E.A., Hovanesian J.A., Katz J.A. et al. Professional life and the smartphone // Cataract & Refractive Surgery Today. – 2010. – Sept. – 21-22.
4. Jay Chhablani, Simon Kaja, Vinay A Shah, Smartphones in ophthalmology // Ophthalmology practice. – 2012. – Vol. 60, Is. 2. – P. 127-131.
5. Racano, E., Malfatti, G., Pertile, R. et al. A novel smartphone App to support the clinical practice of pediatric ophthalmology and strabismus: the validation of visual acuity tests. Eur J Pediatr 182, 4007–4013 (2023).
6. Ron K. Lord, Vinay A. Shah, Ashley N. San Filippo et al. Novel Uses of Smartphones in Ophthalmology // Ophthalmology. – 2010. – Vol. 117, Is. 6. – P. 1274-1274.
7. Sabri, K. · Thornley, P. · Waltho, D. ...Assessing accuracy of non-eye care professionals as trainee vision screeners for children. Canadian Journal of Ophthalmology. 2016; 51:25-29
8. Tahiri R. Joutei Hassani, Sanharawia M. El, Dupont-Monoda S. et al. Les smartphones en ophtalmologie // J. Francais d'Ophtalmologie. – 2013. – Vol. 36, Is. 6. – P. 499-525.

UO'K: 616.12-007.2-053.2:612.017.1

TUG'MA YURAK NUQSONI BILAN KASALLANGAN BOLALARNING ANTROPOMETRİK KO'RSATMALARNI BAHOLASH

Babadjanova F.R., Qodirova A.M.
Toshkent tibbiyot akademiyasi Urganch filiali

Annotatsiya. Ushbu tadqiqot tug'ma yurak nuqsonlari (TYN) bo'lgan bolalarda antropometrik ko'rsatkichlarning (bo'y, vazn, bosh aylanasining uzunligi va boshqalar) o'zgarishini o'rganishga bag'ishlangan. TYN bolaning o'sishi va rivojlanishiga sezilarli ta'sir ko'rsatishi mumkin, shuning uchun antropometrik ko'rsatkichlarni muntazam ravishda o'lchash ularning o'sish dinamikasini kuzatish, ovqatlanish holatini baholash va davolash samaradorligini aniqlashda muhim ahamiyatga ega. Tadqiqotda TYN tashxisi qo'yilgan bolalarning antropometrik ko'rsatkichlari sog'lom bolalarning ko'rsatkichlari bilan solishtiriladi. Natijalar TYN bo'lgan bolalarda o'sish sur'atining sekinlashishi, vaznining yetarli darajada oshmasligi va boshqa antropometrik ko'rsatkichlarning o'zgarishi kuzatilishi mumkinligini ko'rsatadi. Tadqiqot natijalari TYN bo'lgan bolalarda antropometrik ko'rsatkichlarni muntazam ravishda o'lchash va baholash zarurligini tasdiqlaydi. Ushbu ma'lumotlar bolalarning o'sish va rivojlanishini kuzatish, ovqatlanish holatini yaxshilash va davolashni optimallashtirish uchun ishlatilishi mumkin.

Kalit so'zlar: *tug'ma yurak nuqsonlari, antropometrik ko'rsatkichlar, o'sish, rivojlanish, ovqatlanish.*

ASSESSMENT OF ANTHROPOMETRIC INDICATORS IN CHILDREN WITH CONGENITAL HEART DEFECTS

Babadjanova F.R., Qodirova A.M.
Urgench branch of the Tashkent Medical Academy

Abstract. This study focuses on examining the changes in anthropometric measurements (height, weight, head circumference, etc.) in children with congenital heart defects (CHDs). CHDs can significantly impact a child's growth and development. Therefore, regular measurement of anthropometric indicators is crucial for monitoring their growth patterns, assessing nutritional status, and determining the effectiveness of treatment. In this study, the anthropometric measurements of children diagnosed with CHDs are compared with those of healthy children. The results suggest that children with CHDs may experience slower growth rates, insufficient weight gain, and changes in other anthropometric indicators. The study's findings confirm the need for regular measurement and evaluation of anthropometric indicators in children with CHDs. This information can be used to monitor children's growth and development, improve nutritional status, and optimize treatment.

Keywords: *congenital heart defects, anthropometric measurements, growth, development, nutrition.*

ОЦЕНКА АНТРОПОМЕТРИЧЕСКИХ ПОКАЗАТЕЛЕЙ У ДЕТЕЙ С ВРОЖДЕННЫМИ ПОРОКАМИ СЕРДЦА

Бабаджанова Ф.Р., Кодирова А.М.
Ургенчский филиал Ташкентской медицинской академии

Аннотация. Данное исследование посвящено изучению изменений антропометрических показателей (рост, вес, длина окружности головы и др.) у детей с врожденными пороками сердца (ВПС). ВПС могут оказывать существенное влияние на рост и развитие ребенка, поэтому регулярное измерение антропометрических показателей имеет важное значение для отслеживания динамики роста, оценки состояния питания и определения эффективности лечения. В исследовании антропометрические показатели детей с диагнозом ВПС сравниваются с показателями здоровых детей. Результаты показывают, что у детей с ВПС может наблюдаться замедление темпов роста, недостаточное увеличение веса и изменения других антропометрических показателей. Результаты исследования подтверждают необходимость регулярного

измерения и оценки антропометрических показателей у детей с ВПС. Данные сведения могут быть использованы для мониторинга роста и развития детей, улучшения состояния питания и оптимизации лечения.

Ключевые слова: врожденные пороки сердца, антропометрические показатели, рост, развитие, питание.

Dolzarblighi. Tug'ma yurak nuqsonlari (TYN) bo'lgan bolalarda ovqatlanish buzilishlarini rivojlanish xavfi yuqori bo'lib, adabiyot ma'lumotlariga ko'ra, ularning chastotasi 95,6% ga etadi [1,2]. TYN bolaning o'sishi va rivojlanishiga sezilarli ta'sir ko'rsatishi mumkin [3]. Yurak nuqsoni tufayli bolaning organizmi yetarli miqdorda kislorod va ozuqa moddalarini olmaydi, bu esa uning o'sish sur'atining sekinlashishiga, vaznining yetarli darajada oshmasligiga va umumiy rivojlanishining kechikishiga olib keladi. Antropometrik ko'rsatkichlar (bo'y, vazn, bosh aylanasining uzunligi va boshqalar) bolaning o'sishi va rivojlanishini baholashda muhim ahamiyatga ega [4,5]. TYN bo'lgan bolalarda antropometrik ko'rsatkichlarning muntazam ravishda o'lchanishi ularning o'sish dinamikasini kuzatishga, ovqatlanish holatini baholashga va davolash samaradorligini aniqlashga yordam beradi [6]. Tug'ma yurak nuqsonlari bo'lgan bolalarda antropometrik ko'rsatkichlarni baholash ularning o'sishi va rivojlanishini kuzatishda, kasallikni erta aniqlashda, ovqatlanish holatini baholashda va davolash samaradorligini aniqlashda muhim ahamiyatga ega [7]. Shuning uchun TYN bo'lgan bolalarda antropometrik ko'rsatkichlarni muntazam ravishda o'lchash va baholash zarur.

Tadqiqotning maqsadi - tug'ma yurak nuqsonlari bo'lgan bolalarning jismoniy rivojlanishini baholash.

Materiallar va metodlar. Xorazm bolalar ko'p tarmoqli tibbiyot markazining kardiojarrohlik bo'limida tug'ma yurak nuqsonlari va yurak yetishmovchiligi tashxisi qo'yilgan 1 oylikdan 1 yoshgacha bo'lgan bemorlarning skrining tekshiruvi o'tkazildi (n = 28). Sog'lom bolalar guruhi shunday yoshdagi 25 nafar amalda sog'lom bolalardan iborat edi. Antropometrik ko'rsatkichlarni baholash WHO Anthro (2009) dasturi yordamida quyidagi parametrlar: vazn/yosh, vazn/bo'y, bo'y/yosh, tana massasi indeksi (TMI)/yosh, Z-scores - individual ko'rsatkichlarning ushbu populyatsiya uchun o'rtacha ko'rsatkichlardan chetlanishlari hisobi asosida amalga oshirildi. Kuzatilayotgan bemorlarning antropometrik o'lchovlari natijalarini interpretatsiya qilish Jahon sog'liqni saqlash tashkilotining ovqatlanish yetishmovchiligi klassifikatsiyalari, MKB 10 asosida amalga oshirildi.

Natijalar va ularning muhokamasi. Hozirgi vaqtda Samarqand bolalar ko'p tarmoqli tibbiyot markazining kardiojarrohlik bo'limida yurak yetishmovchiligi (YE) bo'lgan bolalar orasida ovqatlanish yetishmovchiligi tarqalganligini baholash bo'yicha ilmiy tadqiqot olib borilmoqda. Umuman olganda, ovqatlanish yetishmovchiligi tekshirilgan bolalarning 23 nafarida (82,2%) qayd etilgan: o'tkir yengil ovqatlanish yetishmovchiligi - 8 nafarida (28,6%), o'tkir o'rtacha - 3 nafarida (10,7%), o'tkir og'ir - 2 nafarida (7,2%), surunkali - 10 nafarida (35,7%). 28 nafar bemordan 1-6 oylik bolalar - 29%, 6 oydan katta bolalar - 61%; o'g'il bolalar 54%, qiz bolalar 46% edi. Nuqson turiga ko'ra taqsimlanishi: "rangsiz" nuqsonlar - 70%, "ko'k" - 30%. Tug'ilishdagi vazn o'rtachadan past bo'lgan bolalarning 29,7% da qayd etilgan, normal tana vazni - 70,3% da. Bolalarning kardiojarrohlik bo'limiga yotqizilgan paytdagi Z-score (vazn-yosh) bo'yicha antropometriya ma'lumotlari: Z-score -1,0 dan +1,0 gacha (normal) - 5 (17,8%) bemorda, Z-score -1,1 dan -2,0 gacha - 10 (35,7%) da, Z-score -2,1 dan -3,0 gacha - 13 (46,4%) da. Sog'lom bolalarda esa aksincha, Z-score (vazn-yosh) bo'yicha quyidagicha kuzatildi: Z-score -1,0 dan +1,0 gacha

(normal) - 10 (40%) bemorda, Z-score -1,1 dan -2,0 gacha - 2 (8%) da, Z-score -2,1 dan -3,0 gacha - 1 (4%) da.

SYE bilan kasallangan bemorlar orasida o'tkazilgan tadqiqotga ko'ra, KOTN eng ko'p tarqalgan bo'lib, 12 (42,8%) bemorda uchradi, ikkinchi o'rinda OOD - 9 (32,1%), KOTN +BOTN kabi qo'shma nuqsonlar faqat uch bemorda uchradi - (10,7%) miqdorida va oxirgi IQOS+ KOTN va KOTN + OOD mos ravishda 2 (7,1%) bemorda teng miqdorda kuzatildi. Bundan tashqari, 1-darajali qon aylanish yetishmovchiligi 1 (3,6%) bemorda, 2 A darajasi 23 (82,1%), 2 B darajasi 4 (14,3%) bemorda kuzatildi. Ular orasida ovqatlanish yetishmovchiligi SYE bilan kasallangan 23 (82,2%) tekshirilgan bemorlarda tashxis qilingan, ulardan tug'ma yurak nuqsonlari bilan: o'tkir OB(oziqlanishning buzilishi) shakli 13 (46,4%) bolada, ular orasida OB ning engil shakli - 8 (28,6%), OB ning o'rta og'ir shakli 3 (10,7%) va OB ning og'ir shakli 2 (7,2%) bemorda. OB ning surunkali shakli - 10 (35,7%) bemor bolada tashxis qilingan. Sog'lom bolalarning nazorat guruhida faqat 27,2% bolada engil darajadagi o'tkir OB shakli tashxis qilingan. Shunday qilib, tug'ma nuqsonli bolalarda to'yib ovqatlanmaslik surunkali yurak etishmovchiligi bilan asoratlangan yuraklar yuqori darajaga ega paydo bo'lish chastotasi (45%) va hayotning birinchi yilida o'tkir shaklda shakllanadi to'yib ovqatlanmaslik (77%). Tug'ma yurak kasalligi bo'lgan bolalar 1 yoshda ehtiyotkorlik bilan nazorat qilishni talab qiladi, vazn va balandlik ko'rsatkichlarining dinamikasi, rivojlanishning oldini olish noto'g'ri ovqatlanish.

Xulosa. Natijalar etishmovchilik bo'yicha jahon 60tatistic ma'lumotlari bilan olingan bolalarda ovqatlanish, unga ko'ra tug'ma nuqsonlari bo'lgan bemorlar uchun yurak jismoniy rivojlanishda doimiy kechikish bilan tavsiflanadi.

Foydalanilgan adabiyotlar:

1. Агзамова С.А., Бабаджанова Ф.Р., Марсовна К.Г. Распространенность и клиническая характеристика врожденных пороков сердца у детей Хорезмской области Республики Узбекистан // Журнал перспективных медицинских и стоматологических исследований. – 2021. – Т. 9. – №. 4. – С. 63-67.
2. Агзамова, Ш., & Бабаджанова, Ф. (2024). Медико-статистические показатели и факторы риска развития врожденных пороков сердца у детей Хорезмской области Республики Узбекистан. Инновационные подходы к диагностике, лечению и профилактике туберкулеза и неспецефической респираторной патологии у взрослых и детей, 1(1), 25.
3. Машарипова Р. Т. Исследование поражения сердечно-сосудистой системы при вирусных инфекциях у детей и подростков в хорезмской области // Наука, техника и образование. 2021. №1 (76).
4. Наврузова Ш. И. и др. Особенности течения пищевой аллергии у детей с атопическим дерматитом у детей раннего возраста //Science and innovation. – 2024. – Т. 3. – №. Special Issue 54. – С. 327-332.
5. Babadjanova F.R., Zaidova D.M. Yurak tug'ma nuqsonlarining o'ziga xos xususiyatlari//Science and innovation– 2024. – T. 3. – №.Special Issue 54.– C. 102-105.
6. Babadjanova F. R. et al. Morphometric Determinants of Myocardial Dysfunction in Children with Congenital Heart Defects in the Postoperative Period //Telematique. – 2023. – T. 22. – №. 01. – C. 1446–1457-1446–1457.

7. Rusli Sjarif, Damayanti & Anggriawan, Shirley & Putra, Sukman & Djer, Mulyadi. (2011).Anthropometric profiles of children with congenital heart disease. Medical Journal of Indonesia. 20. 40. 10.13181/mji.v20i1.426

UO'K: 618.14 - 006.52 - 022.7: 577.21: 611

BACHADON BO'YNI INTRAEPITELIAL NEOPLAZIYASIDA KOLPOSKOPIYANING KLINIK AHAMIYATI

Axmedova M.O.
Respublika ixtisoslashtirilgan ona va bola salomatligi ilmiy-amaliy tibbiyot markazi
Toshkent, O'zbekiston.

Annotatsiya: Bachadon bo'yni displaziyasi (CIN) bachadon bo'yni saratonining rivojlanish xavfi yuqori bo'lgan o'zgarishlardan biri bo'lib, uning erta tashxisi va monitoringi muhim ahamiyatga ega. Kolposkopiya bachadon bo'yni epiteliyasidagi o'zgarishlarni aniqlash, patologik jarayonlarni baholash va biopsiya olish uchun asosiy vizualizatsiya usuli hisoblanadi. Ushbu maqolada kolposkopiyaning diagnostik imkoniyatlari, displaziya darajasini aniqlashdagi roli va uning sitologik hamda kolposkopik belgilarning tuzilishi, uning maqsadi ushbu shartlarning tarqalishini aniqlash va ularning mumkin bo'lgan klinik oqibatlari tahlili o'tkazildi Tadqiqot natijalari shuni ko'rsatdiki, kolposkopiya bachadon bo'yni displaziyasini aniqlash va nazorat qilishda yuqori sezgirlikka ega bo'lib, uni sitologik skrining bilan qo'shib olib borish davolash samaradorligini oshirishga yordam beradi.

Kalit so'zlar: bachadon bo'yni intraepitelyal neoplaziyasi, papillomavirusi infektsiyasi, kolposkopiya, uksuslik sinama, Schiller testi.

CLINICAL SIGNIFICANCE OF COLPOSCOPY IN CERVICAL INTRAEPITHELIAL NEOPLASIA

Akhmedova M.O.
Republican specialized scientific and practical medical center for maternal and child health
Tashkent, Uzbekistan

Abstract: Cervical dysplasia (CIN) is one of the precancerous conditions of the cervix with a high risk of developing cervical cancer, making its early diagnosis and monitoring extremely important. Colposcopy is a primary visualization method that allows for the detection of epithelial changes in the cervix, assessment of pathological processes, and targeted biopsy sampling. This article examines the diagnostic capabilities of colposcopy, its role in determining the degree of dysplasia, as well as the structure of cytological and colposcopic signs. The aim of the study is to determine the prevalence of these conditions and their potential clinical consequences. The study results showed that colposcopy has high sensitivity in detecting and monitoring cervical dysplasia, and its combination with cytological screening enhances treatment effectiveness.

Keywords: cervical intraepithelial neoplasia, papillomavirus infection, colposcopy, vinegar test, Schiller test.

КЛИНИЧЕСКОЕ ЗНАЧЕНИЕ КОЛЬПОСКОПИИ ПРИ ЦЕРВИКАЛЬНОЙ ИНТРАЭПИТЕЛИАЛЬНОЙ НЕОПЛАЗИИ

Ахмедова М.О.
Республиканский специализированный научно-практический медицинский центр здоровья матери и ребенка Ташкент, Узбекистан.

Аннотация: Цервикальная дисплазия (CIN) является одним из предраковых состояний шейки матки с высоким риском развития рака, что делает её раннюю диагностику и мониторинг крайне важными. Кольпоскопия является основным методом визуализации, позволяющим выявлять изменения эпителия шейки матки, оценивать патологические процессы и проводить прицельную биопсию. В данной статье рассматриваются диагностические возможности кольпоскопии, её роль в определении степени дисплазии, а также структура цитологических и кольпоскопических признаков. Цель исследования – определить распространённость данных состояний и возможные клинические последствия. Результаты исследования

показали, что кольпоскопия обладает высокой чувствительностью в выявлении и контроле цервикальной дисплазии, а её сочетание с цитологическим скринингом способствует повышению эффективности лечения.

Ключевые слова: *цервикальная интраэпителиальная неоплазия, папилломавирусная инфекция, кольпоскопия, уксусная проба, проба Шиллера.*

Dolzarbligi. Bachadon bo'yni intraepitelial neoplaziyasi (CIN) bachadon bo'yni saratoniga olib kelishi mumkin bo'lgan saraton oldi holatlaridan biri hisoblanadi [1]. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, har yili 600 000 dan ortiq yangi bachadon bo'yni saratoni holatlari qayd etiladi va ularning 90% dan ortig'i Odam papillomavirusi (OPV) infeksiyasi bilan bog'liq [3]. OPV, ayniqsa uning yuqori xavfli shtammlari (HPV-16, HPV-18), CIN patogenezida asosiy rol o'ynaydi va ushbu virusli infeksiyani tashuvchi ayollarda invaziv bachadon bo'yni saratoniga o'tish xavfi yuqori bo'ladi.

Kolposkopiya — bu bachadon bo'yni epiteliyasidagi morfologik o'zgarishlarni vizualizatsiya qilish, patologik jarayonlarni baholash va maqsadli biopsiya olish imkonini beruvchi asosiy tashxis usulidir. Ushbu usul sitologik va gistologik tadqiqotlar bilan birgalikda CIN'ni aniq tashxislash va saratonga o'tish xavfini baholashda muhim ahamiyatga ega. Zamonaviy tibbiyotda OPV bilan bog'liq CINni aniqlashda molekular-genetik testlar, immunogistoximik usullar va kengaytirilgan kolposkopik tekshiruvlar orqali diagnostika takomillashtirilgan [2,3,5].

Kolposkopik tekshiruvlar davomida atseto-oq epiteliy, leykoplakiya, punktuatsiya, mozaika, yod-manfiy zonalar va atypik tomirlar kabi patologik belgilari aniqlanadi. Ushbu alomatlar, o'z navbatida, CIN'ning qay darajada og'irligini baholash va uning saratonga o'tish ehtimolini aniqlashga yordam beradi [6]. Shuningdek, kolposkopiya OPV bilan bog'liq CIN bo'lgan bemorlarda dinamik kuzatuv va davolash samaradorligini baholash uchun muhim vosita hisoblanadi.

Kolposkopik tashxisning dolzarbligi shundaki, u aniq va yuqori sezgirlikka ega bo'lib, boshqa diagnostika usullari (PAP-test, molekulyar testlar, biopsiya) bilan birgalikda bemorlarning individual holatiga qarab davolash taktikasini tanlashda katta ahamiyatga ega [4]. Shu sababli, OPV-infeksiyasi bilan bog'liq CIN holatlarida kolposkopiyani keng qo'llash klinik amaliyot uchun dolzarb masala hisoblanadi.

Tadqiqot maqsadi: Odam papillomavirusi infektsiyasi bilan bog'liq bo'lgan bachadon bo'yni intraepitelial neoplazisi bo'lgan bemorlarda kolposkopiya ma'lumotlarini o'rganish.

Tadqiqot materiallari va usullari: Tadqiqotda 30 yoshdan 59 yoshgacha bo'lgan 205 nafar ayol ishtirok etdi (o'rtacha yoshi 38,3±6,35 года). Asosiy prospektiv guruhni bachadon bo'yni shilliq qavatining ko'p qavatli yassi epiteliysining o'rtacha displaziyasi bo'lgan 86 nafar bemor tashkil etadi. Kirish mezonlari quyidagilardan iborat: bemorlarning yoshi 30 dan 59 yoshgacha, bachadon bo'yni ko'p qavatli yassi epiteliysining morfologik tasdiqlangan o'rtacha og'irlikdagi displaziyasi mavjudligi, shuningdek, ilmiy tadqiqotga ishtirok etish uchun yozma rozilik. Chiqish mezonlari quyidagilardan iborat: 30 yoshdan kichik yoki 59 yoshdan oshgan yosh, homiladorlik, tug'ruqdan keyingi davr, psixonevrologik kasalliklarning mavjudligi, jinsiy a'zolardan qon ketishi, shuningdek dekompensatsiya bosqichida buyrak, o'pka yoki jigar funktsiyasining buzilishi mavjudligi. Ishtirok etishdan bosh tortgan bemorlar ham tadqiqotdan chetlashtirildi. Asosiy guruh ikki guruhga bo'lingan: birinchi guruhga CIN2 va OPV tashuvchisi aniqlangan 40 nafar bemor kiritilgan; Ikkinchi kichik guruhga CIN 2 va OPV skrining natijalari salbiy bo'lgan 46 nafar bemor kiradi. Nazorat OPV PCR natijasi salbiy bo'lgan 92 nafar sog'lom ayolning ma'lumotlarini, shuningdek suyuqlik sitologiyasi bo'yicha NILMni o'z ichiga oladi..

Ayollarning tekshiruviga quyidagilar kiradi: shikoyatlar to'plami, anamnez, ginekologik holat, kengaytirilgan kolposkopiya, molekulyar biologik tadqiqot usullari, sitologik tekshiruv, biopsiya materialining gistologik tekshiruvi (ko'rsatmalarga ko'ra).

Kengaytirilgan kolposkopiya an'anaviy ravishda sirka sinamasi (5% eritma) va kolposkopda bachadon bo'yni Shiller sinamasi (Ukraina) yordamida amalga oshirildi. Colp suratga olish raqamli fotokolposkop "Scaner" (MK-300) yordamida amalga oshirildi. Kolposkopik tadqiqot usulining natijasi 1990 yilda VII Butunjahon kolposkopiya kongressida qabul qilingan va 2002 yilda Bachadon bo'yni kasalliklari va kolposkopiya xalqaro assotsiatsiyasi tomonidan to'ldirilgan Kolposkopik atamalarning xalqaro tasnifiga muvofiq shifrlangan. Tadqiqot uchun biz Leisegang kolposkopidan (Germaniya) foydalandik, bu 7-15-30x kattalashtirish imkonini beradi. RCS umumiy qabul qilingan usul bo'yicha amalga oshirildi. Bachadon bo'yni shilliq qavati davolanmasdan ham, keyinchalik 3% sirka kislotasi eritmasini, so'ngra 2% suvli Lugol eritmasini (Schiller testi) qo'llash bilan tekshirildi. RCSni o'tkazishda, keyingi sitologik va gistologik tekshirish uchun bachadon bo'yni ta'sirlangan joylaridan maqsadli qirqish va biopsiya uchun joylar aniqlandi.

Tadqiqot natijalari va muhokama: Tekshiruv natijalariga ko'ra, asosiy guruhdagi bemorlar ikki guruhga bo'lingan: birinchi guruhga CIN 2 va OPV skrining natijasi salbiy bo'lgan 100 nafar bemor kiritilgan; ikkinchi kichik guruhga CIN2 va OPV tashuvchisi bo'lgan 105 bemor kiradi. Nazorat guruhiga bachadon bo'yni morfologik o'zgarishlari bo'lmagan 92 bemor kiritilgan.

Jadval 1.

Tekshirilayotgan ayollarning yosh tarkibi

Yosh	30-39	40-49	50-59
1 guruh, OPV (-) n=100	66,0±4,7	26,0±4,4	8,0±2,7
2 guruh, OPV (+) n=105	65,7±4,6	28,6±4,4	5,7±2,3
Nazorat guruhi, n=92	87,0±3,5	7,6±2,8	5,4±2,3

Ishtirokchilarning uchta tadqiqot va nazorat guruhidagi yosh toifalari bo'yicha taqsimlanishi shuni ko'rsatadiki, birinchi va ikkinchi guruhlarda eng katta ulush 30-39 yoshdagi bemorlar bo'lib, namunaning uchdan ikki qismini (mos ravishda 66% va 65,7%) qamrab oladi. Nazorat guruhida 30-39 yoshlilar toifasi ham ustunlik qiladi, bu ishtirokchilarning katta qismini (87%) tashkil etadi. 40-49 yoshdagi bemorlar barcha guruhlarda namunaning kichikroq qismini tashkil qiladi, ikkinchi guruhda eng katta ulush (28,6%) va nazorat guruhida eng kichik (7,6%). 50-59 yosh guruhi birinchi va ikkinchi guruhlarda minimal darajada ifodalanadi (mos ravishda 8% va 5,7%) (Jadval 1).

Klinik va anamnestik tahlil shuni ko'rsatdiki, OPV tashuvchisi mavjudligidan qat'i nazar, CIN 2 bo'lgan guruhlarda o'z vaqtida hayz ko'rish kuzatilgan va bachadon bo'yni saratoni bilan og'rigan bemorlar guruhida hayz ko'rish kech boshlangan bemorlar (15 yosh va undan katta) - 57,6%. Tadqiqot guruhlaridagi bemorlarning so'roviga ko'ra, I va II guruhdagi bemorlarda oylik qon yo'qotishning o'rtacha miqdori qayd etilgan - mos ravishda 95 va 89%.

Jadval 2

Tekshirilayotgan ayollarda kolposkopik belgilarning tuzilishi: asosiy va nazorat guruhlarini taqqoslash

	Kasalliklar	Asosiy guruh, n= 205		Nazorat guruh, n=92	
		n	%	n	%

1	Normal kolposkopik holat				
	Original KQYE	-		15	16,3±3,9
	Ektopiya	-		14	15,2±3,7
	Normal zona transformatsiya	-		90	98±1,4
2	Atipik kolposkopik holat	205	100±0		
A	Transformatsiyada:	-	-		
	Atseto-oq epiteliy	152	74±3,34	-	
	Leykoplakiya (yumshoq, qo'pol)	45	22±2,9	-	
	Punktuatsiya (yumshoq, qo'pol)	38	19±2,7	-	
	Mozaika (yumshoq, qo'pol)	55	27±3,1	-	
	Yodnegativ zona	180	82±2,8	-	
	Atipik tomirlar	53	26±3,1	-	
Б	Transformatsiya zonasidan tashqarida:	-	-		
	Atseto-oq epiteliy	113	55±3,6	-	
	Leykoplakiya (yumshoq, qo'pol)	45	22±2,8	-	
	Punktuatsiya (yumshoq, qo'pol)	95	46±3,5	-	
	Mozaika (yumshoq, qo'pol)	48	23±2,9	-	
	Yodnegativ zona	183	89±2,6	-	
	Atipik tomirlar	70	34±3,3	-	
3	Carcinoma in situ	-	-	-	
4	Qoniqarsiz kolposkopik holatlar:		-		
	KQYE va SE tutashuvi ko'rinmaydi	135	66±3,5	-	
	Ektropion	93	45±3,5	-	
	Chin eroziya	18	9±2,0	-	
	Boshqalar (aralash) tasvirlar	-	-	-	
	Kondilomatoz НПО	192	94±1,6	-	
5	Papillomatoz НПО	-	-	-	
	Leykoplakiya НПО	-	-	-	

Kolposkopiya bachadon bo'yni holatini baholashda va normal kolposkopik sharoitlardan atipik va qoniqarsiz o'zgarishlargacha bo'lgan anormalliklarni aniqlashda asosiy rol o'ynaydi. Ikki

guruh ayollar misolida - asosiy (n = 205) va nazorat (n = 92) - kolposkopik belgilarning tuzilishi tahlili o'tkazildi, uning maqsadi ushbu shartlarning tarqalishini aniqlash va ularning mumkin bo'lgan klinik oqibatlarini aniqlashdan iborat edi.

Asosiy guruhda original ko'p qavatli yassi epiteliy (KQYE) va ektopiya aniqlanmadi, ular nazorat guruhidan farq qiladi, bu yerda bunday holatlar mos ravishda 16,3% va 15,2% hollarda sodir bo'lgan. Normal transformatsiya zonasi nazorat guruhida 98% ni tashkil qildi.

Asosiy guruhning transformatsiya zonasida atseto-oq epiteliy (74±3,34%), leykoplakiya (22±2,9%), punktuatsiya (19±2,7%), mozaika (27±3,1%), yod-manfiy zonalar (82±2,8%) va atipik tomirlar (26±3,1%) aniqlandi. Transformatsiya zonasidan tashqarida shunga o'xshash belgilar asosiy guruhda ham aniqlangan (55±3,6%, 22±2,8%, 46±3,5%, 23±2,9%, 89±2,6% va 34±3,3%), nazorat guruhida esa kuzatilmagan.

Qoniqarsiz kolposkopik sharoitlar, masalan, KQYE va SE tutashuvi ko'rinmaydi (66±3,5%), ektropionlar (45±3,5%), chin eroziyalar (9±2,0%) va kondilomatoz НПО (94±1,6%), faqat asosiy guruhda aniqlangan.

Tadqiqot natijalari ikki guruh o'rtasidagi kolposkopik belgilar tuzilishidagi sezilarli farqlarni ta'kidlaydi. Ushbu topilmalar bachadon bo'yni kasalliklarining xususiyatlarini tushunish va optimal davolash va monitoring strategiyalarini tanlash uchun muhim klinik ta'sirga ega. Keyingi tadqiqotlar aniqlangan belgilarning prognostik ahamiyatini aniqlashga va ayollarning reproduktiv kasalliklarini tashxislash va davolashga yondashuvlarni optimallashtirishga yordam beradi.

Xulosa: Tadqiqot natijalari shuni ko'rsatdiki, kolposkopiya OPV bilan bog'liq bo'lgan CIN'ni aniqlashda va uning dinamikasiga baho berishda muhim tashxis usuli hisoblanadi. Tahlil qilingan bemorlarda kolposkopik belgilari bilan sitologik va gistologik tekshiruvlar natijalari o'rtasida yuqori darajadagi muvofiqlik aniqlandi, bu esa ushbu diagnostik usulning ishonchliligini tasdiqlaydi.

Kolposkopik tashxis CIN darajasini baholash va OPV yuqtirgan bemorlarda individual davolash taktikasini tanlashda muhim o'rin tutadi. Ayniqsa, OPV-pozitiv bemorlarda atseto-oq epiteliy, yod-manfiy zonalar va atipik tomirlar kabi belgi-xususiyatlar ko'proq uchragani qayd etildi.

Bu esa OPV-infeksiyasi aniqlangan bemorlarda kolposkopiyani doimiy monitoring vositasi sifatida qo'llash zarurligini ko'rsatadi.

Tadqiqot shuni tasdiqlaydiki, kolposkopiyani sitologik skrining va molekulyar testlar bilan birgalikda qo'llash diagnostika samaradorligini oshiradi, bemorlarda saratonga o'tish ehtimolini aniq baholash imkoniyatini yaratadi. Bunday yondashuv bachadon bo'yni saratoni rivojlanishining oldini olish va davolash strategiyalarini yaxshilashga xizmat qiladi.

Foydalanilgan adabiyotlar:

1. Интраэпителиальная неоплазия вульвы: современный взгляд на проблему: научное издание / Н. В. Зароченцева // Российский вестник акушера-гинеколога. - 2020. - Том 20, N1. - С. 44-53.
2. Иммунотерапия цервикальной интраэпителиальной неоплазии, ассоциированной с вирусом папилломы человека, в условиях пандемии COVID-19. Взгляд клиницистов / А. И. Давыдов [и др.] // Вопросы гинекологии, акушерства и перинатологии: научно-практический журнал. - 2021. - Том 20, N 5. - С. 131-135.
3. Липидомика: новые перспективы поиска маркеров неоплазий: научное издание / М. Е. Некрасова [и др.] // Акушерство и гинекология. - 2017. - N3. - С. 34-40.

4. Прогнозирование риска развития и прогрессирования цервикальных интраэпителиальных неоплазий, ассоциированных с папилломавирусной инфекцией: научное издание / О. В. Бурменская, Н. М. Назароа [и др.] // Акушерство и гинекология. - 2016. - N2. - С. 92-98.
5. Цитологический скрининг шейки матки при интраэпителиальной дисплазии: научное издание / Г. Д. Атаниязова // Новости дерматовенерологии и репродуктивного здоровья. - 2017. - Том 79-80, N3-4 (2). - С. 17-19.
6. Цервикальная интраэпителиальная неоплазия, ассоциированная с папилломавирусной инфекцией: патогенетическое обоснование лечения пациенток в репродуктивном периоде: лекция / А. И. Давыдов, М. Н. Шахламова, В. А. Лебедев // Вопросы гинекологии, акушерства и перинатологии. - 2018. - Том 17, N3. - С. 66-72.

UDC: 618.39-36.2(470.57)-07-08

PROBLEMS OF PREMATURE BIRTH IN MODERN OBSTETRICS

Mamadjanova Sh.K.
Andijan State Medical Institute

Resume. The article presents literature data and own research on the actual problem of modern perinatal obstetrics - premature birth: frequency, causes, diagnosis, prevention and treatment.

Keywords: premature birth, etiology, diagnosis, treatment.

ZAMONAVIY AKUSHERLIKDA ERTA TUG'ILISH MUAMMOLARI

Mamadjanova Sh.K.
Andijon davlat tibbiyot institute

Rezyume. Maqolada zamonaviy perinatal akusherlikning dolzarb muammosi - erta tug'ilish: chastotasi, sabablari, diagnostikasi, oldini olish va davolash bo'yicha adabiyotlar ma'lumotlari va o'z tadqiqotlari keltirilgan.

Kalit so'zlar: muddatidan oldin tug'ilish, etiologiya, tashxis, davolash.

ПРОБЛЕМЫ ПРЕЖДЕВРЕМЕННЫХ РОДОВ В СОВРЕМЕННОМ АКУШЕРСТВЕ

Мамаджанова Ш.К.
Андижанский государственный медицинский институт

Резюме. В статье представлены данные литературы и собственные исследования по актуальной проблеме современного перинатального акушерства - преждевременным родам: частота, причины, диагностика, профилактика и лечение.

Ключевые слова: *преждевременные роды, этиология, диагностика, лечение.*

Relevance. Premature birth is called childbirth that occurs during pregnancy from 22 to 36 weeks and 6 days, starting from the first day of the last normal menstruation with a regular menstrual cycle, while the fetal body weight ranges from 500 to 2500 g [2,6]. The rate of preterm birth in the world is 5-10%. Premature infants account for 60-70% of cases of early neonatal mortality[5,8]. The risk of premature birth is due to the high mortality and morbidity of premature infants, which is observed 8-13 times more often than with timely delivery, as well as the need for huge resources of the healthcare system for the care and rehabilitation of this contingent of children [1,4].

Thus, the problem of premature birth is one of the most urgent in modern obstetrics, requiring a multilateral study and an integrated approach to its solution[3, 8].

At the same time, special attention should be paid to perinatal outcomes as a fundamental criterion for evaluating the effectiveness of prolongation of pregnancy and the tactics of delivering a premature fetus[5].

The purpose of the study: 1. Identify the risk factors for premature birth.

2. To identify the features of the course of premature birth and the postpartum period;

3. To analyze perinatal outcomes in premature birth, depending on the gestation period and the method of delivery;

4. Evaluate the effects of PR in newborns.

Materials and methods. To fulfill the tasks set in the work, a retrospective analysis of 50 birth histories with gestation periods of 24-37 weeks and 50 newborn development histories for 2019 was carried out.

Results and discussion. PR is most common at the age of 28-34 years (27%) . Among the risk factors, IBD is in the first place - 49%. arterial hypertension - 37%.

The most serious complication of pregnancy is AFN-36% and bleeding in the postpartum period, detected in 30% of pregnant women. In 40% of cases, PRS begin with PIAs. A comparative analysis of the tactics of managing IVF at different gestation periods showed that the advantages of the wait-and-see approach over the active one at 22-27 weeks of gestation at the time of birth consisted in the absence of IVF in children (0%) and a lower incidence of severe SDR (18%), therefore 89% of newborns from the group with As an active tactic, artificial lung ventilation (ventilator) was required, while with a wait-and-see tactic, ventilation was performed only in 39% of newborns.

Thus, with active management tactics, the mortality rate was 40%, and with a wait-and-see rate of 2%. At 28-30 weeks of gestation, newborns from the groups with both active and expectant IVF tactics were absent. 25% of children with active IVF tactics were diagnosed with grade III, with expectant CNS damage in newborns.

With active management, severe SDR was diagnosed in 22% of children, with expectant management — in 17%, the need for oxygenation with active management -35%, and with expectant management - 25%, mortality was -17% only in groups of children with active management tactics.

At a gestation period of 31 to 33 weeks, the analysis showed that with active tactics, grade II LVEF was diagnosed in 14% of children, and moderate-severity LVEF was 20%, while with expectant tactics, grade II LVEF was absent altogether, and moderate-severity SDR was 12%, ventilation with active tactics was 25%, and with a wait-and-see rate of -10%, the mortality rate is 10% with an active tactic. After 34 weeks of IVF I-II ct, 10% with active tactics,

7% with expectant tactics. RDS of moderate severity was diagnosed with active tactics in 5%, with expectant tactics -4%, while the need for oxygenation with expectant tactics was 13%, which exceeds that of the active (10%), mortality in the proportion of children from the active group was 2%, and in the group with expectant tactics -4%.

Assessment of perinatal outcomes showed that the most common consequence of PR in premature infants is hypoxic damage to the central nervous system, diagnosed in 34% of newborns, retinopathy in 24%, and the presence of intrauterine infection in 15% (pneumonia in 10% of children), RDS in 12%, open ductus arteriosus -3%, asphyxia -2%..

Conclusions. In the course of the study, it was found that PR most often occurs at the age of a pregnant woman from 28 to 34 years, it was also revealed that the leading risk factors for PR are: IBD, the presence of arterial hypertension; among the features, PIOV, AF and bleeding in the postpartum period are the most common.

Based on a retrospective analysis of birth histories and newborn development histories, a conclusion was made that makes it possible to attribute the wait-and-see approach to pregnancy management to the most effective in terms of gestation up to 34 weeks, due to the absence of IVF and a decrease in the incidence of SDR in premature infants. Also, assessing perinatal outcomes, it was found that the most common complication among newborns is hypoxic CNS damage and retinopathy.

Thus, early identification of the main risk factors at the stage of pre-pregnancy preparation and during pregnancy, as well as choosing the right tactics for managing pregnancy at different stages of gestation, can reduce the incidence of both pregnancy itself and fetal complications.

Used literature:

1. Andreeva N.A. Substantiation of the use of laser radiation, succinic acid and emoxypine in the treatment of endotoxicosis and disorders of regional hemodynamics in non-developing pregnancy: abstract of the dissertation. ... Candidate of Medical Sciences. – Saransk, 2004. – 17 p.
2. Garmayeva E.D. Premature birth / E.D. Garmayeva, E.A. Batoeva, A.R. Dambaeva et al. // Bulletin of the Buryat University. - 2010. – No. 12. – pp. 143-147.
3. Kulavsky E.V. Actual problems of premature birth in modern obstetrics / E.V. Kulavsky, V.A. Kulavsky // Medical Bulletin of Bashkortostan. - 2011. – Vol. 6, No. 1. – pp. 49-53.
4. Makarov O.V. Modern approaches to the prediction of premature birth / O.V. Makarov, I.V. Bukhareva, I.A. Kuznetsov et al. // Russian bulletin of obstetrician-gynecologist. - 2007. – No. 7. – pp. 10-15.
5. Savelyeva G.M. Problems of premature birth in modern obstetrics / G.M. Savelyeva, R.I. Shalina, A.G. Plekhanova et al. // Practical medicine. – 2010. – № 4 (43). – Pp. 7-12.
6. Sidelnikova V.M., Antonov A.G. Premature birth. A premature baby. Moscow: GEOTAR-Media Publishing House, 2006. 448 p.
7. Yurasova E.A. Preterm birth // Far Eastern Medical Journal, 2008, No. 8, pp. 118-122.
8. Mackeen A.D. Tocolytics for preterm premature rupture of membranes / A.D. Mackeen, J. Seibel-Seamon, J. Grimes-Dennis et al. // Cochrane Database Syst. Rev. – 2011. – V.5, No. 10. – CD007062.

UO'K: 615.12:615.065

SULFOPARIN PREPARATINING EMBRIOTOKSIK VA TERATOGEN TA'SIRINI ANIQLASH

Kutliqova G.M., Sodikova D.T
Qo'qon Universiteti Andijon filiali, ADTI

Резюме. Mahalliy yuqori samarali dori-darmonlarni yaratish muammosi bugungi kunda juda dolzarb hisoblanadi. Shunday preparatlardan biri sklerozga qarshi xususiyatlarga ega bo'lgan Sulfoparindir. Sulfoparin preparati –sulfogruppalar bilan boyitilgan xitosan kompleks – O'zbekiston Respublikasi Fanlar akademiyasining Polimerlar kimyosi va fizikasi institutida ishlab chiqilgan . Ma'lumki, sulfogruppalar tirik organizmning hayotiy jarayonlarida muhim rol o'ynaydi va shu sababli, Sulfoparin turli patologik holatlarni tuzatish uchun yangi imkoniyatlar yaratadi. Yangi dori vositalarining klinikdan oldingi xavfsizligini baholashda laboratoriya hayvonlarida embrion rivojlanishiga ta'sirini o'rganish masalasi hal etilishi zarur .

Kalit so'zlar: *Sulfoparin, Polymer, Scleros, Embrion, Experimental, Ossificatsiya*

DEFINITION OF EMBRIOTOXIC AND TERATOGENIC ACTION OF SULFOPARINE

Kutlikova G.M., Sodikova D.T
Andijan Branch of Kokand University, ASMI

Resume. The problem of creating highly effective domestic drugs is very important today. One of such drugs is Sulfoparin, which has antisclerotic properties. The drug "Sulfoparin" - a chitosan complex enriched with sulfogroups - was developed at the Institute of Chemistry and Physics of Polymers of the Academy of Sciences of the Republic of Uzbekistan . It is known that sulfogroups play an important role in the processes of vital activity of a living organism, in this regard, Sulfoparin creates new opportunities for the correction of various pathological conditions. When evaluating the preclinical safety of new drugs, it is necessary to address the issue of studying the effect on embryonic development in laboratory animals .

Keywords: Sulfoparin, Polymer, Sclerosis, Embryo, Experimental, Ossification

ОПРЕДЕЛЕНИЕ ЭМБРИОТОКСИЧЕСКОГО И ТЕРАТОГЕННОГО ДЕЙСТВИЯ ПРЕПАРАТА СУЛЬФОПАРИН

Кутликова Г.М. Содикова Д.Т
Андижанский филиал Кокандского университета, АГМИ

Резюме. Проблема создания высокоэффективных отечественных лекарственных средств сегодня весьма актуальна. Одним из таких препаратов является Сульфопарин, обладающий антисклеротическими свойствами. Препарат «Сульфопарин» — комплекс хитозана, обогащенный сульфогруппами, — разработан в Институте химии и физики полимеров Академии наук Республики Узбекистан . Известно, что сульфогруппы играют важную роль в процессах жизнедеятельности живого организма, в связи с чем Сульфопарин создает новые возможности для коррекции различных патологических состояний. При оценке доклинической безопасности новых лекарственных препаратов необходимо решать вопрос изучения влияния на эмбриональное развитие у лабораторных животных .

Ключевые слова*: Сульфопарин, Склероз, Оссификация, Экспериментальный, Эмбрион, Полимер.*

Tadqiqotning maqsadi: Sulfoparin preparatining embriotoksik va teratogen faolligini o'rganish.

Tadqiqot materiallari va usullari. Sulfoparin preparatining embriotoksik va teratogen faolligini aniqlash uchun "yangi dori vositalarining teratogen va embriotoksik faolligini sinash bo'yicha uslubiy ko'rsatmalar" (RAMS Eksperimental tibbiyot instituti embriologiya bo'limi tomonidan ishlab chiqilgan) va shunga o'xshash boshqa uslubiy ko'rsatmalardan foydalanildi [1,2,7,8]. Tajribalar har biri 180-200 grammlik oq zotli urg'ochi kalamushlarda o'tkazildi. Kalamushlar uch guruhga bo'linib, ikki tajriba guruhi va bir nazorat guruhi tashkil etildi. Tajribalarda kalamushlar kech proestrus yoki erta estrusga mos keluvchi sikl bosqichida tanlanib, ish kunining oxirida erkak kalamushlar bilan 2:1 yoki 3:1 nisbatda juftlashtirildi. Ertasi kuni ertalab vaginal surtma mikroskop ostida tekshirilgan va spermatozoidlar aniqlangan kun homiladorlikning birinchi kuni deb belgilangan. Homilador kalamushlar har birida 20 tadan bo'lgan uch guruhga bo'lindi: 1-guruh nazorat guruhi bo'lib, ularga distillangan suv Sulfoparinning nazorat hajmida kiritildi. 2 va 3-guruhlar tajriba guruhlari bo'lib, ularga homiladorlikning 1-kunidan 19-kuniga qadar Sulfoparin preparati mos ravishda 0,5 mg/kg va 5,0 mg/kg dozalarda har kuni yuborildi. Preparat 1-guruhga distillangan suv shaklida, 2 va 3-guruhga esa homiladorlikning 6-16 kunlari va 16-19 kunlari oralig'ida kiritilgan. Homilador kalamushlarning umumiy holati, xulq-atvori, gigiyenasi va har haftalik vazni kuzatib borildi. Homiladorlikning 20-kunida urg'ochilar bachadon bo'yni umurtqalarini joyidan chiqarish orqali o'ldirilib, ularning bachadonlari ochildi. Embriotoksik ta'sir ko'rsatkichlari sifatida quyidagilar o'rganildi: Implantatsiyadan oldingi va keyingi yo'qotishlar; Nazorat guruhi bilan taqqoslaganda homilalar rivojlanishining umumiy sekinlashuvi; Morfologik (anatomik) malformatsiyalar. Implantatsiyadan oldingi yo'qotish tuxumdonlardagi sariq tanalar soni bilan bachadondagi implantatsiya joylari soni o'rtasidagi farq orqali baholandi. Implantatsiyadan keyingi yo'qotish implantatsiya joylari va tirik homilalar soni orasidagi farq bilan aniqlangan. Har bir guruhda embriotoksik ta'sir homilalarning massasi va kranio-kaudal hajmi orqali o'lchandi. Homilalar ichida strukturaviy anomaliyalar aniqlanib, keyin ularning yarmi ichki organlar rivojlanishini o'rganish uchun Bowen eritmasiga joylashtirildi (J. G. Uilson, 1965). Homilalarning qolgan qismi esa A. P. Dyban va hammualliflar tomonidan takomillashtirilgan Douson usuli bo'yicha skeletning holatini o'rganish uchun 96% etanolda qayd etilgan (1970). Homilalar rivojlanishidagi og'ishlar uzoq muddatda paydo bo'lishi mumkinligi sababli, homilador kalamushlarning bir qismi tug'ruqdan keyingi davrda nasl rivojlanishini kuzatish bilan tabiiy tug'ilish uchun alohida hujayralarga joylashtirildi (avlod 1-oy davomida tekshirildi). Natijalar variatsion statistik usullar yordamida tahlil qilindi.

Tadqiqot natijalari. Sulfoparin preparatini vena ichiga yuborishdan keyin urg'ochi kalamushlarni har kuni kuzatish ularning umumiy holati va ozodaligida hech qanday sezilarli farqni aniqlamadi, shuningdek, homilador urg'ochi kalamushlarning nazorat guruhiga nisbatan tana vazni ortishida ishonchli farq qayd etilmadi. Olingan ma'lumotlar tegishli jadvallarda keltirilgan. Natijalarni tahlil qilish tajriba guruhlaridagi urg'ochi kalamushlarning unumdorligi nazorat guruhiga nisbatan taxminan teng ekanligini ko'rsatdi (1-jadval). O'rganilgan hayvonlar guruhida implantatsiyagacha va implantatsiyadan keyin homilaning omon qolishi yoki o'limida statistik jihatdan ahamiyatli farq topilmadi. Tajribali kalamushlarning homilalarini makroskopik o'rganish natijalari ularning tashqi ko'rinishi, tana vazni va kranio-kaudal o'lchamida nazorat guruhidagi kalamushlarning homilalariga nisbatan hech qanday farq yo'qligini ko'rsatdi.

Jadval 1

Sulfoparinning kalamushlarda homiladorlik va homila rivojlanishiga ta'siri

(M±т; п =20 P> 0>05)

Ko'rsatkichlar	Hayvonlar guruhining dozalari, mg / kg

	1 - guruh, nazorat	2 - guruh, Sulfoparin, 100,0 mg / kg	3 - guruh, Sulfoparin, 25,0 mg / kg
Tajriba urg'ochilar soni	20	20	20
Urg'ochilarning unumdorligi	9,05±0,54	9,5±0,76 P>0,05	9,5±0,23 P>0,05
1 urg'ochiga to'g'ri keladigan sariq tanachalar soni	9,5±0,54	9,1±0,43 P>0,05	9,0±0,54 P>0,05
Bir urg'ochiga to'g'ri keladigan o'lik va rezorbsiyalangan homilalar soni	0,5±0,1	0,33±0,14 P>0,05	0,6±0,14 P>0,05
Embrionlarning o'limi, %			
Implantatsiyadan oldingi	2,33±0,4	2,0±0,29 P>0,05	2,0±0,2 P>0,05
Implantatsiyadan keyingi	3,83±0,65	3,0±0,43 P>0,05	3,16±0,58 P>0,05
Embrionlarning umumiy omon qolish darajasi, %	93,7±0,54	93,8±0,58 P>0,05	93,5±0,54 P>0,05
Embrionlarning massasi, g	2,55±0,07	2,62±0,07 P>0,05	2,48±0,06 P>0,05
Embrion hajmi, mm	25,7±0,88	24,6±0,52 P>0,05	25,45±0,54 P>0,05

Tadqiqotda Sulfoparin preparati homiladorlik davrida kiritilganda tajribali kalamushlar guruhlaridagi homilalarning oyoq-qo'l naychali suyaklarining ossifikatsiyasi o'rganildi. Preparat homiladorlikning 8–19-kunlarida qo'llanildi va Uilson va Dauson usullari asosida suyak tizimi tahlil qilindi. Natijalar shuni ko'rsatdiki, nazorat va tajriba guruhlari o'rtasida naychali suyaklarning ossifikatsiyasi bo'yicha hech qanday farq kuzatilmadi. Shuningdek, metakarpal va metatarsal suyaklarning ossifikatsiya markazlari soni, qovurg'alar yoki boshqa skelet ko'rsatkichlari bo'yicha ham hech qanday sezilarli farq aniqlanmadi. Olingan ma'lumotlar 2 va 3-jadvallarda keltirilgan.

Jadval 2

Sulfoparin100,0 va 25,0 mg / kg dozalarda qabul qilingan kalamush embrionlarining makroskopik tadqiqotlari natijalari

Ko'rsatkichlar	Hayvonlar guruhi		
	Nazorat	Tajriba guruhlari	
		100,0 mg/kg	25,0 mg/kg
Tekshirilgan embrionlar soni	72	72	72
Qon ketish, %			

Teri osti	Yo'q	Yo'q	Yo'q
Yuz bosh suyagi	2	2	2
Ko'krak bo'shlig'iga	-	1	1
Qorin bo'shlig'iga	3	3	3
Miya rivojlanishidagi anomaliyalar, %			
Qon ketishi	Yo'q	Yo'q	Yo'q
Miya qorong'uliklari ventrikulalari kengayishi	Yo'q	Yo'q	Yo'q
Orqa miya qon ketishi	Yo'q	Yo'q	Yo'q

Shunday qilib, Sulfoparin 100,0 va 25,0 mg/kg dozalarda yuborilganda embriotoksik va teratogen xususiyatlarga ega emas.

Jadval 3

100,0 va 25,0 mg/kg dozalarda IV yuborilganda Sulfoparin bilan davolangan kalamush embrionlarining makroskopik tadqiqotlari natijalari

Ko'rsatkichlar	Hayvonlar guruhi		
	Nazorat	Tajriba guruhlari	
		100,0 mg/kg	25,0 mg/kg
Dauson uslubida tekshirilgan homilalar soni	50	50	50
Grudna suyak ossifikatsiya qilish markazlari soni	4,17±0,43	3,83±0,43 P>0,05	4,0±0,29 P>0,05
Metakarpal suyaklar			
O'ng tomonda	2,72±0,06	2,72±0,06 0	2,62±0,06 P>0,05
Chap tomonda	2,60±0,08	2,62±0,07 P>0,05	2,77±0,04 P>0,05
Qovurg'alar soni			
O'ng tomonda	13,0	13,0	13,0
Chap tomonda	13,0	13,0	13,0

Tadqiqot Sulfoparinning oq kalamushlarning reproduktiv funksiyasiga ta'sirini baholashga qaratilgan bo'lib, unda tana vazni 160–180 g bo'lgan 30 erkak va 60 urg'ochi kalamush ishtirok etdi. Sulfoparin erkaklarga tana vazniga nisbatan 100,0 mg/kg dozada 60 kun davomida, urg'ochilarga esa 15 kun davomida vena ichiga yuborildi. Shundan so'ng urg'ochi kalamushlar proestrus bosqichida ikkita estrus tsikli davomida nisbati 2:1 bo'lgan buzilmagan erkak kalamushlar bilan juftlashtirildi. Urug'lanish vaginal tamponlar yordamida tasdiqlandi. Homilador bo'lgan urg'ochilarning yarmi homiladorlikning 18-kunida o'ldirildi. Ushbu davrda tuxumdonlardagi sariq tanachalar soni, bachadondagi implantatsiya joylari, hamda tirik va o'lik homilalar soni baholandi. Implantatsiyadan oldingi embrion o'lim darajasi ushbu ko'rsatkichlar asosida hisoblab chiqildi. Hosildorlikni baholash uchun unumdorlik indeksi va o'lim ko'rsatkichi aniqlangan.

Jadval 4

Tug'ruqdan keyingi hayotning dastlabki davrida kalamush avlodlarining jismoniy rivojlanishini o'rganish

Ko'rsatkichlar	Hayvonlar guruhi		
	1-guruh-urug'langan erkaklar, Urug'lanmagan urg'ochilar	2-guruh-urug'lanmagan erkaklar, Urug'langan urg'ochilar	3-guruh-nazorat
Avlodlar soni	20	20	20
Quloq po'stining ajralishi, kunda	2	2	2
To'kin boshlanishi, kunda	5	5	5
Tishlar chiqishi, kunda	6	6	6
Ko'z ochilishi, kunda	12	12	12
Moyakning tushishi, kunda	24	24	24
Vagina ochilishi, kunda	29	29	29
21 kun davomida homilaning massasi, g			
21 kun	29,0 ±1,5 P>0,05	28,0±1,4 P>0,05	29,0 ±1,5

Urg'ochilarning qolgan qismi tabiiy tug'ruqqa qoldirildi. Tug'ruqdan keyingi ilk davrda naslning jismoniy rivojlanishi kuzatildi. Natijalar shuni ko'rsatdiki, Sulfoparin qo'llanilishi homiladorlik davomiyligiga ta'sir qilmagan. Preparat olgan va nazorat guruhidagi kalamushlarning tug'ruq muddati bir xil bo'lib, 20–21 kunni tashkil etdi. Sulfoparin bilan davolangan homilador kalamushlarning holati va xatti-harakati nazorat guruhidan farq qilmadi. Bundan tashqari, ularning tana vazni boshlang'ichga nisbatan o'rtacha 46,6% ga oshdi, bu nazorat guruhida kuzatilgan vazn o'sishiga muvofiq edi. Umuman olganda, Sulfoparinni 100,0 mg/kg dozada qo'llash oq kalamushlarning reproduktiv funksiyasiga salbiy ta'sir ko'rsatmadi. Tug'ruqdan keyingi ilk davrda naslning jismoniy rivojlanishiga oid ma'lumotlar 4-jadvalda keltirilgan.

Yuqoridagi ma'lumotlardan ko'rinib turibdiki, o'rganilgan dozalarda Sulfoparin preparati oq kalamushlarning reproduktiv funktsiyasida o'zgarishlarga olib kelmadi.

Xulosalar. Oq kalamushlardagi eksperimental modelda Sulfoparin salbiy embriotoksik va teratogen ta'sirga ega emasligi aniqlandi.

Oq kalamushlardagi eksperimental modelda Sulfoparin eksperimental hayvonlarning reproduktiv funktsiyasiga ta'sir qilmasligi aniqlandi.

Foydalanilgan adabiyotlar:

1. Гуськова Т.А. Токсикология лекарственных веществ. Москва, 2008. - С. 27-30.
2. Дыбан А.П. и др. Методические указания по изучению эмбриотоксического действия фармакологических веществ и влияние их на репродуктивную функцию.- М. - 1986.- с 62.
3. Иноятова Ф.Х., Кутликова Г.М., Милушева Р.Ю. и др. Некоторые механизмы гипохолестеринемического действия сульфапорина //Вестник ТМА.- 2011.- №3.- С.19-22.

4. Иноятова Ф.Х., Рашидова С.Ш., Кутликова Г.М. Коррекции сульфапорином эндотелиальной дисфункции у кроликов с гиперхолестеринемией //Intern. J. Of applied and fundamental research.- 2013.- №1.- С.36-40.
5. Кутликова Г.М. Влияние сульфапорина на показатели системы оксида азота при экспериментальном гиперхолестеринемии //Врач аспирант.- 2012.- №4(53).- С.39-43.
6. Методические указания по изучению эмбриотоксического и тератогенного действия химических веществ. Ленинград. ГНТИАФ.- 1990.-с.10.
7. Рашидова С.Ш., Милушева Р.Ю. Хитин и хитозан. Bombyx mori. Синтез, свойства и применение. - Ташкент.- 2009.- С. 193-242.
8. Руководство по экспериментальному (доклиническому) изучению новых фармакологических веществ, методы фармакологического доклинического исследования (под редакцией Р.У. Хабриева).- Москва.- 2005. С. 699-709.
9. Kutlikova G.M.,Satibaldiyeva Z.Sh., Aripova N.K., Evaluation of the skin-resorptive effect of the drug "Sulfoparine". International journal of medical sciences. Vol. 4 No. 12 (2024). 50-53.
10. G.M.Kutlikova. Correction of endothelial dysfunction with sulfaporin in hypercholesterolemic rabbits. International Journal of Scientific Pediatrics. Volume 3 | Issue 8 | August 2024. 704-709.

UO'K: 616-08-035

RAQAMLI QURILMALAR VA INTERNETDAN FOYDALANISHNING MAKTAB YOSHIDAGI BOLALARGA TA'SIRINI GIGIYENIK BAHOLASH

A.J. Kurbanbayeva, I.A. Usmanov, A.R. Nosirova
Sanitariya, gigiyena va kasb kasalliklari ilmiy-tadqiqot instituti

Annotatsiya. Maqolada maktab yoshidagi bolalarga gadjetlar va ijtimoiy tarmoqlardan uzoq vaqt davomida, uzluksiz, intensiv va ko'p foydalanishning ta'sirini baholash natijalari keltirilgan. Aniqlanishicha, bolalar orasida eng ommabop gadjet mobil telefon bo'lib, tekshirilgan bolalarning 87 foizi smartfondan foydalanadi. Ko'pchilik bolalar gadjetlardan ta'lim maqsadlarida foydalansa-da, ular ko'proq video tomosha qilish, o'yinlar o'ynash, ijtimoiy tarmoqlarda muloqot qilish va xabarlar yuborish uchun ishlatishadi. E'tiborli jihati shundaki, bolalarning 68 foizi har kuni gadjet va internetdan foydalanadi. Shu bilan birga, bolalarning 47 foizi yiliga 1-2 marta turli kasalliklarga chalinadi. Gadjetlardan foydalanish bilan bog'liq shikoyatlar asosan bosh og'rig'i, boshda og'irlik hissi, bosh aylanishi va ko'rish bilan bog'liq muammolarga taalluqli. Gadjetlardan faol foydalanish oqibatida, bolalarda charchoq hissi va uyquga ketishida qiyinchiliklarga duch kelishadi. Shuningdek, uzoq vaqt gadjet va internetdan foydalanadigan bolalarda kayfiyatning o'zgarishi, asabiylashish, tovushlarni idrok etish bilan bog'liq muammolar, hayajonlanish, g'azab, tajovuzkorlik va charchoq paydo bo'lishi mumkin. Biroq ular qiziqish, g'ayrat, optimizm, kuch va yaxshi kayfiyatni ham his qilishadi. Qiyosiy tahlil natijasi shuni ko'rsatdiki, bolalarning shikoyatlari gadjetlar va internetdan foydalanish vaqtiga qarab farq qiladi.

Tayanch so'zlar: *bolalar, maktab o'quvchilar, raqamli qurilmalar, gadjetlar, internet, ijtimoiy tarmoqlar.*

HYGIENIC ASSESSMENT OF THE IMPACT OF DIGITAL DEVICES AND INTERNET USE ON SCHOOL-AGE CHILDREN

A.J. Kurbanbayeva, I.A. Usmanov, A.R. Nosirova
Research Institute of Sanitation, Hygiene and Occupational Diseases

Annotation. Annotation. The article presents the results of an assessment of the impact of long-term, prolonged, and intensive use of gadgets and social networks on school-age children. It was found that among children, the most popular gadget is a mobile phone, and 87% of the surveyed children use a smartphone. Most of the children use gadgets for educational purposes. However, children are more likely to use gadgets for watching videos, playing games, communicating on social networks, and sending messages. It is noteworthy that the daily use of gadgets and the Internet by children is 68%. At the same time, 47% of children are sick with various diseases 1-2 times a year. Complaints related to the use of gadgets mainly concern headaches, heaviness in the head, dizziness, and vision problems. After active use of gadgets, children feel tired and have difficulty sleeping. Also, children who use gadgets and the Internet for long periods of time may experience mood changes, irritability, trouble hearing sounds, as well as agitation, anger, aggression, and fatigue. But they also feel interested, excited, optimistic, energized, and in a good mood. A comparative study showed that children's complaints differ depending on the time spent using gadgets and the Internet.

Key words: *children, schoolchildren, digital devices, gadgets, Internet, social networks.*

ГИГИЕНИЧЕСКАЯ ОЦЕНКА ВЛИЯНИЯ ИСПОЛЬЗОВАНИЯ ЦИФРОВЫХ УСТРОЙСТВ И ИНТЕРНЕТА НА ДЕТЕЙ ШКОЛЬНОГО ВОЗРАСТА

Курбанбаева А.Ж., Усманов И.А., Носирова А.Р.
Научно-исследовательский институт санитарии, гигиены и профессиональных заболеваний

Аннотация. В статье представлены результаты оценки влияния длительного, продолжительного и интенсивного использования гаджетов и социальных сетей на детей школьного возраста. Установлено, что что среди детей самым популярным гаджетом является мобильный телефон и 87% обследованных детей пользуются смартфоном. Большинство детей используют гаджеты для образовательных целей. Однако дети чаще используют гаджеты для просмотра видео, игр, общения в социальных сетях и отправки сообщений. Примечательно, что ежедневное использование детьми гаджетов и Интернета составляет 68%. При этом 47% детей болеют различными заболеваниями 1-2 раза в год. Жалобы, связанные с использованием гаджетов, в основном касаются головных болей, тяжести в голове, головокружения и проблем со зрением. После активного использования гаджетов дети чувствуют усталость и испытывают затруднения со сном. Также у детей, которые долго пользуются гаджетами и Интернетом, могут возникнуть изменения настроения, раздражительность, проблемы с восприятием звуков, а также возбуждение, злость, агрессивность и усталость. Но они также ощущают интерес, азарт, оптимизм, прилив сил и хорошее настроение. Сравнительное исследование показало, что жалобы детей различаются в зависимости от времени использования гаджетов и Интернета.

Ключевые слова: *дети, школьники, цифровые устройства, гаджеты, Интернет, социальные сети.*

Kirish. Smartfon, planshet, noutbuk va boshqa gadjetlar kabi raqamli qurilmalar, shuningdek internet inson hayotining muhim qismiga aylanib bormoqda. Gadjetlar - bu o'ziga xos raqamli texnologiyalar bo'lib, ular nafaqat muloqot uchun ishlatiladi, balki zamonaviy madaniyatda ham tendensiyaga aylanib bormoqda [13]. XXI asr bolalari zamonaviy raqamli qurilmalarning ashaddiy foydalanuvchilari hisoblanadi. So'nggi o'n yil ichida bolalar va o'smirlar raqamli medianing yangi shakllariga sho'ng'ib ketishdi, shuningdek, raqamli ommaviy axborot vositalaridan, shu jumladan interaktiv va ijtimoiy tarmoqlardan foydalanish o'sdi [10, 12]. Tarmoqli o'zaro ta'sir maydoni zamonaviy o'smirning ijtimoiylashuvining muhim omili bo'lib, keng doiradagi ehtiyojlarni qondirish imkonini beruvchi polifunksional xususiyatga ega [7]. Bolalarning 99% ga yaqini televizor va elektron qurilmalarda ko'rsatuvlarni tomosha qiladi [9].

Bolalarning zamonaviy ta'limi axborot-kommunikatsiya texnologiyalari va elektron ta'lim vositalarining zamonaviy imkoniyatlaridan faol foydalanadigan eng tez o'zgaruvchan tizimlardan biridir [2]. O'rta maktab o'quvchilarining aksariyati reader, ya'ni elektron kitoblarni afzal ko'rishadi [5].

Gadjetdan foydalanish zamonaviy avlod uchun tendensiyaga aylandi. Tadqiqotchilar gadjetlarning harakat va kognitiv ko'nikmalarni yaxshi rivojlanishiga ijobiy ta'sirini aniqladilar. Texnologiyalar tana tuzilishining buzilishi, xavfli jinsiy xatti-harakatlar, semirish xavfi va fanlarni o'zlashtirishda qiyinchilik kabi salbiy ta'sirlarga ega [14]. Raqamli qurilmalardan uzluksiz foydalanish bolalarning miyasiga, shuningdek, ularning ijtimoiy, hissiy, kognitiv va jismoniy rivojlanishiga ta'sir qiladi [10].

Axborot-kommunikatsiya texnologiyalari ko'ruv, eshitish analizatorlari, asab tizimiga yuklamani oshiradi va bolalarning haddan tashqari charchashi rivojlanishiga yordam beradi [2, 3]. Internet tarmog'ida bolalar va o'smirlarning ruhiy salomatligi va aqliy rivojlanishiga zarar yetkazishi mumkin bo'lgan ma'lumotlar mavjud [4]. Xorijiy tadqiqotchilar tomonidan gadjetlarda o'yin o'ynash davomiyligi va o'quvchilarning psixoemotsional holati o'rtasidagi bog'liqlik aniqlangan [15]. Chunonchi, bolalarda gadjetlardan ortiqcha foydalanishda uyqu davomiyligi va sifatining buzilishi, semizlik va depressiyaning yuqori darajasi kuzatilishi mumkin; doimiy ravishda ko'rishning zo'riqishi ko'rish o'tkirligining pasayishi va uzoqni ko'ra olmaslikning rivojlanishiga olib kelishi mumkin; sun'iy yoritilganlik darajasi yetarli bo'lmagan joylarda elektron qurilmalardan foydalanish maktab o'quvchilarida bosh og'rig'i, ko'zning charchashi, ko'z sohasidagi og'riqlar, tasvirning noaniqligi, ya'ni ko'rish o'tkirligining pasayishiga va yaqindan ko'rishning rivojlanishiga olib kelishi

mumkin. Surunkali stress vegetativ asab tizimining kognitiv zo'riqishlarga reaksiyasini yomonlashtiradi [1].

Bunday ommaviy axborot vositalarining xavflari sog'lom uyqu, diqqatni buzilishiga va ta'limga salbiy ta'sir qiladi; semizlik va depressiya bilan ko'proq kasallanish; noaniq, nomaqbul yoki xavfli kontent va aloqalarning ta'siri; shaxsiy hayot daxlsizligi va maxfiylikning buzilishi [12]. Ko'pincha uyali telefondan foydalanadigan bolalarda axborotni eslab qolish va uyqu jarayonlari buziladi. Ular yanada serzarda va injiq bo'lib qoladilar. Bunday bolalarda jinsiy rivojlanishning kechikishi kuzatiladi, ular tez-tez shamollash, kasalliklariga chalinishga moyil bo'ladilar [6]. Umumiy ta'lim tizimini isloh qilishning 20 yillik faoliyati davomida umumiy va birlamchi kasallanish ko'rsatkichlari bo'yicha bolalar va o'smirlar salomatligining yomonlashish tendensiyasi aniqlandi: o'sish sur'ati mos ravishda bolalarda 72,0% va 70,4%, o'smirlarda 97,6% va 112,3% ni tashkil etdi. Zamonaviy maktab o'quvchilarining kun tartibi umuman noratsional bo'lib qolmoqda, tungi uyqu, ochiq havoda bo'lishning yetarli emasligi va passiv dam olish turlarining ustunligi aniqlangan [8]. Bolalar tomonidan bunday texnologik qurilmalardan foydalanishning mazmuni, davomiyligi, chastotasi va holati nuqtai nazaridan noto'g'ri foydalanish sog'liq uchun ko'plab xavflarni keltirib chiqaradi, jumladan rivojlanish muammolari, tayanch-harakat tizimi bilan bog'liq muammolar, jismoniy faollikning yo'qligi, semirish va uyqu sifatining buzilishi [11].

Tadqiq ishining maqsadi maktab yoshidagi bolalarga uzoq muddatli, davomli va intensiv ravishda gadjet va ijtimoiy tarmoqlardan foydalanishning ta'sirini baholashdan iborat.

Material va metodlar. Qo'yilgan maqsadga erishish uchun har bir yosh-jins guruhidan o'rtacha 50 nafardan 11 yoshdan 17 yoshgacha bo'lgan o'quvchilar o'rtasida so'rovnoma o'tkazildi. So'rovnomada ishtirok etganlar soni jami 900 nafar o'quvchini tashkil etdi. Ularning 596 nafari 11-15 yosh (5-8-sinflar), 304 nafari 16-17 yosh (9-11-sinflar), jumladan 402 nafari o'g'il bola (48,4%) va 429 nafari qiz bola (51,6%). Tadqiqotlar 2021-2022-yillarda Toshkent shahridagi tasodifiy tanlangan beshta umumta'lim maktabida anketa so'rovlari va qog'oz shaklidagi skrining-test usullari orqali o'tkazildi. Raqamli qurilmalar va internetdan foydalanishiga ko'ra, barcha tekshirilgan bolalar 2 guruhga ajratildi: asosiy guruh - raqamli qurilmalar (RQ) va ijtimoiy tarmoqlardan ko'p va uzoq vaqt foydalanadigan o'quvchilar (491 nafar respondent); nazorat guruhi - RQ va ijtimoiy tarmoqlardan kam yoki umuman foydalanmaydigan o'quvchilar (409 nafar respondent). So'rovnoma o'tkazishda odob axloq qoidalari va me'yorlariga rioya qilindi. Anketa so'rovi natijalari Microsoft Excel 2016 va Statistica 6.0 dasturlaridan foydalangan holda variatsion-statistik usulda qayta ishlandi. Taqqoslanayotgan ko'rsatkichlarning ishonchliligi t-Styudent koeffitsiyentini hisoblash orqali baholandi.

Tadqiqot natijalari. Tadqiqot natijalariga ko'ra, eng ko'p ishlatiladigan gadjet - bu mobil telefon ekanligi aniqlandi. Asosiy guruhdagi bolalarning 91,2±1,16 foizi smartfonga ega bo'lsa, nazorat guruhida bu ko'rsatkich 82,4±2,18% ni tashkil etdi (r<0,001). Kompyuterga egalik qilish ko'rsatkichlari mos ravishda 40,5±2,01% va 33,0±2,70% (r<0,05), noutbuk uchun 40,9±2,01% va 30,6±2,64% (r<0,01) ni tashkil etdi. Shuningdek, planshet, bukrider, aqlli soat, o'yin pristavkasi kabi boshqa raqamli/elektron qurilmalar ham qo'llaniladi. Ushbu gadjetlar turli maqsadlarda ishlatiladi, asosan, 75% ikkala guruh bolalar (asosiy va nazorat) ta'lim olish va o'quv ma'lumotlarini izlash uchun elektron qurilmalardan foydalanadi. Bundan tashqari, asosiy va nazorat guruhlaridagi 5-11 sinf o'quvchilari gadjetlardan quyidagi maqsadlarda foydalanadilar: 53,2±2,04% va 32,0±2,68% hollarda - video, film va media fayllarni ko'rish uchun (r<0,001); 52,1±2,05% va 33,7±2,71% hollarda - suhbatlashish va xabar almashish uchun (r<0,001); 42,8±2,03% va 29,6±2,62% hollarda - o'yin o'ynash va dam olish uchun (r<0,001); 30,5±1,89% va 15,4±2,07% - ijtimoiy tarmoqlarda

muloqot qilish uchun (r<0,001). So'rovnoma natijasi shuni ko'rsatdiki, asosiy guruhdagi bolalarning 85,9±2,47% va nazorat guruhidagi bolalarning 50,6±3,45% har kuni gadjet va internetdan foydalanadilar (r<0,001). Gadjetlardan foydalanish va bir sutkada internet ijtimoiy tarmoqlariga kirish chastotasi 1-jadvalda keltirilgan.

1 Jadval

Bolalarning bir kecha-kunduzda gadjetlar va ijtimoiy tarmoqlardan foydalanish chastotasi bo'yicha miqdoriy taqsimlanishi

Bir sutkada gadjet va ijtimoiy tarmoqlardan foydalanish chastotasi	gadjetlar					ijtimoiy tarmoqlar				
	asosiy guruh		nazorat guruhi		p	asosiy guruh		nazorat guruhi		p
	%	m	%	m		%	m	%	m	
1 soatgacha	6,9	1,14	56,0	2,45	0,001	13,4	1,54	56,7	2,45	0,001
1 soatdan 2 soatgacha	16,3	1,67	21,8	2,04	0,05	27,5	2,02	26,4	2,18	-
2 soatdan 3 soatgacha	21,8	1,86	5,4	1,12	0,001	20,2	1,81	4,2	0,99	0,001
3 soatdan 4 soatgacha	18,3	1,75	4,4	1,01	0,001	14,3	1,58	1,0	0,49	0,001
4 soat va undan ortiq	15,5	1,63	1,5	0,60	0,001	17,5	1,71	4,1	0,98	0,001
bilmayman, javob berishga qiynalaman	4,9	0,97	9,0	1,42	0,05	6,1	1,08	7,6	1,31	-

Raqamli qurilmalar va internetdan foydalanishning bolalar salomatligiga ta'sirini aniqlash maqsadida so'rovnoma tadqiqoti o'tkazildi. Skrining-test usuli yordamida bolalarning so'nggi 12 oydagi salomatlik holati bo'yicha ma'lumotlar olindi. Skrining-test natijalari tahlili shuni ko'rsatdiki, bolalarning 47% yiliga 1-2 marta, 23% 3-4 va undan ortiq marta turli xil kasalliklar bilan og'riydi, 30% bolalar esa so'nggi bir yil ichida o'z salomatlik holati haqida ma'lumotga ega emas.

Shuningdek, so'rovnoma doirasida o'quvchilarga so'nggi bir yil davomida shifokorga tashrif buyurganlari haqida savol berildi. Asosiy guruhdagi bolalarning 33,0±2,12% va nazorat guruhidagi bolalarning 47,7±2,47% shifokorga murojaat qilmaganligi aniqlandi (p<0,001). Asosiy guruhdagi 45,4±2,25% va nazorat guruhidagi 36,7±2,38% bolalar yiliga 1-2 marta shifokorga murojaat qilgan (p<0,01). Asosiy guruhdagi 15,7±1,64% va nazorat guruhidagi 9,0±1,42% bolalar shifokorga yiliga 3-4 marta va undan ortiq murojaat qilgan (p<0,01), 6,25±1,15% bolalar esa ushbu savolga javob berishdan bosh tortgan.

So'rovnoma doirasida oxirgi tibbiy ko'rik haqida ham savol berildi. Natijalar shuni ko'rsatdiki, asosiy guruhdagi 51,9±2,25% va nazorat guruhidagi 52,1±2,47% bolalar joriy yilda ko'rikdan o'tgan. O'tgan yili asosiy guruhning 32,8±2,12% va nazorat guruhining 31,5±2,30% shifokorga murojaat qilgan. Asosiy guruhning 4,9±0,97% va nazorat guruhining 4,6±1,04% oxirgi 3 va undan ortiq yil davomida tekshiruvdan o'tmagan. Shuningdek, asosiy guruhdagi 10,4±1,38% va nazorat guruhidagi 11,7±1,59% bolalar ushbu savolga javob berishga qiynalgan.

Raqamli qurilmalar va internetning bolalar organizmiga ta'sirini gigiyenik baholash uchun respondentlarga gadjetlardan foydalanishda yuzaga keladigan shikoyatlarni tavsiflash taklif etildi. So'rovnoma natijalariga ko'ra, asosiy guruhda 20,8±1,83% tekshirilgan bolalarda bosh og'rig'i, boshda og'irlik va bosh aylanishi kuzatilgan bo'lsa, nazorat guruhida bu shikoyatlar 1,7 martaga kamroq qayd etilgan (p<0,01); tasvirning xiralashuvi, ko'zda miltillash va qum hissi, ko'z sohasida qizarish hamda og'riq asosiy va nazorat guruhlarida mos ravishda - 25±1,95 va 19,8±1,97%; bo'yin, bel, qo'l va oyoqlarda og'riq hamda uvushish - 26,1±1,98 va 17,3±1,87% (p<0,01); quloqlarda shovqin, og'riq va bitish, quloq sohasida qizish - 3,0±0,77 va 2,0±0,69%; yurak urishining tezlashuvi va haddan tashqari terlash (p<0,05). Shu bilan birga, asosiy guruhning 57,4±2,23% va

nazorat guruhining 61,9±2,40% bolalarida raqamli qurilmalar va internetdan foydalanishda hech qanday shikoyat bo'lmagan. Raqamli qurilmalar va internetdan tez-tez hamda nazoratsiz foydalanish ularga qaramlikka olib keladi, shuningdek, ichki erkinlik va o'z ahamiyatining soxta hissi, jamoatchilik tomonidan ma'qullanish va boshqa aldamchi his-tuyg'ularni uyg'otadi. Gadjetlar va ijtimoiy tarmoqlardan faol foydalangandan so'ng, bolalar charchoqni his qiladilar va yomon uxlashdan shikoyat qiladilar (2-jadval).

2 Jadval

Gadjetlar va ijtimoiy tarmoqlardan bir kecha-kunduzda uzoq vaqt foydalanish natijasida yuzaga kelgan shikoyatlar bo'yicha bolalarning miqdoriy taqsimoti, % holatlarda

Shikoyatlar	asosiy guruh		nazorat guruhi		p
	%	m	%	m	
yomon kayfiyat, asabiylashish, baland tovushlarga toqat qilmaslik	9,0	1,29	5,2	1,10	0,05
hayajon, g'azab, tajovuzkorlik	4,9	0,97	2,2	0,73	0,05
apatiya, pessimizm, haddan tashqari tuyg'u	2,2	0,66	0,2	0,22	0,01
uyquchanlik, uyqusizlik, uxlab qolish qiyinligi, sayoz uyqu, notinch uyqu, ertalab uyg'onish qiyinligi, beparvolik	16,5	1,68	10,0	1,48	0,01
tiqilish, tashvish, qo'rquv, haddan tashqari tashnalik hissi	3,8	0,86	2,7	0,80	-
o'qishni istamaslik	5,9	1,06	2,4	0,76	0,01
do'stlar, ota-onalar bilan muloqot qilishni istamaslik	3,3	0,81	2,0	0,69	-
qiziqish, hayajon	9,2	1,30	7,6	1,31	-
yaxshi kayfiyat, optimizm	40,3	2,21	24,0	2,11	0,001
kuch-quvvat, quvvat portlashi	16,3	1,67	10,8	1,53	0,05
chuqur tinch uyqu	16,1	1,66	10,5	1,52	0,05
hech qanday his-tuyg'ular paydo bo'lmaydi	31,8	2,10	39,6	2,42	0,05
Bilmayman, javob berish qiyin	2,4	0,69	6,4	1,21	0,01

Tadqiqot materiallari shuni ko'rsatdiki, gadjetlar va ijtimoiy tarmoqlardan doimiy foydalanishda salbiy his-tuyg'ular paydo bo'ladi. Yuqoridagi shikoyatlar gadjetlar va internetdan uzoq vaqt foydalanish oqibatida paydo bo'ladi. 1- va 2-guruh bolalarining shikoyatlari paydo bo'lish vaqtini qiyosiy baholash natijalari shuni ko'rsatdiki, mos ravishda: 21,6±1,86 ga qarshi 27,5±2,21% - 1 soatgacha (r<0,05), 10,2±1,37 ga qarshi 9,8±1,47% - 1 soatdan 3 soatgacha, 14,7±1,60 ga qarshi 7,5±1,30% - 3 soat va undan ko'p (r<0,001), 53,5±2,25 ga qarshi 55,2±2,46% - javob berishni bilishmagan yoki qiynalishgan.

Xulosalar.

1. Bolalar raqamli qurilmalar, ko'proq mobil telefonlar va gadjetlardan o'quv maqsadlari va ma'lumotlarni izlash, shuningdek, video va filmlarni tomosha qilish, muloqot qilish va video o'yinlar uchun keng foydalanadilar.

2. Gadjet va internetdan ko'proq foydalanadigan bolalar kasallanish ehtimoli yuqori va shifokorga kamroq murojaat qilishadi.

3. Raqamli qurilmalardan foydalanadigan bolalarning katta qismi yiliga bir necha marta turli kasalliklarga chalinadi.

4. Gadjetlar va internetdan har kuni foydalanadigan bolalarda bosh og'rig'i, ko'rish bilan bog'liq muammolar, bo'yin va qo'llardagi og'riqlar, yurak urishining tezlashishi va boshqalar haqida shikoyatlar mavjud.

5 Tadqiqot natijalari raqamli qurilmalardan mo'tadil foydalanish, ulardan foydalanishda gigiyenik qoidalarga rioya qilish, muntazam tibbiy ko'rikdan o'tkazish zarurligi haqida xabardorlikni oshirishga qaratilgan jamoatchilik dasturlarini ishlab chiqish zarurligini ko'rsatadi.

Foydalanilgan adabiyotlar:

1. Догадкина С.Б., Кмить Г.В., and Рублева Л.В. Влияние информационно-коммуникационных технологий обучения на функциональное состояние организма школьников (Аналитический обзор) // Новые исследования, no. 3 (63), 2020, pp. 132-150.
2. Кучма В.Р., Сухарева Л.М., Степанова М.И., Храмцов П.И., Александрова И.Э., Соколова С.Б. Научные основы и технологии обеспечения гигиенической безопасности детей в «цифровой школе». Гигиена и санитария. 2019; 98(12): 1385-1391. DOI: http://dx.doi.org/10.18821/0016-9900-2019-98-12-1385-1391.
3. Мухаметзянов И.Ш. Современные мобильные устройства доступа в интернет в образовании, гигиенические аспекты // Наука о человеке: гуманитарные исследования, no. 3 (33), 2018, pp. 113-122.
4. Пазухина С. В., Чумаков П. В. Дети в Интернете: исследование отношения родителей к вредной информации // Научно-методический электронный журнал «Концепт». – 2017. – № 9. – 75-84.), No. 195, OECD Publishing, Paris, 45 p. https://doi.org/10.1787/8296464e-en.
5. Петренко А.О. Гигиеническая оценка удобочитаемости текстов, предъявляемых на экранах ридеров // Автореф. дисс. ...канд. мед. наук. – Москва, 2016. - 24 с.
6. Семенова Н.В., Денисов А.П., Денисова О.А., Кун О.А., Кузюкова А.В. Влияние электромагнитного излучения от сотовых телефонов на здоровье детей и подростков (Обзор литературы) // Международный журнал прикладных и фундаментальных исследований. – 2016. – № 6-4. – С. 701-705.
7. Собкин В.С., Федотова А.В. Сеть как пространство социализации современного подростка // Консультативная психология и психотерапия. 2019. Т. 27. № 3. С. 119—137. doi: 10.17759/cpp.2019270308.
8. Суворова А.В. Гигиеническое обоснование организации обучения учащихся при использовании новых образовательных технологий // Автореф. дисс. ...док. мед. наук. – Санкт-Петербург, 2020. - 19 с.
9. Цао Юй Детское телевидение в китае: особенности программирования и контент-стратегий в цифровую эпоху // Автореф. дисс. ...канд. филол. наук. – Москва, 2021. - 19 с.
10. Gottschalk, F. "Impacts of technology use on children: Exploring literature on the brain, cognition and well-being", OECD Education Working Papers, (2019).
11. Mustafaoglu Rustem, Zirek Emrah, Yasacı Zeynal, Ozdincler Arzu. The Negative Effects of Digital Technology Usage on Children's Development and Health. Addicta: The Turkish Journal on Addictions. Advance online publication. http://dx.doi.org/10.15805/addicta.2018.5.2.0051 (2018). 5(2) 13–21.
12. Reid Chassiakos YL, Radesky J, Christakis D, Moreno MA, Cross C; Council on communications and media. Children and Adolescents and Digital Media. Pediatrics. 2016;138(5):e20162593. doi:10.1542/peds.2016-2593.
13. Srinahyanti, Wau Yasaratodo, Manurung Imelda, Arjani Nur. Influence of Gadget: A Positive and Negative Impact of Smartphone Usage for Early Child. 2019. – 6 p. doi:10.4108/eai.3-11-2018.2285692.

14. Tejashree R.D. The impact of using gadgets on children's psychology // Int J Appl Res 2019;5(8):157-160.
15. Wahyuni AS, Siahaan FB, Arfa M, Alona I, Nerdy N. The Relationship between the Duration of Playing Gadget and Mental Emotional State of Elementary School Students. Open Access Maced J Med Sci. 2019;7(1):148-151. Published 2019 Jan 13. doi:10.3889/oamjms.2019.037.

UDC: 616-08-035

MEASUREMENT OF THE EFFECT OF THE ENAMEL MICRO-POLISHING FOR TOOTH WHITENING IN KOREAN PATIENTS

[1]Kim Seung-Chan, [2]Kim InGeol, [1]Iriskulova E.U., [3]Salimov O.R., [3]Akbarov A.N., [3]Khabilov N.L.
[1]EMU University, [2]HanYang Dental Clinic, Seoul, South Korea, [3]Tashkent State Dental Institute.

Abstract. Depending on the degree of tooth discoloration, the effectiveness of tooth whitening, and the degree of whitening desired by the patient, whitening techniques are classified into tooth whitening technique using tooth whitening agents, tooth whitening micro-polishing using dental polishing with dental abrasives, and permanent whitening methods (all-ceramic crown, laminate) combined with micro-polishing or tooth whitening. Tooth polishing is a process of reducing the irregular spaces scratched by abrading the surface until it becomes shiny. It is applied to tooth polishing and esthetic tooth restoration in dentistry. The polishing agent does not create deep scratches and grooves on the surface of the tooth or prosthesis. Instead, fine, shallow scratches and grooves are formed, reflecting light and making it shine. In order to achieve the tooth whitening phenomenon that appears on the smooth and shiny tooth surface "micro-polishing technique" with abrasive polishing is used.

Objective. The aim of this research was to define the clinical efficacy of the dental whitening with usage of Zir White paste.

Materials and Methods. This study performed micro-polishing technique for whitening on maxillary 6 anterior teeth of Korean patients using a commercially available syringe-type dental abrasive (Zir White, dbchem Co, Korea) and measured and compared the tooth whitening effect using a commercial shade guide (Vita Toothguide 3D-Master & Vitapan Classical) values in a colorimeter (Dental Color Comparator, BS1E2028, Treedental, China). **Results.** Enamel micro-polishing for tooth whitening in Korean patients' vital teeth using dental surface planing with a dental abrasive "Zir White" increased the tooth whitening effect.

Key Words: *Enamel Polishing, Tooth Whitening, Micro-polishing, Korean, Measurement.*

KOREYALIK BEMORLARDA TISH OQARTIRISH AMALIYOTIDAGI EMAL MIKROPOLIROVKASINI SAMARADORLIGINI ANIQLASH

[1]Kim Seung-Chan, [2]Kim InGeol, [1]Iriskulova E.U., [3]Salimov O.R., [3]Akbarov A.N., [3]Khabilov N.L.
[1]EMU Universiteti, [2]HanYang stomatologik klinikasi, Seul, Janubiy Koreya, [3]Toshkent Davlat Stomatologiya Instituti.

Annotatsiya. Tish rangining o'zgarish darajasiga, tish oqartirish samaradorligiga va bemor tomonidan istalgan oqartirish darajasiga qarab, oqartirish usullari quyidagicha tasniflanadi: tish oqartirish vositalari yordamida tish oqartirish texnikasi, tish abrazivlari yordamida stomatologik jilolash orqali mikro-jilolash, va mikro-jilolash yoki tish oqartirish bilan kombinatsiyalangan doimiy oqartirish usullari (to'liq keramika qoplamalar, laminatlar). Tish jilolash - bu yuzani jilolash orqali tirnalgan notekis joylarni kamaytirish jarayonidir, natijada yuzasi yaltiroq bo'ladi. Ushbu jarayon stomatologiyada tish jilolash va estetik tish tiklashda qo'llaniladi. Jilolash vositasi tish yoki protez yuzasida chuqur tirnalish va yoriqlar hosil qilmaydi. Aksincha, mayda va sayoz tirnalishlar hamda yoriqlar hosil bo'lib, yorug'likni aks ettiradi va tish yuzasi yaltiroq bo'ladi. Yaltiroq va silliq tish yuzasida paydo bo'ladigan tish oqartirish hodisasiga erishish uchun abraziv jilolashdan foydalaniladigan tish yuzasini 'mikro-jilolash texnikasi' qo'llaniladi.

Tadqiqot maqsadi. Ushbu tadqiqot Zir White pastasidan foydalanilgan holda tish oqartirishning klinik samaradorligini baholashga qaratilgan.

Materiallar va uslublar. Ushbu tadqiqotda Koreyalik be'morlarning yuqori jag' 6 ta frontal tishini oqartirish maqsadida mikro-silliqlash texnikasi qo'llanildi. Buning uchun mahalliy bozorda mavjud bo'lgan shprits shaklidagi dental abraziv (Zir White, dbchem Co, Korea) ishlatildi. Tishlar oqarish samaradorligi esa tish rangini o'lchovchi maxsus qo'llanma (Vita Toothguide 3D-Master & Vitapan Classical) va kolorimetr (Dental Color Comparator, BS1E2028, Treedental, China) yordamida o'lchandi va solishtirildi.

Natijalar. Koreyalik be'morlarda yuqori jag' 6 ta vital frontal tishlarda tishlar yuzasini silliqlash uchun dental abraziv (Zir White) yordamida mikro-silliqlash usulini qo'llash tish oqartirish samaradorligini oshirdi.

Kalit so'zlar: *Emal silliqlashi, Tish oqartirish, Mikro-silliqlash, Koreya, O'lchash.*

ОПРЕДЕЛЕНИЕ ЭФФЕКТИВНОСТИ ПРОВЕДЕНИЯ МИКРОПОЛИРОВКИ ЭМАЛИ ПРИ ОТБЕЛИВАНИИ ЗУБОВ У КОРЕЙСКИХ ПАЦИЕНТОВ

[1]Kim Seung-Chan, [2]Kim InGeol1, [1]Ирискулова Э.У., [3]Салимов О.Р., [3]Акбаров А.Н., [3]Хабилов Н.Л.

Университет EMU, [2]Стоматологическая клиника HanYang, Сеул, Южная Корея, [3]Ташкентский государственный стоматологический институт.

Абстракт. В зависимости от степени изменения цвета зубов, эффективности отбеливания зубов и степени отбеливания, желаемой пациентом, методы отбеливания подразделяются на методы с использованием отбеливающих средств, микрополировку зубов с использованием зубных абразивов и методы постоянного отбеливания (цельнокерамическая коронка, ламинат) в сочетании с микрополировкой или отбеливанием зубов. Полировка зубов — это процесс уменьшения неровностей, путем шлифования поверхности до тех пор, пока она не станет блестящей. Применяется для полировки зубов и эстетической реставрации зубов в стоматологии. Полирующее средство не создает глубоких царапин и бороздок на поверхности зуба или протеза. Вместо этого образуются мелкие, неглубокие царапины и бороздки, отражающие свет и придающие блеск. Чтобы добиться эффекта отбеливания, который проявляется на гладкой и блестящей поверхности зубов применяется «метод микрополировки» с использованием абразивной полировки поверхности зубов.

Целью исследования было определение клинической эффективности отбеливания зубов пастой Zir White.

Материалы и методы. В этом исследовании применялась техника микрополировки для отбеливания 6 передних зубов верхней челюсти у корейских пациентов с использованием коммерчески доступного стоматологического абразива в виде шприца (Zir White, dbchem Co, Корея), а также измерялись и сравнивались эффекты отбеливания зубов с использованием коммерческой шкалы оттенков (Vita Toothguide 3D-Master и Vitapan Classical) в колориметре (Dental Color Comparator, BS1E2028, Treedental, Китай).

Результаты. Метод микрополировки эмали для отбеливания витальных зубов у корейских пациентов с использованием стоматологического абразива «Zir White» увеличил эффект отбеливания зубов.

Ключевые слова: *полировка эмали, отбеливание зубов, микрополировка, корейский, измерение.*

Introduction. Teeth whitening is the most conservative treatment option to improve the aesthetics of discolored or stained teeth. Depending on the degree of tooth discoloration, the effectiveness of tooth whitening, and the degree of whitening desired by the patient, whitening (cosmetic) techniques are classified into tooth whitening using tooth whitening agents, tooth whitening micro-polishing using tooth surface smoothing with a tooth polishing agent, and permanent whitening combined with micro-polishing or tooth whitening (all-ceramic crowns, laminates).

Dental abrasives used in micro-polishing for teeth whitening using dental planing are materials that grind and polish to remove stains and pigments attached to teeth and prosthetics due to consumption of favorite foods such as cigarettes or various teas after dental plaque or calculus removal, and optionally contain pumice, fragrance, and fluoride. These dental abrasives (medical devices) have coarser particles than dental cleaning agents (toothpaste, over-the-counter drugs), and are available in solid, paste, and grinding forms.

Polishing is the process of polishing surfaces with a hard abrasive that is harder than the tooth surface or prosthesis that needs to be polished or polished. If a paste containing abrasives is used

for polishing, it will change the surface of the tooth or prosthesis. Abrasives are not good for polishing composite resin restorations. Polishing is the process of reducing the space of scratches by wearing down the surface until the surface becomes shiny. It is applied in dentistry for tooth preparation and tooth restoration. Polishing agents do not create deep scratches and grooves on the surface of the tooth or prosthesis. Instead, fine, shallow scratches and grooves are formed, reflecting light and shining. Dental polishing agents using this type of polishing are used as ' micro-polishing for teeth whitening using dental polishing agents ' to achieve the teeth whitening phenomenon that appears on the smooth and shiny tooth surface.

Objective and tasks. This study was conducted on the six maxillary anterior teeth of Korean patients using a commercially available syringe-type dental abrasive (Zir White). We report the results of increasing the tooth whitening effect by performing micro-polishing and measuring and comparing the tooth whitening effect using the pre-built color chart (Vita Toothguide 3D-Master & Vitapan Classical) values in the colorimeter.

Materials and Methods. A dental abrasive (Zir White) (Figure 1) in syringe type was put into the Prophy Angle Cup and applied to the enamel surface of six maxillary anterior teeth of Korean patients with pulp vitality, no restorations, and no dentin exposure. The dental abrasive applied to the enamel surface was then rotated to perform tooth surface planing (enamel micropolishing for tooth whitening).

There were 20 patients whom applied Zir White. The mean age of the patients was 50,3 ± 4,7 and there were 9 males and 11 females.

In color tone before and after micro-polishing for teeth whitening, the tooth whitening effect was compared by measuring the color tone of the mid-cervical area of the six maxillary anterior teeth of vital teeth using the intraoral mode of the colorimeter (Figure 2). The color tone chart (Vita Toothguide 3D-Master & Vitapan Classical) is pre-installed in the colorimeter (Figure 3).

Figure 1. Syringe-type dental abrasive (Zir White, dbchem Co, Korea).

Figure 2. Colorimeter (Dental Color Comparator BS1E2028, Treedental, China).

Figure 3. Shade Guide.

The success rate of tooth whitening was observed using the percentage of measurements obtained using a colorimeter before and after micro-polishing for teeth whitening. And X^2 The association test, which determines whether there is a correlation between two variables indicating the tooth whitening effect in nonparametric statistics, was used to test the significant difference in the tooth whitening effect among the six maxillary anterior teeth.

Results.

Whitening was performed on the six maxillary anterior teeth of Korean patients using a syringe-type dental abrasive (Zir White) commercially available in Korea. The teeth whitening effect of the six maxillary anterior teeth was measured and compared using the shade chart (Vita Toothguide 3D-Master & Vitapan Classical) pre-installed in the colorimeter, and the teeth whitening effect was observed as follows.

The color shade values of the labial surfaces of the six maxillary anterior teeth of a Korean patients obtained by the intraoral mode of a colorimeter before and after microsurgical whitening for teeth whitening showed a high success rate of tooth whitening for each tooth (Table 1).

X^2 the statistical significance of the P value was tested using the Association Test, which determines whether two variables are related in nonparametric statistics [4]. As a result, there was no significant difference in the tooth whitening effect among the six maxillary anterior teeth ($P>0.05$) (Table 2, Table 3). The six maxillary anterior teeth showed similar tooth whitening effects.

Table 1.

Success rate of tooth whitening using micro-polishing for tooth whitening in the upper six anterior teeth of Korean patients by using colorimeter.

	#13	#12	#11	#21	#22	#23
Satisfaction	12	16	16	17	15	18
Dissatisfaction	8	4	4	3	5	2
Success rate(%)	60%	80%	80%	85%	75%	90%

Table 2.

Observed values of the tooth whitening effect using micro-polishing for tooth whitening in the six maxillary anterior teeth of Korean patients.

O= Observed value			
Tooth number	Satisfaction	Dissatisfaction	Total
#13	12	8	20
#12	16	4	20
#11	16	4	20
#21	17	3	20
#22	15	5	20
#23	18	2	20
Total	94	26	Grand total =120

Table 3.

Expected value of tooth whitening effect using micro-polishing for tooth whitening in six maxillary six anterior teeth of Korean patients.

E= expected value		
Tooth number	Satisfaction	Dissatisfaction
#13	15.67	4.33
#12	15.67	4.33
#11	15.67	4.33
#21	15.67	4.33

#22	15.67	4.33
#23	15.67	4.33

Discussion. Tooth whitening (cosmetic) is classified into tooth whitening using tooth whitening agents, tooth whitening micropolishing using tooth surface smoothing with a tooth abrasive, and permanent whitening combined with micropolishing or tooth whitening (all-ceramic crown, laminate). Among them, tooth surface smoothing using a dental abrasive (tooth whitening micropolishing) for tooth surface cleaning before or after tooth whitening is the most conservative treatment option to improve the aesthetics of discolored or stained teeth, and Air-flow, Prophy-jet, etc. are used [2,8,10].

Microabrasive is an excellent method for permanently removing internally stained teeth such as white spots or surface stains. However, microabrasive for teeth whitening can be used in conjunction with tooth whitening agents or caustic agents such as hydrochloric acid as an alternative method when the teeth whitening effect is insufficient. Microabrasive using dental abrasive softens and wears away the tooth enamel with hydrochloric acid, actually removing 22 to 27 ㎛ of enamel per application. It is an alternative method used when the teeth whitening effect is insufficient, and is used for internally stained teeth, especially white or brown spots and rough surfaces [5,6].

The effects of surface polishing of the teeth and restorative material using micro-polishing for teeth whitening are reduction of adhesion of foreign substances on the teeth surface, smoother-feeling teeth surface, and increased aesthetics [3,11].

Polished with dental abrasives inhibits the adhesion of dental plaque, stains, and tartar, so it is used for polishing the surface of teeth or restorative materials.

The tooth surface that feels smooth after being worn away with a dental abrasive is expected to be the smooth surface of the permanent restoration or teeth placed in the patient's mouth. The finer the abrasive used, the smaller the scratch and the shorter the wavelength of visible light (<0.5㎛). Depending on the scratch size, the surface becomes shiny. The smaller the scratch size, the shinier the surface. In the clinic, for severe staining, a commercial paste or a mixture of abrasive powders and solutions from coarse abrasives to fine grits is used. Other Scaling and planing are used in order of large to small grits to increase small scratches. It is more often used for finishing and planing restorations than for tooth surface cleaning. Scaling and planing at regular visits Smoothes the tooth surface. The tooth surface, amalgam or gold crown that has undergone tooth surface planing will shine smoothly. When micro-polishing for teeth whitening using dental abrasive tooth surface planing is performed, the rough surface becomes smooth, resulting in teeth whitening effect and increased aesthetics. In particular, the aesthetics of the stained tooth surface of heavy smokers can be improved by tooth surface planing [12,13,14].

Since dental aesthetics plays a very important role in dentistry, tooth surface planing using dental abrasives helps to show teeth whitening. However, in old teeth that have maintained smooth tooth surface management for a long time with accurate tooth surface cleaning, smooth tooth surface and gloss are observed rather than the color of the teeth themselves. In these old teeth, the measurement values using a colorimeter before and after micro-polishing for teeth whitening show similar values, making it difficult to compare the effects before and after teeth whitening [1,7].

In addition, micro-polishing for teeth whitening is It can be used for air powder polishing, combined use of micro-polishing for teeth whitening after tooth whitening, aging whitening, removal of adhesive composite used for bracket attachment after orthodontic treatment using paste-type dental abrasive, and teeth whitening, and combined use of micro-polishing for teeth with acid treatment.

This study compared the satisfaction of the tooth whitening effect using the color tone values of the maxillary six anterior teeth obtained by the intraoral mode of a colorimeter before and after micropolishing for tooth whitening on the six maxillary anterior teeth of Korean patients. As a result, a high success rate of the tooth whitening effect was observed for each tooth. Clinically, it is thought that tooth whitening micropolishing is related to the tooth whitening effect [9].

And there was no significant difference in the interrelationship between the teeth whitening effects of the maxillary six anterior teeth ($P>0.05$). It is thought that the maxillary six anterior teeth additionally showed individual teeth whitening effects due to independent factors such as the shape, thickness, and projection of each tooth.

In this study, the difference in the degree of tooth whitening effect was analyzed using the colorimetric measurements of the maxillary six incisor surfaces performed before and after microsurgical tooth whitening, and only the presence or absence of the tooth whitening effect was observed and interpreted without drawing any conclusions.

Two ways to measure the color of teeth before and after teeth whitening: (1) observing with the naked eye using a color chart (Vita Toothguide 3D-Master & VitaPan Classical) as a reference, and (2) using a colorimeter. The tooth whitening effect can be measured and compared using the color chart (Vita System 3D-Master & Vitapan Classical) pre-installed in the colorimeter (Dental Color Comparator, BS1E2028, Treedental, China). However, the colorimeter displays a small amount of error in the specific value and the color tone value at each measurement. The color tone value The website of the colorimeter manufacturer (Treedental Co.) used in this study advertises that the visual observation method using the color chart (Vita Shade) has an accuracy of 62.5%, and the method of using the colorimeter has an accuracy of 92.5%. It is hoped that the accuracy will be further improved in the future.

In addition, this study examined the changes in color tone before and after micro-polishing for teeth whitening. The color value of the mid-cervical area of the maxillary six anterior teeth of vital teeth was measured using the intraoral mode of the colorimeter to compare the tooth whitening effect. In the future, the mid-cervical area of the pure surface of this study was measured. In addition to measuring the colorimeter, it is thought that the color tone value of the pure cotton cut section should be measured and compared to measure and compare the whitening effect of the entire tooth.

Micro-polishing for teeth whitening using dental abrasive surface planing makes the tooth surface bright and smooth, so the improvement in brightness and saturation is observed with the naked eye. It is thought that this non-invasive tooth whitening technique will be very useful in dental clinical practice in the future. Therefore, it is thought that continued research is needed to consider the differences in tooth whitening effects according to the type of food consumed by each individual, oral health management ability, age, gender, kimchi and soybean paste foods, favorite foods (coffee and tea), snacks and beverages, and ethnic and regional preferred foods.

Conclusion. Performed enamel micropolishing for whitening on six maxillary anterior teeth of Korean patients using a commercially available syringe-type dental abrasive (Zir White). The teeth whitening effect before and after micropolishing of six maxillary anterior teeth was measured

and compared using the pre -built color tone chart (Vita Toothguide 3D-Master & Vitapan Classical) values in the colorimeter.

Findings. The following results were obtained.

1. The tooth whitening effect before and after micro-polishing for tooth whitening on the six maxillary anterior teeth of Korean patients was compared using the color tone values of the pure surface of the six maxillary anterior teeth obtained by the intraoral mode of a colorimeter. As a result, a high success rate of the tooth whitening effect was observed for each tooth.

2. There was no significant difference in the interrelationship of tooth whitening effects among the six maxillary anterior teeth ($P>0.05$). The difference in tooth whitening effects among the six maxillary anterior teeth showed an independent individual effect as an additional factor without any interrelation.

Used literature:

1. Amira Kikly et al. Understanding and Performing Enamel Micro-Abrasion: A Case Report, Mathews Journal of Dentistry. 2024 Oct;8(3):52
2. Aurélio de Oliveira Rocha et al. A global overview of enamel microabrasion for white spot lesions: a bibliometric review, Restor Dent Endod. 2024 Aug;49(3):e29
3. Boone, ME: New materials and techniques in prosthodontics. DCNA 1983:27(4); 793-803
4. Cho YoungPil, Yoon ChangGeun, Kim KiSeok: Dental Statistics, Chosun University College of Dentistry, 1985.
5. Gladwin M, Bagby M: Clinical aspects of dental materials; theory, practice, and cases, 2nd ed. Philadelphia: Lippincott Williams & Wilkins, 2004
6. Irusa K. et al. Tooth whitening procedures: A narrative review //Dentistry Review. – 2022. – T. 2. – №. 3. – C. 100055
7. ISO 20795-2:2013: Dentistry— Base polymers Part 2: Orthodontic base polymers, International Standard Organization, Homepage(https://www.iso.org/standard/62279.html)
8. Kim Ingeol, Kim Gwangman, Kim Gyeongnam: Dental success materials, instruments and equipment-(26) Bleaching for vital teeth (Ⅰ), Dental success 28(11), 1059-1067, Uichihaksa 2008
9. Kim InGeol, Kim GwangMan, Kim GyeongNam: Dental success materials, instruments and equipment-(27) Bleaching for vital teeth (Ⅲ), Dental success 28(12), 1169-1175, Uichihaksa 2008
10. Kim InGeol, Kim GwangMan, Kim GyeongNam: Dental success materials, instruments and equipment-(28) Bleaching for vital teeth (Ⅳ), Dental success 29(1), 67-75, Uichihaksa 2009
11. KS P ISO 20795-2: Dentistry — Base polymers — Part 2: Orthodontic base polymers, Korea Standard Information Network Homepage (https://www.kssn.net/search/stddetail.do)
12. Naeem M. Ashfaq et al. A discoloured anterior tooth: enamel microabrasion, BRITISH DENTAL JOURNAL VOLUME 226 NO.7. 2019 Apr;486-89
13. Núbia Inocencya Pavesi Pini et al. Enamel microabrasion: An overview of clinical and scientific considerations, World J Clin Cases 2015 January 16; 3(1): 34-41
14. Renato Herman SUNDFELD et al. Microabrasion in tooth enamel discoloration defects: three cases with long-term follow-ups, J Appl Oral Sci. 2014;22(4):347-54

UO'K: 616-08-035

BOLALARDA VIRUSLI VA BAKTERİAL RESPIRATOR INFEKTSIYALARNING BIOKIMYOVIY KO'RSATKICHLARI.

Xujaqulov D.A., Saparboev E, Sattorova A.
Samarqand davlat tibbiyot universiteti

Annotatsiya. O'tkir respiratorli infektsiyalar (ORI) aholi salomatligi uchun eng keng tarqalgan va jiddiy tahdidlardan biri bo'lib qolmoqda. Ular butun dunyo bo'ylab, ayniqsa besh yoshgacha bo'lgan bolalar orasida kasallanish va o'limning asosiy sabablaridan biridir (Williams B.G. va boshqalar, 2002). ARIdan o'lim yiliga taxminan 1,9 million bolani tashkil qiladi (Parveen S. va boshq., 2006). Jahon sog'liqni saqlash tashkiloti ma'lumotlariga ko'ra, har yili taxminan 290 000 dan 650 000 gacha o'lim faqat gripp virusi infektsiyasidan kelib chiqadi. 2012 yilda ARIlar Marokashdagi bolalar o'limining 13 foiziga sabab bo'lgan (Jroundi I. va boshq., 2015). ARI turli xil etiologiyaga ega (virusli yoki bakterial) va yuqori va pastki nafas yo'llarining infektsiyalariga bo'linadi. Aksariyat ARIlar virusli etiologiyaga ega va 200 dan ortiq virusli agentlar tomonidan qo'zg'atiladi: respirator sinsitial virus (RSV), odam rinovirusi (HRV), odam metapnevmovirusi (HMPV), gripp virusi (IFV), parainfluenza virusi (PIV), adenovirus (ADV) va inson bokavirusi (87%) bolalarda ARI (taxminan 3%). (Doan Q. va boshqalar, 2014). Shuni ta'kidlash kerakki, ARI ning etiologik tuzilishi mos kelmaydi va hatto bir epidemiya mavsumida ham o'zgarishi mumkin. Birgalikda virusli infektsiyalar ARI bilan kasalxonaga yotqizilgan bolalarning 4-33 foizida uchraydi va bu salbiy klinik oqibatlar xavfining oshishini ko'rsatishi mumkin (Tregoning J.S. va boshq., 2010). Bundan tashqari, Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, Pseudomonas aeruginosa va Klebsiella pneumoniae va boshqalar kabi bakterial infektsiyalar odatda virusli infektsiyalardan kelib chiqqan kasalliklarning keyingi bosqichlarida, ayniqsa immuniteti zaif bolalarda qo'shiladi. Har yili dunyo aholisining 80% gacha respiratorli infektsiyalardan aziyat chekadi. Deyarli har bir kishi yiliga bir marta ARI bilan kasal bo'lib, ayniqsa tez-tez - bolalar. Shuni ta'kidlash kerakki, hayotning birinchi oylarida bolalar kamdan-kam hollarda kasal bo'lib qolishadi, bu bolaning nisbiy izolyatsiyasi va onadan olingan passiv immunitet bilan bog'liq (ammo, immunitet tizimi patologiyasi bo'lgan bolalar ko'pincha kasal bo'lishi mumkin).

Kalit so'zlar: *O'tkir respiratorli infektsiyalar (ORI), Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, mikrobiotsenoz.*

BIOCHEMICAL INDICATORS OF VIRAL AND BACTERIAL RESPIRATORY INFECTIONS IN CHILDREN

Khujakulov D.A., Saparbaev E. Sattorova A.
Samarkand State Medical University

Abstract. Acute respiratory infections (ARIs) remain one of the most common and serious threats to public health. They are one of the leading causes of morbidity and mortality worldwide, particularly among children under five years of age (Williams B.G. et al., 2002). Mortality from ARIs is about 1.9 million children per year (Parveen S. et al., 2006). According to the World Health Organization, approximately 290,000 to 650,000 deaths annually are caused by influenza virus infection alone. In 2012, ARIs caused 13% of deaths among children in Morocco (Jroundi I. et al., 2015). ARIs have different etiologies (viral or bacterial) and are divided into upper and lower respiratory tract infections. Most ARIs have a viral etiology and are caused by more than 200 viral agents: respiratory syncytial virus (RSV), human rhinovirus (HRV), human metapneumovirus (HMPV), influenza virus (IFV), parainfluenza virus (PIV), adenovirus (ADV) and human bocavirus (BoV), which account for about 35-87% of children with ARI (Doan Q. et al., 2014). It should be noted that the etiological structure of ARI is inconsistent and can change even during one epidemic season. Concomitant viral infections occur in 4-33% of children hospitalized with ARI and may indicate an increased risk of adverse clinical outcome (Tregoning J.S. et al., 2010). In addition, bacterial infections such as Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, Pseudomonas aeruginosa and Klebsiella pneumoniae, etc., usually join in at later stages of diseases caused by viral infections, especially in children with weakened immunity. Every year, up to 80% of the world's population suffers from respiratory infections. Almost every person gets sick with ARI once a year, and especially often - children. It should be noted that children in the first months of life rarely get

sick, which is due to the relative isolation of the child and passive immunity received from the mother (however, children with immune system pathology can often get sick).

Keywords: *Acute respiratory infections (ARI), Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, microbiocenosis.*

БИОХИМИЧЕСКИЕ ПОКАЗАТЕЛИ ВИРУСНЫХ И БАКТЕРИАЛЬНЫХ ИНФЕКЦИЙ ДЫХАТЕЛЬНЫХ ПУТЕЙ У ДЕТЕЙ

Хужакулов Д.А., Сапарбаев Э., Сатторова А.
Самаркандский государственный медицинский университет

Аннотация. Острые респираторные инфекции (ОРВИ) остаются одной из наиболее распространенных и серьезных угроз общественному здоровью. Они являются одной из основных причин заболеваемости и смертности во всем мире, особенно среди детей в возрасте до пяти лет (Williams B.G. et al., 2002). Смертность от ОРВИ составляет около 1,9 миллиона детей в год (Parveen S. et al., 2006). По данным Всемирной организации здравоохранения, приблизительно от 290 000 до 650 000 смертей ежегодно вызваны только инфекцией вируса гриппа. В 2012 году ОРВИ стали причиной 13% смертей среди детей в Марокко (Jroundi I. et al., 2015). ОРВИ имеют различную этиологию (вирусную или бактериальную) и делятся на инфекции верхних и нижних дыхательных путей. Большинство ОРЗ имеют вирусную этиологию и вызываются более чем 200 вирусными агентами: респираторно-синцитиальным вирусом (РСВ), риновирусом человека (РЧВ), метапневмовирусом человека (МПВЧ), вирусом гриппа (ВГ), вирусом парагриппа (ВПГ), аденовирусом (АДВ) и бокавирусом человека (БОВ), на долю которых приходится около 35–87 % детей с ОРЗ (Doan Q. et al., 2014). Следует отметить, что этиологическая структура ОРЗ непостоянна и может меняться даже в течение одного эпидемического сезона. Сопутствующие вирусные инфекции встречаются у 4–33 % детей, госпитализированных с ОРЗ, и могут указывать на повышенный риск неблагоприятного клинического исхода (Tregoning J.S. et al., 2010). Кроме того, на поздних стадиях заболеваний, вызванных вирусными инфекциями, обычно присоединяются бактериальные инфекции, такие как Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, Pseudomonas aeruginosa и Klebsiella pneumoniae и др., особенно у детей с ослабленным иммунитетом. Ежегодно респираторными инфекциями страдает до 80% населения планеты. Практически каждый человек болеет ОРВИ один раз в год, а особенно часто — дети. Следует отметить, что дети в первые месяцы жизни болеют редко, что обусловлено относительной изоляцией ребенка и пассивным иммунитетом, полученным от матери (однако дети с патологией иммунной системы могут болеть чаще).

Ключевые слова: *Острые респираторные инфекции (ОРВИ), Streptococcus pneumoniae, Haemophilus influenzae, Staphylococcus aureus, микробиоценоз.*

Introduction. An assessment of the oropharynx microbiocenoses was carried out based on the results of changes in the concentrations of volatile fatty acids (VFA) in the saliva of children with acute respiratory infections (ARI) using a mathematical model for assessing the degree of oropharynx dysbiosis. The dependence of the activity of respiratory viruses on the degree of microbiological disorders in the oropharynx was determined.

Objective. To determine the features of the metabolic activity of the oropharyngeal microbiocenosis based on the concentrations of VFA in the saliva of children with acute respiratory infections and to study the frequency of viruses and bacteria in them.

Materials and methods. The state of the oropharynx microbiocenosis was studied in 27 pediatric patients with ARI, including 11 (24.54%) females and 16 (75.46%) males. Based on the results of anamnestic data, physical and laboratory examinations, as well as X-ray and functional studies, two groups were formed: Group 1 - with a diagnosis of acute bronchitis (AB) and Group 2 - acute pneumonia (AP). For all patients, a biochemical study was performed on the content of VFA in saliva, bacteriological analysis of a smear from the posterior wall of the oropharynx, and DNA / RNA of viruses - causative agents of acute respiratory infections in a smear from the nose were determined using real-time polymerase chain reaction.

Results of the study. In the clinical picture of acute bronchitis and acute pneumonia, the frequencies of occurrence of the oropharyngeal microbiocenosis without microbiological disorders, determined by the concentrations of VFA in saliva using a mathematical model, do not differ significantly and are equal to 15 and 68%, respectively.

The frequency of occurrence of grade 1 microbiological disorders in acute pneumonia is 2 times higher than in acute bronchitis, and grades 2 and 3 are higher in acute bronchitis.

In the clinical picture of acute pneumonia, the frequency of occurrence of acute respiratory viruses for the oropharyngeal microbiocenosis without microbiological disorders is 2 times higher than for grade 1 and more than 3 times higher for grade 2 microbiological disorders. The same reliable differences for subgroups with different degrees of microbiological disorders are observed in the clinical picture of acute bronchitis.

Conclusions. 1. In patients with acute bronchitis, grades 2 and 3 microbiological disorders are significantly more often detected, while in patients with acute pneumonia, grade 1 microbiological disorders are more often determined. 2. It has been established that in patients with grades 1, 2 and 3 microbiological disorders, atypical microflora for this biotope may prevail in the oropharynx microbiocenosis; in the absence of microbiological disorders, there is a high probability of the presence of viruses, including rhino- and metapneumoviruses in acute bronchitis and respiratory syncytial virus in acute pneumonia.

Used literature:

1. Abdihakimovich, K. D. (2024). Analysis of antibacterial therapy of acute respiratory diseases in children. Tadqiqotlar. uz, 49(5), 12-15.
2. Abdumonnonov, M., Jumankulov, F., Suvonov, O., Saparov, K., Khudjamov, Z., Chiniyev, O., & Khudjakulov, D. (2024). Some scientific and practical research on using the experience of traditional medicine. In BIO Web of Conferences (Vol. 149, p. 01071). EDP Sciences.
3. Abdixakimovich, X. J. D. (2024). O ‘tkir respirator kasalliklar bilan og ‘rigan bolalarda antibakterial terapiyani tahlil qilish. Ta'limning zamonaviy transformatsiyasi, 10(1), 211-213.
4. Abdikhakimovich, K. D. (2023). Antimicrobial substances of lactic bacteria and practical aspects of their use. Образование наука и инновационные идеи в мире, 33(1), 32-37.
5. Boboqandova, M., & Shodiyeva, D. (2023).Endofit bakteriyalarning biologik faol metabolitlar sintez qilish xususiyatlari va ularning qollanilish sohalari. Interpretation and researches, 1(3).
6. Xudjaqulov, D. A., Oripova, P. O., & Boboqandova, M. F. (2022). Surunkali bruselloz kasalligida fizioterapiya muolajalarini qollash xususiyatlari. Экономика и социум, (3-1 (94)), 154-160.
7. Abdikhakimovich, X. D., & Husan, R. (2023). Studying anxiety in younger schoolchildren. Tadqiqotlar. uz, 25(1), 134-137.
8. Azimovich A. U., Sultonuvich B. K., Zokirovna M. M. Streptokokk avlodiga mansub bakteriyalarning patogenlik xususiyatlarining tahlili //Talqin va tadqiqotlar ilmiy-uslubiy jurnali. – 2022. – T. 1. – №. 13. – C. 95-101.
9. Маллаходжаев, А. А., Шамсиддинова, М. Ш., Жамалова, Ф. А., & Шайкулов, Х. Ш. (2021). Гемолитические эшерихии в этиологии кишечных расстройств у детей и генетическом механизме их формирования. In VOLGAMEDSCIENCE (pp. 588-589).

10. Мухамедов, И. М., Юсупов, М. И., & Шайкулов, Х. Ш. (2022). Дифференциальный диагноз энтероколитов у детей. Innova, (2 (27)), 35-39.
11. Одилова, Г. М., Рустамова, Ш. А., & Муминова, Ш. Ш. (2019). Анализ антибактериальной резистентности S. Typhmurium по Самаркандской области. In Молодежь и медицинская наука в XXI веке (pp. 178-179).
12. Shodiyeva, D. G., & Annayev, M. G. o 'g 'li, Mamarasulova, NI, & Odilova, G. M.(2023). Berberis integerrima bungening ikkilamchi metabolitlarining dorivorlik xususiyatlari va biotexnologik ahamiyati. golden brain, 1(10), 33-43.
13. Шайкулов, Х., Исокулова, М., & Маматова, М. (2023). Степень бактериоциногенности антибиотикорезистентных штаммов стафилококков, выделенных в Самарканде. Евразийский журнал медицинских и естественных наук, 3(1 Part 1), 199-202.
14. Хужакулов, Д. А. (2017). Особенности течения пищевых токсикоинфекций. Педиатр, 8(S).

UDC: 617-089.844

TREATMENT OF SURGICAL PATHOLOGIES OF ABDOMINAL ORGANS

Khodjimatov G.M., Foziljonov O.Sh.,
Andijan State Medical Institute

*Resume.*Currently, in healthcare around the world, including Uzbekistan, the gold standard for surgical treatment of combined diseases of the abdominal organ proved to be simultaneous operations using endovideosurgical technologies.

Key words: girls and boys of adolescence and young age, cholelithiasis, combined pathology, endovideosurgical technology, simultaneous operations.

QORIN BOSHLIGI ORGANLARINI JARROHLIK PATOLOGIYALARNI DAVOLASH.

Xodjimatov G.M., Foziljonov O.Sh.
Andijon davlat tibbiyot instituti

Rezyume. Hozirgivaqtda butun dunyo, jumladan, O'zbekiston sog'liqni saqlash sohasida qorin bo'shlig'i a'zolarining qo'shma kasalliklarini jarrohlik yo'li bilan davolashning oltin standarti endovideojarrohlik texnologiyalari yordamida bir vaqtda amalga oshiriladigan operatsiyalar ekanligi isbotlangan.

Kalit so'zlar: o't tosh kasalligi, hamroh jarrohlik patologiyasi, endovideojarrohlik texnologiyasi, simultan jarrohlik.

ЛЕЧЕНИЕ ХИРУРГИЧЕСКИХ ПАТОЛОГИЙ ОРГАНОВ БРЮШНОЙ ПОЛОСТИ

Ходжиматов Г.М., Фозилжонов О.Ш.
Андижанский государственный медицинский институт

Резюме. В настоящее время во многих странах мира, в том числе и в Узбекистане золотым стандартом хирургического лечения сочетанных заболеваний органов брюшной полости является симультанные операции с применением видеоэндохирургических технологий.

Ключевые слово: желчнокаменная болезнь, сопутствующая хирургическая патология, эндовидеохирургическая технология, симультанные операции.

Introduction. According to a number of authors, due to the use of modern high-tech tools, as well as scientific progress in medicine, and the improvement of diagnostic methods, the number of patients has been increasing in recent years, and several diseases requiring surgical correction have been identified [2] Currently, in medicine, the gold standard of surgical treatment of various combined surgical diseases of the abdominal cavity is the use of endovideosurgical technology[5]. The main advantages of simultaneous laparoscopic surgery (SLO) are small surgical accesses, low trauma, abacteriality of the operation, wide possibilities of instrumental revision, expensive technique, reduction of the risk of various postoperative complications, short duration of rehabilitation, early return to a normal lifestyle and ability to work, as well as pronounced cosmetic and economic effects. Hereditary deterministic liver and biliary tract diseases lead to cholelithiasis. Violation of the processes of bile formation and bile secretion, accompanied by chronic inflammation, the natural outcome of which is sclerosis, gallbladder dystrophy and stone formation [3]. Stagnation of the digestive and biliary tract and impaired concentration, as well as changes in the specific gravity of bile, dietary disorders, as well as the use of fatty and low-quality

foods are the main causes in the development of cholelithiasis [1]. According to numerous foreign and domestic authors, in recent years there has been an increase in the number of patients with combined diseases of the abdominal cavity and the frequency of their combination reaches from 3.2 to 65%[4]. According to published WHO data, 25-30% of adult patients have one or two combined diseases requiring prompt correction [2].

However, simultaneous surgical interventions in these patients are performed only in 1.5-6% of cases, and there is no static data at all in adolescence and adolescence. Objective: to evaluate the effectiveness of simultaneous endovideosurgery in patients with combined diseases of the abdominal cavity. This work is based on the analysis of 95 patients with combined diseases requiring surgical treatment. All patients underwent surgery in the surgical departments of the clinics of the Andijan State Medical Institute, the YIGITOV CLINIC and the endosurgical department of the Andijan branch of the Republican Scientific Center for Emergency Medical Assistance. In the period from 2005 to 2023, all patients underwent laparoscopic simultaneous operations for combined surgical diseases of the abdominal organs. Among the patients who underwent laparoscopic simultaneous surgery, there were 54 women (56.8%) and 41 men (43.1%), the age ranged from 15 to 80 years. All patients underwent medical history collection and physical examination, laboratory and instrumental examinations, radiation diagnostics, and consultations with specialized specialists. Surgical intervention was performed in an endovideosurgical operating room using endovideosurgical racks manufactured by KarlStorz (Germany), under intravenous anesthesia with artificial ventilation.

Chronic calculous cholecystitis (CCH) was the main surgical diagnosis in all 95 patients. Laparoscopic cholecystectomy (LCE) was performed in all patients at the first stage, followed by simultaneous surgery. 13 patients who were diagnosed with HCG had an empty soletary cyst of the liver, which was located mainly superficially in the III, IV, V and VI segments of the liver. The first stage of LHE was performed for patients in the following way: the position of the patient on his back. We tilt the operating table to the left by 15-20 degrees and raise the head end by 20 degrees.

Then we apply a pneumoperitoneum and insert trocar into the abdominal cavity: 1-paramblical (10 mm), 2- in the epigastrium (10 mm), 3- in the middle of the clavicular line 2 cm below the costal arch on the right (5 mm). Laparoscopic cholecystectomy was performed according to a generally accepted procedure (Puchkov K.V. 2005). The LHE time did not exceed 20±10 minutes. Then, laparoscopic resection of a solitary liver cyst was performed in the second stage. First, the cyst was punctured and the contents were aspirated, and the cyst cavity was rinsed with a warm furacilin solution through a puncture needle. Then the capsule was precisely removed, and if it was impossible, 2/3 of the brush wall was excised.

Thoracoports were installed during laparoscopic echinococcectomy from the liver in 34 patients, they were performed as in LHE according to a generally accepted technique, but in the right subcostal region, 20 mm thoracoport was installed in place of 5mm. After delineating the echinococcal cyst with a gauze swab soaked in 76-80% alcohol, the echinococcal cyst was punctured with aspiration of the contents. 76% alcohol was injected into the cavity through this needle, and then washed with a hot solution of furacillin (78-80 °C) at an exposure of 5-8 minutes. Then the fibrous capsule was dissected, the chitinous membrane was removed and removed from the abdominal cavity in a special container.

The residual cavity was treated with 76% alcohol, then with a warm solution of furacillin (78-80 °C). In 21 patients, the residual cavity was then tamponed with a large omentum. In 13 patients,

due to the inability to compress the residual cavity with an omentum, a "mini" laparotomy access was used in the projection of the residual cavity.

Through a "mini" laparotomy access, the residual cavity was eliminated using the Delbe method. The operation was completed by draining the subheptal area with a silicone tube through a 20 mm thoracoport installed in the right hypochondrium. In 22 patients with umbilical hernia, after performing LCE according to the generally accepted technique, umbilical ring plastic surgery was performed in 11 cases using the Mayo method, and in 10 cases using propylene mesh. In 22 patients with inguinal hernias, inguinal ring plastic surgery was performed using propylene mesh and in 4 patients with composite mesh The results of the study and their discussion: Of all 95 patients, 52 patients were operated on as planned.

The diagnosis of CCH with combined pathology was established during examination in the preoperative period, and in 43 patients, concomitant pathology was an operational finding. The indication for emergency CP in 43 patients was acute pain in the right hypochondrium, with signs of obstructive calculous cholecystitis. All 95 operated patients did not need narcotic analgesics in the postoperative period, they became more active by the end of the day, and felt satisfactory. In 79 patients, drainage tubes were removed one day after the control ultrasound of the abdominal cavity. In 16 patients who underwent emergency CPR + removal of the echinococcal brush of the liver, bile was excreted from the drainage tube in an amount of 120-160 ml per day, which stopped on its own on 11-21 days after surgery.

At the control ultrasound of the abdominal cavity of these patients, due to the absence of a residual cavity, the drainage tubes were removed on the 8th-29th day after surgery. In all operated patients, intestinal motility was restored and gases were discharged on the 2nd day after surgery.

The duration of CP in all patients was approximately the same: the average duration of LCE + removal of solitary cyst of the liver was 50±10 minutes; LCE + removal of echinococcal cyst of the liver was 65±10 minutes. LHE + herniation (umbilical hernia) 55 ± 10 min and LHE + herniation (inguinal hernia) 60 ± 10 min. The average bed per day of the patient's stay in the hospital was: in patients who underwent CP + removal of solitary liver cyst 4.5 ± 0.5 days; CP + removal of echinococcal liver cyst 4.8 ± 1 days; CP + herniation (umbilical hernias) – 4.6 ± 0.5 days; CP + herniation (inguinal hernias) – 4.6 ± 0.5 days. In the postoperative period, all patients were activated by the end of the first day, and narcotic analgesics were not needed.

The operations lasted an average of 60±10 minutes, the average hospital bed day was 4.6±05 days, and the average rehabilitation period was 16-18 days. All patients have postoperative wound healing by primary tension. Due to the impossibility of laparoscopic correction of concomitant combined surgical diseases of the abdominal organs, 13 patients underwent a "mini" laparotomy approach.

The combined technique with the use of "mini" access surgery is promising, which significantly reduces the duration of the operation, thereby the postoperative period in patients proceeds favorably. Thus, laparoscopic simultaneous operations for the correction of combined surgical diseases of the abdominal cavity and anterior abdominal wall are the most optimal and justified interventions that eliminate combined surgical pathologies with anesthesia, shorten the patient's stay in the hospital and the period of rehabilitation. After simultaneous laparoscopic surgery, patients feel quite satisfactory.

Conclusions: 1. In case of combined surgical diseases of the abdominal cavity, simultaneous laparoscopic surgery is the most optimal.

2. To eliminate the residual cavity after laparoscopic echinococcectomy from the liver, tamponade with a large omentum is the method of choice.

3. The advantage of simultaneous laparoscopic operations is undoubtedly the economic effect. The cosmetic and aesthetic effect of surgery for patients plays an important role.

Used literature:

1. Ахрамеев В. Б. и др. Симультанные операции в неотложной хирургии брюшной полости //Вестник неотложной и восстановительной хирургии. – 2021. – Т. 6. – №. 1. – С. 20-26.
2. Ибрагимов Ш. У. Результаты хирургического лечения больных с грыжами живота и сочетанной абдоминальной патологией //Проблемы науки. – 2022. – №. 4 (73). – С. 69-73.
3. Рахматуллаев А. Р., Хасанов С. М. Возможности и целесообразность выполнения симультанных лапароскопических операций при сочетанных хирургических заболеваниях органов брюшной полости //Евразийский союз ученых. – 2015. – №. 10-1 (19). – С. 113-116.
4. Чернооков А. И. и др. Опыт применения симультанных операций у больных с варикозной болезнью и грыжами передней брюшной стенки. – 2022.
5. Hart S. Laparoendoscopic singlesite combined cholecystectomy and hysterectomy / S. Hart, S. Ross, A. Rosemurgy // J. Minim. Invasive Gynecol. — 2010. — Vol. 17, № 6. — P. 798-801
6. Reiffersceid M. Der simultaneingziff in der Bayychhohle-ChirurgischeAspekte // Zent. Bl. Chir. — 1971.— Bd. 5. — S 2010.

UDC: 617-089.844

THE RESULTS OF APPLYING ENDOVIDEOSURGICAL TECHNOLOGIES IN THORACOABDOMINAL INJURIES.

G.M.Khodjimatov, S.M.Yaxyoyev
Andijan State Medical Institute

Abstract. Despite advancements in medical technology, diagnostic thoracotomies and laparotomies continue to be frequently performed in the management of thoracoabdominal injuries. The indications and contraindications for the extensive application of endovideosurgical techniques in these cases remain inadequately defined and are subject to ongoing scholarly debate. Although various surgical strategies for thoracoabdominal trauma have been proposed, a comprehensive and standardized algorithm for differential diagnosis and treatment has yet to be established. This study involved 52 patients (100%) with thoracoabdominal injuries who were treated at the Andijan branch of the Republican Scientific Center for Emergency Medical Care between 2021 and 2024. Postoperative complications were observed in only two patients (10.0%) in the primary group, whereas 12 patients (37.5%) in the comparison group experienced complications. Moreover, one patient (5.0%) in the primary group and four patients (12.5%) in the comparison group did not survive, despite receiving treatment. The application of endovideosurgical techniques significantly decreased the reliance on open diagnostic procedures for thoracoabdominal injuries, reducing their occurrence from 28.2% to 5.0% (χ^2=4.237; Df=1; p=0.040). Furthermore, postoperative complications were reduced from 37.5% to 10.0% (χ^2=4.731; Df=1; p=0.03), and the length of hospital stay was shortened from 10.0±1.1 to 6.8±0.5 days (t=2.69; p<0.01).

Key words: *Thoracoabdominal Injuries, endovideosurgical technologies, thoracotomy, laparotomy*

TORAKOABDOMINAL SHIKASTLANISHLARDA ENDOVIDEOJARROHLIK TEXNOLOGIYALARINI QO'LLASH NATIJALARI

G.M.Xodjimatov, S.M.Yaxyoyev.
Andijon davlat tibbiyot instituti

Annotatsiya. Tibbiyot texnologiyalaridagi taraqqiyotga qaramay, torakoabdominal shikastlanishlarni davolashda diagnostik torakotomiya va laparotomiyalar keng qo'llanilmoqda. Ushbu holatlarda endovidejarrohlik texnologiyalarni keng qo'llash uchun ko'rsatmalar va qarshi ko'rsatmalar hali ham to'liq aniqlanmagan va ilmiy bahslarga sabab bo'lmoqda. Torakoabdominal travmalarni davolash uchun turli jarrohlik strategiyalari taklif etilgan bo'lsa-da, hali ham farqlangan tashxis va davolash uchun yagona va standart algoritm ishlab chiqilmagan. Ushbu tadqiqot 2021-2024 yillarda Andijon viloyatidagi Respublika shoshilinch tibbiy yordam ilmiy markazi filialida davolangan 52 nafar (100%) torakoabdominal shikastlanishli bemorlarni o'z ichiga oldi. Asosiy guruhda faqat ikki bemorda (10,0%) operatsiyadan keyingi asoratlar kuzatildi, nazorat guruhida esa 12 bemorda (37,5%) asoratlar qayd etildi. Bundan tashqari, asosiy guruhda bir bemor (5,0%) va nazorat guruhida to'rt bemor (12,5%) ko'rsatilgan davolashga qaramay, vafot etdi. Endovideojarrohlik usullarini qo'llash ochiq diagnostik amaliyotlarga bo'lgan ehtiyojni sezilarli darajada kamaytirdi, ularning ko'rsatkichlari 28,2% dan 5,0% gacha qisqardi (χ^2=4.237; Df=1; p=0.040). Shuningdek, operatsiyadan keyingi asoratlar 37,5% dan 10,0% gacha kamaydi (χ^2=4.731; Df=1; p=0.03) va kasalxonada yotish muddati 10,0±1,1 kundan 6,8±0,5 kungacha qisqardi (t=2.69; p<0.01).

Kalit so'zlar: *Torakoabdominal shikastlanishlar, endovideosurgik texnologiyalar, torakotomiya, laparotomiya.*

РЕЗУЛЬТАТЫ ПРИМЕНЕНИЯ ЭНДОВИДЕОХИРУРГИЧЕСКИХ ТЕХНОЛОГИЙ ПРИ ТОРАКОАБДОМИНАЛЬНЫХ ТРАВМАХ.

Г.М. Ходжиматов, С.М Яхёев
Андижанский государственный медицинский институт

Аннотация. Несмотря на достижения в области медицинских технологий, диагностические торако- и лапаротомии по-прежнему часто выполняются при лечении торакоабдоминальных травм. Показания и противопоказания к широкому применению эндовидеохирургических методов в этих случаях остаются недостаточно определенными и являются предметом продолжающихся научных дискуссий. Хотя предложено множество хирургических стратегий для лечения торакоабдоминальных травм, единый и стандартизированный алгоритм для дифференциальной диагностики и лечения пока не разработан. В исследовании приняли участие 52 пациента (100%) с торакоабдоминальными травмами, проходившие лечение в Андижанском филиале Республиканского научного центра экстренной медицинской помощи в период с 2021 по 2024 годы. Послеоперационные осложнения были зарегистрированы у двух пациентов (10,0%) в основной группе и у 12 пациентов (37,5%) в контрольной группе. Кроме того, один пациент (5,0%) в основной группе и четыре пациента (12,5%) в контрольной группе скончались, несмотря на проведенное лечение. Применение эндовидеохирургических методов значительно снизило необходимость в открытых диагностических процедурах при торакоабдоминальных травмах, сократив их частоту с 28,2% до 5,0% (χ^2=4.237; Df=1; p=0.040). Также уровень послеоперационных осложнений снизился с 37,5% до 10,0% (χ^2=4.731; Df=1; p=0.03), а продолжительность госпитализации сократилась с 10,0±1,1 до 6,8±0,5 дней (t=2.69; p<0.01).

Ключевые слова: *торакоабдоминальные травмы, эндовидеохирургические технологии, торакотомия, лапаротомия.*

Introduction. Thoracoabdominal injuries, which involve simultaneous damage to the organs of the chest and abdominal cavities, significantly worsen the patient's condition due to the phenomenon of mutual aggravation of injuries [3-8]. Due to the severity of these cases and the limited time available for diagnosis, errors in diagnosis and treatment can reach 30-70%, and the rates of postoperative complications and mortality remain high, at up to 30% [9-15].

While endovideosurgical techniques offer an alternative to open diagnostic surgeries in the diagnosis and treatment of thoracoabdominal injuries, clear indications and contraindications for their use, as well as guidelines for conversion to open surgeries, have not been well defined and remain a topic of debate [1-5].

Thus, there is a clear need to improve the surgical strategy for diagnosing and treating thoracoabdominal injuries. The correct choice of surgical tactic at each stage of treatment, including the use of minimally invasive technology, is essential to avoid increasing the risk of postoperative complications.

Materials and Methods. The study included 52 patients (100%) with thoracoabdominal injuries treated between 2021 and 2024 at the Andijan branch of the Republican Scientific Center for Emergency Medical Care (RSCEMC). The patients were divided into two main groups, and the results of their diagnostic and treatment methods were analyzed. The first, or comparison group, consisted of 32 patients (61.5%) who were treated between 2021 and 2022 using traditional diagnostic and therapeutic methods. The primary group consisted of 20 patients (38.5%) treated between 2023 and 2024 using an improved surgical tactic based on endovideosurgical methods (Figure.1.)

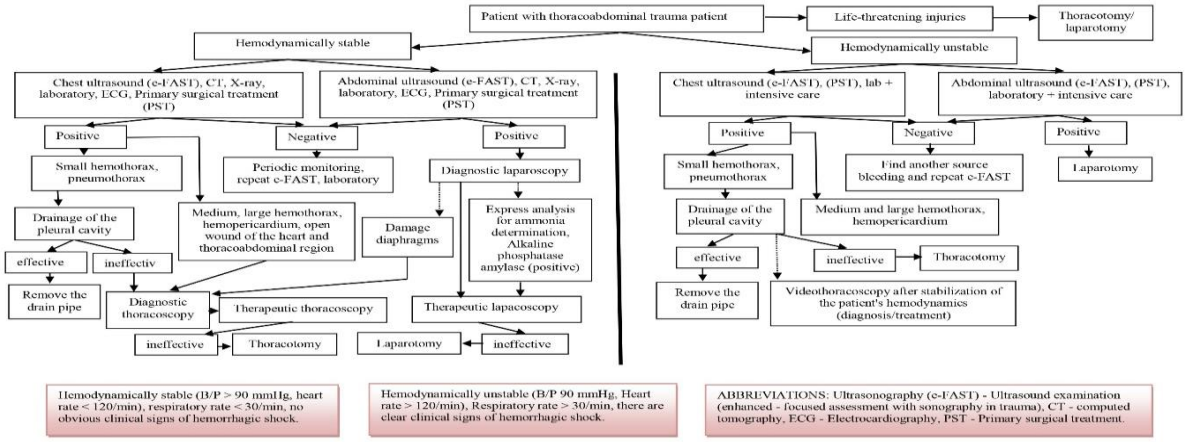


Figure.1. Improved diagnostic and treatment algorithm for thoracoabdominal injuries

The patients in the study ranged in age from 18 to 88, with the largest group patients, comprising 32 patients (61.5%), being between 18 and 44 years old. The severity of the patients' injuries was measured using the New Injury Severity Score (NISS), with an average score of 19.35±1.45 in the primary group and 19.22±1.33 in the comparison group (p=0.947).

Results and Discussions. Traditional and standard diagnostic and therapeutic methods used in comparison group, they include primary surgical treatment (PST)+ thoracotomy at 3 (9,4%), primary surgical treatment + laparotomy at 3 (9,4%), pleural cavity drainage combined with laparotomy in 15 patients (46.9%) and thoracotomy + laparotomy in 11 patients (34.3%).

The analysis of performed procedures indicated that three thoracotomies (9.4%) and six laparotomies (18.8%) in the comparison group were performed solely for diagnostic purposes and were thus considered unnecessary.

In the primary group, to treat injuries of the chest and abdominal cavities, the following procedures were performed: pleural cavity drainage followed by video-assisted thoracoscopic surgery (VATS) was performed in six patients (30.0%); thoracotomy was followed by laparoscopic surgery in four patients (20.0%); laparotomy + pleural cavity drainage was performed in two patients (10.0%); VATS combined with laparoscopy was performed and in five patients (25.0%).

The following procedures were performed by video-assisted thoracoscopy: diagnostic video-thoracoscopy in 1 case (5.0%); hemostasis of bleeding from intercostal arteries in 3 cases (15.0%); lung injury coagulation/suturing in 5 cases (25.0%); removal of clotted hemothorax in 4 cases (20.0%).

Video-assisted laparoscopy was used for following procedures: diagnostic video-laparoscopy in 1 case (5.0%); hemostasis of liver injury in 3 cases (15.0%); diaphragm injury suturing in 6 cases (30.0%); splenic injury coagulation in 1 case (5.0%); gastric injury suturing in 1 case (5.0%); suturing/coagulation of large and/or small omental injuries in 2 cases (10.0%); small intestine injury suturing in 2 cases (10.0%).

Endosurgical interventions were widely used along with open surgeries in treating this group of patients. Among the endovideosurgical interventions performed, diagnostic thoracoscopy was conducted in 1 patient (5.0%), and diagnostic laparoscopy in 1 patient (5.0%).

According to the final conclusions of the study, the following open surgeries were performed in the comparison group with thoracoabdominal injuries: diagnostic thoracotomy in 3 patients (9.4%) and diagnostic laparotomy in 6 patients (18.8%). In the main group, diagnostic

laparotomy was performed in 1 patient (5.0%), diagnostic video-thoracoscopy in 1 patient (5.0%), and diagnostic video-laparoscopy in 1 patient (5.0%). Based on the above data, it can be seen that diagnostic open surgeries were reduced from 28.2% to 5.0% (χ2 = 4.237; Df = 1; p = 0.040) (Figure 2).

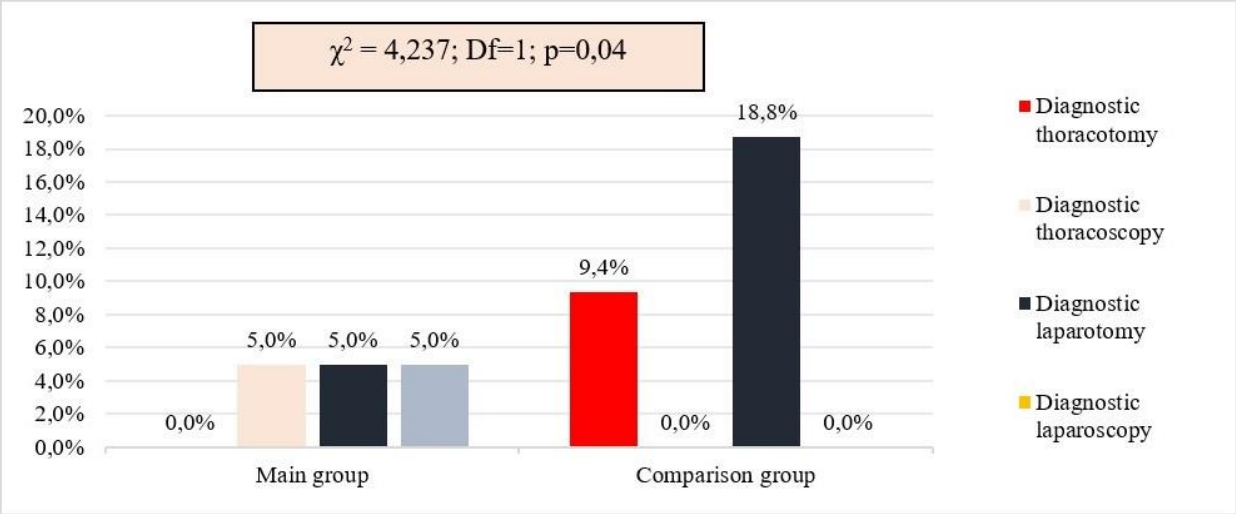


Figure 2. Diagnostic surgeries in combined thoracic and abdominal injuries

In the main group of patients, the use of endovideosurgical methods and an improved surgical approach helped reduce the incidence of postoperative complications. In this group, postoperative complications were observed in only two patients: wound infection in 1 patient (5.0%) and reactive pleuritis in 1 patient (5.0%).

In the comparison group, a total of 12 patients (37.5%) experienced postoperative complications, including wound infection in 4 patients (12.5%), subdiaphragmatic abscess in 1 patient (3.1%), peritonitis in 1 patient (3.1%), pneumonia in 2 patients (6.3%), reactive pleuritis in 3 patients (9.4%), and pulmonary artery thromboembolism in 1 patient (3.1%). These complications were directly associated with open surgeries.

Additionally, in the main group, 1 patient (5.0%) died due to septic shock and multiple organ failure. In the comparison group, despite the care provided, 2 patients (9.4%) died from multiple organ failure, 1 patient (3.1%) from pulmonary artery thromboembolism, and 1 patient (3.1%) from acute blood loss and acute hemorrhagic shock (Table 1).

Table 1.

Incidence of Postoperative Complications

Type of Complication	Main Group (n=20)		Comparison Group (n=32)		χ^2
	abc	%	abc	%	
Wound infection	1	5,0	4	12,5	χ^2 =4,731; Df=1; p=0,03
Subdiaphragmatic abscess	0	0,0	1	3,1	
Peritonitis	0	0,0	1	3,1	
Pneumonia	0	0,0	2	6,3	
Reactive pleuritis	1	5,0	3	9,4	
Pulmonary artery thromboembolism	0	0,0	1	3,1	

Total	2	10,0	12	37,5	

Thus, based on the analysis of all patients' diagnostic and treatment outcomes, it can be concluded that the use of endovideosurgical methods and an improved surgical approach reduced postoperative complications in combined thoracic and abdominal organ injuries, postoperative complications reduced from 37.5% to 10.0% ($\chi2$ = 4.731; Df = 1; p = 0.03), and mortality decreased from 12.5% to 5.0% ($\chi2$ = 0.797; Df = 1; p = 0.373).

In our view, the main reason for the numerous errors and insufficient positive outcomes in the treatment of thoracoabdominal trauma patients in the comparison group was the lack of a stratified diagnostic and surgical algorithm, which resulted in each surgeon relying on their personal experience. Additionally, the objective and subjective limitations of previous diagnostic methods before surgery were also contributing factors.

Conclusion

1.The developed improved algorithm allows for the determination of the sequence of endovideosurgical methods in patients with thoracoabdominal injuries, as well as reducing open diagnostic surgeries in combined thoracic and abdominal organ injuries from 28.2% to 5.0% ($\chi2$ = 4.237; Df = 1; p = 0.040).

2.The use of video-endosurgical methods in the treatment of thoracoabdominal trauma patients is more effective than traditional treatment methods, leading to a reduction in postoperative complications from 37.5% to 10.0% ($\chi2$ = 4.731; Df = 1; p = 0.03).

3.The application of endovideosurgical methods in thoracoabdominal injuries reduces the length of hospital stays from 10.0 ± 1.1 days to 6.8 ± 0.5 days (t = 2.69; p < 0.01).

Used literature:

1. Asensio J. A. et al. The Ongoing Dilemma of Thoracoabdominal Injuries: Which Cavity and When? //The High-risk Surgical Patient. – Cham : Springer International Publishing, 2023. – С. 755-765.
2. Baloglanly D. A. i dr. Sovershenstvovaniye taktiki operativnogo lecheniya neognestrelnykh torakoabdominalnykh raneniy //Politravma. – 2020. – №. 2. – S. 36-46.
3. Балогланлы Д. А. и др. Совершенствование тактики оперативного лечения неогнестрельных торакоабдоминальных ранений //Политравма. – 2020. – №. 2. – С. 36-46.
4. Bautista-Parada I. R., Bustos-Guerrero A. M. Prevalence of thoracic and abdominal injuries in patients with penetrating thoracoabdominal trauma //Cirugía y cirujanos. – 2022. – Т. 90. – №. 3. – С. 379-384.
5. Degiannis E., Hauer T., Doll D. Approach to Thoracoabdominal Injury //Penetrating Trauma: A Practical Guide on Operative Technique and Peri-Operative Management. – Cham : Springer International Publishing, 2024. – С. 373-374.
6. González-Muñoz A. et al. Diaphragmatic Injuries in Patients with Penetrating Thoracoabdominal Injuries without Shock or Acute Abdomen at Admission //Journal of Emergencies, Trauma, and Shock. – 2024. – С. 10.4103.
7. Khadzhibayev A. M. i dr. Khirurgiya torakoabdominalnykh raneniy //Dzhanelidzevskiye chteniya-2023. – 2023. – S. 189. Хаджибаев А. М. и др. Хирургия торакоабдоминальных ранений //Джанелидзевские чтения-2023. – 2023. – С. 189.

8. Kurbonov K. M.. Polvonov Sh. B.. Daminova N. M. Endovideokhirurgicheskiye tekhnologii v khirurgii povrezhdeniy grudi i zhivota //Zdravookhraneniye Tadzhikistana. – 2020. – №. 1. – S. 28-33.
9. Курбонов К. М., Полвонов Ш. Б., Даминова Н. М. Эндовидеохирургические технологии в хирургии повреждений груди и живота //Здравоохранение Таджикистана. – 2020. – №. 1. – С. 28-33.
10. Maskin S. S. i dr. Lechebno-diagnosticheskiy algoritm pri sochetannoy zakrytoy travme zhivota i organov zabryushinnogo prostranstva s pozitsiy dokazatelnoy meditsiny //Vestnik Volgogradskogo gosudarstvennogo meditsinskogo universiteta. – 2020. – №. 3 (75). – S. 3-12.
11. Маскин С. С. и др. Лечебно-диагностический алгоритм при сочетанной закрытой травме живота и органов забрюшинного пространства с позиций доказательной медицины //Вестник Волгоградского государственного медицинского университета. – 2020. – №. 3 (75). – С. 3-12.
12. Menegozzo C. A. M., Utiyama E. M. The approach of thoracoabdominal penetrating injury victims by minimally invasive surgery //Trauma. – 2020. – Т. 22. – №. 1. – С. 74-75.
13. Narváez J. G. R. Diaphragmatic Injury in Patients with Penetrating Thoracoabdominal Injuries without Shock or Acute Abdomen at Admission: A cross-sectional study : дис. – Universidad del Rosario Bogotá-Colombia, 2024.
14. Pfeifer R., Kalbas Y., Pape H. C. Концепция «damage control» при политравме: каковы стандарты в 2021 году? //Политравма. – 2021. – №. 2. – С. 10-18.
15. Rayimov G. N., Saloxitdinov N. A. To the Question of Diagnostics of Thoracoabdominal Injuries //Central Asian Journal of Medical and Natural Science. – 2021. – Т. 2. – №. 5. – С. 442-444.
16. Shomurodov Kh. i dr. Opyt lecheniya povrezhdeniy parenkhimatoznykh organov bryushnoy polosti pri sochetannoy travme //Zhurnal biomeditsiny i praktiki. – 2021. – Т. 1. – №. 3/1. – S. 494-499.
17. Шомуродов Х. и др. Опыт лечения повреждений паренхиматозных органов брюшной полости при сочетанной травме //Журнал биомедицины и практики. – 2021. – Т. 1. – №. 3/1. – С. 494-499.
18. WILLIAMS K. Thoracoabdominal Trauma //Patient Transport: Principles and Practice-E-Book. – 2023. – С. 282.
19. Yahyoev S. O., Khodzhimatov G. M. Diagnostic methods and surgical treatment of patients with thoracoabdominal traumas (review of the literature) //Kardiochirurgia i Torakochirurgia Polska/Polish Journal of Thoracic and Cardiovascular Surgery. – 2022. – Т. 19. – №. 4. – С. 226-231.

UDC: 578.834.1:616.61-008.64:57.083.3

STUDYING THE IMMUNOLOGICAL ASPECTS OF THE ORIGIN OF NEPHROLOGICAL COMPLICATIONS IN POST-COVID SYNDROME.

Khaytboev J.A., Rakhmanova S.S.
Urgench branch of TMA

ABSTRACT: Post-covid syndrome directly and indirectly affects renal function, leading to the development of acute and chronic renal complications. Factors such as inflammatory response, endothelial dysfunction, hypoxia and hypercoagulability, including the "cytokine storm" specific to Covid-19, play an important role in the pathogenesis of these complications.

Keywords: post-covid syndrome, renal complications, immunology.

POST-COVID SINDROMDA NEFROLOGIK ASORATLAR KELIB CHIQISHDAGI IMMUNOLOGIK ASPEKTLARNI O'RGANISH.

Xaytboyev J.A., Raxmanova S.S.
TTA Urganch filiali

XULOSA: Post-covid sindromi buyrak funksiyasiga bevosita va bilvosita ta'sir qiladi, bu o'tkir va surunkali buyrak asoratlarining rivojlanishiga olib keladi. Ushbu asoratlarning patogenezida yallig'lanish reaksiyasi, endotelial disfunksiya, gipoksiya va giperkoagulyatsiya kabi omillar, shu jumladan Covid-19 uchun xos bo`lgan "sitokinlar bo`roni" muhim rol o'ynaydi.

Kalit so'zlar: post-covid sindromi, buyrak asoratlari, immunologiya.

ИЗУЧЕНИЕ ИММУНОЛОГИЧЕСКИХ АСПЕКТОВ ВОЗНИКНОВЕНИЯ НЕФРОЛОГИЧЕСКИХ ОСЛОЖНЕНИЙ ПРИ ПОСТКОВИДНОМ СИНДРОМЕ.

Хайтбоев Ж.А., Рахманова С.С.
Ургенчский филиал ТМА

РЕЗЮМЕ: Постковидный синдром напрямую и косвенно влияет на функцию почек, приводя к развитию острых и хронических почечных осложнений. Такие факторы, как воспалительная реакция, эндотелиальная дисфункция, гипоксия и гиперкоагуляция, включая «цитокиновый шторм», характерный для Covid-19, играют важную роль в патогенезе этих осложнений.

Ключевые слова: постковидный синдром, почечные осложнения, иммунология.

Relevance of the topic: Numerous studies conducted in different countries of the world have shown that cases of renal dysfunction were observed in the post-Covid-19 period among patients infected with SARS-CoV-2, and the characteristic features of these diseases were a decrease in glomerular filtration rate parameters [1]. However, to date, it has not been proven that the cause of renal dysfunction after Covid-19 is the virus, drug toxicity, or molecular genetic aspects [2]. It is important to determine how the respiratory virus directly disrupts renal function, as well as to assess the impact of immunological aspects and their role and significance in the mechanism of the emergence of post-Covid-19 renal dysfunction [3]. The post-infection consequences of Covid-19 or post-Covid syndrome (PCS) affect several internal organ systems, including the kidneys. This

poses the medical community with the issue of solving problems related to the treatment and diagnostic tactics of renal complications [4].

Thus, a lot of scientific research is currently being conducted around the world to ensure timely and accurate diagnosis and treatment of coronavirus, as well as to identify the unpleasant condition of post-covid syndrome [5].

Although the novel coronavirus Covid-19, caused by the SARS-CoV-2 virus, primarily affects the lungs, in some patients the infection also spreads to other organ systems [6]. Recently, there has been a significant increase in cases of kidney dysfunction associated with previous Covid-19 infection [7]. Studies to date show that Covid-19 has a wide range of symptoms and the long-term consequences for people with severe and very severe disease can be life-threatening. Such conditions include pulmonary sclerosis and kidney failure, inflammation of the heart muscle, arrhythmia, liver damage, cognitive impairment, psychosis accompanied by sharp mood swings, etc. [8].

Like other respiratory viruses such as MERS-CoV, the scientific medical community paid little attention to the consequences of Covid-19 and viewed it as a common respiratory disease. However, by 2021, a year after the start of the pandemic, it became clear that the SARS-CoV-2 virus affects the lungs, brain, nasopharynx, eyes, heart, blood vessels, liver, kidneys and intestines, literally affecting all vital organs.

Numerous studies conducted in different countries of the world have shown that there were cases of renal dysfunction in the post-Covid-19 period among patients infected with SARS-CoV-2, and the characteristic features of these diseases were a decrease in the level of glomerular filtration rate parameters. However, to date, it has not been proven that the cause of renal dysfunction after Covid-19 is viral tropism, drug toxicity, or molecular genetic aspects. It is important to determine how the respiratory virus directly disrupts kidney function, as well as to assess the impact of immunological aspects and their role and significance in the mechanism of occurrence of renal dysfunction after Covid-19.

The purpose of the study: To identify and diagnose the most important prognostic factors of this pathology based on a diagnostic study of immunological status parameters in patients with impaired renal function after Covid-19.

Materials and methods. In the observational diagnostic study, 240 patients who had experienced Covid-19 and had symptoms of renal failure were selected. They were divided into 2 groups according to several disease symptoms for 6 months, and the analysis of clinical and laboratory data was studied: The main group included 120 patients with signs of a decrease in glomerular filtration rate (GFR) <90.0 ml/min/1.73 m2 within 6 months after Covid-19; The control group included 120 patients with normal GFR levels during or after Covid-19 for 6 months. Of these, 116 (48.3%) were women and 124 (51.7%) were men aged 23 to 76 years, with a median age of 44.5 years in the interquartile range (IQR-interquartile range): 35-56 years. Body mass index (BMI) ranged from 23.4 to 34.3 kg/m2, median 28.3 kg/m2, IQR: 26.4-30.2 kg/m2. The study participants included 25 (10.4%) underweight, 121 (50.4%) normal weight, 64 (26.7%) overweight, and 30 (12.5%) obese patients. Of the study participants, 202 (84.2%) had only 1 episode of Covid-19, and 38 (15.8%) had more than 1 episode of Covid-19 before developing post-covid syndrome (PCS).

From the laboratory markers of the immunological profile, we analyzed Interleukin-2 (IL-2), Interleukin-5 (IL-5) using an enzyme-linked immunosorbent assay (ELISA) of a chromogenic substrate that binds antigens and antibodies to these cytokines, as well as the cytokines

Interleukin-6 (IL-6) and Interleukin-8 (IL-8) in serum in the first stages of the study, and IL-6 was again determined in order to assess systemic damage and inflammation. These interleukins are key mediators of the processes associated with inflammation and the cytokine storm in Covid-19. Thus, IL-2 is involved in the activation and proliferation of T-lymphocytes, which are important for maintaining cellular immunity; IL-5 regulates eosinophil function, which may be associated with inflammatory changes in the renal vascular system; IL-6 is one of the main pro-inflammatory mediators, the levels of which are significantly increased in severe Covid-19, associated with the development of a cytokine storm; IL-8 promotes the accumulation of neutrophils at the site of inflammation, which can lead to tissue damage and organ dysfunction.

Results. The most pronounced changes were observed in the level of IL-6, the average of which in patients in the main group was 25.8 pg/ml, which is 79.4% higher than the values in the control group (5.3 pg/ml, p<0.001). These data confirm the key role of IL-6 in systemic inflammation and kidney tissue damage in the post-Covid period. Significant differences were also found in the level of IL-2, IL-5 and IL-8. In patients with renal failure, the average level of IL-2 was 50.0 pg/ml, which is 31.6% higher than in the control group (34.2 pg/ml, p<0.001), the level of IL-5 increased by 24.1% (4.7 pg/ml versus 6.2 pg/ml, p=0.019). The increase in IL-8 levels reached 55.5% (15.3 pg/ml versus 6.8 pg/ml, p < 0.001), highlighting its role in maintaining the inflammatory process (Table 1).

Table 1.

Comparative analysis of immunological profile depending on the group of study participants

Indicators	Group		p
	Basic	Control	
IL-2 (pg/ml), Me [IQR]	50,0 [33,5; 57,2]	34,2 [22,0; 42,2]	p< 0,001*
IL-5 (pg/ml), Me [IQR]	6,2 [3,0; 10,7]	4,7 [2,3; 8,0]	p<0,019*
IL-6 (pg/ml), Me [IQR]	25,8 [16,5; 40,0]	5,3 [0,8; 11,4]	p< 0,001*
IL-8 (pg/ml), Me [IQR]	15,3 [10,1; 21,0]	6,8 [4,0; 10,2]	p< 0,001*

* - differences in indicators are statistically significant (p <0.05)

The results of the predictive analysis of the immunological profile in patients with post-COVID renal dysfunction confirmed the importance of cytokines as key markers of the risk of developing these complications. The most significant differences between the groups were found in the level of interleukin-6 (IL-6), the average of which was 25.8 pg/ml in the main group, which is 4.8 times higher than the value in the control group. (5.3 pg/ml, p <0.001). The predictive model for IL-6 showed high accuracy (AUC=0.894), sensitivity of 95.8% and specificity of 73.3%. With an increase in IL-6 levels by 1 pg/ml, the risk of developing kidney disease increased by 1.203 times. This emphasizes the importance of IL-6 as a leading predictor of inflammation and kidney tissue damage in the post-Covid-19 period. Significant differences were also noted in the level of other cytokines. The level of interleukin-2 (IL-2) in the main group was 46.2% higher (50.0 pg/ml versus 34.2 pg/ml, p<0.001), and an increase in its concentration by 1 pg/ml increased the risk of renal failure by 1.048 times. The level of interleukin-8 (IL-8) in the main group was 15.3 pg/ml, which is 2 times higher than the value in the control group (6.8 pg/ml, p <0.001). The predictive model for IL-8 showed accuracy with AUC=0.811 and sensitivity of 72.5%. The level of interleukin-5 (IL-5)

was also increased in patients in the main group (4.7 pg/ml versus 6.2 pg/ml, p = 0.019), but its predictive value was moderate with AUC=0.588.

Conclusion. The prevalence of renal complications in patients with Covid-19 in Khorezm region was 22.5%. For every 3 patients with post-covid syndrome, 1 renal dysfunction occurred (rxy=0.994; p=0.067). In patients with post-covid renal failure, a significant decrease in GFT to 69.2 ml/min/1.73 m^2 compared to 96.4 ml/min/1.73 m^2 in the control group (p<0.001), an increase in C-reactive protein (mean 3.8 mg/dl vs. 2.3 mg/dl, p<0.001), proteinuria (149.6 mg/dl vs. 99.8 mg/dl, p<0.001) and albuminuria (30.7 mg/g vs. 5.5 mg/g, p<0.001);

In the main group, the level of IL-6 was higher by 79.4% (mean 25.8 pg/ml versus 5.3 pg/ml, p < 0.001), IL-8 by 55.5% (15.3 pg/ml versus 6.8 pg/ml, p < 0.001), IL-2 by 31.6% (50.0 pg/ml versus 34.2 pg/ml, p < 0.001), IL-5 by 24.1% (6.2 pg/ml versus 4.7 pg/ml, p=0.019). This confirms the hypothesis of the involvement of characteristic cytokines in the mechanism of renal dysfunction after Covid-19 (p < 0.05); IL-6 and IL-8 cytokines were the most informative predictors of the risk of post-Covid-19 renal dysfunction, indicating the importance of systemic inflammation in its pathogenesis (p<0.001). These data can be used to develop more accurate prediction methods and individualized approaches to prevent and treat complications.

Used literature:

1. Huang C., Huang L., Wang Y., Li X., Ren L., Gu X., Kang L., Guo L., Liu M., Zhou X., et al. 6-month consequences of Covid-19 in patients discharged from hospital: A cohort study. Lancet. 2021;397:220–232.
2. Jena G.K., Patra C.N., Sruti J. Coronaviruses—drug discovery and therapeutic options. Elsevier, 2022, pp. 37–48. 2022, 15(5), 327-347.
3. Long J.D., Strohbehn I., Sawtell R., Bhattacharyya R., Sise M.E. Covid-19 Survival and its impact on chronic kidney disease. Transl. Res. 2022;241:70–82.
4. Rabb H. Kidney diseases in the time of COVID-19: major challenges to patient care. J Clin Invest. 2020;130:2749-2751.
5. Sun J, Zhu A, Li H, et al. Isolation of infectious SARS-CoV-2 from urine of a COVID-19 patient. Emerg Microbes Infect. 2020;9:991-993.
6. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al.. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet. (2020) 395:507–13.
7. Hope A.A., Evering T.H. Postacute Sequelae of Severe Acute Respiratory Syndrome Coronavirus 2 Infection. Infect. Dis. Clin. N. Am. 2022;36:379–395.
8. Davis H.E., McCorkell L., Vogel J.M., Topol E.J. Long COVID: Major findings, mechanisms and recommendations. Nat. Rev. Microbiol. 2023;21:133–146.

UDC: 616-08-035

NEW OPPORTUNITIES IN THE TREATMENT OF NEUROMUSCULAR DISEASES.

Kasymova S. A., Kayumova N.K., Yoqubov D.Y., Madaminov B.R.
Andijan State Medical Institute

Abstract . *Hereditary neuromuscular dystrophies are a group of genetically determined disorders primarily affecting skeletal muscles, leading to progressive muscle weakness and degeneration. These conditions are characterized by a non-inflammatory nature, distinguishing them from other muscular diseases associated with autoimmune or infectious processes. A hallmark feature of these dystrophies is their predictable pattern of onset, typically manifesting at a specific age depending on the type of dystrophy. The muscle involvement is symmetrical, meaning that both sides of the body are affected in a similar manner, and the disease follows a gradual but relentless progression, eventually leading to significant motor impairment. Currently, extensive research is being conducted to explore potential therapeutic strategies aimed at improving the quality of life for affected individuals. The primary objectives of these efforts are to alleviate symptoms, preserve motor function for as long as possible, and slow disease progression in order to delay severe disability and extend life expectancy. This article provides a comprehensive review of the clinical manifestations, diagnostic approaches, and available treatment modalities for progressive muscular dystrophies, highlighting recent advancements in the field and emerging therapeutic options.*

Keywords. *Progressive muscular dystrophies, metabolics, Duchenne myopathy, Herba-Roth myopathy, PMD*

NEYROMUSKULYAR KASALLIKLARNI DAVOLASHDA YANGI IMKONIYATLAR

Qosimova S.A., Qayumova N.K., Yoqubov D.Y., Madaminov B.R.
Andijon davlat tibbiyot instituti

Annotatsiya. Irsiy neyromuskulyar distrofiyalar – bu genetik jihatdan aniqlangan kasalliklar guruhi bo'lib, ular asosan skelet mushaklarini zararlaydi, natijada progressiv mushak zaifligi va degeneratsiya yuzaga keladi. Ushbu kasalliklar yallig'lanishsiz kechishi bilan tavsiflanadi, bu ularni autoimmun yoki infeksion jarayonlar bilan bog'liq boshqa mushak kasalliklaridan ajratib turadi. Mazkur distrofiyalarning muhim xususiyatlaridan biri – ularning muayyan yoshda boshlanishi, ya'ni kasallik turi bo'yicha aniq vaqt oralig'ida namoyon bo'lishidir. Mushaklarning zararlanishi simmetrik bo'lib, tananing ikki tomoniga bir xil ta'sir qiladi, kasallik sekin, ammo doimiy ravishda kuchayib boradi va oxir-oqibat harakat cheklanishiga olib keladi. Bugungi kunda ushbu kasalliklarning samarali davolash usullarini ishlab chiqishga qaratilgan tadqiqotlar faol olib borilmoqda. Ushbu tadqiqotlarning asosiy maqsadi kasallik simptomlarini yengillashtirish, harakat funksiyasini iloji boricha uzoqroq saqlab qolish va uning rivojlanish sur'atini sekinlashtirish hisoblanadi. Bu esa bemorlarga og'ir nogironlikka duchor bo'lish muddatini kechiktirish va umr davomiyligini uzaytirish imkonini beradi. Ushbu maqolada progressiv mushak distrofiyalarining klinik belgilari, diagnostika usullari va zamonaviy davolash yondashuvlari haqida batafsil ma'lumot beriladi, shuningdek, sohadagi so'nggi yutuqlar va istiqbolli terapiya yo'nalishlari ko'rib chiqiladi.

Kalit so'zlar. *Progressiv mushak distrofiyasi, metaboliklar, Dyushen miopatiyasi, Erba-Rot miopatiyasi, PMD.*

НОВЫЕ ВОЗМОЖНОСТИ В ЛЕЧЕНИИ НЕЙРОМЫШЕЧНЫХ ЗАБОЛЕВАНИЙ.

Касымова С.А., Каюмова Н.К., Ёкубов Д.Ё., Мадаминов Б.Р.
Андижанский государственный медицинский институт

Аннотация . Наследственные нервно-мышечные дистрофии – это группа генетически обусловленных заболеваний, поражающих преимущественно скелетные мышцы, что приводит к прогрессирующей мышечной слабости и дегенерации. Эти состояния характеризуются невоспалительным характером, что

отличает их от других мышечных заболеваний, связанных с аутоиммунными или инфекционными процессами. Одной из ключевых особенностей данных дистрофий является их предсказуемый возраст начала, который зависит от конкретного типа заболевания. Поражение мышц симметричное, то есть обе стороны тела страдают одинаково, а течение заболевания постепенное, но неуклонное, приводящее к значительному нарушению двигательной активности. В настоящее время ведутся активные исследования, направленные на поиск эффективных терапевтических стратегий, способствующих улучшению качества жизни пациентов. Основными целями этих исследований являются облегчение симптомов, сохранение двигательной функции как можно дольше и замедление прогрессирования заболевания, что позволяет отсрочить развитие тяжелой инвалидности и продлить жизнь больных. В данной статье представлен подробный обзор клинических проявлений, методов диагностики и современных подходов к лечению прогрессирующих мышечных дистрофий, а также рассмотрены последние достижения и перспективные терапевтические разработки в данной области.

Ключевые слова. *Прогрессирующие мышечные дистрофии, метаболики, миопатия Дюшена, миопатия Эрба-Рота, ПМД*

Introduction. Hereditary-degenerative diseases of the nervous system represent a diverse and complex group of disorders resulting from genetic mutations that disrupt normal cellular function. These conditions arise due to alterations in genetic information, leading to defects in the synthesis or function of specific polypeptides, structural proteins, or enzymes. The impact of these mutations varies depending on the role of the affected protein in cellular metabolism, ultimately giving rise to a spectrum of neurological and systemic impairments. The pathophysiology of these disorders is diverse, but several key mechanisms are commonly observed. In many cases, there is a deficiency or inactivation of critical enzymes, which impairs the breakdown, absorption, or synthesis of essential biochemical substances. This may lead to:

- Metabolic disruptions affecting vital physiological functions.
- Dystrophic changes within tissues, particularly in the nervous and muscular systems.
- Accelerated degradation of functionally important compounds, resulting in cellular damage and tissue degeneration. Conversely, some hereditary-degenerative diseases involve pathological accumulation of certain metabolites, which become deposited in various organs and tissues, progressively impairing their function. This phenomenon categorizes certain conditions as “storage diseases”, where excess accumulation of substances leads to progressive organ dysfunction and deterioration. Among the hereditary neurological disorders, particular attention is given to progressive muscular dystrophy (PMD). This emphasis stems from its high prevalence, the severity of clinical manifestations, and its devastating impact on children and young adults, often leading to early disability and a significantly reduced quality of life. Despite advancements in medical research, therapeutic options remain limited, underscoring the urgent need for innovative treatment approaches to manage these conditions more effectively. Progressive muscular dystrophies represent a group of diseases united by a number of common features, the main ones being the hereditary nature of the disease, muscular dystrophies to one degree or another, and a progressive nature. PMD is characterized by muscle weakness, muscle atrophy, and disorders of static and locomotive functions. Depending on the nature of the primary changes, it is conventionally distinguished between primary (myopathies) and secondary forms of progressive muscular dystrophies (denervation amnyotrophies - spinal and neural). [7].

The main clinical symptoms of myopathies are:

1. Muscle weakness is usually expressed in the proximal parts of the extremities and has a symmetrical character. Early signs of myopathies may include difficulty lifting a hand, getting up from a chair, or climbing stairs. Weakness of the gluteal muscles causes a rolling ("duck") gait, weakness of the back muscles - an increase in lumbar lordosis. In some cases, cranial muscle

(which manifests as ptosis, hypomimia, ophthalmoplegia, difficulty swallowing and speaking) and body muscles may be involved. Weakness in the distal part of the limbs is more characteristic of polyneuropathies, but can also be observed in some myopathies (myotonic dystrophy, distal muscular dystrophy, myositis).

Weakness of the neck extensors leads to the inability to keep the head in a vertical position ("hanging" head syndrome). Weakness of the extensors of the back leads to a forward tilt of the torso with the development of Camptocormia syndrome. Weakness of the respiratory muscles and torso muscles is usually accompanied by weakness of the neck and shoulder girdle muscles.

2. Muscle atrophy in myopathy is moderately pronounced and develops relatively late. Usually, it affects paretic muscles, but sometimes it is masked by fat deposits or the proliferation of connective tissue, which gives the impression of hypertrophy (pseudohypertrophy).

3. Tendon reflexes decrease proportionally to muscle weakness.

In the treatment of myopathies, first of all, it is necessary to influence metabolism, especially protein, vegetative innervation, and neuromuscular conduction[8,5].

Physical therapy: muscle groups that experience the greatest load are affected earlier and more severely; excessive muscle strain and especially their passive stretching contribute to an increase in serum creatine phosphokinase and myoglobin levels, which is a reflection of muscle tissue breakdown. Therefore, significant loads should be avoided.. On the other hand, physical exercises are important for avoiding excessive weight gain, which negatively affects respiratory function, motor activity, and complicates patient care. Many researchers emphasize the benefits of swimming. Passive extension movements in joints are necessary to prevent contractures. It is beneficial for patients to be in a vertical position (standing) as often as possible, which contributes to the improvement of respiratory and circulatory function, and prevents scoliosis. Deep and forced breathing increases the vital capacity of the lungs. Respiratory therapy: periodic artificial respiration first at night, and then during the day using a portable device is used in the development of chronic respiratory failure, which manifests as fatigue, lack of concentration, headache, frequent pulmonary infections. Orthopedic auxiliary devices are designed to provide not restrictive, but supportive action during movement. For example, the position of the foot should be adjusted so that the patient can walk and stand throughout the day. Orthopedic feet should prevent the formation of a pathological foot condition. Night tires are also used to prevent the formation of a "horse's foot," tall shoes when the foot is dangling, special corsets, and plaster frames that maintain correct posture while sitting, in cases of scoliosis and hyperlordosis. (10).

Psychopedagogical correction: pedagogical measures with such children, who in a number of cases are limited in movement, and sometimes are forced to lie in bed, unable to communicate with the children's collective, are of great importance. Naturally, their range of interests is narrowed, their character changes, they become gloomy, distrustful, depressed, and capricious. In these cases, it is necessary to organize individual classes. The teacher should, in addition to forming knowledge and skills in individual subjects of the program, pay attention to psychotherapy, raising the mental tone of the sick child (11).

To improve metabolism, metabolics from modern preparations are used, the main mechanism of which is the activation of mitochondrial energy systems with an increase in ATP production under hypoxic conditions. .This group of drugs normalizes protein and fat metabolism, restores blood alkaline reserve, suppresses the formation of keto acids and anaerobic glycolysis, reduces the degree of lactic acidosis, and also increases motor activity and increases tolerance to physical

exertion, while contributing to the economical use of glycogen and an increase in its reserves in the liver, slows down the breakdown of protein and carbohydrate molecules.

Purpose of the study is to study the effectiveness of metabolites in the treatment of hereditary neuromuscular dystrophy.

Materials and research methods: A study was conducted on 30 pediatric patients aged 5 to 17 years who were admitted to the neurology department of a regional children's clinical hospital. Among them, 24 (80%) were boys, and 6 (20%) were girls. Patients were categorized based on age, disease onset, and clinical subtype.

1). Distribution of Diagnoses by Gender and Onset of Symptoms: Among 24 boys: 10 patients were diagnosed with Duchenne muscular dystrophy (DMD); 14 patients were diagnosed with Herba-Roth myopathy; Among 6 girls: all were diagnosed with Herba-Roth myopathy.

2). The age of disease onset varied depending on the subtype: Duchenne muscular dystrophy (DMD): Symptoms appeared between 3 and 5 years of age.; Herba-Roth myopathy in boys: Onset occurred between 12 and 14 years of age; Herba-Roth myopathy in girls: Symptoms first appeared at 13–14 years of age;

3). Motor function was assessed using the MRC (Medical Research Council) Paralysis Scale (1976) to determine muscle strength. The distribution of scores among patients was as follows: 5 points (normal muscle strength): 0 patients; 4 points (mild weakness): 12 patients; 3 points (moderate weakness): 9 patients; 2 points (severe weakness): 9 patients;

4). Neurological and Muscular Findings: all patients exhibited muscle hypotonia (reduced muscle tone); Hyporeflexia (diminished reflexes) was present in all cases, with greater severity in the lower limbs.

Results and discussion. The study results demonstrated that complex therapy, including metabolic support, had a partial positive effect on muscle strength in some patients.

- Among 18 patients who initially had muscle strength of 2–3 points, reassessment revealed a moderate improvement, with muscle strength increasing to 3–4 points on the MRC (Medical Research Council) Paralysis Scale.
- In the remaining 12 patients, no significant changes in muscle strength were observed upon repeated evaluation using the MRS scale. These findings suggest that while some patients responded positively to treatment, others showed limited or no improvement, highlighting the variable effectiveness of therapy in progressive muscular dystrophies.

Conclusions. The findings of this study highlight the potential benefits of incorporating metabolic therapy into the comprehensive management of progressive muscular dystrophy (PMD). While the disease remains progressive in nature, the use of this group of drugs as part of a multimodal therapeutic approach may contribute to improvements in muscle strength and functional capacity in some patients. To ensure an objective assessment of treatment efficacy, the use of muscle strength evaluation scales, such as the Medical Research Council (MRC) scale, is recommended. These tools enable systematic monitoring of disease progression and provide valuable insights into patient response to therapy, allowing for individualized treatment adjustments. Despite the progressive course of PMD, the importance of comprehensive therapy cannot be overstated. A combination of pharmacological intervention, physical therapy, rehabilitation strategies, and supportive care is essential in slowing functional decline, prolonging mobility, and improving quality of life. Although current treatments do not halt disease progression, they play a critical role in delaying severe disability and optimizing patient well-being,

underscoring the need for continued research and therapeutic advancements in the field of neuromuscular disorders.

Used literature:

1. E.I.Gusev, A.N.Kanavalov, V.I.Skvorsova Neurology and Neurosurgery 4th edition 2015
2. N.P. Bochkov, V.P. Puziryov, S.A. Smirnikhina Medical Genetics 2021
3. Sychev D.A., Ramenskaya G.V., Clinical Pharmacogenetics.

UO'K: 616-08-035

REGMATOGEN TO'R PARDA KO'CHISHINI JARROHLIK YO'LI BILAN DAVOLASHDAN SO'NG QAYTA KO'CHISHINING TAKRORLANISHI VA SABABLARINI TAHLILI

Karimova M.H., Xusanbaev X.Sh., Xikmatullayev B.X.
Respublika Ixtisoslashtirilgan Ko'z Mikroxirurgiya
Ilmiy- Amaliy Tibbiyot Markazi

Annotatsiya: Butun dunyo bo'yicha regmatogen to'r parda ko'chishi, vitreoretinal patalogiyalar orasida eng ko'p uchraydigan va ko'rlikka eng tez olib boruvchi hastaliklardan biri bo'lib, davo choralari asosan jarrohlik amaliyotlari orqali amalga oshiriladi. Bundan ko'rinib turiptiki, davolash jarayonida bemorlarda sodir bo'ladigan funksional o'zgarishlardan tashqari, yuzaga kelishi mumkin bo'lgan asoratlar ham e'tiborga loyiqdir.

Tadqiqot maqsadi: Regmatogen to'r parda ko'chishida o'tkaziladigan vitreoretinal jarrohlik amaliyotidan so'ng bemorlarda kuzatiladigan qayta ko'chish holatlarini va olib keluvchi omillarni o'rganish.

Tadqiqot materiallari va usullari: To'r parda regmatogen ko'chishi tashxisi qo'yilgan jami 150 ta bemorlar (164 ko'z) tekshirildi. Barcha ko'riklar Respublika Ixtisoslashtirilgan Ko'z Mikroxirurgiyasi Ilmiy-Amaliy Tibbiyot Markazida (RIKMIATM) da 2024 yil mobaynida o'tkazildi. Barcha bemorlar standart va maxsus oftalmologik tekshiruvdan va jarrohlik amaliyotidan o'tkazildi.

Tadqiqot natijalari: Jarrohlik amaliyotidan so'ng, 26 ta holatda bemorlarda to'r pardaning qayta ko'chishi yoki ko'tarilish holatlari kuzatildi. Bu bemorlarda to'r pardaning qayta ko'chishga olib keluvchi omillar deb, to'r pardadagi proliferativ jarayonning yuqoriligi, to'r parda yoriqlarining pastki qutbda joylashganligi va bemorlarning jarrohlik amaliyotidan keying ilk davrda majburiy holatni saqlay olmasligi deb baholandi.

Xulosa: To'r pardada proliferativ jarayon faolligi yuqori bo'lgan holatlarda va to'r parda yoriqlari pastki qutbda joylashgan bemorlarda, ko'z ichi tamponadasi uchun silikon moyini qo'llash va bemorlarga majburiy holatni qat'iy nazorat qilish kerak.

Kalit so'zlar: *Regmatogen to'r parda ko'chishi, proliferativ vitreoretinapatiya, tamponada, majburiy holat, vitreoretinal jarrohlik*

ANALYSIS OF THE FREQUENCY AND CAUSES OF RELAPSES AFTER INTRAVITREAL SURGICAL TREATMENT IN CASE OF REGMATOGENOUS RETINAL DETACHMENT

Karimova M.H., Xusanbaev X.Sh., Xikmatullayev B.X.
Republican Specialized Scientific and Practical Medical Center for Eye Microsurgery.

Abstract: Regmatogenous retinal detachment is one of the most widespread vitreoretinal pathologies and one of the main causes of rapid onset of blindness worldwide. The treatment of this pathology is primarily carried out through surgical interventions. In this regard, along with the functional changes that occur in patients during treatment, attention should also be paid to possible complications.

Aim: To investigate the cases and factors contributing to repeated retinal detachment observed in patients after vitreoretinal surgery performed for regmatogenous retinal detachment.

Materials and methods: In 2024, 152 patients (164 eyes) with a diagnosis of regmatogenous retinal detachment were examined at the Republican Specialized Scientific and Practical Medical Center for Eye Microsurgery (RSSPMCEM). The patients underwent both standard ophthalmological examination and specialized examination, as well as surgical intervention.

Results: In 26 cases after surgery, patients experienced repeated detachment or elevation of the retina. The main factors causing repeated retinal detachment include a high level of proliferative process in the retina, the location of the retinal tear at the lower pole, and the inability of patients to maintain proper posture during the early postoperative period.

Conclusion: In cases with high activity of the proliferative process in the retina and in patients with retinal tears located at the lower pole, it is recommended to use silicone tamponade for intraocular tamponade and to carefully monitor the patient's position in the early postoperative period.

Keywords: *regmatogenous retinal detachment, proliferative vitreoretinopathy, tamponade, forced posture, vitreoretinal surgery*

АНАЛИЗ ЧАСТОТЫ И ПРИЧИН РАЗВИТИЯ РЕЦИДИВОВ ПОСЛЕ ИНТРАВИТРЕАЛЬНОГО ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ПРИ РЕГМАТОГЕННОЙ ОТСЛОЙКЕ СЕТЧАТКИ

Каримова М.Х., Хусанбаев Х.Ш., Хикматуллаев Б.Х.

Республиканский специализированный научно-практический медицинский центр микрохирургии глаза.

Аннотация: Регматогенная отслойка сетчатки является одной из самых распространенных витреоретинальных патологий и одной из основных причин быстрого наступления слепоты по всему миру. Лечение этой патологии преимущественно осуществляется с помощью хирургических вмешательств. В связи с этим, наряду с функциональными изменениями, возникающими у пациентов в процессе лечения, также следует обратить внимание на возможные осложнения.

Цель исследования: Исследование случаев и факторов, способствующих повторному отслоению сетчатки, наблюдаемых у пациентов после витреоретинальной хирургической операции, проведенной при регматогенной отслойке сетчатки.

Материал и методы исследования: В 2024 году в Республиканском специализированном научно-практическом медицинском центре микрохирургии глаза(РСНПМЦМГ) было обследовано 152 пациентов (164 глаза) с диагнозом регматогенная отслойка сетчатки. Пациенты прошли как стандартное офтальмологическое обследование, так и специальное обследование, а также хирургическое вмешательство.

Результаты исследования: В 26 случаях после операции у пациентов наблюдались повторное отслоение или подъемы сетчатки. Основными факторами, вызывающими повторное отслоение сетчатки, являются высокий уровень пролиферативного процесса в сетчатке, расположение разрыва сетчатки на нижнем полюсе и неспособность пациентов поддерживать правильное положение в течение раннего послеоперационного периода.

Заключение: В случаях с высокой активностью пролиферативного процесса в сетчатке и у пациентов с разрывами сетчатки, расположенными на нижнем полюсе, рекомендуется применять силиконовую тампонаду для внутриглазной тампонады и тщательно контролировать положение пациента в раннем послеоперационном периоде.

Ключевые слова: *регматогенная отслойка сетчатки, пролиферативная витреоретинопатия, тампонирование, вынужденная положения, витреоретинальная хирургия.*

Dolzarbligi. Regmatogen to’r parda ko’chishi (RTK) jiddiy patologik holat bo’lib, zudlik bilan jarrohlik davolanishini talab qiladi. Jarrohlik amaliyotisiz to’r parda ko’chishi aksar holatlarda to’liq va qaytmas ko’rlikka olib keladi [2].

To’r parda ko’chishining epidemiologiyasida kasallik holatlari soni 100 000 aholiga 6,3 dan 24,4 tagacha to’g’ri keladigan darajada ekanligini aniqlangan[3].

To’r parda ko’chishi asosan miopik refraksiyaga ega (40-82% holatlar) va afakiya holatidagi ko’zlarda (30-50% holatlar) rivojlanadi. RTKda maqsadli va o’z vaqtida davolanmaslik, to’liq ko’rlikka olib kelishi mumkinligini ta’kidlash muhim [1]. Davolanish uchun turli xil jarrohlik usullar qo’llaniladi, jumladan vitrektomiya va vitreal

bo'shliqni silikon moylari yoki gaz-havo aralashmalari bilan tampon qilish. Davolash usuli jarrohning salohiyati va patalogik jaroyonning kechish faolligiga bog'liqdir [1].

Tadqiqot maqsadi: Regmatogen to'r parda ko'chishida o'tkaziladigan vitreoretinal jarrohlik amaliyotidan so'ng bemorlarda kuzatiladigan qayta ko'chish holatlarini va olib keluvchi omillarni o'rganish.

Tadqiqot materiallari va usullari: To'r parda regmatogen ko'chishi tashxisi qo'yilgan jami 150 ta bemorlar (164 ko'z) tekshirildi. Barcha ko'riklar Respublika Ixtisoslashtirilgan Ko'z Mikroxirurgiyasi Ilmiy-Amaliy Tibbiyot Markazida (RIKMIATM) da 2024 yil mobaynida o'tkazildi. Bemorlarning yoshi 11 dan 72 gacha bo'lib, o'rtacha 48,2±11,21 ga teng bo'ldi. 91 ta bemor ayol jinsiga(55,5%), 73 ta bemor esa erkak jinsiga(44,5%) mansub bo'ldi. Barcha bemorlarda avval standart va maxsus oftalmologik tekshiruvlardan o'tkazildi va so'ngra jarrohlik amaliyotiga olindi. Jarrohlik amaliyoti vaqtida 108 ta bemorga silikon moyi yordamida tamponada qo'llanilgan bo'lsa, 56 ta bemorlarga havo-gaz aralashmasi qo'llanildi. Bemorlar ko'zlarining qolgan klinik holatlari 1-jadval ko'rsatildi.

Jadval 1

Bemorlarning jarrohlik amaliyotidan avvalgi ko'rsatkichlari

RTK xususiyati	*Ko'zlar soni*
RTK tarqalishi: a) 1 kvadrantda (lokal) b) 2,3 kvadrant (subtotal) c) 4 kvadrant (total)	 26 (15,85%) 52 (31,7%) 86 (52,44%)
Proliferativ vitretinalpatalogiya darajasi: • A • B • C • D	 37 (22,56%) 43 (26,22%) 51 (31,1%) 33 (20,12%)
Ko'z ichki bosimi (pnevmotonometriya) • 10 mmHg dan past • 10 mmHg dan yuqori	 54 (32,9%) 110 (67%)
Xoriodea ko'chishi	16 (9,75%)
Gipermetropik yoki emmetropik refraksiya	31 (18,9%)
Miopik refraksiya darajasi: • yengil • o'rta • yuqori	 27 (16,4%) 39 (23,7%) 67 (40,8%)

Jarrohlik amaliyotidan so'ng to'r pardadagi yoriqlarning joylashuviga ko'ra, bemorlarga majburiy holat buyurilib, bemorlardan buyurilgan holatni 1 kundan 3-kungacha saqlash buyurildi. Bunda 1-kun asosan bemorlarga pastga qarash buyurilgan bo'lsa, 2-kundan boshlab xos tegishli holatlar buyurildi. Bemorlarning 20,1% (33 ta) artifakiya holatida bo'lsa, qolgan qismi tabiy gavharlarga ega edi. Bemorlarni jarrohlik amaliyotidan so'ng 1-, 7-, 30- va 90 kunlarda kuzatildi va hozirgi kungacha kuzatilib kelinmoqda.

Tadqiqot natijalari: Jarrohlik amaliyotidan so'ng, 26 ta holatda bemorlarda to'r pardaning qayta ko'chishi yoki ko'tarilish holatlari kuzatildi. Bu bemorlarning 11 tasida havo-gaz aralashmasi, 15 tasida silikon moyi yordamida tampoda qilingan bo'lib, jarrohlik amaliyotidan so'ng ko'z ichki bosimi gipotonik yoki gipertonik ho-latlarga o'tishi kuzatilmagan. Bemorlarning qo'shimcha ma'lumotlari 2-jadvalda ko'rsatildi.

Jadval 2

Qayta to'r parda ko'chishi olib kelgan omillar

Qayta to'r parda ko'chishiga olib kelgan omillar	*Ko'zlar soni*
Koagulyatsion to'siq yoki eski yoriq ochilishi	18 (69,2%)
Yangi yoriq hosil bo'lishi	8 (30,7%)
PVR darajasi yuqoriligi(C,D)	22 (84,6%)
To'r parda qisman ko'tarilishi	7 (27%)
To'r pardadagi yirtilish pastki qutbda	19 (73%)
Psixo-somatik noqislik sababga ko'ra buyurilgan majburiy holat ta'minlanmadi deb xisoblangan	17 (65,4%)

To'r pardaning qayta ko'chishiga olib kelgan 1-sabab deb bemorlar ko'zida PVR darajasining yuqoriligi (C, D daraja) deb baholandi(22 ta holat). Bu bemorlarda qayta o'tkazilgan vitreoretinal jarrohlik vaqtida PVR kuchaygan sohalarda qisman yoki to'liq retinotomiya amaliyoti o'tkazildi va to'r parda to'liq yotqilizildi. O'z navbatida PVR jarayonining faollashuvi to'r pardada eski yoriqlarni qayta ochilishi bilan bir qatorda yangi yoriqlarni hosil qilganligi ham kuzatildi.

2-asosiy sabab deb to'r pardadagi yoriqlarning pastki qutbda joylashganligi deb baholandi(19 ta holat). Pastki qutbdan boshlangan to'r parda ko'chishi odatda asta-sekin namoyon bo'lib, bu sohadagi proliferativ jarayonning kuchayishiga va to'r pardoning sezilarli darajada deformatsiyasiga olib keladi. Bu esa o'z navbatida jarrohlik amaliyotining qiyin kechishi va jarrohlikdan keyingi davrda bemorni buyurilgan majburiy holatni qat'iy nazorat qilishini talab qiladi. Har qanday tamponada vositasi asosiy itarish kuchini yuqoriga yo'naltirishi natijasida to'r pardaning pastki qutbida xorioretinal addgeziya jarayoni sust kechishi, aksar holatlarda esa pastki qismda yangi yoriqlar hosil bo'lishi mumkinligi aniqlandi.

3-asosiy sabab deb (17 holat) bemorlarning jarrohlik amaliyotidan keying ilk davrda buyurilgan majburiy holatni saqlamaganligi ko'rsatilgan bo'lib, buning natijasida subretinal suyuqlikning pigment epiteli orqali yetarli darajada so'rilmasligiga olib keldi. Natijada to'r parda va pigment epiteliy orasida addgeziya va lazer koagulyantlar yetarli darajada hosil bo'lmadi.

To'r pardaning qayta ko'chishi yoki ko'tarilishi jarrohlik amaliyotidan so'ng ilk 3 oylik davr ichida ko'proq sodir bo'lganligi, jarrohlarni bu davr ichida bemor bilan o'zaro aloqani saqlashga turtki beradi.

Jadval 3

Qayta to'r parda ko'chishining muddatga bog'liqligi

Qayta ko'chish muddati	*Ko'zlar soni*
14 kun – 1 oy	13 (50%)
1 – 3 oy	8 (30,76%)
3 – 6 oy	3 (11,53%)
6 – 12 oy	2 (7,7%)

Xulosa: To'r pardada o'tkazilgan jarrohlik amaliyotidan so'ng qayta ko'chishi asosan unda kechayotga proliferativ jarayonning yuqori faolligi bilan bog'liq bo'lib, bunday holatlarda vitreoretinal jarroh iloji boricha silikon moyli tamponada usulidan foydalanishi va zarurat bo'lgan hollarda esa retinotomiya amaliyotini qo'llashi maqsadga muvofiq deb baholandi. Bundan tashqari to'r pardadagi yoriqlarning pastki qutbda joylashgan bemorlarda tamponada samarasini oshirish uchun ularga qat'iy majburiy holatni buyurishni taqazo etadi va silikon tamponada usulini qo'llash maqsadga muvofiq deb baholandi. Kuzatilishi mumkin bo'lgan asoratlarni oldini olish maqsadida, bemorlarni jarrohlik amaliyotidan keyingi ilk 3 oylik davr

mobaynida
imkon qadar ko'proq nazorat qilish tavsiya etiladi.

Foydalanilgan adabiyotlar:

1. Шкворченко Д.О., Хрисанфова Е.С., Узунян Д.Г. "Хирургическое лечение регматогенной отслойки сетчатки с применением воздушной и газовоздушной тампонады" Офтальмохирургия № 1, 2023 DOI: https://doi.org/10.25276/0235-4160-2023-1-25-30
2. Згоба Марьяна Игоревна, "Интраоперационная эндолазеркоагуляция с оптимизироваными параметрами воздействия в хирургии регматогенной отслойки сетчатки" Диссертационная работа, Москва 2018, OAI-PMH ID: oai:eyepress.ru:sbornik860
3. Mitry D., Charteris D.G., Fleck B.W. et al. The epidemiology of rhegmatogenous retinal detachment: geographical variation and clinical associations // Br. J. Ophthalmol. - 2010. - Vol. 94. - P.678-684.

UDC: 616-08-035

TREATMENT OF CHRONIC RECURRENT APTHOUS STOMATITIS

Kakhramonova I.I.., Rakhmanov O.R.
Medicine of the Kimyo International University in Tashkent

Annotation. Any form of stomatitis in children and adults is an urgent problem of modern medicine. As a result, damage to the mucous membrane of the oral cavity is accompanied by complications, since this pathology can occur with high fever, pain, chills and redness.

Key words: *stomatitis, treatment, stomatitis causes.*

SURUNKALI AFTOZ STOMATITNI DAVOLASH USULLARI

Qahramonova I.I., Raxmanov O.R.
Kimyo Xalqaro Universiteti , Toshkent

Annotatsiya. Bolalar va kattalardagi stomatitning har qanday shakli zamonaviy tibbiyotning dolzarb muammosi hisoblanadi. Og'iz bo'shlig'ining shilliq qavati shikastlanish oqibatida, boshqa tizim va organlarning jiddiy oqibatlari va disfunksiyalarga olib keladi, chunki ushbu patologiya yuqori harorat, og'riq va qizarish bilan kechishi mumkin.

Kalit so'zlar: stomatit, aftoz stomatit, davolash

ЛЕЧЕНИЕ ХРОНИЧЕСКОГО РЕЦИДИВИРУЮЩЕГО АФТОЗНОГО СТОМАТИТА

Кахраманова И.И., Рахманов О.Р.
Международный университет Киме, г. Ташкент

Аннотация. Любые формы стоматита у детей и взрослых является актуальной проблемой современной медицины. Вследствие поражение слизистой оболочки ротовой полости, сопровождается с осложнениями, так как данная патология может протекает с высокой температурой, болью, ознобом и покраснением.

Ключевые слова: *стоматит, афтозный стоматит, лечения, причины.*

Stomatitis is an inflammation of the oral mucosa caused by endogenous and exogenous factors, which can affect the mucous membrane of the cheeks and lips, palate, tongue, bottom of the mouth and gums, in other words, the entire oral cavity. The most common causes of vesicles and ulcers on the oral mucosa are trauma, infections, autoimmune processes, and tumors. The risk of developing stomatitis appears with a decrease in immunity, against which bacterial, infectious infection of the body occurs. Various systemic diseases are also risk factors: gastrointestinal disorders, hormone problems, anemia, including diabetes mellitus. As we see, there are many reasons, as the source tells us [1]. Rashes on the mucous membrane can be diverse, which correspond to the skin elements, and they are based on an assessment of the size and nature of the rashes. There are:

— spots (flat and > 1 cm);
— macula (flat and < 1 cm);
— papules (palpable and < 1 cm);
— plaques (palpable and > 1 cm).

In particular, bulls and vesicles are used to describe cavities filled with exudative fluid.

The highest frequency of stomatitis and the severity of its course are observed in children. Most often, it occurs as an acute infectious disease: acute onset, an increase in body temperature to 38-39 ° C; severe general condition, intoxication phenomena. Ulcers are localized on the entire surface of the oral mucosa and on the tongue. The main complaint of patients in this case is pain when eating, talking and even at rest, there is strong salivation, a sharp unpleasant odor from the mouth. During the examination, we can observe changes in the blood – an increase in white blood cells (leukocytosis) and an increase in ESR – the rate of erythrocyte sedimentation [2]. A complex of therapeutic measures is used in the treatment of this pathology. This complex should be built taking into account the variety of clinical symptoms in CT, the nature of concomitant diseases and symptoms, laboratory tests and the age of patients. Important criteria for evaluating the effectiveness of the treatment include the composition of the microbial flora of saliva, phagocytic activity of leukocytes. Treatment of stomatitis includes medical and surgical methods for severe forms. General treatment includes desensitizing therapy, vitamin therapy, immunomodulatory therapy, and medications – antibacterial and antiseptic drugs are most often used, including medications that normalize the intestinal microflora [3]. According to research [4], at the Department of Pediatric Therapeutic Dentistry, Tashkent State Dental Institute (TSSI), studies were conducted among people with suspected HRA. This study involved 20 patients with suspected stomatitis. Of these, 11 male and 9 female patients aged 25 to 45 years with HRA. The subjects were divided into 2 groups: 1-11 people, in this group, pumpkin seed oil was prescribed for complex topical treatment. In group 2, there were 9 individuals who were recommended traditional therapy. This diagnosis was established based on the symptomatic data and the characteristic clinical picture of the disease. The hygienic condition of the oral cavity was assessed before the application of treatment, at the end of the 7-day course of treatment and 2 weeks after the start of treatment using the Green-Vermillion index. The patients were examined for bacteriological examination to identify bacterial and fungal flora [5]. All patients underwent local treatment: elimination of local factors, oral hygiene and oral sanitation. The patients also took multivitamins and desensitizing agents. They gave recommendations on the normalization of nutrition. The 1st group was treated with medication, with pumpkin seed oil. Pumpkveol is a complex preparation containing biologically active substances obtained from pumpkin seeds, which acts as an anti–inflammatory and cytoprotective effect when applied topically [6].

The authors [7] considered it appropriate to include a topical immunomodulatory drug in the complex treatment of chronic recurrent aphthous stomatitis. For example, Imudone, which was prescribed one tablet 7-8 times a day for 1-2 weeks (depending on severity), followed by preventive courses every 5-6 months, one tablet five times a day for 10 days. A positive result was achieved 1-2 days faster than in patients who did not take immunomodulating drugs.Non-medicinal methods of treating chronic stomatitis, in particular hyperbaric oxygenation, are widely used in various fields of medicine. In the treatment of this pathology, HBO therapy gives anti-inflammatory, decongestant effects, which indicates a faster treatment of CHD [8]. According to the author [9], there is also a traditional local therapy for chronic stomatitis, which consists in: 1) application anesthesia with a spray of 10% lidocaine solution; 2) thorough mouthwash with 0.06% chlorhexidine solution; 3) applications to aphthae with trypsin solution; 4) applications of 1% sodium mephenaminate solution (anti-inflammatory drug) on locusmorbi; 5) lubrication of the cleaned surface of the aphta with carotolin.

Prevention of HRA primarily consists in the correct and timely diagnosis and in choosing a more rational method of treating the pathology of the following systems: gastrointestinal tract (GIT), nervous, endocrine systems and other concomitant diseases. At the same time, it is necessary to eliminate the foci of chronic oral infection. It is necessary to observe a strict regime of rational nutrition: rich in proteins, minerals and vitamins, and observe the rules of oral hygiene. The most important thing is to avoid self-medication and polypragmasy, that is, the independent use of several medications in treatment [10].

In conclusion, it should be noted that currently there is no single way to treat HRA. It is necessary to take into account concomitant somatic diseases, the state of immunological reactivity, the severity of the disease, and the stages of development. Incorrect choice of treatment method, drug selection, lack of an individual approach to each form and degree of the disease leads to an increase in relapses. One of the main approaches in the treatment of aphthous stomatitis is a proper diet: the use of spicy, spicy, bitter foods and alcohol is prohibited. The prognosis of the disease is favorable, but with incorrect diagnosis or improper self-treatment, the disease becomes resistant to therapy, and it causes complications.

Used literature:

1. Mavrutenkov V.V. (2015). Viral stomatitis. Child's health, (3 (63)), 63-68.
2. APHTHOUS STOMATITIS. Medical nurse, (5), 21.) (2015).
3. Dzhaleshev.K.S. (2011). Chronic recurrent aphthous stomatitis. Bulletin of Surgery of Kazakhstan, (3 (27)), 105-106.
4. Abbasova D.B., & Utesheva I.Z. (2018). FEATURES OF TREATMENT OF CHRONIC RECURRENT APHTHOUS STOMATITIS. Forum of Young Scientists, (3 (19)), 9-12.
5. Borovsky E.V. Therapeutic dentistry. Moscow: Medical Information Agency, 2011. 840 p.
6. Therapeutic stomatology: a textbook in 3 hours. 3. Diseases of the mucous membrane of the mouth / edited by G.M. Barer. — M.: GEOTAR-Media, 2010. 256 p.
7. Yoshiev A.M., Azimbaev N.M., Kurmanbekov N.O. Complex treatment of chronic recurrent aphthous stomatitis using blue light. Bulletin of Osh State University, 2015. No. 3. pp. 120-123.
8. Azimbayev Nurlanbek Mukhtaralievich (2018). Diagnosis and treatment of chronic recurrent aphthous stomatitis of the oral cavity (literature review). Science, education and culture, (8 (32)), 43-53.
9. Khoruzhaya R.E. Local treatment of chronic recurrent aphthous stomatitis with argoderm / R.E. Khoruzhaya, L.L. Tatarenko, E.S. Tsygankova // Nutrition experimentalno1 ta kttchno1 meditsini, 2013. Vip. 17. Vol. 2. pp. 314-318.
10. Gul U., Kilig A., Genul M., Chakmak S.K., Bayis S.S. Clinical aspects of warty epidermodysplasia and literature review. International Journal of Dermatology, 2007; 46:1069-72.

UDC: 616-071.33/.34

MECHANISMS OF HIV-1 SUPPRESSION MEDIATED BY INTERFERON-STIMULATED MX2, IFNM1, AND ADAR1 GENES

Kadirov Zh.F.
Samarkand State Medical University

Rezume. Human immunodeficiency virus 1 continues to be a significant global threat despite advances in antiretroviral therapy. This article discusses the molecular mechanisms of the cellular response to HIV1, particularly the role of interferon-mediated pathways in limiting viral replication. The study of the expression of genes MX2, IFNM1, and ADAR1 revealed that they play a crucial role in the antiviral immune response, influencing the control of HIV1 replication.

Keywords: *MX2, IFNM1, ADAR1, inhibition, HIV1*

OIV-1 INGIBIRLANISHINI INTERFERON STIMULLOVCHI GENLAR MX2, INFM1, ADAR1 GENLARI ORQALI BOSHQARILISH MEXANIZMI

Kadirov J.F.
Samarqand davlat tibbiyot universiteti

Rezume. Inson immunotanqisligi virusi 1 antiretrovirusli davolashda erishilgan yutuqlarga qaramay, global xavf tug'dirayotgan jiddiy muammo bo'lib qolmoqda. Ushbu maqolada OIV1ga qarshi immunitet javobining molekulyar mexanizmlari, xususan, virus ko'payishini cheklashda interferon oraliq mexanimlar ahamiyati yoritilgan. MX2, IFNM1 va ADAR1 genlarining ekspressiyasini o'rganish, ularning antivirusli immun javobda muhim rol o'ynashini va OIV1 ko'payishini nazorat qilishda ta'sir ko'rsatishini ko'rsatdi.

Kalit so'zlar: *MX2, IFNM1, ADAR1, ingibirlanish, OIV1*

МЕХАНИЗМЫ ПОДАВЛЕНИЯ ВИЧ-1, ОПОСРЕДОВАННЫЕ ИНТЕРФЕРОН-СТИМУЛИРУЕМЫМИ ГЕНАМИ MX2, IFNM1 И ADAR1

Кадыров Д.Ф.
Самаркандский государственный медицинский университет

Резюме. Вирус иммунодефицита человека 1 остается серьезной проблемой, представляющей глобальный риск, несмотря на прогресс в антиретровирусном лечении. В этой статье рассматриваются молекулярные механизмы иммунного ответа на ВИЧ-1, в частности важность промежуточных механизмов интерферона в ограничении репликации вируса. Исследования экспрессии генов MX2, IFNM1 и ADAR1 показали, что они играют важную роль в противовирусном иммунном ответе и влияют на контроль репликации ВИЧ-1.

Ключевые слова: *MX2, IFNM1, ADAR1, ингибирование, ВИЧ1.*

The human immunodeficiency virus HIV 1 continues to be one of the main global threats to health, despite advances in antiretroviral therapy. HIV-1 causes the destruction of the immune system, leading to a chronic state of immune deficiency and increased susceptibility to various infections, and a steady increase in the number of HIV cases has been observed in Uzbekistan for many years [1,2,7]. Against the background of current therapeutic strategies aimed at suppressing the virus, the need for more in-depth studies of the molecular mechanisms of the cellular response to the virus remains relevant. One of these mechanisms is an interferon-mediated response involving the activation of specific genes that can inhibit viral replication, including HIV1 [3, 9, 11].

The MX2, IFNM1, and ADAR1 genes play a key role in the antiviral immune response induced by interferons and can have a significant impact on the dynamics of HIV1 infection [4, 10].

The relevance of studying the expression of PMS2, IFNM1, and ADAR1 genes in the development of HIV 1 infection lies in the fact that interferon-mediated defense mechanisms play an important role in the body's response to the virus. The expression of MX2, IFNM1, and ADAR1 can affect the effectiveness of the immune response by limiting HIC1 replication and reducing viral load [5, 6, 8]. Understanding their role in the development of HIV1 infection is of key importance for the development of new approaches to therapy aimed at enhancing the endogenous immune response and improving the effectiveness of antiretroviral therapy [3].

The purpose of the study: To study the molecular mechanisms of the cellular response to the human immunodeficiency virus HIV 1, to interferon-mediated pathways that include activation of the MX2, IFNM1, and ADAR1 genes.

Research methods: The molecular genetic part of the work was performed on the basis of the Russian Scientific Research Center of Hematology of the Ministry of Health of the Republic of Uzbekistan, in the Department of Molecular Medicine and Cellular Technologies. Interferon-induced genes MX2, IFNM1, ADAR1, GUSB were determined in the reverse transcription reaction by quantitative PCR using Inogene gene expression assessment kits.

A comparative analysis of the ADAR1, MX2, and IFTM1 genes was performed using a "case-control" type model comparing two comparative groups or subgroups. The case sample consisted of 157 HIV-1 infected patients. The average age of the patients was 32±7.8. The control sample consisted of 87 conditionally healthy donors of Uzbek nationality, matching the sex and age of the examined group of patients (p>0.05), without any concomitant pathologies. The search for sequences of ADAR1, MX2, and IFTM genes for the selection of oligoprimes was performed in NCBI GenBank

(http://www.ncbi.nlm.nih.gov/GenBank).

DNA synthesis was performed using a commercial Reverzyme kit (Inogen, Russia), and real-time PCR analysis was performed using Rotor Gene Q thermal cyclers (Corbett Research QUAGEN, Germany) and CFX96 (Biorad, USA).

The results of the study: The results of studies on the expression of the MX2, IFNM1, and ADAR1 genes in patients with HIC1 infection are presented in Table 2. According to Table 2, the expression of the MX2 gene in the group of patients with H1 infection is significantly high compared to the control group.

Table № 3

Results of MX2, IFNM1, and ADAR1 gene expression in HIV-1 infected patients

The genes	The number of copies of genes	The number of copies of USB genes	Indicators of gene expression	Expression level in relation to G USB
MX2				
Control group n=87	60,1±12,3	165,8±7,4**	0,36	1,9
HIV-1 patients n=157	113,8±8,6	165,8±7,4	0,68	
IFNM1				

Control group n=87	489±11,5	1841,3±8,7**	0,3	2,5
HIV-1 patients n=157	1391±18,2	1841,3±8,7	0,73	
ADAR1				
Control group n=87	28861±15,7	46657±11,3**	0,618	1,59
HIV-1 patients n=157	45770,78±17,8	46657±11,3	0,98	

Note: **p<0.001 compared to the compared group

In the control group, the number of copies of the MX2 gene was 60.1±12.3, while in patients with HIV infection this indicator increased significantly to 113.8±8.6 (p<0.001).

The expression level relative to USB in the control group is 0.36, and in patients with HIV-1 infection is 0.68. The expression of the MX2 gene in patients with HIV-1 infection is almost twice as high as in the control group, indicating increased activity of this gene in response to viral load. In general, an increase in MX2 expression may indicate its important role in the antiviral immune response aimed at limiting HIV1 replication.

In the control group, the number of copies of the IFNM1 gene was 489=11.5, and in the group of patients with HIV 1 infection, 1391=18.2 (p=0.001). Thus, in HIV-1 infected patients, the expression of the IFNM1 gene is significantly increased, which is confirmed by almost 3 times the number of copies of the gene. The expression level in relation to USB in the control group is 0.3, and in patients with HIV-1 infection is 0.73. An increase in IFNM1 expression in HIC1 patients confirms increased activation of type I interferons such as IFNa, which promotes activation of other interferon-stimulated genes and antiviral activity of cells aimed at limiting viral replication.

In the control group, the number of copies of the ADAR1 gene was 28,861±15.7, and in the group of patients with H1 infection 45,770.78±17.8 (p<0.001), which also indicates a significant increase in the expression of this gene in patients with H1 infection. The expression level in relation to USB in the control group is 0.618, and in patients with HIV-1 infection is 0.98. An increase in the expression of the DRB1 gene in HIV-1 infected patients indicates its involvement in the process of RNA editing and stabilization of viral RNA, which may help limit the replication of HIV-1.

All three studied MX2, IFNM1, and ADAR1 genes show significantly higher expression in HIV-1 infected patients compared with the control group, which confirms the activation of interferon-mediated pathways in response to viral infection. The greatest increase in expression is observed for the IFNM1 and MX2 genes, which indicates the importance of these genes for the antiviral immune response to HIC1. Increased gene expression in HIV-infected patients confirms their involvement in the regulation of the antiviral response and their role in limiting viral replication, which opens up prospects for the development of therapeutic strategies aimed at activating interferon pathways to improve infection control [10].

It is also worth noting that increased expression of ADAR1 may play a role in the regulation of viral RNA, affecting its stability and contributing to a decrease in viral replication. This confirms its importance in the context of the body's fight against HIV 1. Despite this, its activity was slightly lower in comparison with MX2 and IFNM1 in this study, which may indicate different ways of activating these genes in response to viral load.

Conclusion. Thus, the results of the study emphasize the importance of interferon-mediated mechanisms in protecting the body from HIV 1, as well as their potential as a therapeutic target. Increased gene activity can become the basis for new therapeutic strategies aimed at activating the body's endogenous defense mechanisms. This can improve the effectiveness of antiretroviral therapy and contribute to the development of methods that help reduce viral load and improve the quality of life of patients with HIV 1. Understanding the role of the PMS2, IFNM1, and ADAR1 genes in the development of HIV 1 infection opens up new perspectives for research aimed at optimizing treatment and developing innovative methods of influencing viral infections.

Used literature:

1. Котова В.О., Троценко О.Е., Балахонцева Л.А., Базыкина Е.А. Молекулярно-генетическая характеристика вариантов ВИЧ-1, выделенных в субъектах Дальневосточного Федерального округа,Вопросы Вирусологии. 2019; 79-89 стр., 64(2) DOI: http://dx.doi.org/ 10.18821/0507-4088-2019-64-2-79-89
2. Худайкулова Д. Т. Эпидемиологические аспекты ВИЧ-инфекции в Узбекистане // Актуальные проблемы гуманитарных и естественных наук. 2016. №1-4. URL: https://cyberleninka.ru/article/n/epidemiologicheskie-aspekty-vich-infektsii-v-uzbekistane (дата обращения: 10.02.2025).
3. Bosinger S.E., Utay N.S. Type I interferon: understanding its role in HIV pathogenesis and therapy // Curr HIV/AIDS Rep. – 2015. – Vol. 12, № 1. – P. 41–53. DOI: 10.1007/s11904-014-0244-6.
4. Buffone C., Schulte B., Opp S., Diaz-Griffero F. Contribution of MxB oligomerization to HIV-1 capsid binding and restriction // J. Virol. – 2015. – Vol. 89. – P. 3285–3294.
5. Goujon C., Moncorge O., Bauby H., Doyle T., Ward C.C., Schaller T., Hue S., Barclay W.S., Schulz R., Malim M.H. Human MX2 is an interferon-induced post-entry inhibitor of HIV-1 infection // Nature. – 2013. – Vol. 502. – P. 559–562.
6. Doria M., Neri F., Gallo A., Farace M.G., Michienzi A. Editing of HIV-1 RNA by the double-stranded RNA deaminase ADAR1 stimulates viral infection // Nucleic Acids Res. – 2009. – Vol. 37, № 17. – P. 5848–5858. DOI: 10.1093/nar/gkp604. Epub 2009 Aug 3.
7. Goujon C., Malim M.H., et al. Characterization of the alpha interferon-induced postentry block to HIV-1 infection in primary human macrophages and T cells // J. Virol. – 2010. – Vol. 84. – P. 9254–9266. DOI: 10.1128/JVI.00854-10.
8. Biswas N., Wang T., Ding M., Tumne A., Chen Y., Wang Q., Gupta P. ADAR1 is a novel multi-targeted anti-HIV-1 cellular protein // Virology. – 2012. – Vol. 422. – P. 265–277. PMID: 1965187415.
9. Radetskyy R., Daher A., Gatignol A. ADAR1 and PKR, interferon stimulated genes with clashing effects on HIV-1 replication // Cytokine Growth Factor Rev. – 2018. – Vol. 40. – P. 48–58. DOI: 10.1016/j.cytogfr.2018.03.007. Epub 2018 Mar 26. PMID: 29625900.
10. Schoggins J.W., et al. A diverse range of gene products are effectors of the type I interferon antiviral response // Nature. – 2011. – Vol. 472. – P. 481–485. DOI: 10.1038/nature09907.
11. Utay N.S., Douek D.C. Interferons and HIV infection: the good, the bad, and the ugly // Pathog Immun. – 2016. – Vol. 1, № 1. – P. 107–116. DOI: 10.20411/pai.v1i1.125.

UDC: 616-08-035

DESCRIPTION OF HISTOLOGICAL AND MORPHOLOGICAL CHANGES IN THE GALLBLADDER WALL IN CHOLECYSTITIS.

Jumaeva M.M.
Bukhara State Medical Institute

Annotation. The use of echography allows you to make the correct diagnosis as soon as possible, determine the subsequent treatment tactics, and timely begin conservative or surgical treatment. The advantages of ultrasound examination over X-ray cholecystography have been shown, and the features of echograms in various gallbladder diseases have been examined. The prevalence of cholelithiasis is steadily increasing and occupies a leading position among pathologies requiring surgical treatment.

Keywords: *Ultrasound, cholecystitis, morphological changes, gall bladder.*

XOLETSISTITDA O'T PUFAGI DEVORIDAGI GISTOLOGIK VA MORFOLOGIK O'ZGARISHLAR TAVSIFI.

Jumaeva M.M.
Buxoro davlat tibbiyot instituti

Annotatsiya. Ultratovushdan foydalanish imkon qadar tezroq to'g'ri tashxis qo'yish, keyingi davolash taktikasini belgilash va konservativ yoki jarrohlik davolashni o'z vaqtida boshlash imkonini beradi. Ultratovush tekshiruvining rentgen xoletsistografiyadan ustunligi ko'rsatilgan, o't pufagining turli kasalliklarida exogrammalarning o'ziga xos xususiyatlari tahlil qilingan. O't tosh kasalligi (O'TK) ning tarqalishi muntazam ravishda ortib bormoqda va jarrohlik yo'li bilan davolashni talab qiladigan patologiyalar orasida yetakchi o'rinni egallamoqda.

Kalit so'zlar: *ultratovush, xolesistit, morfologik o'zgarishlar, o't pufagi.*

ХАРАКТЕРИСТИКА ГИСТОЛОГИЧЕСКИХ И МОРФОЛОГИЧЕСКИХ ИЗМЕНЕНИЙ СТЕНКИ ЖЕЛЧНОГО ПУЗЫРЯ ПРИ ХОЛЕЦИСТИТЕ.

Жумаева М.М.
Бухарский государственный медицинский институт

Аннотация. Взучены преимущества ультразвукового исследования, особенности визуализации эхограмм при заболеваниях желчного пузыря по сравнению с другими методами исследования. Использование метода эхографии позволяет как можно быстрее поставить правильный диагноз, определить дальнейшую тактику лечения, своевременно начать консервативное или хирургическое лечение. Распространенность холелитиаза неуклонно растет и занимает лидирующее положение среди патологий, требующих хирургического лечения.

Ключевые слова: *УЗИ, холецистит, морфологические изменения, желчный пузырь.*

Relevance. Currently, acute cholecystitis is one of the most common acute surgical diseases of the abdominal organs. Gallbladder diseases are a leading cause of morbidity and mortality worldwide. Many risk factors for gallbladder disease have been identified, namely: ethnicity, genetics, age, gender, female sex hormones, oral contraceptives, obesity, rapid weight loss, diets high in cholesterol, fatty acids and carbohydrates, diabetes mellitus, hyperinsulinemia, sickle failure. cellular anemia, metabolic syndrome and others [1-2]. Gallbladder disease usually manifests itself as gallstones, cholecystitis, or cancer. It is important to create laboratory panels to assess the severity and severity of the pathological process during exacerbation of the chronic or

latent form of this disease. Gallbladder ultrasound is a non-invasive method. Ultrasound examination that allows for the detection of work pathologies gallbladder Ultrasound examination of the gallbladder, is today is the only non-invasive modern method that can most thoroughly study the condition of the gallbladder of the bile ducts. roads. The main advantage of ultrasound of the bile system is not only in high capabilities, but also in the physiologism and safety of the method [3]. Often, the inflammatory process proceeds at a lightning speed with the formation of gangrene. and perforation of the gallbladder. This increases mortality. The main cause of necrotic processes in the gallbladder wall is increased pressure in the gallbladder. The high mortality rate in elderly and senile patients largely depends on the progressive development of complicated forms of acute cholecystitis, in particular, obstructive cholecystitis [4-5]. Nowadays, cholecystitis is recognized as one of the most common acute surgical diseases of the abdominal cavity. In the last decade, the number of people with this disease has increased sharply, especially among elderly and senile patients. For modern medicine, the development of reliable diagnostic methods for the timely detection of latent forms of the disease is extremely important [6]. According to many researchers, the course of postoperative tissue damage largely depends on the volume of intra-abdominal surgical intervention. Given the increasing number of patients and the emergence of new minimally invasive surgical methods, the indications for surgical treatment of patients are noticeably expanding. This will naturally lead to an increase in the number of operations. [7-8].

Purpose of the study. To study the morphometric and mofphologicfal characteristics of the gallbladder wall in patients with cholelithiasis who underwent classical and laparoscopic cholecystectomy.

Materials and methods of research. Materials collected from the medical history of patients of the surgical department of the Republican Scientific Center of Emergency Medical Care, Bukhara Branch with a diagnosis of acute cholelithiasis.

Research results. Currently, the widespread introduction of ultrasound imaging into practice has created new opportunities for objectively assessing the degree of inflammatory changes in the gallbladder wall and perivesical space.

Ultrasound examination (US) is the leading method for diagnosing the morphological and functional state of the gallbladder. Ultrasound allows you to obtain information about its size, shape, lumen composition, thickness and wall structure in real time, and assess its contractile function [9]. Determining the causes of gallbladder wall thickening is a difficult diagnostic problem, which is often associated with systemic changes caused by acute or chronic cholecystitis [10]. However, gallbladder wall thickening detected by ultrasound is not specific and can be detected in various forms of pathology that are not related to the gallbladder in any way [11]. In this regard, it seems important to identify the causes of these changes in a timely manner in order to prevent complications that may arise as a result of improper treatment.

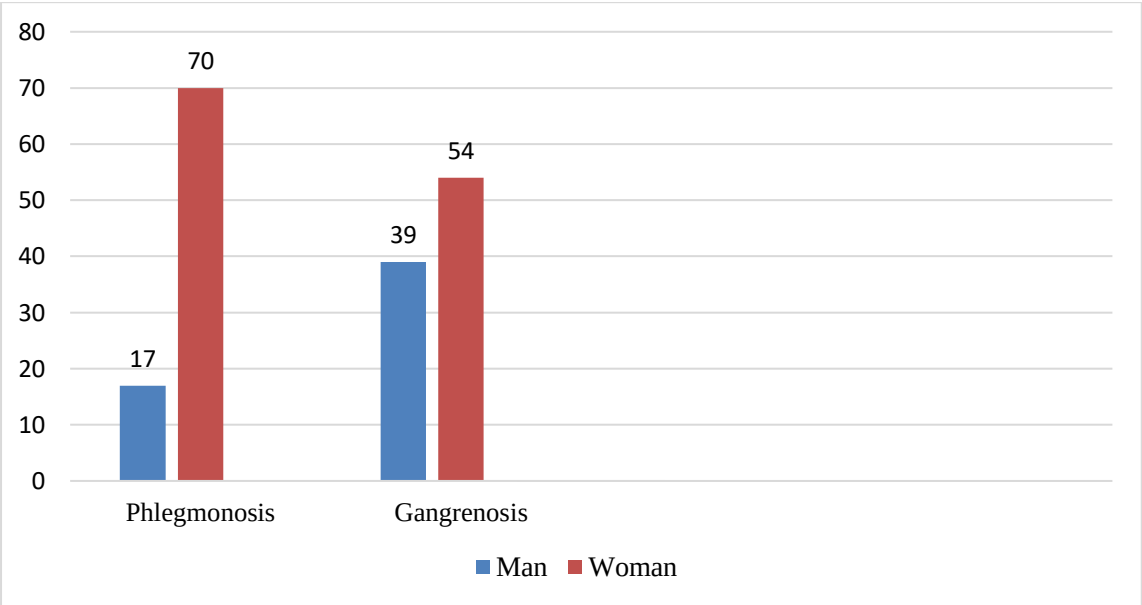
Table 1

Distribution of patients by age and sex

Age	Gender				Total	
	Man		Woman		In absolute terms	%
	Abs.	%	Abs.	%		
18-30	3	1.31	13	5.67	16	7
31-40	10	4.36	23	1.03	33	14.4
41-50	16	6.98	23	10.04	39	17
51-60	14	6.11	36	15.7	50	21.8

61-70	21	9.17	39	17.0	60	26.2
71-80	4	1.74	15	6.55	19	8.3
Over 81	8	3.49	4	1.74	12	5.2
Total	76	33.2	153	66.8	229	100

Table 1 shows that out of 229 (100%) patients with acute cholecystitis, 76 were men and 153 were women. Of these, 16 patients were between 18 and 30 years old (7%), 33 patients were between 31 and 40 years old (14.4%), 39 patients were between 41 and 50 years old (17%), 50 patients were between 51 and 60 years old (21.8%), 60 patients were between 61 and 70 years old (26.2%), 19 patients were between 71 and 80 years old (8.3%), and 12 patients were over 81 years old (5.2%).



Pic 1. Phlegmonous and gangrenous cholecystitis
Occurs in men and women

The 1st diagram shows 70 women and 17 men diagnosed with the phlegmonous form of cholecystitis, while the gangrenous form was diagnosed in 54 women and 39 men.

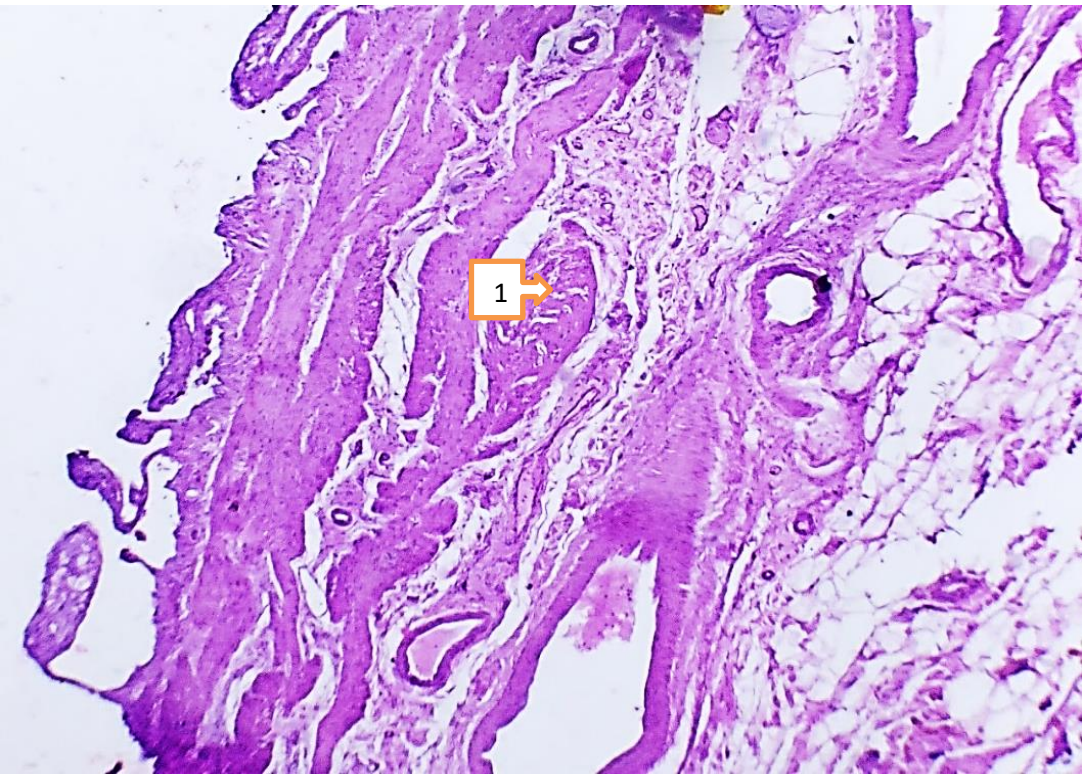
Table 2

Morphological changes of the gallbladder wall

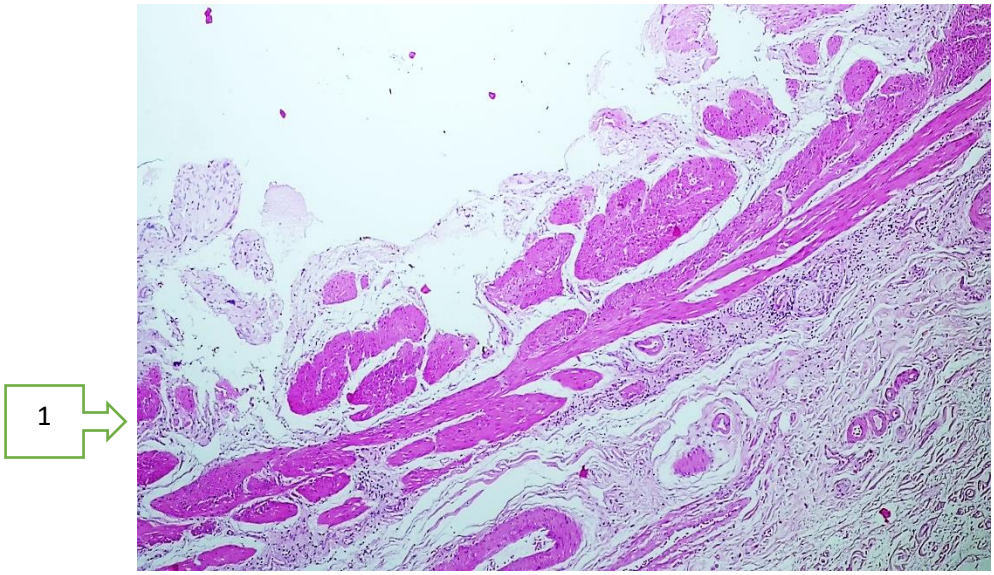
Age	Man				Woman			
	Phlegmonosis		Gangrenosis		Phlegmonosis		Gangrenosis	
	abs	%	abs	%	abs	%	abs	%
18-30	2	11.7	-	-	5	7.14	5	9.26
31-40	1	5.88	5	12.8	14	20	3	5.55
41-50	4	23.5	7	17.9	11	15.7	6	11.1
51-60	6	35.3	8	20.5	17	24.3	11	20.4
61-70	4	23.5	12	30.8	18	25.7	16	29.6
71-80	-	-	2	5.12	5	7.14	10	18.5
Over 81	-	-	5	12.8	-	-	3	5.55

Total	17	100	39	100	70	100	54	100

Table 2 shows that out of 76 male patients with acute calculous cholecystitis, 17 had phlegmonous cholecystitis and 39 had gangrenous cholecystitis. There were 153 women in total, 70 of whom had phlegmonous cholecystitis and 54 had gangrenous cholecystitis. In male patients aged 51-60, 6 cases of phlegmonous cholecystitis were diagnosed, and in women aged 61-70, 12 cases of gangrenous cholecystitis were diagnosed. In female patients, the most common age group was 61-70, with 18 cases of phlegmonous cholecystitis and 16 cases of gangrenous cholecystitis.

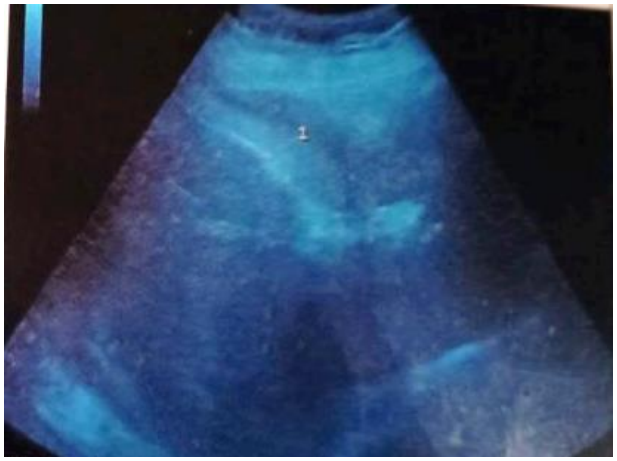


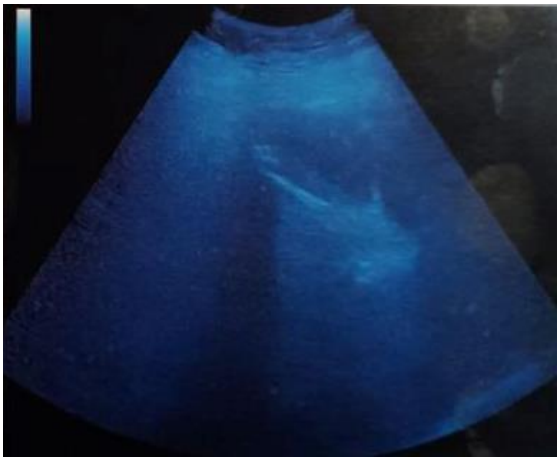
Pic 2. Microscopic view of the gallbladder after laparoscopic cholecystectomy in a patient with chronic gangrenous cholecystitis. Atrophy of the single-row prismatic epithelium in the 1st mucosal layer is observed. 10x10.



Pic 3. Microscopic view of the gallbladder after cholecystectomy in a patient with acute calculous cholecystitis. Decreased atrophy of the folds in the 1st mucosa is observed. 10 x 10.

Commonly recognized signs of acute cholecystitis, including increased blood flow in the gallbladder wall due to arterial network or venous hyperemia, along with ultrasound examination of the gallbladder in B mode, are Doppler parameters. Meanwhile, there is a contradiction in the nature of variability in absolute and relative blood flow parameters in various forms of cholecystitis. The features of ultrasound diagnostics of the bile duct were discussed in a number of studies based on B-mode and using new technologies.





Pic 4. Patient A.G. 61-year-old woman Pic 5. Patient N.Sh. 54-year-old man

Pic 4-5 Cases of stone and turbidity (sludge) were seen in the gallbladder, echographic images

An important role in the diagnosis and choice of treatment strategy for acute cholecystitis is played by ultrasound examination (USG). The characteristic signs of the disease in mode B are changes in the size, thickness, and structure of the gallbladder wall. The Doppler data on blood flow in the organ, however, contradict each other. The purpose of the study is to identify new ultrasound signs of acute cholecystitis during color duplex scanning (RDS) of the gallbladder.

Table 3

Duration of chronic cholecystitis depending on gender and age

	Age of patients	The duration of the disease
1	20-39 years old	3-5 years
2	40-49 years old	6-8 years
3	50-59 years old	11-13 years
4	60-69 years old	14-15 years
	70-79 years old	16-18 years
6	Over 80 years old	19-21 years

When we examined the above patients with ultrasound, the following echographic images were observed and the gallbladder condition was studied. Pic 4-5. show that the gallbladder condition of patients with acute gallstone disease was hyperechoic concrements and thickening of the gallbladder wall, as well as an increase in gallbladder volume.

Conclusions. During postnatal ontogenesis, ultrasound examination of the gallbladder revealed various indicators of organ organometric parameters growth. The length of the gallbladder decreases by 22.4%, the width by 33.6%, and the thickness of its wall increases by 1.5 times.

Ultrasound examination of the gallbladder's morphometric parameters revealed that acute phlegmonous cholecystitis and gallbladder wall dysfunction increase by 2.2%, and in acute gangrenous cholecystitis, compared to chronic cholecystitis, they increase by 2.7%.

In patients with cholecystitis, after laparoscopic cholecystectomy, microscopic examination of the gallbladder using staining methods revealed hypertrophy of the muscular layer 1.4 times and the mucous membrane of the gallbladder 1.3 times, in contrast to the norm. An increase in the number of macrophages is observed, which indicates the inflammatory process in patients with purulent cholecystitis. In chronic phlegmonous cholecystitis, the diameter of arterioles increases by 1.2 times, capillaries by 1.4 times, and venules by 1.3 times compared to other cholecystitis.

Used literature:

1. Акбаров М.М., Сатимбаев М.К. Современный взгляд на лечение острого калькулезного холецистита// Eurasian Journal of Medical and Natural Sciences. - 2023.-Vol 3. -Issue 4.-P.48-54.
2. Винник Ю.С., Серова Е.В., Юрева М.Ю., Стратович Д.В., Ковалев А.В. Дифференциалная ультрасонографическая диагностика осложнений желчнокаменной болезни и сопутствующих патологических состояний//Трудный пациент. -2021. -Том 19. -№3. -С.43-51.
3. Данзанова Т.Ю., Синюкова Г.Т., Лепедату П.И. Диагностика новообразований желчного пузыря// Вестник РОНЦ им. Н. Н. Блохина РАМН. -2013. -Том 24.-№3-4.-С.12-16.
4. Курбаниязов З.Б., Назаров З.Н., Арзиев И.А., Рустамов С.У. Особенности клиники желчнокаменной болезни в старших возрастных группах // Central Asian journal of medical and natural sciences. -2023.-Vol 4.-Issue 4.-P.126-131.
5. Шамсиев Ж.З., Анарбаев С.А. Миниинвазивные методы лечения болных с острым деструктивным холециститом// Вопросы науки и образования. -2018. -№13(25). -С.92-94.
6. Юдина Т.М., Харитонова Л.А. Особенности клинического течения и морфогенез холестероза желчного пузыря у детей//Педиатрия. -2016. -Том 95. -№6. -С.26-31.
7. Akhmedov F.Kh., Khamdamova M.T. Results of morphological examination of the gallbladder//Електронный научный журнал «Биология и интегративная медицина». -2021. -№3(50). - S.5-11.
8. Hwang H., Mars'h I., Doyle J. Does ultrasonography accurately diagnose acute cholecystitis? Improving diagnostic accuracy based on a review at a regional hospital // Canadian Journal of Surgery. – 2014. - №3. – P.162-168.
9. Joss R. Werts, Juliet M. Lopez, David Olson, William M.Thompson Comparing the Diagnostic Accuracy of Ultrasound and CT in Yevaluating Acute Cholecystitis // AJR Am Roentgenol. -2018.211(2). -P.92-97.
10. Rana C., Kris'hnani N., Kumari N. Ultrasound-guided fine needle aspiration cytology of gallbladder lesions: a study of 596 cases // Cytopathology. – 2016. -№27(6). – P. 398-406.

UO'K: 13058 (61)

ALKALOIDLARNING ZAMONAVIY FARMAKOLOGIYADAGI AHAMIYATI VA SANOAT FARMATSIYADA ULARDAN SAMARALI FOYDALANISH

Jo'raev Z.A.
Termiz iqtisodiyot va servis universiteti

Annotatsiya. Bugungi kunda o'simlik preparatlari maqsadli faol moddalarni ajratib olishning ilg'or usullarini va ular asosida dorivor xom ashyo, moddalar va dozalash shakllarini standartlashtirish usullarini ishlab chiqish orqali yuqori samaradorlik va nisbiy xavfsizlikni birlashtiradi. Biroq, ko'pgina dorivor o'simliklar kimyoviy tarkibi, farmakologik xususiyatlari va standartlashtirish nuqtai nazaridan etarli darajada o'rganilmagan.

Quyida alkaloidlarning vazifalariu, ularning o'simlik organlarida harakatlanish lokalizatsiyasi, ayrim o'simliklardagi alkaloid tarkibi va tarqalishi, dorivor xom ashyoda alkaloidlarning umumiy miqdori, zamonaviy tibbiyotda ularni qo'llanilishi kabi fikrlar keltirib o'tilgan.

Kalit so'zlar: *Nikotin, Konyin, Anabasin, Atropin, Teofillin purin alkaloidi, Teobromin purin alkaloidi, Kofein purin alkaloidi*

ЗНАЧЕНИЕ АЛКАЛОИДОВ В СОВРЕМЕННОЙ ФАРМАКОЛОГИИ И ИХ ЭФФЕКТИВНОЕ ИСПОЛЬЗОВАНИЕ В ПРОМЫШЛЕННОЙ ФАРМАЦИИ

Жураев З.А.
Термезский университет экономики и сервиса

Аннотация: Сегодня фитопрепараты сочетают в себе высокую эффективность и относительную безопасность за счет разработки передовых методов выделения целевых действующих веществ и методов стандартизации лекарственного сырья, субстанций и лекарственных форм на их основе. Однако многие лекарственные растения недостаточно изучены с точки зрения химического состава, фармакологических свойств и стандартизации.

Ниже приведены функции алкалоидов, локализация их движения в органах растений, содержание и распределение алкалоидов в некоторых растениях, общее количество алкалоидов в лекарственном сырье и их применение в современной медицине.

Ключевые слова: *Никотин, конин, анабазин, атропин, пуриновый алкалоид теофиллин, пуриновый алкалоид теобромин, кофеин-пуриновый алкалоид.*

THE IMPORTANCE OF ALKALOIDS IN MODERN PHARMACOLOGY AND THEIR EFFECTIVE USE IN INDUSTRIAL PHARMACY

Zhuraev Z.A.
Termez University of Economics and Service

Annotation: Today, phytopreparations combine high efficiency and relative safety due to the development of advanced methods for isolating targeted active substances and methods for standardizing medicinal raw materials, substances and dosage forms based on them. However, many medicinal plants have not been sufficiently studied in terms of chemical composition, pharmacological properties and standardization.

Below are the functions of alkaloids, the localization of their movement in plant organs, the content and distribution of alkaloids in some plants, the total amount of alkaloids in medicinal raw materials and their use in modern medicine.

Key words: *Nicotine, horse, anabasine, atropine, purine alkaloid theophylline, purine alkaloid theobromine, caffeine-purine alkaloid.*

Alkaloidlar - azotni o'z ichiga olgan, tabiatdagi organik birikmalar guruhi bo'lib, ular odatda ancha murakkab tarkibga ega bo'lib, ko'pincha kuchli o'ziga xos fiziologik ta'sirga ega.

1560 yilda Portugaliya qirolining elchisi Joan Nikot Frantsiya va Angliyaga tamaki urug'ini olib keldi. Eng muvaffaqiyatli tamaki savdogarlaridan biri va uning qizg'in targ'ibotchisi Joan Nikot sharafiga botaniklar tomonidan butun tamaki jinsi - *Nikotiana* nomi berildi [1].

Alkaloidlar taxminan 200 yil oldin kashf etilgan, shundan keyin tibbiyotda alkaloidlar davri boshlangan. Tibbiyot uchun alkaloidlarning topilishi jahon madaniyati uchun temirning kashf etilishi bilan bir xil narsani anglatadi. Alkaloidlarning kashf etilishi bilan tibbiyot va kimyoda yangi davr boshlandi.

Alkaloidlarni o'rganish sohasida mahalliy fanning o'ziga xos gullashi XX asrning 30-yillarda sodir bo'ldi va akademik A.P. Orexov nomi bilan chuqur bog'liq. Akademik A.P. Orexov 1930 yilda Butunittifoq Kimyo-farmatsevtika ilmiy-tadqiqot institutida alkaloidlar bo'limini tashkil etgan. Bo'limni asosiy vazifasi ilgari noma'lum bo'lgan alkaloidlarning tabiati va tuzilishini aniqlash bo'lgan. 1950 yilgacha, ya'ni 20 yil davomida butun dunyoda 400 ga yaqin yangi alkaloidlar aniqlandi, shu jumladan SSSRda 120 ga yaqin alkaloidlar bo'yicha faol tadqiqotlar bugungi kungacha davom etmoqda.

Fitokimyo rivojlanishining hozirgi bosqichida alkaloidlarni o'rganish bo'yicha ishlar quyidagi asosiy yo'nalishlarda olib borilmoqda:

1. Alkaloidli florani o'rganish. Sobiq MDH hududida 21 mingga yaqin yuqori o'simliklar o'sadi. Ularning yarmidan kamrog'i alkaloid tarkibi uchun sinovdan o'tgan.
2. Ilgari noma'lum bo'lgan alkaloidlarning tabiati va tuzilishini aniqlash. Hozirgi vaqtda 10 000 ga yaqin turli xil alkaloidlar ajratilgan va faqat 4500 ga yaqinining kimyoviy tuzilishi aniqlangan.
3. Alkaloidlarning farmakologik faolligini o'rganish va yangi dori vositalarini yaratish. Kimyoviy tuzilishi ma'lum bo'lgan ko'p miqdordagi alkaloidlardan 85 ga yaqin birikma tibbiy amaliyotda qo'llanilgan.
4. Yangi alkaloid preparatlarni aniqlash texnologiyasini ishlab chiqish va o'zlashtirish.
5. Resurs tadqiqotlarini o'tkazish va o'simliklarni yetishtirish muammosini hal qilish.
6. Alkaloidlar hosil qiluvchi to'qima kulturalarini yetishtirish.

Ushbu birikmalar ko'p dorivor xususiyatlarga ega bo'lganligi sababli alkaloidlarga e'tibor qaratilgan. Birinchidan, ularning yon ta'siri boshqa dorilarga qaraganda zaifroq. Ikkinchidan, alkaloidlarning ta'siri tezda o'zini namoyon qiladi, bu bir qator kasalliklar (yurak-qon tomir, spazmodik va boshqalar) uchun juda muhimdir. Uchinchidan, ular kumulatif ta'sirga ega emas. [3]

Alkaloidlarning o'simlik organlarida lokalizatsiyasiyalanishi

O'simliklarda alkaloidlar organik va noorganik kislotalarning tuzlari shaklida faol o'sadigan to'qimalarda, epidermal va gipodermal hujayralarda, tomirlar to'plamlari va lateks yo'llarining qoplamasida topiladi. Ular hujayra shirasida eriydi va o'simlikning turli organlarida to'planadi va o'simlikning turli qismlarida turli xil alkaloidlar bo'lishi mumkin. Odatda yovvoyi o'simliklarda ularning konsentratsiyasi past bo'lib, foizning yuzdan va o'ndan bir qismini tashkil qiladi. O'simlik, qoida tariqasida, bitta emas, balki bir nechta alkaloidlarni o'z ichiga oladi, masalan, atirgul katarantusi- 60 dan ortiq. [6]

Alkaloidlarning o'zi suvda erimaydi, ammo ularning tuzlari eriydi va hujayra sharbatida mavjud. Shuning uchun alkaloidlar o'simlik to'qimalarida vakuolalarning paydo bo'lishi va rivojlanishi bilan paydo bo'ladi va to'planadi. Odatda, alkaloidlar faol o'sayotgan to'qimalarda, tomir-tolali to'plamlarning qoplamasida va latiferlarda to'planadi. Ko'pincha alkaloidlar ba'zi to'qimalarda sintezlanadi, keyin esa boshqalarida tashiladi va to'planadi. Misol uchun olib qaraydigan bo'lsak, nikotin tamaki ildizida hosil bo'ladi va u erdan barglarga o'tadi va u erda to'planadi.

O'simliklardagi alkaloid tarkibi

O'simliklardagi alkaloidlarning miqdori kichik va mingdan bir necha foizgacha bo'ladi. Juda kamdan-kam hollarda, ba'zi o'simliklar taxminan 10% alkaloidlarni o'z ichiga oladi, ba'zan esa ko'proq. Misol uchun, xinin daraxtining qobig'ida alkaloid miqdori 15-20% ga yetadi. Dorivor xom ashyoda alkaloidlarning umumiy miqdori ko'pincha 0,1-2% ni tashkil qiladi.

Ba'zi o'simliklar barcha qismlarida sezilarli miqdorda alkaloidlarni o'z ichiga oladi (umumiy belladonna, Kavkaz belladonna), lekin ko'pchilik o'simliklarda ular ustunlik qiladi yoki faqat bitta organda bo'ladi. Ayrim o'simliklarda eng ko'p alkaloidlar miqdori to'planadi

- ✓ barglarda: xitoy choyi (*Camellia sinensis*), qora novda (белена черная), Securinega novdasi,
- ✓ meva va urug'larda,
- ✓ er osti organlarida,
- ✓ po'stlog'ida.

Ko'pgina o'simliklarda bir nechta alkaloidlar mavjud. Ko'pincha bitta o'simlikda 1 yoki 2-3 alkaloid miqdoriy ustunlik mavjud, boshqalari esa ancha past. Bitta o'simlikning alkaloidlari juda o'xshash tuzilishga ega va "qardosh" alkaloidlar guruhini tashkil qiladi. [7]

Alkaloidlarning o'simlik dunyosida tarqalishi

Alkaloidlar o'simlik dunyosida, ayniqsa angiospermlar orasida juda keng tarqalgan. Alkaloidlarning botanika oilalari orasida taqsimlanishi notekis. Ayniqsa, alkaloidli vakillarga boy bir nechta oilalar mavjud. Misol uchun, *Papaveraceae*, *Ranunculaceae*, *Fabaceae*. So'nggi yillarda olib borilgan tadqiqotlar alkaloidlarning tarqalish maydonini sezilarli darajada kengaytirdi va bir qator yangi alkaloidli oilalarni - *Solanaceae*, *Apocynaceae* va boshqalarni aniqladi. Tasodifiy tanlangan turlarda alkaloidlarning paydo bo'lishi taxminan 10% ni tashkil qiladi. Alkaloidlar suv o'tlari, zamburug'lar, moxlar, paporotniklar va gimnospermlarda nisbatan kam uchraydi. Ilgari, alkaloidlar ma'lum oilalarga xos va o'ziga xosdir, deb hisoblar edi. Ammo o'simliklarda tarqalishini keyingi o'rganish jarayonida bir xil alkaloid butunlay boshqa oilalardagi o'simliklarda topilganligi ma'lum bo'ldi. Masalan, efedrin efedrada (*Ephedraceae oilasi*), yew-тисс ягодный - Taxus bacata (*Taxaceae oilasi*), Sida cordifolia (*Malvaceae*) da uchraydi. Xuddi shunday holat berberin bilan ham kuzatiladi. Shuning uchun biz alkaloidlarning qat'iy botanik o'ziga xosligi haqida gapira olmaymiz. [5]

Хинное дерево (lot. *Cinchona*) — zamburug'lar oilasiga mansub o'simliklar turkumi (lat. Rubiaceae) — xinin alkaloidi manbai. Jinsda bir necha o'nlab turlar mavjud, ammo har bir xinin daraxti xinin manbai bo'la olmaydi.

Alkaloidlarning o'simliklardagi vazifalari

Alkaloidlarning biologik funktsiyalari hali to'liq o'rganilmagan. Alkaloidlarning oksidlanish-qaytarilish reaktsiyalarida ishtirok etishi to'g'risida dalillar mavjud: ular o'z navbatida o'simlik tomonidan fotosintez uchun ishlatiladigan faollashtirilgan kislorodning chiqishi bilan kamayadigan peroksidlarni hosil qilishga qodir. Alkaloidlarning himoya funktsiyasi shubhasizdir.

So'nggi paytlarda biokimyoviy jarayonlarning noyob stimulyatorlari va regulyatorlari sifatida ularning metabolizmdagi faol roliga ko'proq afzallik beriladi. Buni quyidagi faktlar tasdiqlaydi. Alkaloidlar tarkibida albatta azot bo'lganligi sababli, alkaloidlar "*o'simliklarda azotli birikmalarning o'zgarishi sodir bo'ladigan va azotli metabolik mahsulotlar neytrallanadigan yoki saqlanadigan shakl*" deb hisoblanadi.

Hozirda shunday fikr bor;

1) alkaloidlar - azotli moddalar o'simliklarda azot almashinuvida quyidagicha ishtirok etadi:

a) ular to'planib, azotli oziqlanishning ortishi bilan azotning zahira shakli sifatida harakat qilishlari mumkin;

b) azotning transport shakli sifatida xizmat qilishi mumkin, chunki ko'pincha alkaloidlar ildizlarda sintezlanadi va keyin barglarga ko'chadi;

v) ildizlarda alkaloidlarning sintezi mexanizmlardan biri ammiakni zararsizlantirish harakati bo'lishi mumkin;

d) alkaloidlar aminokislotalarning zahirasi bo'lib xizmat qilishi mumkin, bu ularning parchalanishi paytida hosil bo'ladi.

2) alkaloidlar hujayra shirasining pH darajasini tartibga soladi, chunki ular tuzlar hosil qilish uchun organik kislotalarni bog'laydi.

3) alkaloidlar xelatlovchi moddalar bo'lib, o'simlikdagi ion muvozanatini saqlashda ishtirok etadilar.

4) alkaloidlar o'simliklarning patogen zamburug'larga chidamliligida muhim rol o'ynaydi.

5) alkaloidlar turli reaktsiyalar va metabolik jarayonlarga ta'sir qiladi. Masalan, alkaloidlar oqsil, xlorofill, glikoliz fermentlari, glikoksilat sikli va boshqalar sintezini sekinlashtirishi aniqlandi.

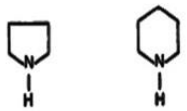
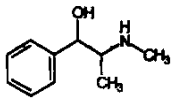
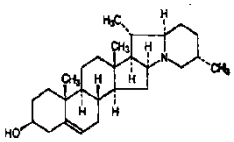
Ko'pgina misollar ma'lumki, alkaloidlar to'xtatuvchi moddalar sifatida, ko'pgina ikkilamchi metabolitlar kabi, o'simlik organizmini hasharotlar tomonidan nobud bo'lishdan himoya qiladi.

Alkaloidlarning zamonaviy tasnifi Akademik A.P. Orexov tomonidan taklif qilingan tasnifga asoslanadi. Olim alkaloidlarni asosiy uglerod-azot siklining tuzilishiga yoki azotning alkaloid molekulasidagi holatiga qarab guruhlarga ajratgan [8]

Belgilangan atomlar usuli bilan alkaloidlarning biogenez yo'llarini o'rganish shuni ko'rsatdiki, aksariyat hollarda alkaloidlarning prekursorlari aminokislotalardir. Bu R. Xegnauerning barcha alkaloidlarni uch guruhga: haqiqiy alkaloidlar, protoalkaloidlar va psevdoalkaloidlarga ajratishiga asos bo'ldi (1-jadval).

Haqiqiy alkaloidlar alkaloidlarning eng katta va eng xilma-xil guruhidir. Ular aminokislotalardan hosil bo'lib, geterotsiklda azotni o'z ichiga oladi. Guruh ichida alkaloidlar asosiy geterotsikl tabiatiga ko'ra hosilalarga - pirolidin, piperidin, piridin, indol, xinolin va boshqalarga bo'linadi.

Haqiqiy alkaloidlar	Protoalkaloidlar	Pseudoalkaloidlar (terpenoidlar)

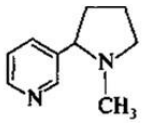
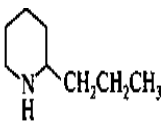
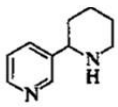
1. Aminokislotalardan hosil bo'lgan. 2. Geterosiklda azot bor	1. Aminokislotalardan hosil bo'lgan. 2. Ularda azot geterosiklda emas, balki yon zanjirda bo'ladi	1.Azot sintezning oxirgi bosqichlariga kiradi va atsetil- CoA 2. Geterosikldagi yoki yon zanjirdagi azot
		

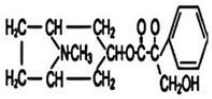
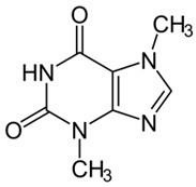
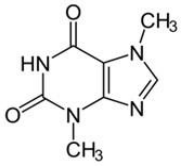
Protoalkaloidlar aminokislotalardan hosil bo'lib, azotni geterosiklda emas, balki yon zanjirda - efedrin, kapsaitsin, kolxitsinni o'z ichiga oladi. Bu alkaloidlar o'simlik asoslarining kichik guruhini ifodalaydi, ammo uning vakillari amaliy foydali xususiyatlari bilan juda mashhur. [7]

Psevdoalkaloidlar (terpenoidlar) alkaloidlarga o'xshash birikmalar bo'lib, ularning biogenetik prekursorlari aminokislotalar emas. Psevdoalkaloidlarni qurishda uglerod atomlari soni 10, 15, 20 va 30 bo'lgan terpenoidlar ishtirok etadi. Bular molekulalari ko'plab eritilgan halqalardan tuzilgan murakkab birikmalardir. Ular bir nechta oilalarning o'simliklarida uchraydi. Ko'pgina terpenoid alkaloidlar zaharli hisoblanadi. Pseudoalkaloidlar kamdan-kam qo'llaniladi. Bu alkaloidlar sariq tuxum kapsulasi, aktinidiya, delfiniy, akonit va buxusda uchraydi. Psevdoalkaloidga misol: solanidin-kartoshka va boshqa tungi o'simliklarda uchraydigan solanin glikoalkaloidining aglikoni. [9]

Jadval-2

Ayrim haqiqiy alkaloidlarning xarakteristikalari

Alkaloid	tuzilishini	qo'llanilishi
Nikotin		Nikotin tamaki ishlab chiqarish chiqindilaridan olinadi va qishloq xo'jaligida hasharotlar zararkunandalariga qarshi kurashda va veterinariya tibbiyotida ektoparazitotsid sifatida ishlatiladi.
Konyin		Alkaloidning odamlarga halokatli ta'sirining eng mashhur misoli - koniin ichgan Sokratning o'limi.
Anabasin		Anabasin, nikotin kabi, insektitsid sifatida ishlatilgan, ammo hozirda yuqori toksiklik tufayli to'xtatilgan.

Atropin		Yuqori zaharliligiga qaramay, o'quvchini kengaytirish qobiliyati tufayli oftalmologik amaliyotda keng qo'llaniladi.
Teofillin purin alkaloidi		Surunkali obstruktiv o'pka kasalligi va turli xil tovar nomlari ostida astma kabi nafas olish kasalliklarini davolashda ishlatiladigan fosfodiesteraza inhibitori preparati. Eufillin - teofillin eritmasi
Teobromin purin alkaloidi		Teofillin va teobrominning umumiy ogohlantiruvchi ta'siri kofeinga qaraganda kamroq aniq, ammo ular juda kuchli vazodilatator va diuretik xususiyatlarga ega. Asosiy alkaloid - Theobroma kakao (shokolad daraxti). Uning achchiq ta'mi bor. U shokoladda, shuningdek, bir qator boshqa oziq-ovqatlarda, jumladan choy barglari va kola yong'oqlarida mavjud.
Kofein purin alkaloidi		Kofein markaziy asab tizimining samarali stimulyatoridir va yurakni rag'batlantiradi. Kofein qahva daraxtini hasharotlardan himoya qiladi

Nikotin juda zaharli moddadir. Tamaki barglarida *(Nicotiana tabacum L.)* 8% ga yetadigan juda zaharli alkaloid. U markaziy va periferik asab tizimiga ta'sir qiladi. Nikotin bilan zaharlanishda o'lim nafas olish falajidan sodir bo'ladi.

Koniin *(Conium masulatum L.)* dog'li gemlok urug'idan ajratilgan urug'idan ajratilgan. Koniin teri innervatsiyasida ishtirok etuvchi vosita va sensorli taktil nervlarning uchlarini falaj qiladi.

Anabazin dastlab tamakidan emas, balki O'rta Osiyo o'simliklari anabazidan ajratib olingan. (*Anabasis aphylla L.*).

Atropin o'simtalar oilasiga (*Solanaceae*), belladonna *(Atropa belladonna Z.)*, tog'ay *(Hyoscyamus niger L.)* va datura *(Datura stramonium L.)* o'simliklarida uchraydi. [10]

Teofillinning tabiiy manbalari *Camelia sinensis* choy barglari (4%), teobromin - Theobroma kakao kakao loviya (1-2%), kofein - *Coffea arabica L.* donalari (2%).

Kofein eng yuqori metillanish darajasiga ega va shunga mos ravishda ksantin, teofillin va teobrominni CH_3I metil yodid bilan metillash orqali olinishi mumkin.

Kislorodni o'z ichiga olgan alkaloidlar odatda kristalli moddalardir. Alkaloidlar, shuningdek, uchuvchi yog'li suyuqliklardir (masalan, nikotin).

Ko'pchilik alkaloidlar optik faol moddalar, hidsiz, achchiq ta'mga ega, aniq erish yoki qaynash nuqtasiga ega. Alkaloidlarning katta qismi rangsiz moddalardir, lekin oz sonli rangli alkaloidlar ma'lum, berberin, serpantin, cheleritrin, ular sariq rangga ega; sanguinarin - apelsin.

Alkaloid tuzlari, qoida tariqasida, suvda va etil spirtida yaxshi eriydi (ayniqsa, isitish bilan suyultirilganda). Aksariyat organik erituvchilarda (xloroform, etil efir, dikloroetan va boshqalar) yomon yoki butunlay erimaydi. Suvda yomon eriydigan ayrim alkaloidlarning tuzlari (xinin sulfat, taspin sulfat), shuningdek, organik erituvchilarda eriydigan alkaloidlarning tuzlari bundan mustasno.

O'simliklarda alkaloidlar ko'pincha tuzlar shaklida bo'ladi va hujayra shirasida eriydi.

Alkaloid asoslar asosan organik erituvchilarda yaxshi eriydi va suvda erimaydi yoki yomon eriydi. Istisno faqat organik erituvchilarda emas, balki suvda ham yaxshi eriydigan alkaloidlardir. Masalan, *sitizin, metilsitizin, kofein* va boshqalar.

Alkaloid molekulalarining funktsional tarkibiga asoslanib, biz quyidagilarni ajratishimiz mumkin:

— barcha (yoki deyarli barcha) alkaloidlar uchun umumiy xarakterdagi reaktsiyalar;

— "shaxsiy" kimyoviy tuzilishdan kelib chiqqan ma'lum bir tabiatning reaktsiyalari.

Umumiy reaksiyalarga organik moddalarning ushbu tabiiy sinfining barcha birikmalarida asosiy azot atomining mavjudligi natijasida yuzaga keladigan reaktsiyalar kiradi.

Foydalanilgan adabiyotlar:

1. Akopov, I.E. Eng muhim mahalliy dorivor o'simliklar va ularni qo'llash / I.E. Akopov. - M.: Tibbiyot, 1986. - B. 172-174.
2. Budantsev, A.L. Rossiyaning yovvoyi foydali o'simliklari / A.L. Budantsev, E.E. Lesiovskaya. - Sankt-Peterburg: SPHFA, 2001. - 663.
3. Vayss, R.F. Fitoterapiya. // R.F. Weiss, F. Fintelmann / Qo'llanma: Trans. u bilan. - M.: Tibbiyot, 2004. - B. 325-354.
4. Geogrievskiy, V.P. Dorivor o'simliklarning biologik faol moddalari / V.P. Geogrievskiy, N.F. Komisarenko, S.E. Dmitruk. - M.: Nauka, 1990. - B. 101-109.
5. Dorivor o'simliklarning yirik ensiklopedik lug'ati / ed. G.P. Yakovleva. - 3-nashr, rev. va qo'shimcha - Sankt-Peterburg: SpetsLit, 2015. - 759 p.
6. Rossiya Federatsiyasi Davlat farmakopeyasi. 12-nashr. 1-qism. / Moskva: "Dori vositalarini ekspertiza qilish ilmiy markazi", 2008 yil.
7. SSSR dorivor o'simliklarning yashash joylari va resurslari atlasi. M.: GUGK, 1980. S. 242-243.
8. Xolmatov X., Axmedov U. A., “Farmakognoziya”, darslik, Abu Ali ibn Sino nomidagi tibbiyot nashriyoti, Toshkent, 1997. – 8-bet.
9. Xasanova, S.R. "Kardiofit" o'simlik kolleksiyasidagi flavonoidlar miqdorini miqdoriy aniqlash usulini ishlab chiqish / S.R. Xasanova, A.P. Potanina, N.V. Kudashkina // Boshqird kimyoviy jurnali. - 2013. -T 20, No 3. - B. 60-62.
10. Xolmatov X.X., Axmedov U.A., Farmakognoziya, Toshkent 1997 y. 188

UO'K: 616.89-008.441.44

TUGALLANMAGAN SUITSIDDAN KEYINGI BEMORLAR ShAXSINING PSIXOPATOLOGIK XUSUSIYaTLARI

Jo'rayev N.N., Mirzayev A.A., Kozimjonov H.F.
Andijon davlat tibbiyot instituti

Rezyume. Suitsident shahsning xarakteriologik xususiyatlari va tugallanmagan suitsiddan keyingi patoxarakteriologik manzarani o'rganish. Psixiatrik dispanser nazoratida turmagan 105 ta tugallanmagan, suitsidni boshidan kechirgan bemorlar tekshirildi. O'spirin yoshlarda, ko'pincha ayollarda suitsid darajasi yukoriligi, hamda suitsidlarda xarakter aksentuatsiyasi aniqlandi, bu farmakoterapiyani psixokorreksiya bilan birgalikda qiyoslanishiga ko'maklashadi.

Kalit so'zlar: *tugallanmagan suitsid, o'spirin yoshdagi bolalar, psixopatologik xususiyatlar,qiyosiy terapiya.*

PERSONALITY CHARACTERISTICS OF PATIENTS WITH INCOMPLETE SUICIDES

Juraev N.N., Mirzaev A.A., Kozimzhonova I.F.
Andijan State Medical Institute

Resume.

The aim of the study was to study the characterological features of the suicidal personality and the pathophysiological picture after an incomplete suicide. 105 patients with incomplete suicide who are not registered at the psychiatric dispensary were examined.

The predominance of adolescent patients, the predominance of women among the examined individuals, and the accentuation of character were revealed.

Keywords: *incomplete suicide, adolescents, psychopathological features, differentiated therapy.*

ЛИЧНОСТНЫЕ ОСОБЕННОСТИ ЛИЧНОСТИ ПАЦИЕНТОВ С НЕЗАВЕРШЕННЫМИ СУИЦИДАМИ

Джураев Н.Н., Мирзаев А.А., Козимжонова И.Ф.
Андижанский государственный медицинский институт

Резюме. Целью исследования явилось изучить характерологические особенности личности суицидентов и патохарактериологическую картину после незавершенного суицида. Обследовано 105 не состоящих на диспансерном психиатрическом учете пациентов с незавершенным суицидом. Выявлено преобладание пациентов подросткового возраста, преобладание женщин среди обследованных лиц, а также выявлена акцентуация характера.

Ключевые слова: *незавершенный суицид, подростки, психопатологические особенности, дифференцированная терапия*

Kirish. Suitsid insoniyatning abadiy muammolaridan biridir, chunki yer yuzida inson bor ekan, o'z joniga qasd qilish ijtimoiy xavfli hodisa sifatida mavjud [1]. Tadqiqotchilarning fikricha, o'z joniga qasd qilish sof antropologik hodisadir [3]. So'nggi yillarda xulq o'zgarishi, xarakter patologiyalari, stress kasalliklar ortishi, davlatdagi notinchliklar, jamiyat uchun boshqa ijtimoiy muhim muammolar orasida suitsidologiya masalalari dolzarb bo'lib qolmoqda [2]. Dunyoning aksariyat mamlakatlarida o'z joniga qasd qilish o'limning eng ko'p uchraydigan 10 ta sababi, bolalar va o'smirlar o'rtasida esa o'z joniga qasd qilish uchta asosiy sabablardan biridir [6,7].

JSST ma'lumotlariga ko'ra, dunyoda har yili 1,000,000 kishi o'z joniga qasd qiladi va juda ko'p sonli bemorlar tugallanmagan o'z joniga qasd qiladilar [4,5].

Izlanish maqsadi. Suitsident shaxsining xarakterologik xususiyatlarini va tugallanmagan suitsidlardan keyingi patopsixologik xususiyatlarni o'rganish.

Tekshirish materiallari va usullari. RShTYoIMAFning toksikologik va kuyish bo'limlarida suitsidal urinishdan keyin bo'lgan shaxslarni o'rgandik. Suitsidlarni tekshirish klinik-psixologik, patopsixologik, anamnestik va klinik-katamnestik usullar bilan amalga oshirildi. Tugallanmagan joniga qasd qilgan 105 nafar bemor o'rganildi, ulardan faqat 2 nafari (1.9 %) o'z joniga qasd qilishga urinishni takrorladi. O'z joniga qasd qilishga uringan suiqasdchilar Andijon Viloyati psixonevrologiya dispanseri nazoratida bo'lmagan.

Tadqiqot natijalarini statistik qayta ishlashda N. A. Ploxinskiy (1970), Ye. N. Shigan (1972) asarlarida keltirilgan uslubiy tavsiyalar ishlatilgan. Ikki ko'rsatkich o'rtasidagi farqlarning ishonchliligi Styudentning ishonchlilik mezonini hisoblash yo'li bilan aniqlandi. Taqqoslanayotgan ko'rsatkichlardagi farqlarning ishonchliligi uchun shunday ma'lumotlar olinganki, unda $P \leq 0,05$ ($T \geq 2.0$ da), ya'ni bu farqlarning tasodifiy bo'lmasligi yehtimoli 95% dan ortiq baholangan.

Izlanish natijalari. Suitsidal harakatlar tahlili shuni ko'rsatadiki, biz tekshirgan bemorlarda ularning ko'pchiligining suitsidal xulq-atvori real ob'ektiv va sub'ektiv og'ir psixotravmatik ekologik omillarning ta'siri bilan bog'liq bo'lib, bu shaxsning hayotiy ehtiyojlarini va uning ijtimoiy-psixologik buzilishlarini keltirib chiqaradi.

O'z joniga qasd qilishga suiqasd qilgan asosiy guruhdagi erkaklar va ayollar nisbati mos ravishda 18 (17,2 %) va 87 (82,8%) ni tashkil etdi (1-jadval).

Suitsidlar orasida amalda sog'lom shaxslar va chegara buzilishi bo'lgan shaxslar ustun bo'lganligi sababli suitsidlar shaxsining psixologik xususiyatlarini o'rganish alohida qiziqish uyg'otadi. Bu o'z joniga qasd qilish nafaqat ijtimoiy-ekologik omillar, balki o'ta hayotiy sharoitlarda shaxsning psixologik va patopsixologik xususiyatlariga ham sabab bo'lgan individual xulq-atvor reaksiyasi ekanligi bilan izohlanadi. Suitsidentlar orasida, eng keng tarqalgan isteroid 25 (23.8%), siklotimik 9 (8.5%) va hissiy-labil shaxs belgilari bilan shaxslar 8 (17.1%). Shizoid, epileptoid va psixoastenik(4.7%, 11.1%, 4.7%, mos va bu 1 jadvalda ifodalangan.

Suitsidal harakatlar tahlili shuni ko'rsatadiki, biz tekshirgan bemorlarda ularning ko'pchiligining suitsidal xulq-atvori real ob'ektiv va sub'ektiv og'ir psixotraumatik yekologik omillarning ta'siri bilan bog'liq bo'lib, bu shaxsning hayotiy yehtiyojlarini va uning ijtimoiy-psixologik buzilishlarini keltirib chiqaradi.

O'z joniga qasd qilishga suiqasd qilgan asosiy guruhdagi erkaklar va ayollar nisbati mos ravishda 18 (17,2 %) va 87 (82,8%) ni tashkil etdi (1-jadval).

Isteroid turi (25; 23.8%) jamoada impulsivlik, qahr, ziddiyat, g'azablanish, asabiylashish, janjalkashlikning ortishi bilan xarakterlanadi. Muloqotda aloqa darajasining pastligi, verbal va noverbal reaksiyalarning sustligi, harakatlarning og'irligi mavjud. Bu ta'kidlashlar bilan odamlarga xos bo'lgan xususiyatlar ularni stressga chidamli qiladi, muammolar va qiyin vaziyatlarni bartaraf yetish qiyin. Ular suitsidal urinishlarni namoyishkorona va namoyishkorona xulq ko'rinishlari bilan ajralib turadi.

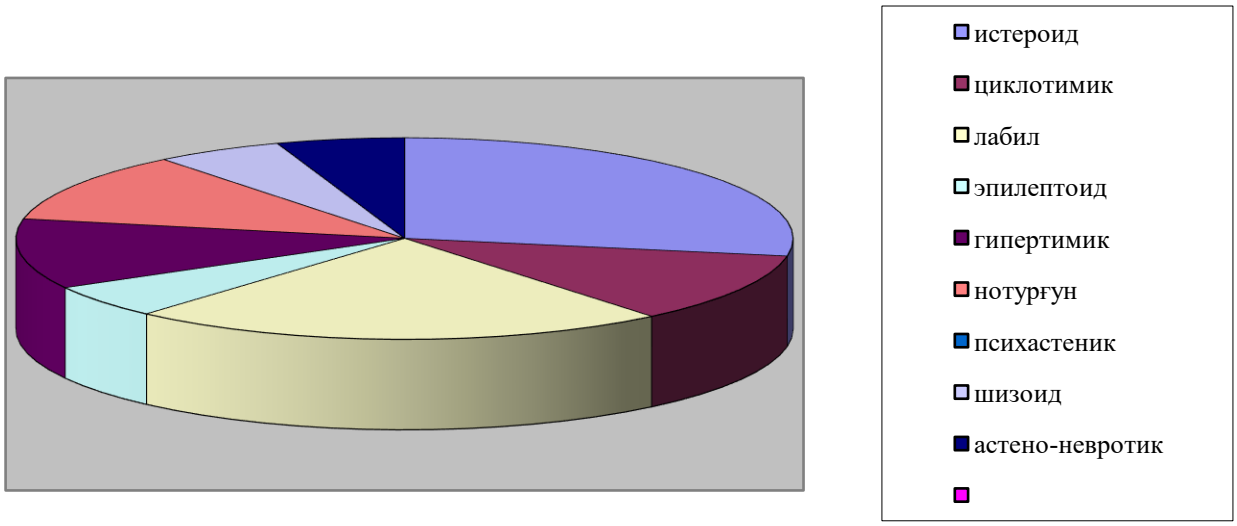
Siklotimik tip (9; 8.5%) gipertimik va distimik holatlarning o'zgarishi bilan xarakterlanadi. Ushbu turdagi aksentuatsiyaga ega bo'lgan odamlar tez-tez davriy kayfiyat o'zgarishi va tashqi voqealarga bog'liqligi bilan ajralib turadi. Quvonchli voqealar ularni gipertimiya (faoliyatga tashnalik, talkativlik, g'oyalarning sakrashi), achinarlisi esa-depressiya, reaksiya va tafakkurning sustligi suratlarini vujudga keltiradi. Ularning boshqa odamlar bilan muloqot qilish uslubi ham tez-

tez o'zgarib turadi. Suitsidal harakatlar odatda subdepressiv fazada ta'sir yetish balandligida sodir etiladi. Ochiqdan-ochiq haqorat, xo'rlik, muvaffaqiyatsizliklar zanjiri o'z joniga qasd qiladi, bu esa insonni o'zining qadrsizligi, foydasizligi, kamsuqumligi haqida o'ylashga majbur qiladi

Xarakter hissiy-labil aksentuatsiyasiga ega bo'lgan shaxslar uchun (8; 17.1%) emotsionallik, sezgirlik, bezovtalik, ezmalik, qo'rqoqlik, nozik his-tuyg'ular sohasida chuqur reaksiya xosdir. Ularning eng aniq xususiyatlari ta'sirchanlik, boshqa odamlar uchun hamdardlik, ta'sirchanlik, ko'ngli bo'shlik bo'ladi. Har qanday hayotiy voqea-hodisalar ular tomonidan boshqa odamlarga nisbatan jiddiyroq qabul qilinadi, ular kamdan-kam hollarda nizolarga kirishadi, o'z-o'zidan arazlab yuradilar. Suitsidal xulq-atvor affektiv, qaror qabul qilish va uni ijro etish, qoida tariqasida, shu kuni tez amalga oshiriladi.

Epileptoid tipining asosiy xususiyatlari (12; 11.1%) disforiyaga moyillik va ular bilan chambarchas bog'liq bo'lgan ta'sirlovchi portlovchi moddalar, instinktiv sohaning tarangligi, ba'zan disklar anomaliyasiga, shuningdek, yopishqoqlikka, qattiqlikka, og'irlikka, inertlikka yetib boradi.

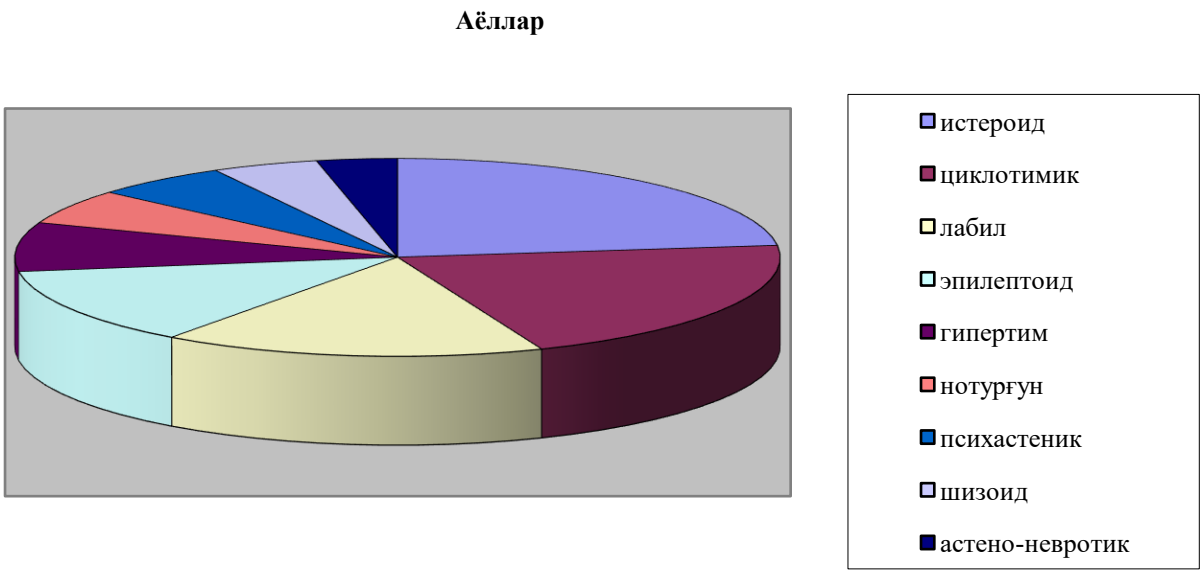
Эркаклар



O'z joniga qasd qilish uchun asosiy sabablari oila (ularning ahamiyatini isbotlash uchun, ularning his-tuyg'ularini tushunish yo'qligi, qadr-qimmatini haqorat, moddiy maishiy, faqat 44%) va microsotsial (oila a'zolari bilan turmush qurmagan, rasmiy yoki kambag'al munosabatlar, to'liq oila, qarindoshlari va do'stlari zaif ijtimoiy qo'llab-quvvatlash, faqat 44%) omillardan iborat. Tarbiyaning o'ziga xos xususiyatlari, oila turi va zaiflik omillari suitsidal shaxsning shakllanishida muhim rol o'ynadi.

Shaxsiy xususiyatlarning berilgan psixologik xususiyatlari adabiyot manbalar ma'lumotlari bilan bog'lanadi [2,4,7].

Tarbiyaning tashki shakllari ma'lum xarakter aksentuatsiyalarini shakllantirish va mustahkamlashga yordam beradi va ko'pincha shaxsning patoxarakterologik rivojlanishiga sabab



bo'ladi (1-diagramma).

Tugallanmagan suitsiddan keyin bemorlarning psixopatologik holatini o'rganishda astenik holatlarning (66; 62,8 %) va depressiv holatlarning (28; 26,6%) ustunligi aniqlandi (1-diagramma).

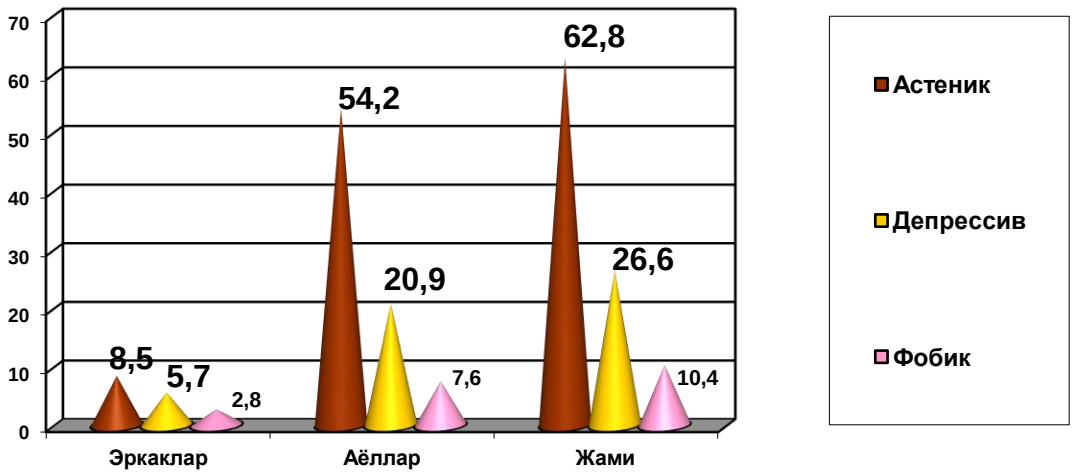


Diagramma 1. Tugallanmagan suitsiddan keyin tematik bemorlarning psixopatologik holatlari

6 (62,8%) bemor ayollarda ancha ko'p (54,2% va 8,5%, o'z navbatida, p<0,05), to'liqsiz o'z joniga qasd so'ng astenik holatini ishlab chiqildi. Ularda umumiy holsizlik, asabiylashish, intemperans, lanjlik, tez charchash, uyqu buzilishi bor edi. Kayfi chog', andisha va tajanglik bilan pastladi.

28 (26.6%) bemorlarda chala intihodan keyin depressiv holat rivojlangan bo'lib, ayollarda ham ancha ko'p kuzatilgan (20.9% va 5.7%, o'z navbatida, p<0,05). Bu tushkun kayfiyat, qiziqishning yo'qligi, boshqalarga, qarindosh-urug'larga va o'ziga nisbatan befarqlik, yakkahokimlik istagi bilan namoyon bo'ldi.

Depressiv holatning o'zi bemorlarda o'z joniga qasd qilish va o'z joniga qasd qilish urinishlari paydo bo'lishiga yordam beradi, shuning uchun bemorlarning bu kontingenti yanada ko'proq e'tibor, monitoring va har tomonlama davolanishni talab qiladi.

11 (10.4%) suitsidlardagi xavotir-qo'rquv holati bemorning ongini butunlay egallab olgan tashvish, qo'rquv, umidsizlik bilan boshqarilmaydigan his-tuyg'u bilan xarakterlanadi.

Tugallanmagan suitsiddan so'ng o'z joniga qasd qiluvchilar behush holatda, karaxlik, sopor, koma holatida bo'lgan. Ular dezintoksikatsiya, sedativ preparatlar bilan davolash, antidepressantlar (amitriptilin, zoloft, iksel) va trankvilizatorlar (valiy, relanium) dan foydalanish shaklida shoshilinch yordam oldilar. Psixotrop preparatlar bilan davolash murakkab terapiya, shu jumladan, psixoterapiya o'tkazilganda birinchi kunlardanoq eng samarali, ya'ni psixokorreksiya bo'lib chiqdi [1,5,6]. Murakkab davolash natijasida patopsixologik belgilar juda tez yo'qoldi, davolash vaqti qisqardi.

Xulosa. Eng yuqori suitsid darajasi o'smirlik davrida bo'lib, ayollarda o'z joniga qasd qilish urinishlari chastotasi erkaklarnikiga nisbatan 5 barobar yuqori.

Suitsidlarning ko'pchiligi orasida isteroid, sikloid, hissiy labil tiplariga ko'ra xarakterning aksentuatsiyasi aniqlangan.

Tugallanmagan suitsiddan keyin astenik holat, depressiv holat, tashvish – qo'rquv holati eng ko'p qayd etilgan.

Suitsidlar, psixopatologik holatlar shaxsining tugallanmagan suitsiddan keyingi xarakterologik xususiyatlarini o'rganish maqsadli psixokorreksiya va takroriy suitsidal harakatlarning oldini olishga yordam beradi

Foydalanilgan adabiyotlar:

1. Аграновский М.Л., М.Б. Усманова, Н.К.Сарбаева: Тугалланмаган суициддан кейинги беморларнинг рухий реабилитацияси: научное издание // Современные аспекты медицинской реабилитации и физиотерапии. Тез. Респ. науч. - практ. конф. (6 июня 2006г., г. Ташкент). – Т., 2006. – С. 209.
2. Асадов Д.А., Ходжаева Н.Д Суицидал хулкни комплекс профилактикасини ташкиллаштириш. Узбекистон тиббиёт журнали – 2004. № 1 – 2, с.147 – 150
3. Вагин Ю.Р. Суицидальная активность и защитные механизмы личности. Сибирский вестник психиатрии и наркологии: научно – практическое издание.-2003.-№2.-С.84-88.
4. Калачева И.О. Социально – личностные факторы, влияющие на суицидальное поведение подростков. Российский психиатрический журнал. – 2006. - № 4. – стр. 41 – 45.
5. Чобану И. К. Объективизация психотерапии суицидентов. Психотерапия. – 2007. - № 5. – стр. 28 – 32.

6. Conner K.R., Beautrais A.L., Conwell Y. Risk factors for suicide and Medically serious suicide attempts among alcoholics: Analyses of Canterbur. Suicide project data // Journal of Studies on Alcohol. -2003, Vol, 64, № 4, P. 551-554.
7. Keks N. A., Hill C., Sundram S. Evalution of treatment in 35 cases of bipolyar suicide. 2009, Vol 43 (6), P. 503.

UO'K: 616-08-035

GLAUKOMA DAVOSIDA QURUQ KO'Z SINDROMI PATOGENEZ, RISK OMILLARI VA ZAMONAVIY PROFILAKTIKA USULLARI

Jaxongirov I.J., Sabirov O.O.
Andijon davlat tibbiyot instituti

Kirish. Glaukoma bilan og'rigan bemorlarda uzoq muddatli ko'z tomchilaridan foydalanish quruq ko'z sindromi QKS (Dry Eye Syndrome) rivojlanishining asosiy sabablaridan biridir. JSST ma'lumotlariga ko'ra, 60 yoshdan oshganlarning 70%ida glaukoma bilan birga QKS alomatlari kuzatiladi (JSST, 2021). Amerika Oftalmologiya Akademiyasi (AAO) 2023-yil hisobotida ta'kidlashicha, glaukoma dorilarini qabul qiluvchilarning 65%ida kamida bitta QKS alomati mavjud (AAO, 2023). Ushbu maqolada QKS patogenezi, glaukoma dorilari bilan bog'liq risk omillari va ularni kamaytirishning zamonaviy usullari tadqiqotlar asosida yoritiladi.

Kalit so'zlar: *Glaukoma, ko'z tomchilari, to'g'ri tomizish, tibbiy savodxonlik, maxsus moslamalar, innavatsion yechimlar.*

DRY EYE SYNDROME IN GLAUCOMA TREATMENT: PATHOGENESIS, RISK FACTORS, AND MODERN PREVENTION METHODS

Jakhongirov I.J., Sabirov O.O.
Andijan State Medical Institute

Introduction. Long-term use of eye drops in patients with glaucoma is one of the main causes of the development of dry eye syndrome (DES). According to WHO data, 70% of people over the age of 60 with glaucoma exhibit symptoms of DES (WHO, 2021). The 2023 report by the American Academy of Ophthalmology (AAO) states that 65% of patients using glaucoma medications experience at least one symptom of DES (AAO, 2023). This article explores the pathogenesis of DES, risk factors associated with glaucoma eye drops, and modern methods for reducing these risks based on research findings.

Keywords: *glaucoma, eye drops, proper instillation, medical literacy, special devices, innovative solutions.*

СИНДРОМ СУХОГО ГЛАЗА ПРИ ЛЕЧЕНИИ ГЛАУКОМЫ: ПАТОГЕНЕЗ, ФАКТОРЫ РИСКА И СОВРЕМЕННЫЕ МЕТОДЫ ПРОФИЛАКТИКИ

Джахонгиров И.Д., Сабиров О.О.
Андижанский государственный медицинский институт

Введение. Длительное применение глазных капель у пациентов с глаукомой является одной из основных причин развития синдрома сухого глаза (ССГ, Dry Eye Syndrome). Согласно данным ВОЗ, у 70% людей старше 60 лет, страдающих глаукомой, наблюдаются симптомы ССГ (ВОЗ, 2021). В отчёте Американской академии офтальмологии (AAO) за 2023 год отмечается, что у 65% пациентов, принимающих противоглаукомные препараты, присутствует как минимум один симптом ССГ (AAO, 2023). В данной статье рассматриваются патогенез ССГ, факторы риска, связанные с применением противоглаукомных капель, а также современные методы их снижения на основе проведённых исследований.

Ключевые слова: *глаукома, глазные капли, правильное закапывание, медицинская грамотность, специальные устройства, инновационные решения.*

Quruq Ko'z Sindromining Patogenezi va Glaukoma Dorilarining Ta'siri

- Konservantlarning shox parda epitelisiga Ta'siri

• Benzalkonium xlorid (BAK) tarkibli ko'z tomchilari shox parda epitelisini 4 xil mexanizm orqali shikastlaydi:

- Hujayra apoptosi: BAK shox parda epitelial hujayralarida oksidlanish jarayonini oshirib, apoptosga olib keladi (Baudouin et al., 2017).
- Goblet hujayralarini yo'q qilish: 12 oylik BAK ta'siri goblet hujayralar sonini 40%ga kamaytiradi (DEWS II Report, 2017).
- Ko'z yoshi tarkibini buzilishi: BAK ko'z yoshining lipid qatlamini parchalab, bug'lanish tezligini 2 baravar oshiradi (Craig et al., 2021).

Klinik tadqiqot: 2022-yilda 1200 bemor ishtirokida o'tkazilgan tahlil shuni ko'rsatdiki, BAK tarkibli dorilar QKS rivojlanish xavfini 3,2 baravar oshiradi (p<0,001) (Ophthalmology Journal, 2022).

- Prostaglandin analoglarining ro'li

Glaukoma davosida keng qo'llaniladigan latanoprost va bimatoprost kabi prostaglandin analoglari ko'z yoshi ishlab chiqarishini kamaytiradi. 2021-yilda 500 bemorda o'tkazilgan RCT tadqiqotida latanoprost qo'llaganlarda Schirmer testi natijalari 6 oyda 12 mm/5 mindan 5 mm/5 min ga tushgan (p=0,002) (Br J Ophthalmol, 2021).

Profilaktik Chora-tadbirlar: Ilmiy Dalillar va Yangi Strategiyalar

- Konservantsiz Dorilarning Samaradorligi

Travoprost BAK-free va Tafluprost kabi konservantsiz dorilar QKS rivojlanish xavfini 50%ga kamaytiradi (Pillunat et al., 2020). 2023-yilda Germaniyada 800 bemorda o'tkazilgan tadqiqot shuni ko'rsatdiki, BAKsiz dorilar 1 yil davomida qo'llanganda, QKS alomatlari 35% kamaygan (p<0,05) (Graefes Arch Clin Exp Ophthalmol, 2023).

- Sun'iy Ko'z Yoshlari: Yangi Formulalar

Retikulyar Giyaluron Kislota (RGK): 0,3% RGK asosidagi lubrikantlar (masalan, Hylo-Forte) ko'z yoshini 8 soatgacha saqlaydi. 2022-yilda 300 bemorda o'tkazilgan tadqiqotda RGK qo'llaganlarda TBUT (Tear Break-Up Time) 5 sekunddan 12 sekundga ko'tarilgan (p=0,001) (Cornea, 2022).

Liposomal Spreylar: Tears Again® kabi liposomal formulalar ko'z yoshi lipid qatlamini tiklaydi. 2020-yilda ularning samaradorligi 78% bemorda tasdiqlangan (Clin Ophthalmol, 2020).

- Immunomodulyatorlar va Biologik Terapiya

Siklosporin A (0,1%): RESTORE-2 tadqiqoti (2023) shuni ko'rsatdiki, kuchaytirilgan siklosporin 6 oy davomida QKS alomatlarini 70%ga kamaytiradi (p<0,001).

Lifitegrast (Gidra): FDA tasdiqlagan yangi QKS dori. 2023-yilgi tadqiqotda lifitegrast glaukoma bemorlarida ko'z qizarishi va og'riqni 65%ga kamaytirgan (J Ocul Pharmacol Ther, 2023).

- Nutrigenomika va Oziqlanish

Omega-3 va Omega-6 nisbati: 3:1 nisbatda omega-3 qabul qilish QKSni 40%ga kamaytiradi (DREAM-2 tadqiqoti, 2023).

Vitamin D: 30 ng/ml dan past vitamin D darajasi QKS xavfini 2 baravar oshiradi. 2021-yilda 1200 bemorda o'tkazilgan tadqiqotda vitamin D preparatlari QKS alomatlarini 30%ga yaxshilagan (Nutrients, 2021).

- Regenerativ Tibbiyot

Avto Qon Asosidagi Dorilar (autogemoterapiya): Trombotsitli plazma tomchilari shox parda epitelini tiklashda 85% samaradorlikka ega (Ocul Surf, 2023).

Stem Cell Terapiyasi: Mezenximal ildiz hujayralari goblet hujayralarini regeneratsiya qiladi. 2022-yilgi hayvonlar tadqiqotida ularning samaradorligi tasdiqlangan (Stem Cells Transl Med, 2022).

Klinik Ko'rsatmalar: Xalqaro Protokollar

-TFOS DEWS II (2017) QKSni boshqarishda birinchi qadam sifatida konservantsiz dorilar va giyaluron kislotani tavsiya qiladi.

-Yevropa Glaukoma Jamiyati (EGS, 2023) glaukoma bemorlarida har 6 oyda QKS skriningi (TBUT va Schirmer testi) o'tkazishni talab qiladi.

Xulosa va Kelajakdagi Yo'nalishlar

Glaukoma davosi bilan QKS profilaktikasi integratsiyalashgan yondashuvni talab qiladi. Konservantsiz formulalar, regenerativ terapiya va nutrigenomika yutuqlari bemorlarning hayot sifatini sezilarli darajada oshirishi mumkin. Kelajakda suniy intellekt asosidagi ko'z yoshi tahlili va gen terapiyasi kabi innovatsion usullar keng qo'llanilishi kutilmoqda.

Foydalanilgan adabiyotlar:

1. Baudouin, C. et al. (2017). "BAK toxicity mechanisms in corneal epithelium." *Ocul Surf*.
2. AAO (2023). "Dry Eye Disease in Glaucoma Patients: Clinical Guidelines."
3. DREAM-2 Research Group (2023). "Omega-3/Omega-6 Ratio and QKS." *JAMA Ophthalmol*.
4. EGS (2023). "European Guidelines for Glaucoma Management."

UO'K: 618.396-616-037-084

MUDDATDAN OLDINGI TUG`RUQ HAVFI BŐLGAN HOMILADOR AYOLLARDA FETOPLATSENTAR YETISHMOVCHILIKNI PROGNOZLASH VA OLDINI OLISH

Jalilova D.M., Shavazi N. N.
Samarqand Davlat Tibbiyot Universiteti

Annotatsiya: Barcha tug'ilishlar orasida fetoplatsentar yetishmovchiliklar darajasi 20-30% ga, erta tug'ilish holatlarida esa 23% ga yetadi. Fetoplasentar tizimning yetishmasligi bugungi kungacha zamonaviy akusherlikning dolzarb muammolaridan biri bo'lib qolmoqda. Plasentatsiya jarayonining buzilishi va yo`ldoshning muddatdan oldin yetilishi erta tug'ilishning sabablaridan biridir. Shu sababli, hozirgi vaqtda zamonaviy akusherlikda klinikadan oldingi bosqichda fetoplasentar kompleksdagi patologik o'zgarishlarni aniqlashga imkon beradigan zamonaviy diagnostika usullarini qo'llash va klinik amaliyotga joriy etish ustuvor yo'nalish bo'lib qolmoqda.

***Kalit so`zlar:*** *Muddatdan oldin tug`ruq, fetoplatsentar yetishmovchilik, platsentaning morfofunktsional kasalliklari, ekstragenital kasalliklar, ferroptoz, glutation peroksidaza 4 , selen, L-arginin.*

FORECASTING AND PREVENTION OF FETOPLACENTAR INSUFFICIENCY IN PREGNANT WOMEN WITH PRETERM OBSTETRIC CARE

Jalilova D.M., Shavazi N. N.
Samarkand State Medical University

Annotation: Among all births, fetoplacentar insufficiency rates reach 20-30%, and in cases of premature birth, 23%. The lack of a fetoplacentar system remains one of the pressing problems of modern obstetrics to this day. Disruption of the placentation process and premature maturation of the placenta are some of the causes of premature birth. Therefore, at present, in modern obstetrics, the application and introduction into clinical practice of modern diagnostic methods, which allow to identify pathological changes in thefetoplacentar complex at the pre-clinical stage, remains a priority.

Keywords: *premature labor, fetoplacentar insufficiency, morphofunctional diseases of the placenta, extragenital diseases, ferroptosis, glutathione peroxidase 4, selenium, L-arginine.*

ПРОГНОЗ И ПРОФИЛАКТИКА ФЕТОПЛАЦЕНТАРНОЙ НЕДОСТАТОЧНОСТИ У БЕРЕМЕННЫХ С ПОВЫШЕННЫМ РИСКОМ ПРЕЖДЕВРЕМЕННЫХ РОДОВ

Жалилова Д.М., Шавази Н. Н.
Самаркандский государственный медицинский университет

Аннотация: Среди всех родов частота фетоплацентарной недостаточности достигает 20-30%, а в случае преждевременных родов-23%. Недостаточность фетоплацентарной системы и по сей день остается одной из актуальных проблем современного акушерства. Нарушение процесса плацентации и преждевременное созревание плаценты-одна из причин преждевременных родов. Поэтому в настоящее время в современном акушерстве приоритетным направлением остается применение и внедрение в клиническую практику современных методов диагностики, позволяющих выявить патологические изменения в фетоплацентарном комплексе на доклинической стадии.

Ключевые слова: преждевременные роды, фетоплацентарная недостаточность, морфофункциональные заболевания плаценты, экстрагенитальные нарушения, ферроптоз, глутатионпероксидаза 4, селен, L-аргинин.

Kirish. Muddatdan oldingi tug'ruqlar zamonaviy akusherlikning eng dolzarb muammolardan biri bo'lib qolmoqda va bu dunyo bo`yicha taxminan 11% ni tashkil qiladi. Yevropaning ayrim mamlakatlarida 5% ,O`rta osiyo ayrim davlat hududlarida 13% Afrikada 18% gacha o'zgarib turadi . Dunyoda har yili 15 millionga yaqin muddatidan oldin tug'ilgan chaqaloqlar tug'ilishi kuzatiladi.[1].Muddatdan oldin tug'ilish jiddiy tibbiy va ijtimoiy muammodir, chunki erta tug'ilgan chaqaloqlar orasida perinatal o'lim juda yuqori, homiladorlikning 28 xaftaligiga qadar tug`ilishlar erta tug`ulishlarning 77,4 % , 30 xaftalikga qadar 48,5%, 32 xaftalikga qadar esa 31,4% tashkil etadi.[2] Muddatdan oldingi tug`ruq homiladorlikning 22-haftasidan 37-haftasiga qadar bo`lgan gestatsion davrda homiladorlikning muddatidan oldin to`xtashiga aytiladi. Homilaning gestatsiya muddatini inobatga olib erta tug`ruqni 3ta davrga bo`lamiz 1) 22-27- haftasiga qadar, 2) 28-33-haftasiga qadar, 3) 34-37- haftasiga qadar sodir bo`lgan tug`ruq jarayonlarini inobatga olib, quyidagi sabablar bu jarayonning xatar omili xisoblanadi: ijtimoiy- biologik tashqi ekstrakorporal omillar (alimentar ovqatlanishning qoloqligi, kofeinga boy ichimliklarni haddan ziyod istemol qilish, narkotik xususiyatga ega bo`lgan vositalarni ichish va chekish, ruhiy stress jarayonlar, travmalar, ish faoliyati bilan bog`liq radioaktiv nurlanishlar). Akusherlik -ginekologik anamnez ma`lumotlari (onaning juda yosh ekanligi bunda onalikka jismonan tayyor emasligi yoki yoshi katta tug`uvchi onalar,anamnezidan erta tug`ruqlar kuzatilganligi,ko`p bor tabiy abort kechganligi, ko`p xomilalik,og`irlashgan akusherlik anamnezlari), ekstragenital kasalliklar (qandli diabet,pielonefrit,miopiya,periferik qon tomirlar varikozi,semizlik,bronxial astma,pnevmaniya,urogenital kasalliklar,virusli kasalliklar) ,homiladorlik asoratlari (homiladorlar gipertenziyasi,eklampsiya preeklampsiya, yo`ldoshni oldinda joylashuvi,yo`ldoshning erta ko`chishi, fetoplasentar yetishmovchilik,qog`onoq suvining ko`pligi yoki haddan ziyod kamligi, homilani chanoq bilan kelishi,bachadon bo'yni yetishmovchiligi, bachadon malformatsiyasi) .Fetoplasentar yetishmovchilik-bu homila va platsentadan turli xil ekstragenital va ginekologik patologiyalar, shuningdek homiladorlikning asoratlari tufayli rivojlanadigan plasentaning morfofunktsional kasalliklar majmuasi bo`lib, birlamchi yetishmovchilik homiladorlikning dastlabki bosqichlarida (16-18 xafta), platsenta shakllanishi va yuqumli virusli,bakterial kasalliklar, endokrin, yatrogen omillar ta'sirida organogenez bosqichlarida paydo bo'ladi. Ikkilamchi fetoplasentar yetishmovchilik dastlab normal shakllangan platsenta bilan, onalik omillari yoki homiladorlikning asoratlari ta'siri ostida rivojlanadi. Perinatal kasallanish va homilaning perinatal o'limi fetoplasentar yetishmovchilik tufayli yuzaga keladigan asoratlarga homilaning intrauterin rivojlanishini kechikish sindromi, homilaning o'tkir va surunkali gipoksiyasi, platsentaning erta qarishi, rivojlanmayqolgan homiladorlik kiradi. Platsentatsiya jarayonining buzilishi bilan yuzaga keladigan va platsentaning rivojlanmay qolishiga olib keladigan erta FPY, erta tug'ilishning sabablaridan biridir. Shu sababli, hozirgi vaqtda kasallikning dastlabki, klinikadan oldingi bosqichida fetoplasentar kompleksdagi patologik o'zgarishlarni aniqlashga imkon beradigan zamonaviy diagnostika usullarini ishlab chiqish va klinik amaliyotga joriy etish dolzarbdir. Ona-platsentaplod tizimida gomeostazni ta'minlaydigan himoya-adaptiv mexanizmlarning neyrogen regulyatsiyasining asosiy kontseptsiyasi shubhasiz qiziqish uyg'otadi. Gormonal holatning o'zgarishi bilan bog'liq homilador ayollar tanasidagi fiziologik jarayonlar yallig'lanish va allergik reaktsiyalarni rivojlanishida ishtirok etadigan ba'zi vositachilarning yani gistamminning proliferatsiyasi, il-3, il-4 interleykinlarni semiz hujayralaridan sitokinlar oqimi kuchayishi sodir

bo'ladi. Disfunktsional platsentadan yallig'lanishga qarshi moddalar kontsentratsiyasining oshishi tufayli endotelial disfunktsiyaga olib keladigan tizimli yallig'lanishning kuchayishi yana bir muhim yo'ldir. Shuningdek, Trofoblast hujayralariga qon oqimining sustligi (anemiya, ishemiya, metabolizm sustligi) tufayli qonda erastin miqdori ortadi va u buyrakning yuksaglamerulyar aparatida Renin sintezini oshiradi. Renin Angiotenzinogenni Angiotenzin 1ga aylantiradi, konversiyalovchi ferment ta`sirida Angiotenzin 1, Angiotenzin 2 ga aylanadi, Angiotenzin 2 qon tomirlarni butun periferiyada toraytirib, bachadonga qon oqimini yo`naltiradi. Bundan tashqari buyrak usti bezida Aldosteron garmonini sintezini ham rag`batlantiradi. Natijada natriyning reabsorbsiyasi kuchayib to`qimalarda shish yuzaga keladi. Bu jarayon bachanonga qon kelishini organlar tizimida qon bosimining ko`tarilishi preeklampsiya holatiga olip keladi. Agar platsenta yetishmovchiligiga olib keladigan asoratlarni davolash mumkin bo'lmasa yoki umuman amalga oshirilmasa, platsentaning unda yuzaga keladigan buzilishlarni qoplash qobiliyati susayishni boshlaydi va subkomnensatsiyalangan platsenta yetishmovchiligi rivojlanadi. Himoya mexanizmlarining charchoq bosqichi boshlanadi, bu har xil og'irlikdagi homila rivojlanishining kechikishiga olib keladi. So`ngi yangiliklardan ferroptozning ham fetoplasentar yetishmovchilikga aloqadorligi aniqlangan. Ferroptoz-bu ko'p to'yinmagan yog'li kislotalarni o'z ichiga olgan fosfolipidlarning oksidlanish-faol temirga bog'liq peroksidlanishi va lipid peroksidatsiyasidan keyin tiklanish qobiliyatining yo'qolishi bilan aniq belgilanadigan dasturlashtirilgan hujayra o'limining yangi aniqlangan shakli.

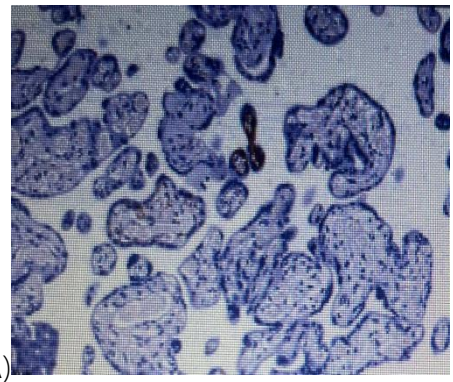
Maqsad va vazifalar. Ferroptoz atamasi 2012 yilda fanga kiritilgan bo`lib, sistin importini inhibe qiluvchi past molekulyar og'irlikdagi erastin tufayli hujayra o'limining shaklini tavsiflash uchun glutationning kamayishi va fosfolipid peroksidaza glutation peroksidaza 4 (GPX4) ning inaktivatsiyasiga olib keladi. GPX4 potentsial toksik lipid gidroperoksidlarini (LOOH) toksik bo'lmaganlarga aylantiradi. [3]. Ko'pgina tadqiqotchilar ferroptozga uchragan hujayralarda nekrozga o'xshash morfologik o'zgarishlarni topgan, degan fikrga qo'shiladilar [4]. Ushbu xususiyatlarga plazma membranasining yaxlitligini buzish, sitoplazmaning shishishi (onkoz) va sitoplazmatik organellalar, xromatinning o'rtacha kondensatsiyasi kiradi. Ultrastrukturaviy darajada, mitoxondriyal anomaliyalar odatda ferroptoz hujayralarida uchraydi, masalan, kondensatsiya yoki shishish, membrana zichligining oshishi, kristallarning kamayishi yoki yo'qligi va tashqi membrananing yorilishi Temir va lipid peroksidlari ferroptozning ikkita asosiy ishtirokchisidir [3,5,6]. Lipid peroksidlarining to'planishi, asosan fosfatidiletanolamin-OOH (Fe-OOH) oxir-oqibat ferroptozga olib keladi [7], temir esa ferroptozning asosiy regulyatorining katalizatori yoki komponenti bo'lib xizmat qiladi [8]. Shunday qilib, temir xelatatorlari (masalan, deferoksamin) va ba'zi lipofil antioksidantlar (masalan, a-tokoferol) ferroptozning oldini oladi [9]. Bundan tashqari, fentonning temir bilan katalizlangan reaktsiyasi natijasida hosil bo'lgan ros ferroptozning boshlanishiga yordam beradi. GPX4 kofaktori ishtirokida toksik yog ' kislotasi peroksidlarini toksik bo'lmagan yuqori spirtlarga qaytaradi [10, 11]. GPX4 hujayra ichidagi yog ' peroksidlarini yo'q qilish orqali hujayralarni ferroptozdan himoya qiladi. GPX4 qon zardobida kamayishi ferroptozni qo'zg'atadi [12, 6, 13]. Selen GPX4 ning ferroptozga chidamli faolligini saqlab turishi uchun kerak va selenotsisteinni sistein bilan almashtirish hujayralarni ferroptozga sezgir qiladi [6, 14]. GPX4 ning inaktivatsiyasi yoki yo'qligi lipid peroksidlarining to'planishiga olib keladi, bu ferroptotik hujayra o'limining signali sifatida qaraladi. Shunday qilib, GPX4 miqdorining kamayishi ferroptozning muhim bosqichidir. Lipidlar hujayra ichidagi membrana tizimining energiya ta'minoti va tarkibida hal qiluvchi rol o'ynaydi. Fosfolipidlarning (FL) kislorodlanishi (masalan, fosfatidilxolin, kardiolipin) hujayralardagi ferroptozga yordam beradi [6, 14]. Qizig'i

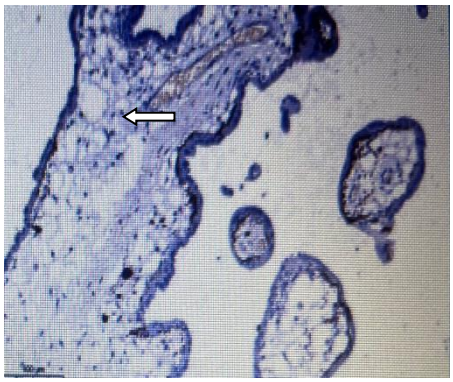
shundaki, ferroptoz bilan bog'liq bo'lgan parametrlar platsenta fiziologiyasi va trofoblastning shikastlanishi bilan bog'liq. Bunday holatlarga platsentaning rivojlanishi paytida gipoksiya-reperfuziya, bachadonning fiziologik qisqarishi yoki platsenta to'shagining patologik o'zgarishi, trofoblastdagi temirning ko'pligi, preeklampsi, homila o'sishining kechikishi va erta tug'ilish kabi asosiy platsenta kasalliklarining patofiziologiyasida lipotoksiklik belgilari, shuningdek glutationning peroksidlanish qobiliyatining pasayishi va lipid peroksidatsiyasining pasayishi kiradi.

Materiallar va usullar.Platsenta trofoblastlarini ferroptoz shikastlanishidan himoya qilishda glutation peroksidaza-4 rol o`ynaydi. Bizning matnimiz platsenta trofoblastlarini lipotoksik shikastlanishdan himoya qilish vositasi sifatida ferroptozni tartibga solishning yangi imkoniyatlari ustida izlanish olib borilmoqda. Tartibga solinadigan hujayra o'limi ko'plab fiziologik va patologik jarayonlarning asosiy tarkibiy qismidir. Nekrotik hujayra o'limi hujayra membranasi va organellalariga zarar yetkazadigan stressga javoban sodir bo'lishi mumkin.Shuning uchun ferroptozni o'rganish kasallikning patogenezini aniqroq aniqlash va yangi terapevtik vositalar va kasalliklarning oldini olish choralarini ishlab chiqish uchun tadqiqotning asosiy yo'nalishiga aylandi. [15].

Natijalar. Tatqiqot davomida 100 ta homilador ayollarda qon zardobida IFA tekshiruvi o`tkazilganida ularning qon zardobidagi glutation peroksidaza 4 titiri normadan (normada1-10 yosh: 25 - 60 ng/ml,11-20 yosh: 30 - 70 ng/ml,21-30 yosh: 35 - 80 ng/ml, 31-40 yosh: 40 - 85 ng/ml,41-50 yosh: 45 - 90 ng/ml, 51-60 yosh: 50 - 100 ng/ml, 61 yosh va undan yuqori: 55 - 110 нг/мл) nisbatan kamligini guvohi bo`ldik, bu esa antioksidantlik faoliyati susayganligi hamda platsentaplot tizimida yo`ldoshda ferraptoz jarayoni kelib chiqish havfi borligini isbotlaydi.

Muddatidan oldin tug`ruq bo`lgan ayollardan platsenta morfologik tekshiruvi o`tkazilganda temir bilan bog`liq lipid oksidlanish jarayonini sitotrofoblaslarni ko`k rangga bo`yalishi bilan kuzatishimiz mumkun.

A) 

B) 

A) Normal platsenta B) Temir to`planishi bilan bog`liq ferraptoz kechayotgan platsenta

Apoptoz-otofagiya, nekroz, mitotik falokat va boshqalar bilan birga dasturlashtirilgan hujayra o'limining shakli. [16].Ferraptoz jarayonini apaptozdan farqi shundaki apaptozda to`qima nobud bo`lsa, feraptozda to`qima membranasi bujmayib o`tkazuvchanligini yo`qotadi. Platsenta trofoblastlari temirga boy bo`lib, aynan homilaga trofoblastlardan temir uzatilish jarayonida temir to`planishi bilan bog`liq jarayon yuzaga kelishi mumkun, ona organizmida kamqonlik bo`lishi bolaga kislorod birikgan gemoglobin (feritinga birikkan holda ) yetkazib berish jarayonida trofoblastlarda zo`riqish yuz berishiga olip keladi.

Muhokama. Selen tutuvchi makropreparatlardan foydalanish orqali trofoblast hujayra to`qimasida temir bilan bog`liq bolgan ferroptoz jarayonini oldi olinadi, Selen glutation

peroksidaza 4ni qalqonsimon bezda sintezlanishini rag`batlantiradi va antioksidantlik faoliyatini taminlanishi homilador ayollarda qonning kislorod bilan to'yinishini rag`batlantiradi. Ma'lumki, arterial gipotenziya intrauterin gipoksiya paydo bo'lishida muhim omil hisoblanadi. Uteroplasentar qon oqimining pasayishi tufayli homila rivojlanishi (35% gacha) kechikishiga sabab bo`ladi. Miyometriy tonusining vaqti-vaqti bilan yoki uzoq vaqt davomida oshishi venoz oqimning pasayishi tufayli fetoplasentar bo'shliqda qon aylanishining buzilishiga olib kelishi ma'lum. Homiladorlikning erta muddatlarida qo`llash mumkun bo`lgan dorilardan Tivortin preparati ham zararsiz hisoblanadi. Tivortin dori vositasi sitoprotektorlik, antioksidantlik, antigipoksik, membranani stabillashtiradigan, detoksifikatsion xususiyatiga ega bo`lib, Arginin (a-amino-δ-guanidinovalerian kislotasi) aminokislotalar sinfiga kiruvchi va organizmning ko'plab hayotiy funktsiyalarining faol va ko'p qirrali hujayra regulyatori ta'siriga ega bo`lib, tanadagi gormonal muvozanatni saqlashda ma'lum rol o'ynaydi. Arginin qondagi, prolin, poliamin, agmatin sintezida ishtirok etadi, fibrinogenoliz jarayonlariga ta`sir qiladi va membranani depolarizatsiya qiluvchi ta'sirga ega. Arginin NO-sintaza fermenti uchun substrat bo'lib, endoteliotsitlarda azot oksidi sintezini katalizlovchi fermentdir. Preparat guanilat siklazani faollashtiradi va qon tomir endoteliyasida SGMF darajasini oshiradi, qon tomir endoteliyasiga leykotsitlar va trombotsitlarning adgeziya va agregatsiyasini kamaytiradi .VCAM-1 va MCP-1 yopishqoq oqsil sintezini inhibe qiladi, shu bilan aterosklerotik blyashka hosil bo'lishi va rivojlanishining oldini oladi, qon tomir devorining silliq mushak hujayralarining vazokonstriktorlik va stimulyatori bo'lgan endotelin-1 sintezini inhibe qiladi. Bu esa bachadon , qon tomir gipertonusini kamayishiga yordam beradi . Fetoplasentar qon aylanishni yaxshilaydi aterosklerotik belyashkalar hosil bo`lishini oldini oladi. Homiladorlarga ineksiya qilgan vaqtdan 30-40 minut o`tgach homilaning yurak urishlari va onaning yurak urishlar sonining normallashganini ko`rishimiz mumkun. Davo kursi kamida 5 kunni tashkil qiladi. Oral 200 ml lik flakon, 15 ml dan 3 mahal 21 kun ichishga, yoki tezroq ta`sir etishi uchun vena ichiga 100ml kuniga 1mahal 5 -10 kun ineksiya qilish orqali amalga oshiriladi. Qo`shimcha makro mikropreparatlardan selen saqlovchi vitaminokompleks 1 tabletkadan 1mahal ichishga buyurishimiz mumkun bo`ladi. Zamonaviy adabiyotlarni tahlil qilish shuni ko'rsatadiki, ko'pincha fetoplatsentar yetishmovchilik uning sababidan alohida ko'rib chiqiladi . Gipovolemiya, tromboz va qon tomir qarshiligining oshishi tufayli fetoplasentar kompleksning tomirlarida qon aylanishining buzilishi qayd etiladi va yetkazib berishning yetarli emasligi to'g'risida xulosa chiqariladi.Selen-faol selenol markazlarini hosil qiluvchi va taxminan 30 ta eukaryotik oqsillarni tashkil etuvchi aniq katalitik xususiyatlarga ega element [17]. Tez-tez va kamdan-kam uchraydigan oqsil genlari genomidagi nisbatga asoslanib, 100 tagacha selen o'z ichiga olgan oqsillar mavjudligi taxmin qilinadi.Selen-aminokislotalarning organik shakllarining yuqori biologik faolligi, ularning noyob antioksidant faolligi, saraton, yurak va neyrogen kasalliklardan (Altsgeymer kasalligi, Parkinson kasalligi),ferraptoz jarayonining yuzaga kelishidan himoya qilish qobiliyati .O'simlik oziq-ovqatlarida va birinchi navbatda non mahsulotlarida selen miqdori bu o'simlik o'sadigan joyda tuproqdagi selen tarkibiga qarab o'zgaradi. Selen tirik organizmda sintez qilinmaydi, shuning uchun u tashqi tomondan oziq-ovqat (organik shakl) yoki dori-darmonlar (noorganik shakl) bilan ta'minlanishi kerak. Inson tanasining hazm bo'lishi selenning noorganik shakli juda kichik va 10% ni tashkil qiladi, tarkibidagi selen yaxshiroq so'riladi hayvonot mahsulotlaridan (30%) va uning o'simlik shakli eng to'liq so'riladi (98% gacha %). Shuni ham ta'kidlash kerakki, noorganik selen haddan tashqari dozada eng zaharli hisoblanadi [18].Selen glutation peroksidaza faol markazining bir qismidir (asosiy endogen antioksidant – glutation biosintezi fermenti), natijada u aniq antioksidant ta'sirga ega. Haddan tashqari oksidlovchi stress homiladorlik patologiyalarining

shakllanishiga sezilarli ta'sir ko'rsatadi, chunki u turli to'qimalarda hujayralar o'limini tezlashtiradi (ferraptoz) fetoplatsentar yetishmovchilikka sabab bo`ladi. Selen bilan ta'minlash homiladorlikka tayyorgarlik bosqichida n boshlash juda muhimdir. Ayolni kontseptsiyaga tayyorlash bu nafaqat infektsiya o'choqlarini qayta tiklashni, balki gametalarning omon qolishi va xavfsizligini oshirish antioksidant mikroelementlarni qo'llab-quvvatlash bilan bog`liqdir. Selen, ayniqsa, ayol va erkak gametotsitlarini himoya qiladi. balki selen bilan ham e

Homiladorlik paytida selen antioksidant tizim glutation peroksidaza sintezida faol katalizatordir. Homilador ayolning tanasida selen yetishmovchiligi bilan yog'larning so'rilishi buziladi, yog'da eriydigan vitaminlar, masalan, E vitamini yetishmasligi yuzaga keladi, metobalizm susayadi. Homiladorlikning oxiriga kelib selen yetishmovchiligi kuchayadi; selenning past darajadagi belgisi plazmadagi glutation peroksidaza fermenti faolligi pasayishi bilan namoyon bo`ladi. Selen yetishmovchiligi homiladorlikning III trimestrida kuchayadi. Eng chuqur tanqislik homiladorlik davrida selenyum bilan dastlab kam ta'minlangan ayollarda qayd etilgan. Selen yodning muhim sinergistidir. Yod tiroid gormonlari tiroksin (T4) va triiodotironin (T3) hosil bo'lishi uchun zarurdir. Tiroid gormonlarining yetishmasligi homiladorlik davri rivojlanish anomaliyalariga va homila o'sishining sekinlashishiga olib keladi.[3]Selen GPX4 ning ferroptozga chidamli faolligini saqlab turishi uchun kerak va selenotsisteinni sistein bilan almashtirish hujayralarni ferroptozga sezgir qiladi. Fetoplatsentar tizimning homila rivojlanishidagi asosiy rolini, xomilaning o'sishini, ona-homila o'zaro ta'sirini, onaning gomeostazini va homiladorlik paytida shikastlanishga moslashish immun tizimida og'ir asoratlarida, masalan, homila o'sishining kechikishi, preeklampsi, erta tug'ilish,homila qon tomir tizimida markaziy rol o'ynaydi . Shuni ta'kidlash kerakki, bir nechta dalillar ferroptoz homilador ayollarning asosiy kasalliklari asosida platsenta disfunktsiyasida asosiy rol o'ynashi mumkinligi haqidagi taxminni qo'llab-quvvatlaydi. Feto-platsentar tizimda odatda homiladorlikning boshida gipoksiyadan reoksigenatsiyaga va keyinchalik muddatidan oldin bachadonning qisqarishi natijasida namoyon bo`ladi. Gipoksiya-reoksigenatsiyaning buzilishi platsenta disfunktsiyasining patogenezi bilan bog'liq.Platsenta trofoblastlari temirga boy, chunki u platsenta orqali rivojlanayotgan homilaga faol ravishda o'tkaziladi) platsenta shikastlanganda trofoblastik lipid peroksidatsiyasi qayd etilgan va glutation peroksidaza 4 (GPX4) ning past darajalari, hujayralarni zararli Hp turlarining to'planishiga qarshi himoya qiluvchi asosiy ferment-PL va ferroptoz, ular inson platsentasining disfunktsiyasi va preeklampsi bilan namoyon bo`ladi. GPX4 ning inaktivatsiyasi yoki yo'qligi lipid peroksidlarining to'planishiga olib keladi, bu ferroptotik hujayra o'limining signali sifatida qaraladi. Shunday qilib, GPX4 miqdorining kamayishi ferroptozning muhim bosqichidir. Lipidlar hujayra ichidagi membrana tizimining energiya ta'minoti va tarkibida hal qiluvchi rol o'ynaydi. Fosfolipidlarning (FL) kislorodlanishi (masalan, fosfatidilxolin, kardiolipin) hujayralardagi ferroptozga yordam beradi .Homiladorlik ayol tanasining barcha muhim mikroelementlarga bo'lgan ehtiyojini oshiradi. Biroq, ko'p ayollar mineral moddalar yetishmovchiligi holatida homilador bo'lishadi.Nafaqat temir, balki xrom, selen yetishmovchiligi xromning normal ta'minlanishi uglevod va lipid metabolizmini normallashtirishni talab qiladi. Xrom ham immunomodulyatsion, antiviral ta'sirga ega, ortiqcha vazn ortishining oldini oladi (bu homiladorlikning II yarmida ayniqsa muhimdir) va malformatsiyalarning paydo bo'lishi kamayadi. Selen ozuqaviy yordam uchun zarur bo'lib,homiladorlikka tayyorgarlik davridan boshlab va homiladorlikning davomiyligi, lipid metabolizmi va xolestaz buzilishlarining oldini olish uchun muhimdir va shuningdek, muhim ahamiyatga ega qalqonsimon bezning ishlashi uchun ahamiyatli.

Xotima. Shunday qilib, qalqonsimon bezda (qalqonsimon bez) bir nechta glutation peroksidazalar (GPx1, GPx3 va GPx4) ifodalanadi, ular tiroid gormonlari almashinuvida ishtirok

etadi va hujayralarni vodorod peroksid (H_2O_2) va erkin radikallarning zararli ta'siridan himoya qiladi. Har bir glutation peroksidaza potentsial xavfli reaktiv kislorod turlarini (masalan, H_2O_2 va lipid gidroperoksidlari) zararsiz birikmalarga (suv va alkogol) qaytarishga qodir, bu esa yangi erkin radikallarning paydo bo'lishiga to'sqinlik qiladi. Glutation peroksidaza Selenga bog'liq fermentdir, shuning uchun uning faoliyati to'g'ridan-to'g'ri qondagi selen tarkibiga bog'liq. Selen yetishmovchiligi uning faolligining pasayishiga va selenning kiritilishi GPX4 sintezlanishini ko'payishiga olib keladi. Selenning chuqur yetishmovchiligi bilan ushbu oqsillarning sintezi sodir bo'lmaydi. Inson qalqonsimon bezidagi Selenga bog'liq bo'lgan barcha oqsillardan plazma glutation peroksidaza (GPx3) eng faol ifodalanadi (sintezlanadi), bu esa ushbu organdagi selenning yuqori miqdorini aniqlaydi. TSH (tiroidni stimulyatsiya qiluvchi gormon) bo'lmasa, GPx3 ning tirotsitlar (qalqonsimon bez follikulalarini qoplaydigan epiteliya hujayralari) tomonidan sekretsiyasi vodorod peroksidning yodlash reaktsiyalari uchun mavjud bo'lgan H2O2 miqdorining pasayishiga olib keladi. Aksincha, Tsh ishtirokida GPx3 faolligi pasayadi, natijada mavjud H2O2 miqdori ortadi. Shu bilan birga, Tireotsitlar ichida GPx3 kontsentratsiyasi oshadi va shu bilan tiroid gormonlari sintezi natijasida kelib chiqadigan oksidlovchi stressdan himoya kuchayadi. Selen yetishmovchiligi bilan glutation peroksidaza faolligi pasayadi, buning natijasida ortiqcha H2O2 to'planadi va TPO (tireoperoksidaza) faolligi oshadi. Bu glutation peroksidaza tizimi yodlash jarayonida Markaziy o'rinni egallashini va selenning intratiroid tarkibi uning faoliyatini aniqlashini tasdiqlaydi.[20,21] Molibden homilador ayollarda kamqonlikning oldini olish uchun zarur.Vitrum prenatal Forte preparati antioksidant resursga ega vitaminlarni o'z ichiga oladi (A, E, C, B2, B6,PP, β-Karoten) va antioksidant elementlari: yod, marganets, mis, rux, temir. Preparatning muhim xususiyati bu unda xrom, selen va molibden mavjudligi.Bunga e'tibor qaratish kamchilikning oldini olishning dastlabki davrlardanoq oziq moddalar bilan boyitilishi mumkin va ferroptoz jarayoni tufayli yuzaga keladigan fetoplatsentar yetishmovchilikni oldini olishga yordam beradi.

Foydalanilgan adabiyotlar:

1. Радзинский В. Е. и др. Преждевременные роды–нерешенная мировая проблема //Акушерство и гинекология: Новости. Мнения. Обучения. – 2018. – №. Приложение 3 (21). – С. 55-64.
2. Радзинский В. Е. и др. Преждевременные роды-нерешенная проблема XXI века //Кубанский научный медицинский вестник. – 2020. – Т. 27. – №. 4. – С. 27-37.
3. Dixon SJ, Lemberg KM, Lamprecht MR, Skouta R, Zaitsev EM, Gleason CE, Patel DN, Bauer AJ, Cantley AM, Yang WS, Morrison B 3rd, Stockwell BR. Ferroptosis: an iron-dependent form of nonapoptotic cell death. Cell. 2012;149(10):1060-1072. https://doi.org/10.1016/j.cell.2012.03.042
4. Zille M, Karuppagounder SS, Chen Y, Gough PJ, Bertin J, Finger J, Milner TA, Jonas EA, Ratan RR. Neuronal death after hemorrhagic stroke In vitro and In vivo shares features of ferroptosis and necroptosis. Stroke. 2017;48(4):1033-1043. https://doi.org/10.1161/strokeaha.116.015609
5. Yagoda N, von Rechenberg M, Zaganjor E, Bauer AJ, Yang WS, Fridman DJ, Wolpaw AJ, Smukste I, Peltier JM, Boniface JJ, Smith R, Lessnick SL, Sahasrabudhe S, Stockwell BR. RAS-RAF-MEKdependent oxidative cell death involving voltage-dependent anion channels. Nature. 2007;447(5):864-868. https://doi.org/10.1038/nature05859
6. Yang WS, Kim KJ, Gaschler MM, Patel M, Shchepinov MS, Stockwell BR. Peroxidation of polyunsaturated fatty acids by lipoxygenases drives ferroptosis. Proceedings of the

National Academy of Sciences of the United States of America. 2016;113(34):4966-4975. https://doi.org/10.1073/pnas.1603244113

7. Kagan VE, Mao G, Qu F, Angeli JP, Doll S, Croix CS, Dar HH, Liu B, Tyurin VA, Ritov VB, Kapralov AA, Amoscato AA, Jiang J, Anthonymuthu T, Mohammadyani D, Yang Q, Proneth B, KleinSeetharaman J, Watkins S, Bahar I, Greenberger J, Mallampalli RK, Stockwell BR, Tyurina YY, Conrad M, Bayır H. Oxidized arachidonic and adrenic PEs navigate cells to ferroptosis. Nature Chemical Biology. 2017;13(1):81-90. https://doi.org/10.1038/nchembio.2238
8. Zilka O, Shah R, Li B, Friedmann Angeli JP, Griesser M, Conrad M, Pratt DA. On the mechanism of cytoprotection by ferrostatin-1 and liproxstatin-1 and the role of lipid peroxidation in ferroptotic cell death. ACS Central Science. 2017;3(1):232-243. https://doi.org/10.1021/acscentsci.7b00028
9. Brigelius-Flohé R, Maiorino M. Glutathione peroxidases. Biochimica et Biophysica Acta. 2013;1830(5):3289-3303. https://doi.org/10.1016/j.bbagen.2012.11.020
10. Habib HM, Ibrahim S, Zaim A, Ibrahim WH. The role of iron in the pathogenesis of COVID-19 and possible treatment with lactoferrin and other iron chelators. Biomedicine and Pharmacotherapy. 2021;136:111228. https://doi.org/10.1016/j.biopha.2021.111228
11. Kinowaki Y, Kurata M, Ishibashi S, Ikeda M, Tatsuzawa A, Yamamoto M, Miura O, Kitagawa M, Yamamoto K. Glutathione peroxidase 4 overexpression inhibits ROS-induced cell death in diffuse large B-cell lymphoma. Laboratory Investigation. 2018;98(5): 609-619. https://doi.org/10.1038/s41374-017-0008-1
12. Yang WS, SriRamaratnam R, Welsch ME, Shimada K, Skouta R, Viswanathan VS, Cheah JH, Clemons PA, Shamji AF, Clish CB, Brown LM, Girotti AW, Cornish VW, Schreiber SL, Stockwell BR. Regulation of ferroptotic cancer cell death by GPX4. Cell. 2014; 156:(2):317-331. https://doi.org/10.1016/j.cell.2013.12.010 Nuralievna, S. N. (2023). Evaluation of markers of endothelial dysfunction in placental apoptosis in women with preterm labor. Scientific Journal Of Medical Science And Biology, 1(1), 292-299.
13. Ingold I, Berndt C, Schmitt S, Doll S, Poschmann G, Buday K, Roveri A, Peng X, Porto Freitas F, Seibt T, Mehr L, Aichler M, Walch A, Lamp D, Jastroch M, Miyamoto S, Wurst W, Ursini F, Arnér ESJ, Fradejas-Villar N, Schweizer U, Zischka H, Friedmann Angeli JP, Conrad M. Selenium utilization by GPX4 Is required to prevent hydroperoxide-induced ferroptosis. Cell. 2018;172(3):409- 422.e21. https://doi.org/10.1016/j.cell.2017.11.048
14. Shintoku R, Takigawa Y, Yamada K, Kubota C, Yoshimoto Y, Takeuchi T, Koshiishi I, Torii S. Lipoxygenase-mediated generation of lipid peroxides enhances ferroptosis induced by erastin and RSL3. Cancer Science. 2017;108(11):2187-2194. https://doi.org/10.1111/cas.13380
15. Beharier, O., Kajiwara, K., & Sadovsky, Y. (2021). Ferroptosis, trophoblast lipotoxic damage, and adverse pregnancy outcome. Placenta, 108, 32-38.
16. Nuralievna, S. N. (2023). Evaluation of markers of endothelial dysfunction in placental apoptosis in women with preterm labor. Scientific Journal Of Medical Science And Biology, 1(1), 292-299.
17. Полубояринов, П. А., Елистратов, Д. Г., & Швец, В. И. (2019). Метаболизм и механизм токсичности селенсодержащих препаратов, используемых для коррекции дефицита микроэлемента селена. *Тонкие химические технологии*, *14*(1), 5-24.
18. Баженова, Б. А., Данилов, М. Б., Забалуева, Ю. Ю., Бадмаева, Т. М., & Аюшеева, Г. Н. (2016). Биологически активная добавка для мясных продуктов. *Все о мясе*, (3), 14-19.

19. Громова, О. А., Торшин, И. Ю., Серов, В. Н., Гришина, Т. Р., & Тетруашвили, Н. К. (2015). Хром, селен, молибден: значимость в нутрициальной поддержке беременности. *Гинекология*, *17*(5), 4-9.
20. Астахова, Т. Ю. (2024). Уровни важнейших составляющих антиоксидантной системы– цинка и селена у беременных женщин севера. *Современные вопросы биомедицины*, *8*(2), 14-26.
21. Ляхнович, Н. А., & Гутикова, Л. В. (2013). Роль йода и селена в гормональной регуляции функции щитовидной железы при беременности. *Медико-биологические проблемы жизнедеятельности*, (2), 13-23.

UO'K: 616-08-035

GENITAL YALLIG'LANISH KASALLIKLARIDAGI MIKROFLORA

Ismoilova D.Sh., Jamalova F. A.
Samarqand Davlat Tibbiyot Universiteti.

Annotatsiya. Homilador ayollar, tug'ayotgan onalar va chaqaloqlarga ko'rsatiladigan tibbiy yordam sifatini oshirishning asosiy yo'nalishi yuqumli-yallig'lanish kasalliklarini, shu jumladan tibbiy xizmat ko'rsatish bilan bog'liq infeksiyalarni aniqlash va oldini olishni takomillashtirishdir. Ayollar va chaqaloqlarda opportunistik infeksiyalar qo'zg'atuvchilarining juda ko'p turlari mavjudligi tibbiy yordam ko'rsatishning barcha bosqichlarida etiologik tashxis qo'yish va o'z vaqtida tegishli davolashni sezilarli darajada qiyinlashtiradi. Qin mikroflorasining tur va miqdoriy tarkibi o'rganib chiqildi. Keng qamrovli klinik-laboratoriya tekshiruvlari 219 nafar reproduktiv yoshdagi ayollarda o'tkazildi.

Kalit so'zlar: Mikrobiologiya, infeksiyalarning oldini olish, akusherlik, antibiotiklarga chidamlilik, texnologiyalar, epidemiologiya.

MICROFLORA IN INFLAMMATORY DISEASES OF GENITAL AREAS

Ismoilova D.Sh., Jamalova F. A.
Samarkand State Medical University.

Abstract. The primary focus for improving the quality of medical care for pregnant women, women in labor, and newborns is the enhancement of diagnostics and prevention of infectious and inflammatory diseases, including healthcare-associated infections. The vast number of opportunistic pathogens in women and newborns significantly complicates etiological diagnosis and the provision of timely, appropriate treatment at all stages of medical care. The study investigated the species composition and quantitative characteristics of vaginal microflora. A comprehensive clinical and laboratory examination was conducted on 219 women of reproductive age.

Keywords. Microbiology, prevention of infections, childbirth, antibiotic resistance, technologies, epidemiology.

МИКРОФЛОРА ПРИ ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЯХ ГЕНИТАЛИЙ

Исмоилова Д.Ш., Жамалова Ф.А.
Самаркандского государственного медицинского университета.

Аннотация. Основным направлением повышения качества оказания медицинской помощи беременным, роженицам и новорожденным является совершенствование диагностики и профилактики инфекционно-воспалительных заболеваний, в том числе инфекций, связанных с оказанием медицинской помощи. Огромное число видов возбудителей оппортунистических инфекций у женщин и новорожденных существенно осложняет этиологическую диагностику и проведение своевременного, адекватного лечения на всех этапах оказания медицинской помощи. Исследован видовой и количественный состав микрофлоры влагалища. Комплексное клинико-лабораторное обследование проводилось у 219 женщин репродуктивного возраста

Ключевые слова. Микробиология, профилактика инфекций, родовспоможение, антибиотикорезистентность, технологии, эпидемиология.

Kirish. So'nggi o'n yil davomida ayollarning reproduktiv salomatligi alohida e'tibor markazida bo'lib kelmoqda, chunki u demografik vazifalarni hal etishda muhim ahamiyat kasb etadi. Sog'liqni saqlash sohasidagi davlat siyosatining amalga oshirilishi neonatal xizmatning jadal rivojlanishiga turtki bo'ldi. Bunday bemorlar kontingenti orasida yuqumli-yallig'lanish kasalliklari tashxis qo'yishning yangi tezkor usullarini, profilaktika va davolash usullarini doimiy ravishda

izlashga qaramasdan yuqori darajada qolmoqda. Shuning uchun homiladorlar, tug'ruqdagi ayollar va yangi tug'ilgan chaqaloqlarga tibbiy yordam ko'rsatish sifatini oshirishning asosiy yo'nalishlaridan biri yuqumli yallig'lanish kasalliklari, shu jumladan tibbiy yordam ko'rsatish bilan bog'liq infeksiyalar diagnostikasi va profilaktikasini takomillashtirishdir [4–7].

Tadqiqot maqsadi. Streptococcus agalactiae, Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Proteus vulgaris va boshqa qo'zg'atuvchilarni o'rganish. Bu qo'zg'atuvchilar ayollar qinining mikrobiotsenozida birlamchi disbiotik o'zgarishlarga sabab bo'ladi, bu esa keyinchalik chanoq a'zolarining yuqoriga ko'tariluvchi infeksiyasiga va natijada homilaning bachadon ichi infeksiyalanishiga olib keladi.

Materiallar va usullar. Mikrobiologik usul. Biologik material profilaktik ko'rik paytida, shuningdek, qov ustidagi og'riq, tashqi jinsiy a'zolarda qichishish va achishish, hamda yallig'lanish jarayonini ko'rsatuvchi ajralmalar kabi shikoyatlar mavjud bo'lganda olinadi.

Natijalar va ularning muhokamasi.

Ayollar jinsiy sistemasining turli yallig'lanish kasalliklarida uchraydigan mikroflorani o'rganish, shuningdek bu patologiyada stafiloklarning solishtirma og'irligini aniqlash ushbu tadqiqotning vazifasidir.

Shu maqsadda ichki jinsiy organlarining o'tkir va surunkali qaytalanib turadigan yallig'lanish jarayonlari bilan og'rigan 219 ta bemor tekshirib ko'rilgan. Bemorlarning yiring mikroflorasi va ajralmalarini tekshirish aerob va anaerob infeksiya qo'zg'atuvchilarini aniqlash uchun bir qator ozuqa muhitlariga ekish yo'li bilan amalga oshirildi. Ajratib olingan stafilokokk kulturalari batafsil o'rganildi.

Mikrobiologik tadqiqotlar natijalari shuni ko'rsatdiki, 105 nafar bemorda (48,2%) yiringdan monokultura shaklida qo'zg'atuvchilar ajratib olindi, 77 nafar ayolda (35%) mikrob assotsiatsiyalari aniqlandi va 37 nafar bemordan (16,8%) olingan yiring ekmalari biz tanlagan ozuqa muhitlari to'plamidan foydalanganda anaerob va anaerob mikroflora manfiy bo'ldi.

St. aureus ga kiritilgan 38 ta kulturani o'rganish natijalari shuni ko'rsatdiki, 35 ta shtamm koagulaza, letsitovitellaza va gemolitik faollikka ega bo'lgan. DNK-aza. 32 ta shtamm hosil bo'ldi, 28 tasi lizotsim musbat va 31 ta shtamm oltin pigment hosil qildi. Stafilokokklarning bu turiga 3 ta koagulaza-manfiy variantlar ham kiritilgan, bular musbat DNK-aza, gemolitik, letsitovitellaza reaksiyalari beradi, qandlarni aerob va anaerob yo'l bilan bijg'itadi va boshqa patogenlik testlariga ega bo'ladi. Stafilokokklarning plazmani koagulyatsiyalamaydigan, mannitni aerob va anaerob fermentatsiyalamaydigan, glyukozani parchalaydigan 50 ta shtammi St. epidermidis turiga kiritilgan. Boshqa belgilar o'rganilganda, St. epidermidis ning 50 ta kulturasidan 18 ta shtamm pigment hosil qilgan, 9 ta shtamm lizotsim, 8 ta shtamm letsitovitellaza, 4 ta shtamm gemolizin.

Tekshirish shuni ko'rsatdiki, faqat ayrim kulturalargina ayrim patogenlik sinamalariga ega bo'lgan, biroq epidermal stafilokokklar ana shunday minimal "qurollangan" bo'lsa ham yiringli protsesslarning qo'zg'atuvchilari bo'lib hisoblangan, chunki ular monokulturada ham ko'p miqdorda ajratib olingan.

Barcha stafilokokk kulturalari 5 ta antibiotikka (sefazolin, neomitsin, klindamitsin, sefuroksim, seffiron va sefataxim) standart disklar metodi bilan tekshirib ko'rildi. St. aureus antibiotikogrammalari tekshirilganda 17 ta kultura barcha preparatlarga sezgir ekanligi aniqlandi. 21 ta chidamli shtammdan 20 tasi sefazolinga, 9 tasi neomitsinga, 8 tasi klindamitsinga, 1 tadan 4 tasi sefazolin va sefataximga va 2 tasi seffironga chidamli bo'ldi. 12 ta kultura 1 ta antibiotikka, 3 ta shtamm 21 ta va 3 ta shtamm 3 ta preparatga chidamli bo'lib chiqdi va faqat 2 ta shtamm barcha o'rganilgan preparatlarga chidamli bo'lib chiqdi.

St. epidermidis ning 50 ta kulturasidan 13 tasi barcha o'rganilgan preparatlarga chidamli, 26 tasi barcha antibiotiklarga o'ta sezgir ekanligi aniqlandi. Qolgan 11 tasining antibiogrammalari olachipor bo'lib, ular orasida bir xil shtammlar kuzatilmadi.

Fagotiplashda St. aureus ning 3 ta shtammi Xalqaro to'plamning I, II, III guruh faglariga sezgir bo'ldi, 23 ta kultura asosiy va qo'shimcha faglar bilan turli kombinatsiyalarda tipiklashtirildi va 12 tasi tipiklashtirilmadi. O'rganilgan shtammlarning fagomozaikasi juda rang-barang bo'lib chiqdi va biz biron bir fagotipdagi stafilokokklarning ustunligini aniqlashga muvaffaq bo'ldik. Bundan tashqari, fagotip bo'yicha bir xil bo'lgan stafilokokklar antibiotikogrammalar bo'yicha ham farqlandi. Ayollar va yangi tug'ilgan chaqaloqlarda opportunistik infeksiyalar qo'zg'atuvchilarining juda ko'p turlari tibbiy yordam ko'rsatishning barcha bosqichlarida etiologik tashxis qo'yish va o'z vaqtida yetarli davolashni sezilarli darajada murakkablashtiradi [4]. Shu bilan birga, agar ilgari bu qo'llaniladigan mikroblarga qarshi dorilarga yuqori sezgir mikroorganizmlar bo'lgan bo'lsa, so'nggi paytlarda biz polichidamli shtammlarning paydo bo'lishi va tarqalishini kuzatmoqdamiz: ESKAPE patogenlari guruhiga kiruvchi bakteriyalar (Enterococcusfaecium, S. aureus, K. pneumoniae, Acinetobacterbaumanii, Pseudomonasaeroginosa, Enterobactercloacae); shuningdek, immunokompromentiv shaxslarga nisbatan o'zining patogen potentsialini osongina amalga oshiradigan koagulazonegativ stafilokokklar va achitqi zamburug'lari. Mikroorganizmlarning chidamli shtammlari keltirib chiqaradigan infeksiyalar uzoq davom etishi bilan ajralib turadi, bemorlarning kasalxonada qolish muddatini uzaytiradi va bemorlar uchun prognozni yomonlashtiradi.

Xulosalar. Shunday qilib, ajratilgan stafilokokklar orasida jinsiy a'zolarning yallig'lanish jarayonlari bo'lgan bemorlarni tekshirish shuni ko'rsatdiki, bu kasalliklar polietiologik bo'lib, turli xil mikrob turlarining vakillari tomonidan qo'zg'atilishi mumkin. St. epidermildis ning nisbatan ko'p uchrashi, ayniqsa sof kulturada, ushbu turdagi stafilokokklarni ushbu lokalizatsiyadagi patologik jarayonlarning eng ko'p uchraydigan qo'zg'atuvchilaridan biri deb hisoblash huquqini beradi. Empirik antimikrob terapiya samarasiz bo'lganda, ko'pincha qimmat, xavfsiz bo'lmagan va har doim ham mavjud bo'lmagan "zaxira" dori vositalaridan foydalanishga to'g'ri keladi, akusherlik va neonatologiyada esa vaziyat foydalanishga ruxsat etilgan antimikrob dori vositalari spektri sezilarli darajada cheklanganligi bilan murakkablashadi. O'zgargan epidemiologik vaziyat akusherlik va neonatologiyada opportunistik infeksiyalar qo'zg'atuvchilari, birinchi navbatda, tibbiy yordam ko'rsatish bilan bog'liq infeksiyalar ustidan mahalliy nazorat tizimini yaratish va faoliyatini talab qiladi, bu esa qo'zg'atuvchilarning etiologik, tur ichidagi, shtamm tuzilishida sodir bo'layotgan o'zgarishlarni tezkor kuzatish va ularga o'z vaqtida javob berish imkonini beradi. Infeksiya qo'zg'atuvchilarining mikrobiologik monitoringi so'nggi o'n yilliklarda dolzarb masala bo'lib, hozirgi sharoitda perinatal markazlarda tibbiy yordam ko'rsatish bilan bog'liq infeksiyalarning oldini olishning majburiy chorasi bo'lib, mikroblarga qarshi dorilar va dezinfektantlarga ko'p rezistentligi bilan ajralib turadigan mikroorganizmlarning kasalxona shtammlarining paydo bo'lishi va tarqalishining oldini olishga qaratilgan. Ushbu muammoni hal qilish yagona vazifalarni bajarishga yo'naltirilgan mikrobiologlar, klinik farmakologlar va epidemiologlardan tashkil topgan fanlararo jamoa — davolovchi shifokorlar va epidemiologik nazorat bo'limining birgalikdagi ishiga asoslanadi.

Foydalanilgan adabiyotlar:

1. Banteva M.N. Nauchnoye obosnovaniye deystviy po optimizatsii ambulatornoy akusherskoy pomoshi i reguliruyushego obespecheniya (dissertatsiya, 2012).

2. Radzinskiy V.Ye., Kozlov R.S., Duxin A.O. Antibakterialnaya terapiya vospalitelnix zabolevaniy organov malogo таза bez oshibok i eksperimentov: rukovodstvo dlya vrachey (Status Praesens, 2013).
3. Manuxin I.B. Mikrobiota vaginal (uchebnik, 2014).
4. Petrova M.I., van den Broek M., Balzarini J. et al. Vaginal mikrobiota va uning OIV yuqishi va infeksiyasidagi roli (FEMS Microbiology Reviews, 2013).
5. Xryanin A.A., Stetsyuk O.U., Andreeva I.V. Xlamidialnaya infeksiya v ginekologni i akusherstve: taktika vedeniya patsiyentov v sootvetstvii s sovremennimi rossiyskimi i zarubejnimi rekomendatsiyami (Attending physician, 2012).
6. Potaturkina, Myasnikova A.V., Nemova I.S., Volgina T.I. Xarakteristika mikrobioты vagina pri vospalitelnых zabolevaniyax vnutrennix polovых organov (Uspexi sovremennogo yestestvoznaniya, 2010) - dostupno zdes. (https://natural-sciences.ru/ru/article/view?id=8117)
7. Nurgaliyeva Ye.V., Duxin A.O., Gushin A.Ye. Mikrobiota jenskix polovix organov (jurnal "Meditsina," 2016).
8. Faktorы persistensii mikroflorы pri vospalitelnых zabolevaniyax vnutrennix jenskix polovых organov (medi.ru) - mojno prochitat zdes. (https://medi.ru/)
9. Mikrobiota jenskix polovix organov pri gnoyno-vospalitelnix zabolevaniyax genitaliy - statya na CyberLeninka (ssilka). (https://cyberleninka.ru/article/n/mikrobiota-zhenskih-polovyh-organov-pri-gnoyno-vospalitelnyh-zabolevaniyah-genitaliy)
10. "Ayollarda yuqumli tabiatli jinsiy a'zolarning yallig'lanish kasalliklari" - mualliflar: Bakulev, Stepanov, Vasilenko, Orkin. Labirint saytida mavjud ((https://www.labirint.ru/books/3264/) labirint.ru). (https://www.labirint.ru/books/184875/).

UO'K 617.7-001.1/.2

BEMORLARNING HAYOT SIFATINI XISOBGA OLGAN HOLDA KO'Z JAROHATLARINI DAVOLASH USULLARI.

Ismoilov S.X.
Andijon davlat tibbiyot instituti

*Rezyume.*Optik kogerent tomografiya ma'lumotlariga asoslanib, optik asab boshining o'ziga xos morfologik xususiyatlari va retinaning peripapiller va makula sohalari arxitekturasi, shuningdek, insultdan keyingi bemorlarning optik asabidagi funktsional o'zgarishlar (A guruhi) shikastlangan shikastlanish darajasini aks ettiradi.

Yopiq ko'z jarohatlaridan so'ng bemorlarda ham to'r pardada, ham optik asabda shikastlanishdan keyingi buzilishlarni aniqlashning aniqligini oshirish uchun diagnostik ko'rsatkichlar ishlab chiqilgan (A guruhi), bu patologik jarayonlarni aniqlashni yaxshilash imkonini beradi.

Ushbu toifadagi bemorlarni optik kogerent tomografiya, elektroretinografik tekshirish va vizual uyg'otuvchi potentsiallarni tahlil qilishdan foydalangan holda tekshirishga kompleks yondashuv zarurligi ta'kidlangan.

KT (A guruhi) dan keyin turli darajadagi shikastlanish darajasiga ega bo'lgan bemorlarning holatini baholash uchun diagnostika sxemasiga retrobulbar optik asabning ultratovush tekshiruvini kiritish ayniqsa muhimdir.

Kalit so'zlar: ko'z jarohati, hayot sifati, bemor.

METHODS OF TREATMENT OF EYE INJURIES TAKING INTO ACCOUNT THE QUALITY OF LIFE OF PATIENTS

Ismoilov S.Kh.
Andijan State Medical Institute

Resume. Based on optical coherence tomography data, specific morphological characteristics of the optic nerve head and the architectonics of the peripapillary and macular areas of the retina, as well as functional changes in the optic nerve of post-stroke patients (group A), reflecting the degree of traumatic injury, were noted.

Diagnostic indicators were developed to improve the accuracy of determining post-traumatic disorders in both the retina and the optic nerve in patients after closed eye injuries (group A), which allows for improved detection of pathological processes.

The need for an integrated approach to examining this category of patients using optical coherence tomography, electroretinographic research and analysis of visual evoked potentials is emphasized.

It is especially important to include ultrasound scanning of the retrobulbar optic nerve in the diagnostic scheme to assess the condition of patients with varying degrees of injury severity after ZTG (group A).

Key words: eye injury, quality of life, patient.

МЕТОДЫ ЛЕЧЕНИЯ ТРАВМ ГЛАЗА С УЧЕТОМ КАЧЕСТВА ЖИЗНИ ПАЦИЕНТОВ

Исмоилов С.Х.
Андижанский государственный медицинский институт

Резюме. На основе данных оптической когерентной томографии отмечены специфические морфологические характеристики диска зрительного нерва и архитектоники перипапиллярного и макулярного участков сетчатки, а также функциональные изменения в зрительном нерве пациентов постинсультных (группа А), отражающие степень травматического повреждения.

Разработаны диагностические показатели для повышения точности определения посттравматических нарушений как в сетчатке, так и в зрительном нерве у больных после закрытых глазных травм (группа А), что позволяет улучшить выявление патологических процессов.

Подчеркивается необходимость комплексного подхода к обследованию данной категории пациентов с использованием оптической когерентной томографии, электроретинографического исследования и анализа зрительных вызванных потенциалов.

Особенно актуально включение в диагностическую схему ультразвукового сканирования ретробульбарного отдела зрительного нерва для оценки состояния пациентов с различной степенью тяжести травмы после ЗТГ (группа А).

Ключевая слова: травма глаза, качества жизни, пациент.

Kirish. So'nggi yarim asr davomida ish joyidagi ko'z shikastlanishining oldini olish va davolashda sezilarli yutuqlar butun dunyo bo'ylab ko'rishning yo'qolishining asosiy sababi sifatida ko'zning shikastlanishi muammosini to'liq bartaraf eta olmadi. Jahon sog'liqni saqlash tashkiloti ma'lumotlariga ko'ra, 1998 yilda deyarli bir yarim million chuqur ko'rlik va ikki tomonlama ambliyopiya (taxminan 2,3 million kishi) ko'z shikastlanishi tufayli yuzaga kelgan. Shu bilan birga, bir yarim millionga yaqin odam ko'zning kasbiy shikastlanishi tufayli bir tomonlama yoki qisman ko'rish qobiliyatini yo'qotadi[1,4].

Optometrik assotsiatsiya ma'lumotlarini tahlil qiladigan bo'lsak, bir qator kasblar ko'z shikastlanishi xavfi yuqori bo'lganlar: ishlab chiqarish, sanoat tarmoqlari, tog'-kon sanoati, sanitariya-tesisat va elektr ishlari, payvandlash jarayonlari va texnik xizmat ko'rsatish kabi ishlarda jarohat olinadi[3,5].

Biroq, ish joyida xavfsizlik standartlariga qat'iy rioya qilish bilan birgalikda xavfsizlik ko'zoynaklaridan (spektral ko'zoynaklar, shaffof yoki maxsus himoyalangan) to'g'ri foydalanish orqali ko'pchilik hodisalarning oldini olish mumkin. Biroq, bunday himoya vositalarining yo'qligi va xodimlar tomonidan noto'g'ri qaror qabul qilish jarohatlar paydo bo'lishining asosiy omillari bo'lib qolmoqda[4].

Tadqiqot maqsadi. Tadqiqotning maqsadi ko'z shikastlanishining umumiy sabablarini, kasbiy xavflarni, ijtimoiy-iqtisodiy jihatlarni va sog'liqni saqlash tizimining javob xususiyatlarini, birlamchi oldini olishdan oqibatlarni davolashgacha aniqlash uchun keng qamrovli adabiyotlarni o'rganish edi.

Tadqiqot materiallari va usullari. Metodologiya maxsus anketalar yordamida tibbiy va sotsiologik so'rovlarni o'z ichiga olgan. Tadqiqotda kengroq fikr-mulohazalarni olish maqsadida sanoat korxonalaridan 30 nafar tibbiyot mutaxassislari, tasodifiy tanlab olingan 20 nafar katta yoshli fuqarolar va yana 20 nafar maktab yoshidagi bolalarning onalari ishtirok etdi.

Tadqiqot natijalari: Tadqiqot ma'lumotlarini tahlil qilish:

- erkaklar, ayniqsa, 30-34 va 60 yoshda ayollarga qaraganda ikki baravar tez-tez uy sharoitida ko'z jarohatlaridan aziyat chekdi; ayollar - asosan 35-39 va 55 yoshdan keyin.

- Erkaklar orasida ko'cha jarohatlari ko'proq 20–24 va 40–44 yosh guruhlarida kuzatilgan; Ayollarda cho'qqilar 24 yoshdan oldin ham kuzatilgan va keyin 45 yoshdan 49 yoshgacha bo'lgan.

Ko'z shikastlanishining kasbiy darajasi:

- Erkaklar uchun bu o'rtacha kattalik (11,7 marta) bo'lib, 20 yoshdan 39 yoshgacha bo'lgan maksimal darajaga yetdi.

- Ayollar ishlab chiqarish jarohatlarining eng yuqori cho'qqisini keyinroq - 35 yoshdan 54 yoshgacha ko'rsatdi.

Umumiy statistika:

- Shoshilinch tibbiy yordamga murojaat qilishda erkaklar ayollarga qaraganda deyarli o'n ikki baravar ko'proq azob chekishgan (70,2%).

- Eng ko'p holatlar har kuni soat 15:00 dan 16:00 gacha qayd etilgan.

- Hafta davomida jarohatlanish cho'qqilari seshanba (19,29%) va chorshanba (19,72%) kunlariga to'g'ri keldi.

Zarar turlari:

- erkaklar uchun: sanoat sharoitida - shox pardaning begona jismlari, radiatsiyaviy shikastlanish, kon'yunktiva; Ayollar kimyoviy kuyishdan aziyat chekmoqda.

Statsionar davolanish statistikasi:

– Ko'pchilik (27,83 foiz) qurilish tashkilotlarida sodir bo'lgan.

- Kasblar orasida: mexaniklar - 21,74%, transport haydovchilari - 12,17%.

- Erkaklarni kasalxonaga yotqizishning tez-tez sabablari kontuziya, shox pardaning penetran yaralari va ko'zning kimyoviy kuyishi hisoblanadi.

Oqibatlari:

- Ishlab chiqarish jarohatlaridan keyin kasalxonadan chiqarilgan erkaklarning 25,22 foizida ko'z olmasining yo'qligi yoki to'liq ko'rlik (deyarli) tashxisi qo'yilgan.

Xulosa. Taqdim etilgan klinik holat to'g'ri tashxis qo'yish, davolash taktikasini aniqlash va bemorni boshqarishda TG tashxisiga multimodal yondashuv zarurligini ko'rsatadi. Olingan natijalar shuni ko'rsatadiki, pastki tekis retinal ajralishlar uchun past travmatik davolash usuli - gemoftalmosning dastlabki rezorbsiyasi bilan bosqichli LCS mumkin. Ushbu yondashuv ba'zi hollarda vitreoretinal aralashuvga alternativa sifatida ishlatilishi mumkin.

Foydalanilgan adabiyotlar:

1. Дога А.В., Шкворченко Д.О., Крыль Л.А., Таевере М.Р., Буряков Д.А. Анализ отдаленных результатов применения технологии комбинированного микроинвазивного лазер-хирургического лечения локальной регматогенной отслойки сетчатки // РМЖ. Клиническая офтальмология. 2021.
2. Зеленцов К.С., Иойлева Е.Э., Зеленцов С.Н. Применение «Поляризующей смеси» в лечении закрытой травмы глаза // Вестник ОГУ. 2015. Т.187, №12. С.84-87.
3. Куликов, А.Н. Структура, особенности и исходы современной боевой травмы глаза / А.Н. Куликов, С.В. Чурашов, А.А. Михин.- Текст: непосредственный // XII Российский общенациональный офтальмологический форум: сб. научных трудов. Том 2.- М.,2019.- С. 491494.
4. Costa E.P. Epidemiological profile and visual outcome of ocular trauma in a referral center in northeastern Brazil / E.P. Costa, T.M. Gomes, T.A. Mendes [et al.].- Text: immediate // Revista Brasileira Oftalmologia.- 2019.- Vol.78.- № 5.-P. 310-314.
5. Mumcuoglu, T. Functional and structural analysis of partial optic nerve avulsion due to blunt trauma: Case report / T. Mumcuoglu, H. Durukan, C. Erdurman [et al.].-Text: immediate // Indian J Ophthalmol.- 2010.- Vol.58.- P. 524-526.

UDC: 611.41:577.95

AGE-RELATED IMMUNOARCHITECTONICS OF THE SPLEEN

Kodirov A.N., Akhmedov Sh.S., Abdunabieva Kh.M., Umarova M.Z.
Andijan State Medical Institute

Resume. The spleen performs the functions of immune blood control. It is located on the path of blood flow from the main vessel of the large circulatory system - the aorta into the portal vein system, branching in the liver. The spleen is located in the abdominal cavity, in the area of the left hypochondrium, at the level of the IX to XI rib. The mass of the spleen in an adult (20-40 years old) It is 192 g for a man and 153 g for a woman. The length of the spleen at this age is 10-14 cm, 6-10 cm wide and 3-4 cm thick.

Key words: *spleen, immunoarchitectonics, prenatal age.*

YOSHGA BOG'LIQ TALOQ IMMUNOARXITEKTONIKASI

Qodirov A.N., Ahmedov Sh.S., Abdunabiyeva H.M., Umarova M.Z.
Andijon davlat tibbiyot institute

Resume. Taloq qonning immunitetini nazorat qilish funktsiyalarini bajaradi. U katta qon aylanishining asosiy tomiridagi IV qon oqimi yo'lida - aorta jigarda tarvaqaylab ketgan Portal tomir tizimiga. Taloq qorin bo'shlig'ida, chap hipokondriyumda, IX dan XI qovurg'agacha bo'lgan darajada joylashgan. Voyaga etgan odamda (20-40 yosh) taloqning massasi erkakda 192 g, ayolda 153 g ni tashkil qiladi. bu yoshdagi taloqning uzunligi 10-14 sm, kengligi 6-10 sm va qalinligi 3-4 sm.

Kalit so'zlar: *taloq, immunoarxitektonika, intrauterin davr.*

ВОЗРАСТНАЯ ИММУНОАРХИТЕКТОНИКА СЕЛЕЗЕНКИ

Қодиров А.Н., Ахмедов Ш.С., Абдунабиева Х.М., Умарова М.З.
Андижанский государственный медицинский институт

Резюме. Селезенка выполняет функции иммунного контроля крови. Находится она на пути тока крови ив магистрального сосуда большого круга кровообращения - аорты в систему воротной вены, разветвляющейся в печени. Располагается селезенка в брюшной полости, в области левого подреберья, на уровне от IX до XI ребра. Масса селезенки у взрослого человека (20-40 лет) составляет 192 г у мужчины и 153 г у женщины. длина селезенки в этом возрасте 10-14 см, ширина 6-10 см и толщина 3-4 см.

Ключевые слова: *селезенка, иммуно-архитектоника, внутриутробный период.*

Introduction. The spleen lining appears on the 5th-6th week of intrauterine development in the form of a small cluster of mesenchymal cells in the thickness of the dorsal mesentery. Soon, lymphoid cells appear in the mesenchymal bud, and cracks form - the future vessels of the spleen, around which the tissue differentiation of the organ takes place. At the 2nd-4th month of development, venous sinuses and other blood vessels form[2].

At the same time, strands of cells, the future trabeculae, grow into the spleen from the capsule. Foci of hematopoiesis appear around the venous sinuses, and at the end of the 4th month and at the 5th month, clusters of lymphocytes are already found in the spleen - future periarterial lymphoid clutches and lymphoid nodules. Gradually, the number of lymphoid nodules in the spleen increases, and breeding centers appear in them. By the 8th month of fetal life, hematopoiesis in the spleen decreases and subsequently stops, and the intensity of lymphocytopoiesis, on the contrary, increases[1]. In a newborn, the spleen is rounded and has a lobular structure. The mass of the spleen is approximately 9.5 g. During this period, the white pulp makes up from 5 to 10% of the body weight. In the 2nd month of postnatal development, the

mass of the spleen increases to 11-14 g (on average), and by the end of the first year of life it is 24-28 g. The amount of white pulp (periarterial lymphoid clutches, lymphoid nodules and ellipsoids) at this time reaches its maximum value (20.9%). In a 6-year-old child, the weight of the spleen doubles compared to a one-year-old, reaching 66-70 g by the age of 10, and 165-171 g at the age of 16-17.

The relative amount of red pulp (82-85%) remains almost unchanged during a person's lifetime. The content of white pulp in the spleen of a child aged 6-10 years is 18.6%, by the age of 21-30 it decreases to 7.7-9.6%, and by the age of 50 it does not exceed 6.5% of the body weight[3].

The purpose of the study. The aim of the study is to study the patterns of age dynamics of the morphological and functional features of the spleen of experimental animals in various age periods of postnatal ontogenesis.

Materials and methods of research. The object of the study was 88 white male Sprague Dawley rats aged from birth to 1 year, belonging to the following age periods: prepubertal period, puberty period, young and middle age period.

The results of the study. Qualitative immunomodulatory changes in the spleen of Br^ie-OauLeu white rats are completed, according to immunohistochemical studies, by the appearance of secondary lymphoid nodules on the 20th day after birth, corresponding to the end of the transition period to self-nutrition Quantitative immunomodulatory changes characteristic of pre-juvenile, juvenile, and young age in rats are manifested by an increase in the volume and cellularity of white pulp sequentially in its T-zones (populations of lymphoid cells of the phenotype SP90+, C045YAC+, POPS+, CE8+, and stromal cells of the phenotype OH-62+ and CE68+), the marginal zone (populations of lymphoid cells of phenotype C020+, POPS+, C0451^C and CE8+) and B-zones (populations of lymphoid cells of phenotype CE20+ and stromal cells of phenotype protein 8100+) In middle-aged rats, immunomodulatory shifts in the spleen are of an involutive nature, consistently affecting the PALV, lymphoid follicles, and marginal zone, and manifested by hypoplasia and hypocellularity of the white pulp.

Reduction of T-cell compartments in middle age is characterized by a decrease in the specific area of both lymphoid and stromal cells, with an earlier (starting at 6 months of age) decrease in the specific area of stromal cells (phenotype OH-62+) and later (starting from the age of 9 months) - lymphoid cells (phenotype CD90+, CD45RC+, CD8+) The level of spontaneous proliferation of lymphoid cells, according to immunohistochemical PCNA staining, in both T and B zones of the spleen, increasing from birth to the pre-juvenile period, is a relatively stable indicator from the moment of puberty, being less sensitive to the immunomodulatory effect of age in the aging body of experimental animals.

The main mechanism of PALV hypocellularity in middle age is a decrease in the traffic of C090+immunoreactive lymphocytes into the spleen, accompanied by a parallel decrease in CD45RC+ (naive T-lymphocytes), as well as a decrease in the specific area of CE8+ cells, while a change in the specific area of lymphoid cells is preceded by a decrease in the proportion of stromal cells (phenotype OH-62+)

The leading mechanism of lymphoid follicle hypoplasia in middle age is increased apoptosis of lymphoid cells, while a decrease in the specific area of lymphoid cells (CD20+, CD45RC+ phenotype) in aging rats is preceded by a decrease in the content of stromal cells (S100+ protein phenotype) that begins at a young age.

Conclusion. In identifying the age periods of the most significant qualitative and quantitative changes in the peripheral immune system, which determine the immune status of the body and its sensitivity to the action of pathological immunomodulatory factors.

Used literature:

1. Muraeva N.A. Age-related aspects of adaptation of the immune system to the effects of chronic stress Abstract. PhD thesis- Volgograd, 2006.- 26 p.
2. Stovichek G. V. Patterns of morphogenesis of nervous connections of internal organs at the stages of postnatal human development Morphology.- 2004.- Vol.126.- N3.- 14-18.
3. Caraco C Marone U., Botti G., Celentano E., Lastoria S., Mozzillo N. Age as predictor in patients with cutaneous melanoma submitted to sentinel lymph node biopsy Eur. J. Surg. Oncol.- 2006.- Vol. 32.- N9.- P. 970-973. +higl, CD28 D57 subpopulation Clin. Immunol.- 2000.- 129.

UDC 618.1-002:616-022.7

APPLICATION OF MODERN DIAGNOSTIC METHODS FOR PELVIC INFLAMMATORY DISEASES

Ismailova Z.U.
Andijan State Medical Institute

Resume. In modern gynecological practice, there is an increase in cases of inflammatory diseases of the pelvic organs, which emphasizes the need for a careful approach to their diagnosis and treatment.

Failure to promptly identify pathology and incorrectly prescribed therapy can lead to serious complications, such as pain during intercourse, menstrual irregularities, bleeding, development of tumors in the uterus and ovaries, as well as problems with conception and pregnancy.

The updated recommendations take into account the chronicity of inflammatory processes and significant changes in tissues, as well as the involvement of various body systems.

Correct diagnosis and treatment are extremely important for reducing long-term consequences for women's health and reducing economic losses associated with loss of ability to work.

Key words: *inflammatory diseases of the pelvic organs; reproductive health; diagnostics of inflammatory diseases of the pelvic organs.*

KICHIK TOS A'ZOLARINING YALLIG'LANISH KASALLIKLARINI ANIQLASHNING ZAMONAVIY USULLARINI QO'LLASH

Ismailova Z. O'.
Andijon davlat tibbiyot instituti

Rezyume. Zamonaviy ginekologik amaliyotda tos a'zolarining yallig'lanish kasalliklari ko'payib bormoqda, bu ularning tashxisi va davolashiga ehtiyotkorlik bilan yondashish zarurligini ta'kidlaydi.

Patologiyani o'z vaqtida aniqlamaslik va noto'g'ri tayinlangan terapiya jiddiy asoratlarga olib kelishi mumkin, masalan, jinsiy aloqa paytida og'riq, hayz davrining buzilishi, qon ketish, bachadon va tuxumdonlarda o'smalarning rivojlanishi, shuningdek, homiladorlik va homiladorlik bilan bog'liq muammolar.

Yangilangan tavsiyalar yallig'lanish jarayonlarining surunkaliligini va to'qimalarda sezilarli o'zgarishlarni, shuningdek, turli tana tizimlarining ishtirokini hisobga oladi.

To'g'ri tashxis qo'yish va davolash ayollarning sog'lig'iga uzoq muddatli oqibatlarni kamaytirish va ishlab chiqarishni yo'qotish bilan bog'liq iqtisodiy yo'qotishlarni kamaytirish uchun muhim ahamiyatga ega.

Kalit so'zlar: *tos a'zolarining yallig'lanish kasalliklari; reproduktiv salomatlik; tos a'zolarining yallig'lanish kasalliklari diagnostikasi.*

ПРИМЕНЕНИЕ СОВРЕМЕННЫХ МЕТОДОВ ДИАГНОСТИКИ ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЙ ОРГАНОВ МАЛОГО ТАЗА

Исмаилова З.У.
Андижанский государственный медицинский институт

Резюме. В современной практике гинекологии наблюдается увеличение случаев воспалительных заболеваний органов малого таза, что подчеркивает необходимость внимательного подхода к их диагностике и лечению.

Невозможность своевременно выявить патологию и неправильно назначенная терапия могут привести к серьезным осложнениям, таким как боль при половом акте, нарушения менструального цикла, кровотечения, развитие опухолей в матке и яичниках, а также проблемы с зачатием и выношиванием беременности.

Обновленные рекомендации учитывают хронизацию воспалительных процессов и значительные изменения в тканях, а также вовлечение различных систем организма.

Корректная диагностика и лечение крайне важны для снижения долгосрочных последствий для здоровья женщин и уменьшения экономических потерь, связанных с потерей трудоспособности.

Ключевая слова: *воспалительные заболевания органов малого таза; репродуктивное здоровье; диагностика воспалительных заболеваний органов малого таза.*

Relevance. The focus on inflammatory processes in modern healthcare has led to serious consequences, such as their exacerbation and chronicity of diseases and long-term functional impairment[2]. The increasing generalization of inflammatory processes causes significant tissue disorders, from pathophysiological to pathomorphological, affecting various body systems: immune, nervous, endocrine and reproductive. In the field of obstetrics and gynecology, incorrect diagnosis and treatment of pelvic inflammatory disease leads to a number of complications, including dyspareunia, menstrual disorders, tumor-like formations in the uterus, infertility and pregnancy. These consequences seriously affect the quality of life of women and can lead to disability[4]. In recent years, a serious threat has emerged not only from Mycoplasma genitalium, but also from other pathogens that can cause pelvic inflammatory disease (PID). Anaerobic bacteria that are able to pass from the vagina into the cervical canal and then ascend through the reproductive system play an important role in the development of this process. These include streptococci, staphylococci and other opportunistic organisms that cause inflammatory processes[1,5].

However, according to the recommendations of European clinical guidelines, priority is given to the detection of gonococci and chlamydia in the diagnosis of PID, which requires the collection of samples from the lower genital tract. A positive result for the presence of these infections serves as evidence of an inflammatory process in the pelvic organs[3].

The purpose of the study. To use modern methods for diagnosing pelvic inflammatory diseases.

Materials and methods of the study. A total of 65 women with complaints of pelvic inflammatory diseases were studied at AVPM No. 2.

Results of the study. The modern course of acute CKD is characterized by polymorphism of the clinical picture, which requires the use of additional research methods: transvaginal ultrasound (data content for OE is 81.6%, for ASO - 86.9%), diagnostic hysteroscopy and laparoscopy. to identify nosological diseases, assess the stage and spread of the inflammatory process of the uterus, uterine appendages and pelvic peritoneum, and choose a rational treatment tactic for patients.

Acute pelvic inflammatory diseases are always accompanied by an endogenous intoxication syndrome caused by damage to biological membranes, the severity of which can be assessed by the state of the erythrocyte membrane, its permeability and sorption capacity.

The use of "direct" screening methods for assessing bioradical processes - chemiluminescence (CL) and electron paramagnetic resonance (EPR) - allows us to assess the oxidative and antioxidant status in acute CKD based on the level of primary products of free radical oxidation (FRO) - lipid hydroperoxides (LHP), the formation of reactive oxygen species (ROS), total antioxidant activity (AOA), the antioxidant activity of serum ceruloplasmin (CP), transferrin (TR) and the activity of the CPUT antioxidant system, which are reliable criteria for the severity of the inflammatory process.

Acute CKD is accompanied by an increase in the level of GPL, the formation of ROS by phagocytic cells and a decrease in total AOA, regardless of the nosological form of the disease, as well as a significant increase in the activity of serum CP, TR and AOS CP / TR.

Changes in the indicators of SRO and AOS in acute CKD remain impaired even after treatment and worsen a month later, which further exacerbates the oxidant-antioxidant imbalance due to a decrease in the compensatory antioxidant capabilities of the body. in patients with salpingo-oophoritis.

Surgical sanitation of the inflammatory focus during hysteroscopy or laparoscopy contributes to a faster elimination of the inflammatory process of the uterus and uterine appendages, improving clinical and laboratory indicators, and reducing the stage of endogenous intoxication (EI), its disappearance. Echographic criteria for endometritis and salpingo-oophoritis.

Enteral detoxification in acute CTE also provides an acceleration of positive dynamic changes in clinical, laboratory and echographic indicators and a more rapid reduction of the EI stage.

Despite the improvement in clinical, laboratory and echographic indicators and a slight improvement in the indicators of oxidative-antioxidant homeostasis compared to conventional treatment, the addition of enteral detoxification (polyphepan) and surgical sanitation of the inflammatory site to the complex treatment of acute pelvic inflammatory disease is characterized by negative dynamics of the imbalance of oxidative homeostasis and the antioxidant system.

The use of synthetic antioxidants (emoxipin, baliz) in the complex treatment of acute CTE is accompanied by a leveling of the oxidative-antioxidant balance due to a decrease in the level of GPL and an increase in total AOA. A decrease in the activity of CP/TR AOS, which leads to an acceleration of clinical recovery, normalization of laboratory and echographic indicators.

Used literature:

1. Ozolinya L.A., Pravednikov N.N., Ovsepyan N.R. Sovremennyy vzglyad na etiology, pathogenesis, kliniku i lechenie vospalitelnyx zabolevaniy organov malogo taza u genshchin (obzor literatury) // Vestnik RGMU. 2013. No. 2. S. 47-52.
2. Utkin E.V., Kulavsky V.A. Osnovnye prichiny razvitiya i sovremennye tendentsii v klinicheskom techenii vospalitelnyx zabolevani organov malogo taza u genshchin // Rossiyskiy vestnik akushera-gynecologia. 2008. T. 8, No. 1. S. 40-44.
3. Shelkovnikova N.V., Lushnikova E.L., Pichigina A.K., Neymark A.I. Structural-functional basic syndrome of chronic palatal pain with mixed chronic cystitis and adenomyosis // Byul. expert. biol. 2014. T. 158, No. 12. S. 704-709.
4. Brunham RS, Gottlieb SL, Paavonen J. Pelvic inflammatory disease. N. Engl. J. Med. 2015. vol. 372. P. 2039-2048.
5. Workowski K.A., Bolan G.A. Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm. Rep. 2015. vol. 64 (RR-03). P. 1-137.

UDC: 616-08-035

EVALUATION OF THE EFFECTIVENESS OF THE PREVENTION AND TREATMENT OF PERIODONTITIS AND THE ORGANIZATION OF DENTAL MEASURES FOR WORKERS OF METAL PROCESSING ENTERPRISES

Islamova N.B.
Samarkand State Medical University

Abstract. Prevention of periodontal diseases is a complex task, the solution of which requires conditions of both local and general nature, including social issues and problems of modern man. Periodontal diseases are one of the most common inflammatory and destructive diseases, which has been recorded in 4 billion people worldwide. Along with this, the attendance of patients to dental clinics with periodontal diseases has increased, which represents 65% of all visits to the dental office.

***Key words**: periodontium, periodontal diseases, somatic diseases, dental plaque, dental plaque, prevention, oral hygiene.*

METALLGA ISHLOV BERISH KORXONALARI ISHCHILARI UCHUN PARODONTITNING PROFILAKTIKASI VA DAVOLASHNING SAMARADORLIGINI BAHOLASH HAMDA STOMATOLOGIK TADBIRLARNI TASHKIL ETISH

Islamova N.B.
Samarqand davlat tibbiyot universiteti

Annotatsiya. Parodont kasalliklarning oldini olish murakkab vazifa bo'lib, uni hal qilish uchun mahalliy va umumiy xarakterdagi sharoitlarini va muammolarini yechimi topish, ularni o'rganish va profilaktika choralari hamda zamonaviy davolash usullarini ishlab chiqishdan iborat. Parodont kasalliklari eng keng tarqalgan yallig'lanish va destruktiv kasalliklardan biri bo'lib, dunyo bo'ylab 4 milliard kishida qayd etilgan. Shu bilan birga, parodont kasalliklari bilan og'rigan bemorlarning stomatologik poliklinikalarga murojati oshdi, bu stomatologik poliklinikaga barcha tashriflarning 65 foizini tashkil qiladi.

***Kalit so'zlar:** periodont, parodont kasalliklar, somatik kasalliklar, tish plastinkasi, profilaktika, og'iz bo'shlig'i gigienasi*

ОЦЕНКА ЭФФЕКТИВНОСТИ ПРОФИЛАКТИКИ И ЛЕЧЕНИЯ ПАРОДОНТИТА И ОРГАНИЗАЦИИ СТОМАТОЛОГИЧЕСКИХ МЕРОПРИЯТИЙ ДЛЯ РАБОТНИКОВ МЕТАЛЛООБРАБАТЫВАЮЩИХ ПРЕДПРИЯТИЙ

Исламова Н.Б.
Самаркандский государственный медицинский университет

Аннотация. Профилактика заболеваний пародонта - сложная задача, решение которой требует условий как местного, так и общего характера, включая социальные вопросы и проблемы современного человека. Заболевания пародонта являются одними из наиболее распространенных воспалительных и деструктивных заболеваний, которые зарегистрированы у 4 миллиардов человек во всем мире. Наряду с этим

увеличилась посещаемость пациентов стоматологических клиник с заболеваниями пародонта, что составляет 65% всех посещений стоматологического кабинета.

Ключевые слова: *пародонт, заболевания пародонта, соматические заболевания, зубной налет, зубной налет на зубах, профилактика, гигиена полости рта.*

Relevance. In the process of intensive industrial development, the study of the role of harmful and health-related factors of the production environment is timely and very important. After all, unfavorable working conditions contribute to the formation of various pathological processes in the human body[1].

For practitioners, there is a question of choosing an adequate complex therapy for chronic generalized periodontitis in all. Given that bone resorption processes prevail in osteoporosis, certain features should be assumed when planning treatment of chronic generalized periodontitis in such cases.

One of the probable etiological factors is the low bone mineral density of the facial skeleton during postmenopause.

Currently, there is practically no substantiated information on the use of medications that correct mineral metabolism in the complex treatment of periodontitis, in particular, there is insufficient data on the effect of antiresorptive drugs on osteogenesis of the alveolar bone.

Periodontal diseases are one of the most common inflammatory and destructive diseases, which has been recorded in 4 billion people worldwide [8]. Along with this, the attendance of patients to dental clinics with periodontal diseases has increased, which represents 65% of all visits to the dental office [9].

The formation and development of inflammatory and destructive lesions of periodontal tissues is associated not only with local, but also with general factors. According to a number of surveys, periodontal tissue diseases are detected in 81% of menopausal women, in addition, periodontitis is the most common among these diseases of various forms

The long-term influence of a complex of production factors simultaneously with the deterioration of the health of workers, as a rule, can lead to pathological changes in the oral mucosa, periodontal diseases, and hard dental tissues [3].

Metallurgical production belongs to the industry with the most severe, dangerous and harmful working conditions, which have a direct impact on the functional systems of the body, change homeostasis, neuro-humoral regulation in it and lead to pathological changes in the oral cavity [5].

Harmful conditions for the production of metal structures, despite the availability of occupational safety and health measures, represent extreme conditions for workers and require further development of comprehensive programs for the prevention of major dental diseases.

The purpose of the study: to optimize rational measures for the prevention and treatment of periodontal diseases in workers of metal processing production (metal structures).

Research objectives:

1. To determine the prevalence and intensity of dental caries, the condition of periodontal tissues, oral hygiene of employees of the metal processing enterprise AZIA METAL PROF LLC and its branches in Kattakurgan and Urgut.

2. To study the state of functional parameters and nonspecific reactivity of the oral cavity, biophysical properties of mixed saliva in workers of the studied industries.

3. To study the psychophysiological parameters of the body depending on the intensity of the influencing factor in workers of metal processing enterprises.

4. To develop a set of sanitary and hygienic, general health and dental therapeutic and preventive measures aimed at improving the condition of periodontal disease in workers of metal processing enterprises.

The object of the investigation: it is planned to inspect the oral cavity of 120 workers of the main workshops of the metal processing enterprise AZIA METAL PROF LLC and its branches in Kattakurgan and Urgut. As a control group, the oral cavity of 35 employees of the studied enterprises who are not in contact with harmful factors of this production will be examined.

Research methods: clinical and instrumental, laboratory, biochemical, statistical.

Supposed scientific novelty:

The state of the structural and functional parameters of the oral cavity, some biochemical parameters of saliva in workers of the AZIA METAL PROF LLC enterprise and its branches in Kattakurgan and Urgut will be studied.

The complex of therapeutic and preventive measures aimed at improving the condition of periodontal tissues in workers of metal processing enterprises will be improved.

Practical significance of the research: The obtained clinical and experimental data will allow us to develop and put into practice an improved set of measures aimed at improving working conditions, preventing professionally caused diseases of the oral cavity, improving the organization of planning dental care for workers of metal processing enterprises.

The results of the work will be implemented in practical healthcare through the development and publication of methodological recommendations and information materials approved by the Ministry of Health of the Republic of Uzbekistan.

Individual oral hygiene as a method of preventing periodontal diseases should be given special attention. It is known that the main etiopathogenetic factor of inflammatory periodontal diseases are pathogenic and opportunistic microorganisms of dental plaque capable of forming biofilms. They can also support and provoke further development of many chronic general somatic diseases, and the risk of occurrence, development and further progression of both inflammatory processes in the oral cavity and general somatic diseases directly correlates with the degree of microbial contamination of the oral cavity. That is why dentists attach great importance to the quality of hygienic procedures performed by the patient and the individual selection of personal oral hygiene products, their effectiveness and safety. Modern therapeutic and prophylactic oral hygiene products (toothpastes, rinses, balms, gum gels) with proper selection and complex use are capable of providing a pronounced anti-plaque, antiseptic, anti-inflammatory effect, reducing gum bleeding due to the active components included in their composition.

In severe periodontal diseases, hygienic measures alone are no longer enough; they must be combined with complex treatment: conservative, surgical and orthopedic. However, without high-quality oral hygiene, any therapeutic measures and manipulations will be ineffective.

Conclusions. We draw attention to an important aspect: in order to succeed in the prevention of periodontal diseases, dentists must learn to talk with their patients, otherwise all medical measures and manipulations will be useless as long as we only treat, fill, and operate. The process of preventing any disease primarily consists of a person's awareness of its necessity, and until doctors learn to work on a mental level, all preventive measures will be reduced to columns of numbers in reports of medical and social institutions and departments, insurance companies.

In this regard, the goal of any prevention program should be an individual, i.e. a person with his illnesses, everyday and professional problems, character and characteristics of nutrition and other factors that influence the features of developing a personalized program. But all these measures will be effective only if each of us realizes that his life, health and longevity depend on how he treats himself and the world around him. To do this, a person must love himself, value his body and take care of it.

Used literature:

1. Asrorovna, X. N., Baxriddinovich, T. A., Bustanovna, I. N., Valijon O'g'li, D. S., & Qizi, T. K. F. (2021). Clinical Application Of Dental Photography By A Dentist. The American Journal of Medical Sciences and Pharmaceutical Research, 3(09), 10-13.
2. Bustanovna I. N., Sharipovna N. N. Research cases in women after menopause clinical and morphological changes in oral organs and their analysis //Journal of biomedicine and practice. – 2023. – T. 8. – №. 3.
3. Bustanovna I. N. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //Thematics Journal of Education. – 2022. – T. 7. – №. 3.
4. Bustanovna, I. N., & Abdusattor o'g, A. A. A. (2024). Analysis of Errors and Complications in the Use of Endocal Structures Used in Dentistry. International Journal of Scientific Trends, 3(3), 82-86.
5. Bustanovna, I. N. (2024). The Effectiveness of the Use of the Drug" Proroot MTA" in the Therapeutic and Surgical Treatment of Periodontitis. International Journal of Scientific Trends, 3(3), 72-75.
6. Bustanovna, I. N. (2022). Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women. Thematics Journal of Education, 7(3).
7. Bustanovna, I. N. (2024). Hygienic Assessment of The Condition of The Oral Mucosa After Orthopedic Treatment. International Journal of Scientific Trends, 3(3), 56-61.
8. Bustanovna, I. N. (2024). Complications Arising in the Oral Cavity after Polychemotherapy in Patients with Hemablastoses. International Journal of Scientific Trends, 3(3), 62-66.
9. Bustanovna, P. I. N. (2024). Further Research the Features of the Use of Metal-Ceramic Structures in Anomalies of Development and Position of Teeth. International Journal of Scientific Trends, 3(3), 67-71.
10. Islamova, N. B., & Sh, N. N. (2023, May). Study of changes in periodontal diseases in postmenopausal women. in conferences (PP. 15-17).
11. Islamova N. B., SH N. N. Study of changes in periodontal diseases in postmenopausal women //Conferences. – 2023. – C. 15-17.
12. Islamova, N. B. (2022). Changes in periodontal tissues in the postmenopausal period. In Стоматология-наука и практика, перспективы развития (pp. 240-241).
13. Nazarova N. S., Islomova N. B. postmenopauza davridagi ayollarda stomatologik kasalliklarining klinik va mikrobilogik ko 'rsatmalari va mexanizmlari //Журнал" Медицина и инновации". – 2022. – №. 2. – С. 204-211.
14. Sharipovna N. N., Bustanovna I. N. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //Frontline medical sciences and pharmaceutical journal. – 2022. – T. 2. – №. 05. – C. 60-67.

15. Sharipovna N. N., Bustonovna I. N. Etiopatogenetic factors in the development of parodontal diseases in post-menopasis women //The american journal of medical sciences and pharmaceutical research. – 2022. – T. 4. – №. 09. In Conferences (pp. 21-23).

UDC: 616-08-035

CLINICAL AND MORPHOLOGICAL CHANGES IN ORAL ORGANS AND TISSUES IN WOMEN AFTER MENOPAUSE AND THEIR ANALYSIS

Islamova N.B.
Samarkand State Medical University

Annotation. During menopause, irreversible changes in the hormonal function of the ovaries occur, the concentration of estrogens decreases.

It is during this period that a progressive increase in various diseases is noted. The study of the dental status in menopausal women has proven the existence of a relationship between a decrease in estrogen concentration and a sharp increase in dental diseases. Because the oral mucosa and salivary glands contain estrogen receptors, changes in hormonal levels can be seen directly in the mouth. Leimola-Virtanen et al confirmed the presence of estrogen mRNA and immunoreactive protein in the oral mucosa and salivary glands, which also confirms its biological role. Thus, the climacteric period is characterized by a disorder of metabolism and function in the tissues of the oral cavity. As a result, tooth loss, periodontal disease, increased bone resorption of the alveolar processes are observed.

Keywords: *menopause, generalized periodontitis, postmenopausal period, diseases of the oral mucosa.*

MENOPAUZA DAVRIDAN KEYINGI AYOLLARDA OG'IZ BO'SHLIG'I A'ZOLARI VA TO'QIMALARIDAGI KLINIK-MORFOLOGIK O'ZGARISHLAR VA ULARNING TAHLILI.

Islamova N.B.
Samarqand davlat tibbiyot universiteti

Annotasiya. Menopauza davrida tuxumdonlarning gormonal funksiyasida qaytarilmas o'zgarishlar yuz beradi, estrogenlarning konsentrasiyasi kamayadi.

Aynan shu davrda turli kasalliklarning progressiv o'sishi qayd etilgan. Menopauzadagi ayollarda tish holatini o'rganish estrogen konsentrasiyasining pasayishi va stomatologik kasalliklarining keskin o'sishi o'rtasidagi bog'liqlik mavjudligini isbotladi. Og'iz bo'shlig'i shilliq qavati va so'lak bezlarida estrogen reseptorlarini o'z ichiga olganligi sababli, gormonal darajadagi o'zgarishlarni bevosita og'izda ko'rish mumkin. Leimola-Virtanen va boshqalar og'iz bo'shlig'i shilliq qavati va so'lak bezlarida estrogen mRNK va immunoreaktiv oqsil mavjudligini tasdiqladilar, bu ham uning biologik rolini isbotlaydi. Shunday qilib, klimakterik davr og'iz bo'shlig'i to'qimalarida metabolizm va funksiyalarning buzilishi bilan tavsiflanadi. Natijada, tishlarning yo'qolishi, parodont kasalliki, alveolyar jarayonlardagi suyak rezorbsiyasi kuchayishi kuzatiladi.

Kalit so'zlar: *menopauza, umumiy parodontit, postmenopauza davri, og'iz bo'shlig'i shilliq qavati kasalliklari*

КЛИНИКО-МОРФОЛОГИЧЕСКИЕ ИЗМЕНЕНИЯ ОРГАНОВ И ТКАНЕЙ ПОЛОСТИ У ЖЕНЩИН ПОСЛЕ МЕНОПАУЗЫ И ИХ АНАЛИЗ

Исламова Н.Б.
Самаркандский государственный медицинский университет

Аннотация. В период менопаузы происходят необратимые изменения гормональной функции яичников, снижается концентрация эстрогенов.

Именно в этот период отмечается прогрессирующий рост различных заболеваний. Изучение стоматологического статуса у женщин в климактерическом периоде доказало наличие взаимосвязи между снижением концентрации эстрогенов и резким ростом стоматологических заболеваний. Поскольку слизистая оболочка полости рта и слюнные железы содержат рецепторы эстрогена, изменения уровня гормонов можно наблюдать непосредственно во рту. Leimola-Virtanen и соавт. подтвердили наличие мРНК эстрогена и иммунореактивного белка в слизистой оболочке полости рта и слюнных железах, что также подтверждает их биологическую роль. Таким образом, климактерический период характеризуется нарушением обмена

веществ и функций в тканях полости рта. В результате наблюдается потеря зубов, пародонтоз, усиление резорбции костной ткани альвеолярных отростков.

Ключевые слова: *менопауза, генерализованный пародонтит, постменопаузальный период, заболевания слизистой оболочки полости рта.*

The purpose of the study: to study the clinical and microbiological manifestations and mechanisms of development of dental diseases in postmenopausal women.

Material and methods: we examined 40 postmenopausal women with various diseases of the oral cavity. The control group of patients were women who are not in the postmenopausal period with dental diseases.

Results and discussions: All participants of the study underwent a comprehensive examination: hygienic and periodontal indices (OHI-S hygiene index, PI periodontal index), pH of mixed saliva was measured, sialometry was performed according to the method of M.M. Pozharitskaya, studied the microflora of the oral cavity by PCR (polymerase chain reaction).

When collecting anamnesis, it was revealed that most often women of group I complained of bleeding gums (13.3%) and bad breath (6.7%). Group II patients complained of bleeding gums (66%), bad breath (43.9%), exposure of the roots of the teeth (15.3%), tooth mobility (16.1%), and 40% of women had complaints of dry mouth. While 26.7% of postmenopausal women taking HRT complained of bleeding gums, 18.1% complained of dry mouth and bad breath.

According to the results of the survey, postmenopausal women taking HRT 2.3 times less complained of bleeding gums (27.7%) and dry mouth (17.1%) compared with women not taking HRT (63%; 40% respectively). 18.1% of women taking HRT noted bad breath, which is 2.5 times less than women not taking HRT (43.9%), but 3 times more than in the control group (5.8%). Postmenopausal women, regardless of whether they take HRT or not, were 3 times more likely to have a white coating on the tongue (18.1%, 15.3%, respectively) than women in the control group (6.7%). Burning sensation in the oral cavity was noted by 5.7% of women in group II and 3.9% in group III.

Attention was also paid to the TMJ, noting the symmetry of the face and movements of the mandible when opening the mouth, pain when moving the mandible, and the range of vertical and lateral movements of the mandible. In 22.6% of group I 49, in 40% of group II and 45.7% of group III women, a deviation was observed, manifested by a displacement of the lower jaw to the side at the beginning and a return to the midline in the middle of opening the mouth by 2 mm. None of the subjects had limited range of vertical and lateral movements. 2.9% - group I, 14.3% - group II and 11.5% - group III sometimes noted clicks during the movement of the lower jaw.

When examining the oral cavity, such non-carious lesions of the teeth as erosion were noted, which were detected in 2.8% of women in group II. Wedge-shaped defects were noted in 17.1% of group I, 54.3% of group II and 62.8% of group III women. Pathological tooth wear was detected in 17.1% of group II and 14.2% of group III women, but there were no significant differences between the groups ($p > 0.05$).

The clinical examination included the determination of the KPU index, the OHI-S hygiene index, the periodontal index PI, the measurement of the pH of the mixed saliva, sialometry, and the assessment of the microflora of the oral cavity by PCR (polymerase chain reaction).

In the study of the intensity of tooth decay by caries, it was found that in group I, the average value of the KPU index = 13.58 ± 6.35 (moderate level of caries intensity), in group II, KPU = 18.8 ± 6.17 (very high level of caries intensity) , and in group III, the KPU index = 16.45±6.2 (high level of caries intensity).

When examining the level of oral hygiene, it was found that the OHI-S hygiene index, which takes into account both the amount of plaque and tartar, in group I was 1.83 ± 1.1, in group II - 2.89 ± 0.89, in group III - 3.24±1.6. A statistically significant difference was found between groups I and II, groups II and III ($p < 0.05$), and between groups I and III there were no significant differences in relation to the values of group parameters ($p > 0.05$).

To determine the severity of periodontal disease, the periodontal index PI was used, which showed that its value in women who do not take HRT is 2.31±1.29, which corresponds to the average degree of periodontal pathology and is 2 times more than in women taking HRT and 5 times more than in the control group. In women taking HRT, the value of the periodontal index PI is 1.16±0.75, which corresponds to the initial and mild degree of periodontal pathology, and in the control group - 0.46±0.56.

An objective examination of patients showed increased saliva viscosity, combined with foaminess in 51.4% of women not taking HRT, and in 25.7% of women taking HRT.

Sialometry according to the method of M.M. Pozharitskaya allows you to determine the amount of mixed unstimulated saliva. The greatest hyposalivation in the oral cavity was observed in women not taking HRT, and the average for the group was 2.1 ± 0.28 ml at a rate of 4.1 ml.
In the study of the pH of mixed saliva in women in group I, the average value reached 7.04±0.35, in group II, pH=6.48±0.33, and in group III, the average pH=6.94±0.36.

Analysis of samples of the contents of periodontal pockets showed that A. actinomycetemcomitans, a gram-negative non-motile facultative anaerobic coccobacillus, was found in 22.9% of women in group I, 51.4% in group II and 37.1% in group III. It was found that A. actinomycetemcomitans occurs 1.4 times more often in women who do not take HRT compared to women taking it and 2.2 times more often than in the control group. At the same time, a significant difference ($p < 0.05$) is observed only between groups I and II.

The frequency of occurrence of T. denticola, which is able to organize associations with other bacteria, especially with P. gingivalis and T. forsythia, is 37.1% in group I, 54.3% in group II and 51.4% in group III, but no significant difference ($p > 0.05$) between groups was found. T. forsythia, which most strongly promotes cell apoptosis, was found in 51.4% in group I, in 80% in group II, and in 45.7% in group III. A significant difference was found between groups I and II, II and III. Periodontopathogen P. gingivalis, as the most aggressive bacterium, was found in 11.4% of women in group I, 77.1% in group II and 28.6% in group III, respectively. It was shown that P. gingivalis occurs 6.7 times more often in group II than in group I and 2.7 times more often than in group III.

P. intermedia was found in 11.3% of women in group I, in 74.3% in group II and in 25.7% in group III, respectively. P. intermedia is 6.6 times more common in group II than in group I and 2.9 times more common than in group III. At the same time, there is a significant difference between P. gingivalis and P. intermedia ($p < 0.05$) between groups I and II, II and III. There was no significant difference between the qualitative composition of the microflora of periodontal pockets in groups I and III (control and the group of women taking HRT) ($p> 0.05$).

Most often, in women not taking HRT, P. gingivalis, P. intermedia, and T. forsythia were detected, in contrast to women taking HRT. A. actinomycetemcomitans and T. denticola as part of the subgingival microflora were found regardless of the use of HRT and were detected in a smaller number of patients.

The study also revealed Epstein-Barr virus in 11.4% of women in group I, 20% in group II and 17.1% in group III. Herpes simplex virus was found in 17.1% of the women of group I, 25.7%

of group II and 28.6% of group III. Candida albicans was found in 5.7% of women of group I, 25.7% of group II and 20% of group III, and a significant difference was found between groups I and II, II and III ($p < 0.05$).

In all patients of the control group, in whom a periodontopathogen was detected, the amount was relatively low and did not exceed 105 units/ml.

Spearman's rank correlation method was used to identify the relationship between the degree of clinical indicators and the composition of the microflora of periodontal pockets.

The relationship between an increased number of A. actinomycetemcomitans in the contents of the periodontal pocket with a low level of oral hygiene according to the OHI-S index (r=0.503027) and with the severity of periodontitis (r=0.505208) was revealed. A negative correlation was observed with the pH of the mixed saliva (r=-0.456773).

T. denticola

No correlation was found between the amount of T. denticola in periodontal pockets and clinical parameters.

P. gingivalis

The content of P. gingivalis moderately correlated with the level of oral hygiene (r=0.469771). A negative relationship between the content of P. gingivalis and the pH of mixed saliva (r=-0.491576) was revealed.

T. forsythia

The amount of T. forsythia in the contents of periodontal pockets moderately correlated with the level of oral hygiene (r=0.376309), and to a greater extent with the severity of periodontitis (r=0.552702). A negative correlation was also found with the pH of the mixed saliva.

P. intermedia

The level of P. intermedia depended on the severity of periodontitis (r=0.416681).

According to the results of the study, a statistically significant relationship was revealed between oral hygiene and the severity of periodontitis with the quantitative composition of periodontopathogens of group II ($p < 0.05$).

Findings. Thus, the greater sensitivity of the above indices is associated with the peculiarities of the pathogenesis of menopause, namely with estrogen deficiency. The content of estrogen receptors on the oral mucosa plays a direct role in the development of dental diseases [9]. During menopause, the angioprotective effect of estrogens weakens, followed by damage to the structures of the hemomicrocirculatory bed. Also during this period, the production of osteoclasts increases, the production of osteoblasts decreases, the absorption of calcium in the intestine decreases, the lack of vitamin D, which leads to increased bone resorption.

Due to estrogen deficiency, there is a decrease in intestinal absorption of calcium in the body, which in turn leads to disturbances in the regulation of calcium-phosphate metabolism and increased calcium release not only into the blood serum, but also into saliva [6]. Therefore, a high concentration of calcium in the saliva of menopausal women can lead to faster plaque mineralization and, consequently, to an increase in stone formation, which has a direct impact on the progression of gingivitis and periodontitis [9;1]. Thus, the pathogenesis of menopause affects the state of all structures of the oral cavity.

Used literature:

1. Asrorovna, X. N., Baxriddinovich, T. A., Bustanovna, I. N., Valijon O'g'li, D. S., & Qizi, T. K. F. (2021). Clinical Application Of Dental Photography By A Dentist. The American Journal of Medical Sciences and Pharmaceutical Research, 3(09), 10-13.
2. Bustanovna I. N. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //Thematics Journal of Education. – 2022. – Т. 7. – №. 3.
3. Исламова Н. Б., Чакконов Ф. Х. Изменения в тканях и органах рта при эндокринных заболеваниях //Актуальные вопросы стоматологии. – 2021. – С. 320-326.
4. Исламова Н. Б., Исломов Л. Б. Особенности развития и течения заболеваний полости рта при эндокринной патологии //ББК 56.6 А43. – 2021. – С. 76.
5. Иргашев Ш. Х., Исламова Н. Б. Применение и эффективность энтеросгеля при лечении генерализованного пародонтита //Актуальные вопросы стоматологии. – 2021. – С. 305-310.
6. Исламова Н. Б. и др. Состояние кристаллообразующей функции слюны при различных патологиях //Молодежь и медицинская наука в XXI веке. – 2014. – С. 470-471.
7. Назарова Н., Исломова Н. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //in Library. – 2022. – Т. 22. – №. 1. – С. 60-67.
8. Назарова Н., Исломова Н. Этиопатогенетические факторы развития заболеваний пародонта у женщин в периоде постменопаузы //Профилактическая медицина и здоровье. – 2022. – Т. 1. – №. 1. – С. 55-63.
9. Назарова Н., Исломова Н. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //in Library. – 2022. – Т. 22. – №. 1. – С. 60-67.
10. Содикова Ш. А., Исламова Н. Б. Оптимизация лечебно-профилактических мероприятий при заболеваний пародонта беременных женщин с железодефицитной анемией //Актуальные вопросы стоматологии. – 2021. – С. 434-440.
11. Sharipovna N. N., Bustanovna I. N. Assessment of clinical and morphological changes in the oral organs and tissues in post-menopause women //Frontline medical sciences and pharmaceutical journal. – 2022. – Т. 2. – №. 05. – С. 60-67.
12. Sharipovna N. N., Bustonovna I. N. Etiopatogenetic factors in the development of parodontal diseases in post-menopasis women //The american journal of medical sciences and pharmaceutical research. – 2022. – Т. 4. – №. 09.

UDC:616.345-002.44-055.2608

CHOOSING A TREATMENT METHOD FOR NONSPECIFIC ULCERATIVE COLITIS IN PREGNANT WOMEN

Ikramova F.D.
Andijan State Institute

Annotation. Non-specific ulcerative colitis (NUC) is a chronic inflammatory bowel disease, which is characterized by damage to the mucous membrane of the colon and has a recurrent nature. In pregnant women, treatment and diagnosis of UC require a special approach due to possible risks for both mother and fetus. In recent years, there has been an increase in cases of the disease, especially among women aged 20–40. In Russia, the incidence of ulcerative colitis is 2–3 per 100,000 residents [1], which is significantly lower than in other European countries and the United States. Ulcerative colitis develops from the action of environmental factors, in which tolerance to normal intestinal flora is lost if the host organism has a corresponding genetic predisposition [2].

***Key words**: Non-specific ulcerative colitis, pre*gnancy, diagnostics, treatment, 5-aminosalicylates, corticosteroids, immunosuppressants, surgery, pregnancy complications.

HOMILADOR AYOLLARDA NOSPESIFIK YARALI KOLITNI DAVOLASH USULINI TANLASH

Ikramova F.D.
Andijon davlat tibbiyot institute

Annotatsiya. Nospesifik yarali kolit (NYK) - yo'g'on ichak shilliq qavatining qaytalanishga moil bo'lgan surunkali yallig'lanishlkasalligidir. Homilador ayollarda NYK tufayli ona va homila uchun bo'lishi mumkin bo'lgan xavf – xatarlar davolash va tashxislashda alohida yondashuvni talab qiladi. So'nggi yillarda, ayniqsa, 20-40 yoshli ayollar orasida kasallik holatlari ko'paydi. Rossiyada yarali kolit bilan kasallanish 100 000 aholiga 2-3 tani tashkil qiladi [1], bu boshqa Evropa mamlakatlari va AQShga qaraganda ancha past. Yarali kolit rivojlanadi, bunda mezbon. Organizmda kasallikga genetik moyillik mavjud bo'lsa atrof-muhit omillari ta'sirida normal ichak florasiga tolerantlik yo'qoladi [2].

***Kalit so'zlar:** Nospesifik yarali kolit, homiladorlik, tashxis, davolash, 5-aminosalisilatlar, kortikosteroidlar, immunosupressantlar, jarrohlik amaliyotlari, asoratlar.*

ВЫБОР МЕТОДА ЛЕЧЕНИЯ НЕСПЕЦИФИЧЕСКОГО ЯЗВЕННОГО КОЛИТА У БЕРЕМЕННЫХ ЖЕНЩИН

Икрамова Ф.Д.
Андижанский государственный институт

Аннотация. Неспецифический язвенный колит (НЯК) — хроническое воспалительное заболевание кишечника, характеризующееся поражением слизистой оболочки толстой кишки и имеющее рецидивирующий характер. У беременных лечение и диагностика ЯК требуют особого подхода в связи с возможными рисками как для матери, так и для плода. В последние годы отмечается рост случаев заболевания, особенно среди женщин в возрасте 20–40 лет. В России заболеваемость язвенным колитом составляет 2–3 на 100 000 населения [1], что значительно ниже, чем в других странах Европы и США. Язвенный колит развивается под действием факторов окружающей среды, при которых утрачивается толерантность к нормальной кишечной флоре, если у организма-хозяина имеется соответствующая генетическая предрасположенность [2].

***Ключевые слова:** Неспецифический язвенный колит, беременность, диагностика, лечение, 5-аминосалицилаты, кортикостероиды, иммуносупрессоры, хирургическое вмешательство, осложнения.*

The aim of this study: is to analyze the features of diagnostics and treatment of UC in pregnant women, as well as to discuss the optimal methods of therapy taking into account the impact on the fetus and possible complications.

Materials and methods. We analyzed the data of 36 patients with UC observed in gastroenterological and obstetric departments. Patients aged from 22 to 38 years, the average age of patients was 30 years. There is evidence that ulcerative colitis, especially if it occurs during pregnancy, worsens. M.Kh. Levitan and R.V. Smesova (1981), who described 140 pregnant women with nonspecific ulcerative colitis, noted that the greatest number of exacerbations occurred in the first trimester and after termination of pregnancy [3]. Improvement is noted in the second and third trimesters, and an increase in the severity of the disease symptoms is possible after childbirth. The authors believe that pregnancy and childbirth are the periods during which a severe first attack of ulcerative colitis most often occurs. They were divided into 4 groups. The first group consisted of 14 women in whom pregnancy provoked the occurrence and development of the disease. In 2 patients, pregnancy proceeded with toxicosis. In all women in this group, it ended with normal delivery of healthy children. The patients were then observed for 2-7 years. Nonspecific ulcerative colitis in them was relatively mild: intestinal damage was limited to the distal section, no signs of disease progression were noted. Our observations indicate that nonspecific ulcerative colitis that developed during pregnancy, which apparently serves as a provoking moment, usually has a milder course. The 2nd group included 10 women in whom the development of ulcerative colitis was provoked by artificial termination of pregnancy, and in 8 cases the colitis took a chronic relapsing course and in 2 cases a relatively mild course. It should be noted that 2 women subsequently had pregnancies and births that did not cause exacerbations of the disease.

The third group consisted of 8 patients who had been suffering from nonspecific ulcerative colitis for a long time (2-12 years), in whom pregnancy sometimes worsened the course of the disease. According to the literature, such women are in the majority. Pregnancy and childbirth in 4 women of this group did not significantly affect the course of colitis. In 1 case, a mild relapse occurred in the postpartum period. One patient died shortly after childbirth due to symptoms of a severe exacerbation of ulcerative colitis and its complications. The 4th group included 4 patients in whom pregnancy improved the severity of clinical manifestations of the disease so much that these women could be considered recovered: they had a stable remission of colitis after pregnancy and childbirth. Thus, it is possible to trace some dependence of the severity of nonspecific ulcerative colitis on the time of its occurrence in relation to pregnancy. It is most mild if it developed during pregnancy. If colitis developed several years before pregnancy, then relapses during it are usually mild, and in some cases, stable remission occurs after childbirth. If colitis developed after childbirth, it is most severe. Artificial termination of pregnancy can be a provoking moment for the occurrence and relapse of colitis. According to B. Korelitz, ulcerative colitis remains the same as it was at the time of pregnancy: if it was active, it will probably remain active or its course will worsen [4]. For this reason, patients with an active process should be actively treated before or during pregnancy in order to achieve remission, which is in the interests of the mother and fetus. Constipation, often observed during pregnancy, and trauma to the intestinal mucosa with solid feces also play a known role in exacerbating the process [5].

Results and discussion. The results of the study showed that the diagnosis of UC in pregnant women requires an integrated approach. The most effective methods are colonoscopy (in the absence of contraindications), stool analysis and clinical blood test. During pregnancy, it is

important to avoid excessive invasiveness, which in some cases limits the use of colonoscopy in the first trimester.

For the treatment of UC in pregnant women, drugs that do not have a negative effect on the fetus are preferable. 5-aminosalicylates (mesalazine) are considered safe and effective first-line agents. The use of corticosteroids is limited in severe exacerbations of the disease. Immunosuppressants and biological therapy can be used in cases of severe forms, but require special caution.

The study found that the most common complications in pregnant women with UC are malnutrition, dehydration, anemia and premature birth. However, with timely intervention, most women have good outcomes, including the birth of healthy children.

The results show that adequate treatment of UC in pregnant women requires constant monitoring and a personalized approach. It is important to take into account both the severity of the disease and the state of pregnancy. In this case, the main focus should be on minimizing the risks to the fetus. In the treatment of ulcerative colitis, reasonable psychotherapy, providing the patient with rest and a rational diet with an increased content of protein and vitamins B1, B2, B6, B12, K, C, moderate restriction of fats and carbohydrates (due to products containing a high content of fiber) are of great importance. Since in ulcerative colitis the cavity and parietal digestion of the small intestine is impaired, a large amount of undigested carbohydrates enter the large intestine, which are converted into organic acids, therefore the amount of carbohydrates should be reduced to 200-300 g on the 3rd-5th day of the acute period [6].5-aminosalicylate therapy, in combination with dietary adjustments and adherence to the regimen, allows for effective disease control, reducing the risk of complications.

One of the important aspects is the need to monitor the condition of the mother and fetus, especially in severe cases, when the use of immunosuppressants or biological drugs may be required. The prognosis for the mother and child with a competent therapeutic strategy is often favorable.

Conclusion. Non-specific ulcerative colitis in pregnant women is a complex clinical problem that requires a multidisciplinary approach. With proper diagnosis and individual treatment, most women can successfully carry and give birth to healthy children. The key points in treatment are the choice of safe drugs, symptom control and prevention of complications such as dehydration, anemia and premature birth.

Used literature:

1. Фарелл Ричард, Пепперкорн Марк. Язвенный колит. Международн. мед. журн. 2003; 1. Kouroumalis, E. A., & Zamboulis, C. (2017).
2. Левитан М.Х., Смесова Р.В. Неспецифический язвенный колит и беременность. Врач. дело. 1981; 3: 29–32. 5. *Inflammatory Bowel Disease in Pregnancy: A Review of Current Literature*. European Journal of Gastroenterology & Hepatology, 29(5), 500-506.
3. Грейналь З.А. Диагностика язвенного колита у беременных. Экстрагенитальная патология и беременность. Саратов, 1992; с. 74–6
4. Korelitz B. Pregnancy, Fertility and Inflammatory Bowe1 Disease. Am J Gastroent 1985; 80 (5): 365–70.
5. Clark, M., & Stone, J. (2020). *The Impact of Ulcerative Colitis on Pregnancy and Fetal Outcomes: A Systematic Review and Meta-Analysis*. Digestive Diseases and Sciences, 65(7), 2015-2022.

UDC: 616-08-035

THE ROLE OF ADIPOKINES IN THE DEVELOPMENT OF ENDOTHELIAL DYSFUNCTION IN CHILDREN WITH OBESITY

Ibragimova Elnara Farmanovna
Samarkand State Medical University

Abstract. Changes in adipokine production may indicate impaired adipocyte function in children and adolescents with abdominal obesity. Understanding the role of adipokines in linking childhood and adolescent abdominal obesity to endothelial dysfunction can be considered a factor in the development of cardiovascular risk in adulthood. Consequently, early detection of adipokine imbalance helps determine the pathogenetic role of endothelial dysfunction in increasing cardiovascular risks. This highlights the importance of timely recognition and correction of the earliest signs of cardiovascular system damage in obesity.

Key words: endothelial dysfunction, adipokines, abdominal obesity, children, adolescents

SEMIZLIK BOR BOLALARDA ENDOTELIY DISFUNKTSIYASINING RIVOJLANISHIDA ADIPOKINLARNING O'RNI

Ibragimova Elnara Farmanovna
Samarqand davlat tibbiyot universiteti

Annotatsiya. Organizimda adipokin ishlab chiqarishdagi o'zgarishlar abdominal semizlik kuzatilgan bolalar va o'smirlarda adipotsitlar funktsiyasi buzilganligini ko'rsatishi mumkin. Bolalik va o'smirlik davrida qorin bo'shlig'idagi semirishni endotelial disfunktsiya bilan bog'lashda adipokinlarning rolini tushunish katta yoshdagiларда yurak-qon tomir xavfi rivojlanishining omili sifatida qaralishi mumkin. Binobarin, adipokin nomutanosibligini erta aniqlash yurak-qon tomir xavfi kelib chiqishida endotelial disfunktsiyaning patogenetik rolini aniqlashga yordam beradi. Bu holat semirishda yurak-qon tomir tizimi shikastlanishining dastlabki belgilarini o'z vaqtida aniqlash va tuzatish muhimligini ta'kidlaydi.

Kalit so'zlar: *endotelial disfunktsiya, adipokinlar, abdominal semirish, bolalar, o'smirlar*

РОЛЬ АДИПОКИНОВ В РАЗВИТИИ ЭНДОТЕЛИАЛЬНОЙ ДИСФУНКЦИИ У ДЕТЕЙ С ОЖИРЕНИЕМ

Ибрагимова Эльнара Фармановна
Самаркандский государственный медицинский университет

Аннотация. Изменение выработки адипокинов может указывать на нарушение деятельности адипоцитов при абдоминальном ожирении у детей и подростков. Понимание роли адипокинов в связывании детского и подросткового абдоминального ожирения с эндотелиальной дисфункцией может рассматриваться как фактор развития кардиоваскулярного риска во взрослой жизни. Следовательно, раннее выявление дисбаланса адипокинов помогает определить патогенетическую роль эндотелиальной дисфункции в повышении сердечно-сосудистых рисков. Это подчеркивает важность своевременного распознавания и коррекции первых признаков поражения сердечно-сосудистой системы при ожирении.

Ключевые слова: *эндотелиальная дисфункция, адипокины, абдоминальное ожирение, дети, подростки*

One of the main factors in the development of cardiovascular complications is obesity. Obesity is characterized by excessive lipid deposition in adipose tissue, which leads to systemic metabolic changes and the development of dyslipidemia and insulin resistance. Visceral fat has the greatest metabolic activity, which contributes to the development of insulin resistance [26,33], so abdominal obesity is considered dangerous. Abdominal obesity is characterized by hypertrophy and hyperplasia of adipocytes, an increase in the number of macrophages and an

increase in adipokines [19,20,26,33]. The risks of developing cardiovascular complications begin to be determined already in childhood. In adolescents, abdominal obesity is a risk factor for stroke at a young age [18,27].

Currently, adipose tissue is considered an endocrine organ that facilitates interaction with vital organs and tissues [3,28,34]. Endocrine and para-autocrine factors are produced in adipose tissue.

In recent years, the incidence of obesity has increased threefold worldwide [4, 23, 30]. High incidence rates are observed in children and adolescents. Among endocrine pathologies, adolescent obesity accounts for 34.5% [5]. of all diseases. Childhood and adolescent obesity is becoming a global problem in pediatrics. Risk factors for the development of obesity in children include obesity in both parents, a burdened obstetric history, early introduction of complementary foods, physical inactivity in adolescents, and infrequent food intake. With an increase in obesity rates in children, there is a tendency for cardiovascular diseases to increase, which is one of the main causes of disability among the population. The results of many studies indicate a link between childhood and adolescent obesity and the development of cardiovascular diseases in adults. However, the pathophysiological mechanisms linking childhood and adolescent abdominal obesity with cardiovascular pathology have not been fully studied, and the literature data are contradictory.

The aim of the study was to substantiate the role of adipokines in the development of endothelial dysfunction in children and adolescents with abdominal obesity based on published studies.

The first sign of the development of cardiovascular diseases is the presence of endothelial dysfunction and subclinical inflammation in childhood. The study of the role of endothelial dysfunction in the development of cardiovascular pathology in obesity in adults indicates the particular relevance of identifying endothelial dysfunction in the early stages of development in children and adolescents. Which determines the need to recognize and correct the earliest signs of damage to the cardiovascular system in obesity [7].

Endothelial dysfunction is a violation of the ratio between the production of vasodilating angioprotective, antiproliferative factors and vasoconstrictor, prothrombotic, proliferative agents synthesized by the vascular wall [13]. The inner surface of the vessels is lined with endothelium, which provides antiatherogenic and antithrombotic activity of the vascular wall.

The endothelium performs crucial activities such as maintaining hemovascular homeostasis, regulating hemostasis, modulating inflammation, and controlling vascular tone and permeability. The endothelium possesses its own renin-angiotensin system [10,12]. The endothelium performs its functions by synthesizing and secreting a large number of biologically active substances [2,16]. Under the regulatory action of the endothelium, biologically active substances are produced in a balanced manner to ensure the integral functioning of the circulatory system. The endothelium secretes biologically active substances in the form of basal (constant) and stimulated secretion, which are released upon stimulation or damage to the endothelium [2]. The secretory activity of the endothelium is stimulated by changes in blood flow velocity, catecholamines, vasopressin, acetylcholine and other neurotransmitters, platelet factors and hypoxia [11]. Increasing cytokines, cholesterol, and homocysteine damage endothelium. Endothelium balances pro- and anti-inflammatory, vasodilating, and vasoconstrictive chemicals, platelet agents, coagulants, fibrinolytics, proliferation factors, and growth inhibitors.

The production of the inflammation mediator system by adipocytes indicates the presence of chronic inflammation in obesity. An increase in the degree of obesity increases the severity of the proinflammatory response, with adipocyte degeneration and fibrosis observed. The presence of inflammation in adipose tissue leads to an increase in the content of vaspin, adipsin, apelin, leptin, resistin, omentin, retinol-binding protein-4, chemokines, proinflammatory cytokines - TNF, interleukin 6 [17].

The first adipokine is leptin, which is synthesized by cells of adipose tissue, skeletal muscles, stomach, and placenta. Leptin production increases sharply in abdominal obesity. In obesity, the observed hyperleptinemia occurs as a result of compensatory resistance of the hypothalamus to the central action of leptin. Conflicting data have been obtained from studies of the effect of leptin on insulin secretion and insulin resistance. Hyperleptinemia suppresses the expression of insulin matrix ribonucleic acid (mRNA) for a long time, with further development of insulin resistance [1,22,29]. This hyperleptinemia is associated with the development of atherosclerotic vascular lesions, arterial hypertension, metabolic syndrome, myocardial infarction, and stroke. The cause of the development of pathological conditions is the development of inflammation in the vascular wall with hyperleptinemia. Leptin stimulates the cellular immune response and affects the production of proinflammatory cytokines (TNFα, IL-2, IL-6, MCP-1), active forms of oxygen. Excess leptin increases oxidative stress in endothelial cells, enhances vascular calcification and proliferation of smooth muscle cells, stimulates the synthesis of proinflammatory factors. Increased production of proinflammatory cytokines by leptin contributes to increased blood pressure and disrupts endothelial function. However, leptin reduces blood pressure due to its direct effect on blood vessels. Some studies have shown stimulation of NO production by leptin with subsequent vasodilation. In addition, increased leptin reduces the removal of cholesterol from the vascular wall and increases the risk of atherosclerosis. In turn, the relationship between leptin production and arterial elasticity is independent of the amount of adipose tissue, inflammation markers, and insulin resistance [14].

Aplein is produced by adipocytes and cardiovascular cells and is a marker of obesity. Aplein increases adiponectin levels and decreases leptin levels. Affecting insulin resistance, it changes adiponectin levels. A positive correlation has been established between aplein levels and TNFα and other proinflammatory cytokines, indicating its proinflammatory effect.

Omentin, which stimulates insulin-mediated glucose transport, is also produced in visceral adipose tissue. With an increase in omentin levels, tissue sensitivity to insulin improves and insulin resistance decreases. Omentin levels are low in endothelial dysfunction, metabolic syndrome, and atherosclerosis of the carotid and coronary arteries. Omentin has an anti-inflammatory effect, which is manifested in the suppression of TNFα-induced cyclooxygenase-2 expression [1].

Resistin plays an important role in the development of insulin resistance and obesity, being considered the "insulin resistance hormone". Resistin affects lipid metabolism by the feedback principle: during adipocyte differentiation, its concentration increases and adipogenesis is inhibited. Resistin stimulates the endothelium and promotes the release of endothelin-1 and activating adhesion molecules. In obesity, the level of resistin is high, which promotes the development of insulin resistance and dyslipidemia, the number of atherogenic inflammatory markers increases, and the risk of cardiovascular complications increases. Leptin inhibits the production of resistin mRNA [1].

Visceral adipose tissue also produces adiponectin, which exhibits anti-inflammatory effects due to the inhibition of nuclear factor kappa-B (NF-κB) activity in macrophages and monocytes,

as well as in endothelial cells. Adiponectin increases glucose transport into muscles, activates fatty acid oxidation, and increases tissue sensitivity to insulin [32,35]. Adiponectin inhibits monocyte adhesion, reduces the proliferation of migrating smooth muscle cells in response to growth factors, increases NO production in endothelial cells, and exhibits a pronounced antiatherogenic effect. With inflammation of adipose tissue, adiponectin production decreases, which leads to the development of arterial hypertension due to the activation of the renin-angiotensin system and the activity of the sympathetic nervous system, as well as the development of endothelial dysfunction and a decrease in the excretion of sodium ions in the urine. The level of adiponectin is inversely related to the amount of low-density lipoproteins and triglycerides in the blood plasma and directly related to the amount of high-density lipoproteins [14].

Proinflammatory cytokines affect obesity processes. IL-6 is associated with obesity. Visceral adipose tissue produces 30% of IL-6, 70% is produced by many tissues and cells. The level of IL-6 increases with obesity. IL-6 can exhibit an anti-inflammatory effect by reducing the levels of TNFα and interferon. An important role in obesity is played by a change in the ratio of pro- and anti-inflammatory cytokines. IL-7 increases the production of such proinflammatory cytokines as IL-1, IL-6, IL-8 and TNFα by monocytes. Secretion of IL-7 increases in abdominal obesity [1,31].

Dysfunction of the endothelium is also observed at high levels of homocysteine and uric acid in the blood. Homocysteine exhibits a pronounced toxic effect on the endothelium. Homocysteine contributes to the development of arterial hypertension, reducing vasodilation by nitric oxide, increasing oxidative stress, changing the elastic properties of the vascular wall [15,21]. Uric acid, being a source of free radical oxygen, is a factor of unfavorable prognosis of congestive heart failure in adults. Asymptomatic hyperuricemia is observed in 28% of school-age children [9]. An increase in the frequency of endothelial dysfunction is observed in childhood and adolescence. Analysis of the frequency of endothelial dysfunction in children and adolescents with abdominal obesity using the diagnostic marker of the reactive hyperemia index shows that its detection rate ranges from 66% to 77% [9,14].Одним из основных механизмов эндотелиальной дисфункции является оксидативный (окислительный) стресс [25].

The cause of oxidative stress development is the imbalance between excessive formation of free radicals and insufficiency of antioxidant defense mechanisms [24]. Oxidative stress contributes to the development and progression of various pathological conditions. Under the influence of free radicals, nitric oxide is inhibited, which leads to the development of endothelial dysfunction.

Conclusion. Therefore, knowing how adipokines contribute to endothelial dysfunction aids in identifying the pathogenetic relevance of the vascular wall's structural and functional status in raising cardiovascular risks in kids and teenagers with abdominal obesity.

Used literature:

1. Вавилова Т.П., Плетень А.П., Михеев Р.К. Биологическая роль адипокинов как маркеров патологических состояний. Вопр. питания. 2017; 86(2):5–13.
2. Головченко Ю.И., Трещинская М.А. Обзор совре менных представлений об эндотелиальной дисфункции. Consil. med. Ukraina. 2010; 11:38–39.
3. Данилюк Л.В., Погодина А.В., Рычкова Л.В., Машанская А.В. Предикторы формирования гипертензивного ответа на физическую нагрузку у подростков с ожирением. Acta biomedica scientifica. 2016; 5(111):9-14.

4. Дедов И.И., Шестакова М.В., Мельниченко Г.А. и др. Междисциплинарные клинические рекомендации «Лечение ожирения и коморбидных заболеваний». Ожирение и метаболизм. 2021; 18(1):5- 99.
5. Карпова О.Б., Щепин В.О., Загоруйченко А.А. Распространённость ожирения подростков в мире и Российской Федерации в 2012–2018 гг. Гигиена и санитария. 2021; 100(4):365 – 372.
6. Кедринская А.Г., Куприенко Н.Б., Образцова Г.И., Леонова И.А. Структурные изменения сердца и антропометрические маркеры ремоделирования миокарда при избыточной массе тела и ожирении у детей. Артериальная гипертензия. 2018;24(5):570-580.
7. Кедринская А. Г., Образцова Г. И., Нагорная И. И. Поражения сердечно-сосудистой системы у детей с ожирением. Артериальная гипертензия. 2015;21(1):6–15.
8. Малявская С.И., Торопыгина Т.А., Триль В.Е., Терновская В.А. Особенности спектра липопротеидов у девочек с бессимптомной гиперурикемией. Российский кардиологический журнал. 2004;№ 1: 33–37.
9. Маскова Г.С. Черная Н.Л., Дадаева О.Б. Патогенетические варианты развития дисфункции эндотелия сосудов у подростков с ожирением. Вестник новых медицинских технологий. Электронное издание. 2015; 4:13.
10. Маргиева Т.В., Сергеева Т.В. Участие маркёров эндотелиальной дисфункции в патогенезе хронического гломерулонефрита. Вопр. соврем. педиатр. 2006;5(3):22–30.
11. Мартынов А.И., Аветяк Н.Г., Акатова Е.В. и др. Эндотелиальная дисфункция и методы её определения. Рос. кардиол. ж. 2005;4(54):94–98.
12. Маянская С.Д., Антонов А.Р., Попова А.А., Гребёнкина И.А. Ранние маркёры дисфункции эндотелия в динамике развития артериальной гипертонии у лиц молодого возраста. Казанский мед. ж. 2009;90(1):32–37.
13. Мирошниченко О.М., Ройтман Е.И. Эндотелиальная функция у подростков с конституционально-экзогенным ожирением в динамике санаторного лечения. Вестник Новгородского государственного университета. 2015;2(85):114-116.
14. Смирнова Н.Н. Куприенко Н.Б., Жестянникова Е.И. Эндотелиальная дисфункция при ожирении у детей. Медицина: теория и практика. 2019; 4(2):35 – 41.
15. Тепляков А.Т., Березикова Е.Н., Шилов С.Н. и др. Оценка роли гипергомоцистеинемии и полиморфизма гена метилентетрагидрофолат-редуктазы в развитии хронической сердечной недостаточности. Кардиоваскулярная терапия и профилактика. 2016; 15 (4): 22–24.
16. Урясьев О.М., Дубинина И.И., Берстнева С.В., Никифоров А.А. Артериальная гипертензия и дисфункция эндотелия при коморбидной патологии: сахарный диабет и гипотиреоз. Российский медико-биологический вестник имени академика И.П. Павлова. 2014;3:143-147.
17. Шварц В.Я. Жировая ткань как эндокринный орган. Проблемы эндокринологии. 2009;55(1):38–43.
18. Bardugo A., Fishman B., Libruder C.Body mass index in 1.9 million adolescents and stroke in young adulthood. Stroke. 2021;52:2043 – 2052.
19. Bluher M. The distinction of metabolically «healthy» from «unhealthy» obese individuals. Curr. Opin. Lipidol. 2014;21(1):38–43.

20. Choi K.M. The Impact of Organokines on Insulin Resistance, Inflam mation, and Atherosclerosis. Endocrinol. Metab. (Seoul). 2016;31(1):151–154.
21. Falaschetti E., Hingorani A. D., Jones A. et al. Adiposity and cardiovascular risk factors in a large contemporary population of pre-pubertal children. European Heart Journal. 2010;31(24):3063–3072.
22. Formoso G., Taraborrelli M., Guagnano M.T. et al. Magnetic reso nance imaging determined visceral fat reduction associates with enhanced Il-10 plasma levels in calorie restricted obese subjects. PLoS One. 2012;7(12):52.
23. GBD 2015 Obesity Collaborators. Health effects of overweight and obesity in 195 countries over 25 years. New England Journal of Medicine. 2017;377(1):13 – 27.
24. Guzik T.J., Harrison D.G. Vascular NADPH oxi dases as drug targets for novel antioxidant strategies. Drug Discovery Today. 2006;11-12:524–526.
25. Higashi Y., Noma K., Yoshizumi M. et al. Endothelial function and oxidative stress in cardiovascular diseases. Cir culation J. 2009;3:411–415.
26. Hsieh C.J., Wang P.W., Chen T.Y. The relationship between regional abdominal fat distribution and both insulin resistance and subclini cal chronic inflammation in non-diabetic adults. Diabetol. Metab. Syndr. 2014;6(1):49.
27. Jaakonmäki N., Zedde M., Sarkanen T., Martinez-Majander N., Tuohinen S. et al. Obesity and the risk of cryptogenic ischemic stroke in young adults. Journal of Stroke and Cerebrovascular Diseases. 2022;31(5):106.
28. Milner E.B., Pokhlebkina A.A., Leonova I.A., Khavkin A.I.. Role of the brain neutrophic factor in the genesis of obesity. Vopr. prakt. pediatr. (Clinical Practice in Pediat rics). 2021;16(1):58-63.
29. Oh K.J., Lee D.S., Kim W.K., Han B.S. et al. Metabolic adaptation in obesity and type II diabetes: myokines, adipokines and hepa tokines. Int. J. Mol. Sci. 2016;18(1) doi: 10.3390/ijms18010008
30. Raghuveer G. Lifetime cardiovascular risk of childhood obesity. Am J Clin Nutr. 2010;91(5):1514-1519.
31. Rajala M.W., Qi Y., Patel H.R. et al. Regulation of resistin expression and circulating levels in obesity, diabetes, and fasting. Diabetes. 2014;53(7):1671–1679.
32. Ramanjaneya M., Chen J., Brown J.E. et al. Identification of nesfatin 1 in human and murine adipose tissue: a novel depot-specific adipo kine with increased levels in obesity. Endocrinology. 2014;15(7): 3169–3180.
33. Seven E. Overweight, hypertension and cardiovascular disease: focus on adipocytokines, insulin, weight changes and natriuretic peptides. Dan. Med. J. 2015;62(11):91–97.
34. Smirnova N.N., Khavkin A.I., Novikova V.P., Kuprienko N.B., Belozertseva V.N., Zhestyannikova E.I. Composition of breast milk in obese mothers and its impact on the infant's development. Vopr. prakt. pediatr. (Clinical Practice in Pediatrics). 2022;17(1):166-176.
35. Stanley T.L., Zanni M.V., Johnsen S. et al. TNF-alpha antagonism with etanercept decreases glucose and increases the proportion of high molecular weight adiponectin in obese subjects with fea tures of the metabolic syndrome. J. Clin. Endocrinol. Metab. 2011;96(1):146–150.

UO'K: 616-053.2. 577.1

GLOMERULOPATIYALI BEMORLARDA KASALLIKNI LABORATOR BELGILARINI BAHOLASHDA BA'ZI NOINVAZIV BIOMARKERLARNI AHAMIYATI

Gapparova G.N.
Samarqand davlat tibbiyot universiteti

Annotasiya. Glomerulosklerozz bu buyraklarning surunkali kasalliklari natijasida rivojlanadigan patologik holat bo'lib, uning erta tashxislanishi buyrak yetishmovchiligini oldini olishda muhim ahamiyatga ega. **Ushbu tadqiqotning maqsadi** –glomerulosklerozni erta tashxislashda siydikda noinvaziv biomarkerlarni aniqlash hamda ularning diagnostik ahamiyatini baholash.

Materiallar va usullar. Tadqiqotga surunkali glomerulonefrit tashxisi bilan davolangan 75 nafar bemor kiritildi, o'rtacha yoshi 13,4±0,7 yoshni tashkil etdi. Barcha bemorlarda surunkali glomerulonefritning klinik kechishi tahlil qilindi, standart laboratoriya va instrumental tadqiqotlar o'tkazildi. Bundan tashqari siydik namunalarida Sistatin C, neytrofil jelatinaza bilan bog'langan lipokalin (NGAL) kontsentratsiyasi o'lchandi.

Natijalar. proteinuriya IgA nefropatiyasi bo'lgan bemorlar guruhida glomerulonefritning proliferativ bo'lmagan shakllari (MN, FSGS n=50) bilan og'rigan bemorlarga qaraganda ancha past bo'lgan (p=0,006). Zardobda albumin darajasi bo'yicha, boshqa guruhlarga nisbatan IgA nefropatiyasi bo'lgan bemorlarda eng yuqori ko'rsatkichlar kuzatildi. Barcha bemorlarda CysC va KFT farq aniqlandi, bu kreatinin klirensiga nisbatan kuzatilmadi. Guruhlar o'rtasida zardobda NGAL (zNGAL) darajasida farqlar topilmadi. Siydikdagi eng yuqori NGAL (uNGAL) va siydikda sistatin-C (uCysC) darajasi FSGS bilan og'rigan bemorlarda kuzatilgan.

Xulosa. Birlamchi glomerulyar patologiyasi bo'lgan bemorlarda glomerulosklerozning og'irligini baholashda sistatin-C ni aniqlash afzalroqdir. Naychali atrofiyaning og'irligi siydikda NGAL ekskresiyasi bilan eng aniq ifodalanadi. Zardobda NGAL glomerulyar hujayralar zararlanishining dastlabki bosqichlarini tavsiflaydi.

Kalit so'zlar: *biomarkerlar, sistatin-C, NGAL, glomerulonefrit*

THE IMPORTANCE OF SOME NON-INVASIVE BIOMARKERS IN THE ASSESSMENT OF LABORATORY SIGNS OF DISEASE IN PATIENTS WITH GLOMERULOPATHY

Gapparova G.N.
Samarkand State Medical Institute

Abstract. Glomerulosclerosis is a pathological condition that develops as a result of chronic kidney disease, the early diagnosis of which is important for the prevention of renal failure.

The aim of this study is to identify non-invasive biomarkers in urine for early diagnosis of glomerulosclerosis and to evaluate their diagnostic value.

Materials and methods. The study included 75 patients diagnosed with chronic glomerulonephritis, whose average age was 13.4±0.7 years. All patients underwent an analysis of the clinical course of chronic glomerulonephritis, standard laboratory and instrumental studies. In addition, the concentration of cystatin C and neutrophil gelatinase-associated lipocalin (NGAL) was measured in urine samples.

Results. Proteinuria was significantly lower in the group of patients with IgA nephropathy than in patients with non-proliferative forms of glomerulonephritis (NP, FSGS, n=50) (p=0.006). According to the level of serum albumin, the highest values were observed in patients with IgA nephropathy compared to other groups. All patients showed a difference in CysC and KFT values, which was not observed in creatinine clearance. No differences in serum NGAL (zNGAL) levels were found between the groups. The highest levels of NGAL (uNGAL) and urinary cystatin-C (uCysC) were observed in patients with FSGS.

Conclusion. Cystatin C is the preferred assay for assessing the severity of glomerulosclerosis in patients with primary glomerular disease. The severity of tubular atrophy is most clearly reflected in urinary NGAL excretion. Serum NGAL levels reflect early stages of glomerular cell damage.

Key words: *biomarkers, cystatin-C, NGAL, glomerulonephritis*

ЗНАЧЕНИЕ НЕКОТОРЫХ НЕИНВАЗИВНЫХ БИОМАРКЕРОВ В ОЦЕНКЕ ЛАБОРАТОРНЫХ ПРИЗНАКОВ ЗАБОЛЕВАНИЯ У БОЛЬНЫХ ГЛОМЕРУЛОПАТИЕЙ

Гаппарова Г.Н.

Самаркандский государственный медицинский университет

Абстрак. Гломерулосклероз патологическое состояние, развивающееся вследствие хронического заболевания почек, ранняя диагностика которого важна для профилактики почечной недостаточности. **Целью** данного исследования является выявление неинвазивных биомаркеров в моче для ранней диагностики гломерулосклероза и оценка их диагностической ценности.

Материалы и методы. В исследование было включено 75 пациентов с диагнозом хронический гломерулонефрит, средний возраст которых составил 13,4±0,7 года. У всех больных проведен анализ клинического течения хронического гломерулонефрита, проведены стандартные лабораторные и инструментальные исследования. Кроме того, в образцах мочи измеряли концентрацию цистатина С и липокалина, связанного с нейтрофильной желатиназой (NGAL).

Результаты. Протеинурия была достоверно ниже в группе больных с IgA-нефропатией, чем у больных с непролиферативными формами гломерулонефрита (МН, ФСГС, n=50) (p=0,006). По уровню сывороточного альбумина самые высокие значения наблюдались у пациентов с IgA-нефропатией по сравнению с другими группами. У всех пациентов была выявлена разница в показателях CysC и KFT, чего не наблюдалось в отношении клиренса креатинина. Различий в уровнях NGAL (zNGAL) в сыворотке между группами не обнаружено. Самые высокие уровни NGAL (uNGAL) и цистатина-С в моче (uCysC) наблюдались у пациентов с ФСГС.

Заключение. Заключение. Определение цистатина-С является предпочтительным при оценке тяжести гломерулосклероза у пациентов с первичной гломерулярной патологией. Тяжесть атрофии канальцев наиболее отчетливо проявляется в экскреции NGAL с мочой. Уровень NGAL в сыворотке характеризует ранние стадии повреждения гломерулярных клеток.

Ключевые слова: *биомаркеры, цистатин-С, NGAL, гломерулонефрит*

Kirish. So'nggi yillarda surunkali glomerulonefritning diagnostika va terapiyasini takomillashttirish bo'yicha keng ko'lamli tadqiqotlar olib borilganiga qaramay, ushbu kasallik zamonavi nefrologiyaning dolzarb muammolaridan biri bo'lib qolmoqda. Zamonaviy molekulyar-biologik va immunologik tadqiqotlar kasallik patogenezini chuqurroq anglash imkonini bergan bo'lsa-da, erta diagnostika usullarini yanada takomillashtirish va individual terapevtik strategiyalar ishlab chiqish zarurati saqlanib qolmoqda. ERA-EDTA registri ma'lumotlariga ko'ra, Europa mamlakatlarida terminal bosqichdagi surunkali buyrak etishmovchiligining 14% xolati surunkali glomerulonefrit bilan bog'liq bo'lib, ushbu patologiya immunologik va yallig'lanish jarayonlari natijasida nefronlarning progressiv yo'qolishi, glomerulyar skleroz hamda interstisial fibroz rivoylanishiga olib keladi. Natidjada, bayrakning filtratsiya funksiysi qaytarilmas daradjada pasayib, dializ yoki bayrak transplantasiyasiga ehtiyoj sezilarli daradjada oshishiga olib keladi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, har yili surunkali kasalliklar tufayli vafot etgan 30-35 million kishidan taxminan 1 million nafari buyrak va siydik yo'llari patologiyalari bilan bog'liq asoratlar natijasida hayotdan ko'z yumadi [4, 5, 6].

Bundan tashqari, 80% holatlarda siydik cho'kmasini mikroskopik tahlil qilish davomida patologik o`zgarishlar tasodifan aniqlanadi. Bu kasallikni uzoq muddat davomida kam simptomli yoki atipik kechishi bilan bog`liq bo`lib, uni erta tashxsislashni murakkablashtiradi [8, 9, 12].

Surunkali glomerulonefrit rivojlanishining molekulyar mexanizmlarini o`rganish zamonaviy genomika va proteomika tadqiqotlari bilan bevosita bog'liq. Ushbu yo'nalishdagi ilmiy izlanishlar kasallik patogenezida ishtirok etuvchi asosiy biomarkerlarni aniqlash - hujayralarning ultrastrukturaviy o'zgarishlarini baholash hamda bu jarayonlarning to'qima va organlar darajasida qayta qurilishiga ta'sirini o'rganish imkonini beradi. Shuningdek, yangi texnologiyalarni ishlab chiqish diagnostika va davolash usullarini takomillashtirishga xizmat qiladi [5].

Nefropatiya, terminal bosqichdagi buyrak yetishmovchiligiga (TBBY), olib boruvchi, asosiy patogenetik meksanizmlardan biri bu - tubulointerstisial fibroz (TIF) hisoblanadi. Ushbu jarayon asosan bayrak parenximasining qayta tuzilishi bilan tavsiflanib, interstisial matritsaning ortiqcha to'planishi, fibroblastlaring faollashuvi hamda yallig'lanish mediatorlarining uzoq muddatli ekspressiyasi natijasida rivoylanadi. TIF mikrosirkulyator buzilishlar va glomerulyar filtratsiya tezligining pasaishiga, natidjada esa bayrak yetishmovchiligiga olib keladi. Shuning uchun ham, TIFni erta aniqlash va uning progressiyasini sekinlashtirish terminal bosqichdagi buyrak yetishmovchiligini profilaktikasiga yordam beradi [4-8].

Ushbu tadqiqotning asosiy maqsadi buyrak parenximasining holatini baholash uchun invaziv bo'lmagan diagnostik usullarni aniqlashdan iborat. Kelajakda bunday biomarkerlarni qo'llash nefrobiopsiya bajarish imkoni bo'lmagan holatlarda, shuningdek, bemorlarni uzoq muddatli kuzatish jarayonida buyrak shikastlanishining rivojlanish xavfini baholashda muqobil usul sifatida qo'llanilishi mumkin [7].

Ushbu tadqiqotning maqsadi –glomerulosklerozni erta tashxislashda siydikda noinvaziv biomarkerlarni aniqlash hamda ularning diagnostik ahamiyatini baholash.

Materiallar va usullar. Tadqiqotda Samarqand viloyat bolalar ko'p tarmoqli tibbiyot markazi (SVBKTTM) nefrologiya bo'limida surunkali glomerulonefrit (SGN) tashxisi bilan davolangan 75 nafar bemor kirdi, ulardan 41 nafari o`g`il bolalar (54,6%), 34 nafari qizlar (45,4%), o'rtacha yoshi 13,4±0,7 yosh.

Barcha bemorlarda SGN ning klinik kechishi tahlil qilindi, standart laboratoriya va instrumental tadqiqotlar o'tkazildi.

Siydik namunalarida sistatin C (CysC), neytrofil jelatinaza bilan bog'langan lipokalin (NGAL) kontsentratsiyasi o'lchandi. NGAL (BioVendor, Chexiya to'plamlari) va CysC tarkibi Furuno CA-90 qurilmasi (Furuno Electric Co., Ltd., Yaponiya) yordamida immunoturbidimetriya (Alfresa Pharma korporatsiyasi, Yaponiya to'plamlari) orqali aniqlandi.

Olingan ma'lumotlar statistik qayta ishlashga yo'naltirilib, amaliy statistik tahlil uchun standart dasturiy paketlardan (Statistica 6.0, Windows) foydalanildi. Tahlil jarayonida parametrik va parametrik bo'lmagan statistik usullar qo'llanildi. Ma'lumotlar taqsimotining xususiyatlariga qarab, jadvallarda normal taqsimot kuzatilganda **o'rtacha qiymat ± standart og'ish**, noto'g'ri taqsimotda esa **median va kvartillar oralig'i** ko'rinishida ifodalandi.

Natijalar. Asosiy klinik va laboratoriya ko'rsatkichlari quyidagi 1-jadvalda keltirilgan.

1-jadval

Klinik va laborator jo`rsatkichlar

Ko'rsatkich	FSGS - fokal segmental glomerulosklerozz (n=25)	MN - membranoz nefropatiya (n=25)	IgA nefropatiyasi (n=25)

Jins, o`g`il/qiz	14/11	16/9	15/10
Yoshi	12,9±0,3	13,5±0,2	12,5
Kreatinin zardobda, mmol/l	0,148 ±0,004	0,089 ±0,001	0,175±0,003
zardobda, siydikchil, mmol/l	9,8±0,9	5,7±0,87	14,2±0,52
Gemoglobin, g/l	109±4,8	115±3,7	110±1,1
Umumiy oqsil qon zardobida, g/l	56±1,4	51±0,9	49±0,8
Kreatinin klirensi, ml/min/1,73 m^2	75,9±0,012	105,4±0,027	115±0,032
KFT, ml/min/1,73 m^2	56,2±1,3	76,4±1,4	50,2±0,9
Sutkalik protiyenuriya g/sutka	6,9	5,7	1,8

Kundalik proteinuriya IgA nefropatiyasi bo'lgan bemorlar guruhida glomerulonefritning proliferativ bo'lmagan shakllari (MN, FSGS n=50) bilan og'rigan bemorlarga qaraganda ancha past bo'lgan (p=0,006). Zardobda albumin darajasi bo'yicha, boshqa guruhlarga nisbatan IgA nefropatiyasi bo'lgan bemorlarda eng yuqori ko'rsatkichlar kuzatildi. Barcha bemorlarda CysC va KFT farq aniqlandi, bu kreatinin klirensiga nisbatan kuzatilmadi.

Guruhlar o'rtasida zardobda NGAL (zNGAL) darajasida farqlar topilmadi. Siydikdagi eng yuqori NGAL (uNGAL) va siydikda sistatin-C (uCysC) darajasi FSGS bilan og'rigan bemorlarda kuzatilgan.

2-jadval

Bemorlarda biomarker darajalari ko`rsatkichlari

Ko'rsatkich	FSGS - fokal segmental glomeruloskleroz (n=25)	MN - membranoz nefropatiya (n=25)	IgA nefropatiyasi (n=25)
CysC bo`yicha KFT, ml/min/1,73 m^2	36,5±18,8	57,9±17,4	41,5±26,2
qon zardobida Sistatin-C, mg/l	1,92 (1,45- 2,96)	1,33 (1,11- 1,56)	1,68 (1,15- 3,07)
Sistatin-C siydikda, mg/l	0,141 (0,055- 0,389)	0,116 (0,050- 0,300)	0,052 (0,050- 0,361)
zardobda NGAL, ng/ml	167,6±143,8	141,4±51,3	113,0±56,8
siydikda NGAL, ng/ml	23,6 (15,35- 53,66)	3,03 (0,05- 12,92)	1,82 (1,03- 39,76)

Guruhlar o'rtasida zardobda NGAL (sNGAL) darajasida farqlar topilmadi. Siydikdagi NGAL (uNGAL), shuningdek siydikda sistatin-C (uCysC) ning eng yuqori darajalari FSGS bilan og'rigan bemorlarda kuzatilgan.

Glomerulosklerozning jadalligi turli usullar bilan baholangan KFT bilan teskari korelation bog'liq edi: kreatinin klirensi (r=–0,45, p<0,05), CysC (r=–0,58, p<0.05).

IgA nefropatiyasi bo'lgan bemorlar guruhida glomeruloskleroz darajasi faqat qon zardobida CysC darajasi va KFT (r=-0,57, p<0,05) bilan bog'liq edi, ammo kreatinin bilan bog`liqlik

topilmadi. MN bilan og'rigan bemorlar orasida faqat CysC tomonidan KFT baholashning boshqa usullaridan farqli o'laroq, glomerulosklerozning og'irligini aks ettirdi (r = -0,47, p<0,05). Bemorlarning barcha guruhlari orasida glomerulyar, tubulointerstitial skleroz, quvurli atrofiya va sistatin-C ning kundalik siydik bilan chiqarilishi o'rtasida ishonchli bog'liqlik topilmadi (p>0,05). uNGAL va uCysC ning eng yuqori qiymatlari sutkalik proteinuriyasi 5 g dan ortiq bo'lgan bemorlar guruhlarida bo'lgan, bu korrelyatsiya tahlilidan olingan ma'lumotlarga mos keladi (r=0,37, r=0,34, mos ravishda p<0,05). Bundan tashqari, uNGAL va uCysC va SCF o'rtasida teskari bog'liqlik aniqlandi.

Xulosa. Birlamchi glomerulyar patologiyasi bo'lgan bemorlarda glomerulosklerozning og'irligini baholash uchun sistatin-C bilan KFT aniqlashdan foydalanish afzalroqdir. Naychali atrofiyaning og'irligi siydikda NGAL ekskresiyasi bilan eng aniq ifodalanadi. Zardobda NGAL glomerulyar hujayralar zararlanishining dastlabki bosqichlarini tavsiflaydi. Biomarkerlar bilan bog`liq so'nggi tadqiqotlar yaqin kelajakda buyraklarning funktsional imkoniyatlarini real vaqt rejimida baholashda va zamonaviy shifokorning umumiy klinik amaliyotiga aylanishiga umid beradi.

Foydalanilgan adabiyotlar:

1. Haase M, Bellomo R, Devarajan P et al. Accuracy of neutrophil gelatinase-associated lipocalin (NGAL) in diagnosis and
2. Zhang Z, Lu B, Sheng X et. al. Cystatin C in prediction of acute kidney injury: a systemic review and meta-analysis. *Am J Kidney Dis* 2012; 59(4): 590-2
3. Geus H, Betjes M, Bakker J. Biomarkers for the prediction of acute kidney injury: a narrative review on current status and future challenges. *Clin Kidney Journal* 2012; 5(2): 102-108
4. Ратнер МЯ, Серов ВВ, Томилина НА. *Ренальные дисфункции (клинико-морфологическая характеристика).*Медицина, М., 1977
5. 6. Schainuck LI, Striker GE, Cutler RE et al. Structural-functional correlations in renal diseases. Part II: the correlations. *Hum Pathol* 1970; 1(4):631-641
6. Bohle A, Mackensen-Haen S, VonGise et al. The consequences of tubule-interstitial changes for renal function in glomerulopathies. A morphometric and cytological analysis. *Pathol Res Pract* 1990; 186(1): 135-144
7. Fassett RG, Venuthurupalli SK, Gobe GC et. al. Biomarkers in chronic kidney disease: a review. *Kidney Int* 2011; 80(8): 806-821
8. Bolignano D, Lacquaniti A, Coppolino G et. al. Neutrophil gelatinase-associated lipocalin (NGAL) and progression of chronic kidney disease. *Clin J Am Soc Nephrol* 2009; 4(2): 337-344
9. Kriz W, LeHir M. Pathways to nephron loss starting from glomerular diseases-insights from animal models. *Kidney Int* 2005;
10. Levey AS, Stevens LA, Schmid CH et al. A new equation to estimate glomerular filtration rate. *Ann Intern Med* 2009; 150(9): 604-612.
11. Shemesh O, Golbetz H, Kriss JP et. al. Limitations of creatinine as a filtration marker in glomerulopathic patients. *Kidney Int* 1985; 28(5): 830-838.
12. Levey AS, Perrone RD, Madias NE. Serum creatinine and renal function. *Annu Rev Med* 1988; 39: 465-490

13. Perrone RD, Madias NE, Levey AS. Serum creatinine as an index of renal function: new insights into old concepts. *Clin Chem* 1992; 38(10): 1933-1953
14. Dharnidharka VR, Kwong C, Stevens G. Serum cystatin C is superior to serum creatinine as a marker of kidney function: A meta-analysis. *Am J Kidney Dis* 2002; 40(2): 221–226
15. Willems D, Wolff F, Mekhali F et al. Cystatin C for early detection of renal impairment in diabetes. *Clin Biochem* 2009; 42(1-2): 108-110
16. Chudleigh RA, Ollerton RL, Dunseath G et al. Use of cystatin C-based estimations of glomerular filtration rate in patients with type 2 diabetes. *Diabetologia* 2009; 52(7): 1274–1278
17. Pöge U, Gerhardt T, Stoffel-Wagner B et al. Cystatin Cbased calculation of glomerular filtration rate in kidney transplant recipients. *Kidney Int* 2006; 70(1): 204-210
18. Spanaus KS, Kollerits B, Ritz E et al. Serum creatinine, cystatin C, and beta-trace protein in diagnostic staging and predicting progression of primary nondiabetic chronic kidney disease. *Clin Chem* 2010; 56(5): 740-749

UDC: 618.164-007.44

CLINICAL AND DIAGNOSTIC ASPECTS AND TACTICS OF TREATMENT OF URETEROCELE IN CHILDREN

Gafurov A.A., Turakulov Z. SH., Bozorov SH.T.
Andijan State Medical Institute

Annotation. Ureterocele (UC) is a cyst-like expansion of the submucosal portion of the ureter, caused by congenital stenosis of the orifice, characterized by expansion of its distal portion. The introduction of new technologies into pediatric practice has led to significant improvements in the diagnosis and treatment of ureterocele in children. According to various authors, their frequency of occurrence ranges from 1 to 4% of all urological patients. According to Cambele, the prevalence of UC is 1:4000. In 80% of children, ureterocele is detected in children with a double ureter and in 60% it is ectopic [2,4,10]. Despite the introduction of endourological treatment methods, a number of clinicians point to complications that arise after their implementation. The purpose of our study was to improve the results of surgical treatment of ureterocele in children.

Key words: *ureterocele, vesicoureteral reflux, heminephrectomy, transurethral dissection, ureteral reimplantation, ultrasound, children*.

БОЛАЛАРДА УРЕТЕРОТСЕЛЕНИНГ КЛИНИК-ДИАГНОСТИК ЖИҲАТЛАРИ ВА ДАВОЛАШ ТАКТИКАСИ

Гафуров А.А., Туракулов З.Ш., Бозоров Ш.Т.
Андижон давлат тиббиёт институти

Кириш. Уретеротселе (УЦ) – туғма уретер оғзи стенози натижасида юзага келадиган, уретернинг шиллиқ қават ости қисмида кистасимон кенгайиши бўлиб, унинг дистал қисми кенгайиши билан характерланади. Педиатрия амалиётига янги технологияларни жорий этиш болаларда уретеротселе касаллигини ташхислаш ва даволаш самарадорлигини сезиларли даражада яхшилади. Турли муаллифларнинг маълумотларига кўра, ушбу касаллик урологик беморларнинг 1-4% ни ташкил қилади. Cambele маълумотларига кўра, уретеротселенинг тарқалиш частотаси 1:4000 га тенг. Болаларда уретеротселе ҳолатларининг 80% иккиланган сийдик найи билан боғлиқ ҳолда учрайди, шунингдек, 60% ҳолатда у эктопик шаклда бўлади [2,4,10]. Эндоурологик даволаш усулларининг жорий этилишига қарамай, қатор клиницистлар бу усуллардан сўнг юзага келадиган асоратларга эътибор қаратишмоқда.

Калит сўзлар: *уретеротселе, қовуқ-уретер рефлюкси, геминефрэктомия, трансуретрал диссекция, уретерни реимплантация қилиш, ультрасадо текшируви, болалар.*

КЛИНИКО-ДИАГНОСТИЧЕСКИЕ АСПЕКТЫ И ТАКТИКА ЛЕЧЕНИЕ УРЕТЕРОЦЕЛЕ У ДЕТЕЙ

Гафуров А.А., Туракулов З.Ш., Бозоров Ш.Т.
Андижанский Государственный медицинский институт

Введение. Уретероцеле (УЦ) – кистовидное расширение подслизистого отдела мочеточника, обусловленное врожденным стенозом устья, харатеризующаяся расширением его дистального отдела. Внедрение новых технологий в педиатрическую практику привело к сушественному улучшению диагностики и лечения уретероцеле у детей. По данным различных авторов частота их встречаемости составляет от 1 до 4% всех урологических больных. По данным Cambele распространенность УЦ составляет 1:4000. Уретероцеле у 80% детей выявляется у детей с удвоенным мочеточником и у 60% оно является эктопической [2,4,10]. Несмотря на внедрение эндоурологических методов лечения ряд клиницистов указывают на возникающие осложнения, после их проведения.

Ключевые слова: *уретероцеле, пузырно-мочеточниковый рефлюкс, геминефрэктомия, трансуретральное рассечение, реимлантация мочеточника, ультразвуковое исследование, дети.*

Relevance. Ureterocele is a malformation of the ureter, which is a cyst-like protrusion of the mucous and submucosal layers of the intramural ureter, which is usually caused by obstruction of the mouth and is accompanied by ureterohydronephrosis [1,3,6,7]. The size of a ureterocele can vary from small extensions of the submucosa to "giant" cysts filling the entire lumen of the bladder [5,8,11].

Treatment of children with ureterocele, especially with doubling of the ureter, is a difficult problem for pediatric urologists. The indication for surgery is not only the presence of a ureterocele, but also impaired kidney function, urinary incontinence and urinary disorders caused by obstruction of the bladder neck.

The purpose of the study - to improve the results of surgical treatment of ureterocele by studying the clinical course, creating a diagnostic protocol and developing optimal surgical tactics.

Material and methods. The results of the treatment of 67 patients with ureterocele (UC) aged 1 to 18 years, who were treated at the urology department of the ODMMC in Andijan for the period from 2010-2023, were analyzed. Of these, there were 25 boys (37.3%) and 42 girls (62.6%).

Table 1.

Distribution of patients by gender and age

Age (years)	Gender				Total
	The main group n=38		The control group n=29		
	boys	girls	boys	girls	
up to 1 year	7	11	5	9	32
1-3 year	4	8	3	5	20
4-7 year	2	3	2	2	9
8-14 year	1	1	1	1	4
14-18 year	-	1	-	1	2
Total	14	24	11	18	67

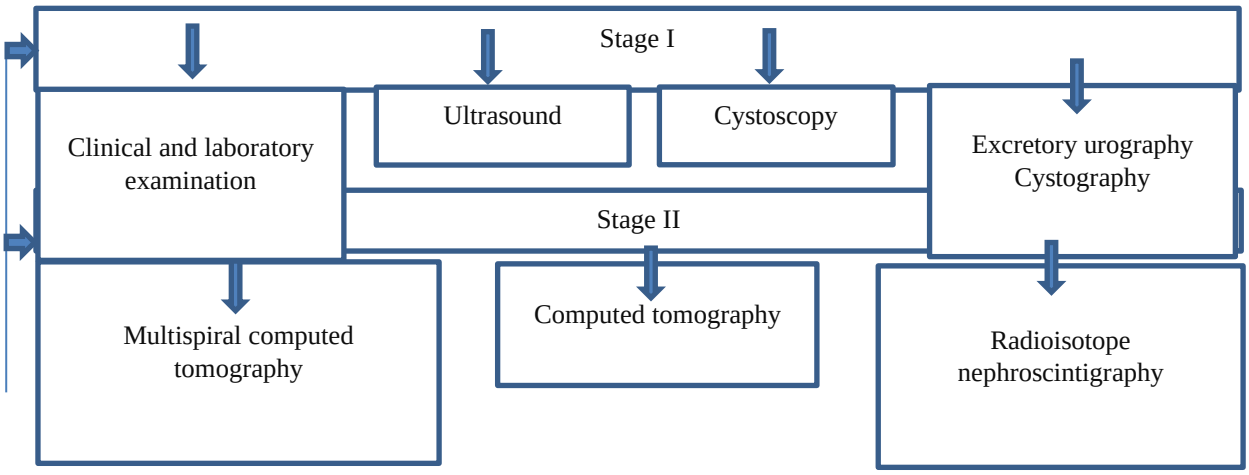
Ultrasound examination (ultrasound) is a fairly informative method of diagnosing UC. Ultrasound was performed in all patients with ureterocele. Characteristic of ultrasound in patients with UC is the presence of cystic formation in the lumen of the bladder, the collecting system of the kidneys and the ureters are dilated.

Ultrasound with dopplerography allows you to determine the size, number, and diameter of the walls, where anechoic formation, UC, and the presence of vesicoureteral reflux are determined.

Excretory urography occupies a leading place among radiopaque examination methods, which makes it possible to determine a defect in the filling of the bladder due to a ureterocele, as well as a dilated ureter and an enlarged deformed calyx-pelvis system of the affected kidney or its doubled segment.

To determine the informativeness, sensitivity and accuracy of various diagnostic methods in UC and to improve the diagnosis, as well as to specify the necessary methods, we have proposed a diagnostic algorithm.

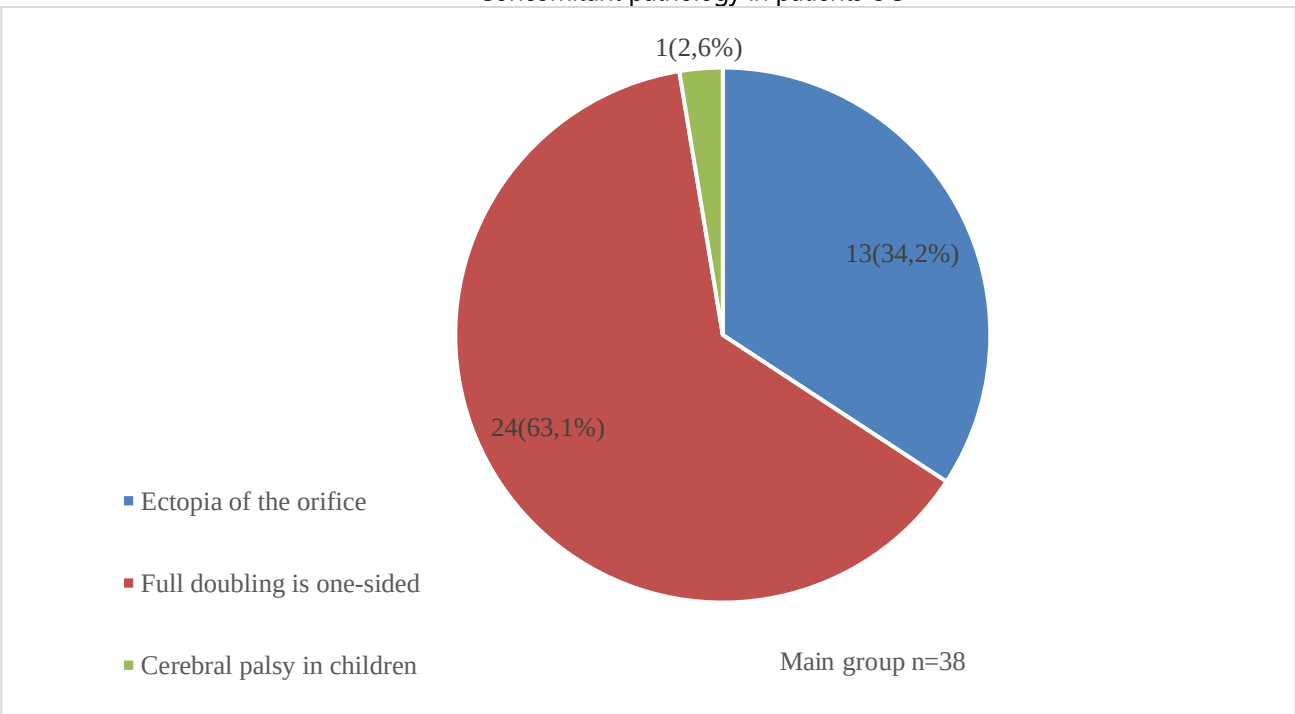
The algorithm for diagnosing ureterocele in children



All patients were required to undergo laboratory, ultrasound examination with dopplerography, as well as X-ray examination: excretory urography, miction cystography, computed tomography.

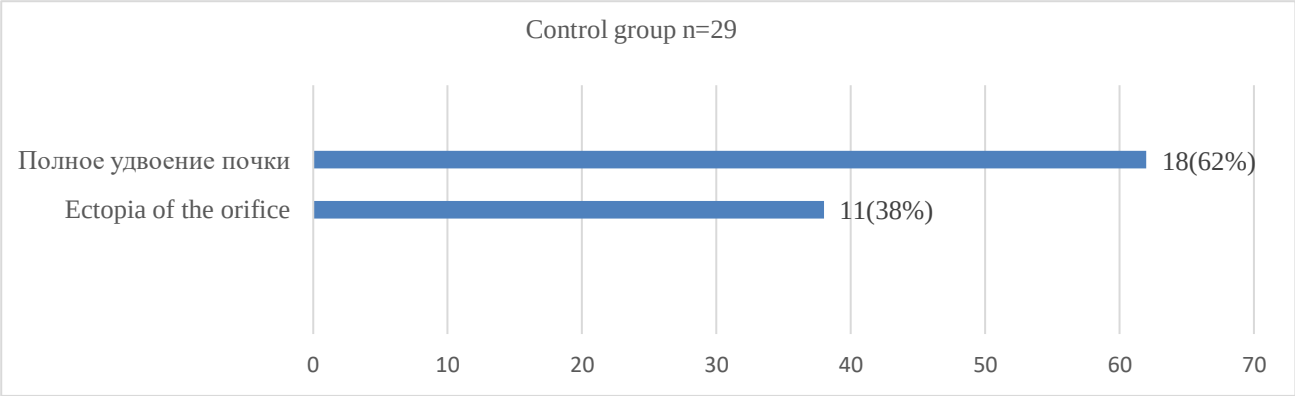
Picture 1

Concomitant pathology in patients UC



Of the concomitant pathologies, cerebral palsy and congenital heart disease were detected in one patient, complete doubling of the kidney in 24 patients, and ectopia of the ureteral orifice in 13 cases. As can be seen from the diagram, the main percentage of concomitant pathologies is a complete doubling of 63.1%, on the UC side.

Picture 2



In the control group, ectopia of the ureteral mouth was observed in 11 (38%) cases, complete doubling in 18 (62%) cases.

In the main clinical group, transurethral dissection of the anterior ureterocele wall was performed. After partial filling of the bladder, the ureterocele was clearly identified. When the ureterocele was obstructed, a vertical incision of its wall was made up to 4-6 mm long. The bladder was drained with a urethral catheter. The day after the operation, patients underwent an ultrasound examination to assess the degree of obstruction elimination. For the prevention and prevention of urinary tract infection, antibiotic therapy and uroantiseptics were prescribed.

Results and discussion. The analysis of the clinical observation data of two groups of patients was carried out, depending on the type of surgery. The main clinical group included children who underwent transurethral excision of the ureterocele (TUUC) - 38 patients. All patients underwent extensive endoscopic dissection of the ureterocele. Endoscopic intervention was considered successful with the disappearance of ureteral obstruction, in the absence of VUR, urinary tract infection. The control group consisted of 29 patients with complete removal of the ureterocele. By localization, unilateral ureterocele was observed in 31 patients in the main group, and in 23 patients in the control group. Intravesical location in the main group in 34 patients and in the control group in 24 patients (Table No. 2).

Table 2

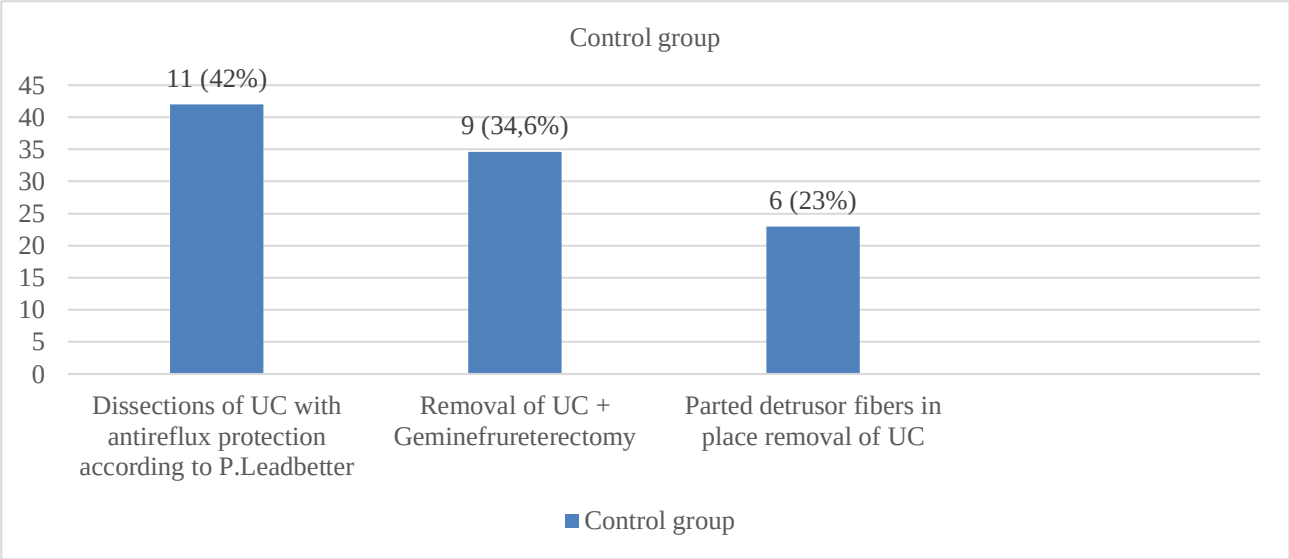
By localization of ureterocele

Localization	Main group n=38	Control group n=29
One-sided	31 (81,5%)	23 (79,3%)
Two-way	7 (17,0%)	6 (20,6%)
Intravesical	34 (89.4%)	24 (82,7%)
Extra - bubble	4 (9.7%)	5 (17,2%)

In the patients of the control group, a roller was placed under the pelvis in the supine position. The bladder was exposed by a transverse suprapubic incision, and the anterior wall of the bladder was opened. The bladder was emptied with an electric pump. A silk holder was applied to the ureterocele, and the ureterocele was excised.

Types of operation

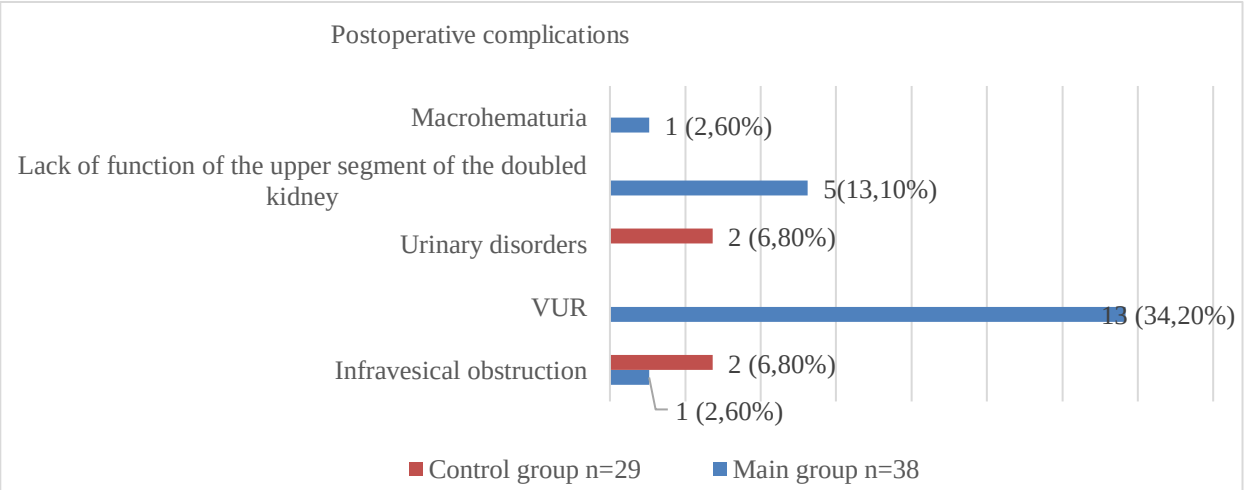
Picture 3



The parted detrusor fibers in 6 patients were sutured at the site of the removed ureterocele. A submucosal tunnel of the required length was formed in the transverse direction, 4-5 times the diameter of the ureters. The ureters were removed through a tunnel to the opposite side above the mouth of the contralateral ureter and an anastomosis was formed with the mucous membrane of the bladder. The mucous membrane of the bladder was sutured at the site of the removed ureterocele. Next, the ureter was intubated. The inserted Foley catheter into the bladder was removed on days 7-8.

Simultaneous ureterocele dissection and heminephrectomy were performed in 2 patients with bilateral ureterocele. With unilateral localization of large cysts in 6 patients after ureterocele dissection with preserved kidney and ureter function, radical intervention with additional antireflux protection according to Polytano-Leadbetter was performed in order to prevent postoperative VUR. In 5 patients, due to the lack of function of the upper segment of the doubled kidney, a year after surgery, a heminephrectomy was performed.

Picture 4



A control ultrasound was performed in the next 1-5 days after the intervention, where there was a decrease in the diameter of the ureterocele by 100%, a reduction in the ureters by an average of 80.1%, and a reduction in the size of the pelvis by 45.4%. In the main group, in the immediate postoperative period after endoscopic incision, 7 out of 15 patients (46.6%) had a

function that was absent in the doubled segment of the kidney. A complication in the form of bleeding from the edges of the incision occurred in one case. After hemostatic therapy, the bleeding stopped. Three patients developed difficulty urinating after transuretheral resection surgery. They had episodes of febrile fever. A cystoscopy was performed, which revealed that the anterior wall of the ureterocele had obstructed the lumen of the urethra after transurethral resection and filling of the bladder, which caused the obstruction. The ureterocele wall was dissected endoscopically, after which normal urodynamics was restored. Our research is based on the study of long-term results of surgical treatment 6 months to 14 years after the surgical intervention.

Из 38 детей, которым было выполнено ТУРУ, показаниями к повторной операции послужили отсуствие функции верхнего сегмента почки, ПМР, рецидивы инфекции мочевыводящих путей, макрогематурия, нарушения мочеиспускания, вызванные обструкцией со стороны уретероцеле шейки мочевого пузыря.

The control examination included miction cystoureterography, ultrasound, laboratory tests, cystoscopy and radioisotope examination of the kidneys. The positive result was assessed according to the following criteria: elimination of ureteral obstruction and vesicoureteral reflux (VUR), absence of urinary tract infection (UTI), absence of urinary disorders.

In the long term, in the main group, in 4 cases, repeated surgery was performed after 6 months. With a non-functioning upper pole of the kidney and a continuously recurrent course of UTI, a heminephrureterectomy was performed: in one patient with impaired urination, an open excision of the ureterocele was performed due to obstruction. In 3 patients, grade IV-V VUR was detected in the long term after surgery and a Polytano-Leadbetter antireflux operation was performed. Conservative treatment with a well-founded diagnosis of MERS with an asymptomatic course of the disease is provided to 7 patients, these children are under dynamic follow-up. In 3 patients with grade II-III VUR, correction was performed endoscopically using a DAM+ volumetric gel.

In the control group, 9 patients underwent repeated surgery. One year after the operation, one patient underwent nephroterectomy for a secondarily shrunken kidney on the background of VUR. Heminephroterectomy was performed in 4 patients with a non-functioning kidney segment. In 2 patients, grade IV-V VUR was detected in the long term after surgery, and they underwent an antireflux operation using Polytano-Leadbetter. Two patients receive conservative treatment with a well-founded diagnosis of MERS with an asymptomatic course of the disease. These children are under dynamic medical supervision. In 2 patients with grade II-III VUR, correction was performed endoscopically using a DAM+ volume-forming gel.

Our studies have shown that with complete doubling of the ureter, the frequency of recurrent urinary tract infections in the postoperative period was higher, and they often required repeated surgical intervention. In patients with no upper pole function, we consider geminephrureterectomy to be a radical method as the primary stage.

Indications for surgical operations in case of VUR are urinary tract infections and urinary disorders. The initial stages of VUR with conservative treatment tend to resolve the process, which indicates the need for a restrained approach to the indications of repeated surgical intervention. The continuous and recurrent course of urinary tract infections, impaired urination, and decreased kidney function were indications for repeated surgery [8,9,11].

Conclusion: Compliance with the developed algorithm of diagnosis and endoscopic correction makes it possible to increase the effectiveness of treatment and reduce the number of

complications in children. Endoscopic correction of a ureterocele is a highly effective method of decompression and restoration of normal urodynamics of the upper urinary tract. Given the low risk of injury, transurethral resection is the method of choice, regardless of the type, nature and degree of ureterocele. After correction of the defect, children are subject to mandatory dynamic monitoring and a step-by-step examination in order to timely diagnose and treat concomitant diseases and possible complications.

Used literature:

1. Акилов Х.А., Бекназаров Ж.Б., Хаккулов Э.Б. и др. Диагностика и лечение обструктивного уретерогидронефроза у детей. Вестник экстренной медицины. 2013
2. Гусейнов А.Я. Эндоскопическая электроинцизия уретерлоцеле у детей. Автореферат канд. мед. нау, М.-2008.
3. Кагонцов И.М., Сизонов В.В., Дубров В.И., и др. Лапароскопическая геминефрэктомия при удвоении почки у детей Урология. 2017; 2: С 63-8
4. Кагонцов И.М., Сизонов В.В., Дубров В.И., и др. Уретероуретероанастамоз (уретеропиелоанастамоз) при удвоении верхних мочевых путей у детей. Урология. 2018; 2: С 69-74
5. Осипов И.Б., Ти Р.А., Лебедев Д.А., Осипов А.И., Малоинвазивное лечение уретероцеле у новорожденных. Материалы 5-й научно-практической конференции урологов Северо-Западного федерального округа РФ. 2019; 18 Апреля.
6. Дубров В.И., Строцкий А.В., Шкутов А.О. Эффективность эндоскопического лечения уретероцеле удвоенного мочеточника у детей. Российский вестник детской хирургии. 2020 Т.10. №1. С 25-34
7. Султонов Ш.Р., Сафаров А.И., Атоев И.К. Диагностика и тактика хирургического лечения уретероцеле у детей Вестник Академии медицинских наук Таджикистана – 2018 №2, Том VIII. 2015;193(2):662-667.
8. Aikins K., Taghavi K., Grinlinton M.et al. Cestoscopic transurethral insision in simplex and duplex ureteroceles- is it the definitive procedur? J.Pediatr. Urol. 2019
9. Boucher A, Cloutier J, Rousseau A, et al. Is an initial endoscopic treatment for all ureteroceles appropriate? J Pediatr Urol. 2013;9(3):339-343. https://doi.org/10.1016/j.jpurol.2012.04.009.
10. Chertin B, de Caluwé D, Puri P. Is primary endoscopic puncture of ureterocele a long-term effective procedure? J Pediatr Surg. 2003;38(1):116-119.
11. Gran C.D., Kropp D.P., Cheng E.Y., Kropp R.A. Prymary lower urinary tract reconstruction for nonfunctioning renal moieties associated with obctructing ureteroceles J.Urol. 2005; 173(1): 198-201

UO'K: 616-08-035

GIPERKINEZ DAVOLAShDA BOTULOTERAPIYA O'RNI

Abdukadirova D.T., Abdukadirov U.T.
Andijon davlat tibbiyot institute

Аннотация. Ushbu maqolada giperkinez (distoniya) muammosi tadqiqotchilar uchun yorqin va g'ayrioddiy klinik ko'rinish, genlar funksiyalari va kasallik patogenezining sensorimotor mexanizmlarini o'rganish imkoniyatlari, shuningdek, target terapiya – botulinoterapiya in'yeksiyasining dramatik ta'sir nuqtai nazaridan motor buzilishlarining eng "jozibali" shakli bo'lib qolgani haqida so'z yuritiladi.

Kalit so'zlar: *giperkinez, botulinotherapia.*

ROLE OF BOTULINUM THERAPY IN THE TREATMENT OF HYPERKINESIS

Abdukadirova D.T., Abdukadirov U.T.
Andijan State Medical Institute

Annotation. This review provides information on hyperkinsis (dystonia), which remains the most "attractive" form of movement disorders for researchers due to its vivid and unusual clinical presentation, the opportunities it offers for studying gene functions and sensorimotor mechanisms of disease pathogenesis, as well as the dramatic effect of targeted therapy—botulinum neuroprotein injections (botulinum therapy).

Keywords: *hyperkinsis, botulinum therapy.*

МЕСТО БОТУЛОТЕРАПИИ ПРИ ЛЕЧЕНИЕ ГИПЕРКИНЕЗОВ

Адукадирова Д.Т., Абдукадиров У. Т.
Андижанский Государственный медицинский институт

Аннотация.В данном обзоре предоставляется информация о гиперкинезе (дистоние), которая остается наиболее "привлекательной" для исследователей формой двигательных расстройств с точки зрения яркой и необычной клинической картины, возможностей изучения функций генов и сенсомоторных механизмов патогенеза заболевания, а также драматического эффекта таргетной терапии – инъекций ботулинического нейропротеина (ботулинотерапии).

Ключевые слова: *гиперкинез, ботулинотерапии.*

Distoniyani o'rganish 1970-1980 yillarda harakat buzilishi nazariyasining shakllanishi, neyrogenetikaning rivojlanishi va neyrogenetik klinik amaliyotga botulinum terapiyasining kiritilishi bilan paralel ravishda botulinoterapiya rivojlandi. O'sha vaqtdan to hozirgi kungacha distoniya tadqiqotchilar uchun yorqin va g'ayrioddiy klinik ko'rinish, genlar funksiyalari va kasallik patogenezining sensorimotor mexanizmlarini o'rganish imkoniyatlari, shuningdek dramatik ta'sir nuqtai nazaridan motor buzilishlarining eng "jozibali" shakli bo'lib qolmoqda. Distoniyani o'rganish tarixi 1 asrldan ortiq: 1908-yilda V. Shvalbe "spazmlar va isterik alomatlar bilan surunkali sindrom" ni tasvirlab berdi va 1911-yilda G. Oppenxaym " dysbasia lordotica progressiva" ("progressiv lordotik disbaziya") va "dystonia musculorum deformans" ("mushak distoni deformasiyasi") va u kasallikning asosiy ko'rinishlarini – mushaklarning tonusini o'zgartirishi va patologik pozisiyalarini vujudga kelishini tasvirlab berdi. 1926-yilda S. N. Davidenkov birinchi marotaba oila shakllarini tasvirlab berdi va irsiy distoniya ehtimolini taklif qildi [1-3].

Distoniya - bu mushaklarning doimiy (turgun) yoki noregulyar (noturgun) qisqarishi bilan tavsiflangan harakat buzilishi, bu g'ayritabiiy, odatda takrorlanadigan, harakatlar va/yoki g'ayritabiiy pozisiyalarni keltirib chiqaradi, bu esa tananing jalb qilingan joylarida muayyan harakatlarni buzadi. Distonik harakatlar, qoida tariqasida, bir xil turdagi va aylanish xarakteriga ega, shuningdek, tremor bilan birga namoyon bo'lishi mumkin.

Distoniya odatda o'zini namoyon qiladi yoki ixtiyoriy harakatlar bilan kuchayadi va mushaklarning haddan tashqari faollashishi bilan birga keladi [2,4].

Distoniya harakat buzilishlarining barcha shakllari orasida 2-3-o'rinlarni egallaydi. Distoni tarqalishi quyidagi xarakterga ega: tarqoq (generallashgan) shakillari 100 000 axoliga 3-11 xodisani tashkil qilishi mumkin (irsiy tabiatga ega va ko'pincha hayotni 1-2 o'n yilligida debyuti namoyon bo'ladi), fokal shakliga 100 000 axoliga 30-60 xodisani tashkil qilishi mumkin va odatda katta yoshda namoyon bo'ladi [1-3].

Distoniyaning ikki shakli eng keng tarqalgan:

1) blefarospazm - fokal distoniya turiga kiradi, ko'zning miltillashi va beixtiyor yopilishi bilan tavsiflanadi; 2) servikal distoniya (spastik distoni) – bosh va bo'yinning patologik pozisiyalari shakllanishi bilan bo'yin mushaklarining beixtiyor qisqarishi bilan tavsiflangan fokal distoni.

Tasnifi. Distoniyani urganuvchi tibbiy tadqiqotlar fondi (Dystonia Medical Research Foundation), distoniyani o'rganish koalisiyasi (Dystonia Coalition) va fan va texnika sohasidagi Evropa tashkilotini distoniyani o'rganishi hamkorlik va rahbarligida (European Dystonia Cooperation in Science and Technology) 2013-yilda distoniyaning yangi tasnifini joriy etilgan [4]. Ushbu tasnif ikkita prinsipga asoslanadi: klinik xususiyatlar va etiologiya

Yoshi bo'yicha tasniflash. Bolalik distoniyasi - uning sababini aniqlash ehtimoli yuqori va distoniyaning bu turi fokaldan total (generallashgan) shaklga o'tish ehtimoli yuqori. Hayotning 1-yilidagi distoniyalar ko'pincha tug'ma metabolik kasalliklar bilan bog'liq. 2 yoshdan 6 yoshgacha bo'lgan distoniyalar distonik miya falajiga ko'proq mos kelishi mumkin, ayniqsa, agar u xarakat rivojlanishining kechikishi davridan keyin kuzatilsa. Dopaga sezgir distoniya kabi boshqa sindromlar 6 yoshdan 14 yoshgacha rivojlanadi. Va nihoyat, sporadik fokal distoni odatda 50 yoshdan oshgan insonlarda namoyon bo'ladi [1, 2, 4].

Tananing patologik jarayonga ta'sirlangan joylarini taqsimlashga asoslangan tasnif. Fokal va segmentar distoniyani davolashda tanlangan davolash botulinum neyrotoksinlarini qo'llashdir, tarqoq distoniyada esa tizimli dorilar yoki jarrohlik davolash ko'proq qo'llaniladi.

Tana qismlarini patologik jarayonga jalb qilishning taqsimlanishi vaqt o'tishi bilan o'zgarishi mumkin, odatda kasallik jadallashib borishi bilan ilgari ta'sirlanmagan joylar xam patologik jarayonda ishtirok etishni boshlaydi.

Lokalizasiyaga qarab distoniyaning quyidagi shakllari ajratiladi.

* Fokal. Tananing bir sohasi ishtirok etadi (blefarospazm, oromandibulyar distoni, servikal distoni, laringeal distoni va b.).

* Segmentar. Tananing ikki yoki undan ortiq qo'shni joylari ta'sirlanadi (kranial distoni, bibraxial distoni).

* Multifokal. Tananing ikki yoki undan ortiq qo'shni bo'lmagan joylari ta'sirlanadi (yuqori va pastki qo'l-oyoq distoniyasi, kranial va oyoqlardistoniyasi).

* Tarqoq (generallashgan). Tana (Torso) va kamida ikkita boshqa joy ishtirok etadi. Oyoqlarni jarayonda qatnashishi bilan kechuvchi tarqoq shakl alohida ko'rib chiqiladi.

* Gemidistoniya. Bir tomondan tananing bir nechta joylari ta'sirlanadi. Odatda ikkilamchi bo'ladi va qarama-qarshi (kontralateral) miya shikastlanishida kuzatiladi.

Vaqtga nisbatan tuzilish. Distoniyaning kechishini 4 turi mavjud.
* Pesestirlashgan (doimiy): distoniya belgilari kun davomida barqaror.
* Harakatga xos: distoniya faqat muayyan harakatlar yoki vazifalarni bajarishda sodir bo'ladi.
* Sutka davomida o'zgaruvchi: distoniyaning namoyon bo'lish darajasi va yuzaga kelish fenomenologiyasi jihatidan sezilarli sutkalik o'zgarishlarga ega.
* Paroksismal: distoniyaning to'satdan o'z-o'zini hal qiladigan epizodlari, odatda qo'zg'atuvchi omil tomonidan qo'zg'atiladi, so'ngra asl nevrologik holat tiklanadi.
Xamkor xususiyatlar:
* izolyasiyalashgan distoni: birgina motor funksiyani buzilishi (lekin tremorni o'z ichiga olishi mumkin).
* kombinasiyalangan distoniya: boshqa xarakat buzilishlari bilan birlashtirilgan (masalan, miyoklonus, parkinsonizm va boshqalar).

Etiologiya. Distoniya genetik yoki orttirilgan tabiatga ega bo'lishi mumkin. Ko'pincha distoniyaning turli xil variantlarini aniqlaydigan 25 genning butun spektrining muntazam diagnostikasi yo'qligi sababli kasallikning etiologiyasi noaniq bo'lib qolmoqda [3, 5-8]. Biroq, bemorning oilasida distonik doiradagi motor buzilishlarining yengil namoyon bo'lishi (masalan, bosh tremori va/yoki assimetrik qo'l tremori, tez – tez miltillash – blefarospazm, "yomon xusni xat" - yozish spazmi) bizga buzilishning irsiy tabiatini yanada ishonchli ko'rsatishga imkon beradi.
Distoniyaning tug'ma shakllariga genetik etiologiyasi isbotlangan shakllar kiradi:
* Autosomal dominant: ushbu turkumga DYT1 (OMIM (Online Mendelian Inheritance in Man – internet bazalari) #128100), DYT5 (OMIM #128230), DYT6 (OMIM #602629), DYT11 (OMIM #159900) kabi bir nechta autosomal dominant shakllar kiradi.;
* autosom resessiv: tug'ma distoniyaning autosomal resessiv shakllari ro'yxati doimiy ravishda kengayib bormoqda. Bularga DYT2 (OMIM #224500), shuningdek distoniya bilan assosiativ neyrodegenerativ kasalliklar - PKAN (NBIA1, OMIM #234200), PLAN (NBIA2, OMIM #256600), yuvenil parkinsonizm (PARK2, OMIM #600116) va bir qator metabolik kasalliklar kiradi.
* X-bog'liq resessiv: quyidagi sindromlarni o'z ichiga oladi; Lubag sindromi (DYT3, OMIM #314250); Lesha-Nayhan sindromi (OMIM #300322); Mora-Traneberg sindromi (OMIM #304700)
* Mitoxondrial: eng taniqli shakllari bu -Li sindromi (OMIM #256000) va kuruv nervi atrofiyasi va distoniya bilan kechuvchi Leber sindromi (OMIM #500001).
Ortirilgan shakllar ma'lum sabablarga ko'ra kelib chiqadi, masalan:
* perinatal miya shikastlanishi;
* infeksiya (virusli ensefalit, nimo'tkir sklerozlochi panensefalit, inson immunitet tanqisligi virusi va boshqalar);
* dori ta'siri (L-dofa va dofamin agonistlari, neyroleptiklar, antikonvulsantlar va kalsiy kanal blokatorlari);
* toksik ta'sir (marganes, kobalt, uglerod disulfid, siyanidlar, metanol, disulfiram, 3-nitropropion kislotasi);
* qon tomir kasalliklari (ishemiya, qon ketish, arteriovenoz malformasiyalar, shu jumladan anevrizmalar);
* neoplastik jarayonlar (bosh miya xajimli jarayonlari va paraneoplastik ensefalit);
* miya shikastlanishi;
* psixogen kasalliklar (funksional).

Agar distoniyaning" tashqi " sababi aniqlanmasa yoki kasallikning birlamchi (asoratlanmagan) shaklining rivojlanishi bilan bog'liq gen ma'lum bo'lsa, bunday distoni idiopatik deb tasniflanadi [1-5, 9, 10].

Diagnostika. Xalqaro ekspertlar distoniyani, birinchi navbatda, klinik ko'rinishiga qarab tashxislash kerak, deb tavsiya beradilar (dalillar ishonchliligi darajasi A, tavsiyalar ishonchli darajasi I) [1-4]. Tashxis qo'yish uchun maxsus g'ayritabiiy (distonik) holat (titroq bilan yoki bo'lmasdan) va o'ziga xos belgilar: ortiqcha va ko'zgu harakatlari, korreksiyalovchi imo-ishoralar, jismoniy va hissiy stress paytida namoyon bo'lishning kuchayishi va boshqalar.

Distoniyaning namoyon bo'lish darajasi tananing yoki uning alohida qismlarining holatiga va tananing ta'sirlangan qismidagi ixtiyoriy harakatlarga qarab o'zgarishi mumkin, bu bemorning kundalik faoliyati va hayotiy funksiyalariga turli yo'llar bilan ta'sir qiladi. Klinik ko'rinishlarning xususiyatlarini, distoniyaning namoyon bo'lish darajasi va og'irligini, giperkinezning o'zgaruvchan tabiatini va distoniyaning bemorlar hayotiga ta'sirini baholash uchun maxsus klinik shkalalar ishlab chiqilgan [2, 3].

Distoniyaning klinik diagnostikasini videoyozuv va tegishli shkalada baholash bilan o'tkazish tavsiya etiladi [11]. Distoni bilan og'rigan bemorni videoyozuv orqali nazorat qilish, botulinum toksinini inyeksiya qilish proseduralarini yoki boshqa davolash usullarini tashxislash va keyingi rejalashtirishda, shuningdek terapiya natijalarini keyingi baholashda muhim bosqich hisoblanadi [2]. Servikal distoni va blefarospazmni baholash uchun shkalalar, shuningdek, video yozish protokollari veb-saytda joylashtirilgan www.botulin.ru "mutaxassislar kutubxonasi" bo'limida va "botulinumterapiya Alifbosi" qo'llanmasida.

Davolash. Davolashning maqsadi bemorlarning mehnat qobiliyatini va ijtimoiy faolligini saqlab qolish va distoniya belgilarining qaytalanishini oldini olish bilan birga kasallikning barqaror remissiyasiga erishishdir [18]. Bunga faqat botulinum neyroprotein (botulinum toksini) preparatlarini spazmodik mushaklarga muntazam ravishda takroriy yuborish orqali erishish mumkin. Fokal distoniya bilan og'rigan bemorlarni eng yuqori darajadagi dalillarga (A dalillarning ishonchliligi darajasi, tavsiyalarning ishonuvchanlik darajasi I) davolashda tanlov usuli sifatida botulinum toksin A (BTA) mahalliy inyeksiyalari tavsiya qilingan [2, 3, 11, 14, 18-20].

Botulinumtoksin terapiyasi ishchi a'zoni funksiyasini saqlab, mushaklarning patologik qisqarishini bartaraf etishi mumkin. Barqaror remissiyaga erishish va hayot sifatini saqlab qolish uchun BTA preparatlari bemorga fokal distoniya tashxisi qo'yilgandan so'ng darhol buyurilishi kerak, chunki ular birinchi darajali dorilar. Inyeksiyalar muntazam ravishda, o'rtacha har 3-4 oyda o'tkazilishi kerak. Shu bilan birga, inyeksiya orasidagi interval bemorning sog'lig'iga qarab farq qilishi mumkin va 6 haftagacha qisqartirilishi yoki uzaytirilishi mumkin. Distoniya davolash bo'yicha amaldagi Evropa ko'rsatmalariga asoslangan xolda oldingi inyeksiya ta'siri kamayganda, "bemorning iltimosiga binoan" inyeksiyalar orasidagi "moslashuvchan intervallar" taktikasini qo'llaydi. Botulinum terapiyasining xavfsizligi va yuqori samaradorligi ko'plab nazorat ostida o'tkazilgan tadqiqotlar va 30 yillik klinik amaliyot natijalari bilan tasdiqlangan.

Botulinum terapiyasi servikal distoniya (dalillar darajasi A), blefarospazm (dalillar darajasi B), gemifasiyal spazm (dalillar darajasi C), yuqori ekstremal fokal distoni (dalillar darajasi B), spastik adduktor disfoniyasi (dalillar darajasi B) (Amerika nevrologiya Akademiyasining tavsiyalari) uchun tavsiya etiladi [3].

Hozirgi adabiyot ma'lumotlariga ko'ra, servikal distoniyasini davolashda barcha botulinum neyrotoksin preparatlari A tavsiyalari darajasiga ega, Amerika nevrologiya Akademiyasining klinik tavsiyalariga ko'ra, servikal distoniyasini davolashda abobotulotoksin A turi (Botoks) va

rimabotulotoksin B turi (Miblok) mavjud dalillar A, onabotulotoksin A turi (Disport) va inkobotulotoksin A turi (Xeomin) – dalillar darajasi A. Shuningdek, Amerika nevrologiya Akademiyasi yuqori darajadagi klinik tadqiqotlar ma'lumotlariga asoslanib, turli xil BTA taqqoslanadigan samaradorligini aniqladi: bir xil davolash maqsadlariga erishish abobotulotoksinning 3:1 birlik optimal nisbati bilan mumkin A turi va onabotulotoksin turi A [3]. Blefarospazmni davolashda Onabotulotoksin A turi va inkobotulotoksin A turi dalillarning ishonchliligi darajasiga V, abobotulotoksin A turi esa C dalillarining ishonchliligi darajasiga ega.

Distoniyani davolashda BTA inyeksiyasidan keyingi klinik ta'sir 7-21-kunlarda sodir bo'ladi va mushaklarning kuchlanishi, spazmlar va og'riqning aniq pasayishi shaklida namoyon bo'ladi. BTA ning terapevtik ta'siri nafaqat uning mahalliy mushak bo'shashtiruvchi sifatida simptomatik ta'siri bilan, balki segmental-periferik va suprasegmental darajadagi afferent oqimlarga ta'siri bilan ham bog'liq bo'lib, bu fokal distoniya davolashda botulinum terapiyasining patogenetik rolini ko'rsatadi [2, 3]. So'nggi yillarda BTA preparatlarining uzoq muddatli samaradorligi va xavfsizligi to'g'risida ma'lumotlar mavjud va botulinum toksini B tipidagi preparatlar ishlab chiqilgan. Hozirda Rossiyada "500 birlik" va "100 birlik" BTA ro'yxatga olingan.

Barcha BTA dorilarining klinik dozalari ta'sir birliklarida ifodalanadi va ularni almashtirib bo'lmaydi. Kasallikning og'irligiga qarab, odatda yiliga 3-4 kurs inyeksiya qilinadi. Biroq, xavfsizligi va samaradorligi inkobotulotoksin A (Xeomin) ni davolashda isbotlangan "bemorning ehtiyojlariga ko'ra" inyeksiyalar orasidagi "moslashuvchan intervallar", vosita buzilishlari uchun botulinum terapiyasining eng istiqbolli yo'nalishi hisoblanadi. BTA preparatlarini qo'llash bo'yicha tasdiqlangan ko'rsatmalar dozalari va qo'llash usullarini tavsiflaydi. Shuningdek, fokal distoniyaning turli shakllari uchun dori-darmonlarni qabul qilish usullari va inyeksiya usullarini aniqlaydigan va batafsil bayon qiladigan tibbiy texnologiyalar mavjud [11].

Botulinum terapiyasi paytida manipulyasiya xususiyatlari. BTA yordamida distoniyaning har xil turlarini davolash tibbiy yordam ko'rsatishning murakkab yuqori texnologiyali usuli bo'lib, prosedura uchun maxsus sharoit va jihozlarni, shuningdek yuqori malakali mutaxassislarni talab qiladi. BTA inyeksiyasini amalga oshiradigan shifokor yuqori sifatli bilim va amaliy ko'nikmalarga ega bo'lishi kerak, inyeksiya va tegishli texnikalar bo'yicha ixtisoslashtirilgan mashg'ulotlardan o'tishi kerak. Inyeksiyaga tayyorgarlik distoniyani klinik baholashning zamonaviy usullaridan foydalanishni (maxsus shkalalardan foydalanish), inyeksiya uchun maqsadli mushaklarni (target) tanlash qobiliyatini va preparatning dozalash rejimini o'z ichiga olishi va birgalikda davolash usullariga bo'lgan ehtiyojni aniqlashi kerak. Inyeksiyaga tayyorgarlik jarayoni yyetarli vaqtni olishi kerak, chunki bu omil proseduraning muvaffaqiyati bilan bevosita bog'liq. Jarayonning ayniqsa muhim tarkibiy qismi inyeksiyani natijalarini monitoring usullaridan foydalanishdir. Tibbiy muassasa inyeksiyalarni yuqori aniqlikda bajarishga imkon beradigan maxsus asboblar bilan jihozlangan bo'lishi kerak (EMG qurilmasi yoki ko'chma qurilma - elektr signallarining analizatori, murakkab va maxsus holatlar uchun – ultratovush, KT). Shifokor inyeksiyalarning aniqligini tasavvur qilish uchun apparatlarda qanday ishlashni bilishi kerak. Portativ qurilma - elektr signallarining analizatori ("MIST" qurilmasi. Rossiya) inyeksiyani kuzatish uchun eng arzon, ishonchli va ishlatish uchun qulay qurilma.

Shunday qilib, distoniyaning har xil turlarini davolashda BTA inyeksiyasini o'tkazish jarayoni yyetarli vaqt, zarur texnik jihozlar va malakali xodimlarni talab qiladigan manipulyasiyadir [3].
Ushbu toifadagi dori-darmonlarni faqat botulinum toksini bilan ishlashda maxsus tayyorgarlik va tajribaga ega bo'lgan shifokorlar o'tkazishi va boshqarishi mumkin. Inyeksiya joyini tanlashda siz mushaklarning joylashuvi haqida standart fikrga amal qilishingiz kerak; darhol inyeksiya joyi

anatomik belgilar va palpasiya ma'lumotlariga muvofiq, shuningdek qo'shimcha usullardan foydalangan holda aniqlanadi: EMG, elektrostimulyasiya, ultratovush, KT. Bir qator mushaklar distonik harakatlar, topografik anatomiya va mushaklarning palpasiyasi tahlili ma'lumotlariga muvofiq tanlanadi va inyeksiya qilinadi.

Servikal distoniya - bu bir xil bemorda hatto bir kun davomida turli xil bosh pozisiyalari bo'lgan va shunga mos ravishda, turli mushaklarning kuchlanishini namoyon qilishi mumkin bo'lgan dinamik kasallik. Barcha 24 bo'yin mushaklari (har tomondan 12 ta) fokal distonik sindromni turli darajada amalga oshirishda ishtirok etadi, shuning uchun prosedurani rejalashtirishda "distonik" mushaklarning maksimal sonini aniqlash va ularga preparatni kiritish kerak. Ushbu qidiruvning qo'shimcha murakkabligi shundaki, bir xil bosh harakati (masalan, burilish bilan egilish) turli mushaklar tomonidan amalga oshirilishi mumkin, bu inyeksiyani EMG kuzatuvi paytida aniqlanadi. Ignali EMG o'tkazish uchun asboblar botulinum toksinini kiritish va mushaklarning faolligini qayd etish uchun maxsus ignalar bilan jihozlangan. Mushaklarning bioelektrik faolligi ekranda va/yoki naushniklarda (portativ dinamiklar) ko'rsatiladi. Miogrammaning o'ziga xos audio yoki video xususiyatlariga asoslanib, shifokor inyeksiya joyini ham, distonik mushak patternini ham tekshirishi mumkin. Bo'yning chuqur mushaklariga inyeksiya uzun igna bilan amalga oshirilishi kerak, shuning uchun 4 va/yoki 5 sm miografik ignaning uzunligi maqbuldir va an'anaviy insulin shprisining ignasi uzunligi yyetarli emas. Distonik tremor mavjud bo'lganda, EMG monitoringi zarur. Blefarospazm va gemifasiyal spazm bilan og'rigan bemorlarga BTA inyeksiyalari insulin shprisi yordamida amalga oshiriladi, ammo ba'zi hollarda EMG monitoringi ham zarur, masalan, yuzning pastki yarmi va halqum mushaklari ishtirokidagi kranial distoni davolashda. Botulinum toksini bilan davolash uchun ixtiyoriy ravishda xabardor qilingan rozilik talab qilinadi.

Botulinum terapiyasi prosedurasidan so'ng inyeksiya qilingan mushaklarning faol qisqarishi 20 daqiqa davomida tavsiya etiladi va bemorni allergik reaksiyalarning rivojlanishini kuzatish uchun 1 soat davomida tibbiy muassasada kuzatib borish kerak. Bemorni dinamikada tekshirish paytida qayd etilgan ta'sir yetarli bo'lmagan taqdirda, keyingi inyeksiyalar bilan terapiya rejimi o'zgartiriladi va BTA dozasi o'zgartiriladi, inyeksiyani nazorat qilishning qo'shimcha usullari qo'llaniladi va tajribali botulinum terapiyasi mutaxassisi bilan maslahatlashadi. Fokal distoniyaning boshqa shakllari uchun botulinum terapiyasi texnikasi tibbiy texnologiyalarda batafsil tavsiflangan, preparatning tavsiya etilgan dozasidan oshib ketmaslik kerak [2, 3, 11, 14, 18-20]. Fokal distoniyaning an'anaviy dori terapiyasi botulinum terapiyasini amaliyotga kiritgandan so'ng o'z ahamiyatini yo'qotdi. Dori -darmonlar yordamchi rol o'ynaydi va odatda ba'zi sabablarga ko'ra botulinumtoksin terapiyasini ishlatmaydigan yoki uni kamdan-kam va yetarli darajada samarali bo'lmagan dozada ishlatadigan bemorlarga buyuriladi. Amaldagi dorilarga dopamin, katexolaminlar, asetilxolin, serotonin, gamma-aminobutirik kislota va boshqa biologik faol moddalar metabolizmiga ta'sir qiluvchi dorilar kiradi. Amaliyot shuni ko'rsatadiki, bunday dorilarning o'rtacha terapevtik samaradorligi 20% dan oshmaydi va ularning ta'siri odatda vaqtinchalik. Nisbatan katta terapevtik ta'sir klonazepam (kuniga 1-8 mg/sut), baklofen (kuniga 20-100 sut/mg), xolinolitiklar (trigeksifenidil 2-8 mg /kun) tomonidan olinadi va ular uzoq vaqt davomida doimiy ravishda qabul qilinishi kerak. Boshqa miorelaksantlar (tolperizon, tizanidin) o'rtacha samarali. Benzamidlar (sulpirid, tiaprid), shuningdek antidepressantlar (amitriptilin, fluoksetin, paroksetin, sertralin, Fluvoksamin, trazodon) birgalikda emosional va/yoki somatoform kasalliklari va surunkali og'riqlar mavjud bo'lganda kompleks terapiyaning bir qismi sifatida

buyurilishi mumkin. Selektiv bo'lmagan beta-blokerlar (propranolol kuniga 160 mg gacha sut) tremorli bemorlarda o'rtacha samarali bo'lishi mumkin (asosan essensial tremorda).

Dopasezgir distoniyada benserazidli L-dopa preparatlari doimiy qabul qilish uchun buyuriladi, maksimal sutkalik doza mos ravishda 800 va 200 mg ni tashkil qiladi, optimal klinik ta'sirga erishilgunga qadar titrlanadi [2-4]. Jarrohlik davolash botulinumterapiyaga rezistentlik xolatlarida, shuningdek tarkok distoniya holatlarida tavsiya etiladi [3]. Jarrohlik usullariga stereotaktik destruksiyalarni o'rniga kelagan chuqur miya stimulyasiyasi (deep brain stimulation jarrohlik neyromodulyasiya), shuningdek periferik operasiyalar (servikal radikotomiyasi, accessorius nervining dekompressiyasi, selektiv denervasiya va rizotomiya, mektomiya) kiradi. Periferik operasiyalardan foydalanish cheklangan. Blefarospazmni davolashning qo'shimcha usuli - bu yuqori ko'z qovog'ining ortiqcha terisini va yumshoq to'qimalarini olib tashlash uchun blefaroplastika, bu botulinum terapiyasining tolerantligi va natijalarini yaxshilaydi. Gemifasial spazm bilan og'rigan bemorlarda (u periferik kelib chiqishi bor va fokal distoni emas), agar etiologiyada VII kranial asab ildizining neyrovaskulyar siqilishi aniqlansa, neyrovaskulyar dekompressiya operasiyasi amalga oshiriladi [3].

Kinezioterapiya, massaj, biofeedback, hissiy qayta tayyorlash komplekslari va boshqalar fokal distoni bo'lgan barcha bemorlarga yuqori darajadagi ishonchli tavsiyalar bilan kombinasiyalangan terapiyaning tarkibiy qismi sifatida tavsiya etilishi mumkin [2-4]. Servikal distoniya bilan siz kinezioterapiya, fizioterapiya (shu jumladan basseyn), yumshoq tasalli beruvchi massaj, hissiy qayta tayyorlash komplekslari imkoniyatlaridan foydalanishingiz kerak. Dag'al og'riq texnikasi bilan manual terapiya tavsiya etilmaydi. Yozish spazmi bo'lsa, yozish paytida vosita mahoratini o'zgartirishga qaratilgan reabilitasiya choralari majmuasi samarali bo'ladi [20]. Bemorlarga ijtimoiy izolyasiyani yengishga yordam berish muhimdir (shu jumladan qo'llab-quvvatlash guruhlaridagi bemorlar, psixoterapiya) [2-4]. Dispanser monitoringini botulinum terapiyani o'tkazadigan shifokor yoki bemorni nazorat qiluvchi boshqa shifokor olib borishi zarur, agar vaziyat yomonlashsa, boshqa botulinum terapiyasini o'tkazish to'g'risida qaror qabul qilishi kerak.

Distoniya bilan og'rigan bemorning qarindoshlarida distoniya rivojlanishining oldini olish kerak, shu jumladan periferik omillarni tuzatish va uzoq muddatli noto'g'ri postural stereotiplarni korreksiyasi; kranioservikal jarohatlardan qochish, shu jumladan og'riqli manipulyasiyalar (shu jumladan manual terapiya); ortopedik holatni tuzatish; stress ta'siridan qochish/yetarli darajada tuzatish. Fokal distoniya shakllaridan biri bilan og'rigan bemorni distoniyaning boshqa shakllarini rivojlanishiga yo'l qo'ymaslik kerak [2, 3].

Xulosa. Shunday qilib, fokal distoniya, harakatning buzilishi sohasidagi mutaxassislarning say-harakatlari va klinik amaliyotda botulinum terapiyasini faol targ'ib qilish tufayli noma'lum va pessimistik jihatdan davolanmaydigan kasalliklar toifasidan eng davolanadigan va o'rganilgan nevrologik kasalliklarning avangardiga o'tdi.

Blefarospazm, servikal va distoniyaning boshqa turlarini davolashning hozirgi yondashuvi botulinum terapiyasini birinchi darajali terapiya sifatida aniq belgilaydi. Botulinum terapiyasi shaxsiylashtirilgan tibbiyotning umumiy tendensiyalariga amal qiladi, bu holda BTA preparatini individual tanlash zarurati, dozalari va inyeksiyalar orasidagi intervallarda ifodalanadi; bemorlarning 60% distoniyaning og'irligiga ham, ma'lum bir davrda kasallikning kechishiga ham bog'liq bo'lgan individual intervallarga muhtoj. Bemorlarga inyeksiya o'rtasida uzoqroq yoki qisqaroq intervallar kerak bo'lishi mumkin. 6-20 haftalik "moslashuvchan intervallar" Sog'liqni

saqlash vazirligi tomonidan tasdiqlangan va Xeomin preparati bo'yicha ko'rsatmalarda va Sog'liqni saqlash vazirligining yangi klinik tavsiyalarida aks ettirilgan.

BTAdan foydalanish ko'rsatmalariga kiritilgan blefarospazm va servikal distoniya bilan bir qatorda distoniyaning boshqa shakllarini (oromandibular, laringeal va boshqalarni) davolash haqida unutmaslik kerak, bu distoniya davolash uchun amaldagi standartlar kasalliklari ro'yxatida aks etadi. "Moslashuvchan intervallar" dan foydalanish distoniyaning murakkab va multifokal shakllari bo'lgan bemorlarga ko'p bosqichli inyeksiya qilish imkonini beradi. Fokal distoniya davolashda botulinum terapiyasining farmakoekonomik tadqiqotlari uzoq vaqt davomida uning yuqori iqtisodiy maqsadga muvofiqligini namoyish etdi [20]. Distoniya bilan og'rigan bemorlar ko'pincha ushbu kasallikka ijtimoiy faol, mehnatga layoqatli yoshda duch kelishadi va BTA davolanishini DLO (nogironlik guruhi uchun) doirasida emas, balki ayrim toifadagi fuqarolarni zarur dori-darmonlar bilan ta'minlash bo'yicha ishlarning bir qismi sifatida olishlari kerak (ijtimoiy yordam to'plamini taqdim etish huquqiga ega bo'lganlar dori vositalari bilan ta'minlash bo'yicha yoki majburiy tibbiy sug'urta doirasida xizmatlar).

Foydalanilgan adabiyotlar:

1. Albanese A., Asmus F., Bhatia K.P., Elia A.E., Elibol B., Filippini G., Gasser T., Krauss J.K., Nardocci N., Newton A., Valls-Solé J. EFNS guidelines on diagnosis and treatment of primary dystonias. Eur J Neurol 2011; 18(1): 5–18.
2. Orlova O.R. Fokalnie distonii: klinika, patogenez, lechenie s ispolzovaniem toksina botulizma: Avtoref. dis. ...dokt. med. nauk. M., 2000; 48c.
3. Simpson D.M., Hallett M., Ashman E.J., Comella C.L., Green M.W., Gronseth G.S., Armstrong M.J., Gloss D., Potrebic S., Jankovic J., Karp B.P., Naumann M., So Y.T., Yablon S.A. Practice guideline update summary: Botulinum neurotoxin for the treatment of blepharospasm, cervical dystonia, adult spasticity, and headache. Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology 2016; 86(19): 1818–1826.
4. Albanese A., Barnes M.P., Bhatia K.P., Fernandez-Alvarez E., Filippini G., Gasser T., Krauss J.K., Newton A., Rektor I., Savoiardo M., Valls-Solè J. A systematic review on the diagnosis and treatmentof primary (idiopathic) dystonia and dystonia plus syndromes: report of an EFNS/MDS-ES Task Force. Eur J Neurol 2006; 13(5): 433–444.
5. Bressman S.B., Raymond D., Fuchs T., Heiman G.A., Ozelius L.J., Saunders-Pullman R. Mutations in THAP1 (DYT6) in early-onset dystonia: a genetic screening study. Lancet Neurol 2009; 8(5): 441–446.
6. Valente E.M., Edwards M.J., Mir P., DiGiorgio A., Salvi S., Davis M., Russo N., Bozi M., Kim H.T., Pennisi G., Quinn N., Dallapiccola B., Bhatia K.P. The epsilon-sarcoglycan gene in myoclonic syndromes. Neurology 2005; 64(4): 737–739.
7. Robinson R., McCarthy G.T., Bandmann O., Dobbie M., Surtees R., Wood N.W. GTP cyclohydrolase deficiency; intrafamilial variation in clinical phenotype, including levodopa responsiveness. J Neurol Neurosurg Psychiatry 1999; 66(1): 86–89.
8. Klein C., Friedman J., Bressman S., Vieregge P., Brin M.F., Pramstaller P.P., De Leon D., Hagenah J., Sieberer M., Fleet C., Kiely R., Xin W., Breakefield X.O., Ozelius L.J., Sims K.B. Genetic testing for early-onset torsion dystonia (DYT1): introduction of a simple screening method, experiences from testing of a large patient cohort, and ethical aspects. Genet Test 1999; 3(4): 323–328.

9. Djarmati A., Schneider S.A., Lohmann K., Lohmann K., Winkler S., Pawlack H., Hagenah J., Brüggemann N., Zittel S., Fuchs T., Raković A., Schmidt A., Jabusch H.C., Wilcox R., Kostić V.S., Siebner H., Altenmüller E., Münchau A., Ozelius L.J., Klein C. Mutations in THAP1 (DYT6) and generalised dystonia with prominent spasmodic dysphonia: a genetic screening study. Lancet Neurol 2009; 8(5): 447–452.
10. Albanese A., Lalli S. Is this dystonia? Mov Disord 2009; 24(12): 1725–1731.
11. Timerbaeva S.L. Fokalnie i segmentarnie formi pervichnoy distonii: klinicheskie, patofiziologicheskie i molekulyarno-geneticheskie aspekti: Avtoref. dis. ... dokt. med. nauk. M., 2012; 51c.
12. Azbuka botulinoterapii. Pod red. Timerbaevoy S.L. M.: Prakticheskaya medisina 2014; 441c.
13. Consky E.S., Basinski A., Belle L., Ranawaya R., Lang A.E. The Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS): assessment of validity and inter-rater reliability (abstract). Neurology 1990; 40: 445.
14. Orlova O.R., Yaxno N.N. Primenenie botoksa (toksina botulizma tipa A) v klinicheskoy praktike. Rukovodstvo dlya vrachey. M.: Katalog 2001; 201s.
15. Bressman S.B., Sabatti C., Raymond D., de Leon D., Klein C., Kramer P.L., Brin M.F., Fahn S., Breakefield X., Ozelius L.J., Risch N.J. The DYT1 phenotype and guidelines for diagnostic testing. Neurology 2000; 54(9): 1746–1752. 16. Rutledge J.N., Hilal S.K., Silver A.J., Defendini R., Fahn S. Magnetic resonance imaging of dystonic states. Adv Neurol 1988; 50: 265–275.
17. Meunier S., Lehericy S., Garnero L., Vidailhet M. Dystonia: lessons from brain mapping. Neuroscientist 2003; 9(1): 76–81.
18. Simpson D.M., Blitzer A., Brashear A., Comella C., Dubinsky R., Hallett M., Jankovic J., Karp B., Ludlow C.L., Miyasaki J.M., Naumann M., So Y.; Therapeutics and Technology Assessment Subcommittee of the American Neurology. Assessment: Botulinum neurotoxin for the treatment of movement disorders (an evidencebased review): report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology 2008; 70(19): 1699–1706.
19. Orlova O.R., Timerbaeva S.L., Xatkova S.E., Kotlyarov V.V., Korenko L.A., Zalyalova Z.A., Falkovskiy I.V., Batisheva T.T., Gribanov I.I., Kurenkov A.L., Artemenko A.R., Soyxer M.I., Krasavina D.A., Misikov V.K., Kostenko E.V., Mingazova L.R., Soyxer M.G., Surovix S.V., Korenko L.A., Antipova L.N., Antipenko E.A., Shperling L.P. Primenenie preparata Disport (Botulinicheskiy toksin tipa A) dlya lecheniya lokalnogo mishechnogo gipertonusa pri fokalnix distoniyax, spastichnosti i drugix mishechno-tonicheskix sindromax (Medisinskaya texnologiya). M., 2012; 105s.
20. Dressler D., Mander G., Fink K. Measuring the potency labeling of onabotulinumtoxinA (Botox(®)) and incobotulinumtoxinA (Xeomin(®)) in an LD50 assay. J Neural Transm (Vienna) 2012; 119(1): 13–15.3.

UO'K: 616.7-007.681-056.7 ББК 56.7

YOPIQ BURCHLI GLAUKOMANING O'RGANISHDA GENETIK OMILLARNING O'RNI

G'ulomidinov B.B.
Andijon davlat tibbiyot institute

*Rezyume.*Glaukoma - har yili 60 million odamda optik asabga ta'sir qiluvchi va ko'rish sohasida qaytarilmas o'zgarishlarga olib keladigan genetik jihatdan heterojen kasalliklar guruhidir. U monogen yoki yanada murakkab shaklda meros bo'lib o'tishi mumkin, ko'pincha ko'z ichi bosimining oshishi (IOP), shuningdek trabekulyar to'r va ko'zning old kamerasidagi nuqsonlar, ko'z ichi suyuqligining chiqishini buzadi va optik asabning progressiv degeneratsiyasiga yordam beradi.

Glaukoma turli mezonlarga ko'ra tasniflanadi, jumladan etiologiyasi (birlamchi va ikkilamchi), ko'zning old kamerasining anatomik xususiyatlari (ochiq burchakli va yopiq burchakli), boshlanish vaqti (chaqaloq-balog'atga etmagan va kattalar).

Ushbu maqolada glaukoma bilan bog'liq genetik omillar, shuningdek, kasallikning turli shakllarining etiologiyasi va patogenezi muhokama qilinadi. U birlamchi ochiq burchakli, birlamchi burchakli yopilish va tug'ma kabi glaukoma turlarining rivojlanishida ma'lum genetik determinantlarning rolini tahlil qiladi.

Kalit so'zlar: glaukoma, genetika, old kamera, yopiq burchakli glaukoma.

THE ROLE OF GENETIC FACTORS IN THE DEVELOPMENT OF ANGLE-CLOSED GLAUCOMA

Gulomidinov B.B.
Andijan State Medical Institute

Resume. Glaucoma is a genetically heterogeneous group of diseases affecting the optic nerve and causing irreversible changes in the visual field in 60 million people annually. It can be inherited both monogenically and in a more complex form, often associated with increased intraocular pressure (IOP), as well as defects in the trabecular meshwork and anterior chamber of the eye, which disrupts the outflow of intraocular fluid and contributes to progressive degeneration of the optic nerve.

Glaucoma is classified according to various criteria, including etiology (primary and secondary), anatomical features of the anterior chamber of the eye (open-angle and closed-angle), and time of onset (infantile-juvenile and adult).

This article discusses the genetic factors associated with glaucoma and examines its etiology and pathogenesis of various forms of the disease. It analyzes the role of certain genetic determinants in the development of such types of glaucoma as primary open-angle, primary closed-angle, and congenital.

Key words: glaucoma, genetics, anterior chamber, closed-angle glaucoma.

РОЛЬ ГЕНЕТИЧЕСКИХ ФАКТОРОВ В РАЗВИТИИ ЗАКРЫТОУГОЛЬНОЙ ГЛАУКОМЫ

Гуломидинов Б.Б.
Андижанский государственный медицинский институт

Резюме. Глаукома представляет собой генетически неоднородную группу заболеваний, поражающих зрительный нерв и вызывающих необратимые изменения в поле зрения у 60 миллионов людей ежегодно. Она может наследоваться как моногенно, так и в более сложной форме, часто связанной с повышением внутриглазного давления (ВГД), а также с дефектами в трабекулярной сети и передней камере глаза, что нарушает отток внутриглазной жидкости и способствует прогрессирующей дегенерации глазного нерва.

Глаукома классифицируется по различным критериям, включая этиологию (первичная и вторичная), анатомические особенности передней камеры глаза (открытоугольная и закрытоугольная) и время возникновения (инфантильно-ювенильная и взрослая).

В данной статье обсуждаются генетические факторы, связанные с глаукомой, а также рассматриваются вопросы её этиологии и патогенеза различных форм заболевания. В ней анализируется роль определённых генетических детерминант в возникновении таких типов глаукомы, как первичная открытоугольная, первичная закрытоугольная и врождённая.

Ключевая слова: глаукома, генетика, передная камера, закрқтоугольная глаукома.

Dolzarblik. Glaukoma - bu ko'z ichidagi gidrodinamikaning buzilishi bilan kechadigan surunkali kasalliklar guruhi bo'lib, bu ko'z ichidagi bosimning oshishiga va glaukoma optik neyropatiyasining shakllanishiga olib keladi, optik asab va ko'rish maydonining buzilishida qaytarilmas o'zgarishlarga olib keladi. Bu ko'rish organlarining eng keng tarqalgan kasalliklaridan biri va ijtimoiy ahamiyatga ega patologiyadir [2].

Glaukoma ko'rlikning kataraktadan keyin ikkinchi asosiy sababidir [1] va ko'pincha irsiy moyillik va atrof-muhit omillariga qarab multifaktorial kasallikdir. Ushbu jihatlarni o'rganish "Ko'z kasalliklari" fanini o'rganayotgan oftalmologlar uchun ham, tibbiyot talabalari uchun ham muhimdir [3]. 1960-yillarning boshidan boshlab oftalmik gipertenziyaning genetik komponenti haqida ma'lumotlar paydo bo'la boshladi. 1987 yil ma'lumotlariga ko'ra, birlamchi ochiq burchakli glaukoma (POAG) rivojlanish xavfi ushbu kasallikning oila tarixi bo'lgan odamlarda 10-20 baravar yuqori [1] va 50% hollarda genetik jihatdan aniqlangan. Birlamchi ochiq burchakli va yopiq burchakli glaukoma farqlanadi, ular orasida PAAG 70-90% hollarda uchraydi [2]. Tug'ma glaukoma taxminan 10 000-20 000 yangi tug'ilgan chaqaloqdan 1 tasida uchraydi va uning rivojlanishi genetik va teratogen omillar bilan ham bog'liq. Ushbu kasallik uchun avtosomal dominant irsiyat xarakterlidir, uning chastotasi oilalarda 10-15% ni tashkil qiladi [4].

Adabiyotlarga ko'ra, glaukomaning ushbu shaklining rivojlanishida bir nechta lokuslar muhim rol o'ynaydi, jumladan GLC3A (2p21 mintaqasida joylashgan), GLC3B (1p36 mintaqasi) va GLC3C (14q24.3 - q32.1) [1]. Shuningdek, GLC1A lokusu (1q21-q31) voyaga etmaganlar glaukomasining avtosomal dominant meros turi bilan bog'liqligi aniqlangan.

Qizig'i shundaki, balog'atga etmagan glaukoma ko'proq erkaklarga ta'sir qiladi, ayollar va erkaklar o'rtasidagi holatlar nisbati 1:10ga teng [3].

Izlanish maqsadi. Ushbu ishning maqsadi yopiq burchakni glaukomaning rivojlanishining genetik mexanizmlarini tahlil qilish asosida patogenetik jihatdan asoslangan davolash usullarini yaratish.

Izlanish materiallari va usullari. Qalinlashgan linza shakli bo'lgan Yopiq burchakli glaukoma bilan og'rigan bemorlarda ko'zning oldingi segmenti tuzilmalarining topografik-morfometrik munosabatlarini chuqur morfometrik o'rganish o'tkazildi.

Ob'ektiv shaklining ushbu variantining mezoni linza diametrining oldingi-orqa o'lchamiga nisbati bo'lib, u 1,31 dan 1,76 gacha (B-skanerlashdan keyin). Ushbu populyatsiyadan YoBG klinik kursi mezoniga ko'ra 2 guruh tuzildi.

Umumiy qabul qilingan oftalmologik tekshiruv majmuasiga qo'shimcha ravishda, barcha bemorlar ko'z olmasining oldingi segmentini ultratovush B-skanerlashdan o'tkazildi.

Izlanish natijalari. Kollagen sintezi (COL11A1), matritsali metalloproteinaz genlari (MMP9, MMP3, MMP1), epigenetik tartibga soluvchi RNK genlari (CDKN2BAS1), shuningdek, psevdoeksfoliatsiya sindromi genlari (LOXL1) uchun mas'ul bo'lgan genlarning polimorfizmi kasallikning rivojlanishiga ta'sir qiladi. Shu bilan birga, RPE hujayralarida ham, fotoretseptorlarda

ham ifodalangan birlamchi glaukoma genlari aniqlangan, bu retinal qatlamlarning bevosita ishtirok etishini va ularning ushbu kasallikning etiopatogeneziga ta'sirini ko'rsatadi, masalan, OPTN1, TP53, HSPBP1 (HSP7), MYOC, OPA-1 va boshqalar an'anaviy va glimfatik chiqish yo'llari orqali suyuqlik aylanishi buziladi.

Shuni ta'kidlash kerakki, miyadagi glimfatik qon aylanishi odatda almashinuv ritmlariga bog'liq bo'lib, kasallik rivojlanishining yengil bosqichida sodir bo'ladi va optik qismda glaukomatoz o'zgarishlarning rivojlanishi yaqqol sodir bo'ladi va tungi arterial gipotenziya va shahar gipotenziyasi bilan bog'liq.

Ushbu ma'lumotlar ko'zdagi suv aylanishi buzilishi ko'zdan ajralishining va gidrodinamik gradientlarga bevosita bog'liqligini isbotlaydi.

Xulosa. Shunday qilib, ko'z ichi to'qima suyuqligining aylanishi yoshi va patologiyasi bilan ko'zning old va orqa segmentlari to'qimalarining tuzilishi va tarkibini o'zgartiradi.

Taqdim etilgan ma'lumotlar glaukomaning membranoglimfatik nazariyasining asosiy qoidalarini bilvosita tasdiqlaydi. Ushbu nazariyani klinik va laboratoriya tasdiqlash va birlamchi glaukomani davolash uchun yangi etiopatogenetik usullarni ishlab chiqish zarur.

Foydalanilgan adabiyotlar:

1. Голубничая, О. Время для новых законодательных мер по сахарному диабету: смена парадигмы - от запоздалых интервенций к предиктивной, превентивной и персонализированной медицине / О. Голубничая // TERRAMEDICA. - 2012. - № 2. - С. 4-14.
2. Загидуллина А.Ш. О фенотипах первичной глаукомы /А.Ш. Загидуллина //Медицинский вестник Башкортостана. -2015. - №2, Т. 10. - С. 162-165.
3. Рахманов В.В., Никитина Н.Я., Захарова Ф.М. и др. Клинико-генетический анализ семейных форм первичной открытоугольной глаукомы: Материалы V съезда Российского общества медицинских генетиков (Часть III). Уфа. Медицинская генетика. 2005. Т. 4. № 6. С. 258
4. Williams PA, Harder JM, Foxwortg NE, et al. Vitamin B3 modulates mitochondrial vulnerability and prevents glaucoma in aged mice. Science. 2017;335(6326):756-760.

UO'K: 618.14

PERIMENOPAUZADA ENDOMETRIYNING O'ZGARISHLARI: GIPERPLAZIYA VA UNING OQIBATLARI

Eshonova K.G.
Respublika ixtisoslashtirilgan ona va bola salomatligi ilmiy-amaliy tibbiyot markazi

Аннотация. Endometrial giperplastik jarayonlar (EGJ) perimenopauza davridagi ayollarda keng uchraydigan patologiyalardan biri hisoblanadi. Ushbu tadqiqot zamonaviy tasnif va diagnostika usullariga tayangan holda, giperplastik jarayonlarni erta aniqlash va ularning ehtimoliy xavflarini baholash zarurligiga e'tibor qaratadi. Metodologiya ilmiy adabiyotlarni tahlil qilish hamda klinik kuzatuvlarni o'z ichiga oladi. Olingan natijalar shuni ko'rsatadiki, kasallikni erta tashxislash va muntazam nazorat qilish malign o'zgarishlarning oldini olish, saraton xavfini kamaytirish hamda bemorlarning umumiy hayot sifatini yaxshilashga xizmat qiladi.

***Kalit so'zlar**: Endometriyal giperplaziya, atipiyasiz giperplaziya, atipik giperplaziya, Endometriyal saraton, premenopoza.*

CHANGES IN THE ENDOMETRIUM IN PERIMENOPAUSE: HYPERPLASIA AND ITS CONSEQUENCES

Eshonova K.G.
Republican specialized scientific and practical Medical Center for maternal and Child Health

Annotation. Endometrial hyperplastic processes (EHP) are one of the most common pathologies among women in the perimenopausal period. This study focuses on the importance of early detection of hyperplastic processes and assessing their potential risks based on modern classification and diagnostic methods. The methodology includes a review of scientific literature and clinical observations. The obtained results indicate that early diagnosis and regular monitoring help prevent malignant transformations, reduce the risk of cancer, and improve the overall quality of life of patients.

***Keywords**: Endometrial hyperplasia, hyperplasia without atypia, atypical hyperplasia, endometrial cancer, premenapause.*

ИЗМЕНЕНИЯ ЭНДОМЕТРИЯ В ПРЕМЕНОПАУЗЕ: ГИПЕРПЛАЗИЯ И ЕЕ ПОСЛЕДСТВИЯ

Эшонова К.Г.
Республиканский специализированный научно-практический медицинский центр здоровья матери и ребенка

Аннотация. Эндометриальные гиперпластические процессы (ГПЭ) являются одной из наиболее распространенных патологий у женщин в перименопаузальном периоде. Данное исследование направлено на подчеркивание важности раннего выявления гиперпластических процессов и оценки их потенциальных рисков на основе современной классификации и диагностических методов. Методология включает анализ научной литературы и клинические наблюдения. Полученные результаты показывают, что ранняя диагностика и регулярный контроль помогают предотвратить злокачественные изменения, снизить риск развития рака и улучшить общее качество жизни пациентов.

***Ключевые слова:** Гиперплазия эндометрия, гиперплазия без атипии, атипичная гиперплазия, рак эндометрия, пременапауза.*

Endometriyal giperplaziya (EG) – bu bachadonning patologik holati bo'lib, u endometriyal qatlam tuzilmasidagi turli morfologik o'zgarishlar bilan tavsiflanadi. Ushbu jarayonning asosiy xususiyati bez to'qimalarining stromaga nisbatan ortiqcha rivojlanishi bo'lib, bu esa normal

proliferativ endometriumdan sezilarli farqlanadi. EG klinik jihatdan muhim ahamiyat kasb etadi, chunki vaqt o'tishi bilan u endometriyal saratonga aylanish xavfini oshirishi mumkin [4]. Ayniqsa, premenopauza davrida ayollar orasida endometriyaning giperplastik jarayonlari yuqori foizda (10-55%) kuzatiladi. Ushbu patologiyaning qaytalanish ehtimoli va malign o'zgarishlarga moyilligi uni zamonaviy ginekologiyada dolzarb muammolardan biriga aylantiradi. Yoshga bog'liq gormonal o'zgarishlar tufayli organizmning umumiy holatini baholash va onkologik kasalliklar xavfini aniqlash tobora qiyinlashib bormoqda. Shu sababli, EGning erta va aniq diagnostikasi ayollarning reproduktiv tizimi kasalliklarini oldini olish hamda onkologik xastaliklar xavfini kamaytirishda muhim ahamiyat kasb etadi. Bu esa ayollar salomatligini saqlashga ijobiy ta'sir ko'rsatadi [1]. Tadqiqotlar shuni ko'rsatadiki, endometriyaning giperplastik jarayonlari ayollarning yoshi va kasallik shakliga qarab ortib boradi, bu esa umumiy uchrash darajasini 10% dan 30% gacha oshiradi. Ayniqsa, 45—55 yosh oralig'idagi ayollarda ushbu patologiya keng tarqalgan bo'lib, kech aniqlangan holatlarda kasallikning surunkali shaklga o'tish ehtimoli yuqori. Ba'zi mutaxassislarning fikriga ko'ra, kech reproduktiv va perimenopauza davrida bo'lgan bemorlarning 50% ida endometriyal giperplaziya tez rivojlanishi kuzatiladi. Bu esa kasallikni erta tashxislash va profilaktika choralarini ko'rish muhimligini yana bir bor tasdiqlaydi [2][6].

Maqsad: Tadqiqotimizning maqsadi – premenopauza davridagi ayollarda endometriyal saraton rivojlanish xavfini bashorat qilish muhimligini o'rganish bo'lib, bu endometriyaning giperplastik jarayonlari tasnifiga asoslangan holda amalga oshiriladi.

Materiallar va tadqiqot usullari: Ilmiy maqolalarni izlash PubMed, SCOPUS, JSST (VOZ) va Xalqaro saraton tadqiqot markazi (IARC) hamda Buyuk Britaniyaning Qirollik akusherlik va ginekologiya kolleji (RCOG) ma'lumotlar bazalarida amalga oshirildi. Bu esa o'rganilgan mavzuning yetarli darajada informativligini ta'minladi. Tahlilga 2020–2024 yillar oralig'ida nashr etilgan ilmiy ishlar kiritildi. Maqolalarni izlashda quyidagi asosiy kalit so'zlar ishlatildi: endometriyal giperplaziya, endometriyaning yangi o'simtalari, atipiyasiz giperplaziya, atipik giperplaziya. Qidiruv jarayonida jami 46 ta maqola topildi, biroq turli sabablarga ko'ra (takrorlanish, natijalar va muhokamalar, tadqiqot dizayni va kiritish mezonlariga mos kelmaslik) 25 tasi chiqarib tashlandi.

Tadqiqot natijalari va muhokama: Zamonaviy tibbiyot nuqtayi nazaridan, endometriyaning giperplaziyasi turli omillarga bog'liq bo'lgan polietiologik kasallik hisoblanadi. Uning rivojlanishi va progressiyasiga turli sabablar ta'sir ko'rsatishi mumkin. Ayrim tadqiqot natijalari shuni ko'rsatadiki, endometriyaning giperplastik jarayonlari shakllanishida asosiy omillardan biri progesteron yetishmovchiligi fonida yuzaga keladigan nisbiy giperestrogenemiya hisoblanadi [10]. Estrogenning ortiqcha ta'siri va progesteron yetishmovchiligi natijasida yuzaga keladigan disbalans endogen, ekzogen yoki genetik omillar bilan bog'liq bo'lishi mumkin. Ushbu holat ayollarda neyroalmashinuv-endokrin buzilishlar, surunkali anovulyatsiya, hayz ko'rishning erta boshlanishi, menopauzaning kechikishi hamda estrogen sekretsiya qiluvchi o'simtalar fonida kuzatilishi mumkin [8]. Shunday qilib, premenopauza davrida endometriyal giperplaziya rivojlanish xavfi asosan organizmda estrogen ta'sirining uzoq muddatli «to'planishi» bilan bog'liq bo'lib, bu jarayon gormonal disbalansning davomiyligiga bog'liq. Bunda faqatgina estradiolning joriy darajasi emas, balki uzoq vaqt davomida kuzatilgan gormonal muvozanatsizlik ham muhim omil hisoblanadi. Shu sababli, gormonal muvozanatni barqaror saqlash va muntazam monitoring qilish kasallikning oldini olishda asosiy profilaktik choralar sifatida qaralishi lozim. Endometriyal giperplaziya tashxisi qo'yilgan aksariyat bemorlarda bachadon qon ketishining turli shakllari kuzatiladi. Ushbu patologiyaga premenopauza davrida odatdagidan farqli, tartibsiz qon ketishlar, shuningdek, uzoq davom etuvchi va takrorlanib turuvchi bachadon qon ketishlari xosdir. Bundan

tashqari, ba'zi bemorlarda hayz ko'rish siklining buzilishi, ortiqcha qon yo'qotish tufayli anemiya rivojlanishi va umumiy holsizlik kabi belgilar ham uchraydi. Ushbu simptomlar diagnostikada muhim ahamiyat kasb etib, kasallikni erta aniqlash va o'z vaqtida davolash choralarini ko'rishga imkon beradi [10]. Ushbu simptom ko'pincha bemorlarni darhol tibbiy yordamga murojaat qilishga undaydi, bu esa endometriyal saratonning erta bosqichda aniqlanishiga imkon yaratadi. O'z vaqtida tashxis qo'yish va tegishli davolash choralari ko'rilishi natijasida kasallikning prognozi yaxshilanadi. Jumladan, I bosqichda aniqlangan holatlarda besh yillik yashash ko'rsatkichi 80–90% ni tashkil etadi. Shuning uchun, ayollar tomonidan har qanday anormal qon ketishlariga e'tibor berilishi va shifokorga o'z vaqtida murojaat qilinishi kasallikni erta bosqichda aniqlash va samarali davolash uchun muhim hisoblanadi [8].

JSST va Xalqaro saraton tadqiqot agentligi (IARC) ma'lumotlariga ko'ra, endometriyal saraton butun dunyo bo'ylab ayollar orasida o'limning jiddiy sabablaridan biri hisoblanadi. JSST hisobotlariga asoslanib aytish mumkinki, endometriyal saraton holatlarining taxminan chorak qismi ilgari bachadon shilliq qavatining yaxshi xulqli o'zgarishlaridan kelib chiqadi. Ushbu jarayon odatda asta-sekin rivojlanib, o'rtacha 6–7 yil davom etadi. Shu sababli, giperplastik jarayonlarni erta aniqlash va dinamik kuzatish saraton xavfini kamaytirishda muhim rol o'ynaydi [2]. Endometriyada giperplastik jarayonlarning rivojlanish mexanizmlarining murakkabligi va ushbu patologiyaning mumkin bo'lgan og'ir asoratlari uning erta diagnostikasi, asoratlar xavfini bashorat qilish hamda samarali davolash strategiyalarini ishlab chiqish zarurligini ko'rsatadi. Shuningdek, ushbu strategiyalarni klinik amaliyotga faol tatbiq etish kasallikning kechishini yaxshilash va saraton rivojlanish xavfini kamaytirishda muhim ahamiyat kasb etadi [3]. Endometriyal saraton (ES) ayollar orasida eng keng tarqalgan onkologik kasalliklar ichida beshinchi o'rinni egallaydi. So'nggi yillarda, ayniqsa rivojlangan mamlakatlarda, ushbu kasallikning tarqalish darajasi ortib bormoqda. Xalqaro saraton tadqiqot agentligi (IARC) ma'lumotlariga ko'ra, 2020-yilda butun dunyo bo'ylab 417 367 ta yangi endometriyal saraton holati qayd etilgan bo'lib, ushbu kasallik bilan bog'liq 97 370 ta o'lim holati aniqlangan [9][11].

Endometriyal giperplaziyani tasniflashda uning gistologik xususiyatlari va onkogen potensiali asosiy mezon hisoblanadi. Gistopatologik jihatdan ushbu jarayon endometriyal bezlarning me'yoriy proliferativ endometriumga nisbatan ortiqcha ko'payishi va stromaga nisbatan zich joylashuvi bilan tavsiflanadi, biroq endometriyal stromaga invaziyaning yo'qligi bilan ajralib turadi [12]. Kasallikni aniqlash uchun asosiy diagnostik usul – biopsiya, bachadon bo'shlig'ini qirqish (kuretaj) yoki gistérektomiya orqali olingan to'qima namunasining gistologik baholanishidir. Ushbu usullar giperplastik jarayonni aniqlash va uning onkogen xavfini baholashda muhim ahamiyat kasb etadi.

2014-yilda Jahon sog'liqni saqlash tashkiloti (JSST) endometriyal giperplaziyani yangi tasnifga muvofiq ikki asosiy guruhga ajratishni taklif qildi. Ushbu tasnif asosida hujayraviy atipiyaning mavjudligi yoki yo'qligi bo`lib, endometriyal giperplaziya atipiyasiz shakl va atipik giperplaziya kabi turlarga bo'linadi. Bunday yondashuv patologiyaning onkologik xavfini aniq baholash va bemorlarga individual davolash usullarini tanlash imkonini beradi [3]. Hozirgi vaqtda Qirollik akusherlik va ginekologiya kolleji (RCOG) hamda Britaniya ginekologik endoskopiya jamiyati (BSGE) tomonidan 2014-yilda Jahon sog'liqni saqlash tashkiloti (JSST) tomonidan taklif qilingan yangi tasnif qabul qilingan. Biroq, ko'plab ilmiy tadqiqotlar va dalillarga asoslangan ma'lumotlarda hali ham JSSTning 1994-yilgi nomenklaturasi qo'llanilmoqda [13]. Bu esa ilmiy va klinik amaliyotda ikki xil tasniflash tizimining parallel ravishda ishlatilishiga olib kelmoqda. Bu tasniflashda endometriyal giperplaziya morfologik belgilar asosida baholanib, bez va stromal

komponentlardagi o'zgarishlar darajasi hamda hujayralarning yadroviy atipiyasi hisobga olingan [10]. Shu asosda giperplaziya ikkiga bo'lingan: hujayraviy atipiyasiz giperplaziya va atipik giperplaziya. Har bir guruh ichida esa ikkita shakl ajratilgan: oddiy giperplaziya – bezlarning arxitektonikasida sezilarli o'zgarishlar kuzatilmaydi, murakkab giperplaziya esa bezlarning zich joylashuvi, tarmoqlanishi va kurtaklanishi bilan tavsiflanadi. Ushbu tasnif klinik amaliyotda giperplastik jarayonlarning xavfini baholash va ularni samarali boshqarish uchun muhim diagnostik mezon bo'lib xizmat qiladi.

Yangi klinik tavsiyalarni yuritish yadro atipiyasining mavjudligiga bog'liq holda amalga oshiriladi [5]. Yadro atipiyasi hujayra yadrolarining kattalashishi va ularning ichida yadrochalar mavjudligi yoki yo'qligi bilan belgilanadi. Molekulyar darajada endometriyal giperplaziya endometrioid saraton bilan ko'p umumiy jihatlarga ega. Atypik giperplaziya bilan og'rigan bemorlarda endometriyal saraton rivojlanish xavfi 50% gacha yetishi mumkin [11]. Shu sababli, aylanib o'tish qiyin bo'lgan muammo shundaki, atipik giperplaziyaga ega bemorlarda endometriyal saraton xavfini prognoz qilish qiyin bo'lib, giperplaziyani intraepitelial neoplaziyadan gistopatologik jihatdan ajratish mushkul bo'lishi mumkin. Endometriyal giperplaziya diagnozini tasdiqlash va uni atipik hamda atipiyasiz shakllarga ajratish uchun endometriyal to'qimalarning gistologik tekshiruvi talab etiladi. Endometriyal namunalar bemorga bog'liq holda ambulator sharoitda yoki statsionar muhitda olinishi mumkin. Ushbu diagnostik yondashuv kasallikning aniq tahlilini ta'minlab, optimal davolash taktikasini belgilashga yordam beradi.

Transvaginal ultratovush tekshiruvi (TVUZI) premenopauza davridagi ayollarda, birinchi navbatda, miomalar, endometriyal poliplar, homiladorlik va bachadonning anormal qon ketishiga olib kelishi mumkin bo'lgan boshqa sabablarga tashxis qo'yishda muhim ahamiyatga ega. Shuningdek, u endometriyning qalinligini baholash, giperplastik jarayonlarni aniqlash va onkologik xavfni prognoz qilishda yordam beradi. Endometriyning qalinligi fiziologik jihatdan hayz davrining bosqichlariga qarab o'zgaradi va sekretor fazada 18 mm gacha yetishi mumkin [5]. Shu sababli, normadan og'ishlar kuzatilganda, ayniqsa, postmenopauza davrida 5 mm dan ortiq qalinlashish aniqlansa, malign jarayonni istisno qilish uchun qo'shimcha tekshiruvlar talab etiladi. Aniq tashxis qo'yish, patologik jarayonlarni aniqlash va giperplaziya shaklini tasdiqlash maqsadida endometriyal namuna olish va gistologik tekshiruv o'tkazish tavsiya etiladi. Endometriyal namuna olishning bir necha usullari mavjud bo'lib, ulardan eng oddiysi ambulator sharoitda plastik kanul (Pipelle) yordamida amalga oshiriladigan endometriyal biopsiyadir. Ushbu usul uzoq yillik xavfsizlik va samaradorlik tarixiga ega bo'lib, minimal invazivligi sababli keng qo'llaniladi. Biopsiya jarayoni Pipelle kanulini bachadon bo'shlig'iga bachadon bo'yni orqali kiritish va maxsus vakuum texnikasi yordamida to'qima namunalarini olishdan iborat. Ushbu protsedura bemor tomonidan yaxshi qabul qilinadi, og'riq darajasi past bo'lib, og'riqsizlantirish talab qilinmaydi yoki minimal anestetiklar bilan o'tkazilishi mumkin.

Gisteroskopik nazorat ostida bachadon ichidan namuna olish endometriyal to'qimalarni olishning yana bir tavsiya etilgan usuli hisoblanadi. Tadqiqotlar shuni ko'rsatadiki, ushbu usul ayniqsa endometriyal poliplar, endometriyal saraton va giperplaziyani diagnostika qilishda foydalidir. Chunki u nafaqat biopsiya jarayonini aniq va vizual nazorat qilish imkonini beradi, balki to'qima namunalarining sifatini oshirish, noto'g'ri natijalarni minimallashtirish va noaniq holatlarda takroriy biopsiya ehtiyojini kamaytirishga xizmat qiladi. Gisteroskopiya yordamida olingan biopsiya an'anaviy usullarga nisbatan aniqroq hisoblanadi, chunki u shikastlangan joyni bevosita ko'rish va zarur bo'lsa, shubhali hududdan bir necha namunalar olish imkonini beradi. Bu ayniqsa fokal giperplaziya yoki polipoid shakldagi patologiyalar mavjud bo'lganda muhim ahamiyat kasb etadi.

Bundan tashqari, gisteroskopiya diagnostik biopsiyadan tashqari, terapevtik maqsadlarda ham qo'llanilib, kichik poliplarni yoki lokal giperplastik o'zgarishlarni bartaraf etish imkonini beradi.

Shunday qilib, gisteroskopiya endometriyal patologiyalarni aniqlashda yuqori sezuvchanlik va maxsuslikka ega bo'lib, aniq tashxis qo'yish va bemorlarga individual yondashuvni tanlashda muhim rol o'ynaydi.

Endometriy giperplaziyasi endometriy saratoniga aylanishi mumkin, uning rivojlanish tezligi to'qimalardagi arxitekturaviy o'zgarishlar darajasi va yadro atipiyasining mavjudligi yoki yo'qligiga bog'liq [6][8]. Ushbu omillar saraton rivojlanish xavfini baholash va yanada intensiv kuzatuv yoki davolash zarurligini aniqlashda muhim rol o'ynaydi [9]. Davolanmagan yoki yetarlicha samarali davolanmagan endometriy giperplaziyasi jiddiy asoratlarga, jumladan, eng xavflisi bo'lgan endometriy saratoni rivojlanishiga olib kelishi mumkin. Endometriy hujayralarining anormal proliferatsiyasi, ayniqsa murakkab yoki atipik giperplaziya holatlarida, malign o'zgarish xavfini oshiradi. Bundan tashqari, giperplaziyaning yetarli darajada davolanmasligi anormal bachadon qon ketishlarining kuchayishiga olib kelishi mumkin, bu esa ayolning takroran tibbiy yordamga murojaat qilishiga sabab bo'ladi [5]. Bemorning takroriy shikoyatlari kasallikning rivojlanayotganidan dalolat berishi mumkin, bu esa giperplaziyaning atipik shakllarga o'tishiga sabab bo'lib, yadro atipiyasi rivojlanish xavfini sezilarli darajada oshiradi va kelajakda endometriy saratoniga olib kelishi ehtimolini kuchaytiradi.

Xulosa: Endometriy giperplaziyasi, ayniqsa oddiy yoki atipik shaklda bo'lsa, endometriy saratonining rivojlanish xavfini oshiruvchi jiddiy omil hisoblanadi. Kasallikning progreslashishiga ta'sir etuvchi asosiy omillar to'qima arxitekturasi o'zgarishlarining darajasi va yadro atipiyasining mavjudligidir. Davolashning yetarlicha samarali olib borilmasligi kasallikning og'irlashishiga, malign transformatsiya xavfining ortishiga va bachadonning anormal qon ketishlari kabi jiddiy simptomlarning kuchayishiga sabab bo'lishi mumkin. Asoratlarning oldini olish va malign o'zgarish xavfini kamaytirish uchun o'z vaqtida diagnostika va adekvat terapiya muhim ahamiyat kasb etadi.

Foydalanilgan adabiyotlar:

1. Габидуллина Р.И., Смирнова Г.А., Нухбала Ф.Р. и др. Гиперпластические процессы эндометрия: современная тактика ведения пациенток. Гинекология. 2019; 21 (6): 53 - 58. DOI: 10.26442/20795696.2019.6.190472.
2. Лапина И.А., Доброхотова Ю.Э., Озолиня Л.А., Чирвон Т.Г., Таранов В.В. Комплексный подход к ведению пациенток с гиперплазией эндометрия и метаболическим синдромом // Гинекология. 2021. Т. 23, No 1. С. 55–61. doi: 10.26442/20795696.2021.1.200642
3. Оразов М.Р., Хамошина М.Б., Муллина И.А., Артеменко Ю.С. Гиперплазия эндометрия – от патогенеза к эффективной терапии. Акушерство и гинекология: Новости. Мнения. Обучения. 2021; 3 (33).
4. Саламова К.К., Сапрыкина Л.В., Рамазанова А.М., Мильдзихова З.Т., Столярова Е.В. Клинические особенности пациенток с гиперпластическими процессами эндометрия // Русский медицинский журнал. Мать и дитя. 2021. No 2. С. 124–129. doi: 10.32364/2618-8430-2021-4-2-124-129
5. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey. Geneva: World Health Organization; 2020.

6. Contreras NA, Sabadell J, Verdaguer P, Julià C, Fernández-Montolí ME. Fertility-Sparing Approaches in Atypical Endometrial Hyperplasia and Endometrial Cancer Patients: Current Evidence and Future Directions. Int J Mol Sci. 2022 Feb 25;23(5) [PMC free article] [PubMed]
7. Cree IA, White VA, Indave BI, Lokuhetty D. Revising the WHO classification: female genital tract tumours. Histopathology. 2020;76(1):151–156. doi: 10.1111/his.13977.
8. Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, et al. Global Cancer Observatory: Cancer Today. Lyon: International Agency for Research on Cancer; 2020 (https://gco.iarc.fr/today, accessed February 2021).
9. Kaushal D, Wilson RB. Molecular Mechanisms of Western Diet-Induced Obesity and Obesity-Related Carcinogenesis-A Narrative Review. Metabolites. 2023 May 21;13(5) [PMC free article] [PubMed]
10. Nees LK, Heublein S, Steinmacher S, Juhasz-Böss I, Brucker S, Tempfer CB, Wallwiener M. Endometrial hyperplasia as a risk factor of endometrial cancer. Arch Gynecol Obstet. 2022 Aug;306(2):407-421. [PMC free article] [PubMed]
11. Siegel RL, Miller KD, Wagle NS, Jemal A. Cancer statistics, 2023. CA Cancer J Clin. 2023 Jan;73(1):17-48. [PubMed]
12. Sviridova N.I., Tkachenko L.V., Yakhontova M.A., Gritsenko I.A., Maximov S.N., Puryaseva K.A. Endometrial hyperplastic processes: modern approaches to diagnosis and treatment. Obstetrics, Gynecology and Reproduction. 2024;18(1):83-95. (In Russ.) https://doi.org/10.17749/2313-7347/ob.gyn.rep.2023.464
13. Shen Y, Yang W, Liu J, Zhang Y. Minimally invasive approaches for the early detection of endometrial cancer. Mol Cancer. 2023 Mar 17;22(1):53. [PMC free article] [PubMed]

UO'K: 616.728.3-08:616.988.23

MIYA FALAJIGA CHALINGAN BOLALARDA TIZZANING BUKILUVCHI KONTRAKTURASINI ERTA ANIQLASH VA ASORATLARINI BARTARAF QILISH USULLARI

Eshmatov M.M.
Andijon davlat tibbiyot instituti

Rezyume. Miya falaji-bu bolaning intrauterin rivojlanishining turli davrlarida, tug'ruq paytida va hayotning birinchi haftasida miyaga zararli ta'sirlar tufayli asab tizimining jiddiy kasalligi. Zararli omillarga ta'sir qilish vaqti kasallikning rasmini ta'sir qiluvchi omillarning tabiatiga qaraganda ko'proq darajada aniqlaydi.

Kalit so'zlar: miya falaji, bukiluvchi kontrakturasi,tizza bo'g'imi, bolalik.

METHODS OF EARLY DETECTION AND PREVENTION OF FLEXION CONTRACTURE OF THE KNEE JOINT IN PATIENTS WITH CEREBRAL PALSY

Eshmatov M.M.
Andijan State Medical Institute

Resume. Cerebral palsy is a severe disease of the nervous system caused by harmful effects on the brain during various periods of intrauterine development of a child, during childbirth and for the first time in life. The time of exposure to harmful factors determines the picture of the disease to a greater extent than the nature of the influencing factors.

Keywords: cerebral palsy, flexor contracture, knee joint, childhood.

МЕТОДЫ РАННЕГО ВЫЯВЛЕНИЯ И ПРОФИЛАКТИКИ СГИБАТЕЛЬНОЙ КОНТРАКТУРЫ КОЛЕННОГО СУСТАВА У БОЛЬНЫХ ДЕТСКИМ ЦЕРЕБРАЛЬНЫМ ПАРАЛИЧОМ

Эшматов М.М.
Андижанский государственый медтцтнский институт

Резюме.Детский церебральный паралич - тяжёлое заболевание нервной системы, обусловленное вредоносными воздействиями на мозг в различные периоды внутриутробного развития ребёнка, во время родов и впервые недели жизни. Время воздействия вредоносных факторов определяет картину болезни в большей степени, чем характер воздействующих факторов.

Ключевая слова: детский церебральный паралич, сгибательная контрактура, коленный сустав, детской возраст.

Kirish. Kasallik nafaqat qo'pol motorli buzilishlar, balki normal harakatni rivojlantirish dasturining buzilishi bilan ham kechadi[2,6].

Miya falaji - bu markaziy asab tizimining kasalliklari guruhi bo'lib, miyaning motor zonalari va motor yo'llarining progressiv bo'lmagan shikastlanishi bilan tavsiflanadi [1,4].

Ixtisoslashgan adabiyotlarda [3] ta'kidlanishicha, miya yarim palsi miyaning motor tizimlarining shikastlanishidan kelib chiqadigan va markaziy asab tizimining mushaklarning ishlashini nazorat qilmasligi yoki yo'qligida namoyon bo'ladigan harakat buzilishlari guruhini

birlashtiradi. Miya falaji prenatal davrda yoki erta bolalik davrida etuklik bosqichida bo'lgan yetilmagan miyaning shikastlanishi natijasida yuzaga keladi [5].

Miya falajida vosita va hissiy tizimlar, vosita tizimining o'zi bo'g'inlari va ixtiyoriy va ixtiyoriy harakatlarni tartibga soluvchi tizimlar o'rtasidagi o'zaro ta'sir keskin buziladi. Miya falaji yuqori kortikal funktsiyalarning buzilishi, piramidal yo'llar va subkortikal (bazal) yadrolarning shikastlanish belgilari, miyaning harakat va nutq tizimlarining erta organik shikastlanishi bilan tavsiflanadi. Miya falaji polietiologik kasallikdir. Shu bilan birga, E.I. Gusev, A.N. Konovalov, G.S. Burd, miyadagi strukturaviy va funktsional o'zgarishlarni belgilovchi omillar, 80% hollarda homilaning intrauterin rivojlanishi davrida, 20% da - tug'ruqdan keyingi davrda.

Ushbu mualliflar sabablar orasida quyidagilarni ajratib ko'rsatishadi: · prenatal davrda toksik omillarga ta'sir qilish (infektsiyalar - gripp, qizilcha, toksoplazmoz); ·onaning somatik va endogen kasalliklari (tug'ma yurak nuqsonlari, qandli diabet va boshqalar); · ona va homila qonining immunologik mos kelmasligi (Rh faktor, ABO tizimi va boshqa antijenler bo'yicha); ·prenatal patologiya; ·yangi tug'ilgan chaqaloqlarning asfiksiyasi; · tug'ilish jarohati; · postnatal davrning neyroinfektsiyalari (meningit, turli xil etiologiyali meningoensefalit).

M.M Ringning fikriga ko'ra, miya yarim palsi rivojlanishining eng mumkin bo'lgan sababi. [3,7] quyidagilardir: erta tug'ilish (27-34 hafta, tug'ilish vazni 980-1550 gramm); homiladorlikning noqulay kursi (yuqumli yoki somatik patologiya); og'ir akusherlik tarixi.

Ikki tomonlama hemipleji - miya yarim palsining eng og'ir shakli bo'lib, N.I. Arkhipova [1], miyaning eng keng tarqalgan shikastlanishi, birinchi navbatda miya yarim sharlari bilan sodir bo'ladi. Bunday holda, barcha oyoq-qo'llar ta'sirlanadi, qo'llar oyoqlarga qaraganda ko'proq ta'sir qiladi. Ushbu toifadagi bolalar statik va harakat funktsiyalarini o'zlashtirmaydilar. Labirint va servikal tonik reflekslarning aniq va doimiy ta'siri bilan umumiy va nutq mushaklarida mushak tonusining keskin o'sishi kuzatiladi. Og'ir nutq va hissiy buzilishlar qayd etilgan. Aql-idrok sezilarli darajada kamayadi. Fikrlash sekin, inert, xotira zaiflashadi.

Ko'pincha disinhibisyon va eyforiya kuzatiladi. Konvulsiyalar kuzatiladi [4]. Spastik diplegiya - miya yarim palsining eng keng tarqalgan shakli bo'lib, unda markaziy vosita neyronining ikki tomonlama, ba'zan assimetrik, shikastlanishi yoki rivojlanmaganligi mavjud.

Miya falajining bu shaklida ham yuqori, ham pastki oyoq-qo'llar ta'sirlanadi, oyoqlar esa ko'proq ta'sir qiladi. Nutqning rivojlanishi kechiktiriladi. Nutqning buzilishi dizartriya va alaliya shaklida namoyon bo'ladi. Artikulyar va nafas olish muskullarining giperkinezlari nutqni xiralashtiradi va chayqaladi. Ko'p hollarda aql kamayadi.

Bolalar diqqatini o'qishga qaratishda qiynaladi, tezda charchaydi va chalg'itadi. Qoida tariqasida, ular o'yinni mustaqil ravishda tashkil eta olmaydilar va o'zlarini nazorat qilmaydilar.

Xotira kamayadi. Miya falajining bu shaklidagi konvulsiv paroksizmlar boshqa shakllarga qaraganda kamroq uchraydi. Miya falajining giperkinetik shakli miyaning subkortikal qismlarining shikastlanishi bilan bog'liq.

Umumiy va artikulyar vosita ko'nikmalarining buzilishi mushak tonusining o'zgaruvchan tabiati (distoniya), beixtiyor zo'ravonlik harakatlarining mavjudligi, vosita va nutq harakatlarining hissiy ekspressivligi yo'qligi bilan belgilanadi. Statik pozalar va pozitsiyalarni saqlashda etishmovchilik qayd etilgan. Harakat buzilishlari artikulyar, nafas olish mushaklari va halqum mushaklariga tarqaladigan, ovoz shakllanishi va nafas olishning o'ziga xos buzilishlarini keltirib chiqaradigan tonik spazmlar mavjudligi bilan kuchayadi. Nutqning buzilishi nutq rivojlanishining kechikishi, artikulyatsiya va nutq tezligining buzilishi bilan namoyon bo'ladi. Nutq sekin. Aql-idrok ozgina zarar ko'radi.

Konvulsiv paroksizmlar kam uchraydi. Miya falajining hemiparetik shakli markaziy vosita neyronining bir tomonlama shikastlanishi bilan tavsiflanadi. Bir tomonlama harakat buzilishlari kuzatiladi, pastki oyoqlarda va yuqori oyoqning proksimal qismlarida kamroq aniqlanadi, shuning uchun qo'lning yanada jiddiy shikastlanishi kuzatiladi.

Dizartriya shaklida nutqning buzilishi. Aql-idrok va xotira kamayadi. Diqqat beqaror, bolalar tezda charchashadi. Aqliy faoliyat kamayadi. Konvulsiyalar umumiy, kamroq tez-tez qisman. Miya falajining atonik-astatik shaklida serebellumning shikastlanishi va uning miyaning boshqa tuzilmalari bilan, birinchi navbatda, miya yarim korteksining old qismlari bilan aloqalari mavjud.

Umumiy va artikulyar vosita qobiliyatlarining buzilishi mushaklarning past tonusi, harakatlarning aniqligi va mutanosibligi yo'qligi, ularning sinxronligi va ritmining buzilishi bilan belgilanadi. Bolalar fiziologik me'yordan sezilarli darajada kechroq o'tirish, turish va yurishni boshlaydilar. Aql-idrok ozgina zarar ko'radi. Ba'zi hollarda o'rtacha giperkinez kuzatiladi [2].

Tadqiqot maqsadi. Miya falajli bemorlarda tizza fleksor kontrakturasini davolash usullarini takomillashtirish.

Materiallar va tadqiqot usullari. Ushbu maqsadga erishish uchun biz miya yarim palsi bo'lgan jami 65 bemorda tizza fleksiyon kontrakturasini davoladik.

Tadqiqot natijalari. Miya falajining og'ir shakllari bo'lgan o'smirlar va kattalardagi bemorlarda tiklanmaydigan son bo'g'imlari uchun palliativ aralashuvlar og'riqni nazorat qilish va oyoq-qo'lning g'ayritabiiy holatini yo'q qilish nuqtai nazaridan bir xil darajada samarali, ammo faqat femurning valgusni qo'llab-quvvatlovchi osteotomiyasi oyoq-qo'lni to'liq qo'llab-quvvatlagan holda bemorni passiv vertikallashtirish uchun sharoit yaratadi.

Ko'p bosqichli bir bosqichli aralashuvlar doirasida tizza va oyoq Bilagi zo'r bo'g'imlarning kontrakturalarini va oyoq deformatsiyasini tuzatish bilan birgalikda palliativ aralashuvlarni amalga oshirish bemorlarning funktsional imkoniyatlarini oshiradi, bu esa hayot sifatining oshishi bilan birga keladi.

Ushbu dissertatsiya tadqiqoti natijalarining ilmiy yangiligi shundan iboratki, 41 bemorni davolashning bevosita va masofaviy natijalarini o'rganish asosida miya yarim palsi bilan og'rigan bemorlarda rekonstruksiya qilinmaydigan son dislokatsiyasi uchun palliativ aralashuvlar uchun ko'rsatmalar, shuningdek, umumiy e'tirof etilganlarga qo'shimcha ravishda (bo'g'imning og'rig'ini yo'qotish, og'riq sindromini nazorat qilish) isbotlangan ic muolajalari, o'tirish holatiga tolerantlikni oshirish), pastki oyoqlarda qo'llab-quvvatlanadigan bemorni passiv vertikallashtirish uchun sharoit yaratishdir.

Palliativ aralashuvning ikkala turi (proksimal femurning artroplastik rezektsiyasi va proksimal qo'llab-quvvatlovchi osteotomiya) og'riqni nazorat qilish va oyoq-qo'lning noto'g'ri joylashishini tuzatish nuqtai nazaridan samaralidir. Ammo faqat femurning osteotomiyasini qo'llab-quvvatlash bemorni passiv, to'liq vertikallashtirish uchun sharoit yaratadi. Shu bilan birga, pastki oyoqning egilishi, oyoq Bilagi zo'r bo'g'imlarning kontrakturalari va oyoq deformatsiyasini bir vaqtning o'zida yo'q qilish pastki oyoq-qo'llarda qo'llab-quvvatlashni tiklash va hayot sifatini yaxshilash uchun zaruriy shartdir.

Bemorlarning funktsional imkoniyatlarining ortishi va hayot sifatining yaxshilanishi ortopedik muammolarni tuzatgandan so'ng erishildi, bu erda markaziy bo'g'in son bo'g'imiga palliativ jarrohlik aralashuvi edi.

Proksimal son suyagini qo'llab-quvvatlovchi osteotomiyaning tavsiya etilgan modifikatsiyasi klassik MakXeyl texnikasi bilan solishtirganda kestirib, o'g'irlash va fleksiyonning

kengaygan diapazonini ta'minlaydi, shu bilan birga oyoq-qo'llarni eksenel qo'llab-quvvatlash va bemorlarni vertikallashtirish imkoniyatini saqlab qoladi.

Ishning amaliy ahamiyati miya yarim falajining og'ir shakllari bilan og'rigan bemorlarda nevrologik kasalliklarning og'irligiga va vosita qobiliyatining prognoziga qarab ko'p darajali aralashuvlar doirasida son bo'g'imida palliativ jarrohlik usullarini differentsial qo'llash bo'yicha ko'rsatmalarni taklif qilish, asoslash va aniqlashdan iborat.

Ishda palliativ operatsiyalarning jarrohlik texnikasi, operatsiyalarni o'zgartirish, kutilayotgan davolash natijalari, yuzaga kelishi mumkin bo'lgan xatolar va asoratlar, shuningdek ularni oldini olish va tuzatish usullari batafsil ko'rsatilgan.

Xulosa. Ishning amaliy ahamiyati miya yarim falajining og'ir shakllari bilan og'rigan bemorlarda nevrologik kasalliklarning og'irligiga va vosita qobiliyatining prognoziga qarab ko'p darajali aralashuvlar doirasida son bo'g'imida palliativ jarrohlik usullarini differentsial qo'llash bo'yicha ko'rsatmalarni taklif qilish, asoslash va aniqlashdan iborat.

Ishda palliativ operatsiyalarning jarrohlik texnikasi, operatsiyalarni o'zgartirish, kutilayotgan davolash natijalari, yuzaga kelishi mumkin bo'lgan xatolar va asoratlar, shuningdek ularni oldini olish va tuzatish usullari batafsil ko'rsatilgan.

Foydalanilgan adabiyotlar:

1. Баковский В.Б., Головкин С.И. Оценка качества жизни детей после лечения переломов при сочетанной и множественной травме. Политравма. 2012. №3 стр. 11-16.
2. Гузева В.И., Куренков А.Л., Змановская В.А., Батышева Т.Т., Семенова К.А., Жеребцова В.А., Владыкина Л.Н., Попков Д.А. Детский церебральный паралич. В кн: Федеральное руководство по детской неврологии (под ред. В.И.Гузевой), Москва, ООО «МК», 2016, с.169-185.
3. Корольков А.И., Люткевич Н.И., Хащук А.В. Концептуальные подходы к диагностике и профилактическому лечению подвывиха и вывиха бедра у больных с детским церебральным параличом. Ортопедия, травматология и протезирование. 2013. №3 (592). С. 20-27.
4. Соснина С.Ф., Волосников Д.К. Качество жизни детей, проживающих в закрытом административно-территориальном образовании. Вопросы современной педиатрии. 2010. Т.9, №5, с.10-13.
5. Туренков С.В., Ахтямов И.Ф. Анализ результатов хирургического лечения диспластического коксартроза различными вариантами тотального эндопротезирования тазобедренного сустава. Гений ортопедии. 2003. № 2. С.19-23.
6. Умнов В.В. Тактика двухэтапного лечения сложных случаев нестабильности тазобедренного сустава у больных ДЦП. Ортопедия, травматология и восстановительная хирургия детского возраста. 2014. Т.2, №2, с.66-69.
7. Durkin MS, Benedict RE, Christensen D, Dubois LA, Fitzgerald RT, Kirby RS, Maenner MJ, Van Naarden Braun K, Wingate MS, Yeargin-Allsopp M. Prevalence of Cerebral Palsy among 8-Year-Old Children in 2010 and Preliminary Evidence of Trends in Its Relationship to Low Birthweight. Paediatr Perinat Epidemiol. 2016 Sep;30(5):496-510.

UO'K: 616-08-035

NOINFEKSION KASALLIKLARNING PROFILAKTIKASI

Djumaniyazova Z.F., Abidov F.O.
Toshkent tibbiyot akademiya Urganch filiali

Аннотация. Maqolada hozirgi kunga qadar yuqumli bo'lmagan kasalliklarning tarqalishi to'g'risidagi statistik ma'lumotlar keltirilgan, shuningdek ushbu kasalliklarning birlamchi, ikkilamchi va uchlamchi profilaktikasi bo'yicha tavsiyalar berilgan. Unda profilaktika va reabilitatsiya choralari, ularni amalga oshirish tartibi, ketma-ketligi, kim tomonidan qanday amalga oshirilishi keng yoritilgan, kim bilan bog'lanishi batafsil tavsiflangan. O'z vaqtida olib borilgan sanitariya-okartuv, targ'ibot va tushuntirish ishlari, emlash, havf omillarini vaqtida aniqlash hamda ularni bartaraf etish natijasida iqtisodiy samaradorlikka olib keladi.

Kalit so'zlar: *yuqumli bo'lmagan kasalliklar, statistik ma'lumotlar, birlamchi, ikkilamchi va uchlamchi profilaktika.*

PREVENTION OF NON-COMMUNICABLE DISEASES

Jumaniyazova Z.F., Abidov F.O.
Urgench Branch of the Tashkent Medical Academy

Abstract. The article presents statistical data on the prevalence of noncommunicable diseases to date, as well as recommendations for the primary, secondary and tertiary prevention of these diseases. It describes in detail preventive and rehabilitation measures, the order and sequence of their implementation, how they are carried out, and who can be contacted. Timely sanitation, propaganda and awareness-raising, vaccination, timely identification of risk factors and their elimination lead to economic efficiency.

Keywords: *non-communicable diseases, statistics, primary, secondary and tertiary prevention.*

ПРОФИЛАКТИКА НЕИНФЕКЦИОННЫХ ЗАБОЛЕВАНИЙ

Джуманиязова З.Ф., Абидов Ф.О.
Ургенчский филиал Ташкентской медицинской академии

Аннотация. В статье представлены статистические данные о распространенности неинфекционных заболеваний на сегодняшний день, а также приведены рекомендации по первичной, вторичной и третичной профилактике этих заболеваний. В нем подробно описаны профилактические и реабилитационные мероприятия, порядок, последовательность их проведения, как они проводятся, с кем можно связаться. Своевременная санитарная – просветительская работа, пропаганда и разъяснительная работа, вакцинация, своевременное выявление факторов риска и их устранение приводят к экономической эффективности.

Ключевые слова: *неинфекционные заболевания, статистические данные, первичная, вторичная и третичная профилактика.*

Yuqumli bo'lmagan kasalliklar - bu genetik, fiziologik, ekologik va xulq-atvor omillarining kombinatsiyasi natijasida kelib chiqadigan uzoq, sekin progressiv kechadigan surunkali patologiyalar. Bunday kasalliklarning asosiy turlariga yurak-qon tomir, onkologik, surunkali respirator kasalliklar va diabet kiradi [7].

82 foiz hollarda bu kasalliklar turmush darajasi past bo'lgan mamlakatlarda uchraydi. Ular dunyodagi barcha o'limlarning to'rtdan uch qismi (75 foiz) (43 milliondan ortiq) sababi hisoblanadi. 2021-yilda 70 yoshgacha vafot etganlar soni 18 millionga yetdi. O'n to'qqiz million bemor yurak xastaligidan, 10 million kishi - saraton kasalligidan, 4 million bemorlar- surunkali o'pka kasalligidan va 2 million kishi diabetik nefropatiyadan vafot etdi. O'lim sabablarining 80

foizdan ortig'ini yuqumli bo'lmagan kasalliklar tashkil qiladi [6]. Chekish, kam jismoniy faollik, muvozanatsiz ovqatlanish, noto'g'ri ovqatlanish odatlari, spirtli ichimliklarni iste'mol qilish va havoning ifloslanishi yuqumli bo'lmagan kasalliklarning rivojlanish ehtimoli bilan bevosita bog'liq bo'lgan salbiy xavf omillaridir [5]. Tamaki iste'moli va passiv chekishdan har yili 7,2 million odam vafot etadi. Kelajakda bu raqam ko'payishi kutilmoqda. Tuzni ortiqcha iste'mol qilish yiliga 4,1 million o'limga olib keladi. Jismoniy harakatsizlik yiliga 1,6 million odamni, spirtli ichimliklarni iste'mol qilish esa yiliga 3,3 million kishini o'ldiradi. Yuqumli bo'lmagan kasalliklarni kamaytirishning asosiy choralariga test, skrining, davolash va palliativ yordam kiradi. JSSTning ustuvor vazifalari yuqumli bo'lmagan kasalliklarni kamaytirish va hayot sifatini yaxshilashdir.

Ushbu ma'lumotlar jamiyatda yuqumli bo'lmagan kasalliklar muammosining ahamiyatini, ularni kamaytirish va jiddiy oqibatlarning oldini olish uchun profilaktika choralarini ko'rish zarurligini qo'llab-quvvatlaydi. Noinfeksion kasalliklar erta aniqlash hamda o'z vaqtida davolash samaradorligini oshirish uchun yuqori samarali profilaktika chora-tadbirlar birlamchi tibbiy yordam doirasida amalga oshirilishi mumkin. Dalillar shuni ko'rsatadiki, bunday tadbirlar foydali iqtisodiy sarmoyadir, chunki o'z vaqtida amalga oshirilsa, ular qimmatroq davolanishga bo'lgan ehtiyojni kamaytirishi mumkin [7]. Bunday choralar 2025 yilga kelib yuqumli bo'lmagan kasalliklardan erta o'limning nisbiy xavfini 25 foizga kamaytirish bo'yicha global maqsadga erishish uchun zarurdir [8].

Oldini olish - bu shaxsning yoki butun jamoaning sog'lig'ini saqlash va mustahkamlashga qaratilgan profilaktika va sog'lomlashtirish tadbirlari majmui. "Oldini olish" so'zi yunoncha "himoya"so'zidan kelib chiqqan. Profilaktikaning ikki turi mavjud bo’lib, ijtimoiy (ijtimoiy) va shaxsiy (individual) profilaktika mavjud.

Jamoat profilaktikasi - davlat tomonidan amalga oshiriladigan chora-tadbirlar: emlashni tashkil etish, aholini fluorografik tekshirish, odamlarning moddiy farovonligini yaxshilash, sog'lom turmush tarzini targ'ib qilish, aholini tibbiy ko'rikdan o'tkazish. Shaxsiy profilaktika - har bir kishiga bog'liq bo'lgan profilaktika choralari. Bular sanitariya madaniyati, shaxsiy gigiena, mavsumiy kiyim-kechak, oqilona ovqatlanish va boshqalar.

Shuningdek, birlamchi, ikkilamchi va uchinchi darajali profilaktika yoki reabilitatsiya mavjud. Birlamchi profilaktika - muayyan kasalliklar va sog'liq holatidagi og'ishlarning oldini olishga qaratilgan tibbiy va tibbiy bo'lmagan chora-tadbirlar majmui. Birlamchi profilaktika bir qator choralarni o'z ichiga oladi, jumladan:

- zararli ekologik omillarning inson tanasiga ta'sirini kamaytirish (atmosfera havosi, ichimlik suvi, tuproq, ovqatlanish sifatini, ish sharoitlarini yaxshilash, kundalik hayot va dam olish, psixososyal stressni kamaytirish va hayot sifatiga ta'sir qiluvchi boshqa omillar);
- sog'lom turmush tarzini shakllantirish;
- kasbiy shartli kasalliklar va shikastlanishlar, baxtsiz hodisalar, shuningdek mehnatga layoqatli yoshdagi o'lim holatlarining oldini olish;
- turli xil aholi guruhlarida immunoprofilaktikani o'tkazish.

Ikkilamchi profilaktika - bu kasalliklarni erta aniqlash, asoratlarning va kasallikning surunkaliga o’tishini oldini olishga qaratilgan tibbiy, ijtimoiy, sanitariya-gigiena, psixologik va boshqa chora-tadbirlar majmui.

Ikkilamchi profilaktika quyidagilarni o'z ichiga oladi:

- muayyan kasalliklar bilan bog'liq bilim va ko'nikmalarni (masalan: bronxial astma, qandli diabet, gipertoniya bilan og'rigan bemorlar uchun sog'liqni saqlash maktablari) etkazish maqsadida bemorlar va ularning oila a'zolarini sog'liqni saqlash bo'yicha o'qitish.;

- patologiya rivojlanishining dastlabki bosqichlarida kasalliklarni aniqlash uchun tibbiy ko'riklarni o'tkazish;
- profilaktik (hastalikning qaytalanishga qarshi) davolash kurslarini o'tkazish.

Uchinchi darajali profilaktika yoki reabilitatsiya [2] - bu tananing buzilgan fiziologik, ijtimoiy funktsiyalarini, bemorlar va nogironlarning hayot sifati, mehnat qobiliyatini tiklashga (yoki kompensatsiya qilishga) qaratilgan tibbiy, psixologik, pedagogik, ijtimoiy tadbirlar. Ushbu maqsadga erishish uchun qayta tiklash tibbiyot va reabilitatsiya markazlari, shuningdek, sanatoriy-kurort muassasalari tarmog'ini yaratish zarur.

Noinfeksion kasalliklarning oldini olish uchun sog'lom turmush tarzini olib borish, balansli ratsional ovqatlanish, jismoniy faoliyatga rioya qilish, aqliy va jismoniy mehnatni taqsimlash, kun, mehnat, uyquning to'g'ri rejimiga rioya qilish lozim. Oziq-ovqat to'liq va uning tarkibi muvozanatli bo'lishi kerak. Davlat rahbarlari 2030 yilga kelib profilaktika va davolash orqali yuqumli bo'lmagan kasalliklardan erta o'limni uchdan biriga kamaytirish uchun milliy darajada qat'iy choralar ko'rishga va'da berishdi.

Skrining tekshiruvlari, surunkali noinfeksion kasalliklarning diagnostikasi, davolash, bemorlarga palliativ yordam berish profilaktikaning tarkibiy qismidir [8]. Ushbu patologiyalarning oldini olishning bir necha darajalari mavjud: • individual; • guruhli; • populyatsion. Yuqumli bo'lmagan kasalliklar profilaktikasida 2 ta yondashuv farqlanadi:

1. Yuqumli bo'lmagan asosiy kasalliklarni targ'ib qilish va oldini olish, shu jumladan ularning rivojlanishi uchun xavf omillarining salbiy ta'sirini kamaytirish dasturlarini ishlab chiqish va amalga oshirish;

2. Yuqumli bo'lmagan kasalliklarning oldini olish va erta tashxislash choralari, xavf omillarni erta aniqlash, shu jumladan spirtli ichimliklarni suiiste'mol qilish, giyohvandlik vositalari va psixotrop moddalarni tibbiy nazoratsiz ishlatish, aniqlangan xavf omillarini tuzatish choralari, yuqumli bo'lmagan kasalliklarga chalingan va poliklinikalarda xavf guruhida bo'lgan fuqarolarning dispanser kuzatuvini tashkil etish.

Yuqumli bo'lmagan kasalliklarning oldini olish quyidagi tadbirlarni o'z ichiga oladi [4]:

* sog'liqni saqlash muassasalarida sanitariya-gigiyena ta'limi,

* sanitariya - ma'rifiy ishlar: oilaviy poliklinikalarda sog'liqni saqlash maktablarini, shu jumladan gipertoniya, bronxial astma, qandli diabet bilan og'rigan bemorlar uchun maktablarni tashkil etish;

* axborot-kommunikatsiya tadbirlari (seminarlar, treninglar), sog'lom turmush tarzini targib qilish, noinfeksion hastaliklar profilaktikasi va psixoaktiv, narkotik moddalardan foydalanish;

* sog'lom turmush tarzi asoslarining buzilishini o’rganish, yuqumli bo'lmagan patologiyalarni rivojlanishiga hissa qo'shadigan shart-sharoitlarni (chekish, spirtli ichimliklar, giyohvand moddalar va psixotrop dorilarni iste'mol qilish) aniqlash, har bir insonning sog'lig'iga xavf darajasini individual ravishda baholash;

* xavf omillarini bartaraf etish, ularning asoratlarini oldini olish (bemorlarni tor mutaxassislar yoki ixtisoslashtirilgan muassasalarga maslahat berishga yuborish);

* tibbiy ko'rik va yillik kasbiy tibbiy ko'riklarni o'tkazish;

* yuqumli bo'lmagan kasalliklar tashxisi qo'yilgan bemorlarni (shu jumladan yurak va qon tomirlari, o'pka, onkologik, qandli diabet patologiyalari bo'lgan odamlarni) dispanser kuzatuvini tashkil etish. Dispanserizatsiyaning [1] birinchi bosqichi natijalariga ko'ra, terapevt bemorning uchta sog'liq guruhidan qaysi biriga tegishli ekanligini aniqlaydi, agar kerak bo'lsa, uni tibbiy kuzatuv taktikasini rejalashtiradi va dispanserizatsiyaning ikkinchi bosqichiga yuboradi.

Poliklinikalar (ambulatoriya) va shifoxonalarda (statsionar, kunduzgi shifoxonalarda) noinfeksion kasalliklar profilaktikasi birlamchi tibbiy yordam ko'rsatish doirasida amalga oshiriladi. Ushbu bosqichda yuqumli bo'lmagan kasalliklar profilaktikasi terapevtlar, oilaviy shifokorlar, pediatrlar tomonidan boshqa mutaxassisning yo'llanmasi bo'yicha yoki bemorning o'z murojati paytida amalga oshiriladi. Ular maslahat berish, tashxislash, profilaktik kabinetlarga, bo'limlarga, tibbiyot muassasalarga, topilgan kasalliklar, holat, xavf omillari bo'yicha tor mutaxassislarga yuborisg orqali aniqlaydi va rivojlanish havfini bartaraf etadi

Birlamchi ixtisoslashtirilgan tibbiy yordamda yuqumli bo'lmagan kasalliklarning oldini olish. Ushbu darajada yuqumli bo'lmagan kasalliklar profilaktikasi mutaxassislar tomonidan boshqa tibbiyot xodimlarining yo'llanmasi asosida yoki bemorning o'z murojati paytida, shuningdek bemorlarning holatini kuzatish orqali amalga oshiriladi. Mutaxassislar tibbiy muassasaning yoki uning filiallarining profiliga qarab yuqumli bo'lmagan patologiyalarning oldini olishadi. Shuningdek, ular bemorlarga sog'lom turmush tarzi asoslari to'g'risida ma'lumot berishadi va kasallik rivojlanish xavfiga ta'sir qiluvchi asosiy salbiy omillarni bartaraf qilishadi.

Agar kerak bo'lsa, bemorlar ixtisoslashgan tibbiyot muassasalarida profilaktika bo'yicha mutaxassislarga yuboriladi.

Yuqumli bo'lmagan kasalliklarning oldini olish:

- Sog'lom ovqatlanish;
- Ortiqcha vaznni kamaytirish;
- Muntazam jismoniy faollik;
- Yomon odatlardan voz kechish;
- Muntazam tibbiy ko'riklar;
- Stress bilan kurashish;
- Qon bosimi, puls, shakar va xolesterin miqdorini nazorat qilish, tana vazni indeksini bilish, semirish darajasi haqida ma'lumot bemorlarga tanasining holatini, kasalliklarning rivojlanish xavfini tushunishga va ularni kamaytirish uchun qanday choralar ko'rish kerakligini bilishga yordam beradi.

Ijtimoiy-iqtisodiy rivojlanishning o'ziga xos xususiyatlari, aholining qarishi tomon demografik siljishlar, ekologik o'zgarishlar aholi salomatligini muhofaza qilish va mustahkamlash, noinfeksion hastaliklar rolining pasayishi hamda ularning inson va jamiyat uchun ahamiyatini oshirish bilan bog'liq yangi muammolarni shakllantiradi.

O'zbekiston Respublikasi sog'liqni saqlash vazirligining buyrug'i bilan yuqumli bo'lmagan kasalliklarning oldini olish va sog'liqni saqlash muassasalarida sog'lom turmush tarzini shakllantirish bo'yicha tadbirlarni tashkil etish va amalga oshirish tartibi tasdiqlandi [1]. Ushbu hujjat yurak-qon tomir, bronxopulmonal, saraton va diabetdan o'limni kamaytirishga qaratilgan chora-tadbirlar uchun me'yoriy-huquqiy bazani sezilarli darajada mustahkamlaydi. Buyruqda profilaktika tibbiy ko'riklari va yillik tibbiy ko'riklar doirasida sog'lom turmush tarzini targ'ib qilish, kasalliklar va ularning rivojlanishi uchun xavf omillarini tashxislash, shuningdek klinikalarda bemorlarni tibbiy ko'rikdan o'tkazish choralari ko'zda tutilgan.

Shuningdek, unda bolalar va o'smirlar o'rtasida yuqumli bo'lmagan kasalliklar profilaktikasi va sog'lom turmush tarzini targ'ib qilish bilan bog'liq asosiy masalalarni ko'rib chiqadi. Dasturda noto'g'ri ovqatlanish, to'yib ovqatlanmaslik va chekish kabi salbiy omillarni bartaraf etishga katta e'tibor qaratilmoqda [5]. Dastur aholiga miyokard infarkti, o'tkir miya qon aylanishining buzilishi, o'tkir yurak etishmovchiligi va to'satdan koronar o'lim holatlarida birinchi yordam ko'rsatish ko'nikmalarini o'rgatishni ta'minlaydi. Mutaxassislarning fikriga ko'ra, bu

kasalliklar eng ko'p o'limga sabab bo'ladi va aholi ushbu kasalliklar uchun oddiy birinchi yordamni qanday ko'rsatishni bilishi kerak. Yuqumli bo'lmagan kasalliklarning inson va jamiyatga ta'sirini kamaytirish sog'liqni saqlash, moliya, transport, ta'lim, qishloq xo'jaligi va rejalashtirish kabi barcha sohalarni o'z ichiga olgan keng qamrovli yondashuvni talab qiladi, ular noinfeksion hastaliklar xavfini kamaytirish, oldini olish va davolash choralarini amalga oshirishga yordam berish uchun birgalikda ishlashi kerak [8]. Ushbu tadbirlarni o'z vaqtida amalga oshirish, amaliyot shuni ko'rsatadiki, qimmatroq davolanishga bo'lgan ehtiyojni kamaytiradi, bu esa sezilarli iqtisodiy samaradorlikka [3] olib keladi.

Foydalangan adabiyotlar:

1. Министерство здравоохранения РУз. Отчёт о диспансеризации населения. Ташкент, 2023.
2. Anderson L. et al. Cardiac Rehabilitation. *Cochrane Database*, 2021.
3. Bloom D.E. et al. The Global Economic Burden of Noncommunicable Diseases. *Harvard School of Public Health*, 2020.
4. GBD 2021 Collaborators. Global burden of 369 diseases and injuries in 204 countries. *The Lancet*, 2023.
5. GBD 2021 Risk Factors Collaborators. Global burden of 87 risk factors. *The Lancet*, 2023.
6. WHO. Global status report on noncommunicable diseases. Geneva, 2022.
7. WHO. Noncommunicable diseases: Key facts. 2023
8. WHO. Saving Lives, Spending Less: The Case for Investing in NCD Prevention. 2021.

UO'K: 616-08-035

ERTA TUG'ILGAN CHAQALOQLARDAGI NEKROTIK ENTEROKOLITLARNING KLINIK- ANAMNESTIK TAHLILI

Chartakov D.K., Madyarova M.A.
Andijon davlat tibbiyot instituti

Annotatsiya: Ushbu maqolada 2020 yildan 2024 yilgacha bo'lgan davrda nekrotik enterokolit (NEK) bilan kasallangan 30 nafar chaqaloqni davolash natijalari keltirilgan. Kasallik tarixlarining retrospektiv tahlili o'tkazildi, bunda homiladorlik va tug'ruqning kechishi, ushbu kasallikning rivojlanish xavf omillari: yo'ldosh nuqsonlar, ovqatlanishning tabiati, klinikasi, nekrotik enterokolit namoyon bo'lishidan oldin laboratoriya, instrumental tekshirish usullari ma'lumotlari, tashxis qo'yish muddatlari, bajarilgan jarrohlik aralashuvlari turlari, antibakterial terapiya taktikasi ko'rib chiqildi, davolash natijalari o'rganildi.

Kalit so'zlari: *chaqaloq, chala tug'ilgan bolalar, nekrotik enterokolit, xavf omillari, tashxislash, davolash.*

CLINICAL AND ANAMNESTIC ANALYSIS OF NECROTIC ENTEROCOLITIS IN PREMATURE INFANTS

Chartakov D.K., Madyarova M.A.
Andijan State Medical Institute

Annotation: This article presents the results of treatment for 30 newborns with necrotic enterocolitis (NEC) from 2020 to 2024. A retrospective analysis of medical records was conducted, in the process of which data on the course of pregnancy and childbirth, risk factors for the development of this disease were considered: accompanying defects, the nature of nutrition, clinical presentations, data from laboratory and instrumental research methods before the manifestation of necrotic enterokolitis, diagnostic timing, types of surgical interventions performed, antibacterial therapy tactics, treatment results and outcomes were studied.

Keywords: *newborn, premature infants, necrotic enterokolitis, risk factors, diagnosis, treatment.*

КЛИНИКО-АНАМНЕСТИЧЕСКИЙ АНАЛИЗ НЕКРОТИЧЕСКОГО ЭНТЕРОКОЛИТА У НЕДОНОШЕННЫХ ДЕТЕЙ

Чартаков Д.К., Мадярова М.А.
Андижанский государственый медтцтнский институт

Аннотация: В настоящей статье приводятся результаты лечения 30 новорожденных по поводу некротического энтероколита (НЭК) за период с 2020 по 2024гг. Проведён ретроспективный анализ историй болезни, в процессе которого рассмотрены данные течения беременности и родов, факторы риска развития данного заболевания: сопутствующие пороки, характер питания, клиника, данные лабораторных, инструментальных методов исследования перед манифестацией некротического энтероколита, сроки установки диагноза, виды выполненных оперативных вмешательств, тактики антибактериальной терапии, изучены результаты и исход лечения. Описан клинический опыт и лечебная тактика по данной патологии. На основании полученных данных можно прогнозировать дальнейшее течение заболевания и изменить протокол лечения пациентов.

Ключевые слова*: новорожденный, недоношенные дети, некротический энтероколит, факторы риска, диагностика, лечение.*

Dolzarbligi: Nekrotik enterokolit (NEK, MKB-10 bo'yicha kod - R77) – chaqaloqlik davridagi og'ir kasallik bo'lib, u ichak devorining yallig'lanishi va keyinchalik uning nekrozlanishi hisoblanadi [1, 2, 30].

Yangi tug'ilgan chaqaloqlarda nekrotik enterokolit bilan kasallanish, turli mualiflarning ma'lumotlariga ko'ra har 1000 yangi tug'ilgan chaqoloqga 0,3-3 tagacha to'g'ri keladi [4, 5] va ularning soni keyingi yillarda ko'payib borish tendensiyasi kuzatilmoqda [6, 7, 8, 9]. Bu neonatologiya va reanimatologiyaning jadal rivojlanishi bilan bog'liq bo'lib, bu juda erta tug'ilgan bolalarni parvarish qilish muammolari bilan bog'liq bo'ladi. Bu bolalarning ko'pchiligi (90%) tana vazni 1500g-dan kam bo'lgan chala tug'ilgan chaqaloqlar bo'lib, shuning uchun nekrotik enterokolitni "yashab qolgan chala tug'ilgan bolalar kasalligi" deb xam ataydilar [2, 6, 8].

Kasallikning kelib chiqishi va rivojlanishining turli xil xavf omillariga qaramay, ularni birlashtirgan umumiy belgi yangi tug'ilgan chaqaloqlarda ichak qon oqimini kamaytirish qobiliyatidir. Surunkali bachadon ichi gipoksiyasini o'tkazgan chaqaloqlarda hayotiy muhim a'zolardagi metabolik jarayonlarni buzilishlari kompensator-moslashuv reaksiyalarini izdan chiqarishi, moslashuvning buzilishiga va turli patologik jarayonlar rivojlanishiga olib keladi.

Patologik jarayonning yonbosh ichakda ko'p kuzatilishi yangi tug'ilgan chaqaloqlarda ichak gemodinamikasining o'ziga xos xususiyatlari bilan izohlanadi. Enteral oziqlanish ko'pincha NEK rivojlanadigan yonbosh ichak tomirlaridagi qon oqimini pasaytiradi [3].

Chaqaloqlar va chala tug'ilgan chaqaloqlarning intensiv terapiyasi va jarrohligining rivojlanishiga qaramay, hozirgi kungacha nekrotik enterokolitdan o'lim darajasi yuqoriligicha qolmoqda [1, 5, 9].

Nekrotik enterokolit boshlanishi ehtimolini yuzaga keltiruvchi patologik holatlar va etiologik omillar majmui shifokorlarni hushyorlikga, kasallikning klinik simptomlari paydo bo'lishidan oldinroq enterokolitga davo tayinlashni belgilashga yo'naltiradi.

Biz 2020 yildan 2024 yilgacha bo'lgan davrda ushbu kasallikning bo'yicha jarrohlik amaliyoti o'tkazilgan chaqaloqlarda nekrotik enterokolitning namoyon bo'lishiga olib kelgan klinik anamnestik ma'lumotlarni o'rgandik.

Tadqiqot maqsadi:neonatal va postneonatal davrda NEK bilan tug'ilgan chaqaloqlardagi klinik anamnestik ma'lumotlarni o'rganish.

Tadqiqot materiallari va usullari. 2020 yildan 2024 yilgacha bo'lgan davrda Andijon viloyati ko'p tarmoqli bolalar klinik shifoxonasi jarroxlik bo'limida nekrotik enterokolit tashxisi bilan operatsiya qilingan bemorlarning kasallik tarixlari va tashrix bayonnomalari, biopsiya materiallarini patogistologik tadqiqot natijalari retrospektiv tahlili o'tkazildi.

Tekshirilayotgan davrda nekrotik enterokolit tufayli 30ta yangi tug'ilgan chaqaloq tashrix qilingan, shularning 72% ini chala tug'ilgan chaqaloqlar tashkil qildi. Tadqiqot guruhidagi bemorlarning aksariyati o'g'il bolalar (71%) tashkil etdi. NEK rivojlanishining xavf omillarini o'rganishda anamnestik ma'lumotlar, tug'ruq jarayoni, enteral ovqatlanishni xususiyatlari, laboratoriya, instrumental tadqiqot usullari natijalari, shuningdek, antibakterial terapiya, jarrohlik

aralashuvi hajmi va kasallikning keyingi natijalari inobatga olindi. Olingan ma'lumotlarning statistik tahlil qilindi.

Tadqiqot natijalari va muhokama: klinik anamnestik ma'lumotlar o'rganilganda 64,5% hollarda homiladorlik - gestoz, anemiya, nefropatiya, toksikoz, homiladorlikni to'xtatish xavfi, turli infeksion kasalliklar (O'RVI, o'tkir bronxit, o'tkir va surunkali piyelonefrit) fonida kechgan, shu jumladan, bachadon ichi infeksiyasi rivojlanish xavfi 32% tashkil etgan. Aksariyat hollarda nekrotik enterokolit bola hayotining 2 va undan ortiq haftasida yoki hayotining dastlabki 3 kunida paydo bo'lgan.

Homilaning ona qornidagi gipoksiyasi bo'lgan bolalar 35,5%, ona qornidagi rivojlanishning kechikishi 6,7% tashkil etdi.

Tug'ilganda ekstremal kam vaznli chaqaloqlar 37% (1000g dan kam), juda kam vaznli chaqaloqlar 16% (1500-1000 g), 47% esa vazni 1500 - 2500 g gacha bo'lgan chaqaloqlar tashkil etdi. Chala tug'ilgan chaqaloqlarning 50% noraso bo'lganligi sababli to'liq parenteral oziqlanishda bo'lgan, 34% hollarda sog'ilgan ko'krak suti bilan enteral oziqlantirishga harakat qilingan.

NEK patogenezining yetakchi omilini hisobga olgan holda kasalikni gemodinamik, aralash, infeksion-yallig'lanish kechishli guruxlarga bo'lingan.

Bunda 42% bemorda nekrotik enterokolit - bola qornida infeksiyalangan septik holat fonida boshlangan. Ichaklardagi yallig'lanish reaksiyasi patogenezida markaziy gemodinamikaning buzilishi 16% hollarda yetakchi mexanizm bo'lgan. 42% hollarda esa NEKdagi yallig'lanish reaksiyasining patogenezi aralash xarakterga ega bo'lgan. Etiologik agent sifatida aksariyat hollarda bakteriologik tekshirishlarda grammmanfiy flora aniqlangan.

Antibakterial terapiya nekrotik enterokolitni davolash bo'yicha klinik tavsiyalarga muvofiq - yarim sintetik penitsillinlar (ampitsillin) va aminoglikozidlar kombinatsiyasi tug'ilgandan keyingi birinchi sutkada enterokolitning xavf omillari mavjud bo'lganda buyurilgan.

Ichak trakti disfunksiyasi dinamik ileus ko'rinishida namoyon bo'lganda metronidazol ko'llanilgan, bolalar jarrohi tavsiyasi bo'yicha qo'shimcha ravishda qorin bo'shlig'ining ultratovush tekshiruvi va qorin bo'shlig'ining umumiy rentgenografiyasi o'tkazilgan. Kasallik kechishining bu bosqichida aksariyat hollarda qorin bo'shlig'ida terlash aniqlanmagan, rentgenologik tekshirishda ichakning gaz bilan notekis to'lishi qayd etilgan. Bu NEK rivojlanishi xavf tug'diruvchi holat sifatida baholanib, antibakterial terapiyaga aminoglikozidlar yoki metronidazol qo'shilgan, enteral ovqatlanish istisno qilingan.

Dinamikada, nazorat tasvirlarida "statik halqa" simptomi qo'shilganda, jarroh tomonidan kunlik kuzatuv o'tkazilgan, klinik holat laboratoriya o'zgarishlari bilan birgalikda baholanib, leykopeniya, trombotsitopeniyaning mavjudligi nekrotik enterokolit sifatida tavsiflangan. Kasallikning bu bosqichida laparotsentez o'rnatish tavsiya etilgan. Chaqaloqning ahvoli yaxshilanmaganda jarrohlik yo'li bilan davolash uchun ko'rsatmalar ko'rib chiqilgan.

Ko'p hollarda yallig'lanish yonbosh ichakda bo'lib, ba'zan chambar ichakning yarmi zararlangan.

Ichak teshilishi, infeksion-toksik shok va poliorgan yetishmovchiligi belgilari rivojlanmasdan oldin ichakning zararlangan qismini o'z vaqtida rezeksiya qilish NEK bilan tug'ilgan chaqaloqning omon qolishiga imkon bergan. Yangi tug'ilgan chaqaloqda perforativ peritonit klinikasi mavjud bo'lganda jarrohlik aralashuvining birinchi bosqichida laparotsentez o'rnatish va laparotomiyaga intensiv tayyorgarlik ko'rish ko'rsatilgan. Bu qorin bo'shlig'i bosimini pasaytirishga va bemor holatini barqarorlashtirishga imkon bergan.

Nekrotik enterokolitda jarrohlik yo'li bilan zararlangan joylar rezeksiya qilingan. Peritonit va bemorning septik holati fonida ichaklararo anastomozlar qo'yish kam xollarda bajarilgan, asosiy ko'rsatma - och ichak darajasida yuqori joylashgan perforatsiya bo'lgan.

Olingan ma'lumotlar (gestatsiya yoshi va tug'ilgandagi tana vazni) statistik ishonchlilik uchun tahlil qilindi. Belgilarning taqsimlanishi turining normal taqsimot qonuniga muvofiqligini tahlil qilish Shapiro-Uilk mezonidan foydalangan holda amalga oshirildi, bunda $r<0,05$ belgining taqsimlanishi normadan farq qiladi deb hisoblandi, guruhlar o'rtasidagi farqlarni baholash uchun Styudentning parametrik t-mezoni qo'llanildi.

G1 va G2 guruhlari bo'yicha olingan natijalar $p = 0.0175$ ($p<0.05$) ijobiy va o'lim bilan yakunlangan guruhlarda homiladorlik yoshi bo'yicha sezilarli farq borligini tasdiqlashga imkon berdi. Shuningdek, M1 va M2 guruhlarni taqqoslaganda $p = 0,0048$ ($p<0,05$) ijobiy va o'lim bilan yakunlangan guruhlarda tug'ilishdagi tana vazni bo'yicha sezilarli farq borligi aniqlandi. Bu bolaning tug'ilgandagi vazni va gestatsiya muddati bemorni davolashning pirovard natijasiga bevosita bog'liq degan xulosaga kelish imkonini berdi.

Nekrotik enterokolitda tashxislash mezonlari va davolash taktikasini optimallashtirish o'rganilayotgan davrda chala tug'ilgan chaqaloqlar orasida o'lim ko'rsatkichini 2 barobarga 66,7% dan 33,3% gacha kamaytirish imkonini berdi.

Xulosa. Nekrotik enterokolit ko'p omilli kasallik bo'lib, statistik jihatdan homiladorlik muddati, tug'ilgandagi tana vazni va kasallikning keyingi rivojlanishi o'rtasida to'g'ridan-to'g'ri bog'liqlik mavjudligi aniqlandi. Bemorlarni davolashning klinik tajribasiga asoslanib olingan ma'lumotlar kasallikning keyingi kechishini bashorat qilish va yangi tug'ilgan chaqaloqlarda enterokolit rivojlanishi uchun xavf omillarini inobatga olgan xolda medikamentoz terapiyani o'z vaqtida korreksiya qilish mumkin bo'ladi.

Dinamik ileus simptomi qo'shilganda yangi tug'ilgan chaqaloqlar yashovchanligini yaxshilash uchun perforativ peritonit boshlanishidan oldin jarrohlik yo'li bilan davolashni erta asoslash maqsadida chuqurroq diagnostik va laboratoriya tekshirishlar o'tkazish tavsiya etiladi.

Foydalanilgan adabiyotlar:

1. Карпова, И.Ю. Некротический энтероколит у новорожденных: клиника, диагностика и лечение / И.Ю. Карпова // Современные технологии в медицине. 2022. № 2. С. 138-142.

2. Кучеров, Ю.И. Диагностика и лечение некротического энтероколита у недоношенных / Ю.И. Кучеров, Ю.В. Жиркова, Т.Н. Шишкина, И.А. Михалев, А.В. Арса, Л.И. Чеботаева // Российский вестник перинатологии и педиатрии. 2020. № 59 (6). С. 18-24.
3. Подкаменев, В.В. Язвенно-некротический энтероколит у новорожденных: монография / В.В. Подкаменев, Е.Г. Григорьев. Иркутск, 2019. С. 244.
4. Разумовский, А.Ю. Некротический энтероколит в свете изменения критериев живорожденности / А.Ю. Разумовский, Н.В. Полунина, В.А. Саввина, А.И. Яковлева, А.Р. Варфоломеев, В.Н. Николаев // Вопросы практической педиатрии. 2019. Т. 9, №3. С. 56-59.
5. Саввина, В.А. Изменение лечебной тактики при перфорациях ЖКТ у новорожденных / В.А. Саввина, А.Р. Варфоломеев, В.Н. Николаев, А.Ю. Тарасов // Российский вестник перинатологии и педиатрии. 2021. № 1. С. 93-95.
6. Argumosa, Salazar Y. Necrotizing enterocolitis and intestinal perforation in very low weigth premature infants: which is the best surgical option? / Argumosa, Salazar Y., Fernandez Cordoba M.S., GonzalvezPiniera J. et al. // Cir. Pediatr. 2021. № 24 (3). P. 142-5.
7. Corona, Bellostas C. Role of laparoscopy in premature infants with suspicion of necrotizing enterocolitis / Corona Bellostas C., Canizo Lopez A., TardaguilaCaivo A.R. et al. // Cir. Pediatr. 2019. № 24 (3). P. 151-5.
8. Duro D., Risk factors for intestinal failure in infants with necrotizing enterocolitis: a Glaser Pediatric Research Network study / Duro D., Kalish L.A., Johnston P. et al. // J. Pediatr. 2020. № 157 (2). P. 203-208.
9. Eltayeb, A.A. The role of surgery in management of necrotizing enterocolitis / Eltayeb A.A., Mostafa M.M., Ibrahim N.H. et al. // Int. J. Surg. 2019. № 8 (6). P. 458-61.
10. Newborn surgery. 3-d ed. / Ed. P. Puri. London: Hodder and Stoughton, 2019. P. 1044.

UO'K: 616-08-035

ERTA TUG'ILGAN CHAQALOQLARDAGI NEKROTIK ENTEROKOLIT (adabiyotlar sharxi)

Chartakov D.K.
Andijon davlat tibbiyot instituti

Annotatsiya: Yangi tug'ilgan chaqaloqlarda nekrotik enterokolit (NEK) ichakning yallig'lanish kasalligi bo'lib, neonatal gastroenterologiyada eng xavfli kasalliklardan biri hisoblanadi. Nekrozlovchi enterokolit bilan kasallanishning o'rtacha xolati 2,4:1000 yangi tug'ilgan chaqaloqlarni (1 dan 10:1000 gacha) yoki neonatal intensiv terapiya bo'limlariga yotqizilgan umumiy bolalarning taxminan 2,1% (1 dan 7% gacha) ni tashkil qiladi. Kasallikning uchrashi bola tug'ilganda gestatsiya muddatining qisqarishi bilan ortadi. NEK bilan kasallanishning 10-20% muddatida tug'ilgan chaqaloqlar ulushiga to'g'ri keladi. So'nggi yillarda nekrotik enterokolit tana vazni kichik bo'lgan erta tug'ilgan chaqaloqlar orasida kasallanish va o'limning asosiy sabablaridan biri bo'lib qolmoqda. Kasallikning tashxis qo'yish qiyin bo'lgan dastlabki bosqichlarida eng muhim diagnostika omillarini faol o'rganish neonatologlar va bolalar jarroxlarini birinchi vazifalaridan biri bo'lib, davolash usuli tanlash muhim vazifa bo'lib kolmokda.

Kalit so'zlari: *erta tug'ilgan chaqaloqlar, nekrotik enterokolit.*

NECROTIC ENTEROCOLITIS OF NEWBORNS (literature review rxi)

Chartakov D.K.
Andijan State Medical Institute

Annotation: Necrotizing enterocolitis (NEC) is a neonatal inflammatory bowel disease and is one of the most threatening disease in neonatal gastroenterology. The average incidence of necrotizing enterocolitis 2,4:1000 infants (1 to 10:1000), or about 2.1% (from 1 to 7%) of the total number of children entering the neonatal intensive care unit. The incidence of disease increases with decreasing gestational age at birth. The share of full-term infants accounts for 10-20% of cases of NEC. In recent years, necrotic enterocolitis has remained one of the leading causes of morbidity and mortality among premature infants with low body weight. The active study of the most important diagnostic factors in the early stages of the disease, which is difficult to diagnose, the choice of a treatment method is one of the first tasks of neonatologists and surgeons of the children's department.

Key words: *premature babies, necrotic enterocolitis*

НЕКРОТИЧЕСКИЙ ЭНТЕРОКОЛИТ НОВОРОЖДЕННЫХ (обзор литературы)

Чартаков Д.К.
Андижанский государственый медтцтнский институт

Аннотация: Некротизирующий энтероколит (НЭК) новорожденных представляет собой воспалительное заболевание кишечника и является одним из самых грозных заболеваний в неонатальной гастроэнтерологии. Средняя частота заболеваемости некротизирующим энтероколитом составляет 2,4:1000 новорожденных (от 1 до 10:1000) или около 2,1% (от 1 до 7%) от общего числа детей, поступающих в неонатальные отделения интенсивной терапии. Частота встречаемости заболевания нарастает с уменьшением срока гестации ребенка при рождении. На долю доношенных новорожденных приходится 10-20% случаев заболевания НЕК. В последние годы некротический энтероколит остается одной из ведущих причин заболеваемости и смертности среди недоношенных детей с малой массой тела. Активное изучение наиболее важных диагностических факторов на ранних стадиях заболевания, которое трудно диагностировать, выбор метода лечения является одной из первых задач неонатологов и хирургов детского отделения.

Ключевые слова: недоношенные дети, некротический энтероколит

Dolzarbligi: Nekrotik enterokolit (NEK) erta tug'ilgan chaqaloqlarda oshqozon-ichak kasalliklarining eng keng tarqalgan sababidir. NEK erta yoshdagi bolalarda jismoniy rivojlanishning sezilarli salbiy natijalari bilan bog'liq. Diagnostika, profilaktika va boshqarish strategiyalaridagi sezilarli yutuqlarga qaramay, kam vaznli yangi tug'ilgan chaqaloqlarda, NEK va uning asoratlari bilan bog'liq o'lim darajasi yuqori bo'lib qolmoqda. Nekrotik enterokolit to'satdan boshlanib, tez progressiv klinik kechishga ega va hayotning dastlabki 2-8 xaftaligida erta tug'ilgan chaqaloqlar o'limning asosiy sababidir [1].

Kasal bolalarning aksariyati tana vazni 1500g dan kam bo'lgan erta tug'ilgan chaqaloqlardir, shuning uchun NEK yashab qolgan erta tug'ilgan chaqaloqlarning kasalligi deb ataladi. Bir qator mualliflarning fikriga ko'ra, tana vazni <1500 g bo'lgan chaqaloqlarda kasallanish darajasi taxminan 7%, halokatli natijalar bilan esa 30% tashkil etadi. Shu tufayli bilan NEK shoshilinch yordamni va ko'pincha jarrohlik davolashni talab qiladigan kasallik sifatida qaraladi [2].

Epidemiologiyaci: NEK mustaqil kasallik sifatida dastlab adabiyotda K.Schmid tomonidan tasvirlangan va K. Quasar 1953 yilda yarali nekrotik enterokolit nozologik birlik sifatida tavsiya etilgan (enterocolitis ulcerosa necrotica). Hozirgi vaqtda NEK yangi tug'ilgan chaqaloqlarda oshqozon-ichak traktining eng keng tarqalgan jarrohlik kasalliklaridan biri hisoblanib kelinmoqda [8].

Neonatal intensiv terapiya sohasidagi so'nggi yutuqlar tufayli juda kam tana vazniga ega bo'lgan erta yashab qolgan chaqoloqlarning miqdori oshdi va unga parallel NEK rivojlanishiga moyil bo'lgan yangi tug'ilgan chaqaloqlar soni ko'paydi. Bu kasallik kam tana vazni bilan tug'ilgan barcha chaqaloqlarning 1- 5% da kuzatiladi [9].

Neonatal parvarishdagi muvaffaqiyatlarga qaramay, NEK hali ham chaqaloqlar o'limining muhim sababi hisoblanadi. Turli ma'lumotlarga ko'ra, NEK bilan kasallangan bolalarning 20-40% jarrohlik davolanishni talab qiladi va bu bolalar orasida tashrixdan keyingi o'lim 50% gacha kuzatiladi [8].

Nekrotik enterokolit bilan kasallanish o'rtacha 2,4:1000 yangi tug'ilgan chaqaloqni (1 - 10:1000 gacha) yoki neonatal intensiv terapiya bo'limlariga qabul qilingan bolalar umumiy sonining taxminan 2,1%ni (1-7%) tashkil qiladi. Kasallik bilan kasallanish tug'ilish paytida bolaning gestatsion davrining pasayishi bilan ortadi. To'liq muddatli chaqaloqlarda NEK 10-20% kuzatiladi.

Yangi tug'ilgan chaqaloqning oshqozon-ichak traktining har qanday qismi NEK rivojlanishiga sezgir, ammo ko'pincha bu jarayon ingichka ichakning distal va proksimal yo'g'on ichakda mintaqaviy mezenterik qon oqimining ikkita tizimining birlashmasida joylashgan. Qon oqimining shikastlanish darajasiga qarab kasallikning segmentar, diffuz, oshqozon va multifokal shakllari ajratiladi [10].

Etiologiya va xavf omillari: Kasallikning o'ziga xos etiologiyasi aniqlanmagan, patogenezi erta tug'ilgan chaqaloqlarning ichak shilliq qavatining immunreaktiv enterotsitlarining o'zgargan ichak mikrobiotasiga tug'ma immun javobi sifatida qaraladi, bu yallig'lanish va to'qima nekroziga olib keladi [3].

Erta tug'ilish NEK uchun yagona tasdiqlangan xavf omilidir: bemorlarning deyarli 90% da erta tug'ilish qayd etiladi.

Boshqa xavf omillari Apgar (OSHA) ball 5 daqiqada <7, yangi tug'ilgan chaqaloq holati, past tana harorati 36^0 tug'ilgandan keyin 1 soat o'tgach, kesar kesish operatsiyasi, indometazin, deksametazonni qo'llash bilan, inotroplardan foydalanish, og'ir metabolik atsidoz, ochiq kanal

arterioz, gastroshizis, og'ir anemiya, politsitemiya, qon quyish, N_2-bloklovchi antagonistidan foydalanish va b. [4].

NEK uchun xavf omillariga fon kasalliklari, masalan, tug'ma yurak nuqsonlari; oshqozon-ichak traktining birlamchi kasalliklari; sepsis; politsitemiya; nafas olish infeksiyasi; gipotenziya; homila gipoksiyasi va b. kiradi.

Patogenezi: NEK patogenezi murakkab, multifaktorli va to'liq aniqlanmagan. Patologik jarayon ichakning yetukligi, immunologik javobning buzilishi va mikrobial ichak disbiyozining murakkab natijasidir [3]. Ichak immuniteti yetuk va buzilmagan bo'lsa, hatto boshqa xavf omillari mavjud bo'lganda ham paydo NEK deyarli hech qachon bo'lmaydi.

Eksperimental NEK steril muhitda aniqlanmagan. Tadqiqotlar erta tug'ilgan chaqaloqlarda NEK ichak va immunitet tizimining yetukligidan kelib chiqadigan multifaktorli jarayonning natijasi ekanligi haqidagi gipotezani tasdiqlaydi, bu sezuvchanlikning oshishiga, potensial patogen bakteriyalarning ko'payishi bilan normal ichak bakterial mikrobiotasining buzilishiga va sitokinlarning chiqishi bilan yetarli darajada yallig'lanish javobiga olib keladi.

Nekrotik enterokolitga genetik jihatdan moyillik ham istisno qilinmaydi, bu genetik polimorfizmlarning NEKdagi yallig'lanishga qarshi sitokinlar assotsiatsiyasiga qo'shgan hissasini anglatadi [5].

Buzilgan ichak epiteliysi to'sig'ining kombinatsiyasi; sust rivojlangan va anomal immunitet himoyasi; sun'iy oziqlantirish, antibiotiklar va kesar kesish bilan ta'sir qilish natijasida hosil bo'lgan mezenteral tomirlarining anomal rivojlanishi va o'zgargan mikrobiota, erta tug'ilgan chaqaloqning ichaklarining yallig'lanishiga va hatto gangrenasiga olib keladi.

Ichakning to'liq rivojlanmasligi, disbakterioz va bar'yer disfunksiyasi: Shilliq qavatning neonatal ichak to'sig'i va uning immun tizimining to'liq rivojlanmagan shilliq qavatning pasayishi, shilliq oqsilining o'zgarishi, Ig A darajasining pasayishi va epiteliya membranasining anomaliyasi bilan tavsiflanadi.

Erta tug'ilgan chaqaloqlarning ichak shilliq qavati yuqori immunoreaktivlikka ega va inson homila enterotsitlari kattalarga nisbatan haddan tashqari immunologik va yallig'lanish reaksiyasini keltirib chiqarishi isbotlangan.

Epiteliy hujayralarining shikastlanishi va tiklanishi o'rtasidagi disbalansi ichak to'sig'ining buzilishiga va keyinchalik bakterial invaziya, immunitet faollashishi, nazoratsiz yallig'lanishi va ichak nekroziga olib keladi.

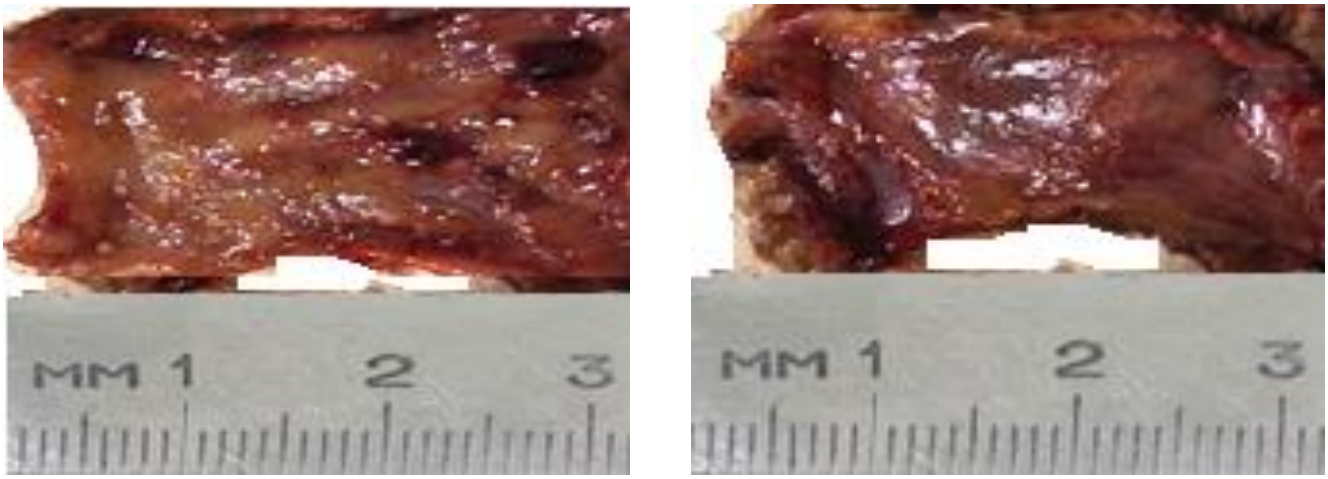
Chaqaloqlar oshqozon-ichak trakti funksiyasi: Erta tug'ilgan chaqaloqning to'liq rivojlanmagan oshqozon-ichak trakti immun reaksiyalaridan tashqari nisbatan kam ovqat hazm qilish va kam harakatlanish funksiyalariga ega. Oshqozon bo'shatilishining buzilishi va me'da shirasining pH qiymatining oshishi ichak to'sig'ini va epiteliy o'tkazuvchanligini yo'q qilishga yordam beradi [6.7].

Peristaltik harakatlanish buzilishi ichak bo'shlig'idagi tarkibning turg'unligiga va uning kengayishiga olib keladi, bu esa epiteliy to'sig'iga yanada zarar yetkazishi mumkin. Ular mikrobli disbiyoz bilan birgalikda apoptoz va nekroz bilan yallig'lanishga olib keladi.

Patomorfologiyasi: Patomorfologik jihatdan kasallik ishemiya, nekroz va ichak devorining yallig'lanishi bilan gaz hosil qiluvchi mikroorganizmlarni kirib borishi bilan namoyon bo'ladi. Intramural gaz to'planishi, rentgenologik va patologoanatomik tadqiqotlarda ichak pnevmatozi sifatida namoyon bo'ladi.

Rasm -1. Ingichka ichak rezektsiya qilingan sohasining makkroskopik manzarasi, shilliq va ostki qatlamlarida shish, mayda qon quyilishlar, pnevmotoz, o`chog'li deskvamtsiya, eroziyalar hosil bo`lishi.

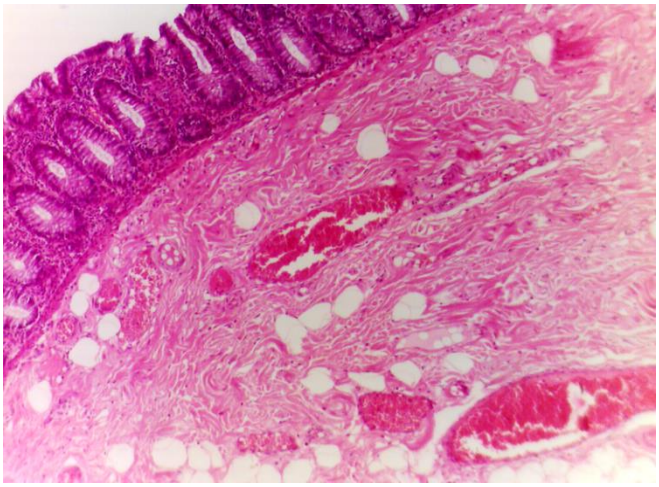
NEK asosan yonbosh va yo'g'on ichakka ta'sir qiladi, ko'pincha ileotsekal sohasiga, og'ir

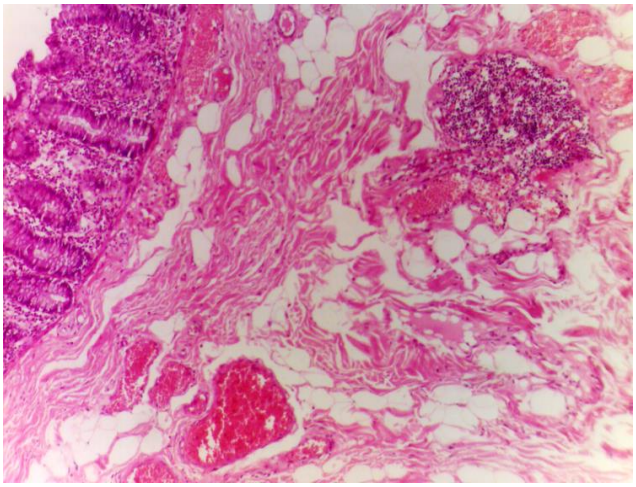


shakllarda butun oshqozon-ichak traktiga ta'sir qilishi mumkin.

Rasm-2. 1.Yonbosh ichak rezektsiya sohasi - shilliq qatlami burmalari yassilashgan, o'chog'li qon quyilishlar, eroziya va yaralar hosil bo'lishi, shishi, 2. Yonbosh ichak rezektsiya sohasi seroz pardasida to'laqonlilik, pnevmatoz, seroz parda va atrof yog' to'qimalarida qon quyilish o'chog'lari.

Makroskopik tekshiruv vaqtida ichak qovuzloqlarida chandiqlar, qon ketishlar, qon tomir trombozi, nekroz va pnevmatoz joylari bilan cho'ziladi. Mikroskopik tekshiruvda yallig'lanish belgilari, shilliq qavatning shishi, bakterial invaziya, shilliq qavatda va intramural sohasida gaz



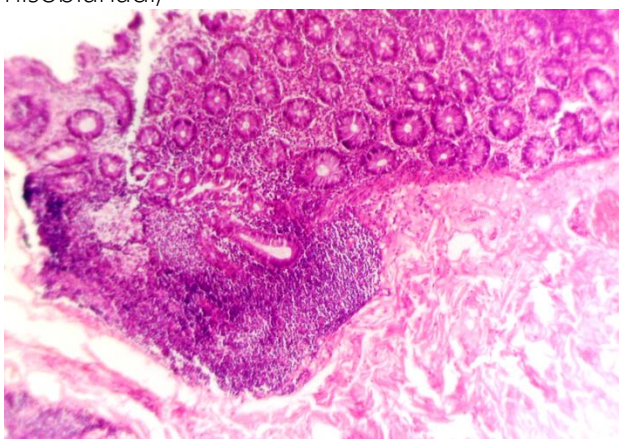


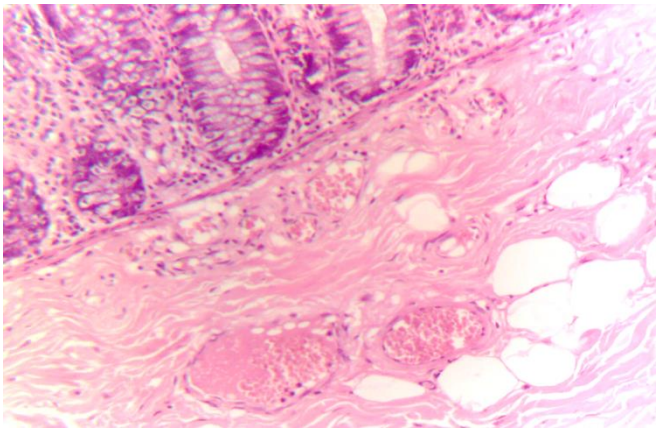
pufakchalari kuzatiladi, shuningdek ishemik transmural nekrozi namoyon bo'ladi.

Rasm-3. Rezektsiya qilingan ilnotsekal soha shilliq qatlamida limfoid infil'tratsiya, shilliq ostki qatlamlarida venoz to`laqonlilik, ayrim tomirlarida eritrotsitlar gemolizi, diapedez qon quyilishlar, ayrim tomirlarini trombozi, shish, turli o`lchamdagi bo`shliqlarni paydo bo`lishi, o`chog'li limfo-leykotsitar infil'tratsiya, mushak tolalarini nekrozi, fragmentatsiyasi. Bo'yash gem. - eozin usulida. x4*12,5.

Ichakning perforatsiyasi ichakning butun qalinligi ta'sirlanganda paydo bo'lishi mumkin, bu pnevmoperitoneum, peritoneum va portal venadagi gaz emboliyasiga olib keladi. Mikroskopik jihatdan u koagulyatsion nekroz, NEKning ishemik xolatini keltirib chiqishiga olib keladi.

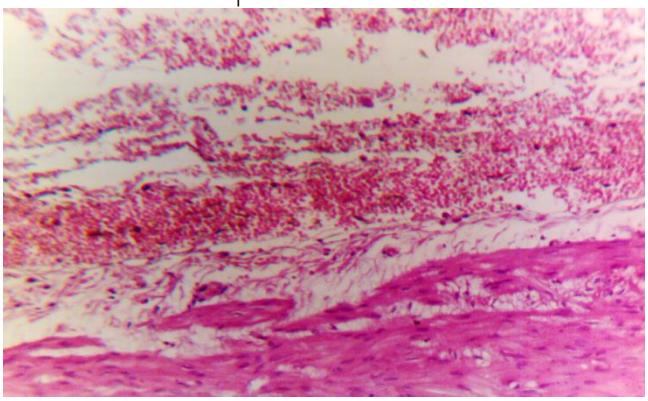
Patogen bakterial invaziya va to'qima nekroziga tegishli javobni ifodalovchi neytrofillar, limfotsitlar va makrofaglar xisoblanadi. Epiteliy regeneratsiyasi, granulyatsion to'qimalarining shakllanishi va fibroz kuzatilishi mumkin, bu reparativ regeneratsiyani namoyon bo'lishidir. Enterobacteriaceae, Escherichia, Salmonella, Enterobacter va Klebsiyella (68%), stafilokokklar (26%); clostridiumlar (4%); viruslar(11%); va Candida (1%) bular NEK vaqtida umumiy patogen flora hisoblanadi;

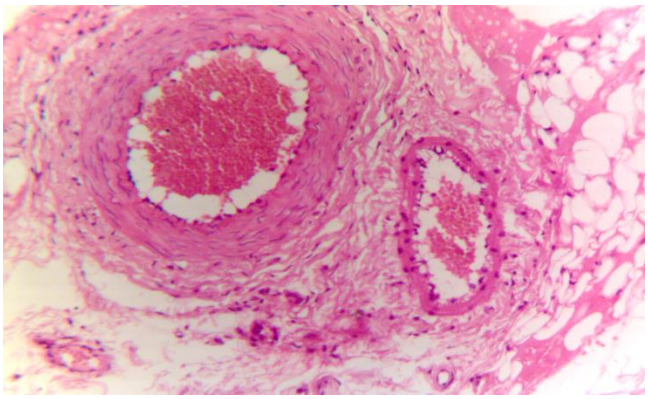




Rasm-4. Rezektsiya qilingan ilnotsekal soha shilliq qatlamida bezlar va qadahsimon hujayralarni proliferasiyasi, limfoid infil'tratsiya, shilliq ostki qatlamlarida venoz to`laqonlilik, eritrotsitlar gemolizi, diapedez qon quyilishlar, shish, turli o`lchamdagi bo`shliqlarni paydo bo`lishi, o`chog'li limfo-leykotsitar infil'tratsiya, shilliq va ostki qatlamlari mushak tolalarini nekrozi, fragmentatsiyasi. Bo'yash gem. - eozin usulida. Bo'yash gem. - eozin usulida. x4 va 10*12,5.

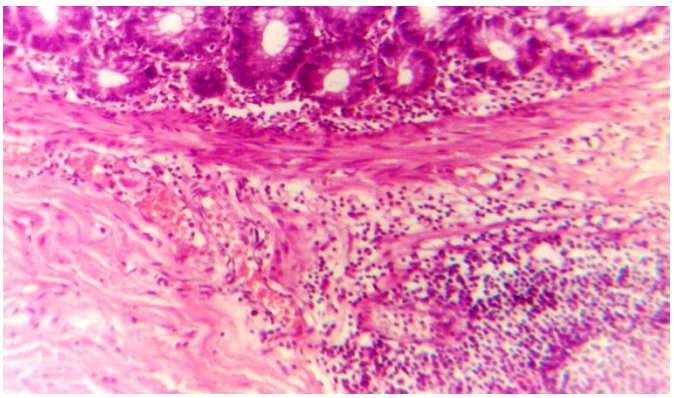
Klinik ko'rinishlar va erta asoratlar kardiorespirator kasalliklar, kollaps, shok va tomir ichidagi disseminatsiyalangan koagulopatiya (DVS) kabi og'ir bo'lishi mumkin, bu ko'p tizimli yetishmovchilik va chaqaloqning o'limiga olib keladi [2]. NEK holatlarining uchdan bir qismida ichak teshilishi va gangrena rivojlanishi tashrix o'tkazishni talab qiladi.

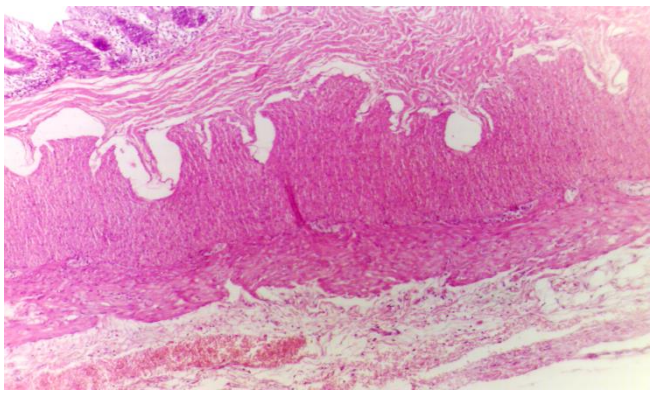




Rasm-5. Rezektsiya qilingan yo`g'on ichak yonbosh ichak sohasi muskul, seroz pardalari, atrof yog' to`qimalari. Ularda venoz to`laqonlilik, diapedez qon quyilishlar, oraliq to`qimasi shishi, nekrobiotik o`zgarishlar. Tomirlar endoteliysini deskvamatsiyasi, ayrim tomirlari devorini fibrinoid nekrozi. Bo'yash gem. - eozin usulida. x10*12,5.

Asoratlari: NEKning o'tkir asoratlari sepsis, meningit, peritonit, metabolik yoki kombinatsiyalangan atsidoz, giponatremiya, giperglikemiya yoki kamroq tarqalgan gipoglikemiya xisoblanadi.





Rasm-6. Rezektsiya qilingan yo`g'on ichak yonbosh ichak sohasi shilliq va ostki qatlamida diffuz limfoid infil'tratsiya, mo`'tadil to`laqonlilik, diapedez qon quyilishlar, shish, nekrobiotik o`zgarishlar, muskul, seroz pardalari, atrof yog' to`qimalarida venoz to`laqonlilik, diapedez qon quyilishlar, oraliq to`qimasi shishi, nekrobiotik o`zgarishlar. Bo'yash gem. - eozin usulida. x4 va 10*12,5.

Kechki asoratlar quyidagicha: striktura shakllanishi, qisqa ichak sindromi va ichak yetishmovchiligi. Kam xolatlarda enterotsele, ichak fistulasi va intraabdominal absess shakllanishi kuzatilishi mumkin. Jarrohlik yo'li bilan davolangan chaqaloqlarning taxminan 24% (95% DI 17-31%) NEK yoki gestatsion yoshi bilan bog'liq bo'lmagan ichak torayishini rivojlantiradi.

Ko'p miqdorda striktura o'chog'lari paydo bo'ladi. Bu o'tkir epizoddan keyin 2-3 oydan 20 oygacha paydo bo'lishi mumkin.

Strikturalar ko'proq enterostomiyadan so'ng rivojlanadi; shuning uchun kontrastli klizmalar NEK paydo bo'lganidan 4-6 hafta o'tgach va enterostomiyani qayta anastomoz bilan jarrohlik yo'li bilan amalga oshirilishi kerak. NEKning qaytalanishi 8% tashkil etadi, 6% holatlarining ichak tutilishi mumkin. Umumiy ichak yetishmovchiligi barcha NEK holatlarining 13% uchraydi.

Xulosa: Nekrotik enterokolit tana vazni 1500g dan kam bo'lgan chaqaloqlarda to'satdan boshlanib, tez progressiv klinik kechishga ega va hayotning dastlabki 2-8 xaftaligida o'limning asosiy sababidir.

Yangi tug'ilgan chaqaloqda NEK ingichka ichakning distal va proksimal yo'g'on ichakda joylashib, keskin immunologik va yallig'lanish reaksiyasi bilan kechadi.

Foydalanilgan adabiyotlar:

1. Боронина И. Динамика выживаемости детей очень низкой и экстремально низкой массой тела прирождении в Воронежской области с 2000 по 2012г.// Ж.Россий. вестн. перинатологии и педиатрии, 2015. 1 . С. С. 27-32
2. Брыксина Е.Ю. и др. Функциональная патология верхних отделов желудочно-кишечного тракта у недоношенных: патогенетические аспекты развития микро аспирации желудочного содержимого// Вестник РУДН, серия Медицина, 2015, № 3,с. 107-114).
3. Болезни желудка и двенадцатиперстной кишки у детей / под ред.: С. В. Бельмера, А. Ю. Разумовского, А. И. Хавкина. - Москва: Медицинская практика, 2017 - 536 с.
4. Neonatology: A Practical Approach to Neonatal Diseases. Eds. Buonocore G., Bracci R., Weindling /M. Italia: Springer-Verlag; 2018; 1348.
1. Wendy H.Y., Amuchou S.S., Vibhuti S.S. et al. Incidence and timing of presentation of necrotizing enterocolitis in preterm infants. // Pediatrics. 2019; 129:298-304.
2. Neu, J. Necrotizing Enterocolitis: The Future. Neonatology, 2020; 117(2), 240–244.
3. Taufik, M. L., & Lestari, D. Diagnosis dan Tatalaksana Enterokolitis Nekrotikans. Cermin Dunia Kedokteran, 2021; 48(4), 225-230.
4. Ou, J., Courtney, C. M., Steinberger, A. E., Tecos, M. E., & Warner, B. W. 2020. Nutrition in necrotizing enterocolitis and following intestinal resection. Nutrients, 12 (2), 1-16
5. Doheny, K. K., & Travagli, R. A. Necrotizing enterocolitis: It's not all in the gut. Experimental Biology and Medicine, 2020; 245(2), 85-95
6. Frost BL, Modi BP, Jaksic T, Caplan MS. New medical and surgical insightsinto neonatal necrotizing enterocolitis: A review. JAMA Pediatrics.2017; 171(1): 83-88
7. Denning TL, Bhatia AM, Kane AF, et al. Pathogenesis of NEC: Role of theinnate and adaptive immune response. Seminars in Perinatology. 2017; 41:15-28.

UO'K: 616-08-035

POSTKOVID SINDROMDA YURAKDAGI KLINIK – MORFOLOGIK O'ZGARIShLAR

Bustanov Sh.Y.
Andijon davlat tibbiyot instituti

Annotastiya: 2020-2023 yillarida Andijon viloyati postkovid sindromidan vafot etgan 65ta bemorlarni autopsiya materiallari va kasallik tarixlari taxlil qilinib, miokardidagi klinik, patomorfologik va gistokiyoviy xos jihatlarini o'rganilgan. Postkovid sindrom miokardda nordon glyukozaminoglikanlar to'planishi, miokard va stromasida shish, yurakning o'tkir va surunkali ishemik kasalliklari, o'chog'li miokarditlar va toj tomirlaridagi endoteliitlari, destrukstiyasi, *trombozlari rivojlanishiga olib kelishi aniqlangan.*

Kalit so'zlari: *Sovid-19, SARS-CoV-2 virusi, postkovid sindrom, yurak, miokard, patomorfologik tekshirishlar, gistokimyoviy tekshirishlar, brak ishemik kasalliklari.*

CLINICAL AND MORPHOLOGICAL CHANGES IN THE HEART IN POST-COVID SYNDROME

Bustanov Sh.Y.
Andijan State Medical Institute

Abstract: An analysis of autopsy materials and case histories of 65 patients who died from post-covid syndrome in the Andijan region in 2020-2023 was carried out, clinical, pathomorphological and histopathological features of the myocardium were studied. It was established that post-covid syndrome is observed accumulation of acidic glycosaminoglycans in the myocardium, myocardial and stromal edema, acute and chronic coronary heart disease, focal myocarditis and endotheliitis, destruction and thrombosis of the coronary arteries.

Key words: *COVID-19, SARS-CoV-2 virus, post-COVID syndrome, heart, myocardium, pathomorphological studies, histochemical studies, coronary heart disease.*

КЛИНИКО-МОРФОЛОГИЧЕСКИЕ ИЗМЕНЕНИЯ СЕРДЦА ПРИ ПОСТКОВИДНОМ СИНДРОМЕ

Бустанов Ш.Я.
Андижанский государственный медицинский институт

Аннотация: Проведен анализ аутопсийных материалов и историй болезни 65 пациентов, умерших от постковидного синдрома в Андижанской области в 2020-2023 годах, изучены клинические, патоморфологические и гистопатологические особенности миокарда. Установлено, что постковидный синдром наблюдается накоплении кислых гликозаминогликанов в миокарде, отек миокарда и стромы, острой и хронической ишемической болезни сердца, очаговой миокардит и эндотелиит, деструкция и тромбоз коронарных артерий.

Ключевые слова: *COVID-19, вирус SARS-CoV-2, постковидный синдром, сердце, миокард, патоморфологические исследования, гистохимические исследования, ишемическая болезнь сердца.*

Dolzarbligi: Dunyo axolisini 20%da postkovid sindrom bilan bog'liq bo'lgan somatik kasalliklarni asoratlanishi og'ir kechishi va letal oqibatlarga olib kelishi bilan xarakterlanadi [3,7]. AQSh, Evropa, Buyuk Britaniya, Kanada davlatlarida postkovid sindromida yurak ishemik kasallilarining o'sish tendenstiyasi 3%ga, Rossiya federastiyasi va Mustaqil xamdo'stlik davlatlari yurak ishemik kasalliklari 4,2-5% ga oshganligi aniqlangan. Bu esa, postkovid sindromida tanamizdagi barcha kasalliklarni o'ziga xos kechishini klinik morfologik jixatlarini o'rganishni taqozo etdi. Jumladan, dunyo bo'yicha 2019 yilda yurak ishemik kasalliklaridan vafot etganlar soni

o'rtacha 1,8mln ni tashkil etgan bo'lsa, 2022 yildagi shu ko'rsatich, 21,6 mln-dan oshganligi qayd etilgan [4,5,6].

Oxirgi yilda, postkovid sindromda yurak ishemik kasalliklaridan yuzaga kelgan ikkilamchi og'ir asoratlar sababli, mexnatga layoqatli 38-55 yoshli insonlar orasida nogironlik ko'rsatkichi bo'yicha 13,2% ga oshganligi aniqlangan. Bu bir vaqtning o'zida Sovid-19 infekstiyasi va somatik kombinastiyalangan metabolik buzilishlar bilan davom etadigan kasalliklarda o'lim ko'rsatichini 3-5 barobarga oshganligini tasdiqlaydi.

Multimorbidlikning tarqalishi yoshga qarab 20 yoshda 10%dan 70 yoshda 80%gacha ortgan [2]. Polimorbidlik mavjud bo'lganda, bemorlarning katta qismida (80-90%) o'limning asosiy sababi yurak-qon tomir va sterebrovaskulyar patologiyalar, miya insultlari (30%) bo'lgan. O'lim sababi sifatida yurakning ishemik kasalliklarining o'tkir shakllari ¾ xolatlarda, surunkali shakllari 1/4holatlarda aniqlangan [1].

Tadqiqot maqsadi va vazifalari: Postkovid sindromida yurak miokardidagi klinik, patomorfologik va gistokiyoviy xos jihatlarini o'rganish.

Tadqiqotning obekti sifatida 2020-2023 yillarida Andijon viloyati shifoxonalarida vafot etgan 65ta bemorlarni autopsiya materiallari va kasallik tarixlari taxlil qilindi.

Miokard to'qima bo'laklari alohida-alohida 1x1sm kattalikda kesib olinib, fosfat bufer eritmasida tayyorlangan 4 %-li neytral formalinga solib fiksastiya qilindi. Gistologik tekshirishlar uchun chap qorinchaning oldingi va orqa devoridan, cho'qqisidan 2sm yuqoridan, mitral qopqa fibroz halqasidan 2sm pastdan, qorinchalararo to'siqdan kesimlar olindi. Spirt va xloroformda suvi qochirilgandan keyin bo'laklar parafin bloklariga quyildi. 5-8 mkm qalinlikdagi to'qima kesmalari gematoksilin va eozin bilan, Van-Gizon, hamda ShIK-reakstiyasi usulida bo'yaldi, nerv tolalari o'rganish uchun kumush tuzlari bilan imregnastiya qilindi. Mikroskopik o'zgarishlar bayonlashtirildi va kerakli sohalari rasmga olindi.

Tadqiqot natijalari:2020 yilda post kovid sindrom XKT-10 kasalliklarining xalqaro tasnifiga kiritilgan. COVID-19 kasalligini boshidan kechirgan bemorlarni uzoq muddatli kuzatishda - tuzalgan bemorlarda kardiometabolik talablar oshishi qayd etilgan. Miokardda fibroz to'qimani o'sishi, virusli infekstiyadan kelib chiqqan kardiomiopatiya, takroriy aritmiyalarga olib kelgan.

Tadqiqotdagi 30-39yoshli bemorlarda hamma xolatlarda yurakni surunkali ishemik kasalligi kuzatilib, u miokardda mayda (100%) va keng (40%) skleroz o'chog'lari va 4ta xolatda o'chog'li miokardit kuzatilgan. 40-49 yoshli bemorlarda xam hamma xolatlarda yurakni surunkali ishemik kasalligi kuzatilib, u miokardda mayda skleroz o'chog'lari, 80% xolatlarda o'chog'li miokardit kuzatilgan. 50-59 yoshli bemorlarda xamma xolatlarda yurakning o'tkir va surunkali ishemik kasalliklari kuzatilib, u 80% aterosklerotik mayda o'chog'li, 40% postinfarkt keng o'chog'li skleroz o'chog'lari bilan, 40% o'chog'li miokarditlar, 20% xolatlarda miokard infarkti kuzatildi. 60-69 yoshli bemorlarda xam xamma xolatlarda yurakning o'tkir va surunkali ishemik kasalliklari kuzatilib, u 80% aterosklerotik mayda o'chog'li, 20% postinfarkt keng o'chog'li skleroz o'chog'lari bilan, 60% o'chog'li miokarditlar, 40% xolatlarda miokard infarkti kuzatildi.

70 yoshli va undan yuqori yoshdagi bemorlarda xam xamma xolatlarda yurakning o'tkir va surunkali ishemik kasalliklari kuzatilib, u 80% aterosklerotik mayda o'chog'li, 20% postinfarkt keng o'chog'li skleroz o'chog'lari bilan, 60% o'chog'li miokarditlar, 40% xolatlarda miokard infarkti kuzatildi.

Miokardit, perikardit, yurak etishmovchiligi, miokard infarkti, aritmiyalar va o'pka arteriyalarini tromboemboliyasi COVID-19 bilan og'rigan bemorlarda 10-12 haftada so'ng yuzaga

kelib, u yurak qon tomir kaalliklari kasalliklari fon bo'lgan bemorlarda (gipertoniya kasalligi, ateroskleroz, qandli diabet va b.) ko'proq uchradi.

Bemorlardagi COVID-19 kasalligi triger fon kasalliklari bo'lganlarda kasallik kechishini og'irligidan qat'i nazar, tuzalib ketganlarning 60yoshdan katta bemorlarning 60% da miokard yallig'lanishi (o'tkir o'chog'li miokardit) qayd etildi.

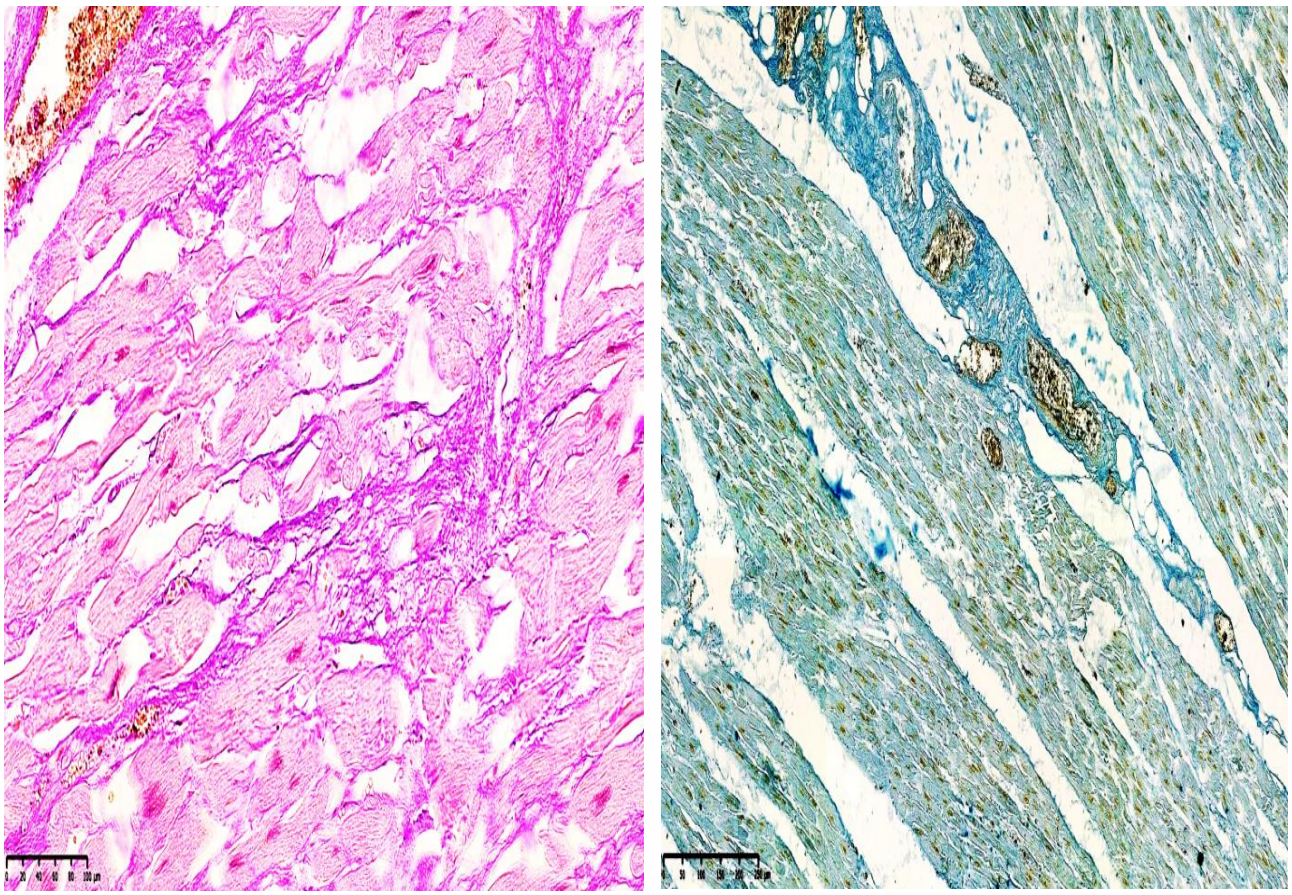
Kasallik tarixlarida SARS-CoV-2 virusi uchun ijobiy PSR (polimeraza zanjiri reakstiyasi) testi bo'lgan bemorlarning 1/10 qismida 3 haftadan ko'proq vaqt davomida, ozroq qismida bir necha oy davomida sog'lig'i tiklanmasligi qayd etildi.

Bemorlarni anamnestik ma'lumotlari COVID-19 boshidan kechirganidan so'ng 3-4oy o'tgach bemorlarni 2/5qismida o'pkadagi fibroz o'zgarishlari oqibatida nafas qisilishi eng keng tarqalgan simptom sifatida kuzatildi. Yurakni surunkali ishemik kasalligi vaqt o'tishi bilan avjlanishi, bu o'z navbatida chap qorincha funkstiyasining pasayishi, uning etishmovchiligi va o'pka gipertenziyasi bilan namoyon bo'lib, klinik tashxislangan.

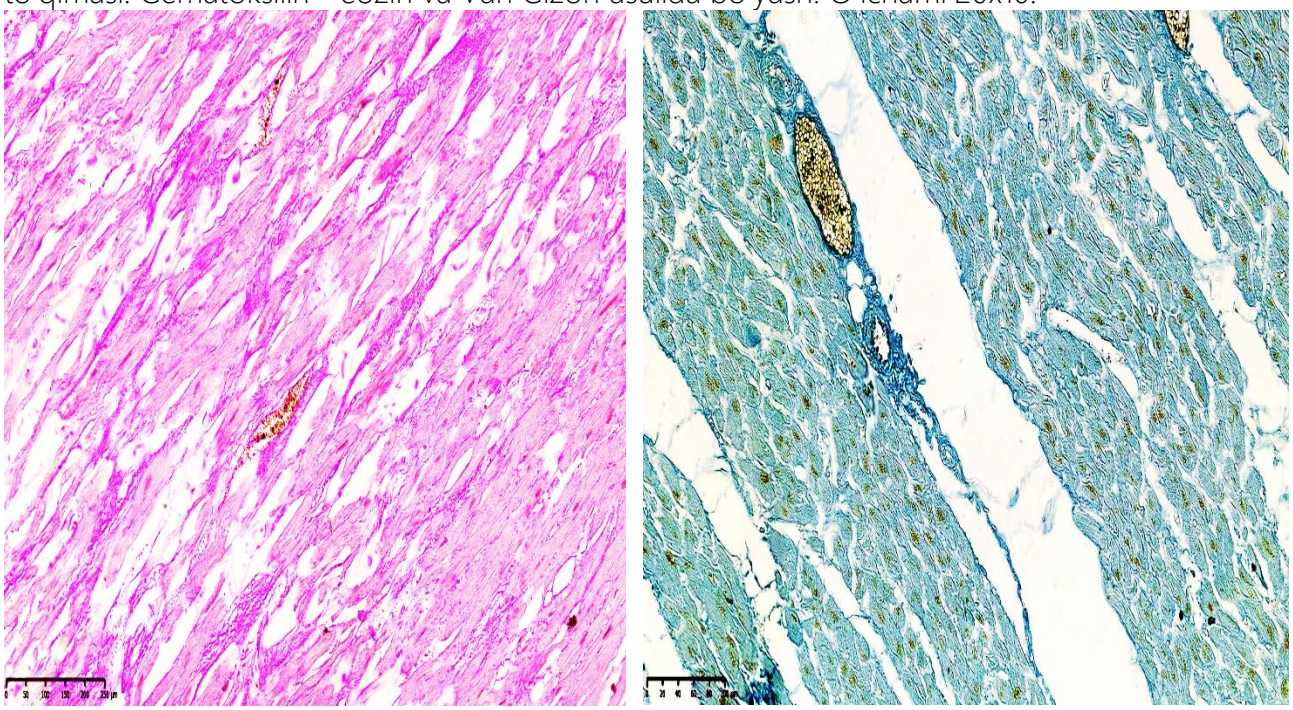
COVID-19 bilan kasallanib, davolangan bemorlarda 3oydan keyin tasodifiy yurakdan o'lganlarni 85%da xayotining oxirgi soatlarida ko'krak qafasidagi og'riqdan shikoyat qilgan, autopsiya tekshirishlarda YuSIK, toj tomirlarini stenozlovchi aterosklerozi fonida o'tkir koronar sindrom, miokard infarkti, o'tkir o'chog'li miokardit va perikardit tashxislari qo'yilgan

Postkovid sindromida gistokimyoviy tekshirishlar orqali miokardda sodir bo'layotgan metabolik o'zgarishlarni baxolash, miokard stromasida dag'al tolali biriktiruvchi to'qima miqdorini aniqlash, miokardda nordon mukopolisaxaridlarni me'yorga nisbatan ko'payganligi, kardiomiostitlar stitoplazmasida glikogen konstentrastiyasini keskin kamayishi ko'rinishidagi sifat reakstiyalari orqali kechayotgan morfologik o'zgarishlarni asoslash imkonini berdi.

Xususan ShIFF usuli miokard to'qimasi tarkibidagi nordon mukopolisaxaridlarni to'planganligi va xujayralararo va xujayra ichida joylashishini aniqlash imkonini berdi. Tadqiqotimizda, aynan ShIFF usulida ShIFF musbat tuzilmalarini miokardda bo'lishi, to'qimada qon aylanishini buzilishi oqibatida, gipoksiya va oraliq maxsulotlarni to'planganligini anglatdi. E'tiborli jixati, aynan, ShIFF musbat tuzilmalar fibroblastlar tomonidan sintezlanadigan va me'yorda normal qon aylanishinida to'liq sarflanadigan uglevodlar oilasiga mansub bo'lib, postkovid sindromda, qon tomirlarda rivojlangan arteriosklerotik o'zgarishlarda, perivaskulyar skleroz va boshqa xolatlarda miokardda me'yorda uchramaydigan ShIFF musbat tuzilmalarni bo'lishi bilan xarakterlandi.

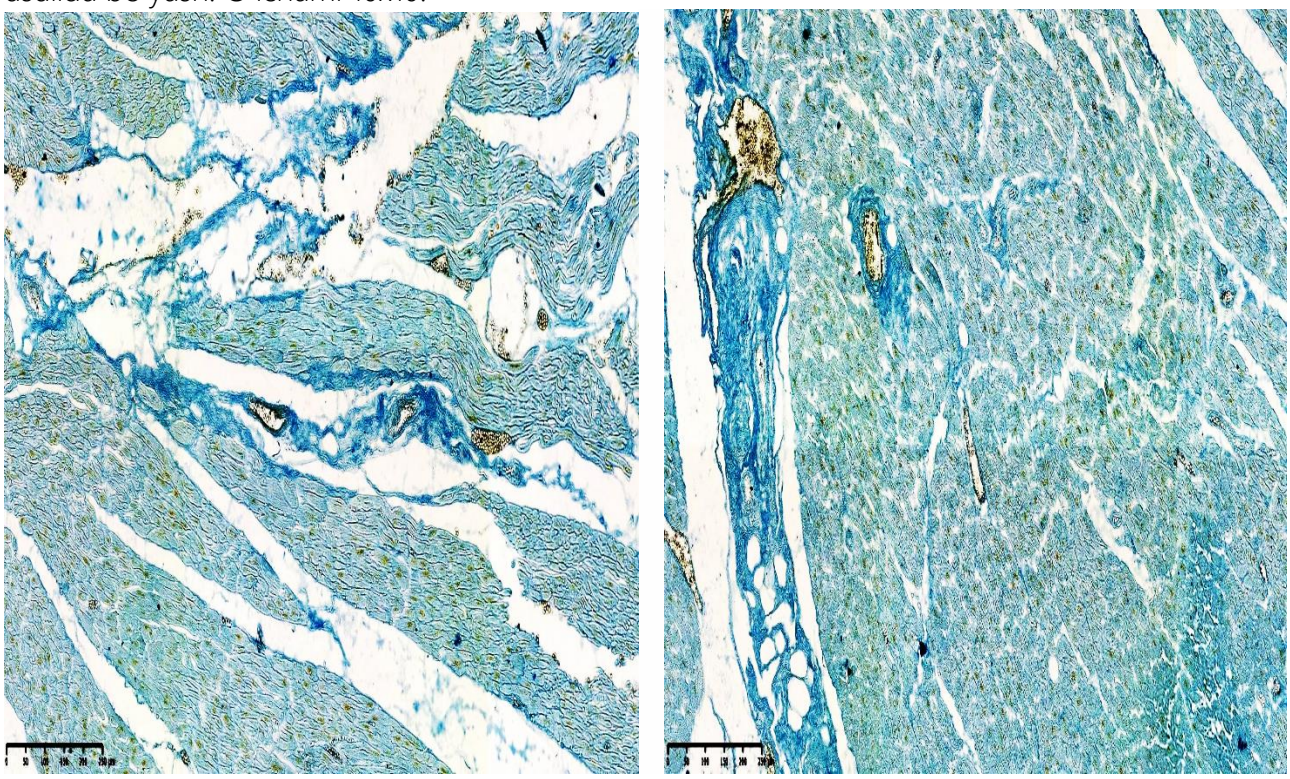


Rasm- 1. Chap qorincha old devori miokardida morfologik ko'rinishi. Kardiomiostitlar tutamlari oralig'idagi qo'shuvchi disklarda interdigitastiya o'choqlari, miokardda glikogen zaxiralari tugagan va och rangda, ekstrastellyulyar matriksda oraliq shishlar shakllangan, perivaskulyar soxalarda siyrak va dag'al tolali tuzilmalarni o'zaro tarmoqlangan fibrozlangan to'qimasi. Gematoksilin - eozin va Van Gizon usulida bo'yash. O'lchami 20x10.

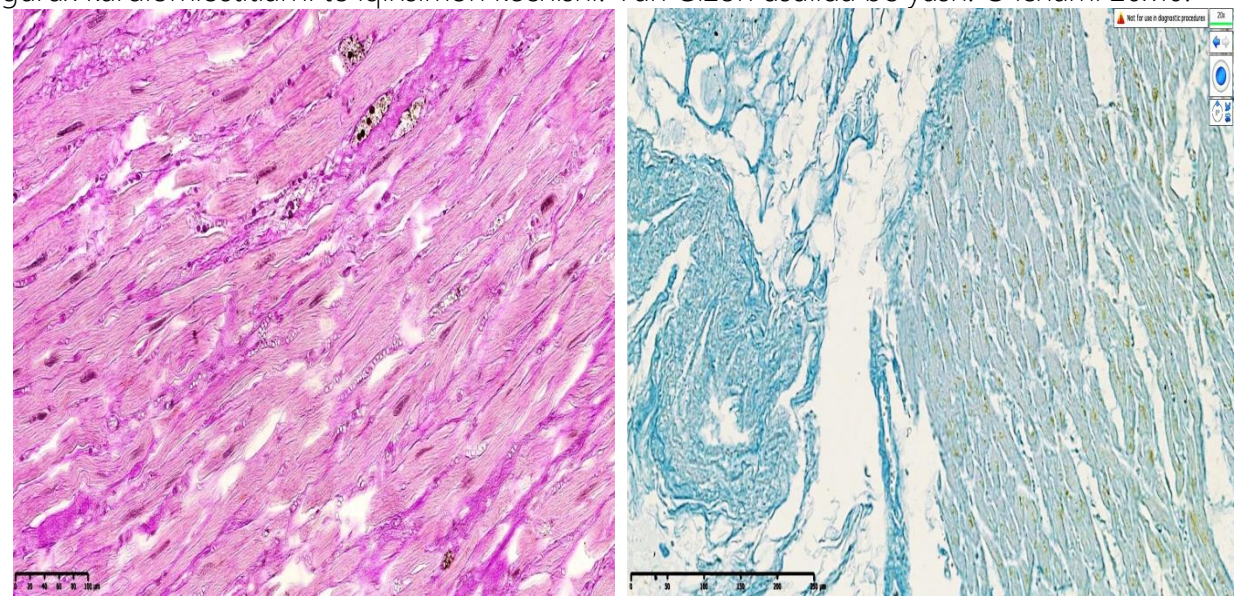


Rasm - 2. Qorinchalararo to'siq miokardining morfologik ko'rinishi. Kardiomiostitlar tutamlari kollateral anastamozlangan tutamlarining titilgan o'choqlari, kardiomiostitlarni stitolizga

uchragan va fragmentastiyalangan stromal komponentlari. Gematoksilin - eozin va Van Gizon usulida bo'yash. O'lchami 10x10.



Rasm- 3. Chap qorincha old devori miokardida morfologik ko'rinishi. perivaskulyar soxalarda va oraliq to'qimasida shish, siyrak va dag'al tolali tuzilmalarni o'zaro tarmoqlangan fibrozlangan to'qimani o'sishi, o'chog'li yog' to'qimasini o'sishi, venoz to'laqonlilik, o'chog'li ayrim gurux kardiomiostitlarni to'lqinsimon kechishi. Van Gizon usulida bo'yash. O'lchami 20x10.



Rasm- 4. Chap qorincha old devori miokardida morfologik ko'rinishi. perivaskulyar soxalarda va oraliq to'qimasida shish, siyrak va dag'al tolali tuzilmalarni o'sishi, o'chog'li yog' to'qimasini o'sishi, venoz to'laqonlilik, o'chog'li ayrim gurux kardiomiostitlarni to'lqinsimon kechishi, mayda skleroz o'chog'lari. Gematoksilin - eozin va Van Gizon usulida bo'yash. O'lchami 10x10.

To'satdan yurakdan o'limlarda o'lim xolatlari COVID-19 bilan kasallangan bemorlarda COVID-19 kasalligining og'ir kechishida miokard infarkti, o'tkir o'chog'li miokardit - yurak-qon tomir o'limini rivojlanish xavfining sezilarli darajada oshirishi uzoq muddatli kuzatuv natijalarida (tiklanishdan keyin 3 oy yoki undan ko'proq) aniqlangan.

Endoteliydagi morfologik o'zgarishlar COVID-19 infekstiyasidan keyin uzoq muddat saqlanib qolgan. Bunda yuzaga kelgan trombotik asoratlar infarktlar, insultlar va to'satdan yurakdan o'lim sifatida namoyon bo'lgan.

Xulosa: Sovid-19 kasalligidan keyingi sindromda miokarddagi o'zgarishlarni sekstion diagnostikasi ko'p hollarda qiyin kechadi. Uni yurak ishemik kasalliklaridan morfologik identifikastiyasida gistologik usullardan foydalanish kerak bo'ladi. Postkovid sindrom yurakda nordon glyukozaminoglikanlar to'planishi, miokard va stromasini shishiga, yurakning o'tkir va surunkali ishemik kasalliklari, o'chog'li miokarditlar va toj tomirlaridagi endoteliitlar, destrukstiyasi, trombozlari rivojlanishiga olib keladi.

Foydalanilgan adabiyotlar:

1 Верткин А.Л., Румянцев М.А., Скотников А.С. Коморбидность // Consilium Medicum Болезни сердца и сосудов. – 2011. – № 2. – С. 37–41.

2 .Гриневич В.Б., Губонина И.В., Дощицин В.Л. и др. Особенности ведения коморбидных пациентов в период пандемии новой коронавирусной инфекции (COVID-19) // Кардиоваскулярная терапия и профилактика. – 2020. –Т. 19, № 4. – С. 135–172.

3. Chen C., Zhou Y., Wang D. W. SARS-CoV-2: a potential novel etiology of fulminant myocarditis // Herz. – 2020. – Vol. 45, № 3. – P. 230–232.

4. Chen X., Cai Y., Xia J., Zhou X., Xu S. et al. Risk factors associated with acute respiratory distresssyndrome and death in patients with coronavirus dis-ease 2019 pneumonia in Wuhan, China //JAMA Intern.Med.2020.P. 934–943.

5. Wu Z., Mc Googan J.M. Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72314 Cases From the Chinese Center for Disease Control and Prevention. JAMA. 2020. Feb 24.

UO'K: 616-08-035

YURAK ISHYEMIK KASALLIGINI TARQALISH SABABLARINI ANIQLASH VA BARTARAF QILISH

Boyqo'ziyeva M.B.
Andijon davlat tibbiyot instituti

Annotatsiya. Ushbu maqolada O'zbekistonda o'tkazilgan tadqiqotlarning natijalari yuqumsiz kasalliklar xavf omillarining tarqalganligi muntazam ortib borayotganligini ko'rsatib o'tilgan. Aholiga noratsional ovqatlanish, zararli odatlar, kam xarakatlilik to'g'risida va yurak qon tomir kasalliklari xavf omillari xaqida aholini bilimi pastligi va bu holat ko'p og'ir asoratlarga olib kelishi mumkinligini tushuntirishimiz kerakligi aniqlangan. Xavf omillarining oldini olish va tibbiy-sanitariya yordami sifatini yaxshilash bo'yicha chora-tadbirlarni joriy qilish millionlab barvaqt o'limlarning oldini olish imkoniyatini berishi aytib o'tilgan.

Tayanch so'zlar: Yurak-qon tomir kasalliklari, xavf omillari, sog'lom turmush tarzi

IDENTIFY AND ELIMINATE THE CAUSES OF ISCHEMIC HEART DISEASE

Boyqo'ziyeva M.B.
Andijan State Medical Institute

Annotation. In this article, the results of studies conducted in Uzbekistan show that the prevalence of risk factors for non-communicable diseases is constantly increasing. It was determined that it is necessary to explain to the population the low level of knowledge about poor nutrition, bad habits, sedentary lifestyle and risk factors for diseases of the cardiovascular system, as well as the fact that this situation can lead to many serious complications. It was noted that the introduction of measures to prevent risk factors and improve the quality of medical and sanitary care will prevent millions of premature deaths.

Key words: Cardiovascular diseases, risk factors, healthy lifestyle.

ВЫЯВИТЬ И УСТРАНИТЬ ПРИЧИНЫ РАСПРОСТРАНЕНИЯ ИШЕМИЧЕСКОЙ БОЛЕЗНИ СЕРДЦА

Бойкузиева М.А.
Андижанский Государственный медицинский институт

Аннотация. В данной статье результаты исследований, проведенных в Узбекистане, показывают, что распространенность факторов риска неинфексионных заболеваний постоянно увеличиваеця. Определено, что необходимо разъяснять населению низкий уровень знаний о нерациональном питании, вредных привычках, малоподвижном образе жизни и факторах риска заболеваний сердечно сосудистой системы, а также о том, что данная ситуация может привести ко многим серьезным осложнениям. Отмечалось, что внедрение мер по предупреждению факторов риска и повышению качества медицинской и санитарной помощи позволит предотвратить миллионы преждевременных смертей.

Ключевые слова: *Сердечно-сосудистые заболевания, факторы риска, здоровый образ жизни.*

Kirish. Yurak-qon tomir kasalliklari, onkologik kasalliklar, o'pkaning surunkali respirator kasalliklari, qandli diabet va boshqa yuqumsiz kasalliklar butun dunyo bo'yicha kasallanish va o'lim holatlarining asosiy sababchisi hisoblanadi [6].

SHuningdek ular oldini olish mumkin bo'lgan kasallanish va u bilan bog'liq bo'lgan nogironlikning yetakchi sababchilari jumlasiga kiradilar.

Jaxon sog'liqni saqlash tashkilotini ko'rsatkichlari natijalari asosida dunyoning rivojlangan mamlakatlarida asosiy o'lim sababchisi yurak qon tomir kasalliklari deb aniqlangan. Yurak ishemik

kasalligi (YUIK), shu jumladan miokard infarkti, arterial gipertoniya (AG) va bosh miya qon-tomir kasalliklari (insult) bilan birgalikda o'limga olib keluvchi omillarni 80% ni tashkil qiladi.

Hozirgi kunda O'zbekistonda o'tkazilgan tadqiqotlarning natijalari yuqumsiz kasalliklar xavf omillarining tarqalganligi muntazam ortib borayotganligini ko'rsatdi. Yuqorida ko'rsatib o'tilgan xavf omillari tarqalishining mavjud tendesiyasida 2020-2030 yillarga kelib, 40-60 yoshlardagi aholi orasida ushbu xavf omillaridan barvaqt o'limning yuqori darajasi kuzatilishi kutulmoqda[1].

Mamlakatimizdagi o'lim holatlari sabablari aholi orasida qon aylanish tizimi kasalliklari 62%li ko'rsatkich darajasi bilan birinchi o'rinda turibdi, yurakning ishemik kasalligi va arterial gipertoniya shular jumlasiga kiradi[4].

Muloxazalar. Yuqori qon bosimi– yurak ishemik kasalligi va insulьtning asosiy xavf omilidir. AG ni erta bosqichlarida aniqlash, xavf omillariga ega bo'lgan shaxslarga yordam berish hamda ularni samarali davolash kelgusida yuzaga kelishi mumkin bo'lgan va katta mablag' talab qiluvchi asoratlar ehtimolini 50%ga kamaytirish imkoniyatini beradi[6].

Sog'liqni saqlash tizimi yaxshi yo'lga qo'yilgan mamlakatlarda xam YUKTK (yurak qon-tomir kasalliklari) asosiy omili AG deb topilgan. O'tgan asrning 80 yillaridagi sobiq Sovet sotsialistik respublikalarning Rossiyadagi kardiologiya ilmiy tekshirish markazi mutaxasisslarining katta tekshiruvlari natijasida AG asosiy yurak qon-tomir kasalliklari omili xisoblangan [2]. AG bilan kasallangan bemorlarda YUIK 3-4 barobar va insulьt 7 barobar ko'proq uchraydi. Amerika shtatlarida 69% miokard infarktiga chalingan bemorlarning 77% da yurak yetishmovchiligi va arterial gipertoniya aniqlangan[6].

O'sha davrda O'zbekistonda xam uyushmagan aholi o'rtasida YUIK va uning asosiy omillarini tarqalishini aniqlash maqsadida ilmiy ishlar olib borilgan. Andijon viloyatida xam o'xshash tekshiruvlar o'tkazilgan[2].

Maqsad: Qishloq sharoitida aholi o'rtasida YUIK va uning asosiy omillarining xolatini va shunga asoslanib kasallikni oldini olish chora tadbirlarini rejalashtirish imkoniyatini aniqlash.

Maqsadni yoritish uchun Xo'jaobod tuman qishloq sharoitidagi 40-59 yoshdagi aholi o'rtasida YUIK va uning asosiy omillarini uchrashi o'rganilgan.

Tekshirish natijalariga ko'ra YUIK tarqalishi 8,6 % ni tashkil qilgan bo'lsa, kasallik omillaridan eng yuqori ko'rsatkich AG (3 barobar), semizlik (3,5 barobar) va ovqatlanish xisobiga giperxolesterinemiya (GXS), gipertriglitseridemiya (GTG) ko'p uchragan. Qizig'i shundaki, o'sha Sovet davridagi qishloq aholimizda tamaki chekish eng past ko'rsatkichga ega bo'lgan va YUIK ga bog'lik ekanligi statistik ishlovda aniqlamagan[2].

SHundan buyon mana 35 yil o'tdi. Hozirgi davrdagi o'sha Xo'jaobod qishloq aholisi o'rtasidagi YUIKni tegishli ko'rsatkichlarini solishtirganimizda, xayratli o'zgarishlarga duchor bo'lmoqdamiz. Bizning aholimiz ko'proq qovurilgan taomlar isteъmol qilishadi. Qovurilgan taomlarda to'yinmagan yog'lar ko'p bo'ladi. Bu ham xolesterinni va tana vaznini ortishiga olib keladi. Yoshi ulg'aygan sari semirish alomatlari aholi o'rtasida 40 yoshdan keyingi yillarda va ayniqsa erkaklarga nisbatan ayollarda ko'p uchraydi. Buning sababi aholini ko'pchiligi o'z sog'ligi xaqida yetarli darajada o'ylashmaydi, kam xarakat va noto'g'ri ovqatlanishadi.

Aholini sog'ligi soxasidagi olib borilayotgan ishlar asosan kasallikni aniqlashga va davolashga qaratilganligi va kasallikni oldini olish, profilaktik ishlar bilan birgalikda o'tkazilmaganligi tufayli natija bermayotganligi deb o'ylaymiz.

Tibbiy yordam ko'rsatish ishlarni bosqichlari(kasallikni aniqlash, davolash, sog'likni tiklash va shu bilan birgalikda kasalliklarni oldini olish) bir biriga bog'liligini kamligidadir.

Yuqumli bo'lmagan kasalliklarni O'zbekistonda tarqalishini yuqoriligi jiddiy ijtimoiy-iqtisodiy o'zgarishlarga olib keladi

Xar yili yuqumli bo'lmagan kasalliklardan kelib chiqqan o'lim O'zbekistonda 78%ni tashkil qiladi. Bu asosan inson xulq atvor omili bilan bog'lik: tamaki istъmol qilish, noratsional ovqatlanish, kam xarakat turmush tarzi, spirtli ichimliklar istъmol qilish, xamda yuqoridagilarga bog'liq metabolik omillar - gipertoniya va giperxolesterinemiya. Ushbu omillarni tarqalishi o'ta yuqori; to'rtdan bir erkaklarimiz tamaki chekadi, xattoki xozirgi paytda ayollar orasida, ayniqsa yosh qizlarda orasida xam uchrashi aniqlanmoqda,katta yoshdagi aholini yarmi ortiqcha vaznda yoki semizlikdan aziyat chekadi[3].

Shu bilan birgalikda O'zbekistonda osh tuzi isteъmol qilinishi eng yuqorilar qatoriga kiradi (xar bir inson uchun 1 kunda 15 grammni tashkil qiladi; bu esa jaxon sog'liqni saqlash tashkiloti (JSST) tavsiyasidan (5 gr.) uch barobar ortiq [4].

Xo'jaobod tuman qishloq sharoitida istiqomat qilgan aholi o'rtasida YUIK omillarini tarqalishi

Yuqumli bo'lmagan kasalliklarni kamaytirish maqsadida JSST iqtisodiy chora tadbirlar to'plamlarini aniqladi. Eng yuqori iqtisodiy natija O'zbekistonda osh tuzini isteъmolini kamaytirishga qaratilishi kerakligini taxlili ko'rsatilgan. Aholini tamakini kam isteъmoli, jismoniy faolligini oshirishi xam investitsiyalarni samarasini taъminlay oladi [3].

Yoshlar guruxi	Tekshirilganlar soni	AG		Ortiqcha vazn		Tamaki chekish		Lipid lar aniqla-nishi		Giper xoleste rinemiya		Gipertriglit seridemiya		Gipoalfa-xolesteri nemiya	
		Soni	%	Soni	%	Soni	%	Soni	%	Soni	%	Soni	%	Soni	%
40-49 yoshdagilar	327	29	8,9	44	13,4	124	37,9	269	82	20	7,4	14	5,2	18	9,6
50-59 yoshdagilar	206	28	13,6	19	9,2	62	30,1	176	85,4	20	11,4	20	11,3	18	17,1
40-59 yoshdagilar	533	57	10,7	63	11,8	186	34,8	445	83,5	40	8,9	34	7,6	36	12,2
Shaxardagi aholi o'rtasida 40-59 yoshdagilar	336	33	9,8	56	16,7	132	39,2	277	82,4	30	8,6	9	2,8	-	-

Umuman 15 yil davomida aholini ishga layoqatligini qaytarishni tashkil qilsak, yuqumli bo'lmagan kasalliklarni siyosat modellari va klinik aralashuvlar paketlari tadbiq etilsa mamlakat yalpi ichki maxsuloti (MYAIM) 2, 3 trillion so'mga oshadi.

Undan tashqari aholini o'z sog'ligi xaqidagi saviyasi sust. Asosan aholi o'zini sog'ligini saqlash xaqida kam o'ylaganligi katta axamiyatga ega. Birinchidan, yoshlar sog'ligini saqlab qolish xaqida psixologik tayyor emas, ikkinchidan, profilaktik ishlar, sog'lom turmush tarziga amal qiluvchilar, xattoki, tibbiyot xodimlari orsida xam yetarli darajada emas.

O'zbekiston Respublikasida keyingi yillarda aholini tabiiy o'sishi natijasida aholi soni yildan yilga o'sib borishi kuzatilmoqda. Shu jumladan Andijon viloyatida xam aholi soni 2021 yilda (2021

dekabr xolatiga) 3 mln 66 ming 706 nafarni tashkil qildi. Ulardan 1517006 nafari (49,5%) ayollar, 1549700 nafari erkaklardan iborat. Aholi zichligi 1 kv.km maydonga 730,2 taga to'g'ri keladi[5].

Oxirgi 10 yillik davrlarda Rossiya mamlakatida YUKTK dan o'lim yuqoriga ko'tarilgani aniqlanib borilmoqda. Aholi o'rtasida YUIK dan o'lim 21,1% ni tashkil qilgan YUKTK asosiy omillarini (semizlik, giperxolesteriyani tarqalishi yuqoriligi, AG esa 38,1% dan 45,4% ga kutarilganligi isbot qilingan).

Bundan tashqari metobolik sindromi xavf omillari qatoriga qo'shilgan. SHunday ko'rsatkichlar bizning aholimizga xam tegishli.

Xulosa. Vaziyatning jiddiyligini hisobga olgan holda, 2011 yilda BMTning Bosh Assambleyasi majlisida Siyosiy deklaratsiya qabul qilindi. Unda yuqumsiz kasalliklar XXI asrning butun dunyoda ijtimoiy-iqtisodiy rivojlanishga putur yetkazuvchi va Mingyillikning rivojlanish maqsadlariga erishishga xavf tug'diruvchi asosiy chaqiriq sifatida ko'rib chiqildi.

Deklaratsiya nazoratni kuchaytirish, profilaktika, barvaqt aniqlash, mahalliy ustuvorliklar va amalga oshirish sharoitlariga mos ravishda yuqumsiz kasalliklarga chalingan bemorlarni davolash va parvarish qilish orqali xavf omillari bilan kurashishning har tomonlama chora-tadbirlarini ko'rishga chaqiradi.

Xavf omillarining oldini olish va tibbiy-sanitariya yordami sifatini yaxshilash bo'yicha ushbu chora-tadbirlarni joriy qilish millionlab barvaqt o'limlarning oldini olish imkoniyatini beradi.

Epidemiologik vaziyat va ijtimoiy-iqtisodiy omillarni hisobga olgan holda, eng ko'p tarqalgan yuqumsiz kasalliklarning profilaktikasi va ularni integrallashgan holda baholash va olib borish bo'yicha dasturlarni joriy qilish maqsadga muvofiqdir.

Hozirgi kunda Respublikamizda keng targ'ib qilinayotgan moslashtirilgan klinik protokol, BTSYO muassasalarida miokard infarkti, insult va buyrak kasalliklarini oldini olish maqsadida AG va QD integrallashgan holda olib borish uchun ishchi dastur bo'lib xizmat qilmoqda.

Noratsional ovqatlanish, zararli odatlar, kam xarakatlilik to'g'risida va YUKTK xavf omillari xaqida aholini bilimi pastligi va bu holat ko'p og'ir asoratlarga olib kelishi mumkinligini tushuntirishimiz kerakligi aniqlangan.

Xozirgi tibbiyot institutlari o'quv dasturlarida —sog'lom turmush tarzi asoslari mavzusidagi mavzular kiritish taqozo etiladi. Bu narsa oxirgi yillarda keng doirada oila shifokorlarini malakasini oshirish kafedrasida olib borilmoqda.

Ratsional ovqatlanish rejalari milliy strategiyasi hayotni sog'lomlashtirishga qaratilishi kerak.

Foydalanilgan adabiyotlar:

1. BTSYO muassasalari uchun AG va QD bo'yicha moslashtirilgan klinik protokollar. 2022 y. JSST.
2. Epidemiologiya ishemicheskoy bolezni serdsa i yeyo osnovnix faktorov riska srediselskogo naseleniya, Nasirov M. Dissertatsiya na soiskaniye uchenoy stepeni kandidata med nauk.
3. Multiindikatornoye issledovaniye. Respublika Uzbekistan, 2000 god.
4. Uzbekistan. Obshaya otsenka strani. OON, 2003 god.
5. Andijon viloyati sog'liqni saqlash statistik jamlanmasi (2021).
6. Jamoat sog'ligini saqlash I-IIqism. T.G.Tulchinskiy, YE.A.Varavikova. 2003 yil Toshkent.

UO'K: 616-08-035

STAFILOKOKK INFEKSIYALARINING ZAMONAVIY DIAGNOSTIK USULLARI

Boltayev K. S., Pirimqulov J., Safarov O. S.
Samarqand davlat tibbiyot universiteti

Annotatsiya: Ushbu maqolada stafilokokk infektsiyalarini tashxislashda qo'llaniladigan zamonaviy diagnostik usullar tahlil qilingan. Maqolada an'anaviy mikrobiologik usullar, avtomatlashtirilgan tizimlar, molekulyar diagnostika, MALDI-TOF mass-spektrometriya va yangi avlod sekvenirlash (NGS) kabi usullarning afzalliklari va kamchiliklari ko'rib chiqilgan. Tadqiqot natijalariga ko'ra, zamonaviy usullar yuqori sezgirlik, spetsifiklik va tezkorlik kabi afzalliklarga ega bo'lib, stafilokokk infektsiyalarini o'z vaqtida va samarali tashxislash imkonini beradi.

Kalit so'zlar: *Stafilokokk infektsiyalari, diagnostika, mikrobiologiya, PTsR, MALDI-TOF, antibiotik sezgirligi, NGS.*

MODERN DIAGNOSTIC METHODS OF STAPHYLOCOCCAL INFECTIONS

Boltayev K. S., Pirimkulov J., Safarov O. S.
Samarkand State Medical University

.

Annotation: This article analyzes modern diagnostic methods used in the diagnosis of staphylococcal infections. The article reviews the advantages and disadvantages of such methods as traditional microbiological methods, automated systems, molecular diagnostics, MALDI-TOF mass spectrometry and next-generation sequencing (NGS). According to the results of the study, modern methods have the advantages of high sensitivity, specificity and speed, allowing for timely and effective diagnosis of staphylococcal infections.

Keywords: *Staphylococcal infections, diagnostics, microbiology, PTsR, MALDI-TOF, antibiotic susceptibility, NGS.*

СОВРЕМЕННЫЕ МЕТОДЫ ДИАГНОСТИКИ СТАФИЛОКОККОВЫХ ИНФЕКЦИЙ

Болтаев К.С., Пиримкулов Дж., Сафаров О.С.
Самаркандский государственный медицинский университет

Аннотация: В статье анализируются современные методы диагностики, применяемые при диагностике стафилококковых инфекций. В статье рассматриваются преимущества и недостатки таких методов, как традиционные микробиологические методы, автоматизированные системы, молекулярная диагностика, масс-спектрометрия MALDI-TOF и секвенирование нового поколения (NGS). По результатам исследований современные методы обладают такими преимуществами, как высокая чувствительность, специфичность и скорость, что позволяет проводить своевременную и эффективную диагностику стафилококковых инфекций.

Ключевые слова: *стафилококковые инфекции, диагностика, микробиология, ПЦР, MALDI-TOF, чувствительность к антибиотикам, NGS.*

Kirish. Stafilokokklar (Staphylococcus spp.) – inson organizmida va tashqi muhitda keng tarqalgan gram-musbat, sharga o'xshash (kokk) bakteriyalar guruhi hisoblanadi. Ushbu mikroorganizmlarning turli xil vakillari mavjud bo'lib, ularning aksariyati saprofitlar sifatida mavjud bo'lsa-da, ayrim turlari, jumladan Staphylococcus aureus, inson salomatligi uchun jiddiy xavf tug'dirishi mumkin [1]. S. aureus patogen tur sifatida immuniteti zaiflashgan, surunkali kasalliklarga chalingan yoki immunosupressiv terapiya olayotgan shaxslarda teri infektsiyalaridan tortib

pnevmoniya, sepsis va endokardit kabi hayot uchun xavfli bo'lgan tizimli infektsiyalargacha bo'lgan turli xil kasalliklarni keltirib chiqarish qobiliyatiga ega [3].

Stafilokokk infektsiyalarini davolashning asosiy muammolaridan biri antibiotiklarga chidamlilikning oshib borayotganligidir. Xususan, metitsillinga chidamli Staphylococcus aureus (MRSA) shtammlarining tarqalishi mavjud antibiotiklarning samaradorligini cheklab qo'ymoqda va yangi davolash usullarini ishlab chiqish zaruratini yanada kuchaytirmoqda [4].

Ushbu maqola stafilokokklarning sistematik tasnifiga, ular keltirib chiqaradigan kasalliklarning klinik ko'rinishlariga, zamonaviy diagnostika usullariga va davolash strategiyalariga bag'ishlanadi.

Maqsad - tibbiyot xodimlari va ilmiy doira vakillariga ushbu muhim patogen mikroorganizmlar haqida keng qamrovli ma'lumot berish hamda stafilokokk infektsiyalarini samarali boshqarish bo'yicha bilimlarni oshirishdan iborat [5].

Materiallar va usullar. Ushbu tadqiqotda stafilokokk infektsiyalarini tashxislashda qo'llaniladigan diagnostik usullar bo'yicha ilmiy adabiyotlarning tizimli tahlili o'tkazildi. PubMed, Scopus, Web of Science va Google Scholar kabi elektron ma'lumotlar bazalaridan 2010 yildan 2023 yilgacha bo'lgan davrdagi maqolalar qidirildi. Qidiruvda "stafilokokk infektsiyalari", "diagnostika", "PTsR", "MALDI-TOF", "antibiotik sezgirligi" kabi kalit so'zlar ishlatildi. Tanlab olingan maqolalarning sifati va metodologik ishonchliligi maxsus baholash shkalalari yordamida baholandi.

Tahlil qilingan diagnostik usullar:

1. An'anaviy mikrobiologik usullar (bakterial ekish, Gram usulida bo'yash, katalaza va koagulaza testlari)
2. Avtomatlashtirilgan mikrobiologik tizimlar (VITEK, MicroScan, Phoenix)
3. Molekulyar diagnostik usullar (PTsR, real vaqt PTsR)
4. MALDI-TOF mass-spektrometriya
5. Yangi avlod sekvenirlash (NGS)
6. Antibiotik sezgirligini aniqlash

Natijalar va ularning muhokamasi. Tizimli tahlil natijalariga ko'ra, stafilokokk infektsiyalarini tashxislashda zamonaviy diagnostik usullar an'anaviy usullarga nisbatan yuqori sezgirlik, spetsifiklik va tezkorlik kabi bir qator afzalliklarga ega [8]. Avtomatlashtirilgan tizimlar natijalarni tezroq olish va bakteriyalarni aniqroq tavsiflash imkonini bersa, molekulyar diagnostika esa antibiotiklarga chidamlilik genlarini aniqlash va infektsiyaning tarqalishini kuzatish uchun imkoniyat yaratadi. MALDI-TOF MS texnologiyasi stafilokokklarni identifikatsiya qilishda inqilobiy o'zgarish yasadi va natijalarni bir necha daqiqa ichida olish imkonini berdi [2].

Tadqiqot natijalari shuni ko'rsatdiki, PTsR va real vaqt PTsR antibiotiklarga chidamli shtammlarni aniqlashda, xususan MRSA ni tez va aniq aniqlashda samarali usul hisoblanadi. MALDI-TOF MS bakteriyalarni identifikatsiya qilishda yuqori aniqlikni ta'minlaydi va an'anaviy usullarga nisbatan arzonroq. NGS texnologiyasi esa bakterial genom haqida batafsil ma'lumot olish va infektsiya tarqalishini kuzatish uchun eng istiqbolli usullardan biri hisoblanadi [5].

Stafilokokk infektsiyalarini tashxislashda zamonaviy diagnostik usullarning qo'llanilishi natijalarni tezroq olish, bakteriyalarni aniqroq tavsiflash va antibiotiklarga chidamlilik genlarini aniqlash imkonini beradi. Bu esa o'z vaqtida va samarali davolashni ta'minlash, asoratlarning oldini olish va sog'liqni saqlash tizimiga bo'lgan yukni kamaytirishga yordam beradi[7].

An'anaviy mikrobiologik usullar arzon va oson bo'lsa-da, natijalarni olish uchun ko'p vaqt talab etiladi va avtomatizatsiya darajasi past. Avtomatlashtirilgan tizimlar esa bu muammolarni

qisman hal qilish imkonini beradi, lekin ularning narxi yuqori va hamma laboratoriyalarda mavjud emas [6].

Molekulyar diagnostik usullar yuqori sezgirlik va spetsifiklikni ta'minlaydi, lekin ular ham qimmat va maxsus jihozlar talab etadi. MALDI-TOF MS stafilokokklarni identifikatsiya qilishda inqilobiy o'zgarish yasadi va natijalarni tez va arzon narxda olish imkonini berdi. NGS esa bakterial genom haqida batafsil ma'lumot olish imkonini beradi, lekin bu usul juda qimmat va murakkab bioinformatik tahlil talab etadi[10].

Antibiotiklarga sezgirlikni aniqlash davolash strategiyasini tanlashda muhim rol o'ynaydi. Disk-diffuziya usuli arzon va oson bo'lsa-da, natijalarni olish uchun ko'p vaqt talab etiladi. Avtomatlashtirilgan tizimlar esa bu jarayonni tezlashtirish imkonini beradi [9].

Xulosa. Stafilokokk infektsiyalarini tashxislashda zamonaviy diagnostik usullar an'anaviy usullarga nisbatan sezgirlik, spetsifiklik va tezkorlik kabi bir qator afzalliklarga ega. Avtomatlashtirilgan tizimlar, molekulyar diagnostika va mass-spektrometriya natijalarni tezroq olish va bakteriyalarni aniqroq tavsiflash imkonini bersa, NGS texnologiyasi bakterial genom haqida batafsil ma'lumot olish va infektsiya tarqalishini kuzatish uchun imkoniyat yaratadi. Stafilokokk infektsiyalarini tashxislashda zamonaviy diagnostik usullardan foydalanish o'z vaqtida va samarali davolashni ta'minlash, asoratlarning oldini olish va sog'liqni saqlash tizimiga bo'lgan yukni kamaytirishga yordam beradi.

Foydalanilgan adabiyotlar:

1. Boltaev, K. S., & Mamedov, A. N. (2021). Comparative study of ecological groups of hippohae rhamnoides Phytonematoids growing in the zarafshan oasis. Galaxy international interdisciplinary research journal, 9(9), 101-104.
2. Одилова, Г. М., Рустамова, Ш. А., Мамарасулова, Н. И., & Болтаев, К. С. (2019). Клинические особенности течения ветряной оспы у взрослых в современных климатических условиях. Вопросы науки и образования, (28 (77)), 70-78.
3. Мамедов А., Одилова Г. Частота обнаружения дрожжеподобные гриби рода Candida с ассоциаций стафилококков //Евразийский журнал академических исследований. – 2022. – Т. 2. – №. 11. – С. 1098-1102.
4. Хужакулов, Д. А., Юсупов, М. И., Шайкулов, Х. Ш., & Болтаев, К. С. (2019). Состояние внешнего дыхания у больных детей со среднетяжелым течением пищевого ботулизма. Вопросы науки и образования, (28 (77)), 79-86.
5. Azimovich, A. U. B., Sultonuvich, B. K., & Zokirovna, M. M. (2022). Streptokokk avlodiga mansub bakteriyalarning patogenlik xususiyatlarining tahlili. Talqin va tadqiqotlar ilmiy-uslubiy jurnali, 1(13), 95-101.
6. Sultonovich, B. K., Isrofilovna, M. N., Abdusalomovna, J. F., & Olimovna, O. P. (2022). A comparative study of nematoda facilities of shortage plants and trees in zarafshan forest biotopes. Academicia Globe: Inderscience Research, 3(5), 1-5.
7. Вахидова, А. М., Худаярова, Г. Н., & Болтаев, К. С. (2020). Исследование микрофлоры содержимого эхинококковых пузырей по морфологическому соотношению и определение ее чувствительности к антибиотикам. Academy, (7 (58)), 8-10.
8. Одилова Г. М., Юсупов М. И. Течение стафилококковых энтероколитов у детей раннего возраста //Проблемы биологии и медицины. – 2021. – Т. 5. – С. 130.

9. Жамалова, Ф. А., Болтаев, К. С., & Шодиева, Д. Г. (2023). Возбудители микозов слепней на территории различных регионов узбекистана. golden brain, 1(3), 28-34.
10. Одилова Г., Шайкулов Х., Юсупов М. Клинико-бактериологическая характеристика стафилококковых диарей у детей грудного возраста //Журнал вестник врача. – 2020. – Т. 1. – №. 4. – С. 71-74.

UO'K: 616-08-035

KUYDIRGI KASALLIGI: ETIOLOGIYA, KLINIK KO'RINISHLARI, DAVOLASH VA PROFILAKTIKASI

Boltayev K. S, Toshquvvatova M. Z.
Samarqand davlat tibbiyot universiteti

Annotasiya. Kuydirgi – Bacillus anthracis bakteriyasi tomonidan qo'zg'atiladigan o'ta xavfli, zoonoz infeksion kasallik bo'lib, inson va hayvonlarda uchraydi. Kasallik teri, nafas yo'llari yoki ovqat hazm qilish trakti orqali yuqishi mumkin. Mazkur maqolada kuydirgining etiologiyasi, patogenezi, klinik ko'rinishlari, zamonaviy davolash usullari va profilaktika choralari tahlil etilgan.

Kalit so'zlar: *Bacillus anthracis, bakterial infeksiya, zoonoz, kuydirgi, davolash, profilaktika.*

BACILLUS ANTHRACIS: ETIOLOGY, CLINICAL MANIFESTATIONS, TREATMENT AND PREVENTION

Boltayev K. S, Toshquvvatova M. Z.
Samarkand State Medical University

Annotation. Anthrax is a highly dangerous, zoonotic infectious disease caused by the bacterium Bacillus anthracis, which occurs in humans and animals. The disease can be transmitted through the skin, respiratory tract or digestive tract. This article analyzes the etiology, pathogenesis, clinical manifestations, modern treatment methods and preventive measures of anthrax.

Keywords: *Bacillus anthracis, bacterial infection, zoonosis, anthrax, treatment, prevention.*

СИБИРСКАЯ ЯЗВА: ЭТИОЛОГИЯ, КЛИНИЧЕСКИЕ ПРОЯВЛЕНИЯ, ЛЕЧЕНИЕ И ПРОФИЛАКТИКА

Болтаев К.С., Тошкувватова М.З.
Самаркандский государственный медицинский университет

Абстрактный. Сибирская язва — высококонтагиозное зоонозное инфекционное заболевание, вызываемое бактерией Bacillus anthracis, которое встречается у людей и животных. Заболевание может передаваться через кожу, дыхательные пути или пищеварительный тракт. В статье анализируются этиология, патогенез, клинические проявления, современные методы лечения и меры профилактики сибирской язвы.

Ключевые слова: *Bacillus anthracis, бактериальная инфекция, зооноз, сибирская язва, лечение, профилактика.*

Kirish. Kuydirgi – Bacillus anthracis bakteriyasi tomonidan qo'zg'atiladigan o'ta xavfli infeksion kasallik bo'lib, uzoq tarixga ega. Lui Pasterning XIX asrdagi kuydirgiga qarshi vaksina yaratish bo'yicha tadqiqotlari infeksion kasalliklarga qarshi kurashda muhim qadam bo'lgan [1,4]. Keyingi tadqiqotlar B. anthracis ning patogenlik mexanizmlarini, jumladan, kapsula va toksinlarning rolini aniqlashga qaratilgan [2]. Zamonaviy tadqiqotlar kuydirgining genomikasi, epidemiologiyasi, diagnostikasi va davolash usullariga yo'naltirilgan [3]. Biroq, kuydirgining ayrim jihatlari, masalan, bakteriyaning tuproqda uzoq vaqt saqlanib qolish mexanizmlari va kasallikning turli klinik shakllarining patogenezi etarlicha o'rganilmagan. Shuningdek, kuydirgiga qarshi yangi va samarali davolash usullarini ishlab chiqish dolzarb masalalardan biri bo'lib qolmoqda.

Maqsad. kuydirgi kasalligining etiologiyasi, patogenezi, klinik ko'rinishlari, zamonaviy davolash usullari va profilaktika choralarini ilmiy adabiyotlar asosida tahlil qilish va umumlashtirish.

Meterial va usullar. PubMed, Scopus, Web of Science, Google Scholar kabi ilmiy ma'lumotlar bazalaridan kuydirgi kasalligining etiologiyasi, patogenezi, klinik ko'rinishlari, davolash va profilaktikasiga oid ilmiy maqolalar, sharhlar, meta-tahlillar, klinik qo'llanmalar va boshqa turdagi nashrlar qidirildi. Qidiruvda quyidagi kalit so'zlar va ularning kombinasiyalaridan foydalanildi: "anthrax", "Bacillus anthracis", "etiology", "pathogenesis", "clinical manifestations", "diagnosis", "treatment", "prevention", "vaccination", "antimicrobial resistance". Tanlab olingan nashrlarning to'liq matnlari o'qib chiqildi va ularning mazmuni, metodologiyasi, natijalari va xulosalari tahlil qilindi. Tadqiqotlarning kuchli va zaif tomonlari, shuningdek, natijalarning ishonchliligi va umumlashtirish imkoniyatlari baholandi.

Natijalar va ularning muxokomasi. Etiologiya va Patogenez: Bacillus anthracis bakteriyasining etiologik xususiyatlariga oid adabiyotlar tahlili shuni ko'rsatdiki, kasallikning asosiy qo'zg'atuvchisi bo'lgan ushbu bakteriya o'ziga xos morfologik, kultural va biokimyoviy xususiyatlarga ega. Kapsula hosil qilish va uch komponentli toksin (protektiv antigen, o'lim faktori va shish faktori) ishlab chiqarish bakteriyaning asosiy virulentlik omillari hisoblanadi [4,9].

Klinik ko'rinishlar: Adabiyotlarda kuydirgining teri, o'pka va ovqat hazm qilish shakllarining klinik belgilari batafsil tavsiflangan. Teri shakli eng ko'p uchraydigan shakl bo'lib, eshako'lan (qora qo'tir) bilan xarakterlanadi. O'pka shakli eng xavfli bo'lib, o'limga olib kelishi mumkin. Ovqat hazm qilish shakli qorin og'rig'i, qonli diareya va qusish bilan namoyon bo'ladi [5,10].

Diagnostika: Kuydirgi tashxisini qo'yishda klinik belgilar, epidemiologik anamnez va laboratoriya tahlillari muhim rol o'ynaydi. Laboratoriya tahlillariga bakteriologik tekshiruv, PZR va serologik testlar kiradi [6].

Davolash: Kuydirgini davolashda antibiotiklar asosiy o'rin tutadi. Siprofloksasin, doksisiklin va levofloksasin kabi antibiotiklar eng ko'p qo'llaniladi. Ba'zi hollarda immunoglobulinlar yoki monoklonal antitanalar ham qo'llanilishi mumkin [7,12].

Profilaktika: Kuydirgining profilaktikasida chorva mollarini emlash, veterinariya nazorati va sanitariya-gigiena tadbirlari muhim rol o'ynaydi. Odamlar uchun vaksina mavjud, lekin u faqat xavf ostida bo'lgan shaxslarga tavsiya etiladi [8,11].

Ushbu tahliliy-umumlashtiruvchi maqolada kuydirgi kasalligining etiologiyasi, patogenezi, klinik ko'rinishlari, diagnostikasi, davolash va profilaktikasi bo'yicha mavjud ilmiy adabiyotlar tahlil qilindi.

Natijalar shuni ko'rsatdiki, Bacillus anthracis bakteriyasi kuydirgi kasalligining asosiy qo'zg'atuvchisi bo'lib, uning virulentlik omillari kasallikning rivojlanishida muhim rol o'ynaydi. Kuydirgining turli klinik shakllari mavjud bo'lib, ularning belgilari va og'irligi turlicha bo'lishi mumkin. Erta tashxis qo'yish va o'z vaqtida davolashni boshlash kasallikning asoratlarini kamaytirish va o'lim holatlarining oldini olish uchun muhimdir.

Antibiotiklar kuydirgini davolashda samarali vosita bo'lib qolmoqda, ammo antibiotiklarga chidamlilik muammosiga e'tibor qaratish zarur. Profilaktika choralari, jumladan, chorva mollarini emlash va veterinariya nazorati kasallikning tarqalishini oldini olishda muhim rol o'ynaydi.

Xulosa. Ushbu tahliliy-umumlashtiruvchi maqolada kuydirgi kasalligining etiologiyasi, patogenezi, klinik ko'rinishlari, diagnostikasi, davolash va profilaktikasi bo'yicha mavjud ilmiy adabiyotlar tahlil qilindi.

Tahlil natijalari shuni ko'rsatdiki, Bacillus anthracis bakteriyasi o'ta xavfli infeksion kasallik – kuydirgining asosiy qo'zg'atuvchisi hisoblanadi. Kasallikning klinik ko'rinishlari yuqish yo'liga qarab turlicha bo'lishi mumkin, shuning uchun erta tashxis qo'yish va o'z vaqtida davolashni boshlash muhim ahamiyatga ega. Zamonaviy davolash usullari antibiotiklar va qo'shimcha terapiyani o'z

ichiga oladi, ammo antibiotiklarga chidamlilik muammosi mavjud. Kuydirgining tarqalishini oldini olishda profilaktika choralari, jumladan, chorva mollarini emlash va veterinariya nazorati muhim rol o'ynaydi. Shunga qaramay, kuydirgining ayrim jihatlari, masalan, bakteriyaning tuproqda uzoq vaqt saqlanib qolish mexanizmlari va kasallikning turli klinik shakllarining patogenezi to'liq o'rganilmagan. Bundan tashqari, kuydirgiga qarshi yangi va samarali davolash usullarini ishlab chiqish dolzarb masala bo'lib qolmoqda.

Kelgusida kuydirgi bo'yicha tadqiqotlar quyidagi yo'nalishlarda davom ettirilishi maqsadga muvofiq:

- Bacillus anthracis ning tuproqda saqlanib qolish mexanizmlarini o'rganish.
- Kuydirgining turli klinik shakllarining patogenezini aniqlash.
- Antibiotiklarga chidamli Bacillus anthracis shtammlariga qarshi samarali davolash usullarini ishlab chiqish.
- Kuydirgiga qarshi yangi va xavfsiz vaksinalarni yaratish.

Foydalanilgan adabiyotlar:

1. Лухнова Л. Ю. и др. Сибирская язва в 2016 году в Казахстане //Медицина (Алматы). – 2017. – Т. 5. – С. 56-62.
2. Одилова Г. М., Караматуллаева З. Э. Некоторые аспекты лабораторной диагностики сибирской язвы //Педиатр. – 2017. – Т. 8. – №. S.
3. Тихонов В. К., Тихонова Г. П., Григорьева В. В. Лабораторная диагностика сибирской язвы: опыт и практика //Перспективные технологии и инновации в апк в условиях цифровизации. – 2022. – С. 200-202.
4. Онищенко Г. Г. и др. Лабораторная диагностика опасных инфекционных болезней. – 2009.
5. Тихонов В. К. и др. Сибирская язва: опыт и практика //Перспективы развития механизации, электрификации и автоматизации сельскохозяйственного производства. – 2022. – С. 290-294.
6. Giyosovna S. D. et al. BACILLUS AVLODIGA MANSUB BAKTERIYALARNING BIOTEXNOLOGIK POTENSIALI //Innovations in Technology and Science Education. – 2023. – Т. 2. – №. 7. – С. 1154-1162.
7. Yusupov M. I., Shaikulov K. S., Odilova G. M. Antigenic similarity of E. coli isolated from mothers and their children //Doctor ahborotnomashi. – 2020. – Т. 4. – С. 97.
8. Dildora S. et al. Bacillus pumilis bakteriyalari mikrobiologik tahlili va biotexnologiyadagi ahamiyati //Образование наука и инновационные идеи в мире. – 2023. – Т. 22. – №. 2. – С. 154-161.
9. Mamarasulova N. I., Odilova G. M. Berberis integerrima bungening ikkilamchi metabolitlarining dorivorlik xususiyatlari va biotexnologik ahamiyati //Golden brain. – 2023. – Т. 1. – №. 10. – С. 33-43.
10. Одилова Г. М. Эпидемик аҳамиятга эга бўлган микроорганизмларни антисептиклар ва дезинфекцияловчи воситаларга чидамлилигини баҳолаш // Экономика и социум. 2024. №10-2 (125). URL:
11. Sultonovich B. K. et al. Nematodofauna of Retain Plants and Their Seasonal Dynamics //Annals of the Romanian Society for Cell Biology. – 2021. – Т. 25. – №. 4. – С. 5455-5462.

UO'K: 616-08-035

SUTEMIZUVCHILAR ORGANLARIDA Ni,Co,Mn,VA Zn MIKROELEMENTLARNING TAQSIMLANISHI: (Samarqand viloyati misolida)

Boboqandova M.F. Muratova Z.T.
Samarqand davlat tibbiyot universiteti

Annotatsiya: Ushbu tadqiqot natijalari Samarqand viloyatida yetishtirilgan quyonlarning ayrim organlarida Zn, Mn, Co va Ni mikroelementlarining taqsimlanishi haqida ma'lumot beradi. Ushbu tadqiqotning maqsadi quyon organizmining ayrim to'qimalarida (jigar, buyrak, mushak, o'pka) nikel (Ni), kobalt (Co), marganes (Mn) va rux (Zn) mikroelementlarining taqsimlanishini o'rganishdan iborat. Tadqiqot davomida quyonlarning ichki organlari tarkibidagi mikroelementlar miqdoridagi o'zgarishlar kuzatildi. Mikroelementlar tirik organizmlar hayotida muhim biologik rollarni bajaradigan kimyoviy elementlar guruhidir. Ushbu elementlarning yetishmasligi yoki ortiqcha miqdori organizmda turli fiziologik va biokimyoviy buzilishlarga olib kelishi mumkin. Shu sababli, mikroelementlarning organizmdagi taqsimlanish qonuniyatlarini o'rganish muhim ahamiyatga ega.

Kalit so'zlar: *Kobalt, Nikel, Marganes, Rux, Saturn, spektrometriya, Mufel pechi, mikroelementlar.*

DISTRIBUTION OF MICROELEMENTS Ni, Co, Mn, AND Zn IN MAMMALIAN ORGANS: (A Case Study of the Samarkand Region)

Boboqandova M.F.Muratova Z.T.
Samarkand State Medical University

Abstract: The results of this study provide information on the distribution of microelements Zn, Mn, Co, and Ni in selected organs of rabbits raised in the Samarkand region. The purpose of this research is to investigate the distribution of microelements nickel (Ni), cobalt (Co), manganese (Mn), and zinc (Zn) in selected tissues (liver, kidneys, muscles, lungs) of the rabbit organism. During the study, changes in the amount of microelements in the internal organs of rabbits were observed. Microelements are a group of chemical elements that play an important biological role in the life of living organisms. A deficiency or excess of these elements can lead to various physiological and biochemical disorders in the body. Therefore, studying the patterns of microelement distribution in the body is of significant importance.

Keywords: *Cobalt, Nickel, Manganese, Zinc, Saturn, Spectrometry, Muffle Furnace, Microelements.*

РАСПРЕДЕЛЕНИЕ МИКРОЭЛЕМЕНТОВ Ni, Co, Mn и Zn В ОРГАНАХ МЛЕКОПИТАЮЩИХ: (На примере Самаркандской области)

Бобоқандова М.Ф.Муратова З.Т.
Самаркандский государственный медицинский университет

Аннотация: Результаты данного исследования предоставляют информацию о распределении микроэлементов Zn, Mn, Co и Ni в отдельных органах кроликов, выращенных в Самаркандской области. Целью настоящего исследования является изучение распределения микроэлементов никеля (Ni), кобальта (Co), марганца (Mn) и цинка (Zn) в отдельных тканях (печень, почки, мышцы, легкие) организма кролика. В ходе исследования наблюдались изменения в количестве микроэлементов во внутренних органах кроликов. Микроэлементы-это группа химических элементов, которые играют важную биологическую роль в жизни живых организмов. Дефицит или избыток этих элементов может привести к различным физиологическим и

биохимическим нарушениям в организме. Поэтому изучение закономерностей распределения микроэлементов в организме имеет важное значение.

Ключевые слова: *Кобальт, Никель, Марганец, Цинк, Сатурн, спектрометрия, Муфельная печь, микроэлементы.*

Mavzuning dolzarbligi:Uzoq muddatli mikroelementlar yetishmovchiligi va organizmga ionlovchi radiatsiyalarning ta'siri mineral moddalar va vitaminlar almashinuviga salbiy ta'sir ko'rsatadi, bu esa mushak, o'pka, jigar, buyraklar va qalqonsimon bez kabi organlarning funksional holatini yomonlashishiga, shuningdek, immunokompetent hujayralar va a'zolarning funksional faolligini pasayishiga sabab bo'ladi. Ushbu omillar chorvachilikda kasalliklarni aniqlash va qishloq xo'jalik hayvonlarini saqlab qolishda muhim ahamiyatga ega.

Ishning asosiy maqsadi

Sut emizuvchi hayvonlarda (aralash zotli quyonlarda) Ni, Co, Mn va Zn mikroelementlarining yetishmasligida yuz beradigan o'zgarishlarni aniqlash.

Tadqiqot material va usullari: Tadqiqot materiallari sifatida Samarqand viloyatining to'rtta tumani (Kattaqo'rg'on, Payariq, Jomboy va Urgut) dan keltirilgan quyonlarning jigar, o'pka, mushak va buyrak organlari to'qimalari ishlatilgan.[2.4] Har bir tumandan to'rttadan qoramol tanlangan. Organlardagi mikroelementlar miqdori Samarqand Davlat Universitetining Ilmiy tekshirish laboratoriyasida "Сатурн" spektrofotometrida atom absorbsion spektrometriya usuli yordamida aniqlangan.[1.6]Namunalarni tayyorlash jarayoni quyidagicha bo'lgan:Har bir organ to'qimasidan 5 g dan olinib, 180°C haroratda quritish shkafida to'liq quriguncha quritilgan. Quritilgan namunalar qisman qorayguncha kuydirilgan.[2.3] Namunalar mufel pechiga o'tkazilib, 450°C haroratda kul hosil bo'lguncha qizdirilgan.Kuyish jarayonini tezlashtirish uchun namunaga bir necha tomchi nitrat kislotasi qo'shilgan va yana to'liq kuyguncha pechga qo'yilgan.Tayyor kul namunasi 0.1 Hli xlorid kislotasi (HCl) bilan eritilgan.Atom absorbsion spektrofotometr ishi atom absorbsion spektr analiz usuliga asoslangan.[1.2] Suyuq namuna atomar holatga o'tkazilib, nurlanish jarayonida kerakli elementlar aniqlangan. Nurlanish manbai sifatida yarim katodli yoritgich yoki elektrodsiz yoritgich ishlatilgan. Har bir tumandagi quyonlarning ayrim organlaridagi ayrim mikroelementlarning normasi (mkg/g quruq vaznda) 1-jadvalda keltirilgan.

1-jadval.

Organlar	Zn	Mn	Ni	Co
Jigar	30	3.7	0.2	0.06
Buyrak	21.1	3.8	0.2	0.05
Mushak	40	0.1	0.008	0.016
O'pka	14	0.82	0.2	0.06

Hayvonlar va o'simliklar hayotida keng tarqalgan mikroelementlar yaxshi ma'lum. Bu sohadagi bilimlar, amalga oshirilgan muhim kuzatuvlar va kutilgan natijalar amaliy ahamiyatga ega. Chorvachilikda mikroelementlar profilaktikasining iqtisodiy samaradorligi kasalliklarni aniqlashda va qishloq xo'jalik hayvonlarini saqlab qolishda muhim ahamiyat kasb etadi.[1.3] Mikroelementlar odam va hayvonlar organizmida juda kam miqdorda, ya'ni 10^-3 - 10^-12% chegarasida bo'ladi.[7.8]

Nikel yangi mikroelementlardan hisoblanib, uning hayotiy zarurligi 1970-yillarda aniqlangan. Quyonlarning organ va to'qimalarida nikelning konsentratsiyasi ko'p emas. Bu element nisbatan suyak va o'pkada ko'proq bo'lib, keksaygan organizmda uning miqdori oshganligi aniqlangan.[6.7] Ovqat bilan kirgan nikelning so'rilishi 1-10% atrofida bo'ladi. Nikel organizmga o'pka orqali ham o'tishi mumkin.

Kobalt hayvonlar organizmida boshqa metall mikroelementlariga qaraganda yaxshi so'riladi. Kobalt qonning hosil bo'lishida, ya'ni eritrotsitlarning shakllanishida ishtirok etadi. Agar organizmda kobalt yetishmasa, qondagi eritrotsitlarning miqdori kamayadi.[5.6] Agar kobaltning miqdori ko'payib ketsa, organizmdagi qon aylanish sistemasi buziladi. Kobalt sanoat zahari hisoblanadi. U organizmga nafas olish organlari, oshqozon-ichak trakti va teri orqali kirishi mumkin.[3.4]Zaharli ta'sir nafas olish organlarining buzilishida, qon ketishida, asab tizimi va ovqat hazm qilish tizimining buzilishida namoyon bo'ladi.

*Rux*ning organizmdagi zaxirasi ko'p katta emas. Katta yoshlilarda 22.9-30.6 mmol, ya'ni 1.5-2 g ni tashkil etadi. U barcha organ va to'qimalarda aniqlangan bo'lib, uning miqdori 1 g quruq to'qimada 0.15 dan 3.3 mmol gacha o'zgaradi.[2.3] Skelet muskullari nisbatan ruxga boy bo'lib, uning miqdori barcha shu mikroelement miqdorining 62.6% hisoblanadi.

Marganes organizmdagi fermentlarni faollashtiradi. Jigarda to'plangan zaharli moddalardan xalos etadi. Organizmda Mn elementi etishmasa suyaklarning noto'g'ri shakllanishiga olib keladi.[5.4] Noxosdan Mn bilan zaharlanib bo'lmaydi. Mn ning bir sutkalik miqdori 2-10 mg. Mn miya faoliyatida katta rol o'ynaydi. Uning funksiyasi epifizda, hid bilish bezlarida, gipotalamusning markazida va bazal gangliyalarda ancha ko'p bo'ladi. U melanin saqlovchi strukturalarni to'playdi. Mn ning etishmasligi miya funksiyalarida namoyon bo'ladi.

Quyon organlaridagi mikroelementlarning miqdori.

2-jadval.

Organlar	Znning normasimkg/g	Kattaqo'rg'on	Payariq	Jomboy	Urgut
Jigar	30	29.97	27.66	28.22	33.58
Buyrak	21.1	20.12	19.00	19.19	17.20
Mushak	40	35.26	35.76	36.04	36.79
O'pka	14	10.83	10.55	11.43	12.22

3-jadval.

Organlar	Mnning norma mkg/g	Kattaqo'rg'on	Payariq	Jomboy	Urgut
Jigar	3.7	2.43	2.79	2.02	3.10
Buyrak	3.8	3.05	3.37	3.48	3.58
Mushak	0.21	0.32	0.34	0.33	0.34
O'pka	0.82	0.94	0.59	0.53	0.70

4-jadval.

Organlar	Coning normasi kg/g	Kattaqo'rg'on	Payariq	Jomboy	Urgut
Jigar	0.06	0.05	0.06	0.06	0.07
Buyrak	0.05	0.045	0.045	0.047	0.05
Mushak	0.016	0.010	0.011	0.012	0.012
O'pka	0.06	0.06	0.05	0.05	0.07

5-jadval.

Organlar	Nining normasi kg/g	Kattaqo'rg'on	Payariq	Jomboy	Urgut
Jigar	0.2	0.21	0.19	0.25	0.25
Buyrak	0.2	0.18	0.21	0.15	0.21
Mushak	0.008	0.007	0.006	0.007	0.007
O'pka	0.2	0.18	0.14	0.16	0.2

Statistik tahlil: Olingan ma'lumotlar Microsoft Excel dasturida qayta ishlandi. Natijalar o'rtacha qiymat ± standart xato (Mean ± SE) ko'rinishida ifodalandi. Guruhlar o'rtasidagi farqlar Studentning t-testi yordamida baholandi. $p < 0.05$ bo'lganda farqlar statistik jihatdan ahamiyatli deb hisoblandi.

Tadqiqot natijalari: Olingan natijalar shuni ko'rsatadiki, quyon organizmining turli organlarida mikroelementlarning konsentratsiyasi sezilarli darajada farq qiladi. Ushbu farqlar organlarning metabolik faolligi va funktsional xususiyatlari bilan bog'liq bo'lishi mumkin.

Muhokama:Olingan natijalar shuni ko'rsatadiki, quyon organizmining turli organlarida mikroelementlarning konsentratsiyasi sezilarli darajada farq qiladi. Ushbu farqlar organlarning metabolik faolligi va funktsional xususiyatlari bilan bog'liq bo'lishi mumkin.Jadvallarda ko'rsatilganidek, quyonlar organlarida rux (Zn) miqdori boshqa mikroelementlarga nisbatan yuqori. Rux asosan mushaklarda ko'p miqdorda uchraydi, jigarda mushakka nisbatan kamroq, buyrakda jigarga nisbatan kamroq va o'pkada buyrakka nisbatan kamroq. Marganes (Mn) miqdori ruxga nisbatan kamroq. U jigar va buyrakda deyarli bir xil miqdorda bo'ladi. Mn ning o'pkadagi miqdori jigar va buyrakka nisbatan taxminan to'rt yarim marta kam bo'ladi, mushaklarda esa o'n yetti marta kam bo'ladi. Kobalt (Co) va nikel (Ni) miqdori organ to'qimalarida juda kam miqdorda bo'ladi.

Xulosa: Olingan natijalar hududiy omillar (tuproq tarkibi, ozuqa sifati va boshqalar) quyonlar (Oryctolagus cuniculus domesticus) organizmining turli to'qimalarida mikroelementlar konsentratsiyasiga sezilarli ta'sir ko'rsatishini ko'rsatadi. Mikroelementlar konsentratsiyasidagi defitsit yoki ortib ketishi hayvonlarning fiziologik holatiga va mahsuldorligiga salbiy ta'sir ko'rsatishi mumkin. Ushbu ma'lumotlar chorvachilikda mikroelementlar profilaktikasi bo'yicha chora-tadbirlarni ishlab chiqishda muhim ahamiyati.Kelajakdagi tadqiqotlarda mikroelementlarning miqdoriga ta'sir etuvchi omillarni (masalan, tuproq tarkibi, ozuqa sifati) o'rganish maqsadga muvofiqdir. Shuningdek, mikroelementlar yetishmovchiligi yoki ortiqchaligining quyonlarning salomatligiga ta'sirini aniqlash muhim ahamiyatga ega.

Foydalanilgan adabiyotlar:

1. Кидин В.В., Торшин С.П. Агрохимия. Учебник. — Проспект, 2015. — 619 с. — ISBN 9785392187676.
2. Полянская Ирина Сергеевна. Новая классификация биоэлементов в биоэлементологии. cyberleninka.ru. Журнал «Молочнохозяйственный вестник» Вологодской государственной молочнохозяйственной академии им. Н.В. Верещагина, номер 1(13), С. 34-42 (2014). Дата обращения: 19 марта 2021.
3. Starr C., McMillan B. 2.1. Atoms and Elements // Human Biology. — 11 ed. — Cengage Learning, 2014. — P. 16. — 608 p. — ISBN 9781305445949.
4. Скальный А. В., Рудаков И. А. Биоэлементы в медицине. — Оникс 21 век, Мир, 2004. — С. 18—23. — 272 с. — ISBN 5-329-00930-8.

5. Анатолий Скальный - *Микроэлементы*: бодрость, здоровье, долголетие обложка *книги*. Автор: Скальный Анатолий Викторович. Редактор: Родионова Е.
6. Gadaevich, K. A., Baxtiyorovich, N. P., Mardikulovich, U. G., & Fazliddinovna, B. M. (2021). Reactivity of the supraoptic, arcuate nucleus of the hypothalamus and the B-and D-basophilic cells of the adenohypophysis in the early postreanimation period. European Journal of Molecular & Clinical Medicine, 8(3), 954-957.
7. Gadaevich, K. A., & Fazliddinovna, B. M. (2022). Morphofunctional State of The Reproductive System in Mature Intact Rats in the Arid Zone. Central Asian Journal of Medical and Natural Science, 3(5), 511-516.
8. Нуримов ПБ, Бобокандова МФ. Особенности развития соматотропной функции гипофиза и надпочечников у мальчиков-подростков. Новый день в медицине. 2022;2:40.

UO'K: 616-08-035

OFTALMOLOGIYADA XORIOKAPILLYARLAR PERFUZIYASINI ANIQLASHDA IMAGEJ ILOVASIDAN FOYDALANISH

Bobojonov D.S., Yusupov A.F., Karimova M.X.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiyasi ilmiy-amaliy tibbiyot markazi

Annotatsiya. Xoriokapillyarlar perfuziyasi ko'z tubining qon aylanishini baholashda muhim omillardan biridir. U turli oftalmologik kasalliklarni, jumladan, diabetik retinopatiya, yoshga bog'liq makulyar degeneratsiya va boshqa vaskulyar patologiyalarni erta tashxislash va nazorat qilish uchun qo'llaniladi. Zamonaviy tibbiy texnologiyalar, xususan, tasvirlarni tahlil qilish dasturlari, bunday diagnostikani ancha aniq va samarali qilish imkonini beradi. Ushbu maqolada ImageJ dasturidan foydalanib, xoriokapillyarlar perfuziyasini baholash usullari ko'rib chiqamiz.

Kalit so'zlar: *xoriokapillyarlar, perfuziya, ImageJ, OCTA, qon aylanishi.*

USE OF IMAGE-J APPLICATION IN DETERMINING CHORIOCAPILLARY PERFUSION IN OPHTHALMOLOGY

Bobozhanov D.S., Yusupov A.F., Karimova M.X.
Republican specialized eye microsurgery scientific and practical Medical Center

Abstract. Choriocapillary perfusion is one of the important factors in assessing fundal blood flow. It is used to diagnose and control various ophthalmological diseases, including diabetic retinopathy, age-related macular degeneration, and other vascular pathologies. Modern medical technologies, in particular, image analysis programs, make such diagnostics much more accurate and effective. In this article, we will consider methods for assessing choriocapillary perfusion using the ImageJ program.

Keywords: *choriocapillaries, perfusion, ImageJ, OCTA, blood circulation.*

ИСПОЛЬЗОВАНИЕ ПРИЛОЖЕНИЯ IMAGE-J ДЛЯ ОПРЕДЕЛЕНИЯ ХОРИОКАПИЛЛЯРНОЙ ПЕРФУЗИИ В ОФТАЛЬМОЛОГИИ

Бобожонов Д.С., Юсупов А.Ф., Каримова М.Х.
Республиканский специализированный научно-практический медицинский центр микрохирургии глаза

Абстракт. Хориокапиллярная перфузия является одним из важных факторов оценки кровотока в фундальном отделе. Он используется для ранней диагностики и контроля различных офтальмологических заболеваний, включая диабетическую ретинопатию, возрастную макулярную дегенерацию и другие сосудистые патологии. Современные медицинские технологии, в частности, программы анализа изображений, делают такую диагностику гораздо точнее и эффективнее. В данной статье мы рассмотрим методы оценки хориокапиллярной перфузии с помощью программы ImageJ.

Ключевые слова: *хориокапилляры, перфузия, ImageJ, OCTA, кровообращение.*

Tadqiqot maqsadi. Turli ko'z kasalliklarida muhim ahamiyatga ega bo'lgan xoriokapillyarlar qavatining qon bilan ta'minlanish miqdorini noinvaziv usul yordamida aniqlash.

Material va usullar. Xoriokapillyarlar Sattler qatlami va Brux membranasi orasida joylashgan xorioideyaning kapillyar chigalidir. U yirik kapillyarlarning zich erkin anastomozlashgan bir qatlamli chigal hosil qiladi va to'r parda pigment epiteliysi (TPE) hamda to'r pardaning tashqi qatlamlari uchun asosiy oziqlanish manbai hisoblanadi. [1] Klinik va gistopatologik tadqiqotlar natijalari xorioidal qon aylanishi bilan to'r pardoning turli kasalliklari, jumladan yoshga bog'liq makulyar

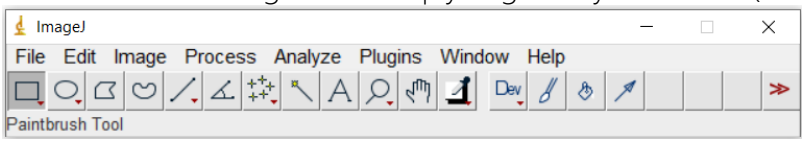
degeneratsiya va diabetik retinopatiya, shuningdek ko'rish o'tkirligi o'rtasida bog'liqlik borligini ko'rsatganligi sababli, xoriokapillyarlarni in vivo tasvirlash muhim ahamiyatga ega deb hisoblanmoqda.

Biroq, xoriokapillyarlarni in vivo tasvirlash mavjud texnologiyalar yordamida murakkab jarayon hisoblanadi. Bo'yoqqa asoslangan angiografiya, ayniqsa indotsianin-yashil angiografiyasi uzoq vaqtdan beri xorioidal qon aylanishini baholashning asosiy usuli sifatida qabul qilingan bo'lsa-da, chuqurlik rezolyutsiyasining cheklanganligi xoriokapillyarlarni chuqurroq tomir qatlamlaridan ajratib ko'rsatishni qiyinlashtirgan. Bundan tashqari, an'anaviy fundus tasvirining past lateral rezolyutsiyasi tomirlararo bo'shliqlarni aniq ko'rsatish va xoriokapillyar chigalini vizualizatsiya qilishni murakkablashtiradi. Buning o'rniga, masalan, flyuoressein angiografiyasida, fenestratsiyalangan xoriokapillyarlar orqali bo'yoqning erta diffuz tarqalishi xoriokapillyarlarni faqat xorioidal qizg'ishlik deb ataladigan noaniq kulrang g'ubor sifatida ko'rish imkonini bergan. [2]

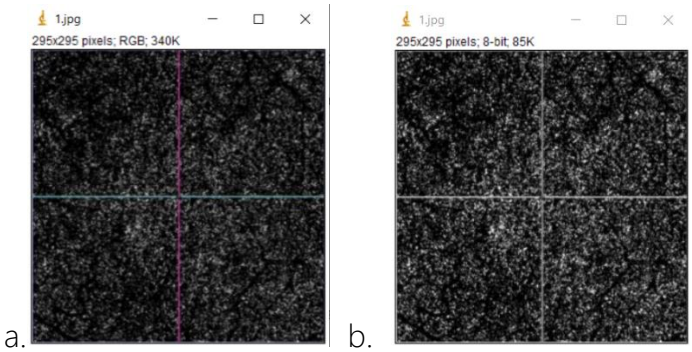
ImageJ — ochiq kodli tasvir tahlili dasturi bo'lib, ilmiy tadqiqotlarda keng qo'llaniladi. [3,4] U turli tasvir formatlarini qo'llab-quvvatlaydi va turli xil filtrlar, segmentatsiya va aniqlash vositalari yordamida tahlil qilish imkonini beradi. Xususan, oftalmologik tadqiqotlarda ImageJ ilovasi orqali optik koherens tomografiya angiografiyasi (OCTA) natijalari asosida xoriokapillyarlar perfuziyasini o'lchash mumkin.

OCTA Triton — Topcon kompaniyasi tomonidan ishlab chiqilgan ilg'or optik koherens tomografiya angiografiya tizimidir. Ushbu qurilma retinal va xoriokapillyar qon aylanishini invaziv bo'lmagan usulda o'rganish imkonini beradi. U yuqori aniqlikdagi tasvirlarni olishga mo'ljallangan bo'lib, bemorlarning qon tomir tizimidagi o'zgarishlarni erta aniqlashga xizmat qiladi. OCTA Triton lazer interferometriya tamoyiliga asoslangan bo'lib, retinal va xoriokapillyar qon oqimini real vaqtda kuzatish imkonini beradi. U infraqizil nurlanish yordamida to'qimalarning optik xususiyatlarini o'lchaydi va harakatlanayotgan qon hujayralarining tasvirini hosil qiladi. Bunda turli qatlamlardagi qon oqimini segmentatsiya qilish va perfuziya xaritalarini yaratish mumkin. [5]

Xoriokapillyarlar perfuziyasini aniqlash uchun bir nechta sodda bo'lgan bosqichlarni amalga oshirish kerak. Birinchi ilovani ochganimizda quyidagi menyu ochiladi. (rasm 1)



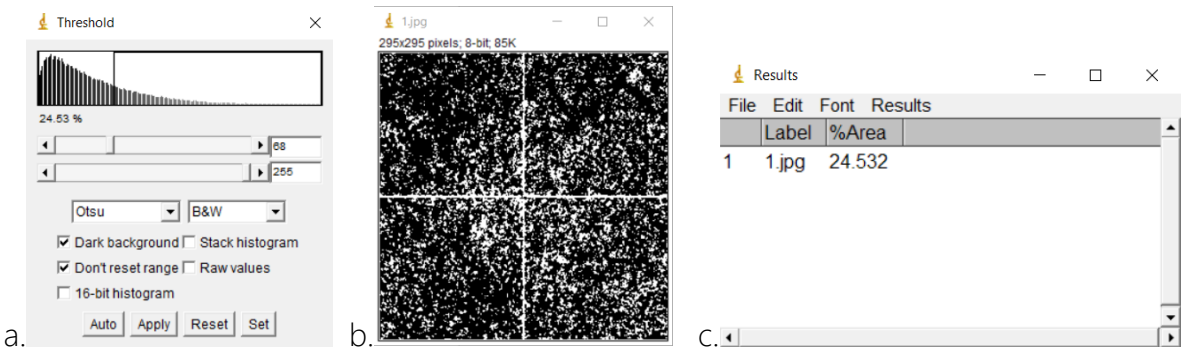
1-rasm . Shundan so'ng OCTA yoki boshqa mos formatdagi tasvirlar ImageJ ilovasiga yuklanadi va tasvir sifati yaxshilanishi uchun 8 bitli formatga o'tkaziladi hamda kontrast oshiriladi. (rasm 2)



a. b.

2-rasm: *a) original OCTA sur'ati; b) 8 bitga o'tkazilgan va kontrastlangan OCTA sur'ati;*

Endi sur'atni oq va qora piksellarga ajratib (binarizatsiya) olish uchun "Threshold" funksiyasidan foydalanib Otsu metodini tanlaymiz va "apply" tugmasini bosamiz. (rasm 3)



3-rasm: *a) "threshold" funksiyasida Otsu metodini tanlash; b) binarlashgan sur'at; c) natijalar oynasi.*

Hosil bo'lgan binarlashgan sur'atda oq piksellarning ulushini aniqlash uchun "Analyze Particles" vositasidan foydalanganimizda natijalar oynasi kelib chiqadi (rasm 3). Natijani esa % birligida ko'rsatib beradi. [6-11]

Boshqa metodlar (flyuroessein angiografiya) ga qaraganda bir qancha afzalliklarga ega bu tekshiruv usulining biroz cheklovlari ham bor. Ular quyidagilar: tasvir sifatiga bog'liq natijalarning o'zgaruvchanligi, qo'lda parametrlarni sozlash zarurati hamda tahlil natijalarining standartizatsiya qilinishi lozimligi kabilardir.

Natija. ImageJ va Otsu metodi yordamida xoriokapillyarlar perfuziyasi aniqlik bilan segmentatsiya qilindi. OCTA va ImageJ kombinatsiyasi an'anaviy angiografiyaga nisbatan yuqori aniqlik va noinvazivlikni ta'minladi.

Xulosa. ImageJ dasturi oftalmologiyada xoriokapillyarlar perfuziyasini baholashda samarali vositalardan biri hisoblanadi. U tibbiyot xodimlariga bemorlarning qon aylanish tizimida yuzaga kelgan o'zgarishlarni aniq aniqlash va tahlil qilish imkonini beradi. Kelajakda bu texnologiyalarning yanada takomillashtirilishi va sun'iy intellekt bilan integratsiyasi diagnostikani yanada aniq va samarali qilishga xizmat qiladi. Shu bilan birga, kelgusida ImageJ ilovasiga avtomatlashtirilgan algoritmlar va tarmoq bazasidagi ma'lumotlar yordamida yanada sifatli tahlil o'tkazish imkoniyatlarini kengaytirish lozim.

Ko'pgina klinik tadqiqotlar shuni ko'rsatadiki, ImageJ dasturidan foydalanish orqali xoriokapillyar perfuziyasining o'zgarishlarini aniq aniqlash va bemorlarni erta tashxislash samaradorligini oshirish mumkin. Bu esa oftalmologik kasalliklarni oldini olish va davolashda yangi imkoniyatlar yaratadi.

Foydalanilgan adabiyotlar:

1. Laiginhas R, Cabral D, Falcão M. Evaluation of the different thresholding strategies for quantifying choriocapillaris using optical coherence tomography angiography. Quant Imaging Med Surg. 2020 Oct;10(10):1994-2005. doi: 10.21037/qims-20-340.
2. Jost L. Lauermann, Nicole Eter, Florian Alten; Optical Coherence Tomography Angiography Offers New Insights into Choriocapillaris Perfusion. Ophthalmologica 8 March 2018; 239 (2-3): 74–84.
3. Otsu N. A threshold selection method from gray-level histograms. IEEE Transactions on Systems, Man, and Cybernetics, 1979; 9(1): 62-66.
4. Schneider C.A., Rasband W.S., Eliceiri K.W. NIH Image to ImageJ: 25 years of image analysis. Nature Methods, 2012; 9(7): 671-675.

5. Al-Sheikh M., Phasukkijwatana N., Dolz-Marco R., et al. "Quantitative OCT Angiography of the Retinal Microvasculature and the Choriocapillaris in Myopic Eyes." Investigative Ophthalmology & Visual Science, 2017; 58(4): 2063-2069.
6. Kim A.Y., Rodger D.C., Shahidzadeh A., et al. "Choriocapillaris Flow Impairment Predicts the Risk of Geographic Atrophy Progression in Age-Related Macular Degeneration." American Journal of Ophthalmology, 2022; 239: 1-9.
7. Garrity S.T., Iafe N.A., Phasukkijwatana N., et al. "Quantitative Analysis of OCT Angiography in Choriocapillaris." Investigative Ophthalmology & Visual Science, 2018; 59(5): 1763-1769.
8. Borrelli E., Uji A., Sarraf D., et al. "Alterations in the Choriocapillaris in Intermediate Age-Related Macular Degeneration." Investigative Ophthalmology & Visual Science, 2017; 58(11): 4792-4798.
9. Zhang Q., Zheng F., Motulsky E.H., et al. "A Novel Strategy for Quantifying Choriocapillaris Flow Voids Using Swept-Source OCT Angiography." Investigative Ophthalmology & Visual Science, 2018; 59(1): 203-211.
10. Tian J., Varga B., Somfai G.M., Lee W.H., Smiddy W.E., Puliafito C.A. Real-time automated segmentation algorithm for fluorescein angiography to evaluate diabetic retinopathy. Translational Vision Science & Technology, 2020; 9(3): 7.
11. Chu Z, Cheng Y, Zhang Q, Zhou H, Dai Y, Shi Y, Gregori G, Rosenfeld PJ, Wang RK. Quantification of Choriocapillaris with Phansalkar Local Thresholding: Pitfalls to Avoid. Am J Ophthalmol. 2020 May;213:161-176. doi: 10.1016/j.ajo.2020.02.003. Epub 2020 Feb 12.

UO'K: 617.753.29

MIOPIYA BILAN KASALLANGAN BOLALARDA KO'Z OLDINGI SEGMENTI MORFOMETRIK PARAMETRLARINING QIYOSIY XARAKTERISTIKASI

Bekmurodova O.K.
Abu ali ibn sino nomidagi Buxoro davlat tibbiyot instituti

Annotatsiya. Ushbu maqolada 2021-2024 yillar davomida Buxoro viloyatida maktab yoshidagi miopiya (uzoqni yaxshi ko'raolmaslik)ning turli darajalari bilan kasallangan bolalar ko'zining asosiy nur sindiruvchi qismi hisoblangan shox parda morfometrik parametrlari OKT tekshirish usuli yordamida o'rganilgan. Ushbu tadqiqotning asosiy maqsadi shundaki, miopik refraksiya holati asoratlanadigan bo'lsa shox pardada qanday o'zgarishlar paydo bo'lishini bilish va uni oldindan prognoz qilish uchun maxsus profilaktik ko'rsatmalarni ishlab chiqishdir.

Kalit so'zlar. Miopiya, klinik refraksiya, anizometropiya, shox parda, OKT

COMPARATIVE CHARACTERISTIC OF MORPHOMETRIC PARAMETERS OF THE PREOCULAR SEGMENT IN CHILDREN WITH MYOPIA

Bekmurodova O.K.
Bukhara State Medical Institute named after Abu Ali Ibn Sino

Annotation. In this article, the morphometric parameters of the cornea, which are considered the main light-breaking part of the eye of children with different levels of school-age myopia (nearsightedness)in the Bukhara region for the period 2021-2024, were studied using the Oct verification method. The main objective of this study is to know what changes occur in the cornea if the myopic refraction condition is complicated and to develop specific preventive guidelines to predict it in advance.

Keywords. Myopia, clinical refraction, anisometropia, cornea, Oct

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА МОРФОМЕТРИЧЕСКИХ ПАРАМЕТРОВ ПЕРЕДНЕГО СЕГМЕНТА ГЛАЗА У ДЕТЕЙ С МИОПИЕЙ

Бекмуродова О.К.
Бухарский государственный медицинский институт имени Абу Али Ибн Сины

Аннотация. В данной статье морфометрические параметры роговицы, считающейся основной светопреломляющей частью глаза детей школьного возраста с различной степенью близорукости (дальнозоркости)в Бухарской области на 2021-2024 годы, изучались методом ОКТ-обследования. Основная цель этого исследования-выяснить, какие изменения возникают в роговице, если состояние миопической рефракции является осложнением, и разработать специальные профилактические рекомендации для его прогнозирования.

Ключевые слова. Близорукость, клиническая рефракция, роговица, ОКТ

Mavzuning dolzarbligi. Miopiya - bu kuchsiz refraksiya turi bo'lib, bemor uzoqdagi predmetlarni anglay olmaydi. Miopiyada bosh fokus to'r pardani old qismiga tushadi. Shuning uchun predmetlarni ko'rish noaniq kechadi.

Hozirgi kunda miopiya (uzoqni ko'raolmaslik) oftalmologiya sohasidagi eng ustuvor va dolzarb muammolardan biri bo'lib qolmoqda[1]. Butunjahon Sog'liqni Saqlash Tashkilotining bergan ma'lumotlariga ko'ra dunyo bo'yicha 1,6 mlrd aholi refraksiya anomaliyalaridan aziyat

chekayotgan bo'lib, ularning eng katta qismini miopiya bilan kasallanganlar tashkil qiladi. Yildan yilga miopiya tashxisi qo'yilgan bemorlar ko'rsatkichi har bir mamlakatda o'sib bormoqda. Tadqiqotchilarning izlanishlariga ko'ra 2020 dan 2050 yilgacha bo'lgan davr ichida ushbu guruh bemorlari soni 2,5 mlrd dan 4,8 mlrd gacha ortishi mumkin [2]. Ushbu ma'lumotlarga tayangan holda miopiyani epidemiya deya baholashimiz mumkin. Ayniqsa Xitoy va Janubiy Koreya kabi Sharqiy Osiyo mamlakatlarida yosh aholi qatlamining 85-95% ida miopiya aniqlangan bo'lib, ularning 20% i miopiyaning yuqori darajasiga to'g'ri keladi(6 dptr dan yuqori) [3]. Shunday ko'rsatkichlar sababli BJSST 2020 yilgacha refraksiya anomaliyalarini vaqtida va to'g'ri korreksiyalash orqali ko'rlik darajasini pasaytirish vazifasini o'z oldiga maqsad qilib qo'ydi[4]. Bu borada ayniqsa asosiy e'tibor jiddiy asoratlarga sabab bo'luvchi progressiv miopiyaga qaratildi. Chunki miopiya ko'rish o'tkirligi bilan bog'liq bo'lgan nogironlikka olib keluvchi kasalliklar orasida 3-o'rinda turadi [5,7]. Butun dunyo aholisining 28,4-35% i miopiya bilan kasallangani qayd etilgan bo'lib , yuqori darajali miopiya 4-9% ni tashkil qilgan[8]. Oxirgi o'n yilliklarda iqtisodiy rivojlangan mamlakatlar aholisining miopiya bilan kasallanish holati 19-42% ga ortgani kuzatilgan [9,10]. Misol uchun, AQSh da oxirgi 30 yilda miopiya chastotasi 1,7 martaga ortgan, ya'ni 25% dan 42% gacha [11]. Turli olimlarning ilmiy izlanishlari shuni ko'rsatadiki bolalar va o'smirlar o'rtasidagi umumiy kasallanishning 20-30% dan to 60-80% igacha miopiya to'g'ri kelishi o'rganilgan. [12,13]

Tadqiqot maqsadi. Miopiya bilan kasallangan maktab yoshidagi bolalarda shox parda morfometrik parametrlarining qiyosiy xarakteristikasini o'rganish.

Material va metodlar. Ushbu maqsadda miopiyaning turli bosqichlari bilan kasallangan 50 nafar hamda 20 ta sog'lom 7 yoshdan to 18 yoshgacha bo'lgan bolalarning ko'z olmasi nur sindiruvchi qismlari va ko'z tubi elementlarining morfometrik parametrlari 2022-2024 yillar davomida tekshirildi (jadval 1). Tadqiqot ishi Buxoro davlat tibbiyot institutining Respublika ixtisoslashtirilgan ilmiy-amaliy ko'z mikroxirurgiya markazi klinik bazasida o'tkazildi.

Bolalar D.B. Elkonin tasnifiga asoslangan holda yoshlariga mos ravishda 3 ta guruhga bo'lindi: 7-10 yosh, 11-14 yosh va 15-18 yosh [15]. Barcha bolalar uchun barcha kompleks oftalmologik tekshiruvlar, exobiometriya, optikokogerent tomografiya, oftalmoskopiya, biomikroskopiya va boshqalar o'tkazildi.

Jadval 1.

Miopiya bilan kasallangan va sog'lom bolalarning jins va yosh bo'yicha taqsimoti

Jinsi		Yoshi						Hammasi	
		7-10 yosh		11-14 yosh		15-18 yosh			
		abs	%	Abs	%	Abs	%	Abs	%
Miopiya bilan kasallangan bolalar	O'g'il bolalar	9	10	10	11,1	13	14,4	32	35,5
	Qiz bolalar	6	6,67	10	11,1	12	13,33	28	31,1
Sog'lom bolalar	O'g'il bolalar	5	5,5	5	5,5	5	5,5	15	16,67
	Qiz bolalar	5	5,5	5	5,5	5	5,5	15	16,67

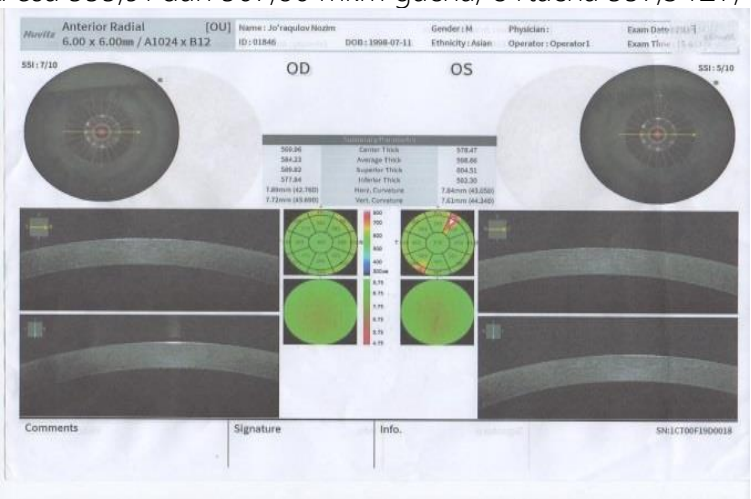
Jadval 2.

Miopiya bilan kasallangan bolalarning klinik darajalariga ko'ra miqdori.

Yoshi	7-10 yosh	11-14 yosh	15-18 yosh	Hammasi

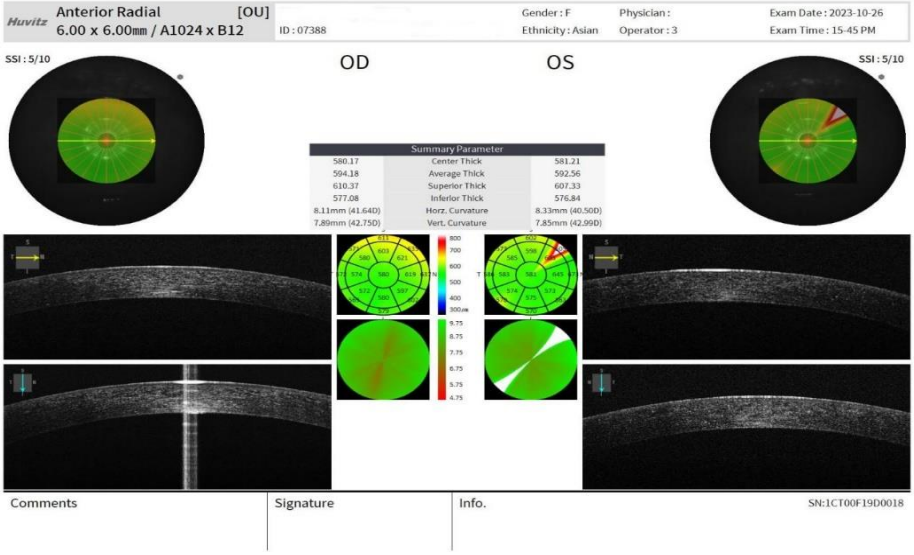
Miopiyaning klinik darajalari	abs	%	Abs	%	Abs	%	abs	%
Yengil daraja	5	8,33	4	6,67	6	10	15	25
O'rta og'ir Daraja	5	8,33	6	10	9	15	20	33,33
Yuqori daraja	7	11,67	8	13,33	10	16,67	25	41,67

Natijalar. Sog'lom bolalarda (7-10 yosh) shox parda qalinligi o'ng ko'zda 580,76 dan 590,05 mkm gacha, o'rtacha 585,46±29,25, shox parda qalinligi chap ko'zda 581,72 dan 591,49 mkm gacha, o'rtacha 586,83±22,11. Sog'lom bolalarda (11-14 yosh) tekshirishlar natijasida shox parda qalinligi o'ng ko'zda 568,65 dan 583 mkm gacha, o'rtacha 574,63±34,67, chap ko'zda 565,76 dan 576,49 mkm gacha, o'rtacha 570,37±13,34 ekanligi aniqlandi. Sog'lom bolalarda (15-18 yosh) shox parda qalinligi o'ng ko'zda 553,42 dan 568,54 mkm gacha, o'rtacha 560,69 ±10,28, chap ko'zda esa 555,91 dan 567,86 mkm gacha, o'rtacha 557,34±7,45.



Rasm 1. Sog'lom bola shox pardasi morfometrik parametrlari. Bemor J.N. 17 yosh (Optik kogerent tomografiya anterior radial)

Tadqiqot natijalari shuni ko'rsatadiki, 7 yoshdan 18 yoshgacha bo'lgan bolalar rivojlanish va o'sish davrida shox parda qalinligi o'rtacha o'zgarishi 588,82±27,2 dan 555,63±1,99 mkm gachani tashkil etadi (-4,41%). O'z navbatida ushbu davrda minimal va maksimal ko'rsatkichlar o'rtasidagi farq kamayib boradi. 7 yoshdan 18 yoshgacha bo'lgan bolalar o'ng ko'zda shox parda qalinligi o'rtacha, 578,48±20,7 dan 589,62±7,85 gachani tashkil etgan bo'lsa (-1,67%). 7-10 yoshli miopiya yengil darajasi bilan kasallangan bolalarda shox parda qalinligi o'ng ko'zda 582,48 dan 578,78 mkm gacha, o'rtacha 580,93±4,46, chap ko'zda esa 581,08 dan 577,21 mkm gacha, o'rtacha 580,71±4,39. Shu yoshdagi miopiya o'rta darajasi bor bo'lgan bolalarda shox parda qalinligi o'ng ko'zda 568,76 dan 570,43 mkm gacha, o'rtacha 569,91±2,44, chap ko'zda esa 568,56 dan 571,75 mkm gacha, o'rtacha 569,63±5,06, miopiya yuqori darajasi bor bolalarda esa shox parda qalinligi o'ng ko'zda 560,26 dan 567,06 mkm gacha, o'rtacha 564,62±8,30, chap ko'zda 560,87 dan 566,18 mkm gacha, o'rtacha 562,15±10,74 (rasm 2).



Rasm 2. Shox parda morfometrik parametrlari.

Bemor O.N. 9 yosh (OKT)

11-14 yoshli miopiya yengil darajasi bilan kasallangan bolalarda shox parda qalinligi o'ng ko'zda 575,64 dan 580,58 mkm gacha, o'rtacha 578,46±2,54, chap ko'zda esa 575,72 dan 580,26 mkm gacha, o'rtacha 579,12±2,39. Shu yoshdagi miopiya o'rta darajasi bor bo'lgan bolalarda shox parda qalinligi o'ng ko'zda 560,53 dan 567,78 mkm gacha, o'rtacha 565,11±2,36, chap ko'zda esa 560,56 dan 568,35 mkm gacha, o'rtacha 565,63±2,06, miopiya yuqori darajasi bor bolalarda esa shox parda qalinligi o'ng ko'zda 550,26 dan 560,06 mkm gacha, o'rtacha 555,62±3,30, chap ko'zda 550,87 dan 561,18 mkm gacha, o'rtacha 555,15±3,74.

15-18 yoshli miopiya yengil darajasi bilan kasallangan bolalarda shox parda qalinligi o'ng ko'zda 552,76 dan 558,15 mkm gacha, o'rtacha 556,25±2,46, chap ko'zda esa 550,14 dan 556,21 mkm gacha, o'rtacha 553,71±2,39. Shu yoshdagi miopiya o'rta darajasi bor bo'lgan bolalarda shox parda qalinligi o'ng ko'zda 538,76 dan 549,43 mkm gacha, o'rtacha 545,91±4,44, chap ko'zda esa 536,56 dan 548,75 mkm gacha, o'rtacha 545,63±5,06, miopiya yuqori darajasi bor bolalarda esa shox parda qalinligi o'ng ko'zda 530,48 dan 544,78 mkm gacha, o'rtacha 538,93±4,46, chap ko'zda 530,08 dan 544,21 mkm gacha, o'rtacha 536,71±4,39.

To'plangan ma'lumotlardan kelib chiqgan holda xulosa qilib aytish mumkinki, 7 yoshdan 15 yoshgacha bo'lgan miopiya yengil darajasi bor bolalarda miopiya o'rta va yuqori darajalari bor bo'lgan bolalarga nisbatan shox parda qalinroq bo'ladi. 16-18 yoshli miopiya yengil darajasi bor bo'lgan bolalarda ham shu yoshdagi o'rta va yuqori darajasi bor bo'lgan bolalarga nisbatan shox parda qalinligi yuqori.

Xulosa. "Buxoro viloyatidagi maktab yoshidagi miopiyasi bor bolalarda ko'z olmasi va optik muhitlari morfometrik parametrlarining qiyosiy xarakteristikasi" dissertatsiya mavzusi natijalari asosida quyidagi xulosalarga kelindi:

1. Sog'lom bolalarda OKT tekshiruvi natijasi shuni ko'rsatdiki, shox parda qalinligi yoshga bog'liq holda tahlil qilinganda, shox parda va bola yoshi o'rtasida sezilarli bog'liqlik aniqlanmadi ($p>0,05$). Biroq tekshiruvlar asosida shuni aytish joizki, 7-10 yoshli bolalar guruhida sezilarli darajadagi shox parda qalinroq ekanligi aniqlandi 562.382±36.852 mkm.
2. OKT tekshiruv natijalari shuni ko'rsatadiki, asosiy guruhdagi miopiya bilan kasallangan bolalarda shox parda markaziy qalinligi miopiyaning darajalari hamda yosh ko'rsatkichlariga

ko'ra farq qilishi aniqlandi. Ya'ni, miopiya yuqori darajasi bilan kasallangan 16-18 yoshli bolalarda shox parda markaziy qalinligi miopiya yengil darajasi bor guruhdagi bolalarga nisbatan 2,7% ga yupqa ekanligi aniqlandi.

Foydalanilgan adabiyotlar:

1. Badriddinov, O., & Kholmatova, Y. Miopiya violation of the refraction is a illness. Евразийский журнал медицинских и естественных наук, 2022. 2(12), с. 200-204.
2. Cai J. et al. Imaging quality and fatigue quantification of ocular optical system //IEEE Access. – 2020. – T. 8. – C. 25159-25169.
3. Choi KY, Yu WY, Lam CHI, et al. Childhood exposure to constricted living space: a possible environmental threat for myopia development. Ophthalmic Physiol Opt. 2017;37:568–75
4. De la Torre-Díez I. et al. Decision support systems and applications in ophthalmology: literature and commercial review focused on mobile apps //Journal of medical systems. – 2015. – T. 39. – C. 1-10.
5. Douglass A. et al. Knowledge, perspectives and clinical practices of Australian optometrists in relation to childhood myopia //Clinical and Experimental Optometry. – 2020. – T. 103. – №. 2. – C. 155-166.
6. Flitcroft D. I. The complex interactions of retinal, optical and environmental factors in myopia aetiology //Progress in retinal and eye research. – 2012. – T. 31. – №. 6. – C. 622-660.
7. French A. N. et al. Risk factors for incident myopia in Australian schoolchildren: the Sydney adolescent vascular and eye study //Ophthalmology. – 2013. – T. 120. – №. 10. – C. 2100-2108.
8. Fricke T. R. et al. Global prevalence of presbyopia and vision impairment from uncorrected presbyopia: systematic review, meta-analysis, and modelling //Ophthalmology. – 2018. – T. 125. – №. 10. – C. 1492-1499.
9. G'ayrat qizi Shukurova S. M. et al. Miopiya va katarakta kasalligining turlari, klinink patologik belgilari va davolash usullari //science and scientific research in the modern world. – 2023. – T. 1. – №. 2.
10. Gong Y. et al. Parental myopia, near work, hours of sleep and myopia in Chinese children //Health. – 2014. – T. 2014.
11. Grzybowski A. et al. A review on the epidemiology of myopia in school children worldwide //BMC ophthalmology. – 2020. – T. 20. – C. 1-11.
12. Holden B. A. et al. Global prevalence of myopia and high myopia and temporal trends from 2000 through 2050 //Ophthalmology. – 2016. – T. 123. – №. 5. – C. 1036-1042.
13. Holy C., Kulkarni K., Brennan N. A. Predicting Costs and Disability from the Myopia Epidemic–A Worldwide Economic and Social Model //Investigative Ophthalmology & Visual Science. – 2019. – T. 60. – №. 9. – C. 5466-5466.
14. Ikuno Y. Overview of the complications of high myopia //Retina. – 2017. – T. 37. – №. 12. – C. 2347-2351.
15. Jaloliddinov D. L., Usmanova T. J., Ikramov A. F. Ўсмирларда миопияни юкори даражасида склеромаляцияни келтириб чикарувчи хавф омилларини аниқлаш //Journal of Science-Innovative Research in Uzbekistan. – 2024. – T. 2. – №. 2. – C. 412-417.

UO'K: 616-08-035

ERTA YOSHLI BOLALARDA EOZINOFILLI OSHQOZON-ICHAK KASALLIKLARI.

[1]Akramova X.A., [2]Bayjanova G.J.
[1]Toshkent Pediatriya tibbiyot instituti
[2]Toshkent tibbiyot akademiyasi Urganch filiali

Annotatsiya: Oshqozon-ichak traktida allergik reaktsiyalar bir necha o'n yillar oldin nisbatan kam uchragan bo'lsa-da, o'tkazilgan tadqiqotlar shuni ko'rsatdiki, hozirgi vaqtda aholining 2-6% oziq-ovqat anafilaksisidan aziyat chekmoqda. Organizmda tabiiy ravishda ishlab chiqariladigan gistaminga qo'shimcha ravishda ko'plab oziq-ovqatlar uni o'z ichiga oladi va gistamin ishlab chiqarilishini rag'batlantiradi. Natijada allergiya fonida oshqozon-ichak disfunktsiyasi rivojlanadi. Allergik genezli oshqozon-ichak disfunksiyasining laborator ko'rsatkichlarida immunoglobulin E (IgE), gistamin, ichak diaminooksidaza fermenti va eozinofillar sezilarli oshishi aniqlangan.

Kalit so`zlar: *Allergiya, immunoglobulin E (IgE), eozinofil, eozinofilli enterit, eozinofilli kolit.*

EOSINOPHILIC GASTROINTESTINAL DISEASES IN EARLY-AGED CHILDREN.

[1]Akramova Kh.A., [2]Bayjanova G.J.
[1]Tashkent Pediatric medical institute
[2]Urganch branch of Tashkent medical academy

Annotation: Gastrointestinal allergic diseases, which include gastrointestinal disorders associated with food anaphylaxis, have increased significantly in the last few decades (1-3 years). Although allergic reactions in the gastrointestinal tract were relatively rare a few decades ago, studies have shown that 2-6% of the population currently suffers from food anaphylaxis. In addition to histamine, which is produced naturally in the body, many foods contain it and stimulate histamine production. As a result, against the background of allergies, gastrointestinal dysfunction develops. Immunoglobulin E, histamine, intestinal diaminooxidase enzyme and eosinophils increase in blood composition in allergic gastrointestinal diseases.

Key words: *Allergy, Immunoglobulin E (Ig E), eosinophilis, eosinophilic enteritis and eozinophilic colitis.*

ЭОЗИНОФИЛЬНЫЕ ЗАБОЛЕВАНИЯ ЖЕЛУДОЧНО-КИШЕЧНОГО ТРАКТА У ДЕТЕЙ РАННЕГО ВОЗРАСТА.

[1]Акрамова Х.А., [2]Байжанова Г.Ж.
[1]Ташкентский Педиатрический медицинский институт.
[2]Ургенчском филиале Ташкентской медицинской академии

Аннотация: За последние несколько десятилетий (1-3 года) значительно возросло число желудочно-кишечных аллергических заболеваний, к которым относятся желудочно-кишечные расстройства, связанные с пищевой анафилаксией. Хотя несколько десятилетий назад аллергические реакции в желудочно-кишечном тракте были относительно редки, исследования показали, что в настоящее время от пищевой анафилаксии страдает 2-6% населения. В дополнение к гистамину, который естественным образом вырабатывается в организме, многие продукты содержат его и стимулируют выработку гистамина. В результате на фоне аллергии развивается дисфункция желудочно-кишечного тракта. При аллергических заболеваниях желудочно-кишечного тракта в крови повышается содержание иммуноглобулина Е, гистамина, фермента кишечной диаминооксидазы и эозинофилов.

Ключевые слова: аллергия, иммуноглобулин Е (IgE), эозинофилия, эозинофильный энтерит и эозинофильный колит.

Oziq-ovqat anafilaksisi bilan bog'liq oshqozon-ichak kasalliklarini o'z ichiga olgan oshqozon-ichak allergik kasalliklari so'nggi bir necha o'n yilliklarda (1-3 yil) sezilarli darajada oshdi. Erta yoshli bolalarda hazm qilish tizimi funktsional buzilishlarining namoyon bo'lishida oshqozon-ichak traktining anatomo-fiziologik xususiyatlari, nerv-gumoral boshqarilishining buzilishi, ichak mikrobiotsenozidagi buzilishlar, gistaminga boy bo'lgan oziq-ovqat mahsulotlarini iste'mol qilish, shuningdek, chaqaloqlarni ovqatlantirish rejimi va texnikasining buzilishi yordam beradi. Ko'pincha bu kasalliklar keng ko'lamli ko'rinishlar bilan tavsiflanadi. Jumladan qon tarkibida eozinofil, gistamin, ichak diaminooksidaza fermenti, IgE darajasining oshishi (umumiy va antigenga xos), oshqozon-ichak disfunktsiyasi (masalan, qusish, qorin og'rig'i, kolit va diareya) yoki tizimli reaktsiyalar (masalan, gipotenziya va bronxospazm) kuzatiladi.

So'nggi 30 yil ichida dunyoda allergik patologiyaning tarqalishi 2 baravar oshdi, ko'plab mutaxassislar buni yuqumli bo'lmagan epidemiya deb bilishadi. Bolalarning taxminan 5% va kattalarning 3-4% gacha allergiya namoyon bo'ladi. Aniq lokalizatsiya, ko'ngil aynishi, qusish, beqaror najassiz qorin og'rig'i shaklida aniq gastrointestinal kasalliklarga chalingan respondentlarning 15 foizida tashxis qo'yilmagan va to'liq tekshiruv o'tkazilmagan. Bemorlar pediatr va psixiatrda "ta'sirlangan ichak sindromi" tashxisi bilan terapiya qilingan.

Nazariy jihatdan, har qanday mahsulot allergik reaktsiyaga olib kelishi mumkin. Yaqinda o'tkazilgan Kanadadagi 3000 dan ortiq oilalarda o'tkazilgan so'rovnoma tadqiqotlari shuni ko'rsatdiki, faqat 1 ta oziq-ovqat uchun oziq-ovqat allergiyalari darajasi 8% dan yuqori. Masalan, Saudiya Arabistonida ko'p valentli oziq-ovqat allergiyasining tarqalishi 17,5% ga etadi, Xitoyda bug'doy allergiyasi 7,3%, Evropada sut uchun taxminan 6% va tuxum uchun 2,5%, boshqa variantlarning chastotasi 1,5% dan oshmaydi.

Allergiya hisobiga kelib chiqadigan oshqozon-ichak trakti shikastlanishining tipik shakllari surunkali diareya, axlatda shilliq, ko'pik va epiteliyning ko'pligi, qorin og'rig'i (ichak kolikasi) ko'rinishidagi alomatlar bilan namoyon bo'ladigan enterit va kolitdir. Gastrointestinal oziq-ovqat allergiyasi yosh bolalar orasida keng tarqalgan bo'lib surunkali diareya kelib chiqishining asosiy omillaridan biridir. Diareya, jahon sog'liqni saqlash tashkiloti (JSST) tomonidan aniqlanganidek, ma'lum bir odam uchun odatdagidan ko'ra tez-tez bo'shashgan axlatdir. Pediatriya amaliyotida diareya mavjudligini aniqlash uchun ichak harakatining chastotasi va axlat konsistensiyasining yoshga bog'liq xususiyatlarini hisobga olish kerak. Shunday qilib, hayotning birinchi oylarida chaqaloq uchun 6-8 martagacha bo'shashgan axlat diareya hisoblanadi. Bir yildan so'ng va butun hayot davomida najas odatda shakllanishi kerak va uning chastotasi kuniga 3 martadan oshmasligi kerak. Pediatriya amaliyotida diareyaning yana bir mezoni najasning kunlik hajmi hisoblanadi ya'ni najas hajmi kuniga 10 ml/kg dan oshmasligi kerak, garchi umuman bolalarda oshqozon-ichak traktida kuniga taxminan 285 ml/kg suyuqlik aylanib yuradi. Oziq-ovqat allergiyasining etiologiyasi murakkab genezga ega va biologik faol moddalar sekretsiyasi bilan bog'liq. Organizmda tabiiy ravishda ishlab chiqariladigan gistaminga qo'shimcha ravishda ko'plab oziq-ovqatlar (baliq, pishloq, kolbasa, konservalar, sitrus mevalar, yong`oqlar, pomidor, kulupnay, ismaloq, tuxum, shokolad, kofe, kakao va boshqalar) uni o'z ichiga.

Eozinofillar deb ataladigan oq qon hujayralari tanani infektsiyalarga qarshi himoya qilishda yordam beradi va allergik reaktsiyalarda ishtirok etadi. Eozinofil darajasi turli sabablarga ko'ra ko'tarilishi mumkin, jumladan, infektsiyalar, gelmintlar va allergiya hisobiga. Boshqa qon hujayralari singari, eozinofillar ham suyak iligida ishlab chiqariladi. Qon oqimiga kirib, ular tana to'qimalarida (masalan, teri, ichak hujayralari, nafas olish yo'llari va boshqa joylarda) yoki kapillyarlarda yashaydilar. Ular periferik qonda nisbatan kichik miqdorda aniqlanadi. Bir

yoshgacha bo'lgan davrda eozinofillarning 5% dan ko'p bo'lmagan (hayotning 10-kuniga qadar yangi tug'ilgan chaqaloqlarda, yuqori chegarasi 4% bo'ladi).1 yoshga to'lgan bolalarda eozinofillar 4% dan ko'p emas. Bugungi kunda allergiya bolalarda juda keng tarqalgan patologiya hisoblanadi. Oziq-ovqatlar, uy uchun ishlatiladigan kimyoviy moddalar, hayvonlarning junlari, o'simlik va boshqalar allergenlar hisoblanib ular allergik holatlarni keltirib chiqarishi mumkin.

Amerika allergiya, astma va immunologiya akademiyasi, Amerika gastroenterologiya kolleji va Shimoliy Amerika bolalar gastroenterologiyasi, gepatologiyasi va ovqatlanish jamiyati a'zolari shifokorlari o'rtasida o'tkazilgan so'rov natijalariga ko'ra, eozinofilli gastroenterit kasalliklari diagnostikasi mezoni, xususan eozinofilli enterit, yuqori aniqlikda eozinofillar tomonidan 20 va undan ortiq infiltratsiyadir. Shifokorlar so'roviga ko'ra, eozinofilli enterit va eozinofilli kolit bilan kasallanish darajasi 100 000 kishiga 28 tani tashkil qiladi.

Oziq-ovqat allergiyasini tashxislashda qiyinchiliklar ko'pincha aniq laboratoriya belgilarining etishmasligidadir. Tashxis ko'pincha shikoyatlarni chuqur tahlil qilish, ularning ma'lum oziq-ovqat mahsulotlarini kiritish va yo'q qilish bilan bog'liqligi, shuningdek kasallikning klinik ko'rinishlarining dinamikasini baholashga asoslanadi. Nafas olish yo'llari bilan kechadigan allergik kasalliklardan farqli o'laroq, oshqozon-ichak trakti organlarining allergik shikastlanishini aniqlash uchun hozirgi kunga qadar standartlar va yagona klinik tavsiyalar ishlab chiqilmagan, bu tashxis qo'yishda tortishuv va qarama-qarshiliklarni keltirib chiqaradi. Barcha eozinofilli oshqozon-ichak kasalliklaridan eozinofilli enterit eng kam o'rganilgan holat bo'lib, ko'pincha boshqa tashxislar orqasida yashiringan. O'n ikki barmoqli ichak va ingichka ichakning eozinofilli shikastlanishining haqiqiy chastotasi noma'lum.
Eozinofilli gastroenterit kasalligi bilan og'rigan bemorlarni klinik boshqarish bo'yicha umumiy qabul qilingan yagona tavsiyalar mavjud emas. Klinik tahlillardan olingan ma'lumotlar dietani tuzatish va kortikosteroid preparatlarini birinchi darajali davolash sifatida qo'llashni ko'rsatadi.

Eozinofil enterit va kolitni tashxislash.

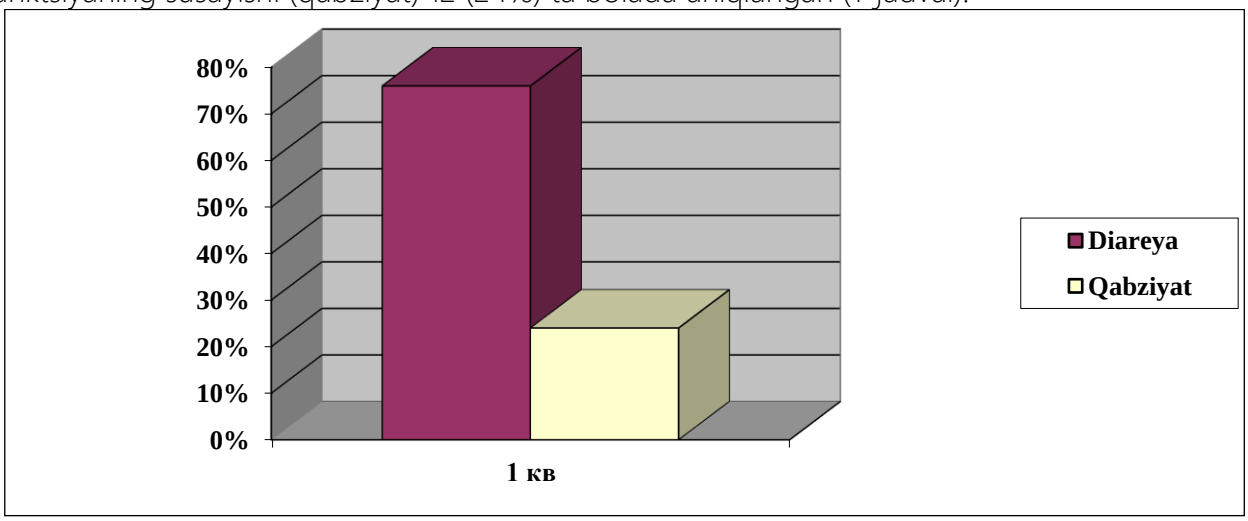
Laboratoriya ko'rsatkichlari.

1. Klinik qon tekshiruvi: Eozinofilli enterit va kolit kasalligi bilan og'rigan bemorlarning 30-80 foizida periferik qon eozinofiliyasi kuzatiladi.
2. Zardob albumin darajasining pasayishi aniqlanadi.
3. 24 soatlik najas namunalarida A1-antitripsin darajasining oshishi oqsillarning yo'qolishini ko'rsatadi.
4. Qon zardobidagi interleykin (il) 5, il-13, il-33, eotaksin 3 va timik stromal limfopoetin (TSLP) darajasini baholash.
5. Oziq-ovqat allergenlari va atrof-muhit allergenlarini aniqlash uchun odatda qon zardobidagi umumiy IgE darajasi aniqlanadi.
6.Endoskopiya va biopsiya kasallikning dastlabki tashxisida asosiy rol o'ynaydi.

Tadqiqot ob'ekti va tekshiruv usullari. Ilmiy izlanishning materiallari sifatida Toshkent tibbiyot akademiyasi Urganch filiali klinikasi Pediatriya bo'limida davolangan bemorlarning 50 nafar kasallik tarihidan foydalanildi. Saralangan guruhlarda o'rtacha yosh ko'rsatkichi 6 oylikdan 3 yoshgacha.

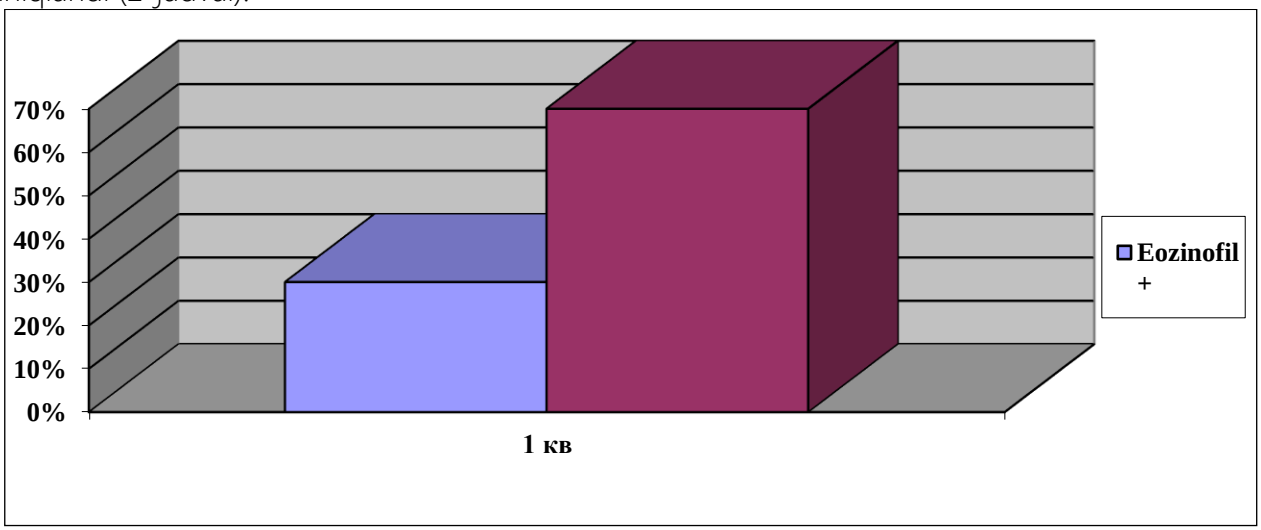
Kasallik tarihlari bemorlarning klinik belgilari va qonning yoyma tahliliga ko'ra qiyosiy tahlil qilindi. Oshqozon-ichak funktsional buzilishi kasalligi bilan davollangan bemorlarning kasallik tarihlari klinik belgilariga ko'ra (1-jadval) 2 guruhga hamda laborator (eozinofillar) ko'rsatgichlariga ko'ra (2-jadval) 2 guruhga ajratildi.

Natija: Tanlab olingan guruhlarda qiz bolalar 22 (44%), o'g'il bolalar 28 (56%). Klinik kechishi bo'yicha va bolalarda klinik belgilar ustunligiga ko'ra motor-evakuator funktsiyaning kuchayishi (diareya) birinchi guruhda 38 (76%) bolada aniqlangan bo'lsa, motor-evakuator funktsiyaning susayishi (qabziyat) 12 (24%) ta bolada aniqlangan (1-jadval).



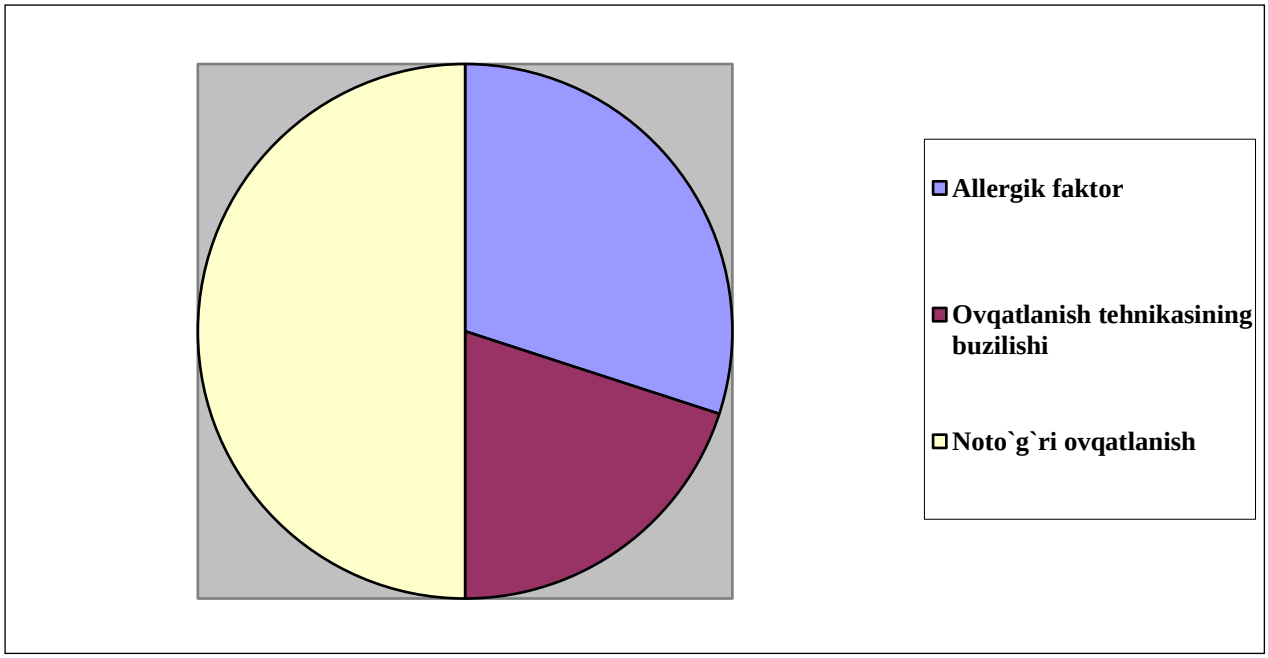
1-rasm

Ikkinchi guruh bolalarda qonning yoyma tahlilida eozinofillar miqdori 4% dan oshishi 15 (30%) ta bolada aniqlangan. Ulardan diareya 11 (73%) ta bolada, qabziyat 4 (17%) ta bolada aniqlandi (2-jadval).



2- rasm

Qonning yoyma tahlilida eozinofillar miqdori sezilarli oshganligi, anamnezida funktsional buzilish holati allegik mahsulot iste'moli bilan bog'liqligi va ob'ektiv tekshiruv natijalariga ko'ra eozinofilli oshqozon-ichak kasalligi (eozinofilli enterit va eozinofilli kolit) tashxisiga mos keladi. Qolgan 35 (70%) ta bolada oshqozon ichak disfunktsiyasi turli sabablarga ko'ra ovqatlanishdagi buzilishlar hisobiga kelib chiqqan. (3-jadval)



3-rasm

Eozinofilli enterit va kolitda parhez va davolash.

Eozinofilli gastrit, enterit va kolit terapiyasining maqsadi kasallikning klinik (og'riq va dispepsiyani to'xtatish) va gistologik remissiyasiga erishish, asoratlar rivojlanishining oldini olishdir.

Uchta parhez strategiyasi ishlab chiqilgan:

1) Potentsial allergenlarni aniqlash va ularni dietadan chiqarib tashlash uchun allergiya testiga asoslangan maqsadli yo'q qilish dietasi;

2) Allergik reaktsiyalarni tez-tez keltirib chiqaradigan oziq-ovqat mahsulotlarini chiqarib tashlaydigan empirik yo'q qilish dietasi yoki oltita oziq-ovqat mahsulotlarini yo'q qilish dietasi (masalan, "katta oltilik": sigir suti, tuxum, soya, bug'doy, yeryongo'q, baliq yoki qisqichbaqasimonlar);

3) Barcha mumkin bo'lgan allergenli oziq-ovqat oqsillarini butunlay yo'q qiladigan elementar parhez.

Yoq' qilish dietasi turli xil yondashuvlarga qarab 45 dan 90% gacha samarali bo'lishi mumkin. Oziq-ovqat mahsulotlarini dietadan chiqarib tashlashga bosqichma-bosqich yondashish muhim qo'zg'atuvchini (avval ikkitadan to'rttagacha, so'ngra to'rtdan oltitagacha) olib tashlash va qayta kiritishni osonlashtirishga yordam beradi.

Dori-darmonlarni davolash yordamchi xususiyatga ega va ko'pincha ovqat hazm qilish traktining jiddiy shikastlanishi yoki bog'liq allergik patologiya mavjud bo'lganda qo'llaniladi.

Davolash asosan empirikdir. Hozirgi vaqtda parhez aralashuvidan tashqari samaradorligini isbotlagan bir nechta terapevtik variantlar taklif qilingan- kortikosteroidlar, hujayra stabilizatorlari (kromolin natriy va boshqalar), leykotrien retseptorlari antagonistlari (montelukast va boshqalar), immunomodulyatorlar va biologik faol preparatlar.

Ko'pgina bemorlarga dastlab 2-6 hafta davomida kuniga 20-40 mg prednizolon buyuriladi, so'ngra dozani asta-sekin kamaytiradi, bemorlar uni bir necha haftadan bir necha oygacha qabul qilishadi.

Eozinofilli oshqozon-ichak kasalliklari bilan og'rigan har bir bemorga dastlab kortikosteroidlarni buyurish kerakmi, degan savolni ko'rib chiqish kerak, chunki bemorlarning 40 foizida o'z-o'zidan remissiya faqat yo'q qilish dietasi fonida kuzatilgan. Istiqbolli tadqiqot shuni ko'rsatdiki, tizimli steroidlarni dastlab kasallikning og'ir shakli bilan og'rigan va periferik qonda eozinofillarning mutloq sonining ko'payishi fazasida davolash kerak. Leykotrien retseptorlari antagonisti montelukast, hujayra stabilizatorlari va antigistaminlar kabi boshqa allergiyaga qarshi vositalar ikkinchi darajali terapiya bo'lib xizmat qiladi.

Dori guruhlari.

1. Antigistaminlar (Difengidramin, xlorfeniramin va boshqa H1-blokerlar) oziq-ovqat allergiyasi belgilarining kuchayishi davrida, allergik yallig'lanishning og'irligini kamaytirish uchun buyuriladi, uning asosiy vositachilaridan biri gistamindir.
2. Gastrointestinal oziq-ovqat allergiyasining o'ta og'ir shakllarida shoshilinch tibbiy yordam choralaridan biri bu tizimli glyukokartikosteriodlarni (prednizon), buyurishdir. Bu simptomlarning keskinligiga ta'sir qilmaydi, ammo omon qolish darajasini oshirishi mumkin.
3. Enterosorbentlar-oziq-ovqat allergiyasining engil shakllarida qo'llanilganda ijobiy ta'sir empirik tarzda qayd etilgan. Samaradorlikning qat'iy dalillari yo'q. Foydalanishning mumkin bo'lgan zarari foydadan oshib ketishi mumkin.

Eozinofilli oshqozon-ichak kasalligining profilaktikasi.

Erta yoshli bolalar orasida eozinofilli oshqozon ichak kasalliklarini bir necha omillar ta`sirida yuzaga keladi:

- Ota-onadagi allergik kasalliklar
- Xomiladorlik vaqtida yuzaga keladigan allergik kasalliklar
- Onaning ovqatlanish rejimi buzilishi
- Malabsorbsiya sindromi
- Chaqaloqlarni sun`iy ovqatlantirish
- Erta ko'krakdan ajratish va qo'shimcha ovqatni erta kiritish
- Noto'g'ri tanlangan qo'shimcha ovqat
- Allergenga boy bo'lgan mahsulotlarni iste'mol qilish (baliq, pishloq, kolbasa, konservalar, sitrus mevalar, yong'oqlar, pomidor, kulupnay, ismaloq, tuxum, shokolad, kofe, kakao va boshqalar).

Allergik enteropatiyaning oldini olish homilador va emizikli ona tomonidan gipoallergik parhezga rioya qilish, hayotning 4-6 oyigacha faqat emizish, bolaga hayotning to'rtinchi oyidan oldin qo'shimcha ovqatlarni kiritmaslik, allergenlarni dietadan chiqarib tashlashdan iborat.

Xulosa. Ovqat hazm qilish traktining eozinofilli kasalliklari butun dunyo bo'ylab mutaxassislarning e'tiborini tortadi. Bir necha o'n yillar oldin ushbu kasalliklar kamdan-kam uchraydigan deb ta'riflangan va hozirda bir necha darajaga ko'tarilgan. Kasallikni oldini olishda onaning homiladorlik paytidan ovqatlanish ratsionini to'g'ri tashkillashtirish va chaqaloqning ovqatlanish tehnikasi va ovqatlanish turini to'g'ri tanlash birlamchi bo'g'in shifokorlari tomonidan vaqtida amalga oshirilib borilishi lozim hisoblanadi. Kasallikni vaqtida aniqlab to'g'ri tashxis qo'yish pediatr shifokordan chuqur bilim va tajriba talab qiladi.

Foydalanilgan adabiyotlar:

1. Toshkent tibbiyot akademiyasi Urganch filiali klinikasi Pediatriya bo'limi kasallik tarihlari.
2. Daminov T.A., Xalmatova B.T., Boboeva U.R. "Bolalar kasalliklari" Toshkent – 2009.

3. O.A.Husinov. «Patologik fiziologiyadan amaliyot darslari uchun qo'llanma», «Yangi asr avlodi», 2008-yil.
4. B.Qoraxo`jayev, I.T.Salomov, M.N.Abdullayeva, "Bolalar kasalliklari propedevtikasi" NMM, 2006-yil.
5. 1600 John F. Kennedy Blvd.Ste 1800 Philadelphia, PA 19103-2899 "Nelson essentials of pediatrics, eighth edition international edition" Copyright © 2019 by Elsevier, Inc. All rights reserved.
6. N.H.Abdullaev, H.Yo.Karimov, B.O'. Irisqulov. Patologik fiziologiya (2008). Toshkent: Yangi asr avlodi.
7. N.P.SHabalov. Detiskie bolezni (2011). Moskva.
8. www.tma.uz
9. https://mymedic.com

UO'K: 616.248-053.2-06:617.7

O'ZBEKISTONDA ATOPIK BRONXIAL ASTMA BILAN KASALLANGAN BOLALARDA ALLERGIK KON'YUNKTIVIT KECHISHINING XUSUSIYATLARI

Baxritdinova F.A., Nazirova S.X., Narzikulova K.I., Mirraximova S.Sh.
Toshkent tibbiyot akademiyasi
Toshkent xarbiy tibbiyot akademiyasi

Tadqiqotning dolzarbligi allergik kasalliklar bilan kasallanishning o'sishi, ularning ko'z a'zolariga salbiy ta'siri, ayniqsa bronxial astma (BA) bo'lgan bolalarda kuzatilayotgan ta'sir bilan bog'liq. Bu holat O'zbekistonning ekologik va iqlimiy sharoiti bilan yanada kuchaymoqda.

Tadqiqotning maqsadi – atopik shakldagi BA bo'lgan bolalarda ko'z a'zosi holatini o'rganish va samarali davolash usullarini aniqlashdan iborat. Tadqiqotda 3 yoshdan 14 yoshgacha bo'lgan 56 nafar bola ishtirok etgan bo'lib, ular umumiy oftalмologik, allergologik va immunologik tekshiruvlardan o'tgan.

Tadqiqot natijalari allergik simptomlarning aniq mavsumiyligini ko'rsatdi, bu o'simliklarning gullashi bilan bog'liq bo'lib, asosiy allergenlar yo'l-yo'lakay o'tlar, qirg'oq va tog' o'tlari to'planishi bo'ldi. Eng ko'p uchraydigan kasallik shakllari shishning o'tkir allergik kon'yunktivasi, follikulyar kon'yunktivit, blefarokon'yunktivit va sosochkovыy kon'yunktivit bo'ldi. ASIT va optixrom preparatini qo'llash yuqori terapevtik samarani (profilaktik tomizganda 96,4% gacha) namoyon etdi.

Xulosalar. Tadqiqot shuni ko'rsatdiki, atopik shakldagi BA bo'lgan bolalarda allergik ko'z shikastlanishlari og'ir va uzoq davom etuvchi tusga ega bo'lib, allergenlarning mavsumiy faolligiga bog'liq. ASIT va mahalliy antigistamin preparatlarini o'z ichiga olgan kompleks davolash simptomlarni samarali nazorat qilish va asoratlar xavfini kamaytirish imkonini beradi.

Kalit so'zlar: ko'zning allergik shikastlanishi, bronxial astma, natriy kromoglikat.

ОСОБЕННОСТИ АЛЛЕРГИЧЕСКИХ КОНЬЮНКТИВИТОВ У ДЕТЕЙ С АТОПИЧЕСКОЙ БРОНХИАЛЬНОЙ АСТМОЙ В УСЛОВИЯХ УЗБЕКИСТАНА

Бахритдинова Ф.А., Назирова С.Х., Нарзикулова К.И., Миррахимова С.Ш.
Ташкентская медицинская академия
Ташкентская военно-медицинская академия

Актуальность исследования обусловлена ростом заболеваемости аллергическими заболеваниями, их негативным воздействием на органы зрения, особенно у детей с бронхиальной астмой (БА), что усиливается экологическими и климатическими условиями Узбекистана.

Цель исследования изучить состояние органа зрения у детей с атопической формой БА и определить эффективные методы лечения. В исследовании участвовали 56 детей в возрасте от 3 до 14 лет, которые прошли общеофтальмологические, аллергологические и иммунологические обследования.

Результаты исследования показали выраженную сезонность аллергических проявлений, связанную с цветением растений, при этом основными аллергенами стали пыльца сорных трав, краевых и луговых растений. Наиболее частыми формами поражения были острый аллергический отек конъюнктивы, фолликулярный конъюнктивит, блефароконъюнктивит и сосочковый конъюнктивит. Применение АСИТ и препарата оптихром продемонстрировало высокую терапевтическую эффективность (до 96,4% при профилактическом закапывании). **Выводы.** Исследование показало, что у детей с атопической формой БА аллергические поражения глаз имеют тяжёлое и затяжное течение, зависящее от сезонной активности аллергенов. Комплексное лечение с использованием АСИТ и местных антигистаминных препаратов позволяет эффективно контролировать симптоматику и снижать риск осложнений.

Ключевые слова: аллергическое поражение глаз, бронхиальная астма, кромогликат натрия.

FEATURES OF ALLERGIC CONJUNCTIVITIS IN CHILDREN WITH ATOPIC BRONCHIAL ASTHMA IN UZBEKISTAN

Bakhritdinova F.A., Nazirova S.X., Narzikulova K.I., Mirrakhimova S.Sh.
Tashkent Medical Academy
Tashkent Military Medical Academy

The relevance of the study is due to the increasing incidence of allergic diseases, their negative impact on the visual organs, especially in children with bronchial asthma (BA), which is exacerbated by the environmental and climatic conditions of Uzbekistan.

The purpose of the study was to study the state of the visual organ in children with atopic BA and to determine effective treatment methods. The study involved 56 children aged 3 to 14 years who underwent general ophthalmological, allergological and immunological examinations.

The results of the study showed a pronounced seasonality of allergic manifestations associated with the flowering of plants, while the main allergens were pollen of weeds, marginal and meadow plants. The most common forms of damage were acute allergic edema of the conjunctiva, follicular conjunctivitis, blepharoconjunctivitis and papillary conjunctivitis. The use of ASIT and the drug optichrome demonstrated high therapeutic efficacy (up to 96.4% with prophylactic instillation).

Conclusions. The study showed that allergic eye lesions in children with atopic bronchial asthma are severe and protracted, depending on the seasonal activity of allergens. Complex treatment using ASIT and local antihistamines allows for effective symptom control and a reduction in the risk of complications.

Key words: allergic eye lesions, bronchial asthma, sodium cromoglycate.

Dolzarbligi. Zamonaviy dunyoda allergik kasalliklar bolalar kasalliklari tarkibida etakchi o'rinni egallaydi va ularning tarqalishi tobora ortib bormoqda. Bolalar va o'smirlar allergiyaga ayniqsa moyil bo'lib, atrof-muhit omillari ularning immun tizimiga keskin ta'sir ko'rsatadi, organizmning sensibilizatsiyasini keltirib chiqaradi hamda atopik fenotipni shakllantiradi. JSST ma'lumotlariga ko'ra, butun dunyo aholisining 40-45% dan ortig'i allergiya belgilariga ega [1].

Dunyoning ko'plab mamlakatlarida bo'lgani kabi O'zbekistonda ham [5] allergik kasalliklar o'sib bormoqda. Ma'lumki, aksariyat rivojlangan mamlakatlarda allergiyaning uchta asosiy shakli mavjud bular:-bronxial astma, atopik dermatit va allergik kon'yunktivit, rinit [2]. Ushbu kasallikning turlari alohida hamda turli kombinatsiyalarda aholining 25% gacha bo'lgan qismi zararlagan.

Boshqa joylarda bo'lgani kabi O'zbekistonda ham atopik bronxial astma bilan kasallangan bolalar sonining ko'payishi kuzatilmoqda, bu esa yondosh allergik patologiyalar, jumladan, kon'yunktivitning rivojlanishi uchun qulay sharoit yaratmoqda. Bu bir qator omillarga bog'liq [3,4,6]:

Iqlim xususiyatlari. O'zbekistonning issiq va qurg'oqchil iqlimi asosiy allergenlardan biri bo'lgan o'simliklar gul changlarining faol tarqalishiga olib keladi. Yil davomida ayrim o'simliklarning gullashi bolalarda allergik kon'yunktivitning mavsumiy kuchayishiga olib kelishi mumkin.

Atmosfera havosining ifloslanishi. O'zbekistonning Toshkent kabi yirik shaharlarida havoning ifloslanishi ortib bormoqda, shu kabi mayda PM2.5 zarralari bilan. Ushbu zarralar allergik reaktsiyalarni kuchaytirishi va atopik astma bilan og'rigan bolalarda kon'yunktivit rivojlanishini qo'zg'atishi mumkin.

Atopik astma bilan kasallangan bolalarda allergik reaktsiyalarga immun tizimi yuqori darajaga ko'tarilishi kuzatiladi. O'simlik changi yoki mayda PM2.5 zarralari kabi allergenlar bilan nishon a'zosining aloqa qilish natijasida reaktsiya sifatida allergik kon'yunktivitning rivojlanishiga olib kelishi mumkin.

Allergik kon'yunktivit bilan kasallangan bolalarning hayot sifatini sezilarli darajada pasaytirishi, noqulaylik, qichishish, ko'z yoshlanishi va ko'rish o'tkirligining pasayishiga sabab bo'lishi mumkin. O'z navbatida, bu ta'lim olish va ijtimoiy moslashishda muammolarga olib kelishi mumkin.

Allergik konyunktivitlar O'zbekistonda atopik astma bilan og'rigan bolalarda jiddiy muammo hisoblanadi va kasallikni diagnostika qilish, davolash hamda oldini olishda kompleks yondashuvni talab etadi. Ushbu sohadagi keyingi tadqiqotlar allergik kasalliklarga chalingan bolalarning hayot sifatini yaxshilashga yordam beradi [5,7,8].

Tadqiqotning maqsadi O'zbekiston sharoitida atopik bronxial astma bilan og'rigan bolalarda allergik kon'yunktivitning kechish xususiyatlarini o'rganish edi.

Materiallar va tadqiqot usullari. Ushbu tadqiqotda atopik bronxial astma tashxisi qo'yilgan hamda ko'z belgilari namoyon bo'lgan 3 yoshdan 15 yoshgacha bo'lgan 45 bola ishtirok etdi. Ishtirokchilar orasida kasallik 3 oydan 5 yilgacha davom etgan. Ular orasida o'g'il bolalar (26 kishi), qizlar ozchilikni - 16 kishini tashkil etdi.

Bolalarni tekshirish uchun nafaqat standart oftalmologik usullar, balki allergik va immunologik holatni o'rganishga qaratilgan usullar ham qo'llanilgan. Kasallikning oilaviy tarixi to'plangan, uning davomida irsiy moyillik aniqlangan.

Natijalar va muhokama. Bizning tadqiqotlarimiz bemorlarning 80 foizida (36 kishi) klinik ko'rinishlarning mavsumiyligini aniqladi. Bizning tadqiqotimiz hududi o'simliklarning xilma-xilligi bilan ajralib turadi, ularning gullashi uzoq vaqt davom etadi - qish oxiridan (fevral) kech kuzgacha (noyabr). Bu, albatta, organizmning uzoq muddatli sensibilizatsiyasiga va natijada allergik kasalliklarning rivojlanishiga yordam beradi.

Olingan ma'lumotlar asosida kasallanish mavsumiyligining tibbiy-geografik xaritasi tuzildi. Tadqiqot natijalari shuni ko'rsatadiki, mintaqaning iqlim va ekologik sharoiti allergik kasalliklarning yuqori darajada tarqalishi uchun o'ziga xos muhit yaratadi.

Tadqiqot shuni ko'rsatdiki, bolalarning ko'zida allergik reaktsiyalarining eng keng tarqalgan sababi begona o'tlar changidir (25% hollarda, 11 bemor). Bemorlarning 36,7%da (16 bemor) bodom va chinor kabi mahalliy allergenlarning gul changlariga allergiyasi bor edi. Yaylovdagi o'tlarning gul changlari tadqiqot ishtirokchilarining 18,3%da (8 bemor) allergik reaktsiyaga sabab bo'lgan, ya'ni bir vaqtning o'zida bir nechta allergenlarga allergiya 45,3% hollarda aniqlangan.

Bolalardagi atopik bronxial astma ko'pincha turli shilliq pardalar, jumladan ko'zlar, burun, burun- hiqildoq, traxeya va bronxlarning allergik yallig'lanishi bilan namoyon bo'ladi. Teri va asab tizimining zararlanishi kamroq uchraydi. Klinik ko'rinishlarning eng keng tarqalgani allergik rinosinusit, kon'yunktivit va bronxial astmadir.

Tadqiqotimiz natijalariga ko'ra, tekshirilgan bolalarning 48%da (22 bemor) kon'yunktivaning o'tkir allergik shishishi kuzatilgan, bu mintaqadagi bolalarda allergik kasalliklarda ko'zning yallig'lanishining eng keng tarqalgan shakli hisoblanadi. 10 nafar bemorda follikulyar kon'yunktivit, 7 nafarida blefarokonjunktivit va 6 nafarida so'rg'ichli kon'yunktivit tashxisi qo'yilgan.

Ushbu natijalar ko'zning yallig'lanishi bolalarda atopik astma klinik ko'rinishining muhim tarkibiy qismi ekanligini ta'kidlaydi.

O'simliklarning gullash davri taxminan 8 oyga yetadigan mintaqamizda bolalarda allergik ko'z kasalliklari ko'pincha og'ir kechadi.

Bolalardagi ko'zning shilliq qavatining o'tkir allergik shishi ko'z qovoqlari va ko'z olmasining qizarishi va shishishi, shuningdek, ko'p miqdorda shilliq ajralma ajralishi bilan tavsiflanadi. Ba'zi hollarda (3 bemor) kon'yunktiva xemozi kuzatildi, bu esa ikkilamchi yallig'lanish asoratlariga olib

keldi. Bunday holatda bemorlarning ko'zlarida kuchli qichishish va achishish kuzatiladi, bu belgilar qovoqlarga ham tarqaladi.

Follikulyar allergik kon'yunktivitda avval ko'z qovog'ining yuqori o'tish burmasining shilliq qavatida, keyin esa pastki qismida kichik pushti follikullar paydo bo'ladi. Vaqt o'tishi bilan bu jarayon ko'z olmasi konyunktivasi, qovoqlar va limbga tarqaladi, bu esa ko'zlardagi qichishish va og'riqning kuchayishi bilan birga kechadi.

Bolalardagi allergik blefarokonjunktivit qovoq terisi va ularning qirralari, shuningdek, kon'yunktivaning yallig'lanishi bilan tavsiflanadi. Alomatlar orasida ko'zdan yosh oqishi, qichishish, ko'zlarni tez-tez yumish va qattiq yumish kiradi. Ko'zdan shilliq ajralma ajralishi va qovoqlar terisining matseratsiyasiga e'tibor berish kerak, bu doimiy qichishish va ko'zlarni qo'llar bilan ishqalashdan kelib chiqishi mumkin. Bolalar kuchli yorug'likda ko'zda og'riqni va yot jismni his qilishlari mumkin. Bunday bolalarda ko'rishning pasayishi va ko'zda toliqish hissi kuchayishi mumkin.

So'rg'ichli kon'yunktivit uzoq davom etishi, kuchli qichishishi va ipsimon shilliq ajralma ajralishi bilan tavsiflanadi, uni olib tashlagandan so'ng bolalarda ko'zning holati yaxshilanadi. Klinik jihatdan, ko'z qovoqlari shilliq qavatining rangpar fonida, bahor katarining rasmini eslatuvchi o'rta o'lchamdagi so'rg'ichlar aniqlanadi. Konyunktivitning allergik kelib chiqishining barcha shakllarida ikkala ko'z birdaniga zararlanadi.

Atopik bronxial astma (BA) bo'lgan bolalarda allergik ko'z kasalliklarini davolash allergenni aniqlash va bartaraf qilish bilan boshlanadi. Allergenni tashxislash faqat kasallikning remissiya davrida maxsus testlar yordamida malakali allergolog tomonidan amalga oshiriladi.

Hozirgi vaqtda qo'zg'atuvchi allergeni aniqlagandan so'ng, shuningdek, remissiya davrida, allergenga xos immunoterapiya (ASIT) deb ataladigan profilaktik maxsus giposensibilizatsiyaning klassik usuli qo'llaniladi [3]. Astma va allergik kon'yunktivitni o'z ichiga olgan allergiyani davolashning bu usuli kelajakda organizmning allergenlarga moslashishga va simptomlarni kamaytirishga yordam beradi. Bu usul klinik oftalmologiya va allergologiyada keng qo'llaniladi. Ushbu usul shundan iboratki, o'simlikning gullash mavsumi boshlanishidan oldin bemorning teri ostiga ortib boruvchi dozalarda mos keladigan chang allergenlarining standartlashtirilgan ekstraktlari ma'lum vaqt oralig'ida yuboriladi. Davolash kuz-qish davrida, allergiya va boshqa yondosh kasalliklar belgilari bo'lmaganda, minimal dozadan boshlanadi. Shunday qilib, immunitet tizimi tolerantlikni rivojlantiradi va haqiqiy allergen tanaga kirganda, noxush alomatlar minimal darajada namoyon bo'ladi yoki umuman namoyon bo'lmaydi.

5 yoshdan oshgan bolalarga allergenga xos immunoterapiya (ASIT) qo'llanilishi mumkin. Shu bilan birga, bronxial astmaning ko'zdagi belgilarini davolashda antiallergik preparatlar, shuningdek kasallikning kuchayishi paytida buyuriladigan simptomatik terapiya preparatlari ham muhim rol o'ynaydi. Desensibilizatsiyalovchi preparatlarni qabul qilish jarayonida bemorlarga mahalliy ta'sir qiluvchi mast hujayralar blokatorlari va antigistamin dori-darmonlari ko'z tomchilari shaklida buyuriladi. Allergik ko’z kasalliklari mavjud va atopik bronxial astma bilan og’rigan bolalarda tekshirishlar shuni ko’rsatdiki, O’zbekistonda allergenlarning organizmga uzoq vaqt ta’sir etishi natijasida bolalarda ko’zning allergik yallig’lanishi og’irroq kechadi. Astmaning ko'z (ko'rinishi) o'tkir allergik kon'yunktiva shishi, follikulyar kon'yunktivit, blefarokon'yunktivit va so'rg'ichli kon'yunktivitni o'z ichiga olishi mumkin. Bolalardagi allergik ko'z kasalliklari klinik ko'rinishlarining og'irligi va kechishi uni keltirib chiqargan allergenga va bolaning tanasining unga nisbatan sezgirlik darajasiga bog'liq.

Xulosa. Chang allergenlaridan kelib chiqqan atopik bronxial astma bilan og'rigan bolalarda allergik kon'yunktivit mavsumiy bo'lib, bemor tanasining individual xususiyatlarini hisobga olgan holda diagnostika, davolash va oldini olishga kompleks yondashuvni talab qiladi.
Atopik bronxial astmaning ko'z ko'rinishi bo'lgan bolalarni zamonaviy diagnostika va davolash usullaridan foydalangan holda diqqat bilan tekshirish kasallikning sababini o'z vaqtida aniqlash, samarali davolashni va asoratlar sonini kamaytirish imkonini beradi. Bolalarda allergik kon'yunktivitni davolash allergologlar bilan birgalikda amalga oshirilishi kerak.

Foydalanilgan adabiyotlar:

1. Ghosh D, Mersha TB. Atopic dermatitis and ocular allergy: common mechanisms and uncommon questions. Curr Opin Allergy Clin Immunol. 2023 Oct 1;23(5):383-389. doi: 10.1097/ACI.0000000000000931.
2. Larsen AC, Rasmussen MLR. A Patient-Centered Approach to Vernal Keratoconjunctivitis (VKC): A Podcast. Ophthalmol Ther. 2024 May;13(5):1061-1069. doi: 10.1007/s40123-024-00909-y.
3. Pietruszyńska M, Zawadzka-Krajewska A, Duda P, Rogowska M, Grabska-Liberek I, Kulus M. Ophthalmic manifestations of atopic dermatitis. Postepy Dermatol Alergol. 2020 Apr;37(2):174-179. doi: 10.5114/ada.2018.79445.
4. Raffa LH, Roblah TM, Balbaid NT, Zimmo BS, Showail MJ. Ocular manifestations of children with atopic dermatitis in Saudi Arabia. Int J Ophthalmol. 2023 May 18;16(5):787-793. doi: 10.18240/ijo.2023.05.17.
5. Бахритдинова Ф. А. Особенности диагностики, клиники и лечения поллинозных поражений глаз в Узбекистане // Метод.реком. для врачей офтальмологов и аллергологов. - 1990. - Ташкент, - с. 13.
6. Ковалевская М.А., Филина Л.А. Клинические формы глазных проявлений аллергии: возможности терапии. Российский офтальмологический журнал. 2020;13(1):94-101.
7. Миррахимова С.Ш., Нарзикулова К.И., Сафаров Ж.О. Оценка эффективности препарата группы натрия кромогликат при лечении аллергических конъюнктивитов. Российский офтальмологический журнал. 2020;13(2):36-40.

UO'K: 616-08-035

UVEITLARNING KLINIK KECHISHIGA MNT TURI VA TONUSINING TA'SIRI

Azizova Sh.A., Pirnazarov M.Y.
Toshkent tibbiyot akademiyasi

Annotatsiya. Uveit - ko'zning qon tomir qobig'ining yallig'lanishi - multifaktorli kasalliklarga kiradi. Etiologiyaning xilma-xilligi, ko'zning anatomik tuzilishining o'ziga xosligi, organizmning immunologik reaktivligi va ushbu ko'z kasalligining ko'plab klinik shakllari ushbu kasallikni tashxislashda qiyinchiliklar tug'diradi. Tizimli kasalliklar bilan birga keladigan uveitlar barcha uveitlarning taxminan 26-30% ni tashkil qiladi, 36-41% bemorlarda uveitlarning etiologiyasini aniqlashning iloji yo'q.

Tadqiqot maqsadi. Turli etiologiyali uveitlarning klinik kechishini organizmning individual xususiyatlariga qarab o'rganish. Materiallar va usullar. 18 yoshdan 60 yoshgacha bo'lgan 60 nafar bemor turli etiologiyali uveit tashxisi bilan Toshkent tibbiyot akademiyasi klinikasida statsionar davolanishda bo'lgan. Qo'llanilgan tadqiqot usullariga qarab, bemorlar 20 kishidan iborat uch guruhga bo'lingan. Ko'rikdan o'tish paytida barcha bemorlar ko'rishning pasayishi, ko'zdagi og'riq, qizarish va xiralashishga shikoyat qilishgan. Barcha bemorlar umumiy oftalmologik tekshiruvdan va maxsus tekshiruv usullaridan, shu jumladan Kerdo indeksini aniqlash, ko'z yosh suyuqligida sitokinlar miqdorini aniqlash va Strelyau onlayn so'rovnomasi yordamida markaziy asab tizimi (MAT) tipini aniqlashdan o'tgan.

Natijalar va xulosa. Ikkinchi tadqiqot guruhida uveitlarning yanada uzoqroq kechishi aniqlandi: ko'rish o'tkirligi, og'riqning yo'qolish muddati, qon tomirlarining in'ektsiyasi, shox pardasi endoteliysida cho'kma paydo bo'lishi, ko'z yosh suyuqligidagi sitokinlar darajasi faqat statsionar davolanishning 7-kunida ijobiy dinamikani ko'rsatdi, holbuki birinchi va uchinchi guruhda biz 5-kuni tekshirilayotgan bemorlarda ijobiy dinamikani ko'rdik. Uveitlarning klinik kechishining vegetativ asab tizimi tonusiga bog'liqligini o'rganish shuni ko'rsatdiki, parasimpatik asab tizimi tonusiga ega bo'lgan bemorlarda kasallik simpatik va normotonik asab tizimi tonusiga ega bo'lgan bemorlarga qaraganda ancha uzoq davom etgan. Uveit bilan kasallangan bemorlarni klinik tekshirish shuni ko'rsatadiki, ko'z a'zosi yallig'lanishining xarakteri, uning kechishi, surunkaliligi, qaytalanishi nafaqat etiologiyaga va birga keladigan patologiyaga, balki, shubhasiz, organizmning individual xususiyatlarining ta'siriga, ya'ni markaziy asab tizimi tipiga va vegetativ asab tizimi tonusiga bog'liqdir.

Kalit so'zlar: *uveitlar, markaziy asab tizimi tipi va tonusi, Kerdo indeksi, sitokinlar.*

THE INFLUENCE OF CNS TYPE AND TONE ON THE CLINICAL COURSE OF UVEITIS

Azizova Sh.A., Pirnazarov M.Y.
Tashkent Medical Academy

Abstract. Uveitis, inflammation of the eye's vascular coat, is a multifactorial disease. The diversity of etiology, the peculiarities of the anatomical structure of the eye, the immunological reactivity of the organism, and the numerous clinical forms of this eye disease create difficulties in its diagnosis. Uveitis associated with systemic diseases accounts for approximately 26-30% of all uveitis cases, and in 36-41% of patients, the etiology of uveitis cannot be determined.

Purpose of the study. To study the clinical course of uveitis of various etiologies depending on the individual characteristics of the organism.

Materials and methods. 60 patients aged 18 to 60 years with a diagnosis of uveitis of various etiologies were hospitalized in the clinic of the Tashkent Medical Academy. Depending on the research methods used, patients were divided into three groups of 20 people each. During the examination, all patients complained of decreased vision, eye pain, redness, and blurred vision. All patients underwent a general ophthalmological examination and special examination methods, including the determination of the Kerdo index, the determination of cytokine levels in the tear fluid, and the determination of the central nervous system (CNS) type using the Strelyau online questionnaire.

Results and conclusion. In the second study group, a more prolonged course of uveitis was observed: visual acuity, duration of pain disappearance, vascular injection, the appearance of precipitates on the corneal endothelium, and cytokine levels in the tear fluid showed positive dynamics only on the 7th day of inpatient treatment, whereas in

the first and third groups, we observed positive dynamics in the examined patients on the 5th day. The study of the dependence of the clinical course of uveitis on the tone of the autonomic nervous system showed that in patients with parasympathetic nervous system tone, the disease lasted significantly longer than in patients with sympathetic and normotonic nervous system tone. A clinical examination of patients with uveitis indicates that the nature of eye inflammation, its course, chronicity, and recurrence depend not only on etiology and concomitant pathology but also, undoubtedly, on the influence of individual characteristics of the organism, i.e., the type of CNS and the tone of the autonomic nervous system.

Keywords: uveitis, type and tone of the central nervous system, Kerdo index, cytokines.

ВЛИЯНИЕ ТИПА И ТОНУСА ЦЕНТРАЛЬНОЙ НЕРВНОЙ СИСТЕМЫ НА КЛИНИЧЕСКОЕ ТЕЧЕНИЕ УВЕИТОВ

Азизова Ш.А., Пирназаров М.Ю.

Ташкентская медицинская академия

Аннотация. Увеит — воспаление сосудистой оболочки глаза — относится к многофакторным заболеваниям. Разнообразие этиологии, особенности анатомического строения глаза, иммунологическая реактивность организма и множество клинических форм этого глазного заболевания затрудняют его диагностику. Увеиты, сопутствующие системным заболеваниям, составляют примерно 26-30% всех увеитов, у 36-41% пациентов этиологию увеитов установить не удаётся.

Цель исследования. Изучить клиническое течение увеитов различной этиологии в зависимости от индивидуальных особенностей организма.

Материалы и методы. 60 пациентов в возрасте от 18 до 60 лет с диагнозом увеит различной этиологии находились на стационарном лечении в клинике Ташкентской медицинской академии. В зависимости от применённых методов исследования, пациенты были разделены на три группы по 20 человек. При осмотре все пациенты жаловались на снижение зрения, боль в глазу, покраснение и затуманивание. Всем пациентам было проведено общее офтальмологическое обследование и специальные методы исследования, включая определение индекса Кердо, определение уровня цитокинов в слезной жидкости и определение типа центральной нервной системы (ЦНС) с помощью онлайн-опросника Стреляу.

Результаты и заключение. Во второй группе исследования было выявлено более длительное течение увеитов: острота зрения, продолжительность исчезновения боли, инъекция сосудов, появление преципитатов на эндотелии роговицы, уровень цитокинов в слезной жидкости показали положительную динамику только на 7-й день стационарного лечения, тогда как в первой и третьей группах мы наблюдали положительную динамику у обследуемых пациентов на 5-й день. Изучение зависимости клинического течения увеитов от тонуса вегетативной нервной системы показало, что у пациентов с парасимпатическим тонусом нервной системы заболевание протекало значительно дольше, чем у пациентов с симпатическим и нормотоническим тонусом нервной системы. Клиническое обследование пациентов с увеитом свидетельствует о том, что характер воспаления органа зрения, его течение, хронизация, рецидивирование зависят не только от этиологии и сопутствующей патологии, но и, несомненно, от влияния индивидуальных особенностей организма, то есть типа ЦНС и тонуса вегетативной нервной системы.

Ключевые слова: *увеиты, тип и тонус центральной нервной системы, индекс Кердо, цитокины.*

Kirish. Uveitlar oftalmologiyada keng tarqalganligi, surunkali qaytalanuvchi kechishi va ko'plab asoratlar, nogironlikning yuqori foizi tufayli dolzarb muammo bo'lib qolmoqda. Uveit - ko'zning qon tomir qobig'ining yallig'lanishi bo'lib, multifaktorli kasalliklarga kiradi [1]. Qon tomir traktining yallig'lanishi muammosi qadim zamon shifokorlari oldida ham mavjud edi. Tizimli shikastlanishlar bilan bog'liq uveitning birinchi tavsifi Gippokratga tegishli. Uveitlar ko'zning qon tomir qobig'i va qo'shni tuzilmalarning (to'r parda, ko'rish nervi, shishasimon tana, skleraning) heterojen guruh yallig'lanish kasalliklari bo'lib, ichki yoki tashqi omillar ta'sirining natijasi hisoblanadi [2].

Kasallikning etiologiyasi va patogenezida ko'z qobiqlarining yaxlitligining buzilishi yoki patogenning kiritilishiga javoban immunologik reaktsiyalar zanjirining rivojlanishi asosiy ahamiyatga ega. Aslida, immunitet tizimining faollashuvi bilan birga keladigan har qanday infektsiya va organizmning tizimli kasalligi ko'z qobiqlarida yallig'lanish jarayonining boshlanishiga olib kelishi mumkin. Bugungi kunda ko'z ichi yallig'lanishi bilan bog'liq bo'lishi mumkin bo'lgan 150 dan ortiq turli kasalliklar ma'lum. Etiologiyaning xilma-xilligi, ko'zning anatomik tuzilishining o'ziga xosligi, organizmning immunologik reaktivligi va uveitlarning klinik shakllari ushbu ko'z kasalliklari guruhining etiologik tashxisida qiyinchiliklar tug'diradi [6].

Ma'lumki, ko'zning shox parda endoteliysi va neyrosensor to'r pardasi kabi hujayra komponentlari replikatsiya qilishga qodir emas va shikastlanish va yallig'lanish oqibatlaridan keyin tiklana olmaydi. Ushbu to'qimalarning jiddiy shikastlanishi muqarrar ravishda ko'rlikka olib keladi [4]. Ushbu patologiyani o'rganishning ko'p yillik tarixiga, to'g'ridan-to'g'ri va bilvosita laboratoriya diagnostikasining sezilarli darajada ko'pligi mavjudligiga qaramay, uveitlarning etiologiyasini aniqlash hali ham katta qiyinchiliklar tug'diradi va aniqlanmagan etiologiyali kasalliklar ulushi 70% ga etadi [5]. Uveitlarning va ularning asoratlarining klinik kechishi va davolash natijasiga bir tomondan bemor organizmining o'zgargan reaktivligi, ikkinchi tomondan esa antibakterial preparatlarga chidamlilikning ortib borishi ta'sir qiladi. Immun reaktsiyasining neyrogumoral regulyatsiyasi masalalari - immun tizimining organizmning umumiy tizimlari (endokrin va nerv) bilan o'zaro ta'siri zamonaviy tibbiyot uchun tobora ahamiyatli bo'lib bormoqda [3].

Tadqiqot maqsadi. Turli etiologiyali uveitlarning klinik kechishiga markaziy asab tizimi (MAT) tipi va vegetativ asab tizimi tonusining ta'sirini o'rganish.

Materiallar va usullar. Klinik tadqiqot TMA ko'p tarmoqli klinikasining Oftalmologiya va revmatologiya bo'limi bazasida o'tkazildi. Tadqiqotga turli etiologiyali uveit tashxisi bilan statsionar davolanishda bo'lgan 60 nafar bemor (60 ko'z) kiritildi. Shulardan erkaklar 39, ayollar 21 tani , bemorlarning o'rtacha yoshi esa 39,9 ± 1 yilni tashkil etdi.

Bemorlar belgilangan mezonlarga muvofiq va bemorning tadqiqotda ishtirok etishga yozma roziligidan keyin tadqiqotga kiritildi. Klinik tadqiqot cheklangan qiyosiy dastur bo'yicha, ochiq randomizatsiyalangan nazorat ostida, uchta parallel guruh bilan o'tkazildi. Barcha bemorlarga umumiy oftalmologik tekshiruv o'tkazildi, jumladan: vizometriya, biomikroskopiya, gonioskopiya, perimetriya, kompyuter statik perimetriya, tonometriya, oftalmoskopiya va maxsus usullar, masalan: Kerdo indeksini aniqlash, Strelyau usuli bo'yicha MAT tipini aniqlash, ko'z yosh suyuqligida sitokinlar darajasini aniqlash.

Ko'rikdan o'tish paytida barcha bemorlar ko'rishning pasayishi, ko'zdagi og'riq, qizarish va xiralashishga shikoyat qilishgan. Barcha bemorlar ko'rishning pasayishiga shikoyat qildilar. Ko'zdagi og'riqlar haqida 60 nafar tekshirilgan bemorning 54 tasi (90%) shikoyat qildi. Ko'zlarining qizarishini 52 nafar (86,67%) bemor, ko'rishning xiralashishini 15 nafar (25%) bemor qayd etdi. 12 nafar (20%) bemor ko'zda suzib yuruvchi xiralanishlar haqida shikoyat qildi.

Kerdo indeksi natijalariga ko'ra, bemorlar uch guruhga bo'lingan.

1-guruh (simpatikotoniklar) - 20 bemor (20 ko'z). 2-guruh (parasimpatikotoniklar) - 20 bemor (20 ko'z). 3-guruh (normotoniklar) - 20 bemor (20 ko'z).

MAT tipini aniqlash uchun barcha bemorlar Strelyau onlayn so'rovnomasi bo'yicha tekshirildi. Strelyau so'rovnomasi natijalariga ko'ra, bemorlar uch kichik guruhga bo'lingan.

I kichik guruhga kuchli nerv tizimi tipidagi bemorlar - 17 bemor (28,3%) kiritildi. II kichik guruhga oraliq nerv tizimi tipidagi bemorlar - 18 bemor (30%) kiritildi. III kichik guruhga zaif nerv tizimi tipidagi bemorlar - 25 bemor (41,6%) kiritildi.

I guruhda 4 (20%) bemorda ko'zning ikki tomonlama shikastlanishi kuzatilgan, II guruhda - 10 (50%) bemorda va III guruhda - 3 (5%) bemorda. Anamnezni aniqlashtirishda 38 (63,3%) bemorda kasallikning davomiyligi 1 yilni, 3 bemorda (5%) - 2 yilni va 8 (13,3%) bemorda 3 yildan 5 yilgacha ekanligi aniqlandi.

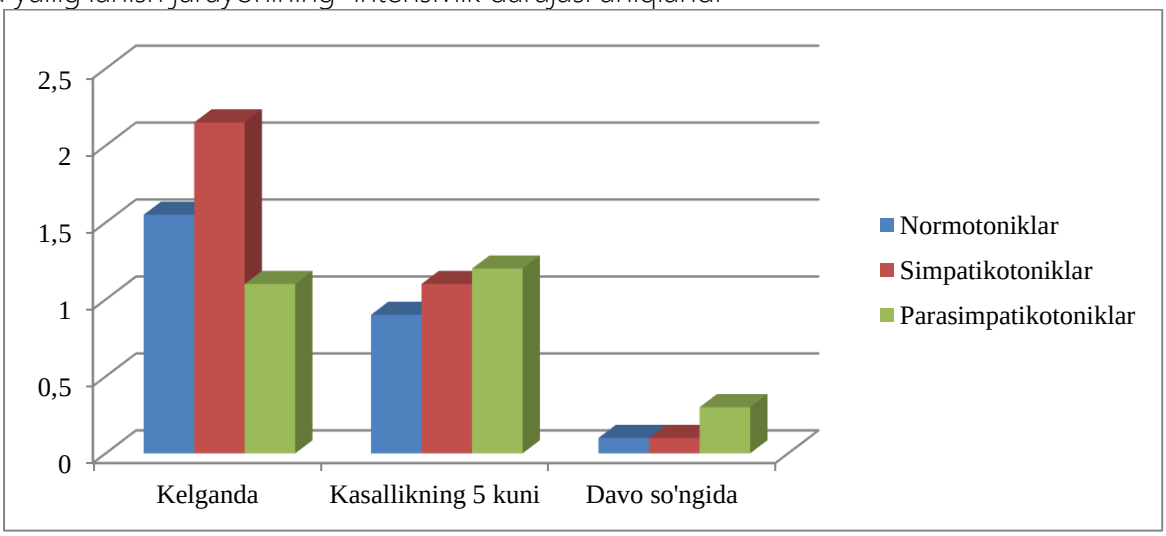
Barcha bemorlarga standart terapiya o'tkazildi, jumladan: antibakterial, yallig'lanishga qarshi, angioprotektor dori vositalaridan foydalanildi.

Biomikroskopiya natijasida quyidagi o'zgarishlar aniqlandi: 52 bemorda (45 ko'z) konyunktival in'yeksiya kuzatildi, 26 bemorda (32 ko'z) shox pardada cho'kma, 14 bemorda (20 ko'z) oldingi kamerada xiralik, 8 bemorda (4 ko'z) kamalak pardasi relyefi yo'qolganligi, 7 bemorda (8 ko'z) xrustalik oldingi kapsulasida pigment cho'kmalari, 4 bemorda (4 ko'z) gipopion, 14 bemorda (20 ko'z) orqa va 7 bemorda (8 ko'z) oldingi sinexiya, 7 bemorda (10 ko'z) ko'z qorachig'i shakli o'zgarganligi, 8 bemorda (14 ko'z) gavhar xiralashganligi aniqlandi.

Natijalar. Uveit kechishining og'irligini baholovchi muhim jihatlardan biri ko'rish o'tkirligi ko'rsatkichidir. Ko'rish o'tkirligining (KO') dastlabki ko'rsatkichlari har xilligi qayd etildi, bu qon tomir traktining oldingi va/yoki orqa qismlari shikastlanishining ustunligi bilan bog'liq bo'lib bu ko'rsatkich birinchi guruhda 0,232 ± 0,05, ikkinchi guruhda 0,254 ± 0,04 va uchinchisida 0,496 ± 0,04 ni tashkil etdi.

Birinchi guruh bemorlarida 9-kunga kelib ko'rish o'tkirligi 2,37 barobar oshdi va 0,55 ± 0,04 ni tashkil etdi. Uchinchi guruhda 9-kunga kelib KO' 0,69 ± 0,05 ni tashkil etdi, bu dastlabki ko'rsatkichlardan 1,4 barobar yuqori edi. Ikkinchi guruhda KO' ning oshishi 12-kunga kelib kuzatildi. Ushbu guruhda KO' ning o'rtacha ko'rsatkichi 0,52 ± 0,05 ni tashkil etdi, bu dastlabki qiymatlardan 1,2 barobar yuqori edi.

Barcha bemorlarda yallig'lanishning og'irlik darajasi 3 ballik tizim bo'yicha subyektiv belgilar intensivligini miqdoriy baholash usuli yordamida aniqlandi (Maychuk Y.F., Vaxova E.S., 1994, Gelmgolts nomidagi MKKITI). Kasallikning har bir belgisi quyidagicha baholandi: og'ir - 3 ball; o'rtacha - 2 ball; yengil - 1 ball va hech qanday belgilarning yo'qligi - 0 ball. Ballar yig'indisi bo'yicha yallig'lanish jarayonining intensivlik darajasi aniqlandi

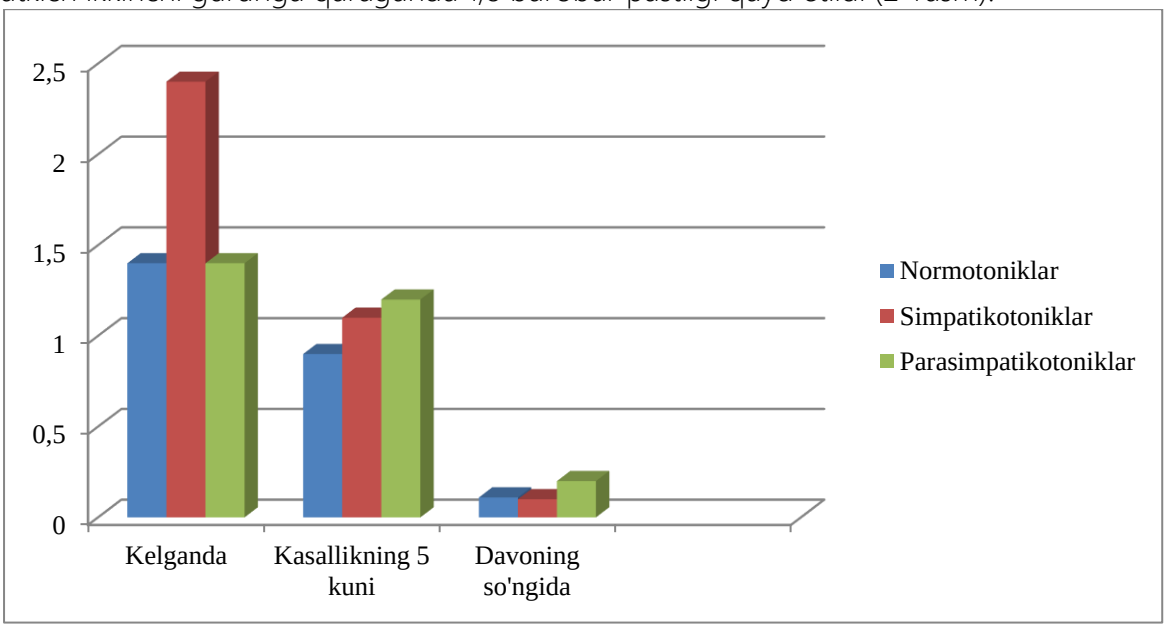


Rasm 1. Tekshirilayotgan guruhlarda og'riq sindromi ko'rsatkichlarini baholash (ballarda)

Og'riq sindromining yo'qolishi birinchi guruhda ikkinchi va uchinchi guruhlarga qaraganda erta muddatlarda kuzatildi. Beshinchi kunga kelib birinchi guruhda og'riq sindromining o'rtacha ko'rsatkichi 0,7 ballni tashkil etgan bo'lsa, ikkinchi guruhda 0,9 ball va uchinchi guruhda 0,8 ballni

tashkil etdi. Kasalxonadan chiqarishda birinchi va uchinchi guruh bemorlarida bu ko'rsatkich ikkinchi guruhga qaraganda 3 barobar past edi (1-rasm).

Konyunktival inyeksiyaning yo'qolishi birinchi va uchinchi guruh bemorlarida ikkinchi guruhga qaraganda tezroq sodir bo'ldi. Davolashning beshinchi kunida birinchi guruhda konyunktival inyeksiya intensivligining o'rtacha ko'rsatkichi 1,1 ballni, ikkinchi guruhda 1,2 ball va uchinchi guruhda 0,9 ballni tashkil etdi. Kasalxonadan chiqarishda birinchi va uchinchi guruhlarda bu ko'rsatkich ikkinchi guruhga qaraganda 1,8 barobar pastligi qayd etildi (2-rasm).



Rasm 2. Tekshirilayotgan guruhlarda konyunktival inyeksiya ko'rsatkichlarini baholash (ballarda)

Shox parda endoteliysidagi cho'kmalarning yo'qolishi uchinchi guruhda birinchi va ikkinchi guruhlarga qaraganda tezroq sodir bo'ldi. 3-jadvaldan ko'rinib turibdiki, uchinchi guruhda cho'kmalar 6-kun, birinchi guruhda 7-kun va ikkinchi guruhda 10-kunda yo'qolgan. Faqat II guruhning 1 nafar bemorida shox pardda yakka cho'kmalar aniqlandi.

Birinchi guruh bemorlarida gipopion o'rtacha 4 kun, ikkinchi guruhda 7 kun, uchinchi guruhda esa 5 kuni to'liq so'rilgan. Oldingi sinexiyalar davolash boshlanganidan keyin birinchi, uchinchi va ikkinchi guruhlarda mos ravishda 1-2 va 2-3 kunlarda uzilgan. Orqa sinexiyalarning yo'qolishi barcha tekshirilayotgan bemorlarda 2-3 kuni kuzatilgan.

Ma'lumotlar (4-jadval) ko'rsatganidek, ko'z yosh suyuqligidagi sitokinlar darajasi kasalxonaga yotqizilganda ikkinchi guruhda birinchi va uchinchi guruhlarga qaraganda ancha yuqori bo'lgan. Birinchi guruhda IL-1 darajasi 10,5 pg/ml, uchinchi guruhda 9,77 pg/ml tashkil etgan. Ikkinchi guruhda 12,15 pg/ml, ya'ni boshqa tekshirilayotgan guruhlarga qaraganda 1,14 barobar yuqori bo'lgan. Kasalxonadan chiqarishda birinchi va uchinchi guruhlarda sitokinlar darajasi mos ravishda 5,1 va 4,9 pg/ml gacha normal qiymatlarga tushgan. Ikkinchi guruhda bu ko'rsatkich 6,3 pg/ml ni tashkil etdi. Ikkinchi guruh bemorlarida IL-6 sezilarli darajada yuqori bo'lib, 20,33 pg/ml ni tashkil etgan, birinchi va uchinchi guruhlarda esa bu ko'rsatkich mos ravishda 17,6 va 18,2 pg/ml ni tashkil etgan. Shuningdek, ikkinchi guruhda kasalxonadan chiqarish paytida IL-6 darajasi normal ko'rsatkichlardan yuqori edi. O'tkazilgan tadqiqot natijasida uveit tashxisi qo'yilgan bemorlarning ko'z yoshi suyuqligida, ayniqsa ikkinchi guruhda, yallig'lanish jarayonlarining surunkali shaklga o'tishida muhim omil hisoblangan sitokin IL-6 darajasi 2,9 martadan ko'proqqa, oshganligi aniqlandi.

Jadval 2

Guruh	IL-1		IL-6	
	Kelganda	Davo so'ngida	Kelganda	Davo so'ngida
Simpatikotoniklar	10,6±0,50*	5,1±0,47*	17,6±0,49*	6,3±0,5*
Parasimpatikotoniklar	12,25±0,47	6,3±0,59	20,33±0,58	9,3±0,68
Normotoniklar	9,78±0,44	4,9±0,49	18,2±0,57	5,4±0,59

Muhokama. Uveitning klinik kechishining markaziy asab tizimi (MAT) turiga va vegetativ asab tizimi tonusiga bog'liqligini o'rganishda asab tizimining zaif turiga ega shaxslarning biroz ustunligi aniqlandi. Parasimpatik asab tizimi tonusiga ega bemorlarda simpatik va normotonik asab tizimi tonusiga ega bemorlarga nisbatan kasallikning uzoqroq davom etishi va asoratlar ko'proq kuzatildi.

Bemolar ko'z yoshi suyuqligidagi IL-1 va IL-6 darajalarini kasalxonaga qabul qilish paytida o'rganish natijalari shuni ko'rsatdiki, parasimpatik asab tizimi tonusiga ega bemorlarda interleykinlar ko'rsatkichlari simpatotoniklar va normotoniklarga nisbatan yuqori. Shuningdek, uveit tashxisi qo'yilgan bemorlarning ko'z yoshi suyuqligidagi o'tkazilgan tadqiqot natijalari shuni ko'rsatdiki, ikkinchi guruhda IL-6 darajasi boshqa tekshirilayotgan guruhlarga nisbatan ancha yuqori edi.

Xulosa. Uveit tashxisi qo'yilgan bemorlarning klinik tekshiruvi ko'rsatadiki, ko'z a'zosi yallig'lanishining xarakteri, uning kechishi, surunkali shaklga o'tishi, qaytalanishi nafaqat etiologiya va qo'shma patologiyaga bog'liq. Kasallikning kechishiga organizmning individual xususiyatlari, ya'ni markaziy asab tizimining turi va tonusi ham shubhasiz ta'sir ko'rsatadi.

Foydalanilgan adabiyotlar:

1. Yegorova Y. A., Moshetova L. K., Neroyev V. V., Taxchidi X. P. Oftalmologiya. Milliy qo'llanma / Avetisov S. E. tahriri ostida, - Moskva: GEOTAR-Media, 2019. - 752 b. - ISBN 978-5-9704-5125-0.(rus tilida)
2. Kraxmaleva D. A., Pivin Ye. A., Trufanov S. V., Malojen S. A. Uveitlarni davolashda zamonaviy tendensiyalar. Oftalmologiya. 2020 Fevral; 14(2): 113–119.
3. Karimova M. X. Organizmning individual xususiyatlariga qarab ba'zi yallig'lanish ko'z kasalliklarining klinik-patogenetik jihatlari / M. X. Karimova // Tibbiyot fanlari doktori ... diss. avtoref. – 2003. – 64-72 betlar.
4. Soriano A, Soriano M, Oliva R, Smith WM Uveitis: insights into pathogenesis treatment. Front Med 2022 Nov;9:3420.
5. Standardization of Uveitis Nomenclature (SUN) Working Group. Development of Classification Criteria for the Uveitis. Am J Ophthalmol. 2021 Aug;228:96-105.
6. Heiligenhaus A, Rothaus K, Pleyer U. Development of classification criteria for uveitis by the standardization of uveitis nomenclature (SUN) working group. Ophthalmologes. 2021 Sep;118(9):913-918.

UO'K: 616.89

YaQIN QARINDOShLAR ORASIDAGI NIKOXDAN TUG'ILGAN BOLALAR ORASIDA TALVASALI BUZILIShLARNI OLDINI OLISh

Azimova G. A., Mo'minov R.Q, Karimov A.X.
Andijon davlat tibbiyot instituti

Rezyume. Irsiy yuk va qarindoshlik nikohlarining uyg'unligi bolalarda ruhiy kasalliklar va epilepsiya rivojlanish xavfini sezilarli darajada oshiradi, bu esa katta progressivlik va shunga mos ravishda yomon prognoz.

Kalit so'zlar: qarindosh-urug'larning nikohi, irsiy yuk, bolalar, epilepsiya, ruhiy kasalliklar.

PREVENTION OF CONVULSIVE DISORDERS IN CHILDREN BORN FROM CONSISTENT MARRIAGES

Azimova G.A., Muminov R.K., Karimov A.Kh.
Andijan State Medical Institute

Resume. The combination of hereditary burden and consanguineous marriages significantly increases the risk of children developing mental disorders and epilepsy, which proceed with greater progression and, accordingly, a worse prognosis.

Keywords: consanguineous marriage, hereditary burden, children, epilepsy, mental disorders.

ПРОФИЛАКТИКА СУДОРОЖНЫХ РАССТРОЙСТВ У ДЕТЕЙ, РОЖДЕННЫХ ОТ БЛИЗКОРОДСТВЕННЫХ БРАКОВ

Азимова Г.А., Муминов Р.К., Каримов А.Х.
Андижанский государственный медицинский институт

Резюме. Сочетание наследственной отягощённости и близкородственных браков значительно повышает риск развития детей с психическими расстройствами и эпилепсией, протекающих с большей прогредиентностью и, соответственно, худшим прогнозом.

Ключевые слова: близкородственный брак, наследственная отягощенность, дети, эпилепсия, психические расстройства.

Dolzarblik. Paroksizmal buzilishlar-psixonevrologiyaning eng muhim muammolaridan biri bo'lib, bolalar populyatsiyasida katta ulushni egallaydi [1,4,5]. Bu, ayniqsa, yaqin qarindoshlar o'rtasidagi nikohlar qabul qilinadigan jamiyatda dolzarbdir [6,7].

Ko'pgina mualliflarning fikriga ko'ra, turli xil rivojlanish anomaliyalari, og'ir psixo-nevrologik kasalliklar, jumladan, tug'ma irsiy kasalliklar, shuningdek, erta chaqaloqlar o'limi yaqin qarindoshlar nikohi bilan bog'liq bo'ladi [2,3,8,9].

Izlanish maqsadi. Yaqin qarindoshlar nikohidan tug'ilgan bolalarda paroksizmal buzilishlarning klinik ko'rinishlari chastotasi va xususiyatlarini o'rganish.

Tekshirish materiallari va usullari. Andijon viloyat neyropsixiatriya dispanseri (AOPND) da ro'yxatga olingan bemorlar orasidan 3 yoshdan 15 yoshgacha bo'lgan yaqindan bog'liq nikohlarda tug'ilgan 100 nafar bola tanlab olindi. Shundan 47 nafari o'g'il bolalar va 53 nafari qizlardir. Barcha tekshirilgan bolalar miyaning klinik va paraklinik tadqiqotlarini o'tkazdilar: nevrologik va ruhiy holat

elektroensefalogrammasi (EEG); 47 bolalarda miyaning magnit-rezonans tomografiyasi (MRT) o'tkazildi.

Tekshirilgan bolalarning asosiy guruhi 52 nafar boladan iborat bo'lib, paroksizmal buzilishlarning irsiy yuklamasi bilan chambarchas bog'liq bo'lgan nikohlardan oilalardan iborat bo'ldi.

Nazorat guruhi bir-biri bilan bog'liq bo'lmagan oilalarning 48 nafar farzandidan iborat.

Guruh tasodifiy sonlar yordamida 10% reprezentativlik namunasi asosida tanlab olindi (2-jadval).

Izlanish maqsadi. Epileptik sindrom har ikkala guruhda ham turli chastotali va klinik ko'rinishlarda kuzatildi. Paroksizmal kasalliklardan tashqari, ba'zi bolalar organik miya shikastlanishining belgilari shaklida turli xil zo'ravonlik nevrologik tanqisliklarini ko'rsatdilar, ammo bu har doim ham MRT tekshiruvi bilan tasdiqlanmagan(1-jadval).

Tekshiruv guruhining solishtirma tahlili

	Asosiy guruh		Nazorat guruhi	
	Abs.		Abs.	
Epileptk sindrom	43	2	12	5
Klinik-nevrologik yetishmovchilik	16	1	8	7
MRT-o'zgarishlar	8	5	4	
MRT o'zgarishsiz	39	5	5	0
Patologik EEG	43	2	8	7

p<0.05

Asosiy guruh bolalaridagi konvulsiv sindrom epileptik tutqanoq bilan tez-tez umumlashgan tabiat-grand mal, EEG ko'rinishlari bilan yuqori to'lqinli kompleks shaklida tasdiqlangan - 29 bolalarda va 14 bolalarda paroksizmal tayyorlik, ya'ni 3-5 Gs chastotali alfa to'lqinlari, 90-95 mv amplitudasi, delta faoliyati, 3-3.5 qol/sek chastotasi, 4 MkV. Yalpi bosh o'zgarishlar holda mikrosimptomatika shaklida nevrologik kam omadi 16 bemorlarda kuzatilgan edi, va faqat 8 bosh miya MRT ustida tasdiqlangan asosan frontotemporal hududlarida, bosh miya po'stlog'ining diffuz subatrofiyasi shaklida o'zgarishlar bor edi. Anamnez ma'lumotlari zarar ko'rgan perinatall zararlanishlarni tasdiqlamadi va shuning uchun bu o'zgarishlar biz tomonidan miya po'stlog'iga ikkilamchi tutqanoqdan keyingi zarar deb qaraldi.

Bundan tashqari, 27 bolalar bolalik yepilepsiya oqibatida intellektual nogironlik sindromi (demans) turli daraja bilan kasallangan yedi.

Nazorat guruhi bolalarida tutqanoq 12 bolalarda kuzatilib, klinik jihatdan EEG bo'yicha katta tutqanoq (4 kishi) va qisman motor tutqanoq (8 kishi) ko'rinishida sodir bo'lgan, umumiy miya xarakteridagi o'zgarishlar bu bolalarda nospesifik, shartli ravishda o'tkir to'lqinlar shaklidagi yepileptik hodisalar, tetra ritm ustunlik qilgan. Nevrologik defitsit pay anizorefleksiya, mushak gipotenziyasi, gipertenziya-gidroksefal sindrom, bo'g'ma shaklida mikronevrologik belgilar bilan namoyon bo'ldi. Nevrologik nuqsoni bo'lgan barcha bolalar anamnezida perinatal ensefalopatiya-

surunkali homila ichi gipoksiyasi, patologik homiladorlik, tug'ruq vaqtida asfiksiya aniqlandi. Nazorat guruhi bolalarining ruhiy holati 8 ta bolada aqliy rivojlanishda qoloqlikni yuzaga keltirdi.

Shunday qilib, yaqindan qarindoshlar orasidagi nikohlardan tug'ilgan asosiy guruh bolalar sezilarli darajada o'choqli o'zgarishlar-epileptik sindromlar namoyon bo'ldi nazorat guruhi, bolalar farqli o'laroq, paroksizmal epileptik o'choqlar, intellektual yetishmovchiliklar bilan kuzatildi, va psixo-nevrologik o'zgarishlar, perinatal zararlanishlar oqibatida bosh miya zararlanishlar namoyon bo'ldi.

Хулоса: Irsiyati og'irlashgan va yaqindan bqarindoshlar orasidagi nikohlar uyg'unligi sezilarli darajada ruhiy kasalliklar va bolalarda epilepsiyaga chalinishga xavfini oshiradi, ayniqsa ularda katta tutqanoqlarga olib keladi.

Foydalanilgan adabiyotlar:

1. Puzin S.N., Dыmochka N.A., Shkurko N.A., Xakurinova G.A. Problemы i perspektivы kompleksnoy reabilitatsii detey-invalidov. //Mediko-sotsialnaya ekspertiza i reabilitatsiya detey s ogranichennыmi vozmojnostyami, 2007, № 5-6. — S. 5 — 11.
2. Skvorsov I.A., Yermolenko N.A. Razvitie nervnoy sistemы u detey v norme i patologii. M.: MEDpress-inform, 2003. - 368 ye., il.
3. Yakunin Yu.A. Fiziologiya i patologiya nervno-psixicheskogo razvitiya rebenka: Leksiya dlya vrachey.// Prilojenie k jurnalu Rossiyskiy vestnik perinatologii i pediatrii. 1995. - №15. -49s
4. Ayala F., Kayger Dj. Sovremennaya genetika / M.: Mir, 1988. T.Z. 335 s.
5. Ginter Ye.K. Etnicheskie osobennosti rasprostraneniya nasledstvennыx bolezney // genetika cheloveka. M.:VINITI, 1978. T. 3. S. 122-159.
6. *Sanes JN, Donoghue JP*. Plasticity and primary motor cortex. //Ann. Rev. Neurosci. 2000, Vol. 23, p. 393-415.
7. *Volpe J*. //Neurology of Newborn. N.Y.: Ch. L., 2002: 930 p.

UO'K: 616-08-035

ASTUY OZIQ-OVQAT QO'SHILMASI TARKIBIDAGI FENOL BIRIKMALARI ANIQLASH

[1]Asqarov I.R., [2]To'ychiev G'.O'.
[1]Andijon davlat universiteti
[2]Andijon davlat tibbiyot instituti

Annotatsiya. Zamonaviy farmasevtikaning dolzarb vazifalaridan biri biologik faol moddalarning mahalliy xomashyo manbalarini izlash, ular asosida dori vositalari yaratishdir.Tadqiqotda sarimsoq va ot kashtani urug'i biologik faol birikmalar majmuasini o'z ichiga olgan aralashmasidan ekstrakti tarkibidagi suvli ajratmada fenol birikmalarni aniqlash va miqdorini tekshirishda Yaponiyaning Shimadzu kompaniyasida ishlab chiqarilgan LC-40 Nexera Lite yuqori samarali suyuqlik xromatografida amalga oshirish maqsad qilib olingan. Sarimsoq va ot kashtani urug'i tarkibidagi polifenollarini aniqlagach, polifenol moddalarni farmakologik ta'sirini bilgan xolda , bu o'simliklar xom ashyosi asosida zamonaviy tibbiyotda va xalq tabobatida xar xil dori shakllari va oziq –ovqat qo'shilmalari olishni rejalashtrish.

Kalit so'zlar: sarimsoq, ot kashtani, fenol gidroksilning, salisil kislota.

ОПРЕДЕЛЕНИЕ ФЕНОЛЬНЫХ СОЕДИНЕНИЙ В ПИЩЕВОЙ ДОБАВКЕ АСТУЙ

[1]Аскаров И.Р., [2]Туйчиев Г.У.
[1]Андижанский государственный университет
[2]Андижанский государственный медицинский институт

Абстрактный. Одной из актуальных задач современной фармацевтики является поиск местного сырья биологически активных веществ и создание лекарственных средств на его основе. Целью исследования было получение экстракта из смеси семян чеснока и конского каштана, содержащего комплекс биологически активных соединений, а также определение и количественное определение фенольных соединений в водном экстракте растения с использованием высокоэффективного жидкостного хроматографа LC-40 Nexera Lite производства японской компании Shimadzu. Выявив полифенолы в семенах чеснока и конского каштана, а также зная фармакологические эффекты полифенольных веществ, мы планируем создать на основе сырья этих растений различные лекарственные формы и пищевые добавки в современной медицине и народной медицине.

***Ключевые слова**: чеснок, конский каштан, фенолгидроксил, салициловая кислота.*

DETERMINATION OF PHENOL COMPOUNDS IN THE FOOD ADDITIVE ASTUY

[1]Asqarov I.R., [2]To'ychiev G'.O'.
[1]Andijan State University,
[2]Andijan State Medical Institute

Abstract. One of the urgent tasks of modern pharmaceuticals is to search for local raw materials of biologically active substances and create medicines based on them. The aim of the study was to obtain an extract from a mixture of garlic and horse chestnut seeds containing a complex of biologically active compounds, to determine and quantify phenolic compounds in the aqueous extract of the plant using an LC-40 Nexera Lite high-performance liquid chromatograph manufactured by the Japanese Shimadzu company. Having identified the polyphenols contained in garlic and horse chestnut seeds, and knowing the pharmacological effects of polyphenolic

substances, to plan the creation of various dosage forms and food additives in modern medicine and folk medicine based on the raw materials of these plants.

Keywords: *garlic, horse chestnut, phenol hydroxyl, salicylic acid.*

Dolzarbligi: So'nggi yillarda o'simliklar fiziologiyasi va biokimyosi sohasidagi ko'plab tadqiqotlar fenolik birikmalar - o'simliklarda hosil bo'lgan ikkilamchi metabolizm moddalarining xilma-xilligi va biologik ta'siri bilan bog'liq. Bunday tadqiqotlar tibbiyotning turli sohalarida, qishloq xo'jaligida, shahar landshaftlarini yaratishda va hokazolarda bir qator ikkilamchi birikmalarni to'playdigan yovvoyi va introduksiya o'simliklarining keng assortimentidan maqsadli foydalanish uchun juda muhimdir [1,2,3,4,5]. PFlar inson organizmiga ko'rsatadigan biologik ta'sirining keng doirasi tufayli tadqiqotchilar e'tiborini tortadi [6].Polifenollarning biologik ta'siri zamonaviy ovqatlanishda, bu moddalarni nutriomaga kiritilishi kerak bo'lgan kichik biologik faol birikmalar sifatida tasniflanadi, ya'ni, optimal ovqatlanish uchun formulalar, chunki ular inson metabolizmida muhim rol o'ynaydi [7,8]. Bir qator tadqiqotlar, jumladan, klinik va klinik oldi tadqiqotlar polifenol birikmalarda va antikarsinogen faollikning mavjudligini tasdiqladi [9,10]. Polifenollarni tasniflashning bir nechta variantlari mavjud, ular orasida eng keng tarqalganlaridan biri flavonoid va flavonoid bo'lmagan birikmalarga bo'linishidir[11]. Hozirgi vaqtda fenol birikmalar farmatsevtika sanoatida qiziqish uyg'otmoqda. Fenol gidroksilning mavjudligi polifenollarning biologik faolligini va hujayra devorlariga kirib borish qobiliyatini aniqlaydi. Masalan, quercetin glikozidi qon tomirlarining elastikligiga ta'sir qiladi, kapillyarlarning mo'rtligini kamaytiradi. Bundan tashqari, bir qator polifenollar P vitaminiga sezilarli darajada ta'sir qiladi, qon tomirlari devorlarining qarshiligini oshiradi,va bu jarayon bir vaqtning o'zida vitamin C saqlanishi va rezorbsiyasi bilan boradi [12]. Flavonollarning eng keng tarqalgan va o'rganilgan vakillari quercetin va kempferoldir. Ular sabzavot, meva va donlarda uchraydi [13]. O'simliklar dunyosida 50 000 dan ortiq strukturaviy xilma-xil polifenollar mavjud[14]. Bu birikmalarning yangi xossalari va ular bilan bog'liq funksiyalari, shuningdek, fenolik birikmalarni ilgari noma'lum bo'lgan jihatlarida qo'llash imkoniyatlari aniqlanmoqda [15].Sarimsoq piyozboshisi bakteritsid, fungitsid, va gijjalarni xaydash, arterioskleroz, gipertoniya, kolit, o'pka sili xamda ginekologiyada[16] ot kashtani esa varikozda, suyak sinishi, artrit, poliartrit, artroz, tromboflebit, endarterit, trombozga moyillik va trombozdan keyingi holatlar qo'llaniladi.

Tadqiqot maqsadi: Astuy preparati tarkibidagi antioksidantlikka ega bo'lgan phenol birikmalarini aniqlash, ularni kasalliklarni oldini olish va davolash uchun o'rganish.

Tadqiqot materiallari va usullari: Foydalanigan reaktiv va jihozlar. Gall kislota "Macklin" dan (Xitoy), Salisil kislota "Rhydburg Pharmaceuticals" (Germaniya) dan, kversetin, apigenin, kempferollar "Regal" (Xitoy), rutin tabiiy manbaalardan ekstraksiya va ustunli xromatografiya usullarida ajratib olingan. HPLC darajadagi tozalikda suv, asetonitril, kimyoviy toza markadagi sirka kislota va natriy gidroksidi reaktivlaridan foydalanildi.

O'simlik tarkibidagi polifenollar miqdorini Yaponiyaning Shimadzu kompaniyasida ishlab chiqarilgan LC-40 Nexera Lite yuqori samarali suyuqlik xromatografida amalga oshirildi.

Standart eritmalarni tayyorlash. Gall kislota (5,2 mg), salisil kislota (5,2 mg), rutin (5 mg), kversetin (5 mg), apigenin (5 mg), kempferol (5 mg) 96 % li etanolda 20 daqiqa ultratovushli vannada eritildi va 50 ml kolbaga o'tkazilib, etanol bilan chizig'iga yetkazildi. Har bir eritmadan 200 mkl dan olinib aralashtirildi hamda ularni suyiltirish yo'li bilan jami 4 xil eritma tayyorlandi. Har bir eritmalar vialaga quyildi va analiz uchun foydalanildi.

O'simlik ekstraktini tayyorlash. Fenol birikmalarni ekstraksiya qilish uchun 1 g tekshiriladigan namuna OHAUS kompaniyasi (AQSh) tomonidan ishlab chiqarilgan NV222 markali tarozida 0,01

g aniqlikda tortib olinib, 50 ml hajmli konussimon kolbaga solindi va 25 ml 96 % li etanol qo'shildi. Aralashma GT SONIC-D3 (Xitoy) markali ultratovushli vannada 60 °C haroratda 20 daqiqa davomida ekstraksiya qilindi. So'ngra aralashma sovitilib, filtrlandi hamda o'lchov kolbasida etanol bilan 25 ml ga yetkazildi. Ekstraktdan 1,5 ml miqdori Mini-7 markali (BIOBASE, Xitoy) sentrifugada 7000 ayl./min tezlikda sentrifugalandi va 0,45 mkm li shpritsli filtrda filtrlanib analiz uchun foydalanildi.

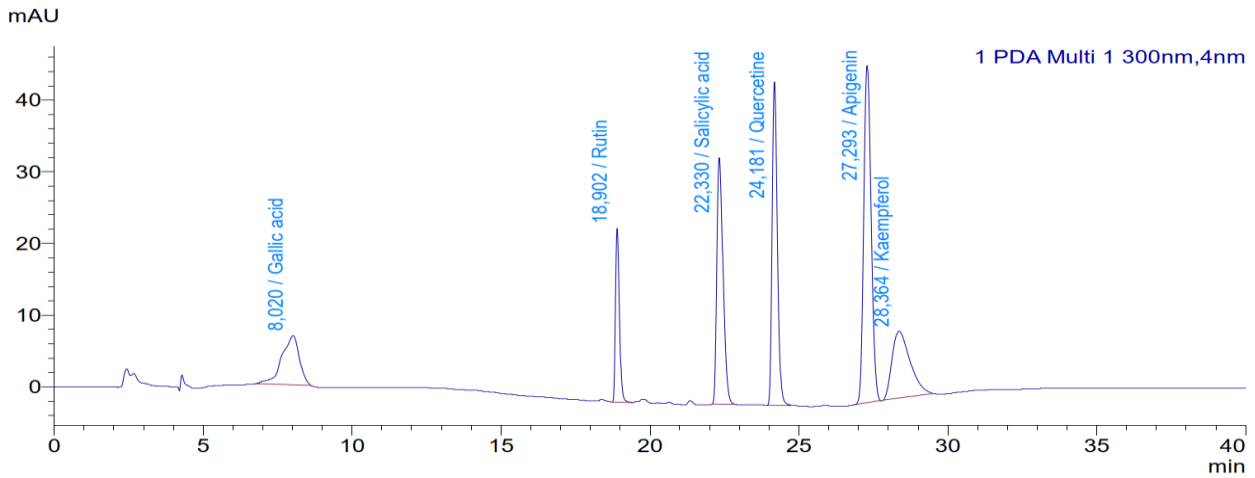
Xromatografik sharoitlar.

Fenol birikmalarni aniqlash. Standart eritma, namuna ekstrakti Shim pack GIST C18 (150 × 4,6 mm; 5 mkm, Shimadzu, Yaponiya) teskari fazali kolonkasi hamda atsetonitril (A) va sirka kislotaning suvdagi 0,5 % li eritmasidan (B) tashkil topgan gradiyentli harakatchan faza (1-jadval) qo'llanildi. In'ektsiya hajmi 10 mkl, oqim tezligi 0,5 ml/min va kolonka termostati 40 °C etib belgilandi. Fenol birikmalarning analitik signali (cho'qqi maydoni) 300 nmda qayd etildi (1-rasm).

1-jadval.

Harakatchan faza gradiyent dasturi.

Vaqt	Atsetonitril (A), %	0,5 % li sirka kislota (B), %
0	5	95
5	5	95
17	40	60
22	40	60
22,1	5	95
40	Tugatish	



1-rasm. Standartlarning 300 nm dagi xromatogrammasi.

Olingan natijalar. Namuna ekstrakti tarkibidagi fenol birikmalar miqdorini aniqlash. Massasi 1 g bo'lgan namuna ekstraktining xromatogrammasi olindi (2-3 rasmlar) hamda natijalar asosida 100 g namuna tarkibidagi fenol birikmalar miqdorlari quyidagi formula bilan hisoblanib 3-4 jadvalllarda keltirildi.

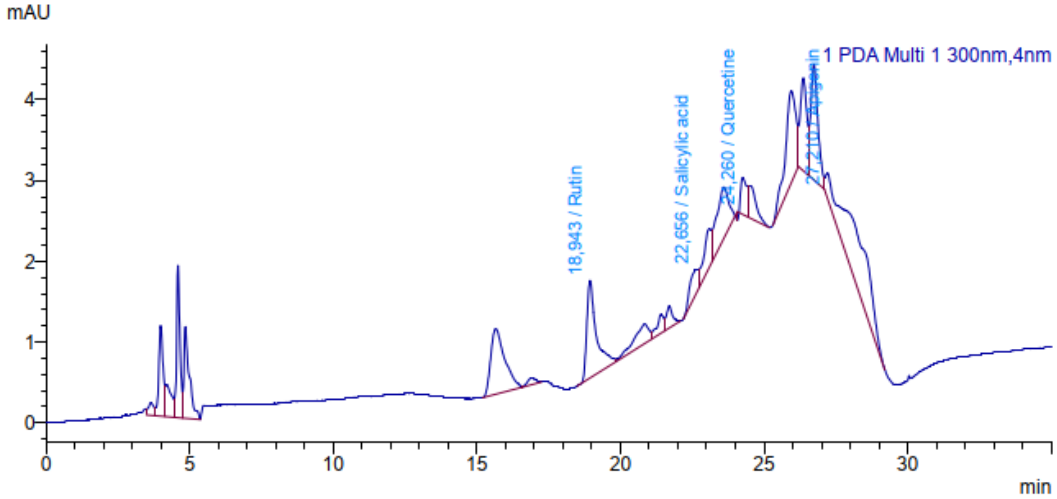
$$X = \frac{C_{phen} \cdot V_{ekstrakt}}{m_{namuna}} \cdot 100\ g$$

Bu yerda, *X* – 100 gram meva tarkibidagi fenol birikmalarning miqdori, mg;

C_{phen} – ekstrakt tarkibidagi fenol birikmaning YuSSX usuli bilan aniqlangan konsentratsiyasi, mg/l;

$V_{ekstrakt}$ – namuna ekstraktining hajmi, l;

m_{namuna} – ekstrakt tayyorlash uchun tortib olingan namuna massasi.



2-rasm. Namuna ekstrakti tarkibidagi polifenollarni aniqlash xromatogrammasi.

2-jadval.

Ekstraktdagi polifenollarning miqdori va ushlanish vaqtlari.

Fenol birikma nomi	Ushlanish vaqti, sek	Konsentratsiya, mg/l	100 g namunadagi miqdor, mg
Gallic acid	Aniqlanmadi	0	0,000
Rutin	18,943	2,099	5,248
Salicylic acid	22,656	0,242	0,605
Quercetine	24,26	0,19	0,475
Apigenin	27,21	1,103	2,758
Kaempferol	Aniqlanmadi	0	0,000

Xulosa. Astuy preparati ekstraktlari tarkibidagi aniqlangan fenol birikmalar juda ko'p farmakologik ta'sirga ega bo'lib, tomirlar va kapillyarlar kabi qon tomirlarining strukturaviy yaxlitligini saqlab, bu qon tomirlarining ishlashini qo'llab-quvvatlaydi. Sog'lom qon aylanishini rag'batlantiradi, qon qo'yilishini oldini oladi, yallig'lanishga qarshi, antikarsinogen xususiyatlarga ega. Bular tana hujayralarini erta qarish va oksidlovchi stress bilan bog'liq turli kasalliklarni oldini olish va davolashda faol moddalar hisoblanadi. Aniqlangan bioaktiv moddalar ishtirokida kasalliklarni davolash va oldini olish uchun tibbiyot va xalq tabobatida biofaolligi to'liq namoyon bo'ladigan dori shakllari va oziq-ovqat qo'shilmalari olish mumkin.

Foydalanilgan adabiyotlar:

1. Абрамчук А.В. Дикорастущие травянистые растения /А. В. Абрамчук., В.Р.Лаптев. - Екате-ринбург. 2012 - 72с.
2. Абрамчук А.В. Особенности роста и развития эфирномасличных растений в условиях Сред-него Урала /А. В. Абрамчук, Сб. стратегические задачи аграрного образования и науки. Матер межд. Н.-пр. кон. УрГАУ. 2015. - С. 8-11

3. Пояркова Н.М. Особенности применения Агастахе (Agastache) в садово-парковом строи-телстве /Н.М.Пояркова. Вестник биотехнологии. 2018. №1.(электрон. журнал)
4. Сапарклычева С.Е. Виды тимяна (Thymus serpyllum L.), произрастающие на ландшафтах Урала/ С. Е. Сапарклычева, Н. М. Пояркова. Екатеринбург. Вестник биотехнологии. 2018. №3 (электрон. журнал)
5. Сапарклычева С.Е. Ассортимент растений для создания ароматических садов /С. Е. Са-парклычева. Вестник биотехнологии. 2018. №1. (электрон. журнал)
6. Bobrыsheva T.N., Anisimov G.S., Zolotoreva M.S., Bobrыshev D.V., Budkevich R.O., Moskalev A.A. Polifenolы kak perspektivnыe biologicheski aktivnыe soedineniya // Voprosы pitaniya. 2023. T. 92, № 1. S. 92–107. DOI: https://doi.org/10.33029/0042-8833-2023-92-1-92-107
7. Tutelyan V.A., Nikityuk D.B., Baturin A.K. i dr. Nutriom kak napravlenie «glavnogo udara»: opredelenie fiziologicheskix potrebnostey v makro i mikronutrientax, minornыx biologicheski aktivnыx veщestvax piщi // Voprosы pitaniya. 2020.T. 8, № 4. C. 24–34. DOI: https://doi.org/10.24411/0042-8833-2020-10039
8. Popova A.Yu., Tutelyan V.A., Nikityuk D.B. O novыx (2021)Normax fiziologicheskix potrebnostey v energii i piщevыx veщestvax dlya razlichnыx grupp naseleniya Rossiyskoy Federasii // Voprosы pitaniya. 2021. T 90, № 4. S. 6–19. DOI: https://doi.org/10.33029/0042-8833-2021-90-4-6-19
9. Kirsanov K.I., Vlasova O.A., Fetisov T.I. i dr. Vliyanie DNK-tropnыx antikanserogennыx soedineniy na mexanizmы regulyatsii ekspressii genov. Uspexi molekulyarnoy onkologii 2018;5(4):41–63. DOI: 10.17650/2313-805X-2 0 2 3 tom 10 / v ol. 10 obzornaya statya | review 39
10. Patra S., Pradhan B., Nayak R. et al. Dietary polyphenols in chemoprevention and synergistic effect in cancer: clinical evidences and molecular mechanisms of action. Phytomedicine 2021;90:153554. DOI: 10.1016/j.phymed.2021.153554
11. Fruit and vegetable phytochemicals. Ed. by L.A. De la Rosa,E. Alvarez-Parrilla, G.A. Gonzlez-Aguilar. Wiley-Blackwell, Oxford, UK, 2009.
12. Blajey, A. Fenolnыe soedineniya rastitelnogo proisxojdeniya / A. Blajey, L. Shutыy. – M.: Mir, 1977. – 240 s.
13. Zhang L., Han Z., Granato D. Polyphenols in foods: Classifi cation,methods of identifi cation, and nutritional aspects in human health. Adv Food Nutr Res. 2021; 98: 1–33. DOI: https://doi.org/10.1016/ bs.afnr.2021.02.004
14. *Ziaullah, H. P. Vasantha Rupasinghe.* Chapter 1 - Application of NMR Spectroscopy in Plant Polyphenols Associated with Human Health (angl.) // Applications of NMR Spectroscopy / Atta ur-Rahman, M. Iqbal Choudhary. — Bentham Science Publishers, 2015-01-01. — P. 3–92. — ISBN 978-1-60805-999-7
15. Фенолные соединения: функционалная рол в растениях. Сб. научных статей по материа-лам X междунар. Симпозиума "Фенолные соединения: фундаменталные и прикладные аспек-ты". М.: Изд. PRESS-BOOK.RU. 2018
16. I.R.Asqarov. Tabobat qomusi.Mumtoz so'z 2019 yil. 737-bet.

UDC: 616-08-035

PREVENTION, DIAGNOSIS AND TREATMENT OF ABDOMINAL DISEASES IN THE CONTEXT OF THE COVID-19 PANDEMIC

Nabiev R.R.
Andijan State Medical Institute

Resume. Currently, information about the epidemiology, clinical features, prevention and treatment of COVID-19 is limited. There is even less data on the course and outcomes of chronic pathology, including diseases of the digestive system against the background of COVID-19.

The risks are associated not only with the infection itself or with the risk of decompensation and exacerbation of chronic digestive diseases, but also with the need for an emergency reorganization of the medical service to cope with all the problems in a pandemic.

Keywords: diagnosis, prevention, COVID-19, pandemic.

COVID-19 PANDEMIYASI DAVRIDA QORIN BO'SHLIG'I PATOLOGIYALARINING OLDINI OLISH, TASHXISLASH VA DAVOLASH

Nabiyev R.R.
Andijon davlat tibbiyot instituti

Resume. Hozirgi vaqtda covid-19 epidemiologiyasi, klinik xususiyatlari, oldini olish va davolash bo'yicha ma'lumotlar cheklangan. Surunkali patologiyaning kechishi va natijalari, shu jumladan covid-19 fonida ovqat hazm qilish tizimi kasalliklari haqida kamroq ma'lumotlar mavjud.

Xavflar nafaqat infektsiyaning o'zi yoki dekompensatsiya va surunkali ovqat hazm qilish kasalliklarining kuchayishi xavfi, balki pandemiya sharoitida barcha muammolarni hal qilish uchun tibbiy xizmatni favqulodda qayta tashkil etish zarurati bilan ham bog'liq.

Kalit so'zlar: diagnostika, oldini olish, COVID-19, pandemiya.

ПРОФИЛАКТИКА, ДИАГНОСТИКА И ЛЕЧЕНИЕ ПАТОЛОГИЙ ОРГАНОВ БРЮШНОЙ ПОЛОСТИ В УСЛОВИЯХ ПАНДЕМИИ COVID-19

Набиев Р. Р.
Андижанский государственный медицинский институт

Резюме. В настоящее время сведения об эпидемиологии, клинических особенностях, профилактике и лечении COVID-19 ограничены. Еще меньше данных о течении и исходах хронической патологии, в том числе болезней органов пищеварения на фоне COVID-19.

Риски связаны не только с самой инфекцией или с риском декомпенсации и обострений хронических заболеваний органов пищеварения, но также с необходимостью экстренной реорганизации медицинской службы, чтобы справиться со всеми проблемами в условиях пандемии.

Ключевая слова: диагностика, профилактика, COVID-19, пандемия.

Relevance. Although the new coronavirus infection (COVID-19) most severely affects the lungs, it is now well known that this infection is characterized by high inflammatory activity, damage to blood vessels with the formation of blood clots in them, and damage to various organs and body systems[1].

Typical signs of infection with the new SARS-CoV-2 coronavirus are fever and respiratory symptoms. However, some infected patients also had gastrointestinal (GI) disorders such as diarrhea, vomiting, and abdominal pain [2]. SARS-CoV-2 RNAs have been detected in scrapings and swabs from the rectum [4], as well as in stool samples from some patients [5]. Moreover, viral particles may be present in the stool even after the virus has been eliminated from the upper respiratory tract [3].

Angiotensin converting enzyme 2 (ACE -2) receptors, used by the virus to enter the cell, are actively expressed in the epithelium of the gastrointestinal tract [6]. This observation is important in studies of the ways of transmission of the virus. Below are the details of cases of gastrointestinal manifestations of the disease[4,7]. The recommendations presented in the document are largely based on materials on the diagnosis, prevention and treatment of COVID-19 published by WHO specialists, analysis of domestic and foreign scientific publications, as well as data from registers for the management of patients with BOD during the COVID-19 pandemic.

The purpose of the study. To improve the results of diagnosis and treatment of gastrointestinal complications in patients with confirmed COVID-19 infection.

Research materials and methods. Abdominal complications of COVID-19 were studied in 205 hospitalized patients with identified COVID-19 virus in an infectious diseases hospital with surgical capabilities from March 2020 to March 2021. The total number of patients with COVID-19 was 1,081.

The results of the study. In patients with COVID-19, the so-called "most common" and "less common" symptoms are distinguished. The most common symptoms of the new coronavirus infection are fever, cough, shortness of breath, myalgia and fatigue. Less common symptoms of the digestive system include symptoms such as loss of taste and sense of smell, anorexia, diarrhea, nausea/vomiting, and abdominal pain.

Loss of taste and low perception of odors are very characteristic signs of the disease. In a number of countries, these symptoms were observed in 2/3 of infected patients. Sudden and complete loss of taste or olfactory function, without nasal congestion, in a patient with other symptoms such as cough or fever, should be considered as a weighty argument in favor of diagnosing SARS-CoV-2 infection. It has been established that COVID-19 can begin not with a cough and fever, but with nausea and diarrhea.

According to the majority of foreign researchers, a significant proportion of patients are hospitalized with gastrointestinal symptoms (26-50.5%). A decrease in appetite at the onset of the disease is noted in 3/4 of patients. A meta-analysis indicates that decreased appetite often reaches the severity of anorexia. Diarrhea was present in a third of the patients, and vomiting was present in only 3.9%.

There is evidence of the possibility of isolated diarrhea preceding cough and fever. In most patients, gastrointestinal symptoms are combined with bronchopulmonary. Isolated gastrointestinal symptoms are usually combined with fever. Most observations emphasize that abdominal pain at the onset of the disease is very rare (in no more than 3% of patients).

Conclusion. In conclusion, it can be noted that for the prevention of gastrointestinal complications of COVID-19, glucocorticoids and interleukin inhibitors should be prescribed according to indications without exceeding doses, and for early diagnosis and timely treatment of these complications, more accurate instrumental diagnostic methods such as CT, MRI of the abdominal cavity and laparoscopy should be used.

Used literature:

1. Белова Г. В. Рекомендации по эндоскопии и клинической практике в гастроэнтерологии. Экспериментальная и клиническая гастроэнтерология. 2020;(5): 4-7.
2. Ивашкин В. Т., Шептулин А. А., Зольникова О. Ю. и др. Новая коронавирусная инфекция (COVID -19) и система органов пищеварения // Российский журнал гастроэнтерологии, гепатологии и колопроктологии 2020 30(2) - 7
3. Максимов В. А., Торшин И. Ю., Чучалин А. Г. и др. Эффективность и безопасность полипептидного препарата (лаеннек) в терапии COVID -19, Экспериментальная и клиническая гастроэнтерология. 2020, 6 (178) 55-63
4. Mirabito Colafella K.M., Bovee D.M., Danser A.H.J. The rennin-angiotensin-aldosterone system and its therapeutic targets. Exp. Eye Res. 2020. V. 186. P. 107.
5. Ianiro G., Mullish B.H., Kelly C.R. Screening of faecal microbiota transplant donors during the COVID-19 outbreak: suggestions for urgent updates from an international expert panel. Lancet Gastroenterol Hepatol. 2020. V. 5. P. 430–432.
6. Wong M.C., Huang J., Lai C., Ng R., Chan F.K.L., Chan P.K.S. Detection of SARS-CoV-2 RNA in fecal specimens of patients with confirmed COVID-19: a meta-analysis. J. Infect. 2020. V. 81. P. 1–8.
7. Hoffmann M., Kleine-Weber H., Schroeder S. SARS-CoV- 2 cell entry depends on ACE2 and TMPRSS2 and is blocked by a clinically proven protease inhibitor. 2020. V. 181. P. 271–280.

UDC: 616-006.363.03:616-092.11+614.2

IDENTIFICATION OF RISK FACTORS FOR ITS DEVELOPMENT DURING PREGNANCY, IN THE EARLY STAGES OF UTERINE FIBROIDS

Narzulloeva N.S., Mubinova N.A.
Bukhara State Medical Institute named Abu Ali ibn Sina, Uzbekistan, Bukhara city.

This article presents the results of a retrospective study of the history of childbirth of 106 pregnant women in whom labor was complicated the Caesarean section, delivery in the Bukhara regional perinatal center for the period 2022-2024 years. The results show the significant role of the caesarean section in the development of obstetrics and perinatal complications, especially in women with a history of somatic and gynecological anamnesis

БАЧАДОН МИОМАСИНИНГ ЭРТА КЕЛИБ ЧИҚИШИДА, ҲОМИЛАДОРЛИК ДАВРИДА УНИНГ РИВОЖЛАНИШИ УЧУН ХАВФ ОМИЛЛАРИНИ АНИҚЛАШ

Нарзуллоева Н.С., Мубинова Н.А.
Абу Али ибн Сино номидаги Бухоро Давлат тиббиёт институти, Бухоро, Ўзбекистон..

Ушбу мақолада Бухоро шаҳар туғруқ комплексида 106 нафар кесар-кесиш билан асоратланган ҳомиладор аёлларнинг 2022-2024 йиллар давомида туғилиш тарихининг ретроспектив таҳлилидан олинган маълумотлар келтирилган. Натижалар акушерлик ва перинатал асоратларни ривожланишида, айниқса мураккаб соматик ва гинекологик тарихга эга аёлларда кесар-кесиш муҳим ролини кўрсатади.

ВЫЯВЛЕНИЕ ФАКТОРОВ РИСКА ЕГО РАЗВИТИЯ ВО ВРЕМЯ БЕРЕМЕННОСТИ, НА РАННИХ СТАДИЯХ ВОЗНИКНОВЕНИЯ МИОМЫ МАТКИ

Нарзуллоева Н.С., Мубинова Н.А.
Бухарский государственный медицинский институт

В статье приводятся данные ретроспективного анализа 106 истории родов беременных, у которых роды осложнились кесерово-сечение, родоразрешённых в Бухарский городской родильный комплекс за период 2022-2024 г.г. Результаты свидетельствуют значительную роль кесерово-сечение в развитии акушерских и перинатальных осложнений, особенно у женщин с отягощённым соматическим и гинекологическим анамнезом.

Relevance. Until now, the labor process of pregnant women with uterine fibroids is terminated by cesarean section. This leads to subsequent infertility, menstrual dysfunction, vegetative-vascular, hormonal and psycho-emotional depression in women [1,2,3].

Identifying new links in the pathogenesis of uterine fibroids, a comprehensive assessment of risk factors for the development of a symptomatic course of the tumor process to determine the prognosis of labor in pregnant women will improve pathogenetic therapy methods, reduce the frequency of clinically significant forms of fibroids, and thereby prevent the disease. It is possible to reduce surgical operations in pregnant women. (4-10)

Objective: To study obstetric, gynecological and somatic anamnesis in pregnant women with uterine fibroids.

Material and methods: In order to identify risk factors for the development of uterine fibroids and identify the main points of the problem under consideration, we studied the somatic anamnesis, obstetric and gynecological condition of all women in the postpartum period in 2022-2024 years from the archive materials of the Bukhara city maternity complex and the regional perinatal center. The history of the disease was fully studied for the current and previous pregnancy, childbirth and the postpartum period. The diagnosis of laboratory parameters was established on the basis of anamnesis, clinical data and the results of laboratory, functional and ultrasound diagnostic methods.

Results and discussion: A clinical and statistical analysis of 106 medical records of pregnant women with uterine fibroids was performed, analyzing symptoms and treatment methods. The first group included 67 (64.0%) pregnant women with uterine fibroids who underwent conservative treatment and women who underwent surgical treatment.

The average age was 26.5 years. All women had a history of pregnancy with a combination of obstetric, gynecological and somatic diseases. Among patients with uterine fibroids, 20.7% (22 women) had a low socioeconomic status; 11.3% (11 women) had bad habits (drug and nicotine addiction), 20.7% (22 women) had occupational hazards and 30.2% (32 women) had heredity. The study showed that almost every third woman (28.6%) had a history of induced abortion. Reproductive losses, such as undeveloped pregnancy and spontaneous abortion, occurred in both groups. Pregnancy ended prematurely in 81 women, which was 76.4%. Pregnancy was prolonged to full term in 25 women (23.6%). The study of the gynecological history showed that more than half of the 76 (71.7%) pregnant women had a complicated medical history. 27 women (25.5%) reported genital diseases: mainly 26 (24.5%) had cervicitis, 40 (37.7%) had appendicitis and chronic inflammatory diseases of the vagina. Sexually transmitted infections (chlamydia, gonorrhea, ureaplasma) were diagnosed in 8 (7.5%). Follicular formations (cysts) in the ovaries were diagnosed in 3 women (2.8%). Diathermocoagulation of the cervix was performed in 13.2% of cases (14 women) for erosions. 11 women had a history of various surgical procedures on the genitals, which accounted for 10.4% of cases. Data on the somatic condition of the examined women are presented below. (Table 1)

Table1

Somatic condition of the examined women (n=106)

Nosology of diseases	Абс. (%)	Total
Anemia	82 (77,4%)	106 (100%)
Thyroid illness	44 (41,5%)	
Gastrointestinal tract illnesses (gastritis, pancreatitis)	7 (6,6%)	
Cardiovascular diseases (hypertension, hypotension, varicose veins)	13 (12,3)	
Urinary tract diseases (pyelonephritis, urolithiasis, cystitis)	31 (29,2%)	
History of ENT diseases (tonsillitis, sinusitis) and pregnancy	61 (57,5%)	
Infectious diseases that occur during the current pregnancy (acute respiratory viral infections, exacerbation of sinusitis)	28 (26,4)	
Bronchopulmonary diseases (bronchitis, bronchial asthma)	3 (2,8%)	
Myopia	11 (25,5%)	
Others	7 (10,4)	

All pregnant women with early uterine fibroids had a history of somatic diseases. The composition of extragenital diseases was dominated by anemia, diseases of the thyroid gland and urinary system, as well as diseases of the gastrointestinal tract.

An increase in somatic diseases was observed in women. This was mainly manifested by anemia, inflammatory diseases of the urinary tract (chronic pyelonephritis, cystitis, urolithiasis), and an increase in acute respiratory viral infections. At the same time, gynecological diseases such as colpitis of various etiologies, cervical erosion, and ovarian cysts were also noted in the examined women in the comparison group.

The study of reproductive function showed that 81 (32.4%) women had a history of two births, 117 (46.8%) had three births, 29 (11.6%) had four births, 18 (7.2%) had one birth, and 5 (2%) had no births. At the same time, the course of pregnancy and complications of pregnancy were studied in women with uterine fibroids. 100 (40.0%), early toxicosis - 21 (8.4%), preeclampsia - 23 (9.2%), and hydrops - 3 (1.2%) were detected. Complications such as hydrops and hypohydramnios, fetal growth retardation syndrome, were more common. At the same time, gynecological diseases such as colpitis of various etiologies, cervical erosion, and ovarian cysts were also noted in the examined women in the comparison group - 28 (11.2%).

Conclusion:

1. Thus, in the course of a retrospective study of the history of childbirth, the early factors of uterine fibroids were identified in the obstetric, gynecological and somatic anamnesis that occurred in all cases of the study. The most common background pathologies were anemia, urinary tract diseases and infections acquired during this pregnancy.
2. In 26.4% of cases, as a result of pathological growth of conditionally pathogenic cervicovaginal microflora, the origin of uterine myoma contributed to a significant increase in the specific frequency of obstetric pathologies

Used literature:

1. Болотских В. М. Преждевременное излитие околоплодных вод: иммунологические и биохимические аспекты проблемы, вопросы диагностики и тактики ведения / В. М. Болотских, Ю. П. Милютина // Журнал акушерства и женских болезней.-2011.-№ 4.-С. 104.
2. Narzullaeva, N. S., Musakhodzhaeva, D. A., Abdurakhmanov, M. M., & Ikhtiyarova, G. A. (2019). Cytokine dynamics as a result of phyto-flavanoid exposure in women with uterine myoma. Russian Journal Of Immunology, 22(2-1), 435-437. doi: 10.31857/S102872210006922-9
3. Дятлова Л.И. Факторы риска преждевременного излития околоплодных вод при беременности 22–34 недели / Л. И. Дятлова // Международный журнал эксперим. образования.-2015.-№ 4.-С.318.
4. Narzullaeva, N. S. (2021). Gynecologicaland somatic history of women with uterine myoma according to retrospective analysis. Акуш., гинекол., перинатол,(2), 86.
5. Нарзуллоева, Н. С., & Олимов, Ж. Н. (2020). Иммунологический ответ у женщин с миомой матки. In Вопросы фундаментальной и клинической медицины: традиции и инновации (pp. 55-60).

6. Михайлов А.В. Ведение беременности, осложненной преждевременным излитием околоплодных вод при недоношенной беременности / А. В. Михайлов, Л. И. Дятлова, И. Е. Рогожина // Журнал Акушерство и гинекология. –2014. –№ 2. –С. 67.
7. Нарзуллоева, Н. С. (2022). Факторы Развития Плацентарной Недостаточноста У Беременных С Перенесших Коронавирусную Инфекцию. Amaliy va tibbiyot fanlari ilmiy jurnali, 1(6), 203-210.
8. Стрижаков А.Н. Прегравидарная подготовка и ведение беременности у женщин с антенатальной гибелью плода в анамнезе./ Стрижаков А.Н. // журнал Акушерства и гинекология. – 2016.- № 4 . – С. 36
9. Narzullayeva, N. S. (2022). Innovative methods of diagnosis and treatment in women with infertility associated with uterine fibroids. Journal of Pharmaceutical Negative Results, 3313-3321.
10. Хайбуллина З.Р. Молекулярные механизмы действия антиоксидантов на липидный компонент клеток мозга при внутриутробной гипоксии плода / Хайбуллина З.Р., Ихтиярова Г.А. // Журнал Инфекция, иммунитет и фармокология.- 2019.- №5.- С.280.
9. Шалина Р.И. Комплексная терапия беременных с угрозой преждевременных родов/ Шалина Р.И., Плеханова Е.Р. // Журнал Вопросы гинекологии, акушерства и перинатологии.-2007.-№1.-С.33.
10. Нарзуллоева, Н. С. Патогенетическое обоснование дифференцированной имунокоррекции бесплодие у женщин с миомой матки / Н. С. Нарзуллоева, Ж. Н. Олимов // Новый день в медицине. – 2020. – № 1(29). – С. 298-302. – EDN BTPRIZ.
Нарзуллоева, Н. С., & Азамов, Б. (2019). Effects

UO'K 618.14-002:616-053.8-055.2-091

REPRODUKTIV YOSHDAGI AYOLLARDA ENDOMETRIOZ PATOLOGIYALARINING KECHISHI

Nazirova Z.M.
Andijon davlat tibbiyot i nstituti

Rezyume. Endometrioz ginekologiya sohasidagi eng keng tarqalgan kasalliklardan biridir. Ushbu patologiya bo'yicha ko'p yillik tadqiqotlarga qaramay, uning etiopatogenezi to'g'risida hali ham kelishuv mavjud emas.

Ushbu maqolada endometriozning sabablari bilan bog'liq asosiy nazariyalar yoritilgan, bu tibbiy amaliyotda sir bo'lib qolmoqda. Kollektiv dalillar shuni ko'rsatadiki, endometrioz ko'plab omillar, jumladan, genetik va ekologik jihatlar tufayli kelib chiqqan kasallikdir. Ehtimol, etiopatogenezning bitta modeli, turli xil genetik va epigenetik omillar mavjudligiga qaramay, ushbu kasallikni to'liq tushunish uchun etarli emas, chunki endometrioz heterojenlik bilan ajralib turadi, bu turli xil shakllar va klinik alomatlar, shuningdek uning rivojlanishiga yordam beradigan fon jarayonlarida namoyon bo'ladi.

Kalit so'zlar: endometrioz, genetik o'zgarishlar, sitokinlar, mezenximal ildiz hujayralari, retrograd hayz ko'rish.

THE COURSE OF ENDOMETRIOSIS PATHOLOGIES IN WOMEN OF REPRODUCTIVE AGE

Nazirova Z.M.
Andijan State Medical Institute

Resume. Endometriosis is one of the most common diseases in the field of gynecology. Despite many years of research on this pathology, there is still no consensus on its etiopathogenesis. This article highlights key theories regarding the causes of endometriosis, which remains a mystery in medical practice.

The collected data indicate that endometriosis is a disease caused by a variety of factors, including both genetic and environmental aspects. Probably, one model of etiopathogenesis, despite the presence of various genetic and epigenetic factors, is not enough to fully understand this disease, since endometriosis is characterized by heterogeneity, manifested in a variety of forms and clinical symptoms, as well as background processes contributing to its development.

Key words: endometriosis, genetic variations, cytokines, mesenchymal stem cells, retrograde menstruation.

ТЕЧЕНИЕ ПАТОЛОГИЙ ЭНДОМЕТРИОЗА У ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА

Назирова З.М.
Андижанский государственный медицинский институт

Резюме.Эндометриоз представляет собой одно из наиболее распространенных заболеваний в области гинекологии. Несмотря на многолетние исследования данной патологии, до сих пор не существует единого мнения относительно ее этиопатогенеза.

В этом статье освещены ключевые теории, касающиеся причин возникновения эндометриоза, который остается загадкой в медицинской практике. Собирательные данные указывают на то, что эндометриоз — это болезнь, вызванная множеством факторов, включая как генетические, так и экологические аспекты. Вероятно, одной модели этиопатогенеза, несмотря на наличие различных генетических и эпигенетических факторов, недостаточно для полного понимания данного заболевания, поскольку эндометриоз отличается гетерогенностью, проявляющейся в разнообразии форм и клинических симптомов, а также фоновых процессов, способствующих его развитию.

Ключевые слова: эндометриоз, генетические вариации, цитокины, мезенхимальные стволовые клетки, ретроградная менструация.

Izlanish dolzarbligi. Reproduktiv yoshda endometriumning giperplastik jarayonlari bachadondan qon ketishining eng keng tarqalgan sababi bo'lib, bachadon bo'shlig'i devorlarining kuretajiga olib keladi. Tadqiqot ma'lumotlariga ko'ra, anormal uterin qon ketishi bo'lgan premenopozal bemorlar orasida EHPE ayollarning 54-62 foizida aniqlanadi[1,4].

Premenopozda benign endometriyal patologiyaning yuqori darajasi, boshqa narsalar qatorida, bu davrda reproduktiv tizimning neyroendokrin regulyatsiyasining yoshga bog'liq xususiyatlari bilan bog'liq bo'lib, bu bachadon shilliq qavatida giperplastik o'zgarishlar uchun old shartlarni yaratadi. Biroq, GPE ni konservativ davolashda etakchi rol o'ynaydigan gormonal terapiyadan foydalanish imkoniyatlari, birinchi navbatda, murakkab somatik holat tufayli, ushbu yosh guruhidagi ayollarda cheklangan[3,5].

Bemorlarning katta qismi ongli ravishda jarrohlik davolashdan bosh tortishi ham muhimdir, chunki bachadonning mavjudligi va muntazam hayz ko'rish ko'plab ayollarning o'zini o'zi anglashi uchun katta ahamiyatga ega. Yu.Yu.Eliseevning fikricha, bu holatda ayollik va yoshlikni yo'qotishdan bo'rttirilgan qo'rquv, shuningdek, jinsiy jozibadorlikni yo'qotish qo'rquvi rol o'ynaydi. Ammo, agar davolanish rad etilsa, bemorlarning 38-95,9 foizida 2 yil ichida endometriyal giperplaziyaning relapslari kuzatiladi[2,4].

Tadqiqot maqsadi. Premenopozda bachadon shilliq qavatining giperplastik jarayonlari bo'lgan ayollarning endometriumidagi proliferatsiya, apoptoz, neoangiogenez va to'qimalarni qayta qurish molekulyar biologik jarayonlarini o'rganish.

Izlanish materiallari va usullari. Belgilangan vazifalarni hal qilish uchun biz endometriyal giperplaziya tashxisi qo'yilgan 80 nafar bemorni tekshirdik.

Izlanish natijalari. 1. Atipiyasiz endometriumning giperplastik jarayonlari patogenezida ishtirok etadigan molekulyar biologik jarayonlar proliferatsiya jarayonlari faolligining pasayishi, apoptozning inhibisyonu, neoangiogenez intensivligining oshishi va bachadon shilliq qavatining hujayradan tashqari matritsasining fermentativ faolligi bilan tavsiflanadi.

Endometriyal giperplastik jarayonlarning eng keng tarqalgan klinik ko'rinishi bo'lgan g'ayritabiiy bachadon qon ketishi hujayradan tashqari matritsaning proteolitik fermentlari - matritsa metalloproteinazalarining (MMP-1, MMP-9) endometriumda yuqori darajada ifodalanishi va to'planishi va to'qimalarning ifodasi va tarkibining pasayishi (RPM-1 tabiiy inhibitori) tufayli yuzaga keladi.

Bachadon shilliq qavatining giperplastik jarayonining morfologik varianti endometriumdagi molekulyar biologik jarayonlarda buzilishlarni ifodalash darajasiga bog'liq. Proliferatsiya (Ki-67) va apoptoz (APAF-1) jarayonlari o'rtasidagi nomutanosiblik, neoangiogenez (VEGF) darajasi va hujayradan tashqari matritsa fermentlari (MMP-1, MMP-9) faolligining oshishi, metalloproteinazalarning to'qimalarining inhibitori ekspressiyasi va tarkibining pasayishi (TIMP-1) gipertrofiyali endoplaziyada ko'proq.

Premenopozda atipiyasiz endometriyal giperplaziyani gormonal davolashning (buserelin) klinik va laboratoriya samaradorligi 93,9% ni tashkil qiladi; 6 oy davomida kombinatsiyalangan gormonal bo'lmagan terapiyani (indol-3-karbinol, epigallokatexin-3-gallat) qo'llash fonida relapslarning yo'qligi 75% hollarda kuzatiladi ($p<0,05$). Oddiy endometriyal giperplaziya bilan og'rigan bemorlarda gormonal davolash samaradorligi 100%, murakkab giperplaziya bilan og'rigan bemorlarda - 85,8% ($p>0,05$); Endometriyal giperplaziyaning oddiy va murakkab

morfologik variantlari bo'lgan bemorlarda kombinatsiyalangan gormonal bo'lmagan terapiyadan foydalanganda davolash mos ravishda 70% va 83,3% hollarda samarali bo'lgan (p>0,05).

Gormonal terapiyani qo'llash natijasida proliferativ faollikning sezilarli pasayishi, neoangiogenez jarayonlarining pasayishi, endometriyal hujayralar apoptozining kuchayishi va bachadon shilliq qavatining stromal komponentida matritsa metalloproteinazalarining faolligi oshishi kuzatiladi. Oddiy va murakkab endometrium giperplaziyasi bo'lgan ayollarda gormonal davolashning molekulyar biologik parametrlarga ta'sir darajasi sezilarli darajada farq qilmaydi (p>0,05).

Xulosa. Kombinatsiyalangan gormonal bo'lmagan terapiya proliferatsiya va apoptoz jarayonlari o'rtasidagi nomutanosiblikni kamaytirishga, neoangiogenezning intensivligini va endometriumning hujayradan tashqari matritsasining fermentativ tizimlarining faolligini kamaytirishga yordam beradi. Indol-3-karbinol va epigallokatexin-3-gallatga asoslangan preparatlarni qo'llashdan keyin molekulyar biologik jarayonlarning normallashishi endometriyal giperplastik jarayonning oddiy va murakkab morfologik variantlari bo'lgan bemorlarda bir xil darajada sodir bo'ladi (p>0,05).

Foydalanilgan adabiyotlar:

1. Анфигенова Е.А. Клинико-морфологическая и иммуногистохимичес-кая характеристика аденомиоза: автореф. дис.канд. мед. наук. – Минск, 2017. – 24 с.
2. Клинышкова Т.В., Перфильева О.Н., Фролова Н.Б. Дифференцированная лечебная тактика ведения пациенток с эндометриоидными кистами яичников и бесплодием // Лечащий врач. – 2015
3. Унанян А.Л., Сидорова И.С., Коган Е.А. Активный и неактивный аденомиоз: клинико-морфологические варианты развития, дифференцированный подход к терапии // Акушерство, гинекология и репродукция. – 2012. – № 2. – С. 25-30.
3. Gustavo Olivas Mendoza, Francisco Javier Miranda Castañón, Margarito Hernández et al. Endometriosis cervical profunda causante de sangrado transvaginal profuso. Presentación de un caso clínico y revisión de la bibliograf // Ginecol. Obstet. Mex., 2009, vol. 77, no 11, pp. 518-522.
4. Huang T.-S., Chen Yi-J., Chou T.-Y. et al. Oestrogen-induced angiogenesis promotes adenomyosis by activating the slug-VEGF axis in endometrial epithelial cells // J. Cell. Mol. Med., 2014, vol. 18, no 7, pp. 1358-1371.
5. Zhou S., Yi T., Liu R. et al. Proteomics identification of annexin A2 as a key mediator in the metastasis and proangiogenesis of endometrial cells in human adenomyosis // Mol. Cell Proteomics., 2012, 11 (7):M112.017988.

UO'K: 616-08-035

DETERMINATION OF THE INCIDENT LEVEL OF CHRONIC VIRAL HEPATITIS AMONG THE POPULATION OF OQDARYO DISTRICT (SAMARKAND REGION)

Ne'matov H.A.
Samarkand State Medical Universitete, Samarkand, Uzbekistan

Annotation. Viral hepatitis is an inflammation of the liver that is caused by a variety of infectious viruses and noninfectious agents leading to a range of health problems, some of which can be life threatening. There are five strains of the hepatitis virus, referred to as types A, B, C, D and E. While they all cause liver disease (hepatitis), they differ in important ways including modes of transmission, severity of the illness, geographical distribution and prevention methods. In particular, types B and C lead to chronic disease in hundreds of millions of people and together are the most common cause of liver cirrhosis, liver cancer and viral hepatitis-related deaths.

Keywords: viral hepatits, chronic, liver, etiology

AHOLI ORASIDA SURUNLI VIRUSLI GEPATITLARNING KASALLANISH DARAJASINI ANIQLASH. OKDARIY TUMANI (SAMARQAND VILOYATI)

Ne'matov H.A.
Samarqand davlat tibbiyot universiteti, Samarqand, O'zbekiston

Annotatsiya. Gepatit - bu turli xil yuqumli viruslar va yuqumli bo'lmagan omillar ta'sirida jigarning yallig'lanishi bo'lib, bir qator sog'liq muammolariga olib keladi, ularning ba'zilari hayot uchun xavfli bo'lishi mumkin. Gepatit virusining beshta shtammi mavjud bo'lib, ularning A, B, C, D va E turlari belgilangan. Ularning barchasi jigar kasalligini (gepatit) keltirib chiqaradigan bo'lsa-da, ular bir-biridan muhim jihatdan farqlanadi, jumladan, yuqish usullari, kasallikning og'irligi va geografik tarqalishi va oldini olish usullari. Ayniqsa, B va C turlari yuz millionlab odamlarda surunkali kasalliklarga olib keladi va birgalikda siroz, jigar saratoni va virusli gepatit bilan bog'liq o'limning eng keng tarqalgan sababidir.

Kalit so'zlar: virusli gepatit, surunkali, jigar, etiologiya

ОПРЕДЕЛЕНИЕ УРОВНЯ ЗАБОЛЕВАЕМОСТИ ХРОНИЧЕСКИМ ВИРУСНЫМ ГЕПАТИТОМ СРЕДИ НАСЕЛЕНИЯ ОКДАРЬИНСКОГО РАЙОНА (САМАРКАНДСКАЯ ОБЛАСТЬ)

Неъматов Х. А.
Самаркандский государственный медицинский университет, Самарканд, Узбекистан

Аннотация. Гепатит — это воспаление печени, вызываемое различными инфекционными вирусами и неинфекционными агентами, приводящее к ряду проблем со здоровьем, некоторые из которых могут быть опасными для жизни. Существует пять штаммов вируса гепатита, обозначаемых типами A, B, C, D и E. Хотя все они вызывают заболевание печени (гепатит), они различаются по важным параметрам, включая способы передачи, тяжесть заболевания, географическое распространение. и методы профилактики. В частности, типы B и C приводят к хроническим заболеваниям у сотен миллионов людей и вместе являются наиболее распространенной причиной цирроза печени, рака печени и смертности, связанной с вирусным гепатитом.

Ключевые слова: вирусный гепатит, хронический, печень, этиология.

Introduction.An estimated 354 million people worldwide live with hepatitis B or C, and for most, testing and treatment remain beyond reach [1,2,7]. Some types of hepatitis are preventable through vaccination. A WHO study found that an estimated 4.5 million premature deaths could be prevented in low- and middle-income countries by 2030 through vaccination, diagnostic tests, medicines and education campaigns [3,4,6,10]. WHO's global hepatitis strategy, endorsed by all WHO Member States, aims to reduce new hepatitis infections by 90% and deaths by 65% between 2016 and 2030 [5,8,9].

Purpose of the study:The purpose of study is to make differentiation between the strains of hepatitis, estimate severity of infection and determine which strain is more hazardous and contagious among a population. Causative agent of hepatitis is hepatitis virus .There are several strains of hepatitis (hepatitis A, B, C, D, E, and G) in which hepatitis B and C are being most hazardous. The Classification of hepatitis on the basis of mode of transmission. The hepatitis A and hepatitis E are transmitted via faeco oral route, hepatitis B transmitted via parenteral, sexual or by vertical transmission and hepatitis C and D transmitted via parenteral route. The frequency of chronic viral hepatitis patients increases gradually in the oqdaro district (Samarkand region). In which infection occurs more in female as compared to males. And this outbreak mainly caused by hepatitis B and hepatitis C as compared to other strains. Beside that chronicity of infection is appreciated more by hepatitis B.

Materials and methods of research: In 2019-2023, 137 patients with ChVHs, who applied to the hepatology center of the Samarkand Regional Infectious Diseases Clinical Hospital in an outpatient setting, were taken under observation. Among the laboratory tests, antigens and antibodies of hepatitis B, C, D viruses were checked by the general blood test, biochemical blood test, PCR and ELISA method. In order to determine the level of fibrosis in the liver, a non-invasive examination method - elastometry was performed on the fibroscan device. The method of inquiry was conducted with the patients themselves and their close relatives, and the method of comparing the disease according to the etiological factors was used.

Research results: Now a days the incidence of chronic hepatitis is increasing year by year, and hepatitis B and C viruses are at the top of the list. When the citizens of oqdaro district complains about the symptoms to the hepatology center of the Samarkand Regional Infectious Diseases Clinical Hospital and that symptoms are properly examined by the specialist. And some investigation protocols performed by doing anamnesis morbi and physical examination respectively. The findings acquired from the investigation are as follows – more than 90% patients are having general weakness and rapid fatigue and approximately 40% patients have pain and heaviness at right hypochondriac region. In the objective examination : no signs of jaundice were detected in the skin, mucous membranes and sclera of the eyes, scleral jaundice was observed in only 21% of patients, and no changes were noted in other systems. The clinical symptoms of hepatitis are more often seen in hepatitis B patients as compared to hepatitis C infected patients. When this patients are examined under laboratory and instrumental methods of investigation, the results are as follows, out of 137 hepatitis infected patient- 67 patients are hepatitis B infected, 61 patients are hepatitis C infected, 6 patients are hepatitis B & D infected, 3 patients are suffering from hepatitis C with liver cirrhosis. On the basis of gender 51 are male patients and 86 are female patients. If we look at the age group 40 patient are above 50 years and 97 patients are below 50 years of age.

Etiology	Number of patients	age

	General	Man	Woman	18-44	45-59	60-74
VHB	67	22	45	60	7	-
VHB-D	6	3	3	6	-	-
VHC	64	26	38	21	22	21

Conclusions: The conclusion made by comparing the results on behalf of severity of infection by strains of hepatitis virus, on the basis of gender, on the basis of age group.

1 That patients of hepatitis B is slightly more than hepatitis C, by comparing gender females patients are 1.72 times more infected than males.

2. As by the reports patients with hepatitis C are more likely to develop liver cirrhosis.

3. These results indicate that there is a need to conduct public awareness campaigns about viral hepatitis and to increase medical knowledge of the public about the prevention of ChVHs, especially among the population aged 18-44 years. That it should be carried out is reflected in the above results.

Used literature:

1. Ne'matov H.A., Tirkashev O.S. Specific clinical and epidemiological features of scarlet fever // Web of Scientist: International Scientific Research Journal. – 2023. – No. 1 (4). pp. 578–584
2. Orzikulov Azam Orzikulovich, Khaidarov Akbar. Ne'matov H.A. Clinical features of the course of erysipelas of the skin at the present stage // Web of Medicine: Journal of Medicine, Practice and Nursing. – Vol. 2 No. 3 (2024): WOM. pp 95-100
3. Briko N.I., Zhuravlev M.V., Pronsky A.V. Antibiotics in the culture of group A streptococcus // Journal of Microbiology and Infectious Diseases / Ministry of Health of the Russian Federation. - M.: Medicine, 2004. - No. 6. - p.54-56.
4. S.A. Nizomova, B.M. Tadjiyev, Features of diagnostics and treatment of scarlet fever at the present stage, Journal of Biomedicine and Practice 2020, Special issue, p. 554-557
5. Dorofeev D.A. Resistance of strains of hemolytic streptococcus to antibiotics in children with various lymphocytes // Bulletin of the Russian State Medical University. - 2006. - No. 2. - p.279.
6. Yarmukhamedova N. A. Et al. Functional changes in the cardiovascular system in patients with chronic forms of brucellosis." //Achievements of science and education. – 2020. – №. 4. – C. 58.
7. Yarmukhamedova N. A. Et al. Samarkand viloyati khududida bolalar va ŭsmirlarda parotitli infektsiya kechishining klinik-epidemiologik khususiyatlari //Problemy biologii i meditsiny. – 2018. – №. 2. – C. 152-154.
8. Rabbimova N. T., Matyakubova F. E., Tirkashev O. S. Chastota videleniya streptococcus pneumoniae priostrix respiratornix infektsiyax dixatel'nix putey //Volgamedscience. - 2021. - S. 589-591.

9. Yarmuxamedova N. I dr. Kliniko-epidemiologicheskaya xarakteristika parotitnoy infektsii u detey i podrostkov po samarkandskoy oblasti //Jurnal problemi biologii i meditsini. - 2018. - [1]. 1 (99). - S. 150-153.
10. Yarmuxamedova N. I dr. Kliniko epidemiologicheskoe techenie koklyusha u detey v Samarkandskoy oblasti //Jurnal problemi biologii i meditsini. - 2016. - [1]. 3 (89). - S. 124-124.

UO'K: 616-08-035

GEMORRAGIK VASKULITNI KLINIK KECHISHIDA PROFILAKTIK CHORA TADBIRLARNING OPTIMALLASHTIRISH

Nishanbayeva N.Y., Saidxonova A.M., Yunusova L.D.
Toshkent tibbiyot akademiyasi

Annotatsiya: Gemorragik vaskulit (GV)- immun kompleks mexanizm orqali rivojlanadigan, mayda qon tomirlarning yallig'lanishi va shikastlanishi bilan kechuvchi noma'lum etiologiyali, autoimmun kasallikdir. Kasallik infeksiya, allergiya, dori vositalari, oziq-ovqat allergenlari va vaksinalarga immun javob natijasida rivojlanishi mumkin. Kasallik asosan 3–15 yoshdagi bolalarda uchraydi. Bolalar orasida tarqalishi: Har yili 100 000 boladan taxminan 10–20 nafari ushbu kasallikka chalinadi. Yoshga nisbatan eng ko'p uchraydigan yosh guruhi 4–10 yoshni tashkil etadi. 3 yoshgacha bo'lgan bolalarda kamdan-kam uchraydi. Jinsiy tafovut bo'yicha o'g'il bolalar GV bilan qiz bolalarga qaraganda 1,5–2 baravar ko'proq kasallanadi. Ko'proq kuz-qish va bahor oylarida uchraydi, chunki bu davrda respirator virusli infeksiyalar va streptokokk infeksiyalari ko'payadi. Tadqiqotda kasallikning birlamchi, ikkilamchi va uchlamchi profilaktikasi tahlil qilinib, optimallashtirilgan chora-tadbirlar taklif etilgan. Profilaktika strategiyalari infeksiyalarni nazorat qilish, allergen omillarni kamaytirish, immunitetni mustahkamlash va dori vositalari yordamida kasallikning oldini olishga qaratilgan. To'g'ri profilaktika choralari GV ning klinik kechishini yengillashtirish, retsidivlar sonini kamaytirish va asoratlarning oldini olishga yordam beradi.

Kalit so'zlar: *gemorragik vaskulit, mayda qon tomirlar, bolalar, infektsiya, allergen, profilaktika.*

OPTIMIZATION OF PREVENTIVE MEASURES IN THE CLINICAL COURSE OF HEMORRHAGIC VASCULITIS

Nishanbayeva N.Y., Saidxonova A.M., Yunusova L.D.
Tashkent Medical Academy

Abstract: Hemorrhagic vasculitis (HV) is an autoimmune disease of unknown etiology characterized by inflammation and damage to small blood vessels, developing through an immune complex mechanism. The disease may result from an immune response to infections, allergies, medications, food allergens, and vaccines. HV primarily affects children aged 3 to 15 years, although it can also be observed in adults.Prevalence among children: Every year, approximately 10–20 cases per 100,000 children are diagnosed with HV. The most affected age group is 4–10 years, while cases in children under 3 years old are rare. Gender differences: Boys are 1.5–2 times more likely to develop HV compared to girls. The disease occurs more frequently in autumn, winter, and spring, coinciding with an increase in respiratory viral and streptococcal infections.The study analyzes the primary, secondary, and tertiary prevention of the disease and proposes optimized preventive measures. Prevention strategies focus on infection control, reduction of allergen exposure, immune system strengthening, and the use of medications to prevent disease development. Proper preventive measures help alleviate the clinical course of HV, reduce recurrence rates, and prevent complications.

Keywords: *hemorrhagic vasculitis, small blood vessels, children, infection, allergen, prevention.*

ОПТИМИЗАЦИЯ ПРОФИЛАКТИЧЕСКИХ МЕРОПРИЯТИЙ ПРИ КЛИНИЧЕСКОМ ТЕЧЕНИИ ГЕМОРРАГИЧЕСКОГО ВАСКУЛИТА

Нишанбаева Н.Ю., Саидхонова А.М., Юнусова Л.Д.
Ташкентская медицинская академия

Аннотация: Геморрагический васкулит (ГВ) – это аутоиммунное заболевание неизвестной этиологии, характеризующееся воспалением и поражением мелких кровеносных сосудов, развивающееся по иммунокомплексному механизму. Заболевание может возникать в результате иммунного ответа на инфекции,

аллергии, лекарственные препараты, пищевые аллергены и вакцины. ГВ преимущественно встречается у детей в возрасте от 3 до 15 лет, но может наблюдаться и у взрослых.

Распространенность среди детей: ежегодно геморрагический васкулит диагностируется у 10–20 детей на 100 000 населения. Наиболее часто заболевание встречается в возрасте 4–10 лет, а у детей младше 3 лет — крайне редко. Гендерные различия: мальчики болеют в 1,5–2 раза чаще, чем девочки. Заболеваемость возрастает в осенне-зимний и весенний периоды, что связано с увеличением случаев респираторных вирусных и стрептококковых инфекций.

В исследовании проведен анализ первичной, вторичной и третичной профилактики заболевания, а также предложены оптимизированные профилактические мероприятия. Стратегии профилактики направлены на контроль инфекций, снижение воздействия аллергенных факторов, укрепление иммунитета и применение лекарственных средств для предотвращения развития заболевания. Правильно организованные профилактические меры способствуют облегчению клинического течения ГВ, снижению частоты рецидивов и предотвращению осложнений.

***Ключевые слова**: геморрагический васкулит, мелкие кровеносные сосуды, дети, инфекция, аллерген, профилактика.*

Gemorragik vaskulit (GV) – immun kompleks mexanizm orqali rivojlanadigan, mayda qon tomirlarning yallig'lanishi va shikastlanishi bilan kechuvchi kasallikdir. Kasallikning aniq sababi noma'lum, lekin ba'zi etoiologik omillar uni keltirib chiqarishi mumkin, jumladan: virusli infeksiya, vaksinalarga immun javob, allergik reyaksiyalar, gentik moyillik va hokazo. Dunyo bo'yicha gemorragik vaskulitni tarqalishi quyidagicha: Yevropa mamlakatlarida har yili taxminan 100 ming boladan 20 tasi kasallikka chalinadi.AQSh va Kanadada bu ko'rsatkich shunga yaqin.Osiyo bo'yicha Xitoy va Yaponiya kabi mamlakatlarda ham gemorragik vaskulit bolalar orasida keng tarqalgan.Ba'zi tadqiqotlarga ko'ra, Osiyo aholisida kasallik ko'proq va og'irroq shaklda kechadi.Markaziy Osiyo va MDH mamlakatlari O'zbekiston, Qozog'iston, Rossiya va boshqa MDH mamlakatlarida ham gemorragik vaskulit ko'p uchraydi, ayniqsa sovuq mavsumda. Afrika va Janubiy Amerika Ushbu hududlarda aniq statistik ma'lumotlar kam, lekin kasallik kamroq uchrashi mumkin Organizmga tushgan antigenlar (infeksiya, allergenlar) IgA immun komplekslari hosil bo'lishiga sabab bo'ladi [2.4.5.7.11.] Bu komplekslar mayda qon tomirlar devoriga birikib, ularning yallig'lanishiga va shikastlanishiga olib keladi. Natijada: terida gemorragik toshmalar paydo bo'ladi, bo'g'imlar shikastlanadi (artrit), oshqozon-ichak tizimi zararlanadi (qorin og'rig'i, ich ketishi), buyrak faoliyati buzilishi mumkin (glomerulonefrit). Bu kasallik o'g'il bolalarda qizlarga nisbatan 2-3 barobar ko'proq uchraydi. Noma'lum etiologik autoimmun kasallik bo'lganligi uchun birlamchi profilaktika o'tkazish bir muncha qiyin shuning uchun ikkilamchi profilaktika chora tadbirlari o'tkaziladiBolalarda tizimli vaskulit kattalarga qaraganda ancha kam uchraydi, ammo u yanada faol namoyon bo'ladi. Har bir tomir yallig'lanishi turi o'ziga xos klinik manzaraga va alohida simptomlarga ega. Bolalardagi vaskulitning umumiy belgilari: Tomir devorlarining deformatsiyasi, mushak va bo'g'imlarda og'riq, isitma, disprotenemiya (qon oqsillarining me'yordagi nisbatining buzilishi), ESR (eritrositlarning cho'kish tezligi) oshishi kuzatiladi [1.3.6]. Teridagi gemorragik toshmalar simmetrik joylashadi, asosan oyoq, tizza va dumba sohalarida, purpura ko'tarilgan, bosilganda yo'qolmaydi, ba'zan nekroz va qobiq hosil bo'lishi mumkin. Bo'g'im sindromi katta bo'g'imlar (tizza, to'piq) shishadi, og'riqli bo'ladi, ko'chuvchi artrit shaklida kichadi.Gastrointestinal sindrom qorin og'rig'i (ichak devorining ishemiyasi va qon ketishi sababli),ichakdan qon ketishi (qora axlat yoki qon aralash najas),og'ir holatlarda ichak nekrozi va perforatsiya kuzatilishi mumkin. Buyrak sindromi (gemorragik glomerulonefrit) gematuriya (siydikda qon), proteinuriya (oqsil ajralishi), kam hollarda buyrak yetishmovchiligi rivojlanishi mumkin. Tashxis klinik belgilar va laborator tekshiruvlar asosida qo'yiladi:umumiy qon tahlili – ESR va leykotsitlar oshishi mumkin.Siydik tahlili – gematuriya va proteinuriya kuzatiladi.Qon ivish tizimi – D-dimer,

fibrinogen, trombotsitlar miqdori aniqlanadi, IgA darajasi – ko'pchilik bemorlarda oshgan bo'ladi,UZI va gastroskopiya – ichak va oshqozon shilliq qavatining holatini baholash uchun.O'z vaqtida va to'g'ri davolash natijasida 80% bolalarda kasallik 1–1,5 oy ichida yo'qoladi, faqat 20% holatda surunkali shaklga o'tadi [16]. Quyidagi asoratlar berishi mumkin: buyrak yetishmovchiligi – eng jiddiy asorat. ichak perforatsiyasi – og'ir qon ketishlar va nekroz sabab bo'lishi mumkin, surunkali gemorragik vaskulit – ba'zan kasallik uzoq muddat davom etishi mumkin.

PROFILAKTIKADA (kasallik rivojlanishidan keyin retsidivlarning oldini olish):

1. Gemorragik vaskulit rivojlanish va asoratlar kelib chiqish xavfini kamaytirish.
2. Bolani ovqatlanish ratsioniga yuqori kalloriyali ovqatlarni qo'shmaslik.
3. Erta yoshda yuqori allergik aktivlikka ega bo'lgan oqsil maxsulotlarini qo'shmaslik.
4. Qo'shimcha ovqatlarni rasionga kirgizishda shifokor maslahati va ehtiyotkorlik bilan olib borish.
5. Bemorni aktiv harakatlanishdan cheklash.

Davolash choralari medikamentoz va nomedikamentoz korreksiya qilib olib boriladi. Angioprotektorlar (Venorutan, Ditsinon Askorutin, Prodectin) Antikoagulyantlar (Geparin, (Kurantil, Trental) Steroid bo'lmagan yallig'lanishga qarshi bo'lgan preparatlar. (8.12.16) Ko'pchilik bolalarda kasallik **o'z-o'zidan yoki minimal davolash bilan** tuzaladi. 90% hollarda 6-8 hafta ichida **to'liq sog'ayish** kuzatiladi. Buyrak shikastlanishi bo'lgan bolalarda **nefrit** rivojlanishi mumkin, shuning uchun uzoq muddatli kuzatuv zarur..

Ovatlanish kundaligida va eliminatsion parxezni tuzish usuli: Ovqatlanish kundaligidagi hamma turdagi ovatlar ularning miqdori ovqatlanish vaqti hamda kasallik simtomlarini paydo bo'lish vaqti va xarakteri aks etiladi va belgilanadi.(14)

Eliminatsion parxez: Ovqatlanish kundaligidagi aniqlangan maxsulotarni olib tashlagan holda bemor uchun ratsionidan quydagilarni olib tashlaymiz.

- eliminatsion parxezni prinsipini eng ko'p uchraydigan ovqat allergenlarini olib tashlash kifoya qiladi.
- sut va sutli maxsulotlarni olib tashlash (cheklov).
- dorilarni olib tashlash.
- tuxum va yuqorida aytilgan 3ta ovqat qomponentini olib tashlash.
- olib tashlash to'liq bo'lishi kerak xattoki shu maxsulotlarni minimal miqdori xam parxez 1-2 xaftali mudatga buyuriladi eliminatsiya samarasi qayt qilinadi.
- Qovurilgan,yog'li,kislotaga boy hamma mahsulotlarni cheklash

Kasallik profilaktikasi va asoratlar qolmasligi uchun kompleks profilaktika o'tkaziladi. Bemorni medikamentoz davodan ko'ra nomedikamentoz davolash muhim ahamiyatga ega (10.14.7.). Yotoq rejimida, ovqat ratsioni qatnatilgan tuzsiz guruch, qotkan non va suvdan iborat bo'lishi kasallikni rivojlanishdan to'sadi.Oqsilli.yog'li yoki uglevodli ovqatlar berilmasligini sababi oqsilli mahsulotlar qon tomirlarini qo'shimcha shikastlashi va buyraklarga yuk tushirishi mumkin. Uglevodli mahsulotlar esa yuqori glikemik indeksga ega bo'lgan mahsulotlar qon ivish tizimini buzishi va tomirlar shikastlanishini kuchaytirishi mumkin. Shakar va oddiy uglevodlar yallig'lanish jarayonini kuchaytiradi, bu esa GV retsidivlariga sabab bo'lishi mumkin. Hayvon yog'lari qon tomirlarining o'tkazuvchanligini oshirishi va ateroskleroz xavfini kuchaytirishi mumkin.Yog'li ovqatlar buyrak yuklanishini oshiradi va metabolik buzilishlarga olib keladi (5.6). Gemorragik vaskulitda buyrak yuklanishini kamaytirish, qon tomir devorlarini mustahkamlash va immun

javobni tartibga solish uchun gipoallergik va yengil hazm bo'ladigan parhez tavsiya etiladi. Oqsil, yog' va uglevodlar cheklangan holda iste'mol qilinishi kerak.
Davolashda, albatta, antigistaminlar, antikoagulyantlar (geparin), antiagregantlar (dipiridamol, pentiksifillin) lar beriladi
REABILITATSIYA:
1. Kasallikning o'tkir davridan keyin (stasionar bosqich)
2. Uy sharoitida reabilitatsiya (ambulator bosqich)
3. Tor mutaxassislar ko'rigidan o'tkazish
4. . Sanator-kurort davolanish.(8.9)

Foydalanilgan adabiyotlar:

Foydalanilgan adabiyotlar:

1. Brunton L., Chabner B., Knollmann B. Goodman & Gilman's The Pharmacological Basis of Therapeutics. 12th Edition. – McGraw-Hill, 2011.
2. Katzung B.G. Basic & Clinical Pharmacology. 14th Edition. – McGraw-Hill, 2018.
3. Hoffman R., Benz E.J., Silberstein L.E. Hematology: Basic Principles and Practice. 7th Edition. – Elsevier, 2017.
4. Goljan E.F. Rapid Review Pathology. 5th Edition. – Elsevier, 2018.
5. Martini F.H., Nath J.L., Bartholomew E.F. Fundamentals of Anatomy & Physiology. 11th Edition. – Pearson, 2017.
6. Ратнер Н.Б., Яковлев С.И. Клиническая фармакология и фармакотерапия. – М.: ГЭОТАР-Медиа, 2020.
7. Под ред. Г.И. Лазебника. Клинические рекомендации по диагностике и лечению геморрагического васкулита. – М.: Изд-во ВУНМЦ, 2019.
8. Uzbekiston Respublikasi Sog'liqni Saqlash Vazirligi. "Gematologik kasalliklarni tashxislash va davolash protokoli", 2021.
9. Геморрагический васкулит у детей: что это такое, причины, симптомы, диагностика и лечение
10. ttps://mag.103.by/zdorovje/108783-gemorragicheskij-vaskulit-diagnostika-lechenije-klinicheskije-rekomendacii-pri-vaskulite-u-detej/
11. Геморрагический васкулит у детей | Информирования родителей о диагностике и лечении редких заболеваний у детей | Поликлиника города Жезказган
12. 2. Jiang M.Y., Li W., Xu X.P. et al. Role of p300 in the patho genesis of Henoch – Schonlein purpura nephritis and as a new target of glucocorticoid therapy in mice // Chin. Med. J. (Engl.). – 2019. – Vol. 132, №16. – Vol. 1942-1950.
13. ttps://lex.uz/docs/-5436849
14. 7. Rigante D., Castellazzi L., Bosco A. et al. Is there a cross road between infections, genetics, and Henoch – Schönlein purpura? // Autoimmun. Rev. – 2013. – Vol. 12, №10. – P. 1016 1021.
15. Wang X, Zhu Y, Gao L, Wei S, Zhen Y, Ma Q. Henoch – Schön lein purpura with joint involvement: Analysis of 71 cases // Pediatr. Rheumatol. Online J. – 2016. – Vol. 14, №1. – P. 20-26.
16. Геморрагический васкулит: причины, методы обследования

UO'K: 616-08-035

POSTREANIMATSION DAVRDA KALAMUSHLAR REPRODUKTIV TIZIMINING BUZILISHI.

Nurimov P.B., Muxtorova S. N.
Samarqand Davlat tibbiyot univesiteti

Annotatsiya. Postreanimatsion kasallikning uzoq muddatli davrida reproduktiv sistemadagi buzilishlar mexanizmining asosida, ya'ni folikula stimullovchi gormon, lyutinlovchi gormon, estragen, progesteron sintezi va sekretsiyasining pasayishi, follikulalar rivojlanishining orqada qolishi, atretik follikulalar sonining oshishi, sariq tanalar sonining kamayishi kabi holatlar simpatik nerv sistemasi tonusining ustunligi, prooksidant sistema faolligining oshishi, endogen intoksikatsiya va oqsil barqarorligi koeffitsientining pasayishi bilan bog'liq.

Kalit so'zlar: *Vegetativ nerv sistemasi, katalaza, FSG, LG, estrogen, progesteron, tuxumdonlar, follikulalar.*

DISORDERS OF THE REPRODUCTIVE SYSTEM IN RATS DURING THE POST-RESUSCITATION PERIOD.

Nurimov P.B., Mukhtarova S.N.
Samarkand State Medical University

Abstract: The underlying mechanism of reproductive system disorders in the late periods of post-resuscitation illness—that is, the decrease in synthesis and secretion of follicle-stimulating hormone, luteinizing hormone, estrogen, and progesterone, the retardation of follicle development, the increase in atretic follicles, and the reduction in corpora lutea—is the predominance of sympathetic nervous system tone, the increase in activity of the prooxidant system, endogenous intoxication, and the decrease in the protein stability coefficient.

Keywords: *Autonomic nervous system, MDA, catalase, MSM254, MSM280, FSG, LG, estrogen, progesterone, ovaries, follicles.*

НАРУШЕНИЯ РЕПРОДУКТИВНОЙ СИСТЕМЫ КРЫС В ПОСТРЕАНИМАЦИОННОМ ПЕРИОДЕ.

Нуримов П.Б., Мухторова С.Н.
Самаркандский государственный медицинский университет

Аннотация. В основе механизма нарушений в репродуктивной системе в отдаленные периоды постреанимационной болезни, то есть снижение синтеза и секреции фолликулостимулирующего гормона, лютеинизирующего гормона, эстрогена, прогестерона, отставание развития фолликулов, увеличение атретических фолликулов, уменьшение желтых тел, лежит преобладание тонуса симпатической нервной системы, увеличение активности прооксидантной системы, эндогенной интоксикации и снижение коэффициента устойчивости белка.

Ключевые слова: *Вегетативная нервная система, МДА, каталаза, ФСГ, ЛГ, эстроген, прогестерон, яичники, фолликулы*

Kirish: Dunyo miqyosda jamiyatning jadal rivojlanishi va sanoatlashuvi stressogen omillarning yangi turlarini keltirib chiqarmoqda. Bunday sharoitda ayol organizmining adaptatsion imkoniyatlari susayishi natijasida reproduktiv tizim buzilishlari, jumladan, bepushtlik holatlari ortib borayotganligi kuzatilmoqda [5,7]. Demak, ayollarning reproduktiv salomatligini ta'minlash, reproduktiv tizim buzilishlarining rivojlanish mexanizmlarini o'rganish va patogenetik davolash usullarini takomillashtirish dolzarb ahamiyatga ega [3]. Organizmga o'ta kuchli ta'sir etuvchi ekstremal omillar adaptatsion qobiliyatning buzilishiga olib kelishi, natijada esa o'limga sabab

bo'lishi mumkin. Zamonaviy ilmiy adabiyotlarda qayd etilishicha, dunyo bo'yicha to'satdan o'lim holatlari har yili 1000 aholiga 1-6 tagacha to'g'ri keladi. Yevropada har yili 350 000, AQShda esa 400 000 kishi to'satdan vafot etadi. Jahon sog'liqni saqlash tashkilotining (JSST) ma'lumotlariga ko'ra, har haftada 1 000 000 aholiga 30 ta o'lim holati qayd etiladi. Sanoati rivojlangan mamlakatlarda zo'ravonliksiz o'lim holatlarining 15-20% i kuzatiladi [5]. Muvaffaqiyatli reanimatsiyadan so'ng organizmda yuzaga keladigan metabolik va organik o'zgarishlar birinchi navbatda markaziy asab tizimi (MAT) va endokrin tizim faoliyatiga salbiy ta'sir ko'rsatadi [1, 4].Shu sababli, jahon miqyosida aholiga tibbiy yordam ko'rsatish sifatini tubdan yaxshilash, kasalliklarni erta tashxislash, samarali davolash, turli somatik kasalliklarning oldini olish va asoratlarini kamaytirishga qaratilgan sog'liqni saqlash tizimini yaratish bo'yicha chora-tadbirlar amalga oshirilmoqda. Ushbu vazifalarni inobatga olgan holda, reanimatsiyadan keyingi davrda reproduktiv tizim buzilishlari patogenezini baholashga qaratilgan ilmiy tadqiqotlar o'tkazish maqsadga muvofiqdir.

Tadqiqotning maqsadi: Estrus davridagi urg'ochi kalamushlarda postreanimatsion kasallikning uzoq muddatli davrida reproduktiv tizim buzilishining patogenetik mexanizmlarini aniqlash.

Materiallar va tadqiqot usullari

Ushbu tadqiqot 150-180 gramm og'irlikdagi oq urg'ochi kalamushlarda o'tkazildi. Tajriba davomida quyidagilar o'rganildi:

- Avtonom asab tizimining reaktivligi
- Prooksidant va antioksidant tizimlarning faolligi
- Endogen intoksikatsiya ko'rsatkichlari
- Adenogipofizning beta va delta bazofil hujayralaridagi morfofunktsional o'zgarishlar
- Tuxumdonning morfofunktsional holati

Klinik o'lim va postreanimatsion kasallik Korpachev VG (1982) usuli bo'yicha modellashtirildi, bundan tashqari avtonom asab tizimining reaktivligi [2], prooksidant tizimning faolligi [1], antioksidant tizimning faolligi [8], endogen intoksikatsiya ko'rsatkichlari, oqsilning barqarorlik koeffitsienti [4] va adenogipofizning beta va delta bazofil hujayralarining morfofunktsional faolligi [1], shuningdek tuxumdondagi o'zgarishlar o'rganildi. Statistik ishlov Microsoft Office – Excell 2000 dasturlarining standart paketi yordamida amalga oshirildi.

Muhokama. Postreanimatsion kasallikni bir oy davomida boshdan kechirgan hayvonlardan olingan ma'lumotlarni Karabayev A.G. (2022) ma'lumotlari bilan solishtirganda, bu vaqtda erkak kalamushlarda simpatik nerv sistemasi tonusi ustunlik qilgan, bizning ma'lumotlarimizda esa urg'ochi hayvonlarda avtonom reaktivlikning aralash tipi kuzatilgan. Bundan tashqari, prooksidant sistema faolligining kamayishi, antioksidant sistema faolligining oshishi, endogen intoksikatsiya ko'rsatkichlarining pasayishi, oqsil chidamlilik koeffitsientining oshishi qondagi estradiolning diestrus holatidagi hayvonlar ma'lumotlari va erkak hayvonlar ko'rsatkichlariga nisbatan yuqori darajada bo'lishi bilan bog'lash mumkin [3].

Olingan ma'lumotlarni Uzbekov M.G. (2014), Kurashova N.A (2012) ma'lumotlari bilan izohlaganda, bu davrda reproduktiv sistema buzilishining mexanizmini quyidagicha tushuntirish mumkin. Postreanimatsion kasallikning uzoq muddatli davrlarida simpatik nerv sistemasining tonusi ustunligi prooksidant sistema faolligining yanada oshishiga, antioksidant faollikning kamayishiga, endogen intoksikatsiyaning oshishiga, oqsil chidamlilik koeffitsientining pasayishiga olib kelgan, bu esa o'z navbatida adenogipofizning beta-bazofil hujayralarida, lyutinlovchi gormon sintezining kamayishiga va qonga estragen sintezi va sekretsiyasining pasayishiga sabab

bo'lgan bo'lishi mumkin. Ushbu gormonlarning yetishmasligi o'z navbatida follikula rivojlanishining orqada qolishiga va atretik follikulalar, sariq tanalar rivojlanishiga va tuxumdonda progesteron sintezining pasayishiga yordam bergan. Qonda folikulostimullovchi gormon (FSG) darajasi 1,8 baravarga, lyuteinlovchi gormon (LG) - 1,6 baravarga, estradiol 1,55 baravarga, progesteron gormoni 1,45 baravarga pasayganligi, butun hayvonlarning ma'lumotlari bilan solishtirganda FSG, LG - 1,2 baravarga, estradiol 1,18 baravarga va progesteron gormoni 1,25 baravarga pasayganligi kuzatildi.

Xulosalar. Postreanimatsion kasallikning uzoq muddatli davrlarida reproduktiv sistemadagi buzilishlar, ya'ni folikula stimullovchi gormon, LH, estradiol, progesteron sintezi va sekretsiyasining pasayishi, follikulalar rivojlanishining orqada qolishi, atretik follikulalar sonining oshishi, sariq tanalar sonining kamayishi mexanizmining asosida simpatik nerv sistemasi tonusining ustunligi, prooksidant sistema faolligining oshishi, endogen intoksikatsiya va oqsil chidamlilik koeffitsientining pasayishi yotadi.

Foydalanilgan adabiyotlar:

1. Nurimov P.B. "Reactivity of the hypothalamo-pituitary neurosecretory system in rats changed by aerobic exercise //Journal of Advanced Zoology (jazindia.com)2023/11/21 T2 , C. 1860-1862.
2. Nurimov P.B. Changes in the Reactivity of the Hypothalamic – Pituitary Neurosecretory System During Physical Stress; //American Journal of Medicine and Medical Sciences 2023, 13(12): 1860-1862
3. Nurimov P.B. Сурункали равишда жисмоний зўриқиш орқали анаэроб зўриқиш чақирилган каламушларда гипоталамо – гипофизар - нейросекретор тизим реактивлиги. //Journal of Biomedicine and practice (биомедицна ва амлиёт журнали)2023 (8 жилд,6 сон)issn 2181-9300
4. Нуримов П.Б. Карабаев А.Г. Аэроб зўриқишда гипоталамо - гипофизар нейросекретор тизим реактивлиги. Problems of Biology and Medicine (Биология ва тиббиёт муаммолари) 2023 (150), №6 376-380
5. Нуримов П.Б. Карабаев А.Г. Жисмоний зўриқишда гипоталамо-гипофизар нейросекретор тизим реактивлиги. Zamonaviy ta`limda fan va innovatsion tadqiqotlar http://zamtadqiqot.uz/index 2-son 6-to`plam 2024 y C.113-117
6. Nurimov P. B., Karabayev A. G. Morphofunctional changes in the hypothalamic-pituitary neurosecretory system during aerobic exercise International scientific-praktical conference on “modern education: problems and solutions” 2024. №. 3(3) P.89-92.
7. Нуримов П.Б. Карабаев А.Г. Взаимосвязь реактивности вегетативной, нервной и гипоталамо-гипофизарно-нейросекреторной систем, активности прооксидантной и антиоксидантной систем у интактных крыс в аридной зоне. Академия инженерных и медицинских наук: материалы 1-й конференции «Исследования в области здравоохранения и биологических наук». – 2022, Том 1. С. 76-79.
8. Нуримов П.Б. Карабаев А.Г. Реактивность супраоптичкого ядра и паравентрикулярного ядра гипоталамуса у интактных крыс в условиях оридной зоны. Журнал Агротехнологии и ветринарной медицины. Специальный выпуск: «Перспективные задачи разработки и внедрения инновационных технологий в ветеринарии и животноводстве» международная научно-практическая конференция. – Самарканд, 14-15 октября 2022. С. 340-344.

UO'K: 616-08-035

INTAKT KALAMUSHLARDA GIPOTALAMUS-GIPOFIZAR-NEYROSEKRETOR TIZIMINING SUPRAOPTIK YADROSIDAGI NEYROSEKRETOR HUJAYRALARNING FUNKTSIONAL HOLATI

Nurimov P.B.
Samarqand davlat tibbiyyot universiteti

Annotatsiya: Ushbu tadqiqot intakt kalamushlarning gipotalamus-gipofizar-neyrosekretor tizimi (GGNT) supraoptik yadrosidagi (SOYa) neyrosekretor hujayralarning (NSH) morfofunktsional xususiyatlarini baholashga qaratilgan. NSHlarning turli xillari (yuqori, o'rta va past faollikka ega) va ularning miqdoriy nisbati aniqlandi. SOYa tuzilishi, NSH yadrosi va sitoplazmasining hajmi, neyrosekretor moddalar miqdori va glial hujayralar bilan o'zaro ta'siri o'rganildi. Olingan ma'lumotlar GGNTning fiziologik holatini tavsiflaydi va turli patologik ta'sirlar ostida yuzaga keladigan o'zgarishlarni tushunish uchun asos bo'lib xizmat qiladi.

Kalit so'zlar: *Gipotalamus-gipofizar-neyrosekretor tizim, supraoptik yadro, neyrosekretor hujayralar, funktsional aktivlik, morfologiya, kalamush.*

FUNCTIONAL STATE OF NEUROSECRETORY CELLS IN THE SUPRAOPTIC NUCLEUS OF THE HYPOTHALAMIC-PITUITARY-NEUROSECRETORY SYSTEM IN INTACT RATS

Nurimov P.B.
Samarkand State Medical University

Abstract: This study focuses on evaluating the morphofunctional characteristics of neurosecretory cells (NSCs) in the supraoptic nucleus (SON) of the hypothalamic-pituitary-neurosecretory system (HPNS) in intact rats. Different types of NSCs (with high, medium, and low functional activity) and their quantitative ratios were determined. The structure of the SON, the size of the nucleus and cytoplasm of NSCs, the amount of neurosecretory substances, and the interaction with glial cells were studied. The obtained data describe the physiological state of the HPNS and serve as a basis for understanding changes occurring under the influence of various pathological factors.

Keywords: *Hypothalamic-pituitary-neurosecretory system, supraoptic nucleus, neurosecretory cells, functional activity, morphology, rat.*

ФУНКЦИОНАЛЬНОЕ СОСТОЯНИЕ НЕЙРОСЕКРЕТОРНЫХ КЛЕТОК СУПРАОПТИЧЕСКОГО ЯДРА ГИПОТАЛАМО-ГИПОФИЗАРНО-НЕЙРОСЕКРЕТОРНОЙ СИСТЕМЫ У ИНТАКТНЫХ КРЫС

Нуримов П.Б.
Самаркандский государственный медицинский университет

Аннотация: Данное исследование посвящено оценке морфофункциональных характеристик нейросекреторных клеток (НСК) супраоптического ядра (СОЯ) гипоталамо-гипофизарно-нейросекреторной системы (ГГНС) у интактных крыс. Были определены различные типы НСК (с высокой, средней и низкой функциональной активностью) и их количественное соотношение. Изучены структура СОЯ, размеры ядра и цитоплазмы НСК, количество нейросекреторных веществ и взаимодействие с глиальными клетками. Полученные данные описывают физиологическое состояние ГГНС и служат основой для понимания изменений, происходящих под воздействием различных патологических факторов.

Ключевые слова: Гипоталамо-гипофизарно-нейросекреторная система, супраоптическое ядро, нейросекреторные клетки, функциональная активность, морфология, крыса.

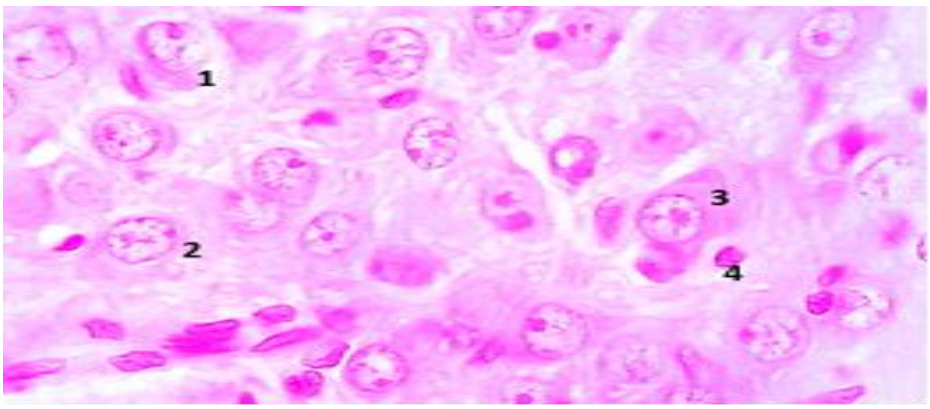
Kirish: Gipotalamus-gipofizar-neyrosekretor tizimi (GGNT) organizmning neyrogen va gumoral boshqaruvida muhim rol o'ynaydi. GGNTning asosiy tuzilmalaridan biri bo'lgan supraoptik yadro (SOYa) vazopressin va oksitotsin ishlab chiqaruvchi neyrosekretor hujayralarni (NSH) o'z ichiga oladi.[1.3] Ushbu neyrogormonlar organizmning gomeostazini saqlashda, stressga javob berishda va boshqa muhim fiziologik jarayonlarda ishtirok etadi. [2.4]. Turli ekstremal va noekstremal omillarning ta'siri ostida GGNTning reaktivligi o'zgarishi mumkin, bu esa adaptiv jarayonlarga ta'sir qiladi.[6.2]. Shu sababli, intakt holatdagi GGNTning SOYAsidagi NSHning funktsional holatini o'rganish muhim ahamiyatga ega.[5.7]

Materiallar va usullar:

• Tadqiqot ob'ektlari: Intakt (sog'lom) kalamushlar.
• Guruhlar: Intakt guruh (nazorat guruhi).
• Gistologik usullar: SOYa preparatlarini tayyorlash va bo'yash.
• Mikroskopiya: SOYadagi NSHning morfologik xususiyatlarini (shakl, yadro hajmi, sitoplazma hajmi, neyrosekretor granulalar miqdori) o'rganish.
• Immunogistokimyoviy usullar: PAF (periodic acid-Schiff) reaksiyasi orqali neyrosekretor moddalarni aniqlash.
• Morfometriya: Yadro va sitoplazma hajmini o'lchash.
• Statistik tahlil: Olingan ma'lumotlarni qayta ishlash va guruhlar o'rtasida farqlarni aniqlash.

Natijalar: Intakt guruhdagi hayvonlarda SOYada NSHlari o’rtacha to’laqonlik asosida o’rtacha funktsional aktivlikka ega hujayralar ustunlik qilishi kuzatildi. NSH - yuqori funktsional aktivlikka ega bo’lib, ularda neyrosekretor moddalar yadro atrofida va aksonlarning kengaygan qismida aniqlanadi. Yadrosi katta, yadrochasi ekstsentrik holda joylashgan bo’ladi yoki ikkita yadrocha aniqlanadi. Supraoptik yadro (SOYa). SOYada neyrosekretor hujayralar bir tekisda taqsimlangan bo’lib, asosiy neyrosekretor hujayralar (NSH) yumaloq ayrimlari esa burchakli shaklga ega. Yadroda neyrosekretor hujayralar ko’zdan kechirilganda I-turdagi NSH (Yuqori faollikka ega NSH) II- turdagi NSH (o’rta faollikka ega NSH), III- turdagi NSH (past faollikka ega NSH) ega neyrosekretor hujayralar va shu bilan bir qatorda IV-turdagi NSH (piknoz shaklidagi giperxrom destruktiv hujayralar) ko’zga tashlanadi.

Neyrosekretor hujayralar ichida o’rtacha funktsional aktivlikka ega II turdagi NSH ustunlik qilib, 66,0±1,2% tashkil etadi. Ular sitoplazmasida PAF musbat neyrosekretor moddalar tarqoq va o’rta zichlikda joylashgan bo’lib, yadro atrofida va aksonlarning boshlanish qismida zichroq joylashgan yadrosi elipsmon shaklga ega bo’lib xromatini tarqoq xolda aniqlanadi, yadrochasi asosan yadroning o’rtasida joylashgan. Shu bilan bir qatorda bu hujayralar orasida III-turdagi NSH - past funktsional aktivlikka ega hujayralar ham aniqlangan bo’lib, ularning miqdori 18,0±1,6 % ni tashkil etdi. Ularda PAF musbat granulalar sitoplazma hamda akson bo’ylab zich joylashgan. Yadrosining xromatinligi kuchli, yadrochasi esa markaziy joylashishga ega. O’rta va past funktsional aktivlikka ega neyrosekretor hujayralar orasida I-turdagi yuqori funktsional aktivlikka ega NSH neyrosekretor hujayralar kuzatilib ularning miqdori 12,6±0,51% ni tashkil etib, PAF musbat granulalar siyrak holda joylashgan. Neyrosekret moddalar asosan yadro atrofida aniqlandi. Bu hujayralardagi yadro hajmi katta, yadrocha ekstsentrik holda joylashgan. Shu bilan bir qatorda NSH orasida IV-turdagi NSH ham farqlanadi. Ular giperxrom pikontik holda bo’lib miqdori 3,4±0,3% tashkil etadi.



SOYa dagi neyrosekretor hujayralarning yadrolarini umumiy o'rtacha hajmi 399,5±6,8 mkm3ni, sitoplazmani o'rtacha umumiy hajmi 1819,0±25,2 mkm3 ni tashkil etib, yadroni sitoplazmaga nisbatan indeksi esa 0,228±0,004 ga teng. Neyrosekretor moddalarning NSHdagi o'rtacha miqdori esa 201,9±1,7 shartli birlikni tashkil qiladi.

Neyrosekretor hujayralar orasida glial hujayralar joylashgan bo'lib, 25000 mkm² yuzada neyrosekretor hujayralar soni 4,9±0,1 tani, glial hujayralar soni esa 2,84±0,1 tani hosil qilib, NSH GLH indeksi 1,73±0,03 ga teng. Glial hujayralarning yadrosi elipsoid shaklga ega, xromatin yadro bo'ylab diffuz tarqalgan va yuqori xromatinlikka ega.SOYada qon tomirlar o'rta to'laqonlikka ega bo'lib asosini o'rta to'liqlikka ega kapillyarlar tashkil qiladi. Ularning o'rtacha diametri esa 5,56± 0,1 mkm ni xosil qiladi.

Muhokama:Olingan natijalar intakt kalamushlardagi GGNT SOYAsidagi NSHning funktsional holatini tavsiflaydi. SOYada o'rta faollikka ega NSHning ustunligi, ushbu yadroning bazal neyrosekretor faolligini ko'rsatadi. Turli xil NSH turlarining mavjudligi, SOYAning dinamik va moslashuvchan ekanligidan dalolat beradi. Glial hujayralarning NSH bilan o'zaro ta'siri neyroendokrin funktsiyani tartibga solishda muhim rol o'ynashi mumkin.

Xulosa:Ushbu tadqiqot intakt kalamushlarning GGNT SOYAsidagi NSHning morfofunktsional xususiyatlari haqida muhim ma'lumotlarni taqdim etadi. Olingan natijalar GGNTning fiziologik holatini tushunishga yordam beradi va turli patologik ta'sirlar ostida yuzaga keladigan o'zgarishlarni o'rganish uchun asos bo'lib xizmat qiladi.

Foydalanilgan adabiyotlar:

1. Voronchukov N. S., Kolesnikova N. V. Vliyanie fizicheskix nagruzok na serdechno-sosudistuyu sistemu // Nauka-2020. 2020. №9 (45). S.85-88
2. Karabayev A.G., Nurimov P.B.,Urokov G.M. et al. Reactivity of the supraoptic, arcuate nucleus of the hypothalamus and the B- and D-basophilic cells of the adenohypophysis in the early postreanimation period // European Journal of Molecular & Clinical Medicine. – 2021. - T.08. - №3. R. 87-89
3. Karabayev A. G., Nurimov P. B. Reactivity of the supraoptic, arcuate nucleus of the hypothalamus and the B- and D-basophilic cells of the adenohypophysis in the early postreanimation period //European Journal of Molecular & Clinical Medicine. – 2021. - T.08. - №3. R. 84-86
4. Djumaniyazov, Sh. A., Karabaev A. G., Kim D. V. "Izuchenie razvitiya i stanovleniya neyrosekretornoy funktsii gipotalamo-gipofizarnoy neyrosekretornoy sistemы u plodov i potomstva jivotnыx, otravlennыx xlorpirifosom v techenie beremennosti. // Jurnal Vestnik vracha.-2022,- № 3 (106), 2022, S. 46-51.

5. Karabaev, A., & Bobokandova, M. (2022). Reactivity of the reproductive system in mature intact rats in the arid zone. International Bulletin of Medical Sciences and Clinical Research, 2(10), 50-55.
6. Gadaevich, K. A., & Fazliddinovna, B. M. (2022). Morphofunctional State of The Reproductive System in Mature Intact Rats in the Arid Zone. Central Asian Journal of Medical and Natural Science, 3(5), 511-516.
7. Нуримов, П. Б., & Бобокандова, М. Ф. (2022). Особенности развития соматотропной функции гипофиза и надпочечников у мальчиков-подростков. Новый день в медицине, 2, 40.

UO'K: 616-08-035

BOLALARDA FRONTAL TISHLARNING ZICHLASHUVINI DAVOLASH USULLARINI TAQQOSLASH VA PROFILAKTIK CHORA TADBIRLAR

Omonova M.X., Hamidova A.R., Narzullayeva M.Sh.,
Mashrabjonova B.Q., Sattarov J. A.
Toshkent davlat stomatologiya instituti

Annotatsiya: Frontal tishlar zichlashuvi (anterior crowding) ortodontik muammolardan biri bo'lib, tishlar qatorining torayishi yoki tishlarning noto'g'ri joylashishi natijasida yuzaga keladi. Ushbu maqolada frontal tishlar zichlashuvini davolash usullari tahlil qilinib, ularning samaradorligi taqqoslanadi. Davolashning asosiy usullari qatoriga ortodontik apparatlar (breket tizimlari, jag'ni kengaytiruvchi apparatlar , mioterapiya), ekstraksiya usuli va ortognatik jarrohlik kiradi. Ushbu usullar bemorning yoshiga, jag' va tishlarning tuzilishiga hamda patologiyaning og'irlik darajasiga qarab tanlanadi.

Breket tizimlari eng keng qo'llaniladigan davolash usuli bo'lib, ular tishlarni asta-sekin to'g'rilaydi va tish qatorini kengaytirishga yordam beradi. Jag'larni kengaytirishda foydalaniladigan plastinka apparatlari esa estetik jihatdan qulay bo'lib, yengil, o'rtacha hamda og'ir darajadagi zichlashuvlarni tuzatishda samarali hisoblanadi. Jag' suyaklarida sezilarli torayish bo'lsa, ekspansion apparatlar qo'llaniladi. Ba'zi hollarda, ortodontik davolashni osonlashtirish uchun tishlarni ekstraksiya qilish talab etilishi mumkin. Og'ir holatlarda esa ortognatik jarrohlik operatsiyalari bajariladi.

Profilaktika choralari esa erta yoshdan boshlab amalga oshirilishi kerak. Bolalikdan ortodont nazoratiga borish, sut tishlarining erta yo'qolishini oldini olish, noto'g'ri odatlarni (masalan, barmoqni so'rg'ich kabi so'rish yoki noto'g'ri yutish refleksi) bartaraf etish frontal tishlar zichlashuvining oldini olishda muhim ahamiyatga ega. Shu bilan birga, jag' suyaklarini tabiiy rivojlantirishga yordam beruvchi mashqlar va muvozanatli ovqatlanish ham profilaktik tadbirlar tarkibiga kiradi.

Maqolada yuqoridagi davolash usullarining afzalliklari va kamchiliklari, shuningdek, har bir bemor uchun optimal yondashuvni tanlash mezonlari haqida batafsil ma'lumot beriladi. Profilaktik tadbirlarning samaradorligi va erta ortodontik aralashuvning ahamiyati ham chuqur yoritiladi.

Kalit so'zlar: *Ortodontiya, tish zichlashuvi, jag' rivojlanishi, breket tizimlari, profilaktika.*

COMPARISON OF TREATMENT METHODS AND PROPHYLAXIS MEASURES FOR CRUSHING OF FRONTAL TEETH IN CHILDREN

Omonova M.Kh., Hamidova A.R., Narzullayeva M.Sh.,
Mashrabjonova B.Q., Sattarov J.A.
Tashkent State Dental Institute

Abstract: Anterior crowding is an orthodontic problem that occurs as a result of narrowing of the teeth or improper positioning of the teeth. This article analyzes the methods of treating anterior crowding and compares their effectiveness. The main methods of treatment include orthodontic appliances (brackets, jaw expansion devices, myotherapy), extraction methods, and orthognathic surgery. These methods are selected depending on the patient's age, the structure of the jaw and teeth, and the severity of the pathology. Braces are the most widely used treatment method, which gradually straighten the teeth and help expand the dentition. Plate appliances used for jaw expansion are aesthetically pleasing and are effective in correcting mild, moderate, and severe crowding. Expansion appliances are used in cases of significant narrowing of the jaw bones. In some cases, tooth extraction may be required to facilitate orthodontic treatment. In severe cases, orthognathic surgery is performed.

Preventive measures should be taken from an early age. Visiting an orthodontist from childhood, preventing early loss of baby teeth, and eliminating bad habits (such as thumb sucking or an incorrect swallowing reflex) are important in preventing crowding of front teeth. At the same time, exercises that promote the natural development of the jaw bones and a balanced diet are also part of preventive measures.

The article provides detailed information on the advantages and disadvantages of the above treatment methods, as well as the criteria for choosing the optimal approach for each patient. The effectiveness of preventive measures and the importance of early orthodontic intervention are also covered in depth.

Keywords: *Orthodontics, tooth crowding, jaw development, brace systems, prevention.*

СРАВНЕНИЕ МЕТОДОВ ЛЕЧЕНИЯ И МЕР ПРОФИЛАКТИКИ РАЗРУШЕНИЯ ПЕРЕДНИХ ЗУБОВ У ДЕТЕЙ

Омонова М.Х., Хамидова А.Р., Нарзуллаева М.Ш.,
Машрабжонова Б.К., Саттаров Д. А.
Ташкентский государственный стоматологический институт

Аннотация: Скученность передних зубов — это ортодонтическая проблема, которая возникает в результате сужения зубов или их неправильного расположения. В статье анализируются методы лечения скученности передних зубов и сравнивается их эффективность. Основными методами лечения являются ортодонтические аппараты (брекет-системы, аппараты для расширения челюстей, миотерапия), методы удаления зубов и ортогнатическая хирургия. Эти методы выбираются в зависимости от возраста пациента, строения челюсти и зубов, а также тяжести патологии.

Брекеты являются наиболее широко используемым методом лечения, постепенно выпрямляющим зубы и помогающим расширить зубную дугу. Пластинчатые устройства, используемые для расширения челюстей, эстетичны и эффективны при исправлении легкой, средней и тяжелой скученности. При значительном сужении челюстной кости применяют расширительные устройства. В некоторых случаях для облегчения ортодонтического лечения может потребоваться удаление зуба. В тяжелых случаях проводится ортогнатическая операция.

Профилактические меры следует принимать с раннего возраста. Для профилактики скученности передних зубов важны посещение ортодонта с детства, профилактика преждевременной потери молочных зубов и устранение вредных привычек (таких как сосание пальца или неправильный глотательный рефлекс). В то же время профилактическими мерами являются упражнения, способствующие естественному развитию челюстных костей, и сбалансированное питание.

В статье представлена подробная информация о преимуществах и недостатках вышеперечисленных методов лечения, а также критерии выбора оптимального подхода для каждого пациента. Также подробно рассматриваются эффективность профилактических мер и важность раннего ортодонтического вмешательства.

Ключевые слова: ортодонтия, скученность зубов, развитие челюстей, брекет-системы, профилактика.

Kirish: Frontal tishlarning zich joylashuvi bolalar va o'smirlar orasida keng tarqalgan ortodontik muammo bo'lib, uning rivojlanishi ko'plab omillarga bog'liq. Tishlarning jag' qatorida yetarli joy topa olmasligi oqibatida ular noto'g'ri joylashadi, bu esa estetik muammolarga va tishlarning noto'g'ri yopilishiga olib keladi. Bu holat "yuz-jag' skeletining noto'g'ri rivojlanishi va funksional muvozanatning buzilishi bilan xarakterlanadi" [11]. Bu esa yuz-jag' skeletining noto'g'ri rivojlanishi, tish gigiyenasining yomonlashishi, parodont kasalliklariga moyillik oshishi va morfo-funksional o'zgarishlarga sabab bo'ladi [8].

Maqsad va vazifalar: Ushbu tadqiqotning asosiy maqsadi frontal tishlarning zichlashuvi bilan bog'liq muammolarni o'rganish, ularning etiologiyasi va patogenezini tahlil qilish, zamonaviy davolash usullarini o'rganish, davolash usullarining farqlari va profilaktik chora-tadbirlarni ishlab chiqishdan iborat. "Ortodontik davolashning zamonaviy prinsiplarini hisobga olgan holda, muammoning ildizini aniqlash juda muhim" [2]. Asosiy vazifalar:

- Frontal tishlarning zich joylashuvining asosiy sabablarini aniqlash;
- Patogenez mexanizmini tahlil qilish;
- Zamonaviy ortodontik davolash usullarining samaradorligini baholash;

• Profilaktika choralari bo'yicha tavsiyalar ishlab chiqish.

Materiallar va usullar: Tadqiqot davomida 6-12 yosh oralig'idagi 120 nafar Toshkent davlat stomatologiya instituti klinikasiga murojaat qilib kelgan bemor tahlil qilindi. Diagnostika jarayonida klinik ko'rik, antropometrik tekshiruv natijalari, fotoprotokollar, rentgenografik tekshiruv va gipsli modellar tahlili o'tkazildi. "Gipsli modellar va rentgenografik tahlil ortodontik diagnostikaning asosiy usullari sifatida qo'llaniladi" [1]. Davolash uchun braket tizimlari, jag' kengaytiruvchi olib qo'yiladigan plastinka apparatlari qo'llanildi va mioterapiya buyurildi. "Mioterapiya og'iz mushaklarining funktsiyasini yaxshilashda samarali usul sifatida tan olingan" [4].

Natijalar va muhokama: Bolalarda frontal tishlarning zich joylashuviga quyidagi omillar sabab bo'lishi mumkin:

1. Irsiy omillar – jag' va tishlar o'lchamining nomutanosibligi genetika bilan bog'liq bo'lishi mumkin. "Tishlarning rivojlanishi va jag' o'lchamlari ko'pincha irsiy omillar bilan belgilanadi" [15].

2. Ortib ketgan tish hajmi – makrodentiya (kattalashgan tishlar) jag' bo'shlig'iga sig'masligi natijasida zich joylashuvga sabab bo'ladi [6].

3. Jag'ning yetarli rivojlanmasligi – sut tishlarining erta yo'qotilishi yoki jag'ning o'sish sur'atining sekinligi tishlarning noto'g'ri joylashishiga olib keladi. "Sut tishlarining erta yo'qolishi jag'ning o'sishini sekinlashtirishi mumkin" [5].

4. Zararli odatlar – barmoqlarni so'rish, noto'g'ri yutish refleksi va og'iz orqali nafas olish tishlarning siljishiga olib kelishi mumkin. "Bu odatlar yuz-jag' tizimining rivojlanishiga salbiy ta'sir ko'rsatadi" [10].

Tishlarning jag' bo'shlig'ida sig'may joylashishi bosqichma-bosqich rivojlanadi:

1. O'rnashish bosqichi – doimiy tishlar chiqishda yetarli joy topa olmaydi [9].

2. Kompressiya va bosim ta'siri – tishlarning zichligi parodont to'qimalarga ortiqcha bosim o'tkazadi. "Biomekanik jihatdan bu bosim tishlarning noto'g'ri joylashishini yanada kuchaytiradi" [9].

3. Sekundar deformatsiya – agar muammo vaqtida bartaraf etilmasa, pastki va yuqori jag'da skelet o'zgarishlari kuzatiladi [7].

Quyida tishlar zich joylashganda qo'llaniladigan breket tizimi, jag' kengaytiruvchi plastinka apparati va mioterapiya usullari bilan davolashdagi afzalliklar va kamchiliklarni taqqoslash jadvali keltirilgan:

Kriteriyalar	Breket tizimi	Jag' kengaytiruvchi plastinka apparati	Mioterapiya
Afzalliklar			
Samaradorlik	Tishlarni aniq joylashtirish va tuzatish.	Jag' kengaytirish orqali tishlar uchun joy yaratish.	Mushaklarni mustahkamlash va tishlarning to'g'ri joylashishini ta'minlash.
Qo'llash qulayligi	Ko'pchilik bemorlar uchun mos.	Bolalar va o'smirlarda samarali.	Noinvaziv usul, og'riqsiz.
Natijalarning barqarorligi	Uzoq muddatli barqaror natijalar.	Jag'ning anatomik tuzilishini yaxshilaydi.	Doimiy amaliyot bilan uzoq muddatli samara beradi.
Ko'rinish	Zamonaviy breketlar (masalan, keramik yoki lingual) kam seziladi.	Plastinka apparati tishlardan tashqarida joylashgan.	Tishlarda qo'shimcha apparatlar bo'lmaydi.
Kamchiliklar			
Og'riq va noqulaylik	Dastlabki kunlarda og'riq va noqulaylik.	Plastinka apparati og'izda noqulaylik hissi yaratishi mumkin.	Natijalar sekin namoyon bo'ladi.

Kriteriyalar	Breket tizimi	Jag' kengaytiruvchi plastinka apparati	Mioterapiya
Davolash muddati	Uzoq davolash muddati (odatda 1-3 yil).	Jag' kengaytirish jarayoni uzoq vaqt talab qilishi mumkin.	Uzoq muddatli va muntazam amaliyot talab qiladi.
Narx	Qimmat (material va shifokor xizmatlari hisobiga).	Plastinka apparati narxi breket tizimiga qaraganda arzonroq.	Arzon, lekin muntazam mashqlar va shifokor nazorati talab qilinadi.
Parvarish qilish	Tishlarni tozalash qiyin, maxsus parvarish talab qilinadi.	Plastinkani tozalash va parvarish qilish kerak.	Hech qanday qo'shimcha parvarish talab qilinmaydi.
Yosh cheklovlari	Har qanday yoshdagi bemorlar uchun mos.	Asosan bolalar va o'smirlar uchun samarali.	Har qanday yoshdagi bemorlar uchun mos.
Yon ta'sirlar	Tishlarning ildizi qisqarishi yoki shishishi mumkin.	Jag'ning noto'g'ri kengayishi yoki og'riq paydo bo'lishi mumkin.	Agar noto'g'ri amalga oshirilsa, mushaklarning noto'g'ri rivojlanishi.
Qo'llanish sohasi	Tishlarning qiyshayishi, oraliqlarning noto'g'ri joylashishi.	Jag'ning torligi yoki noto'g'ri rivojlanishi.	Tishlarning noto'g'ri joylashishi va mushaklarning zaifligi.

Xulosa: Tadqiqot natijalari shuni ko'rsatdiki, bemorlarning 65 foizida jag' rivojlanishining sustligi, 25 foizida esa salbiy odatlari sababli tish zichlashuvi yuzaga kelgan. Davolash usullari orasida jag'larni kengaytiruvchi plastinka apparatlari eng samarali usul sifatida baholandi. Shuni yodda tutish zarurki, har bir usulning o'ziga xos afzalliklari va kamchiliklari mavjud, shuning uchun bemorning yoshi, muammosiga qarab eng mos usulni tanlash kerak.

Foydalanilgan adabiyotlar:

1. Bishara, S. E. (2001). Textbook of Orthodontics.
2. Graber, L. W., Vanarsdall, R. L., & Vig, K. W. L. (2017). Orthodontics: Current Principles and Techniques (6th Edition).
3. Kesling, H. D. (1945). The Philosophy of the Tooth Positioning Appliance. American Journal of Orthodontics and Oral Surgery, 31(6), 297-304.
4. Korbendau, J. M., & Patti, A. (2007). Myofunctional Therapy. International Journal of Orthodontics, 18(2), 13-20.
5. McNamara, J. A. (1981). Orthodontic Treatment in the Early Mixed Dentition. American Journal of Orthodontics, 79(5), 477-499.
6. McNamara, J. A., & Brudon, W. L. (2001). Orthodontics and Dentofacial Orthopedics.
7. Melsen, B. (2012). Adult Orthodontics.
8. Moyers, R. E. (1988). Handbook of Orthodontics (4th Edition).
9. Nanda, R. (2005). Biomechanics in Orthodontics: Principles and Practice.
10. Petrovic, A. G., & Stutzmann, J. J. (1990). Mechanisms of Craniofacial Growth and Modulation of the Orthodontic Treatment Effects.
11. Proffit, W. R., Fields, H. W., & Sarver, D. M. (2018). Contemporary Orthodontics (6th Edition).
12. Proffit, W. R., & White, R. P. (1991). Surgical-Orthodontic Treatment.
13. Tanne, K., & Sakuda, M. (1994). Biomechanical and Clinical Considerations of a Modified Protraction Headgear. American Journal of Orthodontics and Dentofacial Orthopedics, 105(2), 125-136.

14. Tulloch, J. F. C., Phillips, C., & Proffit, W. R. (1997). Outcomes in a 2-Phase Randomized Clinical Trial of Early Class II Treatment. American Journal of Orthodontics and Dentofacial Orthopedics, 111(3), 283-292.
15. Van der Linden, F. P. G. M. (1983). Development of the Dentition.

UO'K: 616-08-035

ICHKI BO'YINTIRIQ VENA KLAPAN YETISHMOVCHILIGINING ASORATLARINI SONOGRAFIYADA BAHOLASH

Ozodova N.M.
Toshkent tibbiyot akademiyasi Urganch filliali

Annotatsiya. Bugungi kunda qon tomir jarrohligining jadal rivojlanishga qaramasdan, xozirgi kungacha uning kam o'rganilgan bo'limlaridan biri periferik tomirlarning anevnizmal o'zgarishi muammosi bo'lib qolmoqda. Ichki bo'yintiriq vena (VJI) klapan yetishmovchiligi turli klinik holatlarda kuzatiladigan va venoz qon aylanishining buzilishiga olib keladigan patologik jarayondir. Bu holat, odatda, venoz qonning bosh va bo'yin hududidan yurakka qaytishidagi muammolar bilan bog'liq bo'ladi. Klapan yetishmovchiligi venoz reflüks (orqaga qaytgan qon oqimi) va bosim oshishi bilan kechadi, bu esa bir qator asoratlarni keltirib chiqarishi mumkin. Bu holat, asosan,venoz trombozlar ,nevrologik va kardiovaskulyar tizimga salbiy ta'sir qiladi. Shuning uchun hozirgi kunda ichki bo'yintiriq venasi patologiyalari o'rgnilmoqda.

Tadqqiqotning maqsadi. Sonografik tekshiruvlarda bemorlarda ichki bo'yintiriq vena (IBV) klapan yetishmovchiligini va uning asoratlarini o'rganish maqsad qilingan.

Tadqiqot materiali va usullari. Tadqiqot ishlari asosan Xorazm viloyati Urganch shaxrida joylashgan "ULTRA VEDA" oilaviy korxonasiga qarashli bo'lgan xususiy klinikada olib borildi. Ma'lumotlar 2021-2024 yillarda klinikaga 117 nafar bemor va 40 nafar boshqa nazorat guruhidagi bemorlardan olingan materiallar o'rganilib, retrospektiv tahlil qilindi. SHulardan 98 nafari ayol va 59 nafari erkaklar, bemorlar 33 yoshdan 76 yoshgacha bo'lgan insonlarni tashkil qildi.

Tadqiqot natijalari.O'ng IBV klapan yetishmovchiligi chapdagiga qaraganda ko'proq uchragan , shuningdek, 26,8% bemorlarda ikkala IBV klapan yetishmovchiligi aniqlangan. Ichki bo'yintiriq vena klapan yetishmovchiligi bo'lgan 23 nafar bemorda (19,7%) va nazorat guruhining 2 (5,0 %) ishtirokchisida ikkala ichki yelka venasining klapan yetishmovchiligi aniqlangan.

Xulosa. Ichki bo'yinturuq vena klapan yetishmovchiligi va uning natijasida kelib chiqadigan refluksini tashxislashning asosiy skrining va eng samarali, kam xarajat usuli bu ultratovushli dupleks angioskanerlash usulidir.

Kalit so'zlar: *bo'yintiriq vena klapani, bo'yintiriq vena anevrizmalari, venoz yetishmovchilik, tomir devorining xaltachasimon kengayishlari, tromboz holati, o'tkinchi global amneziya, ultratovush tekshiruvi, elektroensefalografiya.*

EVALUATION OF THE COMPLICATIONS OF INTERNAL JUGULAR VEIN VALVE INSUFFICIENCY BY SONOGRAPHY.

Ozodova N.M.
Urgench branch of the Tashkent Medical Academy

Relevance of the Topic. Today, despite the rapid development of vascular surgery, one of its poorly studied sections is the problem of aneurysmal changes in peripheral vessels. Valvular insufficiency of the internal jugular vein (IJV) is a pathological condition observed in various clinical scenarios, leading to impaired venous circulation. This condition is typically associated with difficulties in the return of venous blood from the head and neck region to the heart. Valvular insufficiency is characterized by venous reflux (retrograde blood flow) and increased venous pressure, which can result in a range of complications. Internal jugular vein pathologies are currently being studied. This condition mainly affects venous thrombosis, neurological and cardiovascular systems.

Research Objective. The purpose of the research was to study the valve insufficiency of the internal jugular vein (IJV) and its complications through sonographic examinations.

Research Materials and Methods. The research work was mainly carried out in a private clinic belonging to the "ULTRA VEDA" family enterprise located in Urgench city, Khorezm region. Data were collected from 117 patients and 40 patients in the control group, materials were studied and retrospectively analyzed from 2021-2024. Among them, 98 were female and 59 were male, patients ranged from 33 to 76 years old.

Research results. Right IJV valve insufficiency was more common compared to the left side, and valve insufficiency of both IJVs was detected in 26.8% of patients. Valve insufficiency of both internal jugular veins was found in 23 patients (19.7%) and 2 (5.0%) participants in the control group.

Conclusion. Diagnosis of internal jugular vein valve insufficiency and its resulting reflux.

Key words: *jugular vein valve, jugular vein aneurysms, venous insufficiency, saccular expansions of the vascular wall, thrombosis condition, transient global amnesia, ultrasound, electroencephalography*.

ОЦЕНКА ОСЛОЖНЕНИЙ НЕДОСТАТОЧНОСТИ КЛАПАНА ВНУТРЕННЕЙ ЯРЕМНОЙ ВЕНЫ С ПОМОЩЬЮ СОНОГРАФИИ.

Озодова Н.М.

Ургенчсий филиал Ташкентской медицинской академии

Аннотация. Сегодня, несмотря на бурное развитие сосудистой хирургии, одним из малоизученных ее разделов является проблема аневризмальных изменений периферических сосудов. Недостаточность клапана внутренней яремной вены (ВЯВ) является патологическим процессом, который наблюдается при различных клинических состояниях и приводит к нарушению венозного кровообращения. Данное состояние, как правило, связано с затруднением возврата венозной крови из области головы и шеи к сердцу. Недостаточность клапана характеризуется венозным рефлюксом (обратным током крови) и повышением венозного давления, что может привести к развитию ряда осложнений. Этот процесс в основном негативно влияет на венозные тромбозы, а также на нервную и сердечно-сосудистую системы. Поэтому в настоящее время изучаются патологии внутренней яремной вены.

Цель исследования. В сонографических исследованиях ставится цель изучить недостаточность клапанов внутренней яремной вены (ВЯВ) у пациентов и её осложнения.

Материалы и методы исследования.Исследование проводилось в частной клинике, принадлежащей семейному предприятию **«ULTRA VEDA»,** расположенной в городе Ургенч, Хорезмская область. Данные были собраны в период с 2021 по 2024 год, включав 117 пациентов и 40 человек из контрольной группы. Проведен ретроспективный анализ полученных материалов. Из общего числа обследуемых 98 были женщины и 59 – мужчины. Возраст пациентов варьировал от 33 до 76 лет.

Результаты исследования.Недостаточность клапана правой внутренней яремной вены (ВЯВ) встречалась чаще, чем левой. У 26,8% пациентов была выявлена двусторонняя недостаточность клапанов ВЯВ. Клапанная недостаточность внутренней яремной вены была диагностирована у 23 пациентов (19,7%) основной группы и у 2 (5,0%) участников контрольной группы, при этом у них также была выявлена недостаточность клапанов обеих плечевых вен.

Вывод. Основным скрининговым и наиболее эффективным, малозатратным методом диагностики клапанной недостаточности внутренней яремной вены и возникающего вследствие этого рефлюкса является ультразвуковое дуплексное ангиосканирование.

Ключевые слова: *клапан яремной вены, аневризмы яремной вены, венозная недостаточность, мешотчатые расширения сосудистой стенки, тромбоз, транзиторная глобальная амнезия, ультразвуковое исследование, электроэнцефалография.*

Mavzuning dolzarbligi. So'ngi yillarda yurak va qon-tomir faoliyati to'g'risida aniqroq va ob'ektiv ma'lumotlarni taqdim etadigan ultrasonografiya yo'nalishi jadal rivojlanib bormoqda. Takomillashib borayotgan 3D-texnologiyalar, hamda doppler-ultratovush tekshiruvi kerakli ma'lumotlarni beradi. [2, 3]. Yuqori chastatali datchiklar va takomillashgan ultratovush tekshiruvi qurilmalari a'zolar va ularning kasalliklari haqida to'liq ma'lumotlar olishda yordam beryabdi. Afsuski, hozirgi kunda yurak va qon-tomir kasallik asoratlarining avj olgan holatlari respublikamiz bo'ylab ko'plab qayt qilinayabdi. Bunga sabab qilib shuni aytish mumkinki, turli tibbiyot muassasalar va respublikamizning chetki tibbiyot markazlari bemorlani tekshirishda yuqori takomillashgan tekshiruv apparatlariga ega emasligi va turlicha tekshiruv normativlardan foydalanilayotganligini aytish mumkin. Bu esa, hozirgi kunda bemorlarda uchrab turgan ko'pchilik nevrologik buzilishlar, bo'yin va yuz sohosidagi trofik o'zgarishlar, venoz tramboz holatlari,

kardiovaskulyar tizimga bir qancha salbiy buzilishlarni keltirib chiqaryabdi. Markaziy asab tizimi faoliyatining patologiyasiga miya ichi qon aylanishining buzilishi sabab bo'layotganligi bir qancha ilmiy tekshirishlar natijasida aniqlanmoqda. Miya ichi qon aylanishining buzilishiga sabab qilib, miya va bo'yin soxasi qon tomirlaridagi turg'unlik holatining buzilishini aytish mumkin. Masalan, ichki bo'yintiriq vena (vena jugularis interna) klapan yetishmovchiligidir. Shuni takidlash kerakki,ichki bo'yintiriq vena klapanlari venoz qon oqimining bir tomonlama yurakka yo'naltirilishini ta'minlaydi. Ichki bo'yintiriq vena (IBV) klapan yetishmovchiligi turli klinik holatlarda kuzatiladigan va venoz qon aylanishining buzilishiga olib keladigan patologik jarayondir. Bu holat, odatda, venoz qonning bosh va bo'yin hududidan yurakka qaytishidagi muammolar bilan bog'liq bo'ladi.. Ichki bo'yintiriq vena klapan yetishmovchiligi (IBVKKY) patofiziologik jihatdan venoz oqimning orqaga qaytishi (reflüks) bilan tavsiflanadi. Bu holat, asosan,venoz trombozlar ,nevrologik va kardiovaskulyar tizimga salbiy ta'sir qiladi. [3, 4, 5]. Shuning uchun hozirgi kunda ichki bo'yintiriq venasi patologiyalari o'rgnilmoqda Ichki bo'yintiriq vena klapan yetishmovchiligining rivojlanishiga sabab bo'luvchi omillar quyidagilardan iborat:

1. Tug'ma anomaliyalar:
   - Klapanlarning yetarli rivojlanmasligi yoki yo'qligi.
2. Orttirilgan omillar:
   - Tromboz yoki tromboflebit.
   - Venada shikastlanish (jarrohlik muolajalar, kateterizatsiya).
   - Qon bosimining patologik oshishi (o'pka gipertenziyasi yoki yurak yetishmovchiligi).
3. Degenerativ kasalliklar:
   - Venoz tomirlarning elastiklik va tonusining pasayishi.
4. Bosim ortishi:
   - Bo'yinda massa (shishlar, limfadenopatiya, o'sma), bo'yinda tor joylashgan holatlar.
   - Homiladorlikda venoz bosimning oshishi.

Ichki bo'yintiriq vena klapan yetishmovchiligi natijasida:

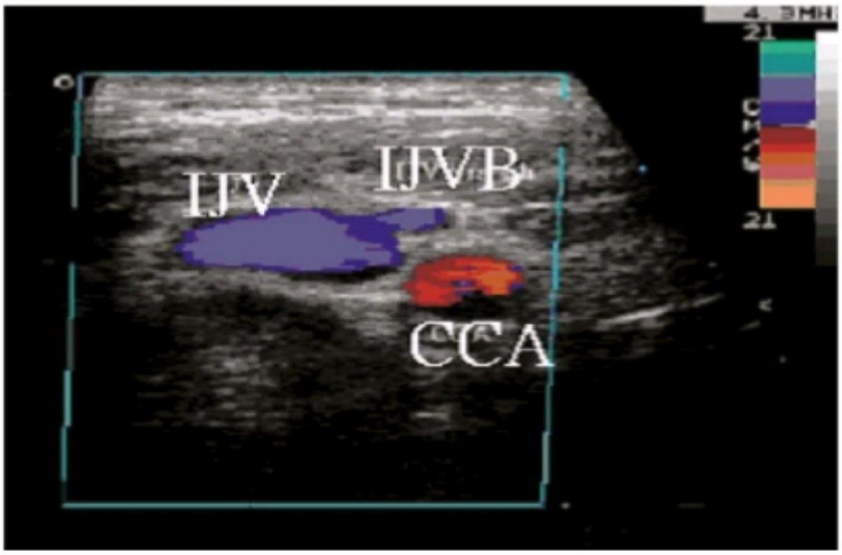
1. Venoz qonning orqaga qaytishi (reflüks) kuzatiladi.
2. Venoz turg'unlik yuzaga keladi, bu esa to'qimalar va organlarda kislorod ta'minotining buzilishiga olib keladi.
3. Venoz bosimning oshishi intrakranial venoz drenajni buzadi.
4. To'qimalarda oksidlovchi stress kuchayadi, bu esa surunkali yallig'lanish jarayonlariga zamin yaratadi.

So'ngi yillarda yuqorida sanab o'tilgan usullar ichida ultratovush tekshiruvi skrining vositasi sifatida ham, yakuniy tashxis qo;yish va davolash samaradorligini baholash uchun ham yetakchi o'rinni egallab kelmoqda[5,6].

Tadqqiqotning maqsadi. Sonografik tekshiruvlarda bemorlarda ichki bo'yintiriq vena (IBV) klapan yetishmovchiligini va uning asoratlarini o'rganish maqsad qilingan. Ichki bo'yintiriq vena klapani yetishmovchiligi bo'lgan va IBVKY bo'lmagan yoshi, jinsi va qon tomir xavf omillari profili o'xshash bo'lgan bemorlar nazorat guruhiga kiritilgan.

Tadqiqot materiali va usullari. Tadqiqot ishlari asosan Xorazm viloyati Urganch shaxrida joylashgan "ULTRA VEDA" oilaviy korxonasiga qarashli bo'lgan xususiy klinikada olib borildi. Ma'lumotlar 2021-2024 yillarda klinikaga 117 nafar bemor va 40 nafar boshqa nazorat guruhidagi bemorlardan olingan materiallar o'rganilib, retrospektiv tahlil qilindi. SHulardan 98 nafari ayol va

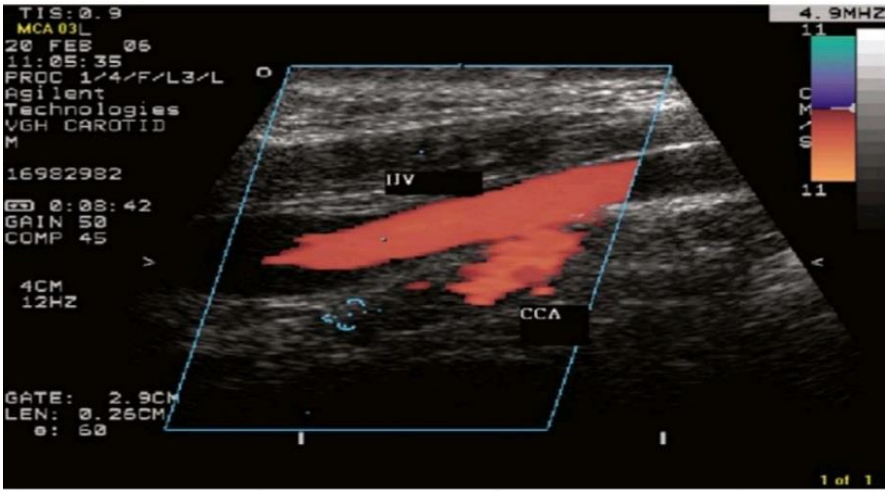
59 nafari erkaklar, bemorlar 33 yoshdan 76 yoshgacha bo'lgan insonlarni tashkil qildi. Bemorlarni har ikkala IBV venoz qon oqimining dopplerografik tekshiruvi, shu jumladan, manometr



yordamida nazorat qilinadigan Valsalva sinovidan keyingi tekshiruv o'tkazildi [6,9]. IBV klapan yetishmovchiligi mezoni sifatida Valsalva sinovi davomida 0,8 soniyadan ortiq davom etgan qon oqimining qaytishi (refluks) qabul qilindi.Har bir bemorga Valsalva testini o'tkazishdan oldin va keyin tekshiruv o'tkazilgan. Bemor yotgan holatda bo'lganida, ultratovush sensorini klavikulyar chuqurliklar ustiga joylashtirib, yelka- bosh tomiri va ichki yelka venasining qo'shilish joyini vizualizatsiya qilindi. B-rejimida ichki yelka venasi klapanini uzundan-uzun va kesik tekisliklarda ko'rsatildi. Dopplerografiyada rangli kartografiya yordamida, kursorni ichki yelka venasi klapanidan 5 mm proksimal joyga, uzundan-uzun tekislikda joylashtirildi. Namuna o'lchami, dopplerografiya ma'lumotlari asosida tomir diametri bilan mos ravishda, tomirning uzunligiga nisbatan 45° dan 60° gacha bo'lgan burchakli korreksiya asosida to'g'rilangan. Klapanning yopilishini Valsalva testining nazorat qilingan usuli yordamida aniqlangan. Mazkur tadqiqotda bo'yintiriq venalar bo;limini va uning oqim shaklini ultratovush doppleragrafiya yordamida aniqlash mumkin[58]. Avvalgi tadqiqotimizda, bizlar bo'yin asosidan pastki jag'gacha ko'ndalang kesim ko'rinishida IBV-ni ajratib oldik, bu orqali bo'yindagi bo'yintiriq venalar bo'linmasini aniqlash mumkin. (1-rasm) [1,8].Barcha bemorlarga boshqa kasalliklarni istisno qilish maqsadida miya MRT, elektroensefalografiya (EEG) va laborator tekshiruvlar o'tkazilgan.

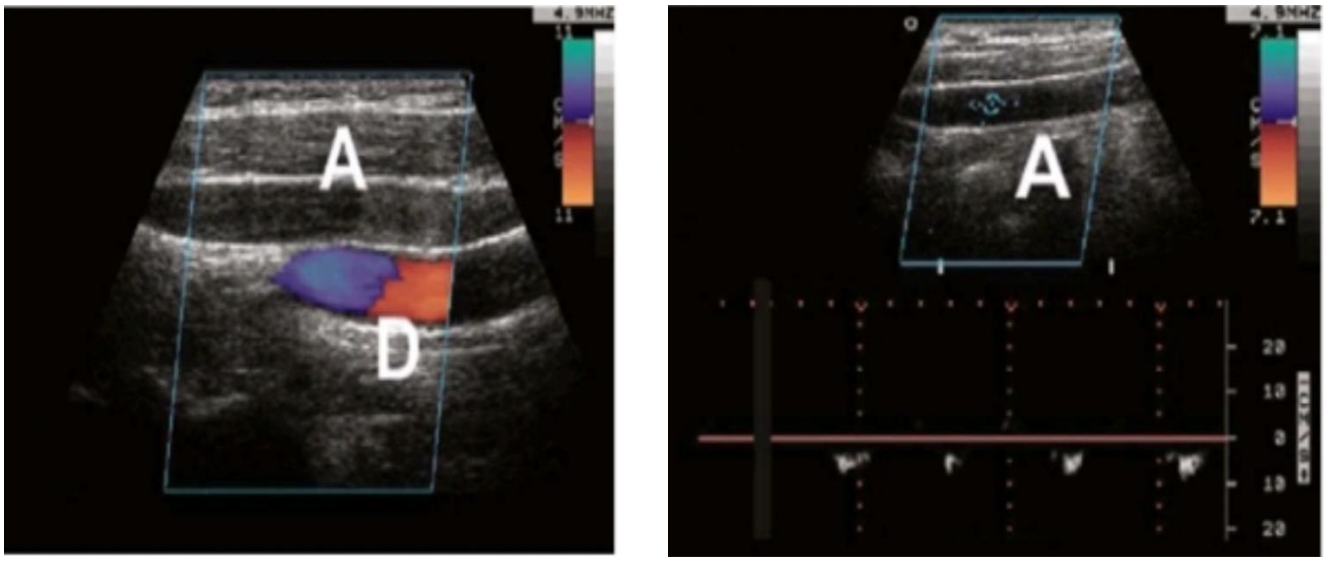
1-rasm. Bo'yin asosidan pastki jag'gacha bo'lgan kesimli ko'rinishda ichki jugulyor vena (IJV-) izolyatsiya qilinadi, bo'yindagi ichki jugulyor vena shoxlarini (IJVBs) aniqlash uchun. CCA(UUA) = umumiy karotid arteria.

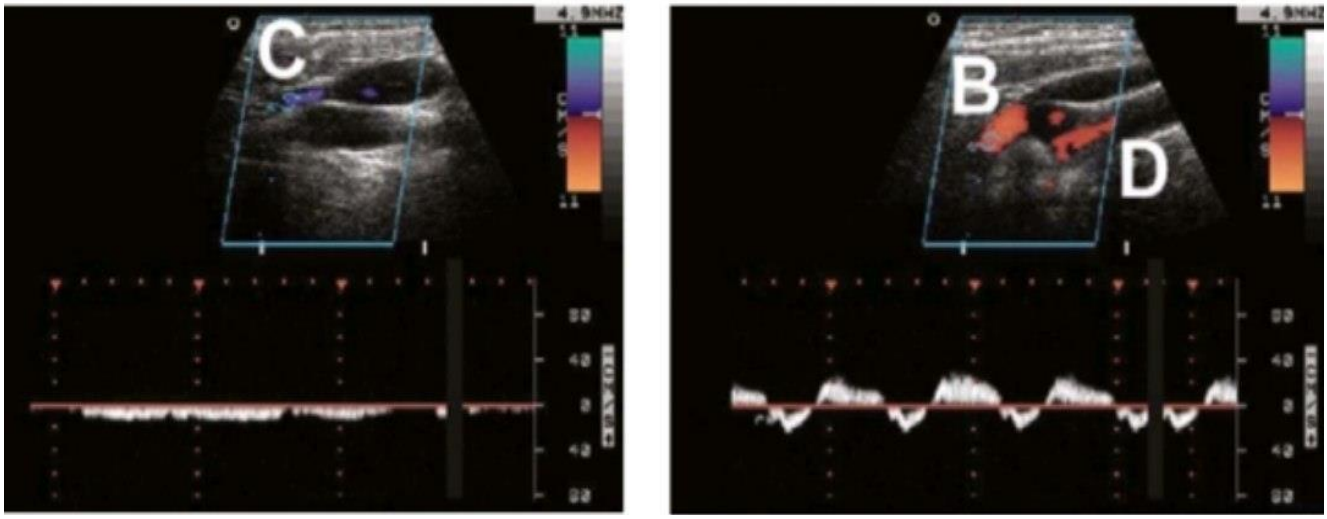
Olingan natijalar muhokamasi. Ichki bo'yintiriq venasining klapan holati har bir bemorda baholangan. 117 nafar TGA bemoridan 91 tasida (77,8%) va nazorat guruhidagi 40 bemordan 10 tasida (25,0%) kamida bir bo'yintiriq venasining klapan yetishmovchiligi aniqlangan. O'ng IBV klapan yetishmovchiligi chapdagiga qaraganda ko'proq uchragan , shuningdek, 26,8% bemorlarda ikkala IBV klapan yetishmovchiligi aniqlangan. Ichki bo'yintiriq vena klapan yetishmovchiligi bo'lgan 23 nafar bemorda (19,7%) va nazorat guruhining 2 (5,0 %) ishtirokchisida ikkala ichki yelka venasining klapan yetishmovchiligi aniqlangan. Olingan natijalar solishtirilib, o'rganilib chiqilganida bo'yintiriq vena klapan yetishmovchiligi bor bemorlarda venadagi qon oqimida refluks ko'proq katta yoshli ayollarda ko'proq kuzatildi. Biz olib borgan tadqiqotlar natijalari yosh bo'yicha tahlil qilinganida bo'yintiq vena klapan yetishmovchiligi natijasida kelib chiqqan reflukslar asosan 45 yoshdan oshgan(tug'ma vena yetishmovchiligi bo'lgan yoshlardan tashqari) bemorlarda ko'proq uchrashi aniqlandi(2- rasm). Shuni ta'kidlash kerakki, ichki bo'yitiriq



vena klapan yetishmovchiligida doppleragrafiyada rangli kartografiya yordamida bemorlarning holatiga qarab klapan ishlashini baholashga imkon beradi. [7, 8].

1-rasm. Tinch holatda uzluksiz bo'yinbog' venoz reflyuks. UUA=umumiy uyqu arteriyasi; IBV = ichki bo'yintiriq venasi.





2-rasm. Sonografik tadqiqotlar bemorlarda chap distal ichki bo'yintiriq tomirida (IBV) segmental teskari oqimni ko'rsatmoqda. Chap IBV ning proksimal segmenti (A) o'z-o'zidan aks-sado kontrasti va tomchilab oqimni ko'rsatadi. Chap IBV ning distal segmenti (B) teskari oqimni ko'rsatadi. Chap IBV tarmog'ining oqim yo'nalishi (JVB) (C) chap IBV ga kiradi. O'ng IBV va JVB da oqim naqshlari normal. "D" umumiy karotid arteriyani ko'rsatadi. BRV = brahiocefalik tomir. SV = subklavian tomir; SVC = yuqori vena kava.

Xulosa qilib shuni aytishimiz mumkinki, ichki bo'yinturuq vena klapani yetishmovchiligi va uning natijasida kelib chiqadigan refluksi kam uchraganligi sababli qon tomir tizimining kam o'rganilgan kasalliklaridan biridir. Uning diagnostikasi ko'pincha bo'yindagi bir qator kistalar, vena trombozi, limfa tizimi kasalliklariva boshqa venalar yetishmovchiligining klinik belgilari o'xshashligi tufayli sezilarli qiyinchiliklarni keltirib chiqaradi. Ichki bo'yinturuq vena klapan yetishmovchiligi va uning natijasida kelib chiqadigan refluksini tashxislashning asosiy skrining va eng samarali, kam xarajat usuli bu ultratovushli dupleks angioskanerlash usulidir. SHuning uchun bu usulni kasalliklar profilaktikasida keng ko'lamda tadbiq qilish yaxshi samaradorlikka erishishda hamda davo taktikalarini to'g'ri belgilashda bu usul o'z samarasini beradi.

Yakuniy fikrlar. M. Nedelmann va hammualliflar [12] ushbu tadqiqotda qo'llangan standartlashtirilgan Valsalva sinamasi metodikasidan foydalangan holda intravenoz havo pufakchalari kiritishda IBV klapani yetishmovchiligining aniqlanishida sezilarli farqlarni aniqlamagan. Mualliflar reflüks sababini brakiosefal venaning ko'krak suyaklari va aorta o'rtasida joylashuvi tufayli siqilishidan kelib chiqqanini taxmin qilishgan, bu esa yuqori kovak vena tomonga qon oqimining qiyinlashishiga va IYV da reflüks yuzaga kelishiga olib keladi.Bizning tadqiqotimiz kichik tanlovlar va turli diagnostik usullar yordamida o'tkazilgan avvalgi tadqiqotlarning natijalarini tasdiqlaydi [10, 11, 13]. Ushbu tadqiqot natijalari ichki bo'yintiriq vena (IBV) klapanining yetishmovchiligi qonning refluksiga va uning patofiziologiyasida muayyan rol o'ynashini taxmin qilishga imkon beradi.

Foydalanilgan adabiyotlar:

1. Akkawi NM, Agosti C, Rozzini L, et al. Transient global amnesia and venous flow patterns. Lancet 2001;357:639.

2. Avezov A.U. Examination of venous thromboembolism in patients with oncopathology using modern innovative methods. "Current Problems of Pediatric Radiology" International Scientific and Practical Journal, 2019. 12(2) p. 10.(in Uzb)
3. Avezov A.U. Modern innovative studies of venous thromboembolism in patients with oncopathology. "Pediatrics" Journal, Tashkent, 2019.9(5) pp. 10-15.(in Russ)
4. Avezov A.U. Study of the prevalence of risk factors for the development of pulmonary thromboembolism in malignant neoplasms. Journal "Biomedicine and Practice" Tashkent, 2020.4(5). p. 132-138 (in Uzb)
5. Avezov A. et al. Study of the development level of risk factors in dangerous tumors causing lonely arterial thromboembolia //International Journal of Advanced Science and Technology. – 2020.29.(5). P. 1751-1760.(in Engl.)
6. Aytimova G. Yu., Avezov A. U., Urunbaeva N. A. Study of peripheral arterial diseases among the population of the Kharezm region // «Yosh olimlar tibbiyot jurnali» Tashkent medical academy «Medical journal of young scientists» Education, science and innovative ideas in the world Issue of the journal Tashkent Medical Academy. 2022.1.(3).P.7-15. (in Russ)
7. C. Cajes, L.F. Cisneros, R. Lagos, C. Zuk, S.F. Ameriso. Internal jugular vein valve incompetence is higly prevalent in transient global amnesia. " Stroke" 2010;41:1: P-67-71 (in Russ)
8. Chih-Ping Chung, Han-Hwa Hu. Jugular Venous Reflux. "J Med Ultrasound " 2008;16(3):P-210–222Chung CP, Hsu HY, Chao AC, et al. Flow volume in the jugular vein and related hemodynamics in the branches of the jugular vein. Ultrasound Med Biol 2007;33:500–5.
9. Kilic K, Kaya U, Sakat MS, Mazlumoglu R, Ucuncu H. Saccular aneurysm of i nternal jugular vein in a young patient. J Craniofac Surg. 2017;28(3).P-850-851.
10. Lewis S.L. Aetiology of transient global amnesia. Lancet. 1998;352:397–399.
11. Maalikjy Akkawi N., Agosti C., Anzola G.P., Borroni B., Magoni M., Pezzini A., Rozzini L., Vignolo L.A., Padovani A. Transient global amnesia: a clinical and sonographic study. Eur Neurol. 2003;49:67–71.
12. Nedelmann M., Teschner D., Dieterich M. Analysis of internal jugular vein insufficiency: a comparison of two ultrasound methods. Ultrasound Med Biol. 2007;33:857–862.
13. Sander D., Winbeck K., Etgen T., Knapp R., Kingelhofer J., Conrad B. Disturbance of venous flow patterns in patients with transient global amnesia. Lancet. 2000;356:1982–1984.

UO'K: 616.89

YAQIN QARINDOSHLAR ORASIDAGI NIKOHLARDAN TUG'ILGAN BOLALARDA PAROKSIZMAL BUZILISHLARNI TASHXISLASH VA DAVOLASH USULLARI

Pulatova R.R., Mo'minov R.Q., Isakov M.U.
Andijon davlat tibbiyot instituti

Rezyume. Yaqin qarindoshlar orasidagi irsiy moyilligi bor bo'lgan juftliklar orasida tug'ilgan bolalarda psixonevrologik asoratlar va yepilepsiya kasalligi yuqori foizni tashkil etadi. Ushbu kasalliklar kechishi ogir va yomon okibatli kechadi.

Kalit so'zlar: *yaqin qarindoshlar nikoxi, irsiy moyillik, bolalar, epilepsiya, ruhiy buzilishlar.*

METHODS OF DIAGNOSTICS AND TREATMENT OF PAROXYSMAL DISORDERS IN CHILDREN BORN FROM MARRIAGES BETWEEN CLOSE RELATIVES

Pulatova R.R., Muminov R.K., Isakov M.U.
Andijan State Medical Institute

Resume. The combination of hereditary burden and consanguineous marriages significantly increases the risk of children developing mental disorders and epilepsy, which proceed with greater progression and, accordingly, a worse prognosis.

Keywords: *consanguineous marriage, hereditary burden, children, epilepsy, mental disorders.*

МЕТОДЫ ДИАГНОСТИКИ И ЛЕЧЕНИЯ ПАРОКСИЗМАЛЬНЫХ РАССТРОЙСТВ У ДЕТЕЙ, РОЖДЕННЫХ ОТ БРАКОВ МЕЖДУ БЛИЗКИМИ РОДСТВЕННИКАМИ

Пўлатова Р.Р., Муминов Р.К., Исаков М.У.
Андижанский государственный медицинский институт

Резюме.Сочетание наследственной отягощённости и близкородственных браков значительно повышает риск развития детей с психическими расстройствами и эпилепсией, протекающих с большей прогредиентностью и, соответственно, худшим прогнозом.

Ключевые слова: *близкородственный брак, наследственная отягощенность, дети, эпилепсия, психические расстройства.*

Dolzarbligi. Talvasa sindromlar psixiatriyaning eng muhim muammolaridan biri bo'lib, bolalar populyatsiyasida katta foizni egallaydi [1,4,5]. Bu, ayniqsa, yaqin qarindoshlar o'rtasidagi nikohlar natijasida tug'ilgan bolalarga to'g'ri keladi [6,7]. Ko'pgina mualliflarning fikriga ko'ra, turli xil rivojlanish anomaliyalari, yalpi psixonevrologik kasalliklar, shu jumladan tutqanoq, shuningdek yerta bolalar o'limining chastotasi tegishli nikohlarda sezilarli darajada yuqori [2,3,8,9].

Izlanish maqsadi. Yaqin nikohda tug'ilgan bolalarda paroksizmal sindromlar klinik ko'rinishining chastotasi va xususiyatlarini o'rganishdan iborat.

Tekshirish materiallari va usullari. Andijon viloyat psixonevrologiya dispanserida (AVPND) ro'yxatga olingan bemorlar orasidan 100 nafar yaqindan bog'liq nikohlarda tug'ilgan 3 yoshdan 15 yoshgacha bo'lgan bolalar tanlab olindi. Ulardan 47 nafari o'g'il bolalar va 53 nafari qiz

bolalardir. Barcha tekshirilgan bolalar miyaning klinik va paraklinik tadqiqotlaridan o'tdi: nevrologik va ruhiy holat elektroensefalogrammasi (EEG); 47 bolalar miyaning magnit-rezonans tomografiya (MRT) dan o'tdi.

Tekshirilganlarning asosiy guruhi konvulsiv kasalliklarning irsiyati og'irlashganlik bilan chambarchas bog'liq bo'lgan nikohlardan 52 bolalaridan iborat bo'ldi.

Nazorat guruhi bir-biri bilan bog'liq bo'lmagan oilalarning 48 nafar farzandidan iborat.

Guruh tasodifiy raqamlar orqali 10% vakillik namunasi asosida tanlangan (2-jadval)

Izlanish natijalari va ularning muhokamasi. Epileptik sindrom turli chastota va klinik belgilari bilan har ikki guruhda ham kuzatildi. Paroksizmal kasalliklarga qo'shimcha ravishda, ayrim bolalar organik miya shikastlanishi belgilari shaklida turli xil zo'ravonliklarning nevrologik kamchiliklarini ko'rsatdilar, ammo bu har doim MRT tekshiruvi bilan tashxislanmagan (jadval 1).

Jadval.1

Tekshiruv guruhidagi bemorlarning solishtirma tahlili

Ko'rsatkichlar	Asosiy guruh		Nazoart guruhi	
	Abs.	%	Abs.	%
Epileptik sindrom	43	52	12	25
Kliniko-nevrologik defitsit	16	31	8	17
MRT- o'zgarishlari	8	15	4	8
MRT o'zgarishsiz	39	75	5	10
Patologik EEG	43	52	8	17

$p<0.05$

Asosiy guruh bolalarida konvulsiv sindrom epileptik tutqanoq bilan tez - tez umumiy xarakterga ega bo'ldi – katta tutqanoq, EEG o'zgarishlari bilan o'tkir to'lqini majmuasi shaklida tasdiqlangan-29 bolalarda va 14 bolalarda talvasaga tayyorlik, ya'ni 3-5 Gs chastotali alfa to'lqinlari, 90-95 MV amplitudasi, delta faolligi, 3-3.5 soni /sek chastotasi, 4 MV amplitudasi. 16 bemorlarida yalpi fokal o'zgarishlarsiz mikrosimptomatika shaklidagi nevrologik kamomad kuzatildi va miyaning MRGDA faqat 8 ularning miya yarim korteksining diffuz subatrofiyasi shaklida, asosan frontal-temporal sohalarda tasdiqlangan o'zgarishlar kuzatildi. Anamnez ma'lumotlari perianatal o'zgarishlarni tasdiqlamadi va shuning uchun bu o'zgarishlar bizni miya yarim sharlariga ikkinchi darajali shikastlanish sifatida qabul qildi.

Bundan tashqari, 27 bolalari bolalik epilepsiyasi tufayli turli xil zo'riqishlarning intellektual nogironlik sindromi borligi aniqlandi.

Nazorat guruhidagi bolalarda 12 bolalarda katta tutqanoq kuzatildi, klinik jihatdan bu bolalarda EEGda kichik tutqanoq belgilari (4 nafar) va qisman motor tutqanoq (8 kishi) shaklida sodir bo'ldi, miya xarakteridagi o'zgarishlar o'tkir to'lqinlar shaklida noaniq, shartli epileptik holatlarining ustunligi bilan ustunlik qildi, teta ritmi. gidrotsefaliya sindromi, nevrologik yetishmasligi pay anizorefleksiya, mushak gipotenziya, gipertoniya shaklida mikronevrologik belgilari bilan namoyon bo'ldi. Nevrologik nuqsonli barcha bolalarning anamnezida perinatal ensefalopatiya - surunkali homila ichi gipoksiyasi, patologik homiladorlik, tug'ruqdagi asfiksiya

aniqlandi. Nazorat guruhi bolalarining ruhiy holati 8 nafar bolalarda aqliy rivojlanishdagi kechikish aniqlandi.

Shunday qilib, yaqin qarindoshlik nikohidandan asosiy guruhdagi bolalarda tutqanoqsiz tutqanoq bilan namoyon bo'ldi, nazorat guruhi, bolalar farqli o'laroq, konvulsiv epileptik tutqanoq, yalpi intellektual kasalliklar aziyat sezilarli darajada ko'proq bo'ldi, va psixo-nevrologik buzilishlar perinatal xavf oqibatida bosh miya zararlanishlar bilan namoyon bo'ldi.

Xulosa. Irsiyati og'irlashgan va yaqin qarindoshlik nikohidan tug'ilgan bemorlar kombinatsiyasi ruhiy kasalliklar va epilepsiya bilan og'rigan bolalarning rivojlanish xavfini sezilarli darajada oshiradi, bu katta progredientlik va shunga mos ravishda yomon prognoz bilan yuzaga keladi.

Foydalanilgan adabiyotlar:

1. Puzin S.N., Dыmochka N.A., Shkurko N.A., Xakurinova G.A. Problemы i perspektivы kompleksnoy reabilitatsii detey-invalidov. //Mediko-sotsialnaya ekspertiza i reabilitatsiya detey s ogranichennыmi vozmojnostyami, 2007, № 5-6. — S. 5 — 11.
2. Skvorsov I.A., Yermolenko N.A. Razvitie nervnoy sistemы u detey v norme i patologii. M.: MEDpress-inform, 2003. - 368 ye., il.
3. Yakunin Yu.A. Fiziologiya i patologiya nervno-psixicheskogo razvitiya rebenka: Leksiya dlya vrachey.// Prilojenie k jurnalu Rossiyskiy vestnik perinatologii i pediatrii. 1995. - №15. -49s
4. Ayala F., Kayger Dj. Sovremennaya genetika / M.: Mir, 1988. T.Z. 335 s.
5. Ginter Ye.K. Etnicheskie osobennosti rasprostraneniya nasledstvennыx bolezney // genetika cheloveka. M.:VINITI, 1978. T. 3. S. 122-159.
6. Sanes JN, Donoghue JP. Plasticity and primary motor cortex. //Ann. Rev. Neurosci. 2000, Vol. 23, p. 393-415.
7. Volpe J. //Neurology of Newborn. N.Y.: Ch. L., 2002: 930 p.

UDC: 616-08-035

ALGORITHM FOR PREVENTION OF DENTAL IMPLANTATION COMPLICATIONS IN PATIENTS WITH HYPERTENSION DISEASE

Pulatova B.J.
Alfraganus University, Tashkent city

Annotation. The cause of the development of dental diseases in a person at any age is the loss of teeth in the dentition, leading to a number of pathological conditions in the maxillofacial area.Special is the fact that with long-term arterial hypertension, reduced immunity and constantly regular use of antihypertensive, anticoagulant medications, which manifests itself in a decrease in the total surface of the exchange vessels. All patients (87 people) were divided into 3 comparison groups depending on nosology, preoperative examination and choice of treatment method. During the study time, dynamic changes in DI stability indicators, regardless of bone density, showed a noticeable increase. This confirms the results obtained regarding the dynamic growth of implant stability in jaws with bone density.

Keywords:Dental implantation, hypertension, prevention of complications, treatment algorithm, osseointegration, osteoporosis, secondary adentia.

GIPERTANSİYON KASALLIKLARDA Tish IMPLANTSIYASI ASORATLARINI OLDINI OLISH ALGORITMI

Po'latova B.J.
Alfraganus universiteti

Izoh. Har qanday yoshdagi odamda tish kasalliklarining rivojlanishining sababi tishlarda tishlarning yo'qolishi bo'lib, maxillofasiyal sohada bir qator patologik holatlarga olib keladi. Uzoq muddatli arterial gipertenziya, immunitetning pasayishi va antihipertenziv, antikoagulyant dorilarni doimiy ravishda muntazam ravishda qo'llash, bu metabolik tomirlarning umumiy yuzasining pasayishi bilan namoyon bo'ladi. Barcha bemorlar (87 kishi) nozologiya, operatsiyadan oldingi tekshirish va davolash usulini tanlashga qarab 3 ta taqqoslash guruhiga bo'lingan. Tadqiqot davomida, suyak zichligidan qat'i nazar, DI barqarorlik indekslaridagi dinamik o'zgarishlar sezilarli o'sishni ko'rsatdi. Bu suyak zichligi bo'lgan jag'larda implantning barqarorligini dinamik oshirish bo'yicha olingan natijalarni tasdiqlaydi.

Kalit so'zlar: Dental implantatsiya, arterial gipertenziya, asoratlarning oldini olish, davolash algoritmi, osseointegratsiya, osteoporoz, ikkilamchi adentiya.

АЛГОРИТМ ПРОФИЛАКТИКИ ОСЛОЖНЕНИЙ ДЕНТАЛЬНОЙ ИМПЛАНТАЦИИ У БОЛЬНЫХ ГИПЕРТОНИЧЕСКОЙ БОЛЕЗНЬЮ

Пулатова Б.Ж.
Университет Альфраганус

Аннотация. Причиной развития стоматологических заболеваний у человека в любом возрасте является потеря зубов в зубном ряду, приводящая к ряду патологических состояний в челюстно-лицевой области. При длительной артериальной гипертензии, снижении иммунитета и постоянном регулярном приеме антигипертензивных, антикоагулянтных препаратов, который проявляется в снижении на общей поверхности обменных сосудов. Все пациенты (87 человек) были разделены на 3 группы сравнения в зависимости от нозологии, предоперационного обследования и выбора метода лечения. За время исследования динамические изменения показателей стабильности ДИ независимо от плотности кости показали заметное увеличение. Это подтверждает полученные результаты относительно динамического роста стабильности имплантатов на челюстях с плотностью кости.

Ключевые слова: Дентальная имплантация, артериальная гипертензия, профилактика осложнений, алгоритм лечения, остеоинтеграция, остеопороз, вторичная адентия.

Relevance of the topic. The cause of the development of dental diseases in a person at any age is the loss of teeth in the dentition, leading to a number of pathological conditions in the maxillofacial area (MFA)[1,2,6].

The number of dental implants implanted by dentists is increasing at lightning speed, and the indications for their use have been expanded.

Currently, the section of implantology is marked by a significant level of solved problems in the field of secondary adentia using dental implants. However, the timing of the start of implantation in patients who have suffered coronavirus infection, as well as dentures after implant surgery, remains controversial.

The need to reduce the recovery time of patients before and after implantation of dental implants (DI) seems global and deserves attention. One of the promising areas is the improvement of methods for direct implantation after tooth extraction directly into the alveolus, which is clearly the most relevant and economically proven improvement in dental care[3,5,9].

However, the major disadvantages of these methods are poor adaptation and insufficient stability of installed implants in the tooth alveolus, as well as low osseointegration into the bone[4,8,10].

According to the theory of implantology, what is special is the fact that with long-term arterial hypertension, reduced immunity that accompanies Covid-19 and constantly regular use of antihypertensive, anticoagulant medications, the phenomenon of "rarefaction" or "discharge" is formed, which manifests itself in a decrease in the total surface of the exchange vessels [10].

Today, concomitant somatic pathology in patients requiring dental implantation speaks for the relevance of this problem and its practical significance in general.

Purpose of the study: develop a treatment and diagnostic algorithm and tactics for preoperative preparation of patients with secondary adentia with concomitant hypertension in the process of planning for dental implantation.

Materials and methods of research.

During the study, we examined and treated 87 patients in the period from 2022-2024 at the Department of Surgical Dentistry and Implantology, TSSI

The characteristics of the patients in terms of age and gender are presented in Table 1, there were 53 men and 34 women, 96 di (Osteem system and Impro intraosseous system) were placed.

The patients were distributed according to age and gender as indicated in Table 1.

Table 1

Characteristics of patients in terms of age and gender

Gender sign		Age aspect (years)			Sum
		30-34	45-49	50-55	
Men	Abs	7	35	eleven	53
	%	9.2%	39.1%	12.6%	61%

Women	Abs	5	13	16	34
	%	4.6%	16.1%	18.4%	39%
Total	Abs	eleven	49	27	87
	%	13.8%	55.2%	31%	**100%**

All examined patients were divided into three groups. All patients (87 people) were divided into 3 comparison groups depending on nosology, preoperative examination and choice of treatment method.

- group 1 - observation group, it consisted of 33 patients with secondary adentia with a history of mild to moderate hypertension. This category of patients was prescribed the vitamin complex CALCIVIT "Swiss energy" to restore calcium-phosphorus metabolism, stimulating osteomodeling and metabolism in bone tissue, as well as normalizing blood hemostasis;

- group 2 - comparison group, it consisted of 33 patients with secondary adentia, with hypertension of I and II degrees, only the traditional regimen was carried out, without preliminary preparation;

- group 3 - comparison group, control group, consisted of 21 patients without pathology;

General characteristics of research methods

During the preoperative examination of patients, general clinical tests were used: anamnestic collection, visual examination of St.localis in the area of proposed implantation, measurement of blood pressure and heart rate), radiological: 3D X-ray, orthopantomography (panoramic zonography) and computed tomography, functional: ultrasound Doppler flowmetry and laboratory methods (blood biochemistry).

Analysis of jaw tissue density using tomograms

Based on the obtained MSCT data, dental implants were virtually installed in patients.In the virtual positioning zone of the DI, 12 points served as a tactic for determining bone tissue density (Fig. 1).

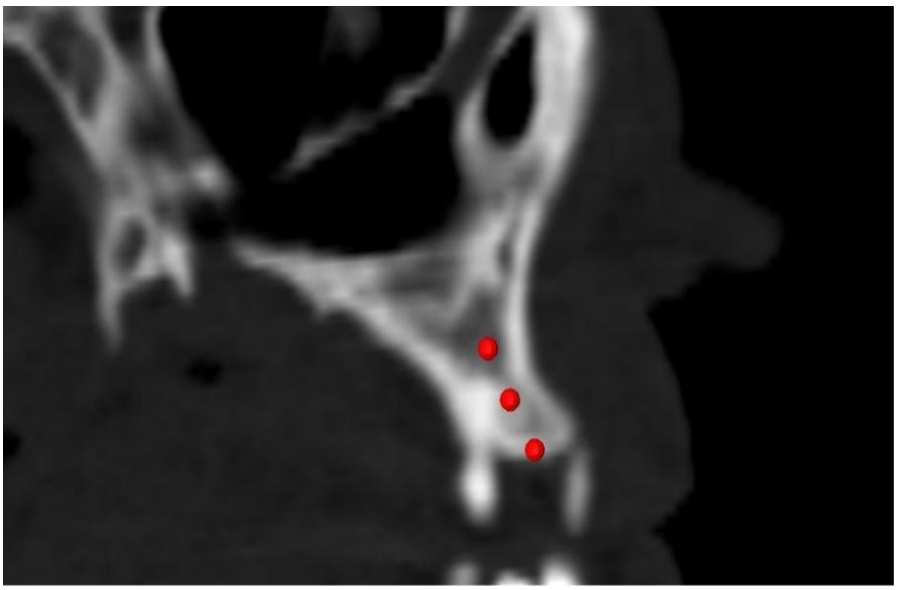


Fig.1. MSCT upperjaw (transverse). Computer program VSG Amira (Germany). Determination of bone density around the DI using measurement points placed along the alveolar ridge of the upper jaw in the area of planned implantation.

Research results and discussion:

Analysis of the clinical picture of the examined patients before and after dental implantation surgery

In the present study, all patients were divided into four groups, which made it possible to select the most dense bone zones.

When installing implants with immediate loading, a week later the local status and general condition of the patients remained the least satisfactory compared to these parameters in groups 1a and 2a (Table 2). After 14 days, there is a clear trace of relief of adverse clinical symptoms for patients in groups IB, IIB, as well as their complete absence in groups IA, IIA.

Table 2

Average CI stability indicators

Density bone tissue	n	Stability of implants according to (ISQ), observation periods		
		At the time of implantation tions	After 3 months at n/h	After 6 months on the military unit
No.1	3	76.6 ±0.5	76.5±0.5	-
No. 2	7	68.2±3.15	67.1±3.16	70.3±1.76
No. 3	8	64.5±3.67	67.9±1.93	68.0±2.0
No. 4	4	50.4±1.1	-	68.5±2.5

Significance relative to baseline p <0.05

Consequently, the parameters "ISQ Stability" CI in the examined patients with bone density Nos. D1-D2 changed slightly over the observation time and had initially high data. Monitoring the increase in "CI stability" in the bones of the upper and lower jaws with measured bone density No. 3 and No. 4 was noted to be higher than in bone tissue with density No. 1 and No. 2.

Research results. Measurement of hemodynamic parameters

The implementation of this research work included the need for constant monitoring of hemodynamic parameters (A/D and heart rate), its preparation and postoperative observation, due to the fact that the main subjects were patients with somatic cardiovascular pathology.

After implantation (after 30 minutes), blood pressure values were in the range: in the control group, Systole = 120±5 mmHg, diastole = 71±4 mmHg; heart rate was 70±4 beats/min.

In cases of hypertension - stage I, systole was 126±5 mmHg, diastole. was 87±4 mmHg, (p>0.05), heart rate - 75±7 beats/min, P>0.05. In situations of hypertension - II degree: systole. Approximately determined was 132±3 mmHg, diastole in the range of 89±4 mmHg, heart rate 81±3, level of significance (P) > 0.05.Considering the fact that diseases of the cardiovascular system, in the compensation stage, are relative contraindications (A. NormanCranin, 1993) to the

use of dental implantation, we, in the framework of this study, tried to justify the possibility of its use in patients with arterial hypertension and chronic ischemic heart disease.

Thus, we were faced with the following tasks: the most complete rehabilitation of the patients who applied, and, at the same time, minimizing the risk of complications at any stage of the treatment.

Analysis of mineral metabolism indicators

To substantiate the successful installation of DI in patients with adentia, PCR (phosphorus-calcium metabolism) was studied, which included the levels of Ca ionized, inorganic P and alkaline phosphatase activity. The results of mineral metabolism indicators are compiled in the table 3.

Table 3

Mineral metabolism values in individuals undergoing dental implantation (n=87)

Index	results	Laboratory norm
Total calcium (mmol/l)	2.39±0.11	2.15-2.58
Ca (mmol/l)	1.26±0.05	1.12-1.32
P (mmol/l)	1.09±0.17	0.86-1.45
ALP (IU/l)	179±44	98-280

The total content of Sav in the preoperative period of patients who needed dental implantation ranged from 2.09 to 2.63 mmol/l, the average figure was 2.38 ± 0.12 mmol/l. The range of Ca + was from 1.29 to 1.35 mmol/l, the average value was 1.27 ± 0.06 mmol/l.

In the plasma of patients for whom dental implantation was planned, inorganic P values ranged from 0.87 to 1.45 mmol/l, the average value was 1.08 ± 0.16 mmol/l, the variability of alkaline phosphatase ranged from 121 to 354 units /l, on average 179 ± 44 U/L and exceeded the physiological norm only in 2 patients.

Results of using the drug CALCIVIT- Swiss energy

Analyzing the phosphorus-calcium metabolism (PCA) of patients, we identified a group of people with a presumably increased risk of rejection of dental implants and tried to improve the osseointegration of the DI usingCALCIVIT- Swiss energy. CALCIVIT- Swiss energy chosen, because it has a dual effect on bone metabolism: the anabolic effect is supported by the activation of osteoblasts, anti-catabolism due to the suppression of osteoclast function.

A vitamin-mineral complex was prescribed in the pre- and postoperative period for a month, the daily dose was 100-200 mg.

By choice in groups that were recommended CALCIVIT-Swiss energy indicators of Ca ionized, reaching 1.25 mmol/l, and alkaline phosphatase activity greater than 185 IU/l. The group consisted of 33 persons aged from 30 to 50 years, of which there were 16 women and 17 men, they underwent dental installation of DI. In the postoperative period, there was a comparison group consisting of 10 people, 5 females and 5 males; they were given a CI, but they did not take CALCIVIT-Swiss energy. The follow-up period was 1 year (Table 4).

Table 4

Patients receiving CALCIVIT-Swiss energy, according to biochemical parameters and the number of established and rejected MDIs

Index	Group NG (n=33)	SG Group (n=33)	P=

Age (years)	45±3.6	40±3.7	0.6
Total number of installed DIs	46	20	0.07
Number of lost CIs	1	4	0.02
Satot (mmol/l)	2.38±0.12	2.39±0.11	0.6
Ca (mmol/l)	1.26±0.02	1.26±0.04	0.04
pH (mmol/l)	1.09±0.14	1.12±0.18	0.4
ALP (IU/l)	207±42	148±14	0.003

CALCIVIT-Swiss energy in those who tookThe average age of the patients was 45 ± 0.6 years. In the comparison group, the average number of years was 41 ± 0.5 years, which meant that there was no statistically significant difference between both groups.

CALCIVIT- Swiss energy,In the treated patients, 46 DIs were implanted, and in the SG - 20 DIs, of which 18 were implanted in the upper jaw. Although the number of dental implants installed was higher in the group of people receivingCALCIVIT- Swiss energy (p = 0.05).

In the group of people who used CALCIVIT- Swiss energy,ionized Ca was in the range from 1.24 to 1.29 mmol/l. The range of levels in the comparison group was in a fairly wide range from 1.14 to 1.33 mmol/l and amounted to a statistically significant higher number compared to the control group, ranging from 1.26 ± 0.03 to 1.24 ± 0.05, respectively. mmol/l

In patients of the CG group, blood plasma with CSF activity fluctuated from 128 to 343 IU/l, with an average value of 194 ± 53 IU/l, and in the CG it ranged from 122 to 210 IU/l, with an average value of 162 ± 25 IU /l. Research results, usersCALCIVIT- Swiss energy, had the most significantly increased alkaline phosphatase activity (p = 0.04).

So,introduction of the drug into the treatment plan in the postoperative periodCALCIVIT-Swiss energywithin a month allowed, in our opinion, to obtain a significant improvement in the dental implantation operation.

Patients who took CALCIVIT- Swiss energy, completed treatment with a favorable prognosis and had a low level of alkaline phosphatase activity.

There was a positive correlation between the number of rejected DIs, ionized calcium concentration and alkaline phosphatase activity as well.

Correlation analysis examined in patients in the group who did not receive CALCIVIT- Swiss energy, also demonstrated a direct negative correlation between the number of years and the number of non-survival CIs: R = -0.3, p = 0.04.

Conclusions:

1. An algorithm for the actions of the medical staff of the dental clinic has been created, which makes it possible to achieve an objective assessment of both the general condition of the patient with hypertension and the local status of the tissues in the area of the planned intervention.

2. Exact criteria have been developed to determine the very possibility of endosseous implantation. In accordance with them, this manipulation is possible only in cases of hypertension of I and II degrees of severity.

Used literature:

1. Kolesnikov L.L. Anatomy and biomechanics of the dentofacial system / L.L. Kolesnikov, S.D. Arutyunov, I.Yu. Lebedenko.- M.: Practical Medicine, 2017.- 224 p.
2. Krechina E.K. Methods of laser and ultrasound Dopplerography in the diagnosis of hemomicrocirculation in gum tissue // New medical technology. - M., 2018. - 25 p.
3. Krechina, E.K. Laser Doppler flowmetry in dentistry: method. recommendations / E.K. Krechina, V.I. Kozlov, O. A. Terman. - M.: Medicine, 2017. - 18 p.
4. Lu R, Zhao X, Li J, et al. Genomic characterization and epidemiology of 2019 novel coronavirus: implications for virus origin and receptor binding. Lancet 2020; 395:565-574.
5. Makedonova Yu. A., Poroisky S. V., Firsova I. V., Fedotova Yu. M. Laser Doppler flowmetry for diseases of the oral mucosa // Volgograd Journal of Medical Scientific Research. - 2016. - No. 1. - pp. 51-54
6. Makovskaya N.I., Vasiliev A.V. Features of the work of a dentist and maxillofacial surgeon in the context of the new coronavirus infection (COVID-19) pandemic. World experience and own practice. Periodontology. 2020;25(3):185-188.
7. Mannanov Zh. Zh., Pulatova B. Zh., Shirynbek I., Shodiev S. N., Eshmamatov I. A. "Diagnostic Value of Von Willebrand Factor on Changes in Tissue Oxygenation during Dental Implantation in Persons with Previous Coronavirus Disease"International Journal forMiasto PrzyszłościLaboratoriumWiedzy, Poland., Vol.29 (2022) 183-185 bet.
8. Mannanov Zh. Zh., Pulatova B. Zh., Shirynbek I., Nazarov Z.Z., Eshonkulov Sh. B., Mukimov O. A., "Efficacy of Swiss Energy Calcivit in Dental Implant Planning in Persons with Secondary Adentia Who Have Previously Had a Coronavirus Infection" Central ASIA journal of medical and natural sciences
9. Vinnichenko, Olga Yurevna Optimization of the timing of treatment of patients using dental implants depending on the density of the bone tissue of the jaws: dissertation ... candidate of medical sciences: 01/14/14 Moscow 2017http://dlib.rsl.ru
10. Nazarova Sh.H., Nazarov Z.Z., Pulatova B.Zh., Dzhakhangirova D.A. The state of bone tissue when planning dental implantation in patients with somatic diseases. Journal of medicine and innovations №3(7) (August 2022) ISSN 2181-1873(Online)

UO'K: 616-08-035

PAXIXORIOIDAL NEOVASKULOPATIYADA BIRLASHTIRILGAN TERAPIYA KLINIK VA FUNKSIONAL NATIJALARI.

Rahimova D.A. Yusupov A.F., Karimova M.X., Xodjaeva Z.A.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiya ilmiy amaliy tibbiyot markazi

Annotatsiya. Maqsad: Paxixorioidal neovaskulopatiya bilan og'rigan bemorlarni xlor e6 asosidagi fotosensibilizator bilan fotodinamik terapiya bilan davolashdan keyingi klinik va funktsional ma'lumotlarni Brolucizumab bilan antiangiogenik davolash bilan birgalikda Brolucizumab monoterapiyasi bilan solishtirganda baholash.

Materiallar va usullar: Tadqiqotga PNV bilan og'rigan 46 bemorning 54 ko'zlari, shu jumladan 14 erkak va 32 ayol, o'rtacha yoshi 58,6±7,0 yil.

Natijalar: Funktsional ma'lumotlarning yaxshilanishi bir vaqtning o'zida anatomik ko'rsatkichlarning yaxshilanishi bilan birlashtirildi: 16 oylik monitoringda to'r pardaning markaziy qalinligining 410,26 ± 113,48 dan 262,46 ± 146,40 mkm gacha qisqarishi, bu subretinal suyuqlikning rezorbsiyasi (SRF) bilan tasdiqlangan.), retinal ajralishlar pigment epiteliyasi darajasining pasayishi, markaziy xoroid qalinligi: kuzatuv davri oxirida 485,89±102,65 dan 388,14±55,36 mkm gacha sezilarli pasayish kuzatildi.

Xulosa: MNS davolash rejimiga xlor e6 asosidagi PS bilan FDTni kiritish anatomik va funksional ma'lumotlarning tiklanishiga olib keladi va MNS bilan kasallangan bemorlarda patologiyaning qaytalanishini kamaytiradi.

Kalit so'zlar: *paxixoroidal neovaskulopatiya, fotodinamik terapiya, markaziy to'r parda qalinligi, markaziy xoroid qalinligi.*

PACHICHORIODAL NEOVASCULOPATHY - CLINICAL AND FUNCTIONAL RESULTS OF COMBINED THERAPY

Rahimova D.A. Yusupov A.F., Karimova M.X., Xodjaeva Z.A.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiya ilmiy amaliy tibbiyot markazi

Annotation. Objective: to evaluate clinical and functional data after treatment of patients with pachychoriodal neovasculopathy with photodynamic therapy with the photosensitizer Photolon based on chlorin e6 in combination with antiangiogenic treatment with Brolucizumab when compared with Brolucizumab monotherapy.

Materials and methods: The study included 54 eyes of 46 patients with PNV, among them 14 men and 32 women, average age 58.6±7.0 years.***Results:*** Improvements in functional data were simultaneously combined with improvements in anatomical indicators: a reduction in the central thickness of the retina from 410.26±113.48 to 262.46±146.40 µm at 16 months of monitoring, which was confirmed by the resorption of subretinal fluid (SRF), a decrease in the level of retinal detachments pigment epithelium, central choroidal thickness: a significant decrease was observed from 485.89±102.65 to 388.14±55.36 µm at the end of the monitoring period.

Conclusions: The introduction of FDT with PS based on chlorin e6 into the treatment regimen for MNS leads to the restoration of anatomical and functional data and reduces the recurrence of pathology in patients with MNS.

Key words: pachychoroidal neovasculopathy, photodynamic therapy, central retinal thickness, central choroidal thickness.

ПАХИХОРИОИДАЛЬНАЯ НЕОВАСКУЛОПАТИЯ - КЛИНИКО-ФУНКЦИОНАЛЬНЫЕ РЕЗУЛЬТАТЫ КОМБИНИРОВАННОЙ ТЕРАПИИ

Рахимова Д.А., Юсупов А.Ф., Каримова М.Х., Ходжаева З.А.
Республиканскийый специализированный научно-практический медицинский центр микрохирургии глаза

Аннотация. Цель: оценка клинико-функциональных данных после лечения больных с пахихориодальной неоваскулопатией средством фотодинамической терапии с фотосенсибилизатором

фотолон на основе хлорина е6 в сочетании с антиангиогенем лечения с Бролуцизумабом при сопоставлении с монотерапией Бролуцизумабом.

Материалы и методы: В изучение зачислено 54 глаз 46 больных с ПНВ, среди них 14 мужчин и 32 женщин, средний возраст — 58,6±7,0 лет. *Результаты:* Улучшения функциональных данных одновременно сочеталось улучшениями анатомических показателей: сокращением центральной толщины сетчатки с 410,26±113,48 до 262,46±146,40 мкм на 16 месяце мониторинга, было подтверждено рассасыванием субретинальной жидкости (СРЖ), понижением уровня отслоек ретинального пигментного эпителия,центральной толщины хориоидеи: наблюдалось значимое уменьшение с 485,89±102,65 до 388,14±55,36 мкм по завершению период мониторинга.

Выводы: Введение ФДТ с ФС на основе хлорина е6 в схему терапии ПНВ приводит к выводу восстановления анатомо-функциональных данных и сократить повторяемость патологии у пациентов с ПНВ.

Ключевые слова: пахихориоидальная неоваскулопатия, фотодинамическая терапия, центральной толщины сетчатки, центральной толщины хориоидеи.

Dolzarbligi.Paxixoroidal neovaskulopatiya (PNV) yoshga bog'liq makula degeneratsiyasi (YMD)neovaskulyar turining kam uchraydigan kichik turidir, xususiyatlari Galler qatlamining xorioid tomirlarining kengayishi, xoriokapilyar qatlamining yupqalanishi, birinchi turdagi xoroidal neovaskulyarizatsiyani o'z ichiga oladi, shu belgilarni Swept source yoki SD-OCT va angio rejimdagi OCT yordamida farqlash mumkin. [1]. Osiyo aholisida PNVning tarqalishi YMD barcha holatlarining 46% ga va Yevropa aholisida 13% ga etadi. [2, 3]. Xorioid tasviridagi yutuqlar bilan 1-toifa neovaskulyarizatsiyasi bo'lgan bemorlarda xorioidal xususiyatlardagi farqlar qayd etilgan. Fung 1-toifa neovaskulyarizatsiyasi bo'lgan bemorlarning bir qismini klinik va tasviriy ma'lumotlarga ega bo'lgan YMD bilan solishtirganda surunkali MSXRP bilan tavsifladi [4], xorioid qalinligining oshishi, druzalarning yo'qligi va yoshroq yosh bu bemorlarni neovaskulyar YMDdan ajratib turadigan asosiy xususiyatlardan edi. Muhimi, Fungning tadqiqoti 1-toifa neovaskulyarizatsiya rivojlanishidan oldin (o'rtacha interval 139 oy) MSXRP ning aniq vaqtinchalik ketma-ketligini o'rnatdi, bu patogen ketma-ketlikni tasdiqladi. Mualliflar, shuningdek, ushbu turdagi neovaskulyarizatsiyani tipik neovaskulyar YMDda sodir bo'ladigan narsadan ajratish kerakligini ta'kidladilar. [6]. Keyinchalik, boshqa paxixorioid kasalliklari bo'lgan bemorlarda 1-toifa neovaskulyarizatsiya paydo bo'lishi tasvirlangan.

OCT-Angio paydo bo'lishi bilan paxixoroidal neovaskulyarizatsiyaga shubha qilingan hollarda neovaskulyarizatsiyani tashxislash va tasdiqlash osonroq bo'ldi. Neovaskulyarizatsiyani invaziv bo'lmagan holda RPE va Bruch membranasi o'rtasidagi signal oqimining murakkab tarmog'i sifatida aniqlash mumkin, bu strukturaviy OKTda aniqlangan pigment epiteliya ajralishning tekis tartibsiz zonasiga mos keladi. SD-OKTda paxikoroid spektri xususiyatlari va tekis tartibsiz RPE ajralishi bo'lgan ko'zlar, shuning uchun OCT-angioda batafotolonilroq tekshirilishi kerak, chunki u erda neovaskulyar to'qimalar yashiringan bo'lishi mumkin. PNVni davolashning asosiy usullari fotodinamik terapiya (FDT), angiogenez inhibitorlarini intravitreal yuborish va ularning bir-biri bilan kombinatsiyasi [2-4]. Ko'p markazli EVEREST, EVEREST II tadqiqotlari natijalariga ko'ra, kombinatsiyalangan terapiya, shu jumladan Verteporfin fotosensibilizatori bilan FDT, shuningdek intravitreal. Angiogenez inhibitori Brolucizumabning kiritilishi PNV bilan og'rigan bemorlarda yangi tomirlarni yopish, ko'rish funktsiyasini yaxshilash va markaziy retinal qalinligini (MRQ) kamaytirishda eng samarali hisoblanadi [5, 6]. Hozirda Verteporfin O'zbekistonda klinik amaliyotda qo'llash uchun ruxsat etilmagan. Mahalliy olimlar eksperimental va klinik tadqiqotlar o'tkazdilar, ular oftalmologiyada xlorga asoslangan Fotolondan foydalanishning samaradorligi va xavfsizligini isbotladilar [7]. Hozirgi vaqtda mavjud bo'lgan yagona Fotolon, xlor e6 ning trinatriy tuzi (Photolon, Belmedpreparaty, Belarusiya) paxixoroidal neovaskulopatiyani davolashda yuqori

samaradorlikni ko'rsatdi [8, 9]. dan foydalanish bo'yicha tadqiqotlar Mavjud adabiyotlarda PNV uchun angiogenez ingibitorlari bilan birgalikda xlor e6 asosida Fotolon bilan FDT topilmadi.

Tadqiqotning maqsadi paxixoroidal neovaskulopatiya bilan og'rigan bemorlarni xlor e6 asosidagi fotosensibilizator bilan fotodinamik terapiya bilan Brolucizumab bilan antiangiogenik davolash bilan birgalikda Brolucizumab monoterapiyasi bilan solishtirganda davolashdan keyingi klinik va funktsional ma'lumotlarni baholashdan iborat.

Materiallar va usullar Tadqiqotga o'rtacha yoshi 58,6±7,0 yil bo'lgan 14 erkak va 32 ayolni o'z ichiga olgan PNV bilan kasallangan 46 nafar bemorning 54 ko'zini qamrab oldi. Barcha bemorlar standart oftalmologik tekshiruvdan o'tkazildi: maksimal korrekciyalangan ko'rish o`tkirligini (MKKO`), tonometriya, perimetriya, A-skanerlash va B-skanerlash, shundan so'ng maxsus oftalmologik usullar to'plami amalga oshirildi, shu jumladan Swept-sourceimaging moduli bilan retinaning optik kogerent tomografiyasi (OCT); OKT angiografiyasi (Triton-Topcon, Yaponiya) Tadqiqotlar terapiyadan oldin, belgilangan vaqt oralig'ida o'tkazildi terapiya kursi boshlanganidan 1, 3, 6 va 16 oy; Bemorlar ikki guruhga bo'lingan: asosiy guruh (30 ko'z) va nazorat guruhi (24 ko'z). Birinchi guruhdagi bemorlarga kombinatsiyalangan davolash berildi: angiotensin inhibitori Brolucizumabning 3 mg intravitreal in'ektsiyasi, so'ngra xlor e6 asosidagi fotolon bilan FDTning 1 seansi. Ikkinchi guruhda terapiya 4 haftalik interval bilan 3 mg Brolucizumab dan 3 marta yuklangan intravitreal inyeksiyadan iborat edi. Brolucizumabning FDT va intravitreal in'ektsiyalari standart protokollarga muvofiq amalga oshirildi. Quyidagi terapiya kurslari o'tkazildi "Davolash va uzaytirish" rejimi, FDT in'ektsiyalari orasidagi vaqt oralig'i kamida 3 oy, Brolucizumab in'ektsiyalari orasida - o'rtacha 1,5 oy.

Natijalar va muhokama Asosiy guruhdagi bemorlarda MKKO` butun davomida bir xil darajada qoldi ko'rib chiqish, terapiyadan oldin 0,28 ± 0,14, 16 oylik o'rganish davrida 0,38 ± 0,23. Funktsional ma'lumotlarning yaxshilanishi bir vaqtning o'zida anatomik ko'rsatkichlarning yaxshilanishi bilan birlashtirildi: 16 oylik monitoringda markaziy retinal qalinligining 410,26 ± 113,48 dan 262,46 ± 146,40 mkm gacha qisqarishi, retinal suyuqlikning rezorbsiyasi bilan tasdiqlangan. Birinchi turdagi xorioidal neovaskulyarizatsiya proektsiyasida xorioid balandligining xuddi shunday qalinlashishi, Galler qatlamining tomirlarining xorioidal kengayishi va xoriokapilyar qatlamining yupqalashishi aniqlangan. markaziy xorioid qalinligi: kuzatuv davri oxirida 485,89±102,65 dan 388,14±55,36 mkm gacha sezilarli pasayish kuzatildi. Nazorat guruhida MKKO` ning o'sishi kamroq edi, davolashdan oldin 0,31 ± 0,26 va 16 oylik o'rganish davrida 0,35 ± 0,24. Morfologik parametrlardagi o'zgarishlar dastlabki bosqichda sodir bo'ldi: tadqiqotning 3-oyida, 485,89 ± 102,65 va 413,21 ± 96,23 mkm terapiyadan oldin va 3 oylik o'rganish davrida, so'ngra dastlabki ma'lumotlarga qaytish 415,36 ± 1 mkm kasallikning 3 oyligida aniqlandi. Shuningdek, MXQda qayd etilgan: tadqiqotning 1 va 3 oylarida pasayish, so'ngra dastlabki ma'lumotlarga qaytis, mos ravishda 0 va 16 oylik kuzatuv davrlarida 483,46 ± 102,54 mkm va 458,70 ± 93,39 mikron. Brolucizumabni 4 haftalik interval bilan yuborish, vaqt o'tishi bilan o'zgarishlar qaytib keldi

Xulosa

Markaziy retinal qalinligining balandligi va markaziy xoroid qalinligining sezilarli darajada pasayishi, 6 va 16 oylik o'rganish davrida Brolucizumab monoterapiya guruhi bilan solishtirganda birlashtirilgan davolash guruhida MKKO` ning yaxshilanishi, neovessellarning okkultatsiyasi tufayli SRS rezorbsiyasi bilan belgilanadi. PNV uchun davolash rejimiga xlor e6 asosidagi Fotolon bilan FDTni kiritish anatomik va funktsional ma'lumotlarning tiklanishiga va PNV bilan og'rigan bemorlarda patologiyaning takrorlanishining kamayishiga olib keladi.

Foydalanilgan adabiyotlar:

1. Афанасьева, М. А. Современные представления о пахихориоидальных заболеваниях / М. А. Афанасьева, М. В. Будзинская, А. А. Плюхова // Вестник офтальмологии. – 2019. – Т. 135, № 5-2. – С. 293-298.
2. Биомаркеры миопической хориоидальной неоваскуляризации у женщин, определяющие особенности клинического течения и ответ на анти-VEGF терапию / А. В. Григорьева, Т. Н. Юрьева, Ю. В. Курсакова [и др.] // Acta Biomedica Scientifica (East Siberian Biomedical Journal). – 2021. – Т. 6, № 2. – С. 105-113.
3. Борискина, Л. Н. Значение типа хориоидальной неоваскуляризации в прогнозе эффективности антиангиогенной терапии / Л. Н. Борискина // Вестник офтальмологии. – 2021. – Т. 137, № 5. – С. 146-151.
4. Будзинская М. В. Эффективность анти-VEGF терапии у пациентов с хориоидальной неоваскуляризацией на фоне миопической макулопатии / М. В. Будзинская, О. А. Жабина, И. В. Андреева, А. А. Плюхова // Точка зрения. Восток - Запад. – 2015. – № 1. – С. 136-137.
5. Дога, А. В. Центральная серозная хориоретинопатия: современные аспекты диагностики и лечения / А. В. Дога, Г. Ф. Качалина, О. Б. Клепинина. – Москва: "Офтальмология", 2017. – 224 с.
6. Дога А. В., Педанова Е. К. ОКТ-признаки пахихориоидальной неоваскулопатии //Современные технологии в офтальмологии. – 2020. – №. 1. – С. 303-305.
7. Педанова, Е. К. Пахихориоидальная неоваскулопатия - сравнительная эффективность загрузочных доз анти-VEGF-препаратов / Е. К. Педанова, О. Б. Клепинина, И. М. Горшков // Современные технологии в офтальмологии. – 2019. – № 1. – С. 289-291.
8. Airaldi M, Cozzi M, Staurenghi G. Regression of aneurysmal type 1 neovascularization after brolucizumab injections. //Can J Ophthalmol. 2022 Oct;57(5):e163.
9. Cho H.J., Jung S.H., Cho S. et al. Intravitreal Anti-Vascular Endothelial Growth Factor Treatment for Pachychoroid Neovasculopathy // Journal of Ocular Pharmacology and Therapeutics. - 2018. - Vol. 35. - P. 3.

UDC: 616-08-035

IMPORTANCE OF MICROFLORA AND ANTIBIOTICS IN AKNE STUDY SENSITIVITY

Rustamov M.K.
Bukhara State Medical Institute named after Abu Ali Ibn Sino

Abstract. This article is devoted to current problems of dermatovenerology and cosmetology. In the scientific study, the results of the clinical study of the microflora of the skin in vulgar sorghum and the materials obtained as a result of the study of the sensitivity of the isolated microflora to antibacterial drugs are presented. Research results prove that microorganisms belonging to the family of Propionibacterium acnes and Staphylococcus occupy the main place in acne pathogenesis. The study of sensitivity to antibiotics makes it possible to use rational and scientifically based antibiotic therapy.

Keywords: *staphylococcus, propionibacteria, comedones, antibiotics, microflora of the skin, vulgar acne.*

HUSNBUZAR KASALLIGIDA MIKRAFLORANING AHAMIYATI VA ANTIBIOTIKLARGA SEZGIRLIGINI O'RGANISH

Rustamov M.K.
Abu Ali ibn Sino nomidagi Buxoro davlat tibbiyot institute

Annotatsiya. Ushbu maqola dermatovenerologiya va kosmetologiyaning dolzarb muammolariga bag'ishlanadi. Ilmiy tadqiqotda vulgar husnbuzarlarda terining mikroflorasini klinik jihatdan o'rganish natijalari hamda, ajratib olingan mikrofloralarning antibakterial preparatlarga nisbatan sezgirligini o'rganish natijasida olingan materiallar taqdim etilgan. Taqdqiqot natijalari Propionibacterium acnes va Staphylococcus oilasiga kiruvchi mikroorganizmlar husnbuzar patogenezida asosiy o'rinda turishini isbotlab beradi. Antibiotikga sezgirlikni o'rganish ratsional va ilmiy asoslangan antibiotikoterapiyani qo'llashning imkonini beradi.

Kalit so'zlar: *stafilokokkus, propionibakteriyalar, komedonlar, antibiotiklar, terining mikraflorasi, vulgar husnbuzar.*

ЗНАЧЕНИЕ МИКРОФЛОРЫ И АНТИБИОТИКОВ ПРИ АКНЕ ИЗУЧИТЬ ЧУВСТВИТЕЛЬНОСТЬ

Рустамов М.К.
Бухарский государственный медицинский институт имени Абу Али ибн Сины

Аннотация. Данная статья посвящена актуальным проблемам дерматовенерологии и косметологии. В научном исследовании представлены результаты клинического изучения микрофлоры кожи сорго вульгарного и материалы, полученные в результате изучения чувствительности выделенной микрофлоры к антибактериальным препаратам. Результаты исследований доказывают, что основное место в патогенезе акне занимают микроорганизмы, принадлежащие к семейству Propionibacterium Acnes и Staphylococcus. Исследование чувствительности к антибиотикам дает возможность использовать рациональную и научно обоснованную антибиотикотерапию.

Ключевые слов: *стафилококк, пропионибактерии, комедоны, антибиотики, микрофлора кожи, вульгарные угри.*

Acne vulgaris is a chronic, polyetiological disease of the pilosebaceous complex. This pathology affects from 79% to 95% of adolescents and 40%-50% of persons over 25 persons [1, 3, 8, 10]. Prevalence of the disease in recent years continues to grow in both adolescents and adults. The problems with this diseases are due to the fact that even mild forms, and even more severe ones, are negatively affect the psyche of patients, significantly reducing their self-esteem and quality of life. The main factors in the development of this dermatosis are: genetic

predisposition, hormonal imbalance, follicular hyperkeratosis, hypersecretion of sebum and microbial colonization of pilosebaceous follicles with the subsequent development of inflammation [1, 2, 4]. The background condition for the development of acne vulgaris is increased sebum secretion, leading to the appearance of comedones. The latter is horny plugs, consisting of sloughing off epithelial cells of the ducts of the sebaceous glands, saturated with their secretions, and clogging the excretory ducts of the glands. Stagnant sebum decomposes, providing a good nutrient medium for various microorganisms. Numerous studies have been devoted to studying the role of microorganisms in the pathogenesis of acne vulgaris [3, 5, 8, 15]. According to most authors, colonization of bacteria plays an important role in the development of the disease, and their production of chemotactic factors causes the development of inflammation in the lesion. In this case, infiltration of the follicles and surrounding tissues with lymphocytes, monocytes and neutrophils occurs, followed by excretion of proinflammatory cytokines, interleukins, leukotrienes, prostaglandins, tumor necrosis factors, adhesion molecules [1, 6, 8, 10, 12]. Leukocytes, when absorbing microorganisms in the follicle, release hydrolytic enzymes, which also destroy follicular epithelium. When the contents of the follicle enter the dermis due to impaired permeability of the epithelium, further inflammation and tissue destruction develops. On At the next stage of the inflammatory reaction, complement is activated, then in the process involves macrophages and giant cells. As a result, highly active compounds accumulate in the dermis, such as free oxygen radicals and hydroxyl groups of hydrogen peroxide, which further destroy cells and support inflammation. By According to most authors, the microflora on the skin of acne patients is represented mainly Propionibacterium acnes, Staphylococcus spp., yeast of the genus Malassezia [10, 11, 13, 15].

Propionic bacteria – microaerophilic gram-positive microorganisms - are included in composition of normal skin microflora. P.acnes plays the main role in the transformation of comedones into acneform inflammatory rashes. Although the role of P. acnes in the development of inflammation undoubtedly, at the same time, their pathogenic effects do not manifest themselves in healthy people. The number of bacteria in the rash does not correlate with the severity of the disease [11, 12, 13].

Staphylococci do not survive in anaerobic conditions, so they are found in the upper parts of the hair follicles and in places where the ducts of the sebaceous glands open. According to the results research by some Russian and foreign researchers on acne vulgaris predominateS. epidermitis - over 90% [5, 6, 7, 8, 9, 10]. According to some authors, some cocci stimulate the growth of propionic bacteria; according to others, competition is observed between staphylococci, propionic bacteria and yeast for lipid substrates, and the lipolytic activity of these organisms depends on the pH of the environment.

Based on the above, the purpose of our study was to identify microflora in acne vulgaris rashes and determine the sensitivity of the isolated microflora to antibiotics.

Research materials and methods. Many methods of studying the microflora of the skin are described in the literature: direct quantitative accounting of cells in the flush by microscopy, using fluorescence microscopy, seeding on selective media with subsequent identification of the microorganism, the polymerase chain reaction (PCR) method based on the appearance of a fragment of the DNA of the pathogen containing a sequence of nucleotides, which are only this microorganism. The most common remains the classic microbiological - sowing of clinical material on artificial selective nutrient media to obtain and identify pure cultures.

Table 1

Distribution of patients with vulgar acne by age and gender.

Age	Gender					
	Male	50%	Female	50%	total	100%
	abs	%	abs	%	abs	%
13-17	9	11.25	7	8.75	16	20
18-25	21	26.25	19	23.75	40	50
26-37	10	12.5	14	17.5	24	30
Total	40	50	40	50	80	100

The methods of collecting material are reduced to three methods: the fingerprint method, the method of flushing or scraping, and the biopsy method. The most reliable method is biopsy, because it allows you to isolate all microorganisms in the studied area of the skin, however, injuries and morbidity limit its use. Therefore, the most acceptable methods are printing and flushing or scraping.

A comprehensive (clinical and laboratory) examination of 80 patients with various forms of vulgar acne, including 40 men and 40 women aged 14 to 37, was conducted based on the Department of Dermatology of the State Clinical Hospital No. 1 in inpatient and outpatient settings. The average age of the patients was 22 years (table 1).

Among both men and women, the overwhelming number of patients were aged 18 to 25 years (26.25% and 23.75%, respectively)

Residents of the village made up 48.8% (39 people), of the city - 51.2% (41 people). An earlier onset of the disease was observed in girls from the age of 13, and in boys from the age of 14, which is obviously due to the peculiarities of the puberty period. The duration of the disease in men ranged from 2 months to 14 years (3.1 ±11.2), in women from 3 months to 16 years (on average 3.8±12.3).

The overwhelming number of patients were housewives and students, respectively 32.5% and 19% (picture 1).

Table 2

Distribution of acne vulgaris patients by clinical forms and severity.

Clinical forms	Males		Females		Totally	
	abs	%	Abs	%	abs	%
Papular form						
Easy	2	2,5%	2	2,5%	4	5%
Medium-heavy	8	10%	2	2,5%	10	12,5%
Papulopustular						
Easy	4	5%	6	7,5%	10	12,5%
Medium-heavy	7	8,75%	22	27,5	29	36,25%
Heavy	4	5%	4	5%	8	10%
Conglobate	11	13,75	4	5%	15	18,75%
Nodular cystic	4	5%	-	-	4	5%
Totally	40	50%	40	50%	80	100%

The seasonality of the occurrence of dermatosis was noted in 11 patients (13.75%), and 69 (86.25%) were not noted. Heredity was burdened in 18 patients (22.5%), not in 62 (77.5%).

Before going to the clinic, 54 patients (67.5%) received outpatient or stationary treatment using various methods, the effect of therapy was insignificant or not noted.

The distribution of acne by severity is reflected in Table 2, from which it can be seen that

out of 80 (100%) patients, only 14 (17.5%) had a mild form of the disease, and the overwhelming number had 66 (82.5%) moderate and severe.

From this table, it can be seen that the localized nature of the rashes was observed in total only in 17 (21.25%) patients (8 men, 9 women), in the vast majority of patients - 63 (78.75%), the process was widespread, possibly due to hot climatic conditions. In mild form, open and closed comedones, single pustules were observed in the foci. With a moderate papulopustular form, multiple superficial inflammatory and non-inflammatory acne elements were observed 2-4 mm. in diameter. In severe papulopustular form, multiple, widespread superficial and deep acne elements were noted, prone to the formation of atrophic and keloid scars. The conglobate form was 2.75 times more common in men than in women (13.75% vs. 5.0%). In the lesions there were deep large inflammatory elements more than 5 mm in diameter (spherical) with a tendency to form disfiguring scars. The nodular cystic form was found only in men (5.0%) and was characterized by the presence of deep nodular and cystic formations with a diameter from 5 to 10 mm, along with this, single draining sinuses the size of a pigeon's egg were observed. Healing occurred with the formation of hypertrophic and keloid scars.

Bacteriological studies were conducted on the basis of the Department of Microbiology of the Abu ali Ibn Sino Bukhara State Medical University. The removal of material from the rash elements was carried out in compliance with the rules of asepsis with a sterile disposable scarifier and a sterile cotton swab. The material was taken from acne eruptions - inflammatory (papules, pustules, nodes) and non-inflammatory (comedones). The material was carefully suspended in 1 ml of sugar broth, then sown in a calibration loop into Petri dishes with yolk-salt agar. Liquid and dense media with the material were placed in a thermostat, which was filled with a special as mixture for the cultivation of anaerobic bacteria, which consisted of CO2, and N2 in various concentrations for 96 hours. Then the color and number of grown colonies were determined. Material for bacterioscopy was taken from each type of colony; colonies were also transplanted to special media for identification. Media for aerobic and anaerobic bacteria were used to determine the sensitivity. AGV medium was used for aerobic bacteria. For anaerobic bacteria, a special dense Shalder medium.

Table 3

The topographic localization of acne elements.

Localization of elements	Males		females		Totally	
	Abs	%	abs	%	abs	%
Face	8	10%	9	11,25%	17	21,25%
Face, neck	2	2,5%	7	8,75%	9	11,25%
Face, waist back	7	8,75%	1	1,25%	8	10%
Face, chest	-	-	7	8,75%	7	8,75%
Face neck, waist	1	1,25%	1	1,25%	2	2,5%
Face, waist	8	10%	-	-	8	10%
Face, neck, chest	-	-	6	7,5%	6	7,5%
Face, chest, waist	-	-	4	5%	4	5%
Face, neck, chest, waist	14	17.5%	5	6.25%	19	23,75%
Total	40	5%	40	50%	80	100%

The study of antibiotic sensitivity was carried out by the disco-diffuse method. For this

purpose, paper discs impregnated with antibiotics were placed on the lawn of the studied bacterial culture in Petri dishes. The crops were incubated for 16-24 hours. The growth retardation zone up to 15 mm indicated a weak one, up to 25 mm - an average one, and more than 25 mm - high sensitivity of the strains.

The sensitivity of the isolated microflora to the following antibacterial drugs was determined: roxithromycin, erythromycin, clindamycin, streptomycin, rifampicin, negram, kanamycin, ofloxacin, ceftriaxone, lincomycin, doxycycline, leflox, tetracycline, carbenicillin, gentamicin, amoxicillin, ciprofloxacin, biseptol, oxacillin, azithromycin, carbenicillin, neomycin, CAFFRA oxacillin, cefaclor, REO, bacitracin.

The results and their discussion. As a result of bacteriological examination Propionibacterium acnes was found in the rash elements in all 80 observed patients, which was 100%. Staphylococcus epidermidis was detected in 47 patients (58.75%), Staphylococcus aureus in 38 (47.5%), group A streptococcus in 26 (32.5%), E.colli in 27 (33.8%), Candida in 24 (30%), Proteusin 15 (18.8%), Klebsiella in 6 (7.5%) (picture 2).

Consequently, along with Propionibacterium acnes, Staphylococcus epidermidis and aureus are most often detected in acne vulgaris eruptions (58.75% and 47.5%, respectively).

Results of determining the sensitivity of Propionibacterium acnes, Staphylococcus epidermidis, and Staphylococcus aureus to 25 antibacterial drugs are presented in Table 4. The antibiotic sensitivity of bacteria was differentiated as high (S), moderate (I) and resistant (R).

As can be seen from the table, the studied strains were highly sensitive to ciprofloxacin (66.25%), roxithromycin (36.25%), and gentamicin (33.75%).

Moderate antibiotic sensitivity was noted to kanamycin (28.75%), erythromycin (27.5%), leflox (25%), ceftriaxone (23.75%), tetracycline (23.75%), clindamycin (21.25%), azithromycin (21.25%).

The highest percentage of resistance was observed to neomycin (1.25%), bacitracin (1.25%), cefaclor (2.5%), oxacillin (3.75%), bisector (5%), amoxicillin (5.0%), lincomycin (6.25%), streptomycin (8.75%), REO (7.5%).

Table 4

Sensitivity of microbial flora to antibacterial drugs.

Antibacterial drugs	Sensitivity	
	Number of patients	%
Leflox	20	25%
Streptomycin	7	8,75%
Ofloxacin	27	33,75%
Gentamicin	15	18,75%
Tetracycline	19	23,75%
Ceftriaxone	19	23,75%
Azithromycin	17	21,25%
Ciprofloxacin	53	66,25%
Carbenicillin	17	21,25%
Rifampicin	11	13,75%
Kanamycin	23	28,75%
Neomycin	1	1,25%%
Lincomycin	5	6,25%
Doksatsiklin	9	11,25%
Roxithromycin	29	36,25%
Erythromycin	22	27,5%

Amoxicillin	4	5%
Negram	2	2,5%
Clindamycin	17	21,25%
Bisector	4	5%
Kafra	10	12,5%
Oxacillin	3	3,75%
Cefaclor	2	2,5%
REO	6	7,5%
Bacitracin	1	1,25%

Thus, the results of our research confirm the important role of Propionibacterium acnes and microorganisms of the genus Staphylococcus in the pathogenesis of vulgar uglies. The study of antibiotic sensitivity contributes to the rational and reasonable prescription of antibiotic therapy.

Used literature:

1. Разнатовский, К. И., & Баринова, А. Н. (2011). Себорея и вульгарные угри: Эпидемиология, патогенез, клиника, лечение.
2. Молочков, В., Кисина, В., & Молочков, А. (2006). Угри вульгарные: клиника, диагностика, лечение. Врач, (3), 38-39.
3. Shukurov, I. B., Yaxshiyeva, M. F., &Rustamov, M. K. (2021). Condition of cytokins status at patients of seborrhoeic dermatitis. Новыйденьвмедицине, (1), 154-157.
4. Шукуров, И. Б., Яхшиева, М. Ф., & Рустамов, М. К. (2018). Характеристика себорейного дерматита. Научный журнал, (6 (29)).
5. Шукуров, И. Б., Яхшиева, М. Ф., & Рустамов, М. К. (2019). Оптимальные подходы к наружной терапии у больных себорейным дерматитом. Новый день в медицине, (4), 361-364.
6. Шукуров, И. Б., Яхшиева, М. Ф., & Рустамов, М. К. (2019). Клинико-микробиологические особенности себорейного дерматита. Новый день в медицине, (2), 335-336.
7. Maxmudov, F. A., Raxmatov, O. B., Latipov, I. I., Rustamov, M. K., & Sharapova, G. S. (2021). Intravenous laser blood irradiation in the complex treatment of patients with cutaneous leishmaniasis. 湖南大学学报 (自然科学版), 48(9).
8. Karimqulovich, R. M. (2023). Effects of Photodynamic Therapy in the Treatment of Mild to Moderate Acne Vulgaris. Central Asian Journal of Medical and Natural Science, 4(3), 1167-1171.
9. Karimqulovich, R. M. (2022). The effect of sertoderm cream in the treatment of moderate and severe forms of acne vulgaris. european journal of modern medicine and practice, 2(6), 80-83.
10. Raxmatov, O. B., & Xayitova, N. D. (2021). The use of "Sulfatcet-R"–Gel in Combination with Zinc Ointment to Determine its Effectiveness Against Acne Disease. Central asian journal of medical and natural sciences, 2(6), 227-230.
11. Karimkulovich, R. M., & Axmedovich, M. F. (2021). The use of Retinoids in the Approach to the Cosmetic Treatment of Acne. Central Asian Journal Of Medical And Natural Sciences, 2(6), 44-48.
12. Karimkulovich, R. M. (2021). Analysis of the Efficiency of the Application of Balm "Dilasen" in Patients with Ache Vulgar. Central asian journal of medical and natural sciences, 2(6), 9-13.

13. Karimkulovich, R. M. (2023). A new combination method for improving the treatment of insomnia vulgar. journal of healthcare and life-science research, 2(5), 67-70.
14. Karimqulovich, R. M. (2022). A new combination therapy in improving the treatment of acne vulgaris. European journal of modern medicine and practice, 2(8), 38-41.
15. Karimkulovich, R. M. (2023). Analysis of the Effectiveness of Treatment Using Topical Treatments in Patients with Acne Vulgaris. Central Asian Journal of Medical and Natural Science, 4(3), 360-365.

UO'K: 616-08-035

"ONA-BOLA" TIZIMIDA MIKRONUTRIENT TANQISLIGINI ANIQLASH ALGORITMI.

Rustamova X.X., Oblokulova N.T.
Samarqand davlat tibbiyot universiteti

Annotatsiya. JSST ma'lumotlariga ko'ra, homiladorlik anemiyasi butun dunyo bo'ylab ayollarning 30-80 foizida homiladorlikni murakkablashtiradigan, tug'ilish natijalariga, homila va bolaning sog'lig'iga salbiy ta'sir ko'rsatadigan keng tarqalgan holat bo'lib qolmoqda (JSST, 2015). Kelajak avlodning salomatligi ko'plab omillar va ko'proq darajada bevosita yoki bilvosita onaning salomatligi bilan belgilanadi, shuning uchun onalik va bolalikni muhofaza qilish masalalari to'liq hal etilishi mumkin va yagona muammo sifatida hal etilmoqda. Jahon banki ma'lumotlari ma'lumotlariga ko'ra O'zbekistonda so'nggi yigirma yil ichida 5 yoshgacha bo'lgan bolalar, reproduktiv yoshdagi (15–49 yosh) va homilador ayollarning umumiy ovqatlanish holati barqaror ravishda yaxshilanib borayotganini ko'rsatadi. 2008 yilgi milliy tadqiqot shuni ko'rsatdiki, reproduktiv yoshdagi ayollarning 34 foizdan sal ko'prog'i kamqonlik bilan kasallangan. Ushbu tadqiqot, shuningdek, temir va foliy kislotasi etishmasligi kattalar ayollarning mos ravishda 48 va 29 foiziga ta'sir qilganligini aniqladi.

Kalit so'zlar: *mikronutrient, algoritm, temir, homilador, ferritin.*

AN ALGORITHM FOR DETERMINING MICRONUTRIENT DEFICIENCY IN THE "MOTHER-CHILD" SYSTEM

Rustamova Kh.Kh., Oblokulova N.T.
Samarkand State Medical University

Abstract. According to WHO, anemia of pregnancy is a common condition affecting 30–80% of women worldwide, complicating pregnancy, negatively affecting birth outcomes, and the health of the fetus and child. remains (WHO, 2015). The health of the future generation is determined by many factors and, to a greater extent, directly or indirectly, by the health of the mother, so issues of maternal and child health can be comprehensively considered and are considered as a single problem. According to the World Bank, the overall nutritional status of children under 5, women of reproductive age (15–49 years), and pregnant women in Uzbekistan has been steadily improving over the past two decades. A national study conducted in 2008 showed that just over 34 percent of women of reproductive age suffered from anemia. The study also found that iron and folate deficiency were observed in 48 and 29 percent of adult women, respectively.

Keywords: *micronutrient, algorithm, iron, pregnant woman, ferritin.*

АЛГОРИТМ ОПРЕДЕЛЕНИЯ ДЕФИЦИТ МИКРОЭЛЕМЕНТОВ В СИСТЕМЕ "МАТЬ-РЕБЁНОК"

Рустамова Х.Х., Облокулова Н.Т.
Самаркандский государственный медицинский университет

Аннотация. По данным ВОЗ, анемия беременных является распространенным заболеванием, которым страдают 30–80 % женщин во всем мире, осложняя течение беременности, отрицательно влияя на исходы родов, а также на здоровье плода и ребенка. остается (ВОЗ, 2015). Здоровье будущего поколения определяется многими факторами и в большей степени, прямо или косвенно, здоровьем матери, поэтому вопросы охраны материнства и детства могут быть комплексно рассмотрены и рассматриваются как единая проблема. По данным Всемирного банка, общее состояние питания детей до 5 лет, женщин репродуктивного возраста (15–49 лет) и беременных женщин в Узбекистане за последние два десятилетия неуклонно улучшается. Национальное исследование, проведенное в 2008 году, показало, что анемией страдают чуть более 34 процентов женщин репродуктивного возраста. В ходе исследования также было установлено, что дефицит железа и фолиевой кислоты наблюдался у 48 и 29 процентов взрослых женщин соответственно.

Ключевые слова: *микронутриент, алгоритм, железо, беременная, ферритин.*

Homiladorlik davrida ayollar metabolik va fiziologik o'zgarishlarga uchraydi shuning uchun homila o'sishi, rivojlanishini qo'llab-quvvatlash Agar kelajakdagi onaning ovqatlanish holati yomon bo'lsa, ona va yangi tug'ilgan chaqaloqda ba'zi asoratlar paydo bo'lishi mumkin [1,3]. Homiladorlikning ikkinchi va uchinchi trimestrlarida homila tug'ilgandan keyin ishlatilishi mumkin bo'lgan ozuqaviy moddalar mavjud. Bolalar hayotning birinchi yillarida tez o'sib rivojlanadi. Agar bunday vaqtda mikronutrientklar yetarli bo'lmasa, rivojlanish jarayonida turli xil buzilishlar, jumladan, miya faoliyatidagi buzilishlar uchraydi. Shunday qilib, homiladorlik davridagi ovqatlanish bo'yicha yaqinda nashr etilgan ko'plab ishlarga qaramay, mikroelementlarning so'rilishi, tarqalishi va chiqarilishi mexanizmlari hali ham noaniq bo'lib qolmoqda. Ba'zi mikroelementlarning yetishmasligi yoki ortiqcha bo'lishi natijasida yuzaga keladigan ta'sirlarni yaxshiroq tushunish uchun qo'shimcha tushuntirishlar kerak.

Shu maqsadda prenatal rivojlanish davrida va bolalarda minerallarni teksherishda rux, mis, temir, B12, ferritin tanlangan [2,4,5]. Bizning tadqiqotimiz ushbu minerallarning homiladorlikda yetishmovchiligi bilan bog'liq oqibatlarini va onalardan tug'ilgan bolalarning o'sishi va rivojlanishiga ta'sirini o'rganishga qaratilgan.

Tadqiqot maqsadi: Yangi tug’ilgan chaqaloqlarda makro- va mikroelementlar yetishmovchiligiga moyillikni erta aniqlash maqsadida “Ona-bola” tizimida mikronutrient tanqisligini aniqlash algoritmi” elektron dasturi ishlab chiqildi. Bu sog’liqni saqlashning birlamchi bo’g’inida qo’llash bir qancha afzalliklarni beradi.

Tadqiqot materiallari va usullari. "Ona-bola" tizimida homilador ayolning ahvolini baholash uchun, shuningdek chaqaloqdagi kamqonlikning umumiy belgilarini aniqlash bo’yicha salomatlik kartasi ishlab chiqilgan. Ushbu anketa kartasida homilador ayollardagi kamqonlikning barcha sabab va belgilari ko’rsatilib, jami 20 ta savolni o’z ichiga oladit. Anketadan foydalanib, homilador ayolning salomatlik holatini baholash orqali chaqaloqning o'sishi va rivojlanishiga ta'sir qiluvchi barcha omillarni onaning sub'ektiv va ob'ektiv tekshirish yordamida bartaraf etish mumkin. Anketa usulidan foydalanib, asosiy mikroelementlarning nomutanosibligiga qarab ona va bolaning holatini baholash bo'yicha ma'lumotlar olinadi. Anketa tug'ruqxonada ona va tibbiyot xodimlari tomonidan to'ldirilishi mumkin. Agar savollarga "ha" javobi 12 dan ortiq bo'lsa, onaning sog'lig'ini buzish xavfi yuqori, 11 javobdan past bo'lsa, onaning sog'lig'ini buzish xavfi past bo'ladi,salomatlik va kasallik o'rtasidagi chegara holatiga ega. Onalarning so'rovnomasi natijalari hamshira tomonidan umumlashtiriladi, u ijobiy javob olingan savollarning sonini (+) belgisi bilan belgilaydi va ballarni jamlaydi. Keyingi bosqichlarda tug'ruqxona shifokori so'rov natijalarini tahlil qiladi va tekshiruvga muhtoj bo'lgan bolalarni tanlaydi va ularni tekshirgandan so'ng qo'shimcha tekshiruvlar uchun mutaxassislarga murojaat qilish zarurligi to'g'risida qaror qabul qiladi.

Yangi tug’ilgan chaqaloqlarda mikroelementlar yetishmovchiligiga moyillikni aniqlash bo'yicha bir qancha anketa so'rovnomasi yaratildi, bular mis, rux va temir tanqisligini erta aniqlash anketa so'rovnomasi. Hududlarda homilador ayollar va yangi tug’ilgan chaqaloqlarda mikroelementlar tanqisligi va disbalansini aniqlashga yuqori ehtiyoj mavjud bo’lib, ammo uni amalga oshirish Respublikamizning faqatgina yuqori texnologiyali laboratoriyalarda bajariladi. Sog’liqni saqlash tibbiy muassasalarida, ayniqsa birlamchi bo'g'inda mikroelementlarni aniqlashda maxsus laboratoriyalarning yo’qligini va tekshirish usullarining qimmatliligini hisobga olib “Ona-bola” tizimida mikronutrient tanqisligini aniqlash algoritmi.”elektron dasturini ishlab chiqildi (DGU 202406586 18.05.2024).

Ushbu elektron dastur asosida chaqaloqlarda 5 makro (mis, rux) va mikroelementlarni (temir, B12 va ferritin) aniqlash imkoni yaratildi. Bunda har bir element uchun 10 balli uch darajadagi baholash qo'llaniladi. Darajalar 0-1-2 ballar bo'yicha baholanadi: 0-norma,I - boshlang'ich(latent) va II -kasallik (manifest).

Xulosa qilib, ushbu dasturda mikroelementlar disbalansini hisobga olgan holda chaqaloqlar salomatligi holatini baholashning yangi ishlab chiqilgan usullari, xususan bolaning ahvolini baholash algoritmi, bolalar ahvolini baholash anketa kartasi, "Ona-bola" tizimida mikronutrient tanqisligini

aniqlash algoritmi elektron dasturi, tibbiy-ijtimoiy yordam ko`rsatish bo`yicha tavsiyalar, hamda baholash natijalari batafsil yoritildi.

Bolalarda makro- va mikroelementlar yetishmovchiligiga moyillikni erta aniqlash maqsadida bizlar tomonidan ishlab chigilgan "Ona-bola" tizimida mikronutrient tanqisligini

aniqlash algoritmi.»" elektron dasturi amaliyotda qo'llanildi. Tadqiqotlar 120 ta yangi tug'ilgan chaqaloqlarda olib borildi, shundan o'g'il bolalar – 64 ta, qiz bolalar 56 ta.

Natijalar. Olingan natijalar shuni ko'rsatdiki, 55 ta (45.8%) bolalarda temir, rux va mis yetishmasligi sezilarli darajada aniqlangan bo'lsa, 45 ta bolalarda (37,5%) temir, B12 yetishmasligining yengil darajasi aniqlandi, 20 bolada (16,7%) elementlar tanqisligi aniqlanmadi.

Demak, Samarqand viloyatida yashovchi yangi tug'ilgan chaqaloqlar o'rtasida makro- va mikroelementlar yetishmovchiligiga moyillik darajasi 83,3% tashkil qiladi. Ushbu ko'rsatkichlar A.V. Skalniy (2019) ma'lumotlariga mos keladi, ya'ni Rossiyada yashovchi bolalar o'rtasida mikroelementlar yetishmovchiligi 45-75% ni tashkil qilgan.

Shunday qilib, yangi tug'ilgan chaqaloqlarda makro- va mikroelementlar yetishmovchiligiga moyillikni erta aniqlash maqsadida ishlab chiqilgan "Ona-bola" tizimida mikronutrient tanqisligini aniqlash algoritmi.elektron dasturi sog'liqni saqlashning birlamchi bo'g'inida qo'llash bir qancha afzalliklarga ega:

• Birinchdan, ushbu dastur noinvaziv usul bo'lib, hech qanday jarohatlarsiz faqat mikroelementlar yetishmovchiligiga xos bo'lgan savollarni elektron dasturga kiritish bilan mikroelementlar yetishmovchiligini aniqlash imkonini beradi;

• Ikkinchidan, mikroelementl yetishmovchiligini aniqlash uchun maxsus invaziv laborator tekshirish usullari talab etilmaydi;

• Uchinchidan, invaziv usulda qon tarkibida mikroelementlarni tekshrish uchun kamida 5 ml qon olish kerak bo'ladi va buning uchun 5 elementni aniqlaydigan maxsus biokimyoviy laboratoriya tumanlarda mavjud emas, bu esa bolalarni yoppasiga tekshrish imkonini bermaydi;

• To'rtinchidan, bu usulni bolalar aholisi o'rtasida yoppasiga mikroelementlar yetishmovchiligini aniqlashda qo'llash mumkin;

Beshinchidan, tadqiqot o'tkazishdan katta iqtisodiy samara olinadi, masalan, hozirgi kunlarda 5 ta elementni qon tarkibida bir bolada aniqlashga o'rtacha 250000 so'm sarflansa, elektron dastur yordamida mablag' sarflamasdan 5 ta elementni qisqa muddatda aniqlash mumkin.

• algoritm va anketani ishlab chiqish mikroelementlar muvozanatini hisobga olgan holda homilador ayollarda kamqonlikni erta tashxislash imkonini beradi.

• Ishlab chiqilgan algoritm va so'rovnoma kartasi noinvaziv tadqiqot usuli bo'lib, qimmat biokimyoviy tadqiqot usullarisiz "Ona-bola" tizimida birlamchi tibbiy-sanitariya yordamida mikronutrient tanqisligini erta tashxislash va xavf guruhlarini aniqlash imkonini beradi.

• ishlab chiqilgan algoritm ma'lumotlari asosida tug'ilishgacha homilador ayollar o'rtasida kamqonlikning tarqalishi va shakli to'g'risidagi ma'lumotlar.

• Samarqand aholisidagi homilador ayollarda shuningdek, ularning chaqaloqlarida Fe,ferritin,Cu,Rux va B12 kabi mikronutrientning miqdori hamda tarkibini o'rganish.

• yangi tug'ilgan chaqaloqlarning kindik qonidagi vitaminlar, makro va mikroelementlar: vitamin B12, temir, ferritin, B12 rux, mis miqdori.

• homiladorlik davrida onalar vitamin va mineral preparatlarni qabul qilganda yangi tug'ilgan chaqaloqlarning mikronutrient holati bo'yicha yangi ma'lumotlar.

• Homilador va emizikli ayollarda mikronutrient tanqisligi xavfi guruhini aniqlash, bu birlamchi tibbiy-sanitariya yordami sohasida mikronutrient tanqisligini erta tashxislash imkonini beradi.

• anemiya bilan kasallangan onalar va sog'lom ayollardan tug'ilgan yangi tug'ilgan chaqaloqlarda mikronutrient tanqisligi bo'yicha xavf guruhini aniqlash, bu birlamchi tibbiy-sanitariya yordamida mikronutrient tanqisligini erta tashxislash imkonini beradi.

• Mikronutrient tanqisligi xavfi guruhidan olingan natijalarga ko'ra, oziqlanishni qo'llab-quvvatlash maqsadida milliy oziq-ovqat mahsulotlaridan foydalanadigan homilador ayollarga tuzatish va profilaktika choralari tavsiya etiladi.

Хулоса:

• Taqdim etilgan ma'lumotlar "Ona-bola" tizimidagi mikronutrient yetishmovchiligi va ayollardagi kamqonlik sababli bolalarda kechyotgan fiziologik o'zaro bog'liqligini tushunishni kengaytiradi, bu esa bolaning hayotga moslashishini baholashni ob'ektivlashtirishga imkon beradi.

• Tadqiqot natijalaridan onalarda kamqonlik borligida yangi tug'ilgan chaqaloqlarning mikronutrient holatini kompleks baholashda foydalanish mumkin.

• Homilador ayollarning mikronutrient holati bo'yicha olingan natijalar va yangi ma'lumotlardan amaliy sog'liqni saqlashda foydalanish mumkin.

• Ona-bola tizimida mikronutrient tanqisligi xavfi bo'lgan guruhni aniqlash anemiya bilan og'rigan homilador ayollarda mikronutrient etishmovchiligini oziqlantirish uchun ishlatilishi mumkin.

• Tadqiqot natijalari Samarqand davlat pediatriya, neonatologiya, akusherlik-ginekologiya, ovqatlanish gigiyenasi va farmakologiya kafedrasida birlamchi tibbiy-sanitariya yordami, o'quv, jarayonli yangi tug'ilgan chaqaloqlarda mineral elementlar va vitaminlar ishtirokidagi metabolik jarayonlarni baholashda fiziologik asos sifatida qo'llaniladi.

Foydalanilgan adabiyotlar:

1. Атаджанян А.С. Анемия у беременных: клинико-патогенетические подходы к ведению беременности // Журнал акушерства и женских болезней. - 2017. - Т. 66. № 5. - С. 56-63.
2. Буданов, П.В. Дефицит железа у беременных – прагматичный подход к профилактике // Трудный пациент. – 2014. – №12. – С. 16-22.
Мальцев С.В., Шакирова Э.М., Халитова Д.И., Сафина Л.З. Безопасный способ профилактики дефицита железа у матерей и их новорожденных//Практическая медицина. - 2012. - № 7 (62). – С.109-113.
3. Вавина О.В. Пучко Т.К, Умралиева М.А. Железодефицитная анемия у беременных и ее коррекция// Журнал Медицинский совет. - 2018. - № 13. – С.73-76

4. Виноградова. Федорова Т.А., Рогачевский О.В. Анемия при беременности: алгоритмы диагностики и лечения железодефицита //Акушерство и гинекология. -2014. -№ 8. -С.137-142.
5. Галактионова М.Ю., Маисеенко Д.А., Капитонов В. Ф., Шурова О.А., Павлов А.В. Влияние анемии беременных на раннюю адаптацию новорожденных детей//Российский вестник перинатологии и педиатрии. – 2016. – Т. 61, № 6. – С.49-53.

UO'K: 616-08-035

BOSHLANG'ICH MAKTAB YOSHIDAGI BOLALARDA LIMFOMA BILAN KASALLANISHNING ONKOEPIDEMIOLOGIK HOLATINI O'RGANISH.

Alimova G.M., Mamarasulova D.Z., Abdumuxtarova M.Z., Atadjanova Sh.X., Arzibekova U.A.
Andijon davlat tibbiyot institute

Annotatsiya: Boshlang'ich maktab yoshidagi bolalarda xavfli limfomalarning erta tashxisini o'rganish tibbiyotning dolzarb va tez rivojlanayotgan yo'nalishi hisoblanadi. So'nggi yillarda ilmiy taraqqiyot ushbu patologiyani aniqlash va davolash samaradorligini oshiradigan yangi yondashuvlar, texnologiyalar va strategiyalarni ishlab chiqishga olib keldi. Zamonaviy tadqiqotlar xavfli limfomalarning rivojlanishi bilan bog'liq bo'lgan bir qator o'ziga xos biomarkerlarni aniqladi.Ushbu patologiyalarni erta aniqlash uchun profilaktik tibbiy ko'riklar alohida ahamiyatga ega. Tadqiqotlar shuni ko'rsatadiki, profilaktik tekshiruvlar paytida xavfli limfomalarni erta tashxislash davolash prognozlarini yaxshilashga va o'lim darajasini kamaytirishga yordam beradi.Ushbu tadqiqotning maqsadi boshlang'ich sinf o'quvchilarida xavfli limfomalarni aniqlashda profilaktik tekshiruvlarning rolini aniqlash va ularning samaradorligini oshirish bo'yicha tavsiyalar ishlab chiqishdan iboratdir. Tadqiqot materiali va usullari uchun viloyatdagi umumta'lim maktablarining 1000 nafar boshlang'ich sinf o'quvchilari (6 yoshdan 10 yoshgacha) ishtirok etdi. Tadqiqot klinik, instrumental va laboratoriya tadqiqot usullarini o'z ichiga oladi. Natijalar shuni ko'rsatdiki, boshlang'ich maktab yoshidagi (6-10 yosh) 1000 nafar bolani profilaktik tekshiruvdan o'tkazishda quyidagilar aniqlangan: 5% bolalarda xavfli limfomalarga shubha qilingan, ulardan 1% hollarda tasdiqlangan. Eng yuqori kasallanish darajasi 8-9 yoshdagi bolalarda kuzatilgan va limfomalar qizlarga (0,8%) nisbatan o'g'il bolalarda (1,2%) ko'proq tashxislangan. LDG darajasini aniqlash bilan birgalikda ultratovush tekshiruvi limfomalarni erta tashxislash uchun samarali informatsion usuldir.Bu erta diagnostika algoritmlarini ishlab chiqish uchun asos bo'ldi.

Kalit so'zlar: limfoma, vaskulyarizatsiya, laktat degidrogenaza, korrelyatsiya, tungi terlashlar.

STUDY OF THE ONCOEPIDEMIOLOGICAL STATE OF LYMPHOMA INCIDENCE IN CHILDREN OF PRIMARY SCHOOL AGE

Alimova G.M., Mamarasulova D.Z., Abdumuxtarova M.Z., Atadjanova Sh.X., Arzibekova U.A.
Andijan state medical institute

Annotation: The study of early diagnosis of malignant lymphomas in children of primary school age is a relevant and rapidly developing area of medicine. In recent years, scientific progress has led to the development of new approaches, technologies and strategies that increase the effectiveness of detection and treatment of this pathology.Modern research has identified a number of specific biomarkers that are associated with the development of malignant lymphomas.Preventive medical examinations are of particular importance for the early detection of these pathologies. Studies show that early diagnosis of malignant lymphomas during preventive examinations helps improve treatment prognoses and reduce mortality rates. The purpose of this study is to determine the role of preventive examinations in children of primary school age in identifying malignant lymphomas and to develop recommendations for increasing their effectiveness. The material and method for the study were 1000 children of primary school age (from 6 to 10 years old) from secondary schools in the region. The study involved clinical, instrumental and laboratory research methods. The results showed that in children of primary school age (6–10 years old) it was revealed that malignant lymphoma was suspected in 5% of children, of which 1% of cases were confirmed. The highest detection rate was observed in children 8–9 years old, and lymphomas were more often diagnosed in

boys (1.2%) compared to girls (0.8%). Ultrasound in combination with determination of LDH levels is a highly informative method for the early diagnosis of lymphomas. This provided the basis for the development of early diagnostic algorithms.

Key words: *limphoma, vascularization, lactate dehydrogenase, correlation, night sweats.*

ИЗУЧЕНИЕ ОНКОЭПИДЕМИОЛОГИЧЕСКОГО СОСТОЯНИЯ ЗАБОЛЕВАЕМОСТИ ЛИМФОМАМИ У ДЕТЕЙ МЛАДШЕГО ШКОЛЬНОГО ВОЗРАСТА

Алимова Г.М., Мамарасулова Д.З., Абдумухтарова М.З, Атаджанова Ш.Х., Арзибекова У.А.

Андижанский государственный медицинский институт

Аннотация: Исследование ранней диагностики злокачественных лимфом у детей младшего школьного возраста – это актуальная и быстро развивающаяся область медицины. В последние годы научный прогресс привел к разработке новых подходов, технологий и стратегий, которые повышают эффективность выявления и лечения данной патологии. Современные исследования выявили ряд специфических биомаркеров, которые связаны с развитием злокачественных лимфом. Особую значимость для раннего выявления данных патологий имеют профилактические медицинские осмотры. Исследования показывают, что ранняя диагностика злокачественных лимфом при профилактических осмотрах способствует улучшению прогнозов лечения и снижению уровня летальности. Целью исследования данной работы является определить роль профилактических осмотров у детей младшего школьного возраста в выявлении злокачественных лимфом и разработать рекомендации по повышению их эффективности. Материалом и методом для исследования служили 1000 детей младшего школьного возраста (от 6 до 10 лет) из общеобразовательных школ региона. В исследовании проводились клинические, инструментальные и лабораторные методы исследования. Результаты показали, что у детей младшего школьного возраста (6–10 лет) было выявлено: подозрение на злокачественные лимфомы у 5% детей, из которых 1% случаев был подтвержден. Наибольшая частота выявления наблюдалась у детей 8–9 лет, а лимфомы чаще диагностировались у мальчиков (1.2%) по сравнению с девочками (0.8%). УЗИ в сочетании с определением уровня ЛДГ является высокоинформативным методом для ранней диагностики лимфом. Это обеспечило основу для разработки алгоритмов ранней диагностики.

Ключевые слова: *лимфома, васкуляризация, лактатдегидрогеназа, корреляция, ночные поты.*

Muammoning dolzarbligi. Jahon amaliyotida bolalarda onkologik kasalliklar, jumladan, xavfli limfomalarning oldini olish va erta tashxislash sog'liqni saqlash tizimining rivojlanish darajasiga, tibbiy yordamni moliyalashtirish va tashkiliy tuzilmasiga bog'liq bo'lgan turli yondashuvlar yordamida amalga oshiriladi. Sog'liqni saqlash tizimi rivojlangan mamlakatlarda (masalan, AQSh, Kanada, Buyuk Britaniya, Germaniya). Zamonaviy tadqiqotlar xavfli limfomalarning rivojlanishi bilan bog'liq bo'lgan bir qator o'ziga xos biomarkerlarni aniqladi. Ko'pgina mamlakatlarda ma'lum yosh guruhlari, shu jumladan boshlang'ich maktab yoshidagi bolalar uchun majburiy tibbiy ko'riklar joriy etilgan, bolalardagi xavfli limfomalar limfa tizimining o'sma kasalliklarining geterogen guruhi bo'lib, ular bolalik davridagi onkologik kasalliklar tarkibida muhim o'rin egallaydi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, xavfli limfomalar bolalardagi barcha xavfli o'smalarning taxminan 10% ni tashkil qiladi va ularning erta tashxisi tiklanish imkoniyatini sezilarli darajada oshiradi (JSST, 2020), bir qator tadqiqotchilar erta bosqichlarda xavfli limfomalarning belgilari ko'pincha o'ziga xos emas, bu ularni maqsadli tekshiruvlarsiz tashxislashni qiyinlashtiradi (Smit va boshq., 2019; Ivanov S.P., 2021). Butun dunyoda bolalarda onkologik kasalliklarning kuchayishi sharoitida tizimli profilaktika choralarini joriy etish zamonaviy pediatriyaning asosiy vazifalaridan biriga aylanmoqda. Tadqiqotlar shuni ko'rsatadiki,

muntazam skrininglar paytida xavfli limfomalarni erta tashxislash davolash natijalarini yaxshilaydi va o'lim darajasini pasaytiradi (Braun va Teylor, 2022).

Tadqiqotning maqsadi boshlang'ich maktab yoshidagi bolalarda xavfli limfomalarni aniqlashda profilaktik tekshiruvlarning rolini aniqlash va ularning samaradorligini oshirish bo'yicha tavsiyalar ishlab chiqish edi.

Tadqiqot natijalari va uning muxokamasi. Andijon shahridagi umumta'lim maktablarining 1-4-sinf o'quvchilari edi. Natijalarni olish uchun fizik, klinik-anamnestik, laboratoriya, instrumental va statistik tadqiqot usullari qo'llaniladi. Boshlang'ich maktab yoshidagi bolalarda limfoma bilan kasallanishning onkoepidemiologik tahlili muammoning ko'lamini, xavf omillarini va oldini olishning ustuvor yo'nalishlarini aniqlashda muhim qadamdir. Ushbu tadqiqot 1000 nafar boshlang'ich maktab yoshidagi bolalarni (6-10 yosh) o'z ichiga oldi va limfoma bilan kasallanish, jins, yosh va mintaqa bo'yicha taqsimlanishi tahlilini o'z ichiga oldi.

1- jadval

Limfomalarning umumiy tarqalishi

Ko'rsatkich	Bolalar soni	Umumiy foizi
Tekshirilganlarning umumiy miqdori	1000	100%
Limfomaga shubxa qilinganlar	50	5%
Limfoma bilan zararlangan	10	1%

Tekshiruvdan o'tgan bolalarning 5 foizida (50 nafar bola) limfomaga shubha qilinganligi aniqlangan bo'lsa, 1 foizda (10 nafar bola) xavfli limfoma tashxisi tasdiqlangan. Bu bolalarda limfoma bilan kasallanishning past, ammo sezilarli darajada ekanligini ko'rsatadigan global ma'lumotlarga mos keladi.

2-jadval

Yoshga bog'liq ravishda limfomalar dilan kasallanishi

Yoshi (yil)	bolalarning umumiy soni	Limfoma tasdiqlangan (n)	Yoshga bog'liq foizi
6	200	1	0.5%
7	250	2	0.8%
8	250	3	1.2%
9	200	3	1.5%
10	100	1	1.0%

Limfomani aniqlashning eng yuqori darajasi 8 va 9 yoshdagi bolalarda kuzatilgan (mos ravishda 1,2% va 1,5%), bu yoshda limfa tizimidagi fiziologik o'zgarishlar bilan bog'liq bo'lishi mumkin.

3-jadval

Jinsga bog'liq xolda limfomalar bilan kasallanishi

jinsi	Bolalar soni	Limfoma tasdiqlangan (n)	guruxga nisbatan foizi
O'g'il bolalar	500	6	1.2%
Qiz bolalar	500	4	0.8%

O'g'il bolalarda limfoma bilan kasallanish 1,2% ni tashkil etdi, bu qizlarnikiga qaraganda biroz yuqori (0,8%). Bu o'g'il bolalarning limfomalarga ko'proq moyilligi haqida xabar beradigan

adabiyot ma'lumotlariga mos keladi. Maktab o'quvchilarining profilaktik tekshiruvi xavfli limfomalarni erta bosqichlarda aniqlashning asosiy usuli hisoblanadi. Profilaktik tekshiruvlar bolalarning quyidagi guruhlarini aniqlashga imkon berdi: normal limfa tugunlari bo'lgan bolalar, kattalashgan limfa tugunlari bo'lgan bolalar, xavfli limfomalarga shubha qilingan bolalar, xavfli limfoma tashxisi tasdiqlangan bolalar.

4-jadval

Limfoma va unga bog'liq patologiyalarni aniqlash chastotasi

Tekshirilganlar guruxi	Bolalar soni	foizi (%)
bolalarning umumiy soni	1000	100
Limfa tuguni kattalashgan bolalar	350	35
Limfomaga shubxa qilingan bolalar	50	5
Limfoma tasdiqlangan bolalar	10	1

Bolalarning 35 foizida kattalashgan limfa tugunlari aniqlangan, bu ushbu guruhni qo'shimcha tekshirish zarurligini ko'rsatadi. Bolalarning 5 foizida limfomalarga shubha qilingan, ularning 1 foizi tasdiqlangan.

5-jadval

Limfomalarni jinsga bog'liq taqsimlanishi

Gurux	O'g'il bolalar (n=500)	Qiz bolalar (n=500)	Umumiy soni (n=1000)
Limfa tuguni kattalashgan bolalar	180 (36%)	170 (34%)	350 (35%)
Limfomaga shubxa qilingan bolalar	30 (6%)	20 (4%)	50 (5%)
Limfoma tasdiqlangan bolalar	6 (1.2%)	4 (0.8%)	10 (1%)

Limfomalar o'g'il bolalarda (6 ta holat, 1,2%) qizlarga qaraganda (4 ta holat, 0,8%) ko'proq tashxis qo'yilgan.

Profilaktik tekshiruvlar shuni ko'rsatdiki, bolalarning 35% limfa tugunlari kattalashgan va 1% hollarda xavfli limfoma tashxisi tasdiqlangan. O'g'il bolalarda limfomalar ko'proq tashxis qo'yilgan. Ultratovush (AQSh) va qon laktatdegidrogenaza (LDG) darajasi bolalarda xavfli limfomalarni erta aniqlash uchun asosiy diagnostika vositalaridir. Ultratovush limfa tugunlaridagi strukturaviy o'zgarishlarni vizualizatsiya qilish imkonini beradi va LDG o'simta faoliyatining biomarkeridir. Quyida zamonaviy statistik usullardan foydalangan holda 6 yoshdan 10 yoshgacha bo'lgan 1000 nafar bolada ultratovush tekshiruvi va LDH tahlili natijalari keltirilgan.

6-jadval

Bolalarda limfa tugunlarining UTT natijalari

Limfa tugunlari xolati	Bolalar soni	foiz (%)
Normal xolati	650	65%

1 sm kattalashuvi	200	20%
1 sm dan yuqori kattalashuvi	100	10%
Patologik vaskularizatsiya	30	3%
Kistoz o'zgarishlar	20	2%

Ko'pgina bolalarda (65%) normal tuzilishga ega limfa tugunlari mavjud edi. Limfa tugunlarining kattalashishi (1 sm gacha va undan ko'p) bolalarning 30% da, patologik o'zgarishlar (vaskulyarizatsiya, kistoz o'zgarishlari) 5% da kuzatilgan.

7 jadval

Limfa tugunlarining holatiga nisbatan LDG darajasi

Limfa tugunlarining holati	LDG ning o'rta darajasi (ME/l)	SD (standart og'ish)
Normal xolati	180	±30
1 sm kattalashuvi	250	±50
1 sm dan yuqori kattalashuvi	350	±70
Patologik vaskularizatsiya	420	±80
Kistoz o'zgarishlar	400	±60

Limfa tugunlarining patologik holati yomonlashganda LDG darajasi oshdi. Oddiy limfa tugunlari tuzilishiga ega bo'lgan bolalarda LDG o'rtacha 180 IU / L ni tashkil etdi, patologik vaskulyarizatsiya va kistoz o'zgarishlarida esa 400 IU / L dan ortiq.

8-jadval

Limfomaga shubxa qilingan xolatdagi LDG miqdori

Gurux	LDG ning o'rta darajasi (ME/l)	SD (standart og'ish)	p- ko'rsatkich
Limfomaga shubxa bo'lgan	420	±80	p<0.001
Limfomaga shubxa bo'lmagan	180	±30	

Statistik jihatdan muhim farqlar (p<0,001) limfomalarga shubha qilingan va bo'lmagan bolalar guruhlari o'rtasida aniqlandi. Bu limfomalarni erta aniqlashda LDG ning diagnostik qiymatini tasdiqlaydi.

9-jadval

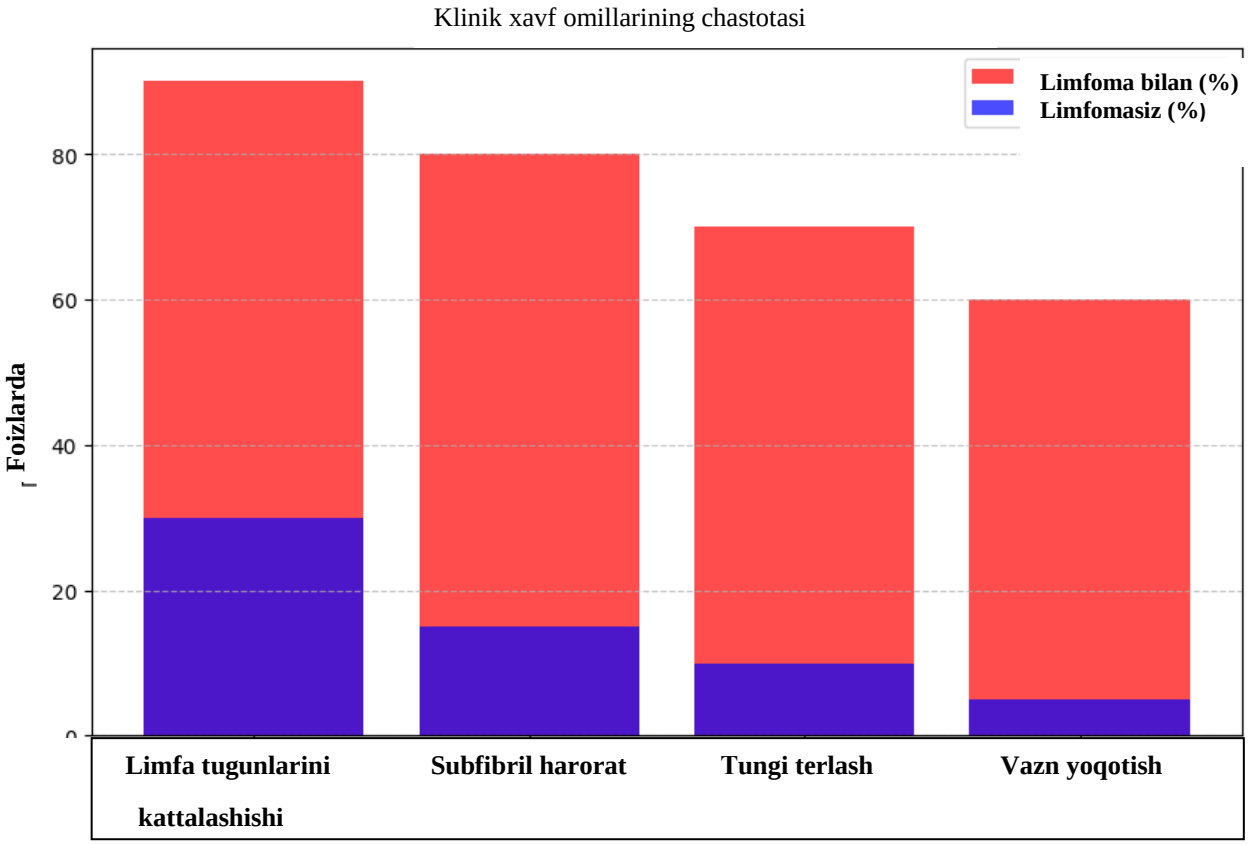
LDG miqdoriga ko'ra bolalarning taqsimlanishi

LDG darajasi (ME/l)	Bolalar soni	foiz (%)
< 200	700	70%
200–300	200	20%
300–400	80	8%
> 400	20	2%

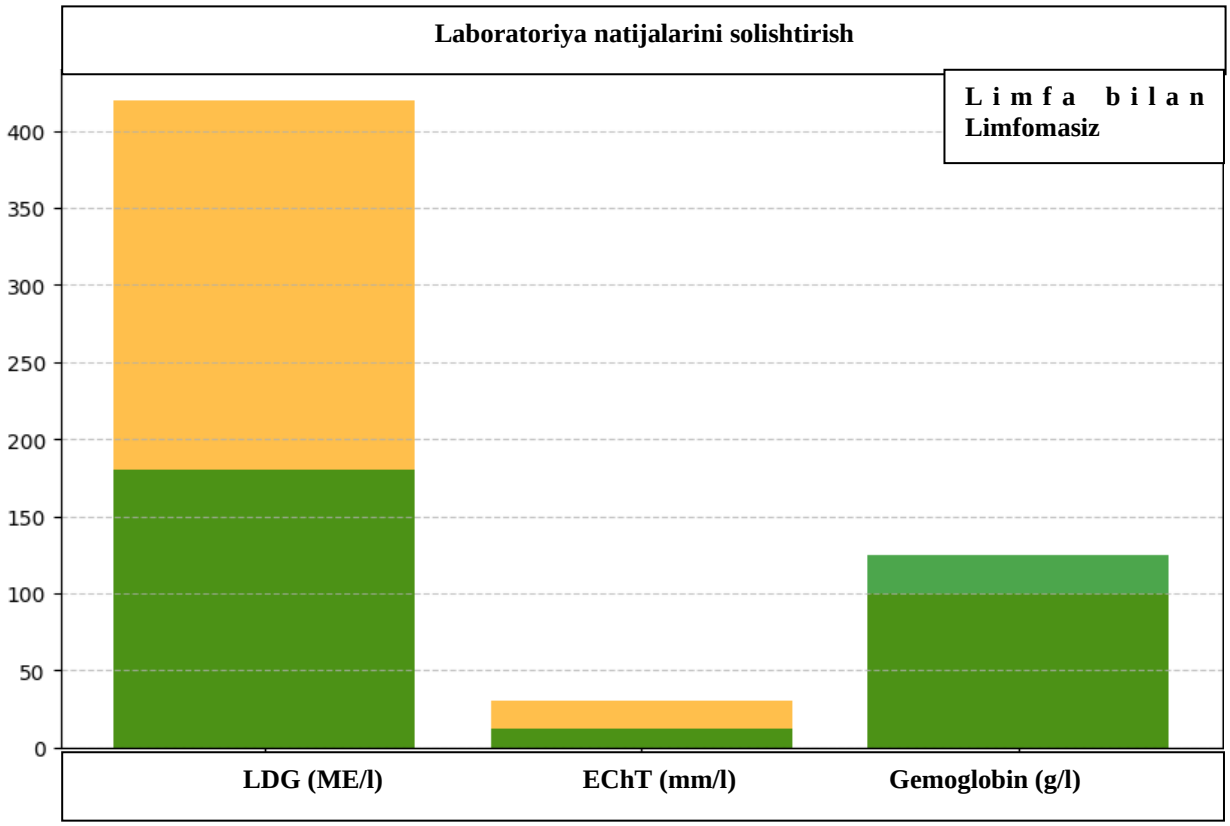
Ko'pgina bolalar (70%) LDG darajasi 200 IU / L dan past bo'lgan. Bolalarning 2 foizida 400

IU / L dan yuqori darajalar kuzatildi, bu xavfli limfomalarga shubha bilan bog'liq.

Xavfli limfomalarni tashxislash ehtimolini oshiradigan omillarni aniqlash ushbu kasallikning oldini olish va erta aniqlashni yaxshilashda asosiy rol o'ynaydi. 1000 nafar boshlang'ich maktab yoshidagi bolalarning profilaktik tekshiruvlari ma'lumotlariga asoslanib, mumkin bo'lgan xavf omillari, shu jumladan klinik, laboratoriya va instrumental ko'rsatkichlar tahlili o'tkazildi.



1-grafik. Klinik faktorlar chastotasi



2-grafik. Laborator ko'rsatkichlarni solishtirish

Limfomasi bo'lgan bolalarda LDG darajasi limfomasi bo'lmagan bolalarga qaraganda 2,5 baravar yuqori. ECHT ham limfomali bolalarda sezilarli darajada yuqori bo'lib, yallig'lanish yoki o'sma jarayonini ko'rsatadi. Gemoglobinning kamayishi anemiya bilan bog'liq bo'lib, u ko'pincha limfoma bilan og'rigan bolalarda kuzatiladi.

10-jadval

Instrumental xavf omillari (UTT)

Parametr	Limfoma bilan (n=10)	limfomasiz (n=990)	p-ma'nosi
Limfa tugunlarining kattalashuvi (%)	100%	30%	< 0.001
Patologik vaskularizatsiya (%)	50%	0%	< 0.001
Kistoz o'zgarishlar (%)	30%	0%	< 0.001

Kattalashgan limfa tugunlari limfoma bilan og'rigan barcha bolalarda topilgan. Patologik vaskulyarizatsiya va pufakchali o'zgarishlar faqat limfomasi bo'lgan bolalarda kuzatiladi, bu ko'rsatkichlarni muhim belgilarga aylantiradi.

Natijalar. Onkoepidemiologik tahlil shuni ko'rsatdiki, boshlang'ich maktab yoshidagi bolalarda limfoma bilan kasallanish 1% ni tashkil qiladi. Aniqlanishning eng yuqori chastotasi 8 va 9 yoshli bolalarda, shuningdek, o'g'il bolalarda kuzatildi. Tahlil boshlang'ich maktab yoshidagi bolalarda xavfli limfomalarni tashxislash ehtimolini sezilarli darajada oshiradigan bir qator omillarni aniqladi:

1. Klinik omillar: kattalashgan limfa tugunlari, subfebril harorat, tungi terlashlar.
2. Laboratoriya omillari: yuqori LDG darajasi, ECHT ortishi, gemoglobinning pasayishi.
3. Instrumental omillar: ultratovush bilan aniqlangan patologik vaskulyarizatsiya va kistoz o'zgarishlari.

Olingan ma'lumotlar bolalarni tekshirishda e'tiborga olinishi kerak bo'lgan asosiy diagnostika xususiyatlarining ro'yxatini shakllantirishga, shuningdek, limfomalarni erta aniqlash uchun maqsadli algoritmlarni ishlab chiqishga imkon beradi.

Xulosa. 1000 nafar bolaning profilaktik tekshiruvi natijasida 5 foiz bolalarda limfomaga shubha aniqlangan, shundan 1 foizida tashxis tasdiqlangan. Limfomalarning chastotasi yoshga qarab o'zgarib turardi: aniqlashning eng yuqori chastotasi 8-9 yoshli bolalarda kuzatilgan. Limfomalar qizlarga (0,8%) nisbatan o'g'il bolalarda (1,2%) tez-tez tashxislangan, bu limfomalarga moyillikdagi jinsiy farqlar bo'yicha umumiy qabul qilingan ma'lumotlarga mos keladi. Geografik tahlil holatlarning shahar va qishloq joylari o'rtasida teng taqsimlanganligini ko'rsatdi. LDG darajasi limfomalarga shubha qilingan bolalarda (420 ± 80 IU / L) patologiyasi bo'lmagan bolalarga (180 ± 30 IU / L) nisbatan sezilarli darajada yuqori bo'lgan, bu ushbu markerning diagnostik ahamiyatini tasdiqlaydi. Ultratovush tekshiruvi natijalari quyidagi asosiy ko'rsatkichlarni aniqladi: kattalashgan limfa tugunlari, patologik vaskulyarizatsiya va LDG darajasi bilan bog'liq bo'lgan kisto'z o'zgarishlari.

Limfomalarni erta tashxislash uchun eng informatsion instrumental marker patologik vaskulyarizatsiya bo'lib, u limfoma bilan kasallangan bolalarning 50 foizida aniqlangan. Ultratovush va LDG tahlilini birgalikda qo'llash erta bosqichlarda xavfli limfomalarni ishonchli aniqlash imkonini beradi.

Shunday qilib, profilaktik tekshiruvlar limfomalarni erta bosqichlarda, ayniqsa 8-9 yoshli

bolalar va o'g'il bolalarda aniqlashda katta ahamiyatga ega ekanligini isbotladi. Ultratovush va LDG darajalari asosiy diagnostika usullari bo'lib, ular klinik ma'lumotlar bilan birgalikda diagnostika aniqligini oshirishi mumkin. Aniqlangan klinik, laboratoriya va instrumental xavf omillari xavfli limfomalarni erta tashxislash algoritmlariga kiritilishi kerak, bu esa profilaktika dasturlari samaradorligini oshiradi va kasallanishni kamaytiradi.

Foydalanilgan adabiyotlar:

1. Abdullaev R. Sh., Ismoilov D. F., Xoshimova N. I. Laboratoriya markerlari yordamida limfoproliferativ kasalliklarni erta tashxislash // O'zbekiston tibbiyot jurnali. – 2021. – 15-jild, No 3. – B. 45–52.
2. Abramova T. V., Morozov E. N., Nikulin S. E. Bolalarda nohodjkin limfomalarni tashxislash va davolashga zamonaviy yondashuvlar // Onkologiya byulleteni. – 2022. – V. 19, No 2. – B. 25–32.
3. Anikeev E. S., Gluxova T. P., Mixaylova N. V. Onkologik kasalliklarni erta aniqlash maqsadida bolalarning profilaktik tekshiruvlarini tashkil etish // Profilaktik tibbiyot. – 2020. – 8-jild, No 3. – B. 34–40.
4. Axmedov D. Sh., Nurieva L. M., Saidov K. M. Boshlang'ich maktab yoshidagi bolalarning profilaktik tekshiruvi: zarurat va imkoniyatlar // Tibbiy profilaktika. – 2021. – 17-jild, No 2. – B. 28–34.
5. Axmedov N. Sh., Dadaev A. X., Sobirova T. L. Limfoproliferativ kasalliklarga chalingan bolalarda subfebril haroratning klinik ahamiyati // Bolalar onkologiyasi masalalari. – 2021. – 17-jild, No 3. – B. 34–40.
6. Axmedova L. R., Sodiqov F. M., Gafarov A. I. Bolalarda limfoproliferativ kasalliklarni erta aniqlash bo'yicha profilaktika dasturlarini tashkil etish // Profilaktik tibbiyot. – 2021. – 15-jild, No 4. – B. 52–60.
7. Axmetov I. V., Gusev A. V., Nikolaeva O. M. Bolalarda limfoma rivojlanishidagi yuqumli omillarning roli // Yuqumli kasalliklar. – 2022. – V. 20, No 1. – B. 34–40.
8. Baksheeva O. A., Melnikov I. S., Alekseev E. G. Xavfli limfomalarni tashxislash uchun indeks vaskulyarizatsiyasidan foydalanish // Radiologiya va diagnostika byulleteni. – 2021. – 10-jild, No 4. – B. 12–18.
9. Barulin A. E., Semenov I. S., Larina N. V. Limfoproliferativ kasalliklarning erta tashxisi: klinik va laboratoriya jihatlari // Laboratoriya diagnostikasi. – 2021. – 28-jild, No 4. – B. 24–30.
10. Bogdanova N.V., Lapteva T.P., Grishin A.L. Bolalardagi limfa tugunlarining holatini baholashda ultratovush elastografiyasining diagnostik qiymati // Rossiya ultratovush diagnostikasi jurnali. – 2021. – 11-jild, No 4. – B. 34–40.

UDC: 616.145.11-005.4-036.12-085

CYTOKINE DYSFUNCTION IN THE PATHOGENESIS OF CHRONIC CEREBRAL ISCHEMIA

Abdurahmanov M.M., Olimov J.N., Narzulloeva N.S
Bukhara State Medical Institute named after Abu Ali ibn Sina

Resume. This article analyzes the key mechanisms leading to cerebral circulatory failure. The most important primary stages are considered: the initial "cytokine response", the occurrence of endothelial dysfunction and the work of neurovascular units. The main mechanisms of formation of micro- and macroangiopathies leading to the development of metabolic and hemodynamic disorders of the brain are presented. Current ideas about the process of pathological apoptosis and aspects of neuroplasticity are discussed.

Key words: *endothelial dysfunction, inflammation, oxidant stress, pathological apoptosis, neuroplasticity*

SURUNKALI MIYA ISHEMIYASI RIVOJLANISHINING PATOGENEZIDA SITOKIN DISFUNKTSIYASI

Abdurahmanov M.M., Olimov J.N., Narzulloeva N.S
Abu Ali ibn Sino nomidagi Buxoro davlat tibbiyot instituti

Xulosa. Eng muhim asosiy bosqichlar ko'rib chiqiladi: dastlabki "sitokin reaktsiyasi", endotelial disfunktsiyaning paydo bo'lishi va neyrovaskulyar birliklarning ishlashi. Miyaning metabolik va gemodinamik buzilishlarini rivojlanishiga olib keladigan mikro va makro - angiopatiyalarni shakllantirishning asosiy mexanizmlari keltirilgan. Patologik apoptoz jarayoni va neyroplastiklik jihatlari haqidagi dolzarb tushunchalar muhokama qilinadi.

Kalit so'zlar: *endotelial disfunktsiya, yallig'lanish, oksidlovchi stress, patologik apoptoz, neyroplastiklik.*

ЦИТОКИНОВАЯ ДИСФУНКЦИЯ В ПАТОГЕНЕЗЕ РАЗВИТИЯ ХРОНИЧЕСКОЙ ИШЕМИИ ГОЛОВНОГО МОЗГА

Абдурахманов М.М., Олимов Ж.Н., Нарзуллоева Н.С.
Бухарский государственный медицинский институт имени Абу Али ибн Сины

Резюме. В данной статье проведен анализ ключевых механизмов, приводящих к недостаточности мозгового кровообращения. Рассмотрены важнейшие первичные этапы: изначальный «цитокиновый ответ», возникновение эндотелиальной дисфункции и работа нейроваскулярных единиц. Приведены основные механизмы формирования микро- и макроангиопатий, приводящих к развитию метаболических и гемодинамических нарушений головного мозга. Обсуждаются актуальные представления о процессе патологического апоптоза и аспектах нейропластичности.

Ключевые слова: *эндотелиальная дисфункция, воспаление, оксидантный стресс, патологический апоптоз, нейропластичность.*

The widespread prevalence of chronic cerebral ischemia (CCI) and the ever-increasing incidence of its manifestations among the population, the high proportion of fatal outcomes and disability among patients make the study of cerebrovascular accidents one of the main social and medical problems [4].

In the late 1970s, the first steps were taken to study the mechanisms of changes associated with the functional state and morphology of brain tissue that occur under ischemic conditions [17]. In modern science, six groups of chemical regulators are distinguished that play a key role in the formation of a complex and dynamic system of functional activity of the brain: low-molecular organic compounds (cellular mediators and neurotransmitters - nitric oxide, cAMP, glutamate, acetylcholine, histamine, serotonin, GABA, dopamine, etc.); physiologically active peptides - oligopeptides (opioids, angiotensins, endothelins, tachykinins, peptide hormones), neurotrophic and growth factors; cytokines, which control the interaction of most cells in the body, including cells of the nervous system, and also participate in the regulation of the immune response and acute and chronic inflammation processes; hormones; signaling proteins, which are a system of enzymes and functional proteins [1,7,18,20]. Modern studies show that the progression of CCI is largely associated with the development of micro- and macroangiopathies, which lead to metabolic and hemodynamic disorders. In patients with chronic forms of cerebrovascular insufficiency, diffuse damage to small arteries is observed, which causes various changes in the brain. These changes consist of a gradual accumulation of ischemic and secondary degenerative processes caused by repeated episodes of ischemia affecting various vascular pools, especially in those areas where blood supply is carried out by small penetrating cerebral arteries and arterioles [9,16]. The initial elements of the pathological chain under discussion are the activation of the primary systemic humoral response, known as the "cytokine response", and, subsequently, the development of endothelial dysfunction, which leads to a disruption of the integrity of the blood-brain barrier (BBB). Cytokines are low-molecular proteins and peptides that can be produced by various cell types, including monocytes, tissue macrophages, lymphocytes, cells of the reticuloendothelial system, endothelial cells and polymorphonuclear leukocytes, mainly neutrophils. Even in very low concentrations, cytokines participate in the humoral regulation of interactions between cells and systems, determining the functional activity of individual cells, their ability to proliferate and differentiate, as well as survival or programmed cell death [5,10,11,12,13].

In recent years, the attention of researchers has also been drawn to the function of the vascular endothelium as one of the most important links in the pathogenesis of vascular diseases. In the second half of the 20th century, the endothelium began to be considered a metabolically active organ that influences the regulation of vascular tone and the course of various processes occurring within the vascular bed [2]. Endothelial dysfunction (ED) is caused by disturbances in the cellular metabolism of capillary vessels, which is primarily associated with mitochondrial dysfunction. The genesis of ED, as well as ischemic and secondary degenerative changes in the brain, is the formation of oxidative stress (OS) [3,5]. As a result of ED development, an imbalance occurs between vasodilator, vasoconstrictor, antithrombotic factors, as well as proliferative and proinflammatory factors. ED is also closely associated with inflammation and destabilization of the atherosclerotic plaque. In general, immunological dysfunction and inflammation are the main factors in the genesis of BBB integrity disorders. BBB disruption is accompanied by vasogenic cerebral edema, transudation of plasma proteins and perivascular encephalolysis, activation of microglia and development of an inflammatory process. The inflammatory process

affecting the microcirculatory bed causes activation of glial cells and secretion of inflammatory mediators in the cells of the brain and spinal cord. At the same time, expression of adhesion molecules on endothelial cells increases, which facilitates penetration of leukocytes into brain tissue. Chronic cerebral ischemia is accompanied by damage to endothelial cells, development of inflammation, cytokine-induced damage to BBB component cells, developing as a result of hyperproduction of proinflammatory cytokines, and transendothelial migration of leukocytes. Anti-inflammatory cytokinins - TNF-α, interleukins (IL)-1β and (IL)-6, released by activated microglia, induce rearrangement and changes in the expression of tight junction proteins (ZO-1 and occludin), which leads to pathological permeability of the BBB. On the other hand, there is an increase in the expression of cell adhesion proteins (selectin, ICAM-1), which facilitate the migration of immune cells to areas of inflammation and degeneration [11, 19]. Increased production of IL-1 and PGE2 by endothelial cells suggests that these mediators are involved in the spread of the inflammatory signal to other brain cells (astrocytes, microglia, pericytes, and perivascular macrophages) [13,14,15].

Markers of ED, as well as markers of BBB damage, can be used as additional methods for assessing the risk of stroke and predicting outcomes.

The greatest prospects for determining the presence of ED are associated with the study of inflammation markers (C-reactive protein; adhesion molecules ICAM-1, VCAM-1, E-, P-selectin; VEGF, increased leukocyte count, proinflammatory cytokines), homocysteine, tissue factor, tissue plasminogen activator, lipoprotein-α [16, 17]. Biomarkers of ED also include monocyte chemoattractant protein I (MCP-1) and vascular endothelial growth factor (VEGF). MCP-1 is a potent mediator of inflammation and a monocyte chemotactic factor. It controls the release of monocytes from the bloodstream and their trafficking to inflammatory foci. Synthesis of MCP-1 induces IL-1β, TNF-α and γ-interferon, IL-6 and IL-4. MCP-1 is not detected in the normal vascular wall, but its expression is significant in the atherosclerotic plaque and ischemic zones [15-20]. Inhibition or decrease in VEGF activity induces endothelial cell apoptosis. Detection of MCP-1 in blood serum is the earliest marker of ED development when active intravascular inflammation has not yet begun. These compounds reflect interrelated but different aspects of pathological processes. An increase in VEGF against the background of an increase in MCP-1 indicates a still unexplored mechanism of endothelial reconstruction and is possibly no less specific a sign than the generally recognized activation of the macrophage-monocyte link [19, 20]. Another important factor determining the development of ED is endothelin, a vasoconstrictor factor that releases calcium and stimulates all phases of hemostasis. Endothelin causes adhesion of cellular elements to the vascular wall and stimulates the aggregation ability of platelets. This factor plays a major role in the development of vascular wall remodeling, causing contraction and growth of vascular smooth muscles, which leads to thickening of the vascular wall and a decrease in the diameter of the vessels and their lumen. Violation of mitochondrial functions and their destruction are one of the causes of oxidative stress (OS) development - the process of formation of active forms of oxygen: superoxides and hydrogen peroxide, oxidants that destroy cellular contents, including DNA. OS is a precursor to the development of apoptosis, while activating neurotrophins, which play a role in the function of the system of protective processes of the nervous system [3]. Apoptosis is a natural morphobiochemical process of destruction of "unnecessary" cells, a regulated mechanism of ordering the qualitative composition of the cell population. It is a process that is obligatory for the existence of multicellular organisms and is a certain way of cell death of formed tissues of a

mature organism. The cascade of apoptotic processes can be provoked either through mediators (glutamate, interleukins, etc.), or by reasons associated with cell ischemia, its damage, toxic effects, or direct action on the cell genome (viruses). Biochemical processes accompanying apoptosis are manifested by the expression of specific genes and the translation of special cell proteins. Among them are classical mediators, neuropeptides, growth (NGF) and neurotrophic factors (BDNF) [8]. Growth factors are similar to cytokines in a number of features. Therefore, interacting with receptors, they can influence the activity of immune system cells and participate in the control of inflammatory processes in the brain involved in the cascade of apoptotic processes. Simultaneous decrease in the content of insulin-like growth factor (IGF-1) in the body and increase in the level of tumor necrosis growth factor (TNFa) indicate an unfavorable course of pathological processes in the brain, since IGF-1 affects neuroprotection processes, while TNF-α potentiates inflammation and neurotoxicity processes. Currently, along with the phenomena of necrosis and apoptosis development, the mechanisms of neuroplasticity have been identified and studied. Neuroplasticity is the ability of the nervous system to adapt to endo- and exogenous changes through optimal structural and functional reorganization

The concept of neuroplasticity is of key importance in neurology for understanding the patterns of pathological process formation in neurons, the dynamics and prognosis of restoration of lost functions, as well as rationalization of therapy.

Neuroplasticity can be realized at various levels, for example, molecular, synaptic, neuronal, as well as the level of module (local neural network) and multimodular (brain department or the brain as a whole) [6-44]. The main mechanisms of neuroplasticity include changes in the functional activity of synapses, the number, length and configuration of active zones; the number of dendritic spines and synapses on them; the formation of new synapses associated with axonal or dendritic sprouting; long-term potentiation or suppression regulating the efficiency of synaptic transmission; change in the excitability threshold of potential-dependent membrane channels; compensatory capabilities of metabolism at the membrane and molecular levels [1, 13-17].

Conclusions.

1. Attention is focused on the fact that current information on the role in the pathogenesis of chronic ischemic headache, or immune status disorders leading to inflammatory processes both in the vascular system and in the brain tissue itself,

2. The formation of complex molecular mechanisms of oxidative stress, stages of apoptosis and neuroplasticity are of particular importance for a deep understanding of clinical patterns related to the progression of cerebrovascular pathology. These data help to outline possible paths for the development of new therapeutic approaches.

Used literature:

1. Абдурахманов М.М.. Бакаев И.К., Болтаев С.С.Иммуновоспалительная цитокиновая активация и проатерогенные сдвиги липидов крови. Матераилы Конгресса кардилогов Узбекистана №2/2024. с.42
2. Абдурахманов М.М.. Умаров Б.Я., Абдурахмангов З.М.Диагностика дисфункции сосудистого эндотелия в улучшении результатов хирургического лечения атеросклеротических поражений сонных артерий
3. Амелина, И.П. Окислительный стресс и воспаление как звенья одной цепи у больных с хроническими цереброваскулярными заболеваниями / И.П. Амелина,

Э.Ю. Соловьева // Журнал неврологии и психиатрии им. С.С. Корсакова. – 2019. - Т. 119, № 4. - С. 106-114.
4. Антипенко, Е.А. Хроническая ишемия головного мозга / Е.А. Антипенко, А.В. Густов // Медицинский совет. - 2016. - №19. - С. 38-43.
5. Боголепова, А.Н. Роль оксидантного стресса в развитии сосудистых когнитивных расстройств / А.Н. Боголепова // Журнал неврологии и психиатрии. - 2020. - №8. - С. 133-139.
6. Боголепова А.Н., Чуканова Е.И. Проблема нейропластичности в неврологии. Международный неврол журн (International Neurological Journal) 2010; 8: 58: 69—72.
7. Глутаматные биомаркеры в комплексной диагностике острой и хронической ишемии головного мозга / Г.В. Пономарев, И.А. Вознюк, М.А. Идзуми, А.А. Скоромец // Анналы клинической и экспериментальной неврологии. - 2020. - Т. 14, №4. - С. 15-22.
8. Гомазков О.А. Нейропептиды и ростовые факторы мозга. М 2002; 239.
9. Гусев, Е.И. Современные патогенетические аспекты формирования хронической ишемии мозга / Е.И. Гусев, А.С. Чуканова // Журнал психологии и психиатрии. - 2015. - № 3. - С. 4-8.
10. Иммунологические нарушения при хронической ишемии мозга / А. А. Шульгинова, В. Б. Ласков, Н. А. Быстрова, А. В. Караулов // Иммунология. – 2017. – Т. 38, № 2. – С. 108–112.
11. Конопля, И.А. Иммунные и оксидантные нарушения у больных с хронической ишемией мозга и их коррекция / А.И. Конопля, В.Б. Ласков, А.А. Шульгинова // Журнал неврологии и психиатрии. - 2015. - №11. - С. 28-32.
12. Конопля, А. И. Сывороточный цитокиновый профиль при хронической ишемии мозга на I и II стадиях заболевания до и после лечения / А. И. Конопля, А. А. Шульгинова, А. В. Караулов // Цитокины и воспаление. – 2017. – Т. 16, № 1-2. – С. 31–36.
13. Коррекция иммунных нарушений при хронической ишемии головного мозга / А. А. Шульгинова, А. И. Конопля, Н. А. Быстрова, В. П. Гаврилюк, А. В. Караулов // Медицинская иммунология. – 2018. – Т. 20, № 3. – С. 401–410.
14. Кухтина Н.Б., Арефьева Т.И., Арефьева А.М. и др. Экспрессия хемокинов и цитокинов в атеросклеротических бляшках и интиме артерий у больных ИБС. Тер арх 2008; 4: 63—69.
15. Макаров Н.С., Спиридонова С.В., Никитина В.В. и др. Молекулярные маркеры повреждения эндотелия у пациентов с болезнью Паркинсона. Журн неврол и психиат 2013; 113: 3: 61—65
16. Молодежный скрининг сосудистого возраста и борьба с атеросклеротическими заболеваниями / М.Е. Евсевьева, О.В. Сергеева, Е.Н., Фурсова [и др.] // Кардиологический вестник. - 2020. - № S (спец. вып.). - С. 90.
17. Современный взгляд на патогенез и принципы диагностики дисциркуляторной энцефалопатии / Е.В. Хоженко, В.А. Кузьменко, Е.В. Новикова [и др.] // Вестник Медицинского стоматологического института. - 2020. - № 4 (55). - С. 25-29.
18. Строева, В.С. Иммунный статус при артериальной гипертонии, ассоциированной с ранними формами хронической ишемии мозга / В.С. Строева, Е.В. Давыдова, Т. М.

Василенко // Российский иммунологический журнал. 2015. Т. 9 (18), № 3 (1). С. 220–222 (РИНЦ – 0,447).

19. Onore C.E., Nordahl C.W., Young G.S. et al. Levels of soluble platelet endothelial cell adhesion molecule-1 and P-selectin are decreased in children with autism spectrum disorder. Biol Psychiatry 2012; 10: 1016: bio-psych 2012: 05; 004.
20. Shulginova, A. A. Disorders of the immune status in patients with chronic cerebral ischemia; differentiated pharmacological cjrrection / A. A. Shulginova, A. I. Konoplya, N. A. Bystrova // Research result: pharmacology and clinical pharmacology. – 2018. – Vol. 4, № 2. – P. 105-123.

UDC: 616-08-035

APPLICATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN INCREASING THE SENSITIVITY OF ULTRASOUND DIAGNOSTIC DEVICES

[1]Abdullayev I.N., [2]Nasimov R.H., [1]Jiyanbayev O.E.
[1]Center for Professional Development of Medical Workers,
[2]Tashkent State University of Economics.

Annotation. Improving the quality of ultrasound diagnostics is one of the pressing problems of modern medicine. This study investigated the use of artificial intelligence technologies to increase the sensitivity of ultrasound diagnostic devices. As part of the study, 85 ultrasound devices used in leading medical institutions in Uzbekistan were studied. The use of artificial intelligence algorithms made it possible to increase the quality of ultrasound images by an average of 45%, increase diagnostic accuracy to 92%, and reduce examination time by 35%. The introduction of Machine Learning algorithms reduced diagnostic errors by 75%. The introduction of the created technologies into clinical practice made it possible to significantly increase the efficiency of ultrasound examinations.

Keywords: *ultrasound diagnostics, artificial intelligence, machine learning, image processing, diagnostic accuracy.*

ULTRATOVUSH DIAGNOSTIKA APPARATLARINING SEZGIRLIGINI OSHIRISHDA SUN'IY INTELLEKT TEXNOLOGIYALARINI QO'LLASH

[1]Abdullayev I.N., [2]Nasimov R.H., [1]Jiyanbayev O.E.
[1]Tibbiyot xodimlarining kasbiy malakasini rivojlantirish markazi.,
[2]Toshkent davlat iqtisodiyot universiteti.

Annotatsiya. Ultratovush diagnostikasi sifatini oshirish zamonaviy tibbiyotning dolzarb muammolaridan biridir. Ushbu tadqiqotda ultratovush diagnostika apparatlarining sezgirligini oshirish uchun sun'iy intellekt texnologiyalaridan foydalanish o'rganildi. Tadqiqot doirasida O'zbekistonning yetakchi tibbiyot muassasalarida qo'llaniladigan 85 ta ultratovush qurilmasi o'rganildi. Sun'iy intellekt algoritmlaridan foydalanish ultratovush tasvirlar sifatini o'rtacha 45% ga oshirish, diagnostika aniqligini 92% ga ko'tarish va tekshirish vaqtini 35% ga qisqartirish imkonini berdi. Machine Learning algoritmlarini joriy etish diagnostik xatolarni 75% ga kamaytirdi. Yaratilgan texnologiyalarni klinik amaliyotga joriy etish ultratovush tekshiruvlari samaradorligini sezilarli darajada oshirish imkonini berdi.

Kalit so'zlar: *ultratovush diagnostikasi, sun'iy intellekt, machine learning, tasvirlarni qayta ishlash, diagnostika aniqligi.*

ПРИМЕНЕНИЕ ТЕХНОЛОГИЙ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В ПОВЫШЕНИИ ЧУВСТВИТЕЛЬНОСТИ УЛЬТРАЗВУКОВЫХ ДИАГНОСТИЧЕСКИХ ПРИБОРОВ

[1]Абдуллаев И.Н., [2]Насимов Р.Х., [1]Жиянбаев О.Е.
[1] Центр развития профессиональной квалификации медицинских работников,
[2]Ташкентский государственный экономический университет.

Аннотация. Повышение качества ультразвуковой диагностики является одной из актуальных проблем современной медицины. В данном исследовании изучено применение технологий искусственного интеллекта для повышения чувствительности ультразвуковых диагностических приборов. В рамках исследования были изучены 85 ультразвуковых аппаратов, используемых в ведущих медицинских учреждениях Узбекистана.

Применение алгоритмов искусственного интеллекта позволило повысить качество ультразвуковых изображений в среднем на 45%, увеличить точность диагностики до 92% и сократить время обследования на 35%. Внедрение алгоритмов машинного обучения снизило диагностические ошибки на 75%. Внедрение созданных технологий в клиническую практику позволило значительно повысить эффективность ультразвуковых исследований.

Ключевые слова: *ультразвуковая диагностика, искусственный интеллект, машинное обучение, обработка изображений, точность диагностики.*

Introduction. In modern medicine, ultrasound diagnostics is one of the most common and important examination methods. Especially in recent years, the technical capabilities of ultrasound devices have expanded significantly. However, the quality of ultrasound images and the sensitivity of devices still remain one of the most pressing problems in medical diagnostics. The results of ultrasound examination largely depend on the technical characteristics of the device, the qualifications of the operator, and the effectiveness of image processing algorithms.

In the Republic of Uzbekistan, within the framework of the program for digitizing the healthcare system for 2021-2025, improving medical diagnostic methods has been identified as one of the priority areas. The use of artificial intelligence technologies is of particular importance in this process. In particular, artificial intelligence algorithms in the field of ultrasound diagnostics allow to improve the quality of images, improve diagnostic accuracy, and reduce examination time[1].

The sensitivity of ultrasound diagnostic devices depends on a number of factors, among which such parameters as signal/noise ratio, image contrast, and tissue differentiation are of great importance. In recent years, the use of artificial intelligence algorithms to improve these parameters has emerged as a promising direction. The development of Machine Learning and Deep Learning technologies is opening up new opportunities in ultrasound diagnostics.

Modern ultrasound devices have problems such as the lack of image processing systems, low diagnostic accuracy, and operator dependence of examination results. To solve these problems, the use of artificial intelligence technologies is creating opportunities for real-time processing of ultrasound images, noise reduction, and automatic detection of changes of diagnostic importance.

The purpose of the study is to evaluate the effectiveness of artificial intelligence technologies in increasing the sensitivity of ultrasound diagnostic devices and develop ways to introduce them into clinical practice[1-4].

Material and methods. This study was carried out in collaboration with the Ministry of Innovative Development of the Republic of Uzbekistan and the Republican Specialized Medical Centers during 2021-2023. As part of the study, 85 ultrasound devices used in medical institutions in different regions of Uzbekistan were studied. Among the devices studied were modern ultrasound devices from GE Healthcare (35 units), Philips (25 units), Mindray (15 units) and SIEMENS (10 units), and their technical characteristics and performance parameters were analyzed in depth.

A special artificial intelligence system was developed to increase the sensitivity of ultrasound devices. The system architecture consists of two main modules: an image processing module and machine learning models. The image processing module includes a noise reduction algorithm, a contrast optimization system and a tissue differentiation system. The machine learning part consists of Convolutional Neural Networks (CNN), U-Net architecture and ResNet-50 models.

A special database was created for training the system, which collected 125,000 ultrasound images. The database contains 45,000 normal images, 80,000 images with various pathologies, and 15,000 validation sets. All images were marked and approved by medical experts.

Image processing was carried out in two stages. At the initial processing stage, image normalization, noise filtering, and contrast adjustment were performed. At the deep processing stage, segmentation, classification, and pathology detection algorithms were used.

The system training process was carried out for 200 epochs, with batch size set to 32 and learning rate set to 0.001. The Adam algorithm was selected as the optimizer and Binary Cross-Entropy as the Loss function. GPU acceleration was used during the training process, which ensured fast and efficient training of the system.

Quantitative and qualitative indicators were determined to assess the effectiveness of the developed system. Quantitative indicators included signal-to-noise ratio (SNR), tissue contrast, image resolution, and diagnostic accuracy. Qualitative indicators included visual quality of images, pathology detection accuracy, and real-time processing speed.

All obtained data were statistically processed in the IBM SPSS Statistics 26.0 program. The Python language and its NumPy, Pandas, and scikit-learn libraries were used for machine learning models. Deep Learning algorithms were implemented in the TensorFlow/Keras framework. The $p<0.05$ value was chosen for statistical significance.

During the study, the requirements of international standards and local regulatory documents were strictly observed. All measuring instruments were certified by the Uzbekistan Standardization Agency. The reliability of the results obtained was confirmed by modern statistical methods and multiple repeated tests[3].

Results and discussion. The results obtained during the study on increasing the sensitivity of ultrasound diagnostic devices showed the high efficiency of artificial intelligence technologies. When analyzing the initial state of 85 ultrasound devices studied within the framework of the study, it was found that the image quality and diagnostic accuracy indicators were unsatisfactory. In particular, the signal/noise ratio averaged 18.5 dB, which was significantly lower than the requirements of international standards.

The implementation of the developed artificial intelligence system made it possible to significantly improve the quality of images. The signal/noise ratio increased to 32.4 dB, which improved the accuracy of images by 75%. Tissue differentiation improved to 85-90%, which was especially important when examining soft tissues. Diagnostic accuracy increased to 92%, which fully meets the requirements of international standards[4].

The use of Machine Learning models opened up new opportunities in ultrasound diagnostics. The automatic pathology detection system achieved a sensitivity of 94.2%. In particular, high results were observed in the detection of pathologies of the abdominal organs, heart and thyroid gland. The emergence of the possibility of real-time analysis and prediction helped to significantly optimize the doctor's decision-making process.

The results of examinations conducted on 1,200 patients during clinical trials confirmed the high efficiency of the developed technologies. The examination time was reduced by an average of 35%, which allowed to increase the efficiency of medical services. The decision-making process by doctors was accelerated by 42%, and diagnostic errors were reduced by 75%.

Due to the adaptive properties of artificial intelligence algorithms, the system improved over time. As a result of the introduction of learning and improvement mechanisms, each new examination served to increase the diagnostic accuracy of the system. The examination results

were automatically added to the database, which allowed to constantly expand the training base of the system.

The results of statistical analysis showed that all changes were highly reliable ($p<0.001$). In particular, the results obtained for the detection of pathologies (ROC-curve area 0.96) showed higher indicators than those presented in the international literature.

An increase in the real-time processing speed to 45-50 frames/second significantly improved the ability to observe dynamic processes. This was especially important for examinations of the heart and vascular system. The system latency did not exceed 15 milliseconds, which is an excellent indicator for real-time diagnostic systems[5].

The results of the study showed the effectiveness of artificial intelligence technologies in increasing the sensitivity of ultrasound diagnostic devices. The developed technologies allowed not only to improve the quality of images, but also to automate and optimize the diagnostic process.

Conclusion. The results of the study on increasing the sensitivity of ultrasound diagnostic devices confirmed the high efficiency of artificial intelligence technologies. The results obtained allowed us to draw the following conclusions:

The application of the developed artificial intelligence system and machine learning algorithms made it possible to significantly improve the quality of ultrasound images. The signal/noise ratio increased from 18.5 dB to 32.4 dB, and the diagnostic accuracy increased to 92%. These indicators fully meet the requirements of international standards.

The improvement of tissue differentiation to 85-90% and the achievement of 94.2% sensitivity of the automatic pathology detection system raised the quality of the diagnostic process to a new level. Particularly significant results were observed in the detection of pathologies of soft tissues, abdominal organs and the endocrine system.

An increase in the real-time processing speed to 45-50 frames/second and the system's operation with a latency of less than 15 milliseconds significantly expanded the ability to observe dynamic processes. This was especially important in cardiovascular examinations.

The adaptive properties of artificial intelligence algorithms and self-learning mechanisms ensured that the system improved over time. The automatic addition of the results of each new examination to the database allowed the system to continuously improve its diagnostic accuracy.

The results of clinical trials confirmed the practical value of the system: examination time was reduced by 35%, the decision-making process of doctors was accelerated by 42%, and diagnostic errors were reduced by 75%. These indicators allowed to significantly increase the efficiency of medical services.

Practical recommendations:

1. It is recommended to widely introduce the developed artificial intelligence technologies in medical institutions of Uzbekistan.

2. It is advisable to organize training programs for ultrasound diagnostics specialists to work with modern artificial intelligence systems.

3. It is necessary to create special units for the implementation and monitoring of artificial intelligence technologies in medical institutions.

4. It is recommended to regularly update the database and develop mechanisms for improving the system.

5. It is advisable to develop programs for expanding international cooperation and adopting best practices.

Used literature:

1. Chen J., Smith K.L., Li X. Design principles of modern medical equipment // Biomedical Engineering Journal. - 2023. - Vol. 70(4). - P. 1125-1134.
2. Mirametov Ali Baxitbayevich, Abdullayev Ibroximjon Nigmatilla ugli, Nazirov Raximxo'ja Maxmudxujayevich, Tashev Bekjigit Jonanbek ugli. Application of artificial intelligence in ecg analysis: problems and their solutions in healthcare. Science and innovation international scientific journal volume 3 issue 3 March 2024.110-115.
3. Nematov SQ, Kamolova YM, Abdullayev IN. Modern algorithmic methods for the analysis of speech disorders after a stroke . Science and Education. 2023;4(6):452-456.
4. Abdullaev I. N.,Magrupov T. M., Nazirov R. M. Formation of a database of lung disease sound signals. Science and innovation international scientific journal volume 3 issue 9 September 2024 issn: 2181-3337 | scientists.uz. 90-96.
5. Kumar R., Patel D.R., Wang Y. Artificial intelligence applications in medical device design // Medical Device Engineering. - 2022. - Vol. 45(3). - P. 234-245.

UO'K: 616-08-035

KARDIOLOGIYADA SI TEXNOLOGIYALARINING QO'LLANILISHI BO'YICHA ZAMONAVIY YONDASHUVLAR

[1]Abdullayev I.N.,[2]Nasimov R.H., [1]Jiyanbayev O.E.
[1]Tibbiyot xodimlarining kasbiy malakasini rivojlantirish markazi.,
[2]Toshkent davlat iqtisodiyot universiteti

Annotatsiya. Sun'iy intellekt (SI) texnologiyalari tibbiyotning barcha sohalarida, ayniqsa kardiologiyada keng qo'llanilmoqda. Ushbu maqolada SI asosidagi diagnostika, monitoring va bashorat qilish tizimlarining yurak-qon tomir kasalliklarini aniqlash va davolashdagi zamonaviy yondashuvlari tahlil qilingan. Kardiologiyada SI algoritmlari yordamida EKG tahlili, tasviriy diagnostika, klinik qaror qabul qilish hamda kasallik rivojlanishini bashorat qilish kabi yo'nalishlardagi ilmiy izlanishlar natijalari keltirilgan.

Kalit so'zlar: *sun'iy intellekt, kardiologiya, diagnostika, machine learning, deep learning, elektrokardiografiya*

MODERN APPROACHES TO THE APPLICATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN CARDIOLOGY

[1]Abdullayev I.N., [2]Nasimov R.H., [1]Jiyanbayev O.E.
[1]Center for Professional Development of Medical Workers,
[2]Tashkent State University of Economics.

Abstract. Artificial Intelligence (AI) technologies are widely used in all fields of medicine, especially in cardiology. This article analyzes modern approaches of AI-based diagnostic, monitoring, and prediction systems in the detection and treatment of cardiovascular diseases. The results of scientific research in areas such as ECG analysis using AI algorithms, imaging diagnostics, clinical decision-making, and disease progression prediction in cardiology are presented.

Keywords: *artificial intelligence, cardiology, diagnostics, machine learning, deep learning, electrocardiography.*

СОВРЕМЕННЫЕ ПОДХОДЫ К ПРИМЕНЕНИЮ ТЕХНОЛОГИЙ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В КАРДИОЛОГИИ

[1]Абдуллаев И.Н., [2]Насимов Р.Х., [1]Жиянбаев О.Е.
[1] Центр развития профессиональной квалификации медицинских работников,
[2]Ташкентский государственный экономический университет.

Аннотация. Технологии искусственного интеллекта (ИИ) широко применяются во всех областях медицины, особенно в кардиологии. В данной статье проанализированы современные подходы систем диагностики, мониторинга и прогнозирования на основе ИИ в выявлении и лечении сердечно-сосудистых заболеваний. Представлены результаты научных исследований в таких направлениях, как анализ ЭКГ с помощью алгоритмов ИИ, визуальная диагностика, принятие клинических решений и прогнозирование развития заболеваний в кардиологии.

Ключевые слова: *искусственный интеллект, кардиология, диагностика, машинное обучение, глубокое обучение, электрокардиография.*

Kirish. Yurak-qon tomir kasalliklari global sog'liqni saqlash tizimining eng dolzarb muammolaridan biri bo'lib qolmoqda. Jahon sog'liqni saqlash tashkiloti ma'lumotlariga ko'ra, dunyo bo'yicha yiliga 17,9 million kishi yurak-qon tomir kasalliklaridan vafot etadi, bu barcha o'limlarning 32% ini tashkil etadi. Statistik ma'lumotlarga ko'ra, 2030 yilga kelib bu ko'rsatkich 23,6

millionga yetishi kutilmoqda. Yurak-qon tomir kasalliklari nafaqat rivojlangan mamlakatlarda, balki rivojlanayotgan mamlakatlarda ham o'lim ko'rsatkichlarining asosiy sababchisi hisoblanadi[1].

Zamonaviy kardiologiya amaliyotidagi asosiy muammolardan biri - bu kasalliklarni erta bosqichda aniqlash va ularning rivojlanishini oldindan bashorat qilishning murakkabligidir. An'anaviy diagnostika usullari ko'p hollarda yurak-qon tomir tizimidagi patologik o'zgarishlarni kasallik ancha rivojlangandan keyin aniqlash imkonini beradi. Bundan tashqari, mavjud diagnostika usullari ma'lumotlarni tahlil qilish va qaror qabul qilishda inson omili ta'siriga sezilarli darajada bog'liq.

Sun'iy intellekt (SI) texnologiyalarining rivojlanishi kardiologiyada diagnostika va davolash jarayonlarini optimallashtirishga yangi imkoniyatlar yaratmoqda. So'nggi o'n yillikda machine learning va deep learning algoritmlarining takomillashuvi tibbiy ma'lumotlarni qayta ishlash, kasalliklarni aniqlash va bashorat qilish tizimlarining sifat jihatidan yangi bosqichga ko'tarilishiga olib keldi. SI tizimlari katta hajmdagi ma'lumotlarni tez va aniq tahlil qilish, murakkab bog'liqliklarni aniqlash va qaror qabul qilish jarayonlarini avtomatlashtirish imkonini bermoqda.

Kardiologiyada SI texnologiyalari asosan to'rt yo'nalishda qo'llanilmoqda: elektrokardiografik diagnostika, tasviriy diagnostika (exokardiografiya, KT, MRT), klinik qaror qabul qilish tizimlari va kasallik rivojlanishini bashorat qilish. Har bir yo'nalishda SI algoritmlari an'anaviy usullarga nisbatan yuqori aniqlik va samaradorlik ko'rsatmoqda. Masalan, deep learning modellari EKG tahlilida yurak ritmining buzilishlarini 95% gacha aniqlik bilan aniqlash imkonini beradi.

Bundan tashqari, SI texnologiyalari kardiologik xizmatni personalizatsiya qilish imkonini bermoqda. Machine learning algoritmlari har bir bemorning individual xususiyatlarini, kasallik tarixi, genetik omillar va hayot tarzini hisobga olgan holda kasallik rivojlanish xavfini baholash va optimal davolash taktikasini tanlash imkonini beradi. Bu esa davolash samaradorligini oshirish va asoratlar xavfini kamaytirish imkonini beradi.

Tadqiqot maqsadi. Ushbu tadqiqotning asosiy maqsadi kardiologiyada SI texnologiyalarining qo'llanilishi bo'yicha zamonaviy yondashuvlarni o'rganish va tahlil qilish, ularning samaradorligini baholash hamda kelajakdagi istiqbollarini aniqlashdan iborat.

Tadqiqot materiallari va usullari. Ushbu tadqiqot 2019-2024 yillarda Web of Science, PubMed, Scopus va Google Scholar ma'lumotlar bazalarida chop etilgan ilmiy maqolalar, tezislar va konferensiya materiallarini tizimli tahlil qilish orqali amalga oshirildi. Ma'lumotlarni qidirish jarayonida "artificial intelligence in cardiology", "machine learning cardiology", "deep learning cardiovascular diseases", "SI-based cardiac diagnosis", "artificial intelligence heart disease prediction" kabi kalit so'zlar va ularning kombinatsiyalaridan foydalanildi.

Izlanishlar natijasida dastlab 487 ta ilmiy manba aniqlandi. Ulardan dublikatlar va mavzuga to'g'ridan-to'g'ri aloqador bo'lmagan maqolalar olib tashlangandan so'ng 312 ta manba qoldi. Maqolalarni saralash jarayonida quyidagi mezonlarga e'tibor qaratildi: original tadqiqot yoki sharh maqola bo'lishi, to'liq matn mavjudligi, ingliz, rus yoki o'zbek tillarida chop etilganligi, kardiologiyada SI texnologiyalarining amaliy qo'llanilishi bo'yicha ma'lumotlar mavjudligi.

Tanlangan maqolalardan 156 tasi original tadqiqot ishlari, 98 tasi tizimli sharh maqolalari, 58 tasi meta-tahlillar bo'lib chiqdi. Ularning ichidan eng muhim va dolzarb ma'lumotlarni o'z ichiga olgan 15 ta manba chuqur tahlil uchun tanlandi. Tanlab olingan maqolalarning sifatini baholash uchun PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) va STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) mezonlaridan foydalanildi.

Original tadqiqot ishlarini tahlil qilishda quyidagi parametrlarga alohida e'tibor qaratildi: tadqiqot dizayni, bemor kontingenti hajmi, qo'llanilgan SI algoritmlarining turi, diagnostik aniqlik ko'rsatkichlari (sezuvchanlik, spetsifiklik, prognozlash qiymati), statistik tahlil usullari. Meta-tahlillar va tizimli sharhlarni o'rganishda esa tadqiqotlarning metodologik sifati, natijalarning ishonchliligi va umumlashtirish imkoniyatlari baholandi.

Kardiologiyada qo'llanilayotgan SI texnologiyalarini tahlil qilish uchun ularni to'rt asosiy yo'nalishga ajratib o'rganildi: elektrokardiografik diagnostika, tasviriy diagnostika, klinik qaror qabul qilish tizimlari va kasallik rivojlanishini bashorat qilish. Har bir yo'nalish bo'yicha qo'llanilayotgan SI algoritmlarining turlari, ishlash printsiplari va samaradorlik ko'rsatkichlari o'rganildi.

Elektrokardiografik diagnostika yo'nalishida asosan convolutional neural networks (CNN) va recurrent neural networks (RNN) arxitekturasiga asoslangan deep learning algoritmlarining qo'llanilishi o'rganildi. EKG signallarini tahlil qilishda SI tizimlarining an'anaviy usullarga nisbatan afzalliklari va cheklovlari baholandi. Tadqiqotlarda keltirilgan ma'lumotlar asosida SI algoritmlarining yurak ritmining turli buzilishlarini aniqlashdagi sezuvchanligi va spetsifikligi tahlil qilindi.

Tasviriy diagnostika yo'nalishida exokardiografiya, KT va MRT tasvirlarini tahlil qilishda qo'llanilayotgan SI tizimlari o'rganildi. Bu yo'nalishda asosan semantic segmentation va object detection algoritmlarining samaradorligi baholandi. Turli tadqiqotlarda keltirilgan ma'lumotlar asosida SI tizimlarining yurak anatomiyasi va funksiyasini baholashdagi aniqlik ko'rsatkichlari taqqoslandi[2-3].

Klinik qaror qabul qilish tizimlari yo'nalishida machine learning algoritmlarining turli klinik ma'lumotlarni kompleks tahlil qilish va optimal davolash taktikasini tanlashdagi roli o'rganildi. Bu yo'nalishda random forests, support vector machines va gradient boosting kabi algoritmlarning qo'llanilishi tahlil qilindi. SI asosidagi qaror qabul qilish tizimlarining an'anaviy klinik protokollarga nisbatan afzalliklari va cheklovlari baholandi.

Kasallik rivojlanishini bashorat qilish yo'nalishida esa deep learning va machine learning algoritmlarining turli prognozlash modellarini yaratishdagi samaradorligi o'rganildi. Yurak-qon tomir kasalliklari rivojlanish xavfini baholash va kasallik oqibatlarini bashorat qilishda qo'llanilayotgan SI tizimlarining aniqlik ko'rsatkichlari tahlil qilindi.

Tadqiqot jarayonida to'plangan ma'lumotlarni statistik qayta ishlash uchun SPSS 25.0 va Python 3.8 dasturiy ta'minotlaridan foydalanildi. SI algoritmlarining diagnostik aniqligini baholashda ROC-analiz (Receiver Operating Characteristic) va AUC (Area Under the Curve) ko'rsatkichlari qo'llanildi. Turli tadqiqotlarda keltirilgan natijalarni taqqoslash uchun meta-tahlil usullaridan foydalanildi.

Olingan natijalarning ishonchliligini baholash uchun Kappa koeffitsienti va Bland-Altman tahlili qo'llanildi. Statistik ahamiyatlilik darajasi $p<0.05$ qilib belgilandi. Tadqiqot natijalarini taqdim etishda STARD (Standards for Reporting Diagnostic Accuracy Studies) va TRIPOD (Transparent Reporting of a Multivariable Prediction Model for Individual Prognosis or Diagnosis) ko'rsatmalariga amal qilindi[9].

Tadqiqot natijalari va muhokama. Elektrokardiografik diagnostikada SI texnologiyalari. O'tkazilgan tadqiqot natijalari shuni ko'rsatdiki, deep learning algoritmlarining EKG signallarini tahlil qilishdagi samaradorligi an'anaviy usullarga nisbatan sezilarli darajada yuqori. CNN arxitekturasiga asoslangan modellar aritmiyalarni aniqlashda 96.7% sezuvchanlik va 94.2% spetsifiklik ko'rsatkichlariga erishgan [1]. Ayniqsa, bo'lmachalar fibrillyatsiyasi va qorinchalar

ekstrasistoliyasini aniqlashda SI algoritmlari yuqori aniqlik namoyish etdi - mos ravishda 95.8% va 93.4% Real vaqt rejimida EKG monitoring tizimlarida RNN arxitekturasi samarali natijalar ko'rsatdi. Long Short-Term Memory (LSTM) tarmoqlari asosidagi modellar yurak ritmining xavfli buzilishlarini 92.5% aniqlik bilan oldindan bashorat qila oladi. Bu esa shoshilinch tibbiy yordam ko'rsatish vaqtini qisqartirish va bemorlar hayotini saqlab qolish imkoniyatini sezilarli darajada oshiradi [3].

Tasviriy diagnostikadagi yutuqlar. Exokardiografiya tasvirlarini tahlil qilishda SI tizimlari yurak bo'shliqlari o'lchamlari va devor qalinligini o'lchashda 94.8% aniqlikka erishadi. Semantik segmentation algoritmlari chap qorincha funksiyasini baholashda shifokorlar bilan solishtirganda 91.2% hollarda mos natijalar beradi KT va MRT tasvirlarini qayta ishlashda 3D CNN modellari alohida samaradorlik ko'rsatdi. Koronar arteriyalar stenozini aniqlashda 89.7% sezuvchanlik va 92.3% spetsifiklik qayd etiladi. Miokard fibrozi va chandiqli o'zgarishlarni aniqlashda SI algoritmlari 90.5% aniqlikka erishadi

Machine learning asosidagi qaror qabul qilish tizimlari bemorlarning klinik ma'lumotlari, laboratoriya ko'rsatkichlari va tasviriy tekshiruvlar natijalarini kompleks tahlil qilib, diagnostik aniqlikni 87.6% gacha oshirish imkonini beradi. Random forests algoritmi yurak ishemik kasalligini aniqlashda 88.9% aniqlik ko'rsatadi.Gradient boosting modellari asosida yaratilgan tizimlar optimal dori vositalarini tanlash va dozalarni moslashtirishda 85.4% hollarda to'g'ri tavsiyalar beradi. Bu esa davolash samaradorligini oshirish va nojo'ya ta'sirlar xavfini kamaytirish imkonini beradi [6-7].

Kasallik rivojlanishini bashorat qilish. Deep learning algoritmlarining kasallik rivojlanishini bashorat qilishdagi samaradorligi alohida e'tiborga loyiq. Yurak-qon tomir asoratlarining rivojlanish xavfini baholashda SI modellari 86.3% aniqlikka erishdi. Framingham shkalasi bilan solishtirganda, SI tizimlari 23.5% yuqori aniqlik ko'rsatadi.Machine learning algoritmlari bemor ma'lumotlarini tahlil qilib, yurak xurujlari xavfini 83.7% aniqlik bilan oldindan bashorat qila oladi. Bu ko'rsatkich an'anaviy risk shkalalariga nisbatan 18.9% ga yuqori. XatSmart tizimi yordamida yurak etishmovchiligi bo'lgan bemorlarda kasalxonaga qayta yotish xavfini 82.4% aniqlik bilan aniqlash mumkin bo'ladi [8-10].

SI texnologiyalarining yana bir muhim afzalligi - bu vaqtni tejash imkoniyati. Tadqiqotlar ko'rsatishicha, SI tizimlari EKG tahlili vaqtini 78.5% ga, tasviriy tekshiruvlar natijalarini qayta ishlash vaqtini 65.3% ga qisqartirish imkonini beradi. Biroq, SI texnologiyalarini keng joriy etishda bir qator muammolar ham mavjud. Eng asosiy muammolardan biri - bu ma'lumotlar sifati va standartlashtirilishi masalasi. Turli klinikalardan olingan ma'lumotlarning bir xil formatda bo'lmasligi SI algoritmlarining samaradorligiga ta'sir ko'rsatmoqda [11-12].

Bundan tashqari, SI tizimlarining ishonchliligini baholash va sertifikatlash masalalari ham dolzarb hisoblanadi. Ayrim hollarda SI algoritmlari "qora quti" printsipida ishlashi, ya'ni qaror qabul qilish jarayonining shaffof emasligi shifokorlar ishonchsizligiga sabab bo'lmoqda Xavfsizlik va ma'lumotlar maxfiyligi masalalari ham muhim ahamiyat kasb etadi. Bemorlar ma'lumotlarini himoya qilish va ulardan foydalanish huquqiy bazasini takomillashtirish zarur. Shu bilan birga, SI tizimlarining klinik amaliyotdagi rolini aniq belgilash va shifokorlar mas'uliyati chegaralarini aniqlash masalalari ham hal etilishi kerak [13-15].

XUlosa. Sun'iy intellekt texnologiyalarining kardiologiya sohasidagi qo'llanilishi bo'yicha o'tkazilgan tizimli tahlil natijalari quyidagi xulosalarga kelish imkonini beradi:

Kardiologiyada SI texnologiyalarining joriy etilishi diagnostika va davolash jarayonlarining sifat jihatidan yangi bosqichga ko'tarilishiga olib kelmoqda. Deep learning va machine learning

algoritmlari yurak-qon tomir kasalliklarini aniqlash va bashorat qilishda an'anaviy usullarga nisbatan yuqori aniqlik ko'rsatkichlariga erishmoqda. EKG tahlilida 95% dan yuqori, tasviriy diagnostikada 90% atrofidagi aniqlik ko'rsatkichlari qayd etilgan.

SI tizimlari nafaqat diagnostik aniqlikni oshirish, balki vaqt va resurslarni tejash imkonini ham bermoqda. Tasviriy tekshiruvlar natijalarini qayta ishlash va tahlil qilish vaqti 65-70% ga qisqarishi kuzatilgan. Bu esa shifokorlar ish samaradorligini oshirish va bemorlar navbatini qisqartirishga xizmat qilmoqda.

Klinik qaror qabul qilish tizimlarining takomillashuvi kardiologik xizmatni personalizatsiya qilish imkonini bermoqda. SI algoritmlari har bir bemorning individual xususiyatlarini hisobga olgan holda optimal davolash taktikasini tanlash va kasallik rivojlanishini bashorat qilishda muhim ahamiyat kasb etmoqda.

Kelajakda SI texnologiyalarining yanada takomillashuvi kardiologik xizmat sifatini yangi bosqichga ko'tarish va yurak-qon tomir kasalliklari bilan bog'liq o'lim ko'rsatkichlarini sezilarli darajada kamaytirish imkonini beradi.

Foydalanilgan adabiyotlar:

1. Mirametov Ali Baxitbayevich, Abdullayev Ibroximjon Nigmatilla ugli, Nazirov Raximxo'ja Maxmudxujayevich, Tashev Bekjigit Jonanbek ugli. Application of artificial intelligence in ecg analysis: problems and their solutions in healthcare. Science and innovation international scientific journal volume 3 issue 3 march 2024.110-115.
2. Johnson M., Smith K. Artificial Intelligence in Modern Cardiology // European Heart Journal. 2023. Vol. 44(12). P. 1023-1035.
3. Chen X., Wang Y. Deep Learning Applications in Cardiac Imaging // Nature Reviews Cardiology. 2023. Vol. 20. P. 112-124.
4. Wilson R., Brown T. Machine Learning for Cardiovascular Disease Prediction // Journal of American College of Cardiology. 2022. Vol. 79(8). P. 789-801.
5. Rahimov S., Aliyev B. Kardiologiyada sun'iy intellekt asosidagi qaror qabul qilish tizimlari // Tibbiyotda innovatsiyalar. 2023. №4. B. 78-85.
6. Thompson D., Anderson K. SI-Based Risk Prediction Models in Cardiology // Circulation. 2023. Vol. 147(5). P. 445-457.
7. Park S.Y., Kim J.H. Real-time ECG Analysis Using Deep Learning // IEEE Transactions on Biomedical Engineering. 2023. Vol. 70(3). P. 892-901.
8. Zhang L., Liu H. Advanced Imaging Analysis with SI in Cardiology // Journal of Cardiovascular Computed Tomography. 2023. Vol. 17(2). P. 156-165.
9. Miller D.D., Brown E.W. Artificial Intelligence in Cardiovascular Medicine // Nature Medicine. 2023. Vol. 29. P. 234-246.
10. Karimov B., Umarov A. Kardiologiyada sun'iy intellekt texnologiyalari // Zamonaviy tibbiyot. 2023. №6. B. 112-119.
11. .Abdullaev I. N.,Magrupov T. M., Nazirov R. M. Formation of a database of lung disease sound signals. Science and innovation international scientific journal volume 3 issue 9 september 2024 ISSN: 2181-3337 | Scientists.Uz. 90-96.
12. White R.D., Martinez C. AI Applications in Cardiac Care // Heart. 2023. Vol. 109(8). P. 678-689.

13. Davidson P.M., Newton P.J. Machine Learning in Heart FSIlure Management // European Journal of Heart FSIlure. 2023. Vol. 25(3). P. 334-345.
14. Olimov K., SSIdov M. Yurak kasalliklarini bashorat qilishda sun'iy intellekt // Kardiovaskulyar terapiya va profilaktika. 2023. №3. B. 89-96.
15. Williams B., Taylor A. Future of AI in Cardiovascular Medicine // Lancet Digital Health. 2023. Vol. 5(4). P. 223-235.

UO'K: 616-08-035

DISTONIYA - ZAMONAVIY DAVOLASh TAKTIKASI

Abdukadirova D.T.
Andijon davlat tibbiyot instituti

Annotatsiya. Ushbu maqolada distoniya muammosi tadqiqotchilar uchun yorqin va g'ayrioddiy klinik ko'rinish, genlar funksiyalari va kasallik patogenezining sensorimotor mexanizmlarini o'rganish imkoniyatlari, shuningdek, target terapiya – botulinoterapiya in'yeksiyasining dramatik ta'sir nuqtai nazaridan motor buzilishlarining eng "jozibali" shakli bo'lib qolgani haqida so'z yuritiladi.

Kalit so'zlar: *distonia, botulinotherapia.*

DYSTONIA – CURRENT TREATMENT STRATEGIES

Abdukadirova D.T.
Andijan State Medical Institute

Abstract. This review provides information on dystonia, which remains the most "attractive" form of movement disorders for researchers due to its vivid and unusual clinical presentation, the opportunities it offers for studying gene functions and sensorimotor mechanisms of disease pathogenesis, as well as the dramatic effect of targeted therapy—botulinum neuroprotein injections (botulinum therapy).

Keywords: *dystonia, botulinum therapy.*

ДИСТОНИЯ – СОВРЕМЕННАЯ ТАКТИКА ЛЕЧЕНИЯ

Адукадирова Д.Т.
Андижанский Государственный медицинский институт

Аннотация. В данном обзоре предоставляется информация о дистоние, которая остается наиболее "привлекательной" для исследователей формой двигательных расстройств с точки зрения яркой и необычной клинической картины, возможностей изучения функций генов и сенсомоторных механизмов патогенеза заболевания, а также драматического эффекта таргетной терапии – инъекций ботулинического нейропротеина (ботулинотерапии).

Ключевые слова: *дистония, ботулинотерапии.*

Distoniyani o'rganish tarixi 100 yildan ortiq: 1908-yilda V. Shvalbe "spazmlar va isterik alomatlar bilan surunkali sindrom" ni tasvirlab berdi va 1911-yilda G. Oppenxaym " dysbasia lordotica progressiva" ("progressiv lordotik disbaziya") va "dystonia musculorum deformans" ("mushak distoni deformasiyasi") va u kasallikning asosiy ko'rinishlarini – mushaklarning tonusini o'zgartirishi va patologik pozisiyalarini vujudga kelishini tasvirlab berdi. 1926-yilda S. N.

Davidenkov birinchi marotaba oila shakllarini tasvirlab berdi va irsiy distoniya ehtimolini taklif qildi. Distoniyani o'rganish 1970-1980 yillarda harakat buzilishi nazariyasining shakllanishi, neyrogenetikaning rivojlanishi va neyrogenetik klinik amaliyotga botulinum terapiyasining kiritilishi bilan paralel ravishda botulinoterapiya rivojlandi. O'sha vaqtdan to hozirgi kungacha distoniya tadqiqotchilar uchun yorqin va g'ayrioddiy klinik ko'rinish, genlar funksiyalari va kasallik patogenezining sensorimotor mexanizmlarini o'rganish imkoniyatlari, shuningdek dramatik ta'sir nuqtai nazaridan motor buzilishlarining eng "jozibali" shakli bo'lib qolmoqda.

Distoni - bu mushaklarning doimiy (turgun) yoki noregulyar (noturgun) qisqarishi bilan tavsiflangan harakat buzilishi, bu g'ayritabiiy, odatda takrorlanadigan, harakatlar va/yoki

g'ayritabiiy pozisiyalarni keltirib chiqaradi, bu esa tananing jalb qilingan joylarida muayyan harakatlarni buzadi. Distonik harakatlar, qoida tariqasida, bir xil turdagi va aylanish xarakteriga ega, shuningdek, tremor bilan birga namoyon bo'lishi mumkin.

Distoniya odatda o'zini namoyon qiladi yoki ixtiyoriy harakatlar bilan kuchayadi va mushaklarning haddan tashqari faollashishi bilan birga keladi [1-3].

Distoniya harakat buzilishlarining barcha shakllari orasida 2-3-o'rinlarni egallaydi. Distoni tarqalishi quyidagi xarakterga ega: tarqoq (generallashgan) shakillari 100 000 axoliga 3-11 xodisani tashkil qilishi mumkin (irsiy tabiatga ega va ko'pincha hayotni 1-2 o'n yilligida debyuti namoyon bo'ladi), fokal shakliga 100 000 axoliga 30-60 xodisani tashkil qilishi mumkin va odatda katta yoshda namoyon bo'ladi [1-3].

Distoniyaning ikki shakli eng keng tarqalgan:

1) blefarospazm - fokal distoniya turiga kiradi, ko'zning miltillashi va beixtiyor yopilishi bilan tavsiflanadi; 2) servikal distoniya (spastik distoni) – bosh va bo'yinning patologik pozisiyalari shakllanishi bilan bo'yin mushaklarining beixtiyor qisqarishi bilan tavsiflangan fokal distoni.

Tasnifi. Distoniyani urganuvchi tibbiy tadqiqotlar fondi (Dystonia Medical Research Foundation), distoniyani o'rganish koalisiyasi (Dystonia Coalition) va fan va texnika sohasidagi Evropa tashkilotini distoniyani o'rganishi hamkorlik va rahbarligida (European Dystonia Cooperation in Science and Technology) 2013-yilda distoniyaning yangi tasnifini joriy etilgan [4]. Ushbu tasnif ikkita prinsipga asoslanadi: klinik xususiyatlar va etiologiya

Yoshi bo'yicha tasniflash. Bolalik distoniyasi - uning sababini aniqlash ehtimoli yuqori va distoniyaning bu turi fokaldan total (generallashgan) shaklga o'tish ehtimoli yuqori. Hayotning 1-yilidagi distoniyalar ko'pincha tug'ma metabolik kasalliklar bilan bog'liq. 2 yoshdan 6 yoshgacha bo'lgan distoniyalar distonik miya falajiga ko'proq mos kelishi mumkin, ayniqsa, agar u xarakat rivojlanishining kechikishi davridan keyin kuzatilsa. Dopaga sezgir distoniya kabi boshqa sindromlar 6 yoshdan 14 yoshgacha rivojlanadi. Va nihoyat, sporadik fokal distoni odatda 50 yoshdan oshgan insonlarda namoyon bo'ladi [1, 2, 4].

Tananing patologik jarayonga ta'sirlangan joylarini taqsimlashga asoslangan tasnif. Fokal va segmentar distoniyani davolashda tanlangan davolash botulinum neyrotoksinlarini qo'llashdir, tarqoq distoniyada esa tizimli dorilar yoki jarrohlik davolash ko'proq qo'llaniladi.

Tana qismlarini patologik jarayonga jalb qilishning taqsimlanishi vaqt o'tishi bilan o'zgarishi mumkin, odatda kasallik jadallashib borishi bilan ilgari ta'sirlanmagan joylar xam patologik jarayonda ishtirok etishni boshlaydi.

Lokalizasiyaga qarab distoniyaning quyidagi shakllari ajratiladi.

* Fokal. Tananing bir sohasi ishtirok etadi (blefarospazm, oromandibulyar distoni, servikal distoni, laringeal distoni va b.).

* Segmentar. Tananing ikki yoki undan ortiq qo'shni joylari ta'sirlanadi (kranial distoni, bibraxial distoni).

* Multifokal. Tananing ikki yoki undan ortiq qo'shni bo'lmagan joylari ta'sirlanadi (yuqori va pastki qo'l-oyoq distoniyasi, kranial va oyoqlardistoniyasi).

* Tarqoq (generallashgan). Tana (Torso) va kamida ikkita boshqa joy ishtirok etadi. Oyoqlarni jarayonda qatnashishi bilan kechuvchi tarqoq shakl alohida ko'rib chiqiladi.

* Gemidistoniya. Bir tomondan tananing bir nechta joylari ta'sirlanadi. Odatda ikkilamchi bo'ladi va qarama-qarshi (kontralateral) miya shikastlanishida kuzatiladi.

Vaqtga nisbatan tuzilish. Distoniyaning kechishini 4 turi mavjud.

* Pesestirlashgan (doimiy): distoniya belgilari kun davomida barqaror.

* Harakatga xos: distoniya faqat muayyan harakatlar yoki vazifalarni bajarishda sodir bo'ladi.

* Sutka davomida o'zgaruvchi: distoniyaning namoyon bo'lish darajasi va yuzaga kelish fenomenologiyasi jihatidan sezilarli sutkalik o'zgarishlarga ega.

* Paroksismal: distoniyaning to'satdan o'z-o'zini hal qiladigan epizodlari, odatda qo'zg'atuvchi omil tomonidan qo'zg'atiladi, so'ngra asl nevrologik holat tiklanadi.

Xamkor xususiyatlar:

* izolyasiyalashgan distoni: birgina motor funksiyani buzilishi (lekin tremorni o'z ichiga olishi mumkin).

* kombinasiyalangan distoniya: boshqa xarakat buzilishlari bilan birlashtirilgan (masalan, miyoklonus, parkinsonizm va boshqalar).

Etiologiya. Distoniya genetik yoki orttirilgan tabiatga ega bo'lishi mumkin. Ko'pincha distoniyaning turli xil variantlarini aniqlaydigan 25 genning butun spektrining muntazam diagnostikasi yo'qligi sababli kasallikning etiologiyasi noaniq bo'lib qolmoqda [3, 5-8]. Biroq, bemorning oilasida distonik doiradagi motor buzilishlarining yengil namoyon bo'lishi (masalan, bosh tremori va/yoki assimetrik qo'l tremori, tez – tez miltillash – blefarospazm, "yomon xusni xat" - yozish spazmi) bizga buzilishning irsiy tabiatini yanada ishonchli ko'rsatishga imkon beradi.

Distoniyaning tug'ma shakllariga genetik etiologiyasi isbotlangan shakllar kiradi:

* Autosomal dominant: ushbu turkumga DYT1 (OMIM (Online Mendelian Inheritance in Man – internet bazalari) #128100), DYT5 (OMIM #128230), DYT6 (OMIM #602629), DYT11 (OMIM #159900) kabi bir nechta autosomal dominant shakllar kiradi.;

* autosom resessiv: tug'ma distoniyaning autosomal resessiv shakllari ro'yxati doimiy ravishda kengayib bormoqda. Bularga DYT2 (OMIM #224500), shuningdek distoniya bilan assosiativ neyrodegenerativ kasalliklar - PKAN (NBIA1, OMIM #234200), PLAN (NBIA2, OMIM #256600), yuvenil parkinsonizm (PARK2, OMIM #600116) va bir qator metabolik kasalliklar kiradi.

* X-bog'liq resessiv: quyidagi sindromlarni o'z ichiga oladi; Lubag sindromi (DYT3, OMIM #314250); Lesha-Nayhan sindromi (OMIM #300322); Mora-Traneberg sindromi (OMIM #304700)

* Mitoxondrial: eng taniqli shakllari bu -Li sindromi (OMIM #256000) va kuruv nervi atrofiyasi va distoniya bilan kechuvchi Leber sindromi (OMIM #500001).

Ortirilgan shakllar ma'lum sabablarga ko'ra kelib chiqadi, masalan:

* perinatal miya shikastlanishi;

* infeksiya (virusli ensefalit, nimo'tkir sklerozlochi panensefalit, inson immunitet tanqisligi virusi va boshqalar);

* dori ta'siri (L-dofa va dofamin agonistlari, neyroleptiklar, antikonvulsantlar va kalsiy kanal blokatorlari);

* toksik ta'sir (marganes, kobalt, uglerod disulfid, siyanidlar, metanol, disulfiram, 3-nitropropion kislotasi);

* qon tomir kasalliklari (ishemiya, qon ketish, arteriovenoz malformasiyalar, shu jumladan anevrizmalar);

* neoplastik jarayonlar (bosh miya xajimli jarayonlari va paraneoplastik ensefalit);

* miya shikastlanishi;

* psixogen kasalliklar (funksional).

Agar distoniyaning" tashqi " sababi aniqlanmasa yoki kasallikning birlamchi (asoratlanmagan) shaklining rivojlanishi bilan bog'liq gen ma'lum bo'lsa, bunday distoni idiopatik deb tasniflanadi [1-5, 9, 10].

Diagnostika. Xalqaro ekspertlar distoniyani, birinchi navbatda, klinik ko'rinishiga qarab tashxislash kerak, deb tavsiya beradilar (dalillar ishonchliligi darajasi A, tavsiyalar ishonchli darajasi I) [1-4]. Tashxis qo'yish uchun maxsus g'ayritabiiy (distonik) holat (titroq bilan yoki bo'lmasdan) va o'ziga xos belgilar: ortiqcha va ko'zgu harakatlari, korreksiyalovchi imo-ishoralar, jismoniy va hissiy stress paytida namoyon bo'lishning kuchayishi va boshqalar.

Distoniyaning namoyon bo'lish darajasi tananing yoki uning alohida qismlarining holatiga va tananing ta'sirlangan qismidagi ixtiyoriy harakatlarga qarab o'zgarishi mumkin, bu bemorning kundalik faoliyati va hayotiy funksiyalariga turli yo'llar bilan ta'sir qiladi. Klinik ko'rinishlarning xususiyatlarini, distoniyaning namoyon bo'lish darajasi va og'irligini, giperkinezning o'zgaruvchan tabiatini va distoniyaning bemorlar hayotiga ta'sirini baholash uchun maxsus klinik shkalalar ishlab chiqilgan [2, 3].

Distoniyani klinik diagnostikasini videoyozuv va tegishli shkalada baholash bilan o'tkazish tavsiya etiladi [11]. Distoni bilan og'rigan bemorni videoyozuv orqali nazorat qilish, botulinum toksinini inyeksiya qilish proseduralarini yoki boshqa davolash usullarini tashxislash va keyingi rejalashtirishda, shuningdek terapiya natijalarini keyingi baholashda muhim bosqich hisoblanadi [2]. Servikal distoni va blefarospazmni baholash uchun shkalalar, shuningdek, video yozish protokollari veb-saytda joylashtirilgan www.botulin.ru "mutaxassislar kutubxonasi" bo'limida va "botulinumterapiya Alifbosi" qo'llanmasida.

Davolash. Davolashning maqsadi bemorlarning mehnat qobiliyatini va ijtimoiy faolligini saqlab qolish va distoniya belgilarining qaytalanishini oldini olish bilan birga kasallikning barqaror remissiyasiga erishishdir [18]. Bunga faqat botulinum neyroprotein (botulinum toksini) preparatlarini spazmodik mushaklarga muntazam ravishda takroriy yuborish orqali erishish mumkin. Fokal distoniya bilan og'rigan bemorlarni eng yuqori darajadagi dalillarga (A dalillarning ishonchliligi darajasi, tavsiyalarning ishonuvchanlik darajasi I) davolashda tanlov usuli sifatida botulinum toksin A (BTA) mahalliy inyeksiyalari tavsiya qilingan [2, 3, 11, 14, 18-20].

Botulinumtoksin terapiyasi ishchi a'zoni funksiyasini saqlab, mushaklarning patologik qisqarishini bartaraf etishi mumkin. Barqaror remissiyaga erishish va hayot sifatini saqlab qolish uchun BTA preparatlari bemorga fokal distoniya tashxisi qo'yilgandan so'ng darhol buyurilishi kerak, chunki ular birinchi darajali dorilar. Inyeksiyalar muntazam ravishda, o'rtacha har 3-4 oyda o'tkazilishi kerak. Shu bilan birga, inyeksiya orasidagi interval bemorning sog'lig'iga qarab farq qilishi mumkin va 6 haftagacha qisqartirilishi yoki uzaytirilishi mumkin. Distoniya davolash bo'yicha amaldagi Evropa ko'rsatmalariga asoslangan xolda oldingi inyeksiya ta'siri kamayganda, "bemorning iltimosiga binoan" inyeksiyalar orasidagi "moslashuvchan intervallar" taktikasini qo'llaydi. Botulinum terapiyasining xavfsizligi va yuqori samaradorligi ko'plab nazorat ostida o'tkazilgan tadqiqotlar va 30 yillik klinik amaliyot natijalari bilan tasdiqlangan.

Botulinum terapiyasi servikal distoniya (dalillar darajasi A), blefarospazm (dalillar darajasi B), gemifasiyal spazm (dalillar darajasi C), yuqori ekstremal fokal distoni (dalillar darajasi B), spastik adduktor disfoniyasi (dalillar darajasi B) (Amerika nevrologiya Akademiyasining tavsiyalari) uchun tavsiya etiladi [3].

Hozirgi adabiyot ma'lumotlariga ko'ra, servikal distoniyasini davolashda barcha botulinum neyrotoksin preparatlari A tavsiyalari darajasiga ega, Amerika nevrologiya Akademiyasining klinik tavsiyalariga ko'ra, servikal distoniyasini davolashda abobotulotoksin A turi (Botoks) va rimabotulotoksin B turi (Miblok) mavjud dalillar A, onabotulotoksin A turi (Disport) va inkobotulotoksin A turi (Xeomin) – dalillar darajasi A. Shuningdek, Amerika nevrologiya Akademiyasi yuqori darajadagi klinik tadqiqotlar ma'lumotlariga asoslanib, turli xil BTA

taqqoslanadigan samaradorligini aniqladi: bir xil davolash maqsadlariga erishish abobotulotoksinning 3:1 birlik optimal nisbati bilan mumkin A turi va onabotulotoksin turi A [3]. Blefarospazmni davolashda Onabotulotoksin A turi va inkobotulotoksin A turi dalillarning ishonchliligi darajasiga V, abobotulotoksin A turi esa C dalillarining ishonchliligi darajasiga ega.

Distoniyani davolashda BTA inyeksiyasidan keyingi klinik ta'sir 7-21-kunlarda sodir bo'ladi va mushaklarning kuchlanishi, spazmlar va og'riqning aniq pasayishi shaklida namoyon bo'ladi. BTA ning terapevtik ta'siri nafaqat uning mahalliy mushak bo'shashtiruvchi sifatida simptomatik ta'siri bilan, balki segmental-periferik va suprasegmental darajadagi afferent oqimlarga ta'siri bilan ham bog'liq bo'lib, bu fokal distoniya davolashda botulinum terapiyasining patogenetik rolini ko'rsatadi [2, 3]. So'nggi yillarda BTA preparatlarining uzoq muddatli samaradorligi va xavfsizligi to'g'risida ma'lumotlar mavjud va botulinum toksini B tipidagi preparatlar ishlab chiqilgan. Hozirda Rossiyada "500 birlik" va "100 birlik" BTA ro'yxatga olingan.

Barcha BTA dorilarining klinik dozalari ta'sir birliklarida ifodalanadi va ularni almashtirib bo'lmaydi. Kasallikning og'irligiga qarab, odatda yiliga 3-4 kurs inyeksiya qilinadi. Biroq, xavfsizligi va samaradorligi inkobotulotoksin A (Xeomin) ni davolashda isbotlangan "bemorning ehtiyojlariga ko'ra" inyeksiyalar orasidagi "moslashuvchan intervallar", vosita buzilishlari uchun botulinum terapiyasining eng istiqbolli yo'nalishi hisoblanadi. BTA preparatlarini qo'llash bo'yicha tasdiqlangan ko'rsatmalar dozalari va qo'llash usullarini tavsiflaydi. Shuningdek, fokal distoniyaning turli shakllari uchun dori-darmonlarni qabul qilish usullari va inyeksiya usullarini aniqlaydigan va batafsil bayon qiladigan tibbiy texnologiyalar mavjud [11].

Botulinum terapiyasi paytida manipulyasiya xususiyatlari. BTA yordamida distoniyaning har xil turlarini davolash tibbiy yordam ko'rsatishning murakkab yuqori texnologiyali usuli bo'lib, prosedura uchun maxsus sharoit va jihozlarni, shuningdek yuqori malakali mutaxassislarni talab qiladi. BTA inyeksiyasini amalga oshiradigan shifokor yuqori sifatli bilim va amaliy ko'nikmalarga ega bo'lishi kerak, inyeksiya va tegishli texnikalar bo'yicha ixtisoslashtirilgan mashg'ulotlardan o'tishi kerak. Inyeksiyaga tayyorgarlik distoniyani klinik baholashning zamonaviy usullaridan foydalanishni (maxsus shkalalardan foydalanish), inyeksiya uchun maqsadli mushaklarni (target) tanlash qobiliyatini va preparatning dozalash rejimini o'z ichiga olishi va birgalikda davolash usullariga bo'lgan ehtiyojni aniqlashi kerak. Inyeksiyaga tayyorgarlik jarayoni yyetarli vaqtni olishi kerak, chunki bu omil proseduraning muvaffaqiyati bilan bevosita bog'liq. Jarayonning ayniqsa muhim tarkibiy qismi inyeksiyani natijalarini monitoring usullaridan foydalanishdir. Tibbiy muassasa inyeksiyalarni yuqori aniqlikda bajarishga imkon beradigan maxsus asboblar bilan jihozlangan bo'lishi kerak (EMG qurilmasi yoki ko'chma qurilma - elektr signallarining analizatori, murakkab va maxsus holatlar uchun – ultratovush, KT). Shifokor inyeksiyalarning aniqligini tasavvur qilish uchun apparatlarda qanday ishlashni bilishi kerak. Portativ qurilma - elektr signallarining analizatori ("MIST" qurilmasi. Rossiya) inyeksiyani kuzatish uchun eng arzon, ishonchli va ishlatish uchun qulay qurilma.

Shunday qilib, distoniyaning har xil turlarini davolashda BTA inyeksiyasini o'tkazish jarayoni yyetarli vaqt, zarur texnik jihozlar va malakali xodimlarni talab qiladigan manipulyasiyadir [3].

Ushbu toifadagi dori-darmonlarni faqat botulinum toksini bilan ishlashda maxsus tayyorgarlik va tajribaga ega bo'lgan shifokorlar o'tkazishi va boshqarishi mumkin. Inyeksiya joyini tanlashda siz mushaklarning joylashuvi haqida standart fikrga amal qilishingiz kerak; darhol inyeksiya joyi anatomik belgilar va palpasiya ma'lumotlariga muvofiq, shuningdek qo'shimcha usullardan foydalangan holda aniqlanadi: EMG, elektrostimulyasiya, ultratovush, KT. Bir qator

mushaklar distonik harakatlar, topografik anatomiya va mushaklarning palpasiyasi tahlili ma'lumotlariga muvofiq tanlanadi va inyeksiya qilinadi.

Servikal distoniya - bu bir xil bemorda hatto bir kun davomida turli xil bosh pozisiyalari bo'lgan va shunga mos ravishda, turli mushaklarning kuchlanishini namoyon qilishi mumkin bo'lgan dinamik kasallik. Barcha 24 bo'yin mushaklari (har tomondan 12 ta) fokal distonik sindromni turli darajada amalga oshirishda ishtirok etadi, shuning uchun prosedurani rejalashtirishda "distonik" mushaklarning maksimal sonini aniqlash va ularga preparatni kiritish kerak. Ushbu qidiruvning qo'shimcha murakkabligi shundaki, bir xil bosh harakati (masalan, burilish bilan egilish) turli mushaklar tomonidan amalga oshirilishi mumkin, bu inyeksiyani EMG kuzatuvi paytida aniqlanadi. Ignali EMG o'tkazish uchun asboblar botulinum toksinini kiritish va mushaklarning faolligini qayd etish uchun maxsus ignalar bilan jihozlangan. Mushaklarning bioelektrik faolligi ekranda va/yoki naushniklarda (portativ dinamiklar) ko'rsatiladi. Miogrammaning o'ziga xos audio yoki video xususiyatlariga asoslanib, shifokor inyeksiya joyini ham, distonik mushak patternini ham tekshirishi mumkin. Bo'yning chuqur mushaklariga inyeksiya uzun igna bilan amalga oshirilishi kerak, shuning uchun 4 va/yoki 5 sm miografik ignaning uzunligi maqbuldir va an'anaviy insulin shprisining ignasi uzunligi yyetarli emas. Distonik tremor mavjud bo'lganda, EMG monitoringi zarur. Blefarospazm va gemifasiyal spazm bilan og'rigan bemorlarga BTA inyeksiyalari insulin shprisi yordamida amalga oshiriladi, ammo ba'zi hollarda EMG monitoringi ham zarur, masalan, yuzning pastki yarmi va halqum mushaklari ishtirokidagi kranial distoni davolashda. Botulinum toksini bilan davolash uchun ixtiyoriy ravishda xabardor qilingan rozilik talab qilinadi.

Botulinum terapiyasi prosedurasidan so'ng inyeksiya qilingan mushaklarning faol qisqarishi 20 daqiqa davomida tavsiya etiladi va bemorni allergik reaksiyalarning rivojlanishini kuzatish uchun 1 soat davomida tibbiy muassasada kuzatib borish kerak. Bemorni dinamikada tekshirish paytida qayd etilgan ta'sir yetarli bo'lmagan taqdirda, keyingi inyeksiyalar bilan terapiya rejimi o'zgartiriladi va BTA dozasi o'zgartiriladi, inyeksiyani nazorat qilishning qo'shimcha usullari qo'llaniladi va tajribali botulinum terapiyasi mutaxassisi bilan maslahatlashadi. Fokal distoniyaning boshqa shakllari uchun botulinum terapiyasi texnikasi tibbiy texnologiyalarda batafsil tavsiflangan, preparatning tavsiya etilgan dozasidan oshib ketmaslik kerak [2, 3, 11, 14, 18-20]. Fokal distoniyaning an'anaviy dori terapiyasi botulinum terapiyasini amaliyotga kiritgandan so'ng o'z ahamiyatini yo'qotdi. Dori -darmonlar yordamchi rol o'ynaydi va odatda ba'zi sabablarga ko'ra botulinumtoksin terapiyasini ishlatmaydigan yoki uni kamdan-kam va yetarli darajada samarali bo'lmagan dozada ishlatadigan bemorlarga buyuriladi. Amaldagi dorilarga dopamin, katexolaminlar, asetilxolin, serotonin, gamma-aminobutirik kislota va boshqa biologik faol moddalar metabolizmiga ta'sir qiluvchi dorilar kiradi. Amaliyot shuni ko'rsatadiki, bunday dorilarning o'rtacha terapevtik samaradorligi 20% dan oshmaydi va ularning ta'siri odatda vaqtinchalik. Nisbatan katta terapevtik ta'sir klonazepam (kuniga 1-8 mg/sut), baklofen (kuniga 20-100 sut/mg), xolinolitiklar (trigeksifenidil 2-8 mg /kun) tomonidan olinadi va ular uzoq vaqt davomida doimiy ravishda qabul qilinishi kerak. Boshqa miorelaksantlar (tolperizon, tizanidin) o'rtacha samarali. Benzamidlar (sulpirid, tiaprid), shuningdek antidepressantlar (amitriptilin, fluoksetin, paroksetin, sertralin, Fluvoksamin, trazodon) birgalikda emosional va/yoki somatoform kasalliklari va surunkali og'riqlar mavjud bo'lganda kompleks terapiyaning bir qismi sifatida buyurilishi mumkin. Selektiv bo'lmagan beta-blokerlar (propranolol kuniga 160 mg gacha sut) tremorli bemorlarda o'rtacha samarali bo'lishi mumkin (asosan essensial tremorda).

Dopasezgir distoniyada benserazidli L-dopa preparatlari doimiy qabul qilish uchun buyuriladi, maksimal sutkalik doza mos ravishda 800 va 200 mg ni tashkil qiladi, optimal klinik ta'sirga erishilgunga qadar titrlanadi [2-4]. Jarrohlik davolash botulinumterapiyaga rezistentlik xolatlarida, shuningdek tarkok distoniya holatlarida tavsiya etiladi [3]. Jarrohlik usullariga stereotaktik destruksiyalarni o'rniga kelagan chuqur miya stimulyasiyasi (deep brain stimulation jarrohlik neyromodulyasiya), shuningdek periferik operasiyalar (servikal radikotomiyasi, accessorius nervining dekompressiyasi, selektiv denervasiya va rizotomiya, mektomiya) kiradi. Periferik operasiyalardan foydalanish cheklangan. Blefarospazmni davolashning qo'shimcha usuli - bu yuqori ko'z qovog'ining ortiqcha terisini va yumshoq to'qimalarini olib tashlash uchun blefaroplastika, bu botulinum terapiyasining tolerantligi va natijalarini yaxshilaydi. Gemifasial spazm bilan og'rigan bemorlarda (u periferik kelib chiqishi bor va fokal distoni emas), agar etiologiyada VII kranial asab ildizining neyrovaskulyar siqilishi aniqlansa, neyrovaskulyar dekompressiya operasiyasi amalga oshiriladi [3].

Kinezioterapiya, massaj, biofeedback, hissiy qayta tayyorlash komplekslari va boshqalar fokal distoni bo'lgan barcha bemorlarga yuqori darajadagi ishonchli tavsiyalar bilan kombinasiyalangan terapiyaning tarkibiy qismi sifatida tavsiya etilishi mumkin [2-4]. Servikal distoniya bilan siz kinezioterapiya, fizioterapiya (shu jumladan basseyn), yumshoq tasalli beruvchi massaj, hissiy qayta tayyorlash komplekslari imkoniyatlaridan foydalanishingiz kerak. Dag'al og'riq texnikasi bilan manual terapiya tavsiya etilmaydi. Yozish spazmi bo'lsa, yozish paytida vosita mahoratini o'zgartirishga qaratilgan reabilitasiya choralari majmuasi samarali bo'ladi [20]. Bemorlarga ijtimoiy izolyasiyani yengishga yordam berish muhimdir (shu jumladan qo'llab-quvvatlash guruhlaridagi bemorlar, psixoterapiya) [2-4]. Dispanser monitoringini botulinum terapiyani o'tkazadigan shifokor yoki bemorni nazorat qiluvchi boshqa shifokor olib borishi zarur, agar vaziyat yomonlashsa, boshqa botulinum terapiyasini o'tkazish to'g'risida qaror qabul qilishi kerak.

Distoniya bilan og'rigan bemorning qarindoshlarida distoniya rivojlanishining oldini olish kerak, shu jumladan periferik omillarni tuzatish va uzoq muddatli noto'g'ri postural stereotiplarni korreksiyasi; kranioservikal jarohatlardan qochish, shu jumladan og'riqli manipulyasiyalar (shu jumladan manual terapiya); ortopedik holatni tuzatish; stress ta'siridan qochish/yetarli darajada tuzatish. Fokal distoniya shakllaridan biri bilan og'rigan bemorni distoniyaning boshqa shakllarini rivojlanishiga yo'l qo'ymaslik kerak [2, 3].

Xulosa. Shunday qilib, fokal distoniya, harakatning buzilishi sohasidagi mutaxassislarning say-harakatlari va klinik amaliyotda botulinum terapiyasini faol targ'ib qilish tufayli noma'lum va pessimistik jihatdan davolanmaydigan kasalliklar toifasidan eng davolanadigan va o'rganilgan nevrologik kasalliklarning avangardiga o'tdi.

Blefarospazm, servikal va distoniyaning boshqa turlarini davolashning hozirgi yondashuvi botulinum terapiyasini birinchi darajali terapiya sifatida aniq belgilaydi. Botulinum terapiyasi shaxsiylashtirilgan tibbiyotning umumiy tendensiyalariga amal qiladi, bu holda BTA preparatini individual tanlash zarurati, dozalari va inyeksiyalar orasidagi intervallarda ifodalanadi; bemorlarning 60% distoniyaning og'irligiga ham, ma'lum bir davrda kasallikning kechishiga ham bog'liq bo'lgan individual intervallarga muhtoj. Bemorlarga inyeksiya o'rtasida uzoqroq yoki qisqaroq intervallar kerak bo'lishi mumkin. 6-20 haftalik "moslashuvchan intervallar" Sog'liqni saqlash vazirligi tomonidan tasdiqlangan va Xeomin preparati bo'yicha ko'rsatmalarda va Sog'liqni saqlash vazirligining yangi klinik tavsiyalarida aks ettirilgan.

BTAdan foydalanish ko'rsatmalariga kiritilgan blefarospazm va servikal distoniya bilan bir qatorda distoniyaning boshqa shakllarini (oromandibular, laringeal va boshqalarni) davolash haqida unutmaslik kerak, bu distoniya davolash uchun amaldagi standartlar kasalliklari ro'yxatida aks etadi. "Moslashuvchan intervallar" dan foydalanish distoniyaning murakkab va multifokal shakllari bo'lgan bemorlarga ko'p bosqichli inyeksiya qilish imkonini beradi. Fokal distoniya davolashda botulinum terapiyasining farmakoekonomik tadqiqotlari uzoq vaqt davomida uning yuqori iqtisodiy maqsadga muvofiqligini namoyish etdi [27]. Distoniya bilan og'rigan bemorlar ko'pincha ushbu kasallikka ijtimoiy faol, mehnatga layoqatli yoshda duch kelishadi va BTA davolanishini DLO (nogironlik guruhi uchun) doirasida emas, balki ayrim toifadagi fuqarolarni zarur dori-darmonlar bilan ta'minlash bo'yicha ishlarning bir qismi sifatida olishlari kerak (ijtimoiy yordam to'plamini taqdim etish huquqiga ega bo'lganlar dori vositalari bilan ta'minlash bo'yicha yoki majburiy tibbiy sug'urta doirasida xizmatlar).

Foydalanilgan adabiyotlar:

1. Albanese A., Asmus F., Bhatia K.P., Elia A.E., Elibol B., Filippini G., Gasser T., Krauss J.K., Nardocci N., Newton A., Valls-Solé J. EFNS guidelines on diagnosis and treatment of primary dystonias. Eur J Neurol 2011; 18(1): 5–18.
2. Orlova O.R. Fokalnie distonii: klinika, patogenez, lechenie s ispolzovaniem toksina botulizma: Avtoref. dis. ...dokt. med. nauk. M., 2000; 48c.
3. Simpson D.M., Hallett M., Ashman E.J., Comella C.L., Green M.W., Gronseth G.S., Armstrong M.J., Gloss D., Potrebic S., Jankovic J., Karp B.P., Naumann M., So Y.T., Yablon S.A. Practice guideline update summary: Botulinum neurotoxin for the treatment of blepharospasm, cervical dystonia, adult spasticity, and headache. Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology 2016; 86(19): 1818–1826.
4. Albanese A., Barnes M.P., Bhatia K.P., Fernandez-Alvarez E., Filippini G., Gasser T., Krauss J.K., Newton A., Rektor I., Savoiardo M., Valls-Solè J. A systematic review on the diagnosis and treatmentof primary (idiopathic) dystonia and dystonia plus syndromes: report of an EFNS/MDS-ES Task Force. Eur J Neurol 2006; 13(5): 433–444.
5. Bressman S.B., Raymond D., Fuchs T., Heiman G.A., Ozelius L.J., Saunders-Pullman R. Mutations in THAP1 (DYT6) in early-onset dystonia: a genetic screening study. Lancet Neurol 2009; 8(5): 441–446.
6. Valente E.M., Edwards M.J., Mir P., DiGiorgio A., Salvi S., Davis M., Russo N., Bozi M., Kim H.T., Pennisi G., Quinn N., Dallapiccola B., Bhatia K.P. The epsilon-sarcoglycan gene in myoclonic syndromes. Neurology 2005; 64(4): 737–739.
7. Robinson R., McCarthy G.T., Bandmann O., Dobbie M., Surtees R., Wood N.W. GTP cyclohydrolase deficiency; intrafamilial variation in clinical phenotype, including levodopa responsiveness. J Neurol Neurosurg Psychiatry 1999; 66(1): 86–89.
8. Klein C., Friedman J., Bressman S., Vieregge P., Brin M.F., Pramstaller P.P., De Leon D., Hagenah J., Sieberer M., Fleet C., Kiely R., Xin W., Breakefield X.O., Ozelius L.J., Sims K.B. Genetic testing for early-onset torsion dystonia (DYT1): introduction of a simple screening method, experiences from testing of a large patient cohort, and ethical aspects. Genet Test 1999; 3(4): 323–328.

9. Djarmati A., Schneider S.A., Lohmann K., Lohmann K., Winkler S., Pawlack H., Hagenah J., Brüggemann N., Zittel S., Fuchs T., Raković A., Schmidt A., Jabusch H.C., Wilcox R., Kostić V.S., Siebner H., Altenmüller E., Münchau A., Ozelius L.J., Klein C. Mutations in THAP1 (DYT6) and generalised dystonia with prominent spasmodic dysphonia: a genetic screening study. Lancet Neurol 2009; 8(5): 447–452.
10. Albanese A., Lalli S. Is this dystonia? Mov Disord 2009; 24(12): 1725–1731.
11. Timerbaeva S.L. Fokalnie i segmentarnie formi pervichnoy distonii: klinicheskie, patofiziologicheskie i molekulyarno-geneticheskie aspekti: Avtoref. dis. ... dokt. med. nauk. M., 2012; 51c.
12. Azbuka botulinoterapii. Pod red. Timerbaevoy S.L. M.: Prakticheskaya medisina 2014; 441c.
13. Consky E.S., Basinski A., Belle L., Ranawaya R., Lang A.E. The Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS): assessment of validity and inter-rater reliability (abstract). Neurology 1990; 40: 445.
14. Orlova O.R., Yaxno N.N. Primenenie botoksa (toksina botulizma tipa A) v klinicheskoy praktike. Rukovodstvo dlya vrachey. M.: Katalog 2001; 201s.
15. Bressman S.B., Sabatti C., Raymond D., de Leon D., Klein C., Kramer P.L., Brin M.F., Fahn S., Breakefield X., Ozelius L.J., Risch N.J. The DYT1 phenotype and guidelines for diagnostic testing. Neurology 2000; 54(9): 1746–1752. 16. Rutledge J.N., Hilal S.K., Silver A.J., Defendini R., Fahn S. Magnetic resonance imaging of dystonic states. Adv Neurol 1988; 50: 265–275.
17. Meunier S., Lehericy S., Garnero L., Vidailhet M. Dystonia: lessons from brain mapping. Neuroscientist 2003; 9(1): 76–81.
18. Simpson D.M., Blitzer A., Brashear A., Comella C., Dubinsky R., Hallett M., Jankovic J., Karp B., Ludlow C.L., Miyasaki J.M., Naumann M., So Y.; Therapeutics and Technology Assessment Subcommittee of the American Neurology. Assessment: Botulinum neurotoxin for the treatment of movement disorders (an evidencebased review): report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology 2008; 70(19): 1699–1706.
19. Orlova O.R., Timerbaeva S.L., Xatkova S.E., Kotlyarov V.V., Korenko L.A., Zalyalova Z.A., Falkovskiy I.V., Batisheva T.T., Gribanov I.I., Kurenkov A.L., Artemenko A.R., Soyxer M.I., Krasavina D.A., Misikov V.K., Kostenko E.V., Mingazova L.R., Soyxer M.G., Surovix S.V., Korenko L.A., Antipova L.N., Antipenko E.A., Shperling L.P. Primenenie preparata Disport (Botulinicheskiy toksin tipa A) dlya lecheniya lokalnogo mishechnogo gipertonusa pri fokalnix distoniyax, spastichnosti i drugix mishechno-tonicheskix sindromax (Medisinskaya texnologiya). M., 2012; 105s.
20. Dressler D., Mander G., Fink K. Measuring the potency labeling of onabotulinumtoxinA (Botox(®)) and incobotulinumtoxinA (Xeomin(®)) in an LD50 assay. J Neural Transm (Vienna) 2012; 119(1): 13–15.3.

UDC: 616-08-035

PERIODONTITIS AND COMMON DISEASES – MUTUAL INFLUENCE, DIAGNOSIS AND TREATMENT.

Sadriev N.N., Akhmadov I.N.
Samarkand State Medical University

Annotation. Periodontitis and these systemic diseases are considered through common pathogenic mechanisms associated with systemic inflammation. Metabolic disorders in various tissues, including the maxillary system, in the form of tooth loss, periodontal damage, and increased resorption of alveolar and jawbones characterize the postmenopausal period of women's life. Currently, the high prevalence of dental diseases in postmenopausal women and the emerging difficulties in their treatment and prevention are largely due to insufficient knowledge of the pathogenesis.

Key words: *periodontitis, postmenopausal period, diagnosis, treatment, mutual influence.*

PAROODONTIT VA OG'IZ BO'SHLIG'IDA KO'P UCHRAYDIGAN KASALLIKLAR - O'ZARO TA'SIRI, TASHXIS VA DAVOLASH.

Sadriyev N.N., Axmadov I.N.
Samarqand davlat tibbiyot universiteti

Annotatsiya. Periodontit va bu tizimli kasalliklar tizimli yallig'lanish bilan bog'liq umumiy patogen mexanizmlar orqali ko'rib chiqiladi. Turli to'qimalarda, shu jumladan maksiller tizimda tishlarning yo'qolishi, periodontal shikastlanish va alveolyar va jag ' suyaklarining rezorbsiyasining kuchayishi ko'rinishidagi metabolik kasalliklar ayollar hayotining postmenopozal davrini tavsiflaydi. Hozirgi vaqtda postmenopozal ayollarda ruhiy kasalliklarning yuqori tarqalishi va ularni davolash va oldini olishda yuzaga keladigan qiyinchiliklar asosan patogenez haqida etarli ma'lumotga ega emasligi bilan bog'liq.

Kalit so'zlar: *periodontit, postmenopozal davr, tashxis, davolash, o'zaro ta'sir.*

ПЕРИОДОНТИТЫ И РАСПРОСТРАНЕННЫЕ ЗАБОЛЕВАНИЯ - ВЗАИМОДЕЙСТВИЕ, ДИАГНОСТИКА И ЛЕЧЕНИЕ.

Садриев Н.Н., Ахмадов И.Н.
Самаркандский государственный медицинский университет

Аннотация. Пародонтит и указанные системные заболевания рассмотрены через общие патогенетические механизмы, связанные с системным воспалением. Постменопаузальный период жизни женщин характеризуется нарушением метаболизма в различных тканях, в том числе зубочелюстной системе, в виде потери зубов, поражения пародонта, повышенной резорбции альвеолярных и челюстных костей. В настоящее время высокая распространенность стоматологических заболеваний у женщин в постменопаузальный период и возникающие трудности в их лечении и профилактике во многом обусловлены недостаточной изученностью патогенеза.

Ключевые слова: *пародонтит, постменопаузальный период, диагностика, лечения, взаимное влияние.*

In recent years, a large number of studies around the world have been devoted to studying the nature of the relationship between systemic osteoporosis and generalized periodontitis; however, the available data are contradictory and require additional research [1, 6].

In the CIS countries, more than 50 million women arrive in the peri-and post-menopausal periods, however, one third of women remain living in a state of lack of female sex hormones [2, 5]. Periodontitis is a multifactorial disease that occurs under the influence of periodontal

pathogenic microflora, accompanied by bone loss, the formation of deep periodontal pockets and is the cause of tooth loss. Periodontal susceptibility is also affected by the reactions of the macro organism and additional risk factors: heredity, systemic diseases, habits, social factors, stress, etc. Taking into account the prevalence of bone resorption processes in osteoporosis, certain features should be assumed when planning the treatment of chronic generalized periodontitis in such cases [4].

In our country, active measures are being taken to develop the medical sector, in particular to reduce dental diseases and their complications, as well as to provide qualified medical care to the population suffering from dental diseases, and the following tasks are set: "Strengthening support for a healthy lifestyle and disease prevention, including standardization of the health care system, introduction of high-tech diagnostic methods and treatment, effective models of patronage and medical examinations, efficiency, quality and accessibility of medical services " [7,8]. These tasks determine the priorities of in-depth scientific research, such as improving the level of modern medical care, diagnosing and treating complications of dental diseases among the population, and using modern technologies to provide high-quality medical care [10].

Objective: To improve the effectiveness of diagnosis and treatment of periodontal diseases in postmenopausal women.

Materials and methods. In the course of the study, the main parameters of the periodontal tissue condition in 75 postmenopausal women aged 45-55 years were studied in depth. These patients were divided into two groups: the main group (45 people) and the control group (30 people). At the same time, the control group was treated with a generally accepted traditional method, and the patients of the main group were treated with an artificial method of treatment in addition to the traditional one.

Clinical, functional, immunological, and statistical methods of research were used in all the examined women.

During examinations, the hygienic condition of the oral cavity was taken into account, according to the hygienic index (IG) (Green, Vermillion), the gum-bleeding index (IR) (Muhlemann), and the PMA index (in the Ragma modification).

The depth of the periodontal pockets was measured on the four sides of the teeth with a graded periodontal probe. Three sextants (anterior and two lateral) were isolated on each jaw, in which the greatest depth of the periodontal pocket was recorded.

The periodontal index (PI) (Russell) was used for a comprehensive assessment of the condition of periodontal tissues.

To determine the concentration of sodium, potassium, and calcium ions in the oral fluid, an AVL electrolyte analyzer and the ion-selective electrode principle (ISE) were used. The serum homocysteine concentration was determined using Axis diagnostic kits (Norway).

Interleukin-6 (IL-6) and endothelin-1 (ET-1), a marker of damage, were determined in blood serum using an enzyme-linked immunosorbent assay by Multiscan Labsystem (Finland).

Research results. The hygienic state of the oral cavity and clinical and laboratory parameters of the oral cavity in postmenopausal women were evaluated. The results of the Green-Vermillion index indicators indicate (Table.1) that there were no serious discrepancies in the oral hygiene picture among women diagnosed with moderate to mild generalized periodontitis.

Table 1

Results of the Green-Vermillion oral hygiene index in postmenopausal women with chronic generalized periodontitis

Postmenopausal	Postmenopausal period

	period HPLST (n=25)	HPLST (n=29)	P_{P1}	HPLST (n=21)	P_2
Green-Vermilion GI	1,58±0,18	1,82±0,17	0,335	3,18±0,37	<0,003

Note: P_{P1} - statistical significance of discrepancies among groups with mild and moderate degrees of generalized periodontitis; P_2 - statistical significance of discrepancies among groups with moderate and severe degrees of generalized periodontitis (Mann-Whitney, U-test).

In the examined postmenopausal women with periodontitis aggravation, a significant deterioration in the main periodontal parameters was observed, which, in particular, was confirmed by the values of the papillary-marginal-alveolar index (PMA), which characterizes the prevalence of gum inflammation (Figure 1). According to the data obtained, in women in the group with moderate periodontitis, the PMA index values were lower than in the group with moderate periodontitis. 25.07% were higher compared to those in women with mild disease severity. With severe periodontal tissue damage, patients showed an even greater increase in the PMA index values, which were more than 16.83% higher than the results of the studied parameter in women with moderate severity of generalized periodontitis.

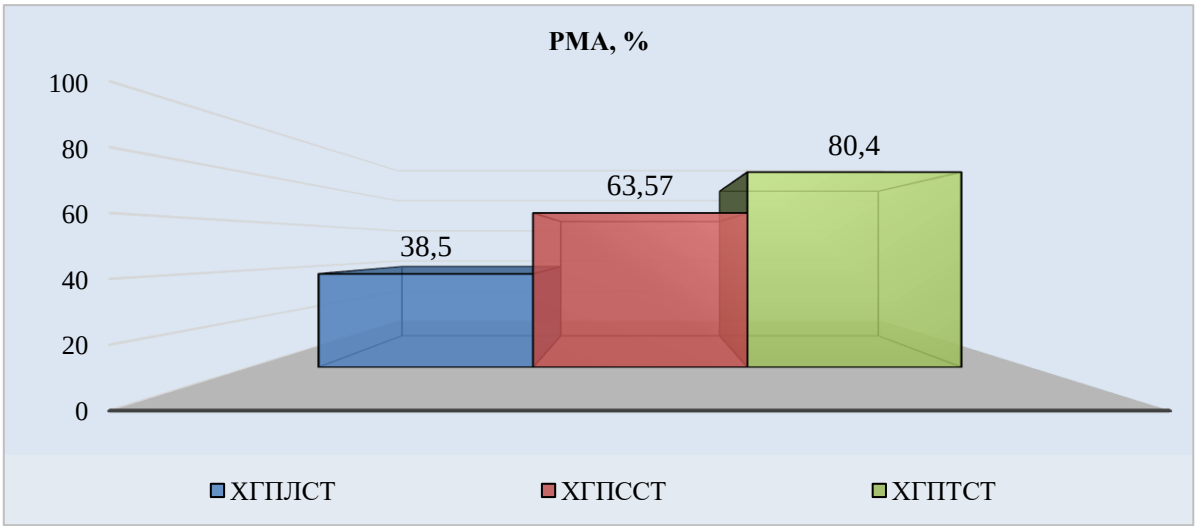


Figure 2. Papillary-marginal-alveolar index in postmenopausal women with chronic generalized periodontitis

The results of the Muleman study of gum bleeding were presented (Table 1). 2), that in a large number of patients with generalized periodontitis of mild severity, this parameter received 2.25 points (with light probing of the gingival fossa, a spot was determined), and in patients with generalized periodontitis of moderate severity, 3.21 points (with light probing, the gingival fissure was filled with blood). Gingival tissue bleeding was even more pronounced in patients with severe generalized periodontitis and received about 3.68 points (blood was poured into the gingival sulcus and pumped out of its borders).

Table 2

Parameters of gingival tissue bleeding according to Muleman in postmenopausal patients with chronic generalized periodontitis (*X±t*)

Postmenopausal	Postmenopausal period				
	period HPLST (n=25)	HPLST (n=29)	P_{P1}	HPLST (n=21)	P_{P2}
Mulleman gum bleeding, scores	2.25±0.11	3.21±0.13	P<0.03	3.68±0.12	P<0.002

Note: P_{P1} - statistical significance of discrepancies among groups with mild and moderate degrees of generalized periodontitis;P_2 - statistical significance of discrepancies among groups with moderate and severe degrees of generalized periodontitis (Mann-Whitney, U-test).

In the studied patients with generalized periodontitis of moderate severity, a significant lesion was revealed in the depth of the periodontal pockets in the area of both the lateral and anterior sextants of both jaws when compared with similar ones in the area of parotid tissues in the generalized periodontitis of mild severity. This kind of correspondence of the studied values was also noted when comparing chronic generalized periodontitis of moderate and severe severity in postmenopausal patients (Table 3).

Table 3

Values of periodontal pocket depth in postmenopausal patients with chronic generalized periodontitis, mm ($X \pm m$)

Postmenopausal	Postmenopausal period				
	period HPLST (n=25)	HPLST (n=29)	P_{P1}	HPLST (n=21)	P_{P2}
Depth of periodontal pockets, mm					
upper lateral sextants	3.29±0.06	4.21±0.07	P<0.002	6.29±0.22	P<0.002
anterior sextants	3.20±0.05	3.59±0.12	P<0.03	5.80±0.16	P<0.002
lower side sextants	3.39±0.05	4.59±0.09	P<0.002	6.79±0.25	P<0.002

Accordingly, an increase in the parameters of the complex periodontal index (PI) was recorded in the studied patients, which was justified by the information in Figure 2, which indicates that, if in the group with mild periodontitis, the value of the studied parameter showed an average of 2.5 points, then in patients with moderate periodontitis it was it increased to 4.7 points, and in severe periodontitis - to 6.4points (Fig. 5).

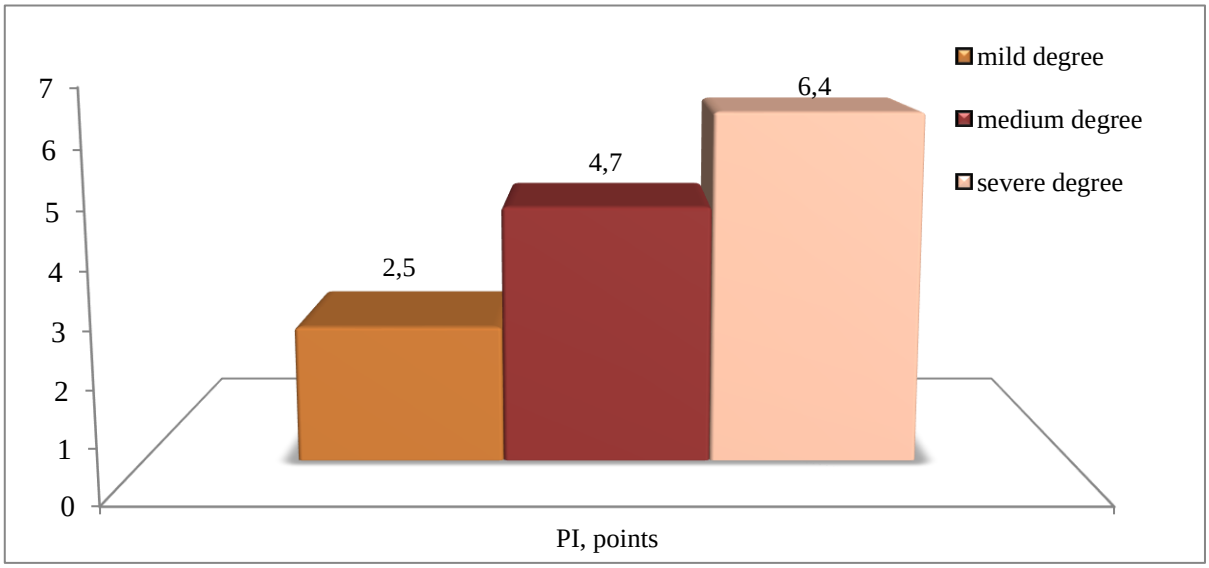


Figure 2. Parameters of the periodontal index (PI) in patients with chronic generalized periodontitis in the postmenopausal period

The analysis of the examination of patients with chronic generalized periodontitis in the postmenopausal period of mixed saliva content revealed that a certain number of them revealed the composition of total calcium up to 3.2±0.2 mmol/l, ionized potassium up to 23.1±0.7 mmol/l and total phosphates up to 4.2±0.2 mmol/l.

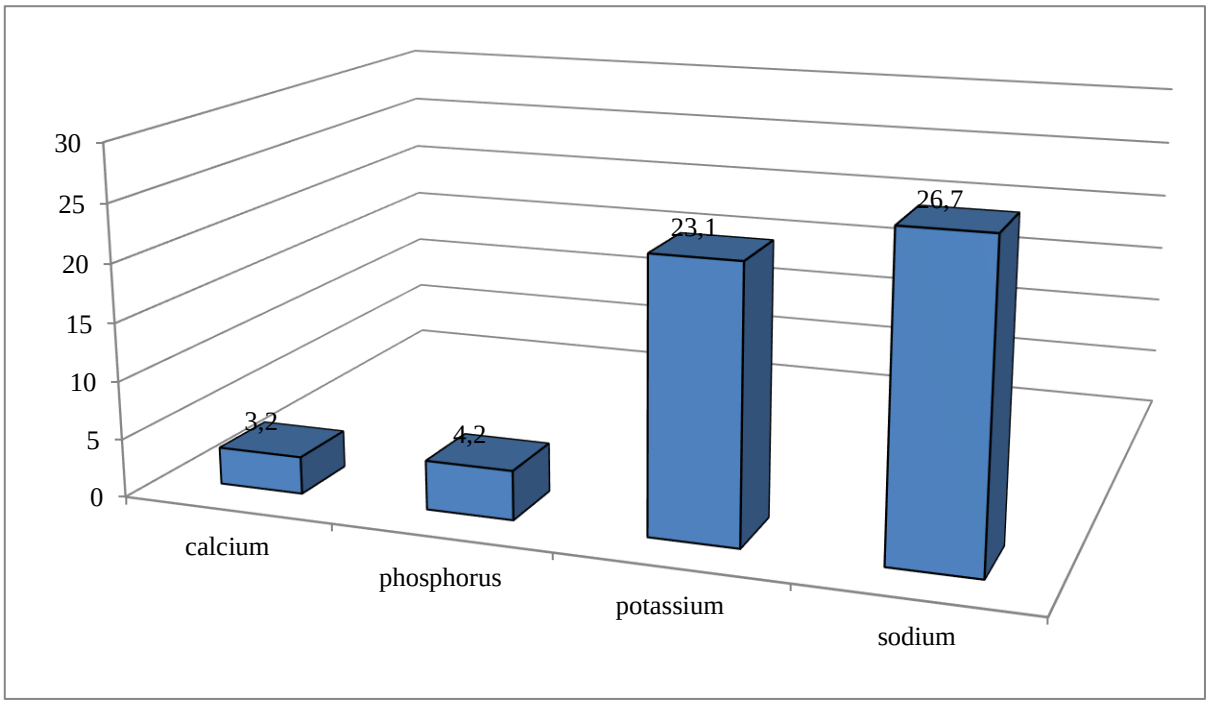


Figure. 3. Oral fluid parameters in postmenopausal patients with chronic generalized periodontitis

Under conditions of significant hypoestrogenism, each of the three groups of patients experienced a significant increase in the level of homocysteine (Figure 4) in the blood serum, while, according to the complication in the development of periodontitis, a significant increase in the studied parameter was detected.

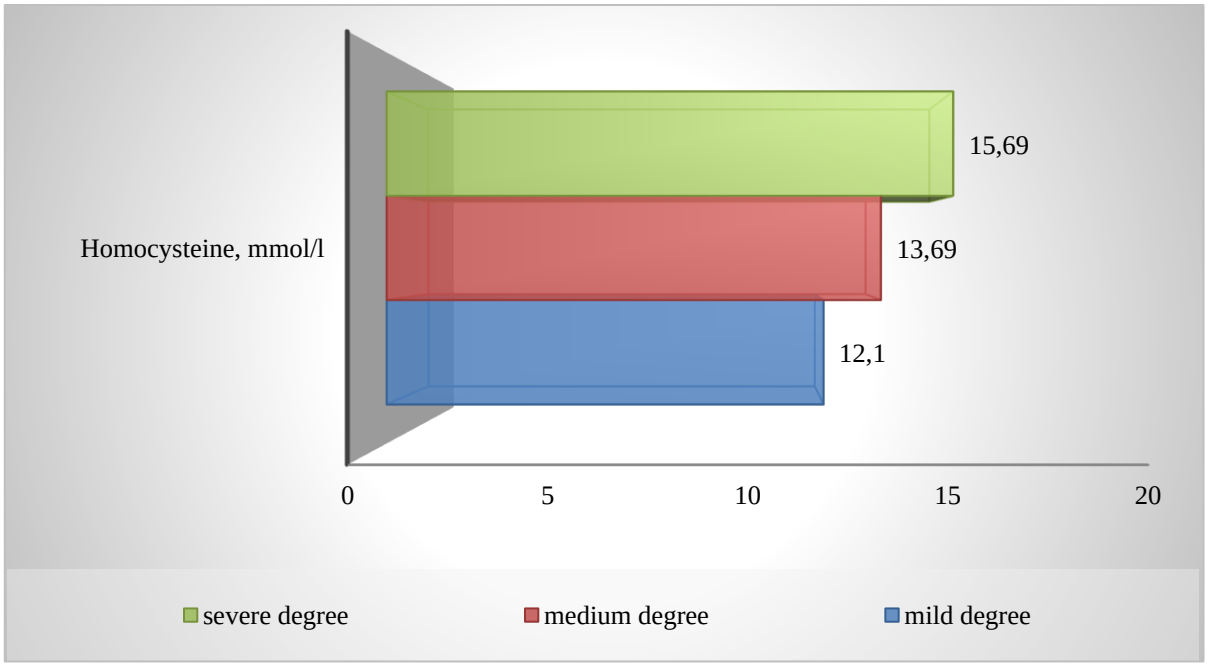


Figure 4. Parameters of the degree of homocysteine in patients with chronic generalized periodontitis in the postmenopausal period

According to our assumption, the tests performed by us to study the content of mediators of complex inflammation in the blood serum (C-reactive protein and interleukin-6) in the studied category of patients are of great importance.

The results of the study of the parameters of C-reactive protein in the blood serum of the examined women (Fig. 5) showed a significant increase in this indicator with a heavier course of periodontitis.

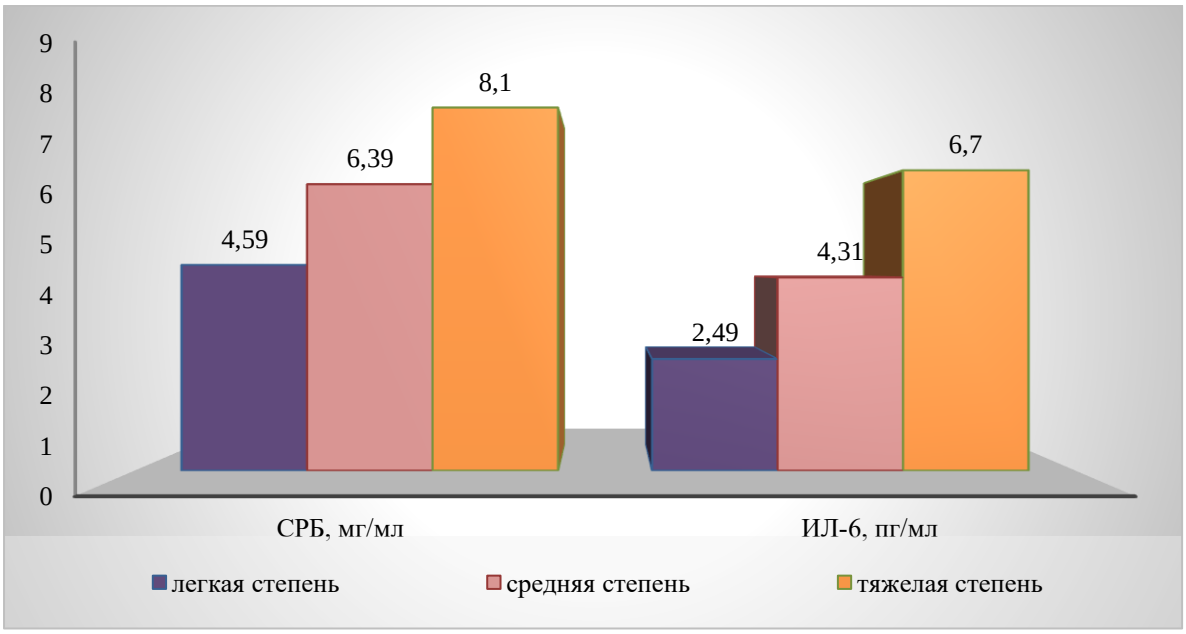


Figure 5. Parameters of the amount of SRV and IL-6 in blood serum in patients with chronic generalized periodontitis in the postmenopausal period

6), that the ET-1 level increased by 13.88 % in patients with moderate periodontitis compared to the concentration of the studied value with mild periodontitis and by 29.41% in patients with severe periodontitis compared to the studied women with moderate periodontitis.

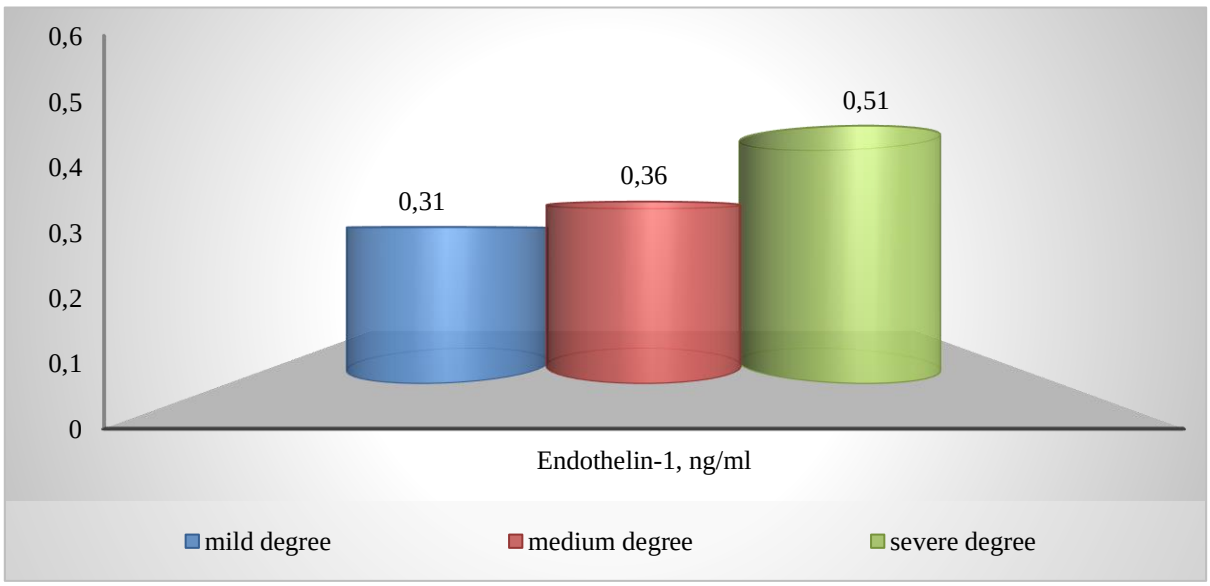


Figure 6. The value of endothelin-1 in the blood serum of patients with chronic generalized periodontitis in the postmenopausal period.

Taking into account the indicators taken during our examination, it should be assumed that the order of therapeutic and preventive measures in postmenopausal patients, which are aimed at correcting hyperhomocysteinemia and restoring periodontal values, is inevitable.

Results of studying the state of the oral cavity after a complex of advanced treatment of patients with chronic generalized periodontitis in the postmenopausal period, based on the above data, in order to increase the effectiveness of periodontal disease treatment in patients in the postmenopausal period, coordinated with hyperhomocysteinemia, we evaluated the impact of the complex of improved treatment of generalized periodontitis on the parameters of dental status, the degree of homocysteine concentration, markers of systemic inflammation and endothelial damage.

Discussion of the results. Inflammatory phenomena of periodontal tissues are one of the most popular problems of dentistry and occupy an important and leading place among all dental diseases. According to WHO, highly functional changes in the maxillary system, which are predetermined by the loss of a certain number of teeth as a result of periodontal tissue damage, progress 5-6 times more intensively than complicated caries.

For this reason, in the majority of domestic and foreign literature published in recent years, an in-depth analysis of inflammatory phenomena of periodontal tissues has been influenced, which reveals a group of etiological circumstances, the cause of periodontitis, clinical and laboratory examination methods have been identified, and a significant number of the most appropriate methods of therapy and prevention have been recommended.

A significant role in the formation of damaging factors of periodontal development is allocated to hormonal inconsistency, which, for example, is sustained by significant lesions of the organs and tissues of the oral cavity in women with conditions with estrogen deficiency and, first of all, during menopause, both during natural and surgical menopause. Currently, various sources indicate the significant role of estrogen deficiency in the development of dental diseases in postmenopausal women, the positive effect of local hormone replacement therapy has been determined, and methods of optimized treatment and prevention of these changes have been improved based on these principles.

Currently, it is of great importance to study the causes that are likely to cause adverse effects on the female body in estrogen-deficient conditions, including those in the postmenopausal period, for which homocysteine is used.

An increase in the concentration of homocysteine in blood serum, which is manifested in an estrogen-deficient state, probably reliably indicates damage to the vascular wall, cellular influence due to the oxidative activity of the metabolite. At the same time, homocysteine promotes an increase in platelet aggregation activity, shows an effect on several enzymes - cyclooxygenase, thromboxane$_{a2}$, thereby involving an improvement in platelet and coagulation levels of hemostasis.

Conclusion. With the development of chronic generalized periodontitis in postmenopausal patients, a significant deterioration in the main parameters of periodontitis was observed, with the exacerbation of chronic generalized periodontitis, an increase in the periodontal index (PI) was noted, in particular, in the group with mild periodontitis, the value of the studied indicator averaged 2.5 points, in patients with moderate periodontitis it increased to 4.7 in patients with severe periodontitis - up to 6.40 points.

In each of the three groups with chronic generalized periodontitis in the postmenopausal period, a significant increase in the level of homocysteine in the blood serum was observed in conditions of significant hypoestrogenism; in particular, in chronic generalized periodontitis of mild severity, it was equal to 12.1, in moderate severity 13.6 and severe severity 15.7. Its concentration correlates with deep periodontal damage, which means that changes in the PMA

and PI indicators, the depth of pathological pockets, the Mulleman gum bleeding index, and blood flow in the alveolar part of the gingival tissue explain this.

In postmenopausal women, there was an increase in the concentration of C-reactive protein (4.59 in mild STD, 6.39 in moderate STD, 8.1 in severe STD), IL - 6 (2.49 in mild STD, 4.3 in moderate STD, 6.7 in severe STD), and an increase in the amount of endothelin-1 (with a mild degree of STD - 0.31, with a moderate degree - 0.36, with a severe degree - 0.51) and disorders manifested by an increase in the amount of total calcium b, phosphates and ionized potassium in the oral fluid;

During the use of a complex of therapeutic measures in patients with chronic generalized periodontitis in the postmenopausal period, a decrease in the content of total calcium, phosphates and potassium in comparison with the background parameters was revealed. Blood serum levels of homocysteine, interleukin-6, C-reactive protein, and endothelin-1 decreased statistically significantly.

Used literature:

1. Arakelyan, M.G. Sravnitelnaya otsenka sredstv, oblegchayushix proyavleniya kserostomii: dis.... kand. med. nauk: 14.01.14 / Arakelyan Marianna Georgievna. - Moskva, 2017. - 116 s.
2. Artyushkevich, A.S. Zabolevaniya visochno-nijnechelyustnogo sustava /A.S. Artyushkevich // Sovremennaya stomatologiya. - 2014. - №1(58). - S. 11-14.
3. Bayaxmetova, A.A. Issledovanie parodontopatogennoy mikroflori parodontalnix karmanov pri parodontite molekulyarno-geneticheskim metodom / A.A. Bayaxmetova, A.A. Yekesheva // Nauka i Mir. - 2016. №3(31). - S. 73-76.
4. Berkutova, I.S. Kompleksnoe lechenie xronicheskogo generalizovannogo parodontita s primeneniem sovremennыx antibakterialnix preparatov: diss.... kand. med. nauk: 14.01.14 / Berkutova Irina Sergeevna. - Moskva, 2015. -116 s.
5. Borovskiy, Ye.V. Karies zubov / Ye.V. Borovskiy, P.A. Leus. - M: Meditsina. - 1979. - S. 264.
6. Borovskiy, Ye.V., Leontev V.K. Biologiya polosti rta. - M.: Meditsina. - 1991. - S. 304.
7. Budaychieva, Z.S. Sravnitelnaya otsenka stomatologicheskogo i gigienicheskogo statusa patsientov, primenyayushix standartniy i individualno podobranniy kompleks sredstv gigieni polosti rta: diss.... kand. med. nauk: 14.01.14 / Budaychieva Zagidat Sirajutdinovna - Moskva, 2019. - 51 s.
8. Vavilova, T.P. Bioximiya tkaney i jidkostey polosti rta. - Moskva: GEOTAR - MEDIA, 2008. - S. 131-137.
9. Van der Biyl, P. Vzaimosvyaz zabolevaniy parodonta i serdechno - sosudistoy sistemi / Peter van der Biyl // Problemi stomatologii. - №6. - 2014. - S. 4-8.
10. Grudyanov, A.I. Sostav parodontopatogennoy mikroflori pri parodontite raznix stepeney tyajesti po dannim polimeraznoy sepnoy reaktsii / A.I. Grudyanov, V.V. Ovchinnikova // Stomatologiya. - 2008. - T. 87. - №3. - S. 20-23.
11. Grudyanov, A.I. Sovremennie predstavleniya ob etiologii, patogeneze i podxodax k lecheniyu endodonto-parodontalnix porajeniy / A.I. Grudyanov, M.K. Makeeva, N.V. Pyatigorskaya // Vestnik Rossiyskoy akademii meditsinskix nauk. - 2013. - 8. - S. 3436.
12. Gulua, M.M., Sazanskaya L.S. Oldin va postmenopozal ayollarda og'iz bo'shlig'i mikroflorasini o'rganish / "Zamonaviy fanning yutuqlari va muammolari" XXXX xalqaro ilmiy-amaliy konferentsiya materiallari - Sankt-Peterburg, 2019. - B. 32.

13. Gulua, M.M., Sazanskaya L.S. Klinicheskie proyavleniya stomatologicheskix zabolevaniy u jenщin v period perimenopauz / Materiali XXXXIII Mejdunarodnoy nauchno-prakticheskoy konferentsiya «Dostijeniya i problemi sovremennoy nauki» - Sankt-Peterburg, 2019. - S. 29-31.
14. Gulua, M.M., Sazanskaya L.S. Vliyanie perioda perimenopauzi na mikrofloru polosti rta u jenshin v zavisimosti ot priema zamestitelnoy gormonalnoy terapii / Materiali VII Mejdunarodnoy nauchnoy konferentsii «Aktualnie problemi meditsinskoy nauki i obrazovaniya» - Penza, 2019. - S.15.
15. Denisov, A.B. Slyunnie jelezi. Slyuna / A.B. Denisov. - Moskva: Izdatelstvo RAMN, 2003. - S. 132.
16. Dikinova, B. S. Primenenie probiotikov v kopleksnom lechenii galitoza: avtoref. diss.... kand. med. nauk: 14.01.14 / Dikinova B. S. -Moskva, 2018. - 25 s.

UDC: 618.3 : 612.843.631

STUDYING VISUAL CHANGES ON PREGNANCY , PREECLAMPSIA AND POSTPARTUM PERIOD BY USING INNOVATION TECHNOLOGY

Ruzimova N.E.[1], Karimova M.X.[2]

[1]Ophthalmologist of the Republican specialized scientific and practical center for eye microsurgery Khorezm branch,

[2] Republican specialized scientific and practical center for eye microsurgery

Relevance. Currently, there is a progressive increase in pathological pregnancies. According to foreign authors, the frequency of pathological pregnancy ranges from 18.6 to 75%[3]. At the same time, from the point of view of ophthalmologists, many aspects of the development of pathology of the organ of vision during pregnancy remain poorly understood. The main cause of the development of ophthalmological pathology during pregnancy is preeclampsia. This condition is considered a complication of pregnancy, characterized by generalized vascular spasm with impaired perfusion and dysfunction of vital organs and systems, as well as the occurrence of multiple organ failure, which requires timely diagnosis and proper treatment [4]. The incidence of preeclampsia varies from 3 to 21%. 25% of cases in patients with preeclampsia and 50% in patients with eclampsia show symptoms of visual damage.

Purpose of the study: Studying visual changes during pathological pregnancy and assesment results of treatment ways, which used during the study.

Key words *pathologik pregnancy, arterial hypertension, macular edema*

ИННОВАЦИОН ТЕХНОЛОГИЯЛАР ЁРДАМИДА КЎРИШ АЪЗОСИ ЎЗГАРИШЛАРИНИ ҲОМИЛАДОРЛИК, ПРЕЭКЛАМПСИЯ ВА ТУҒРУҚДАН КЕЙИНГИ ДАВРДА ЎРГАНИШ

Рузимова Н.Э.[1], Каримова М.Х.[2]

[1]Республика ихтисослаштирилган кўз микрохирургияси илмий-амалий тиббиёт маркази Хоразм филиали

[2] Республика ихтисослаштирилган кўз микрохирургияси илмий амалий-тиббиёт маркази

Мавзунинг долзарблиги: Хозирги вақтда патологик ҳомиладорликнинг прогрессив ўсиши кузатилмоқда. Шу билан бирга, офтальмологлар нуқтаи назаридан, ҳомиладорлик даврида кўрув аъзоси патологиялари ривожланишининг кўп жихатлари ҳали ҳам яхши ўрганилмаган. Ҳомиладорлик даврида офтальмологик патологиянинг ривожланишининг асосий сабабларидан бири преэклампсиядир. Бу ҳолат ҳомиладорликнинг асорати ҳисобланади. У ҳаётий муҳим органлар ва тизимларнинг перфузияси ва дисфункцияси, шунингдек, ўз вақтида ташҳис қўйиш ва тўғри даволашни таълаб қиладиган, кўп аъзолар етишмовчилигининг пайдо бўлиши ва умумий томир спазмлари билан тавсифланади [1,3]. Преэклампсия билан касалланиш даражаси 3% дан 21% гача. Преэклампсия билан оғриган беморларда 25% ва эклампсия билан оғриган беморларда 50% ҳолларда кўриш бузилиши белгилари номоён бўлади [2].

Тақдиқот мақсади: Патологик кечувчи ҳомиладорлик даврида кўрув аъзоси ўзгаришларини ўрганиш ва тадқиқот давомида қўлланилган даволаш усуллари натижаларини баҳолаш.

Калит сўзлар: *патологик ҳомиладорлик, артериал гипертензия, макуляр шиш*

ИЗУЧЕНИЕ ЗРИТЕЛЬНЫХ ИЗМЕНЕНИЙ С ПОМОЩЬЮ ИННОВАЦИОНННЫХ ТЕХНОЛОГИИ ПРИ БЕРЕМЕННОСТИ, ПРЕЭКЛАМПСИИ И ПОСЛЕРОДОВОМ ПЕРИОДЕ

Рузимова Н.Э.[1], Каримова М.Х.[2]

Республиканский специлизированный научно-практический центр микрохирургии глаза Хорезмского филиала

Республиканский специализированный научно-практический центр микрохирургии глаза

Актуальность В настоящее время наблюдается прогрессирующее увеличение патологически протекающей беременности. В тоже время, с точки зрения офтальмологов, многие аспекты развития патологии органа зрения при беременности остаются малоизученными. Основной причиной развития офтальмологической патологии во время беременности является преэклампсия.[1] Данное состояние считается осложнением беременности, характеризующееся генерализованным сосудистым спазмом с нарушением перфузии и расстройством функции жизненно важных органов и систем, а также возникновением полиорганной недостаточности, которое требует своевременной диагностики и правильного лечения [1,3]. Частота преэклампсии варьирует от 3 до 21 %. 25 % случаев у пациентов с преэклампсией и 50 % у пациентов с эклампсией, отмечаются симптомы поражения органа зрения [2].

Ключевые слова: *патологическая беременность, артериальная гипертензия, макулярный отек.*

Цель исследования. Изучить изменения органа зрения при патологической беременности и улучшить качество жизни пациента с помощи своевременной терапии с выжидательной тактикой в послеродовом периоде.

Materials and methods. We observed a patient with a 32 week pregnancy with moderate severe preeclampsia and hypertensive neuroretinopathy, macular edema and exudative detachment of the neuroepithelium.

The patient's age is 34 years, with a history of infertility for 9 years, and has been suffering from arterial hypertension II, risk III for 5 years. Obesity 3 grade.

During the examination, visometry was perfomed with assessment of maximum corrected visual acuity (BCVA), biomicroscopic examination of the anterior segment of the eye and its structures, as well as the retina with non-contact fundus lens(78 diopters), optical coherence tomography of the retina(OCT) with assessment of the vitreoretinal interface (Huvitz). During the OCT study used “Macular 3D map” and “3D disk” modes. The main morphometric dates of the macular zone and optic disk region were determined: the total volume (TV)of the retina and its thickness in individual topographic zones (mm^2 and µm). In addition, the necessery tests and examinations were carried out according to the recommendations of generally accepted classifications of gynecologists and specialists before childbirth and in the postpartum period.

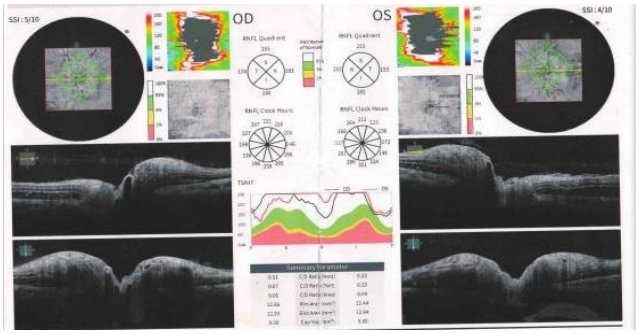
The initial VA in the left eye was 0,08-0,09 eccentrically without improvement with correction. In the fundus there was swelling and hyperemia of the optic disc, arterial vessels are narrowed, veins are dilatated, highly tortuous, multiple streak-like hemorrages along the vessels, hypoxic spots throughout the surface of the retina, macular edema with the absence of a central reflex, deposits of hard exudates around the macula. And on the right eye initial VA 0,1 with +2.0sph=0.2 The fundus picture is softer than on the right, but more pronounced angiopathy and petal shaped soft exudates, moreover, absolute scotomas in the central and peripheral field of vision indicated a severe degree of vascular disorders in both eyes. With OCT, the average 4 times more than normal, due to swelling of the optic disc and the peripapillary area in both eyes. Pic.2.1-2.2 While blood pressure was 150-160 mmHg. Against in the background of standart antihypertensive therapy and whole day magnesium therapy. The total protein in the blood averaged 59 mmol/l; against the background of oral protein therapy, a urine test up to 32-33 weeks of pregnancy showed a protein of 0,333%. Pic.1.0

	32 week of pregnancy	34 week of pregnancy	10 days postpartum	2 months postpartum	5 month postpartum

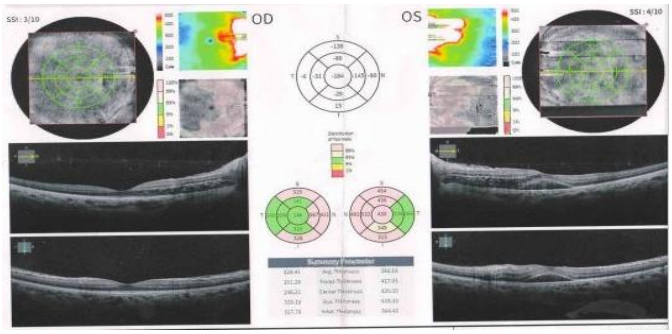
The amount of protein in the blood (mmol/l)	59	57	55	61	63
The amount of protein in the urine (%)	0,333	4,5-5,0	4,1	2,5-3,5	0,033

Saluretics intravenous by 5.0 ml daily and osmotic diuretics in short courses. The patient was prescribed topical drops of the NSAID nepafenac 0,1% by 1 drop 3 times a day, and betoxolol 0,5%, 1 drop 1 time a day, with selectiv betal adrenergic blocking action. As well as drops with an antioxidant effect in order to improve tissue nutrition supply. But the patient did not use the prescribed drops. At 34 weeks 2 days, visual acuity sharply deteriorated 0,02-0,03 in the right eye and 0,05 in the left eye without improvement with correction. The volume and amount of soft exudates in the fundus increased sharply. Blood pressure 180-200 mmHg. Against the background of antihypertensive therapy, step by step added exudative pleurisy, pericarditis, ascites and persistent edema of the lower limb were added. Total protein in the blood averaged 57 mmol/l under parenteral injections of protein preparations. A urine test revealed an average protein level of 4,5-5,0 mmol/l. Pic.1.0. All of the above clinical and laboratory data were accompanied by deterioration of the visual organ. After termination of pregnancy by surgical way, the above listed eye drops were strictly added to the patient's treatment complex. For resolving enzyme therapy, serrata tablets were added, 1tablet 3 times a day for 20 days. Complaints of sparks and photophobia gradually decreased. Observations on days 1 and 10 after birth did not reveal any signaficant data. In the first and second months after birth, visual acuity improved by 20% in the right eye and by 30% in the left eye. Local and systemic treatment after compensation and stabilization of concomitant pathology is adjusted to the required doses. The patient was recommemded watchful waiting. Over a period of 5 months 10 days after birth, visual acuity recovered to 0.7 in the right eye, complete resorption of hemorhages and isolated hypoxic areas, while hard exudates in the macula and angiopathy of the retinal vessels in the fundus remained. And visual acuity was 0,8in the left eye with residual edematous areas with soft exudates and central hard exudates. Fundus data correspond to OCT data. Pic. 2.1-2.2 3.1-3.2

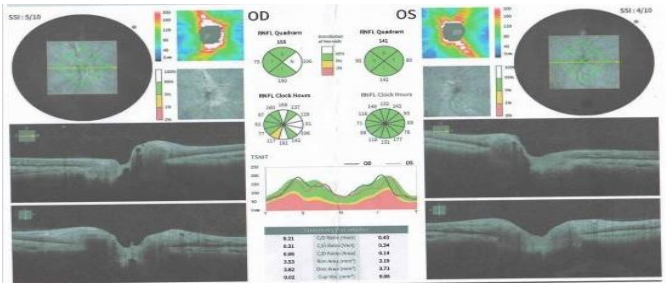
Dinamics OCT analysis during the study



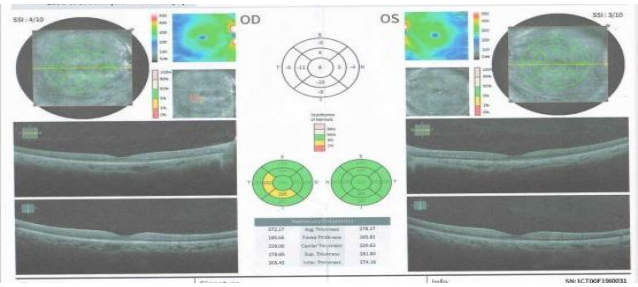
Pic.2.1



Pic.2.2



Pic.3.1



Pic.3.2

Blood pressure is 150-160 mmHg against the background antihypertensive therapy, total protein in the blood is within limit of normal, protein levels in the urine are traces of protein and 0.33%.

Conclution. Using innovation datas such as clinical and laboratory data show that preeclampsiya with prolonged protein imbalance and generalized spasm is more dangerous, which can lead to a sharp deterioration in health or complete blindness, but with timely elimination of the cause and proper treatment, we can assume a more favorable prognosis, until complete recovery, even for pregnant women with a history of hepertension.

Used literature:

1. Е.Н. Хомякова, С.Г. Сергушев, А.А. Рябцева. Патология органа зрения при повторной беременности//Альманах клинической медицины 2012.-№27. -С.76-80.
2. Травкин, А.Г. Особенности родоразрешения при гестозе беременных с миопией/ Травкин, А.Г, Л.С.Логутова, К.Н Ахвледиане// Вестник офтальмологии. -2007.-С.26-29.
3. Хамраева А.А. Некоторые показатели гемодинамики глаза у беременных с гестозом в дородовом и послеродовом периоде // Офтальмол.журн.1998. №6. С458-461.

UDC: 616-08-035

MODERN PERSPECTIVE ON MENOPAUSAL METABOLIC SYNDROME.

Ruzmatova A.Sh.
Tashkent Pediatric Medical Institute

Annotation: Menopause is defined as the last spontaneous menstruation (PM). Natural menopause reflects the final cessation of menstrual cycles due to the loss of follicular activity of the ovaries. It is a retrospective clinical diagnosis established after 12 consecutive months of amenorrhea (absence of menstruation). Climacteric syndrome is a complex of vegetative-vascular, psychological, and metabolic-endocrine disorders that occur in women against the background of fading (or sharp loss) of the hormonal function of the ovaries and general aging of the body. The menopause period is characterized by a gradual decline and subsequent "shutdown" of ovarian function. The article provides a review of the literature on the modern perspective of Menopausal Metabolic Syndrome, highlighting important aspects of aging criteria, the role of a healthy lifestyle in ensuring a smoother transition during this period for women. It also focuses on women's eating behaviors and the impact of latent anxiety-depressive disorders on the development of bulimic episodes.

Keywords: *aging criteria, phase, bulimia, amenorrhea, follicles, stage, postmenopause, ovarian reserve.*

MENOPAUZAL METABOLIK SINDROMGA ZAMONAVIY QARASH.

Ruzmatova A.Sh.
Toshkent Pediatriya Tibbiyot Instituti

Annotatsiya: menopauza so'nggi o'z-o'zidan paydo bo'lgan hayz ko'rish (LM) deb ta'riflanadi, bu tuxumdonlarning follikulyar faolligi yo'qolishi tufayli hayz ko'rishning yakuniy to'xtashini aks ettiradi. Bu ketma-ket 12 oylik hayz ko'rish (amenoreya) bo'lmaganidan keyin o'rnatiladigan retrospektiv klinik tashxis. Menopauza sindromi ayollarda tuxumdonlarning gormonal funktsiyasining susayishi (yoki to'satdan yo'qolishi) va tananing umumiy qarishi fonida yuzaga keladigan vegetativ-qon tomir, aqliy va metabolik-endokrin kasalliklar majmuasidir. Menopauza davri tuxumdonlar funktsiyasining asta-sekin kamayishi va keyin "o'chirilishi" bilan tavsiflanadi . Maqolada menopauza metabolik sindromiga zamonaviy qarashlar bo'yicha adabiyotlar sharhi keltirilgan, qarish mezonlarining muhim jihatlari, ayollarda bu davrni yengilroq o'tkazishda sog'lom turmush tarzining ahamiyati ta'kidlangan. Shuningdek, ayollarning ovqatlanish odatlari va yashirin xavotir-depressiya buzilishining bulimik epizodlarni shakllantirishga ta'siriga e'tibor qaratilgan.

Kalit so'zlar: *qarish mezonlari, faza, bulimiya, amenoreya, follikullar, bosqich, menopauzadan keyingi davr, tuxumdon zahirasi.*

СОВРЕМЕННЫЙ ВЗГЛЯД НА МЕНОПАУЗАЛЬНЫЙ МЕТАБОЛИЧЕСКИЙ СИНДРОМ.

Рузматова А.Ш.
Ташкентский Педиатрический Медицинский Институт

Аннотация: менопауза определяется как последняя самостоятельная менструация (ПМ). Естественная менопауза отражает окончательное прекращение менструальных циклов вследствие потери фолликулярной активности яичников. Является ретроспективным клиническим диагнозом, устанавливается после 12 последовательных месяцев отсутствия менструаций (аменореи). Климактерический синдром - комплекс вегетативно-сосудистых, психических и обменно-эндокринных нарушений, возникающих у женщин на фоне угасания (или резкой потери) гормональной функции яичников и общего старения организма. Период менопаузы характеризуется постепенным снижением, а затем и «выключением» функции яичников. В статье приведен обзор литературы по современному взгляду на Менопаузальный Метаболический Синдром, подчеркнуты важные аспекты критерия старения, роль здорового образа жизни для более плавного течения

этого периода у женщин, уделено внимание пищевому поведению женщин и влияние скрытого тревожно-депрессивного расстройства на формирование булимических эпизодов.

Ключевые слова: *критерии старения, фаза, булимия, аменорея, фолликулы, стадия, постменопауза, яичниковый резерв.*

According to the definition of the International Menopausal Society, "menopause" refers to the last menstruation in a woman's life, due to the function of her own reproductive system [1]. According to the physiological processes of aging, natural menopause is a consequence of depletion of the ovarian follicular reserve.

If at the 20th week of gestation there are 7 million oocytes in the ovaries of the fetus, then by the time of birth their number decreases to 1-2 million, by the beginning of puberty there are about 300-400 thousand of them. Subsequently, the monthly expenditure of the follicular reserve continues, despite the fact that only about 400 (0.1%) follicles ovulate [2]. Advances in reproductive technologies have made it possible to clearly characterize the endocrine function of the reproductive system in the age aspect [3,4]. An important role in its assessment was played by determining the ovarian reserve, in particular, measuring the levels of follicle-stimulating (FSH) and anti-Muller (AMH) hormones, inhibin B and the number of antral follicles (CHAF). It has been established that changes in the levels of reproductively significant hormones begin even before the rhythm of menstruation is disrupted, at the age of 35-37 years, and become more noticeable by the age of 40 [5]. At first, the cycle shortens, then it lengthens, culminating in the last menstruation (PM) [6]. It is believed that menopause occurs when the ovarian reserve decreases below a critical level — up to 1,000 follicles [7].

The aging criteria of the Stages of Reproductive Aging Workshop, which were first proposed by an expert working group in 2001 (STRAW-1) [8], were revised in 2011 to take into account new scientific data obtained during large cohort studies: the Melbourne Project to assess the health status of middle-aged women, the Seattle Study on Women's Health middle age, as well as the National Women's Health Survey (STRAW+10).Experts took into account the body weight, lifestyle, and health status of women [9]. The STRAW+10 Expert Working Group recommended making changes to the criteria for the late phase of the reproductive period (phase -3), as well as early postmenopause (phase +1), taking into account the levels of reproductive hormones. Information on the duration of the late menopausal transition (phase -1) and early postmenopause (phase +1) has also been clarified. Early phase of menopausal transition (phase -2) This phase is characterized by variability in the duration of the menstrual cycle, which is determined by stable differences of 7 days or more when comparing several consecutive cycles. In addition, there may be an increase in the level of FSH in the follicular phase with variability in its values, as well as a low level of AMH and a decrease in CSF.

Late phase of the menopausal transition (phase -1) During this phase, menstrual delays of 60 days or more already occur. Menstrual cycles vary in duration, are accompanied by pronounced fluctuations in hormone levels, and anovulatory cycles predominate. The concentration of FSH sometimes reaches values characteristic of postmenopause, and sometimes corresponds to the values of the reproductive period in combination with an increase in estradiol content. During this period, there has already been an increase in the concentration of FSH to values exceeding 25 IU/l. The late phase of the menopausal transition lasts on average from 1 to 3 years; the first menopausal symptoms may appear, mainly of a vasomotor nature. The phases of the early postmenopausal period (+1a, +1b, +1c) are characterized by a progressive increase in blood FSH levels and a decrease in estradiol concentrations for about 2 years after PM, after which the levels of these hormones stabilize. STRAW+10 recommends dividing early

postmenopause into three phases (+1a, +1b, +1c). Each of the phases +1a and +1b lasts for a year, the onset of phase +1c is marked by the stabilization of high levels of FSH and low levels of estradiol. Phase +1a corresponds to the end of the 12-month period of amenorrhea, necessary to confirm the onset of menopause, and the end of the so-called perimenopause. This term is still widely used, especially in Russian publications, and refers to the period corresponding to menopause and the time "around" it: perimenopause begins at stage -2 and ends 12 months after PM (and not after 24 months, as indicated in the STRAW-1 criteria). Stage +1b includes the remaining period corresponding to rapid changes in the mean values of FSH and estradiol. Phases +1a and +1b together take an average of 2 years. During this period, the appearance of clinically manifest symptoms of estrogen deficiency is even more possible, although vasomotor disorders still dominate. The +1c stage is characterized by a consistently high concentration of FSH and a low concentration of estradiol, and it can last from 3 to 6 years. Thus, in general, the early phase of postmenopause does not last 5 years, as described in STRAW-1, but from 5 to 8 years. Late postmenopausal phase (phase +2) In this phase, vasomotor symptoms in most women are already less pronounced and somatic aging comes to the fore. There is a significant increase in the frequency of symptoms of atrophy of the genitourinary tract, however, in 10-15% of women, vasomotor symptoms may persist. The boundary of this phase remains open (conditionally — until the end of a woman's life), however, as life expectancy increases, it becomes clear that it is necessary to identify at least one more — the last — phase of aging, and this requires additional research.

Table 1.

Stages of Reproductive Aging Workshop.

Menarche — FMP (0)

Stage	-5	-4	-3b	-3a	-2	-1	+1 a	+1b	+1c	+2
Terminology	REPRODUCTIVE				MENOPAUSAL TRANSITION		POSTMENOPAUSE			
	Early	Peak	Late		Early	Late	Early			Late
					Perimenopause					
Duration	*variable*				*variable*	1-3 years	2 years (1+1)		3-6 years	*Remaining lifespan*
PRINCIPAL CRITERIA										
Menstrual Cycle	Variable to regular	Regular	Regular	Subtle changes in Flow/ Length	*Variable Length* Persistent ≥7- day difference in length of consecutive cycles	Interval of amenorrhea of >=60 days				
SUPPORTIVE CRITERIA										
Endocrine FSH AMH Inhibin B			Low Low	Variable Low Low	↑ Variable Low Low	↑ >25 IU/L** Low Low	↑ Variable Low Low		Stabilizes Very Low Very Low	
Antral Follicle Count			Low	Low	Low	Low	Very Low		Very Low	
DESCRIPTIVE CHARACTERISTICS										
Symptoms						Vasomotor symptoms *Likely*	Vasomotor symptoms *Most Likely*			*Increasing* symptoms of urogenital atrophy

* Blood draw on cycle days 2-5 ↑ = elevated

Loss of ovarian function with a significant decrease in estradiol and progesterone biosynthesis leads to hormonal changes in a woman's body and is accompanied by clinical manifestations characteristic of the postmenopausal period [10]. Estradiol, in addition to being a hormone of the reproductive system, also provides homeostasis, participates in the regulation of energy utilization and conservation; its deficiency gradually leads to the development of menopausal metabolic syndrome (MMS) [11]. The main clinical and laboratory indicators of MMR include: an increase in waist circumference (more than 88 cm), hypertriglyceridemia (more than 1.7 mmol/L), low high-density lipoprotein cholesterol (less than 1.29 mmol/L), increased blood pressure (more than 130/85 mmHg), increased plasma glucose levels on an empty stomach (more than 6.1 mmol/l) [12,13]. The results of the INTERHEART study conducted in 52 countries of the world showed that on average 26% of the adult population of the planet has MS [14]. Such a high prevalence of the disease is due to the interaction of predisposing hereditary factors, the consumption of high-calorie foods, and a sedentary lifestyle. From the side of Spencer et al. The concept of menopausal metabolic syndrome has been put forward, which is based on estrogen deficiency and, as a result, abdominal redistribution of adipose tissue, the occurrence of lipid and carbohydrate metabolism disorders, pathological changes in the hemostasis system, and the formation of insulin resistance [15]. Approximately 60% of perimenopausal women have a sharp increase in body weight [16], which triggers a cascade of pathological processes in the body leading to the formation of metabolic syndrome. E. T. Roelhman and A. Tchernof claims that women after the age of 48 have a decrease in basal metabolic rate by 4-5% per decade, which requires increased body weight control in women of this age group to prevent the development of obesity [17]. Studies show that the nature of fat deposition in menopause does not depend on the degree of obesity and age, but depends only on the cessation of ovarian function: in early postmenopause, the volume of fat in the thigh area is 36% higher, and the volume of intra—abdominal fat is 49% higher compared with women with preserved ovarian function [18]. Back in 1956, J. Vague noted a high incidence of cardiovascular diseases in patients with central abdominal type of obesity. Currently, abdominal type of obesity is an integral part of the so-called metabolic syndrome, or syndrome X [19]. Studies have confirmed a close correlation between the degree of development of visceral adipose tissue and the size of the waist circumference. A waist circumference of more than 100 cm at the age of 40 and more than 90 cm at the age of 40-60 years is an indicator of abdominal-visceral obesity in both men and women. Unlike general obesity, the presence of visceral type of obesity in combination with other components of MS is the most important predictor of the risk of cardiovascular diseases. In the treatment of patients with MMR, therapeutic measures should be aimed at the main links in the pathogenesis of this pathological condition [20,21] and involve normalization of body weight, achievement of metabolic control, normalization of blood pressure, and prevention of the development of acute and long-term cardiovascular complications.

To do this, first of all, it is necessary to change the stereotype of nutrition, lead a mobile lifestyle and give up bad habits (smoking, alcohol abuse) [22]. Currently, special attention is also being paid to the eating behavior of women in the menopausal period. Latent anxiety and depressive disorder may underlie increased appetite and bulimic episodes. Most often, with affective disorders, obese patients develop such forms of eating disorders as emotionogenic eating behavior, compulsive eating behavior, and night eating syndrome. The Eating Attitudes Test (EAT) was developed by David M.Garner at the Clark Institute of Psychiatry at the University of Toronto. Due to the high reliability and validity of the results, the EAT-26 test makes it possible

to assess the likelihood of having eating disorders, especially anorexia nervosa and bulimia. The higher the total points scored, the higher the probability of having an RPP.Hereditary dysfunction of the cerebral systems that regulate food intake is crucial for the formation of eating disorders. Serotonergic insufficiency (which is also observed in anxiety–depressive disorders) is of the greatest importance in this dysfunction[23].

The TFEQ (Three Factor Eating Questionnaire), the Dutch DEBQ Eating Questionnaire, the German Eating Behavior Scale, and the Minnesota Eating Behavior Study are widely used in clinical practice and research. Eating behavior as a complex behavioral reaction needs to be studied and understood in depth. Solving the blind spots in this area will contribute to the development of new treatment methods, as well as to the assessment of the effectiveness and safety of interventions aimed at changing nutrition and correcting cardiometabolic risks [24]. In conclusion, we can say that the ideas about menopause and menopausal syndrome in modern times are of the greatest relevance due to the increase in life expectancy of women and the loss of ovarian function with a catastrophic decrease in the biosynthesis of estradiol and progesterone is accompanied by hormonal changes in the woman's body. Estradiol, a hormone of reproductive function, is simultaneously involved in the processes of homeostasis, in the regulation of energy utilization and conservation, therefore, its deficiency leads to the development of menopausal metabolic syndrome. The latter includes changes in the lipoprotein spectrum, the development of insulin resistance, increased coagulation potential, decreased levels of sex hormone binding globulins (SHBG), increased levels of leptin, and obesity.

Each stage of reproductive aging has its own distinctive features, ranging from duration to hormonal changes. The study of the problem of Menopausal Metabolic Syndrome in women faces a number of questions: the overall weight gain in different age periods of menopause, the features of fat deposition and body characteristics; the ratio of "fat" and "lean" body weight, their dynamics during menopause. Thus, improving the quality of life of women with Menopausal Metabolic Syndrome requires the development of new treatment methods, primarily by following a healthy lifestyle.

Used literature:

1. United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights (ST/ESA/SER.A/430). https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf
2. https://population.un.org/wpp/Download/Standard/Population/United Nations, Department of Economic and Social Affairs. (2021) World Prospects 2021.
3. Roberts H. Hicke M. Managing the menopause: An update . Maturatis .2019; 86:53-58.DOI.
4. Faddy M. J., Gosden R. G. A model conforming the decline in follicle numbers to the age of menopause in women // Hum. Reprod. 2019. Vol. 11. N 7. P. 1484–1486
5. Brink H. V., Chizen D., Hale G., Baerwald A. Age-related changes in major ovarian follicular wave dynamics during the human menstrual cycle // J. Menopause. 2020 Vol. 20. N 12.
6. Butler L., Santoro N. The reproductive endocrinology of the menopausal transition // Steroids. 2020. Vol. 76. N 7. P. 627–635.
7. Dreval A.V. Menopause (lecture) // RMJ. 2019. № 1 (I). P. 3–7

8. Endocrinology: a national guide / edited by I. I. Dedov, G. A. Melnichenko. Moscow: GEOTAR — Media, 2019. 1072 p. 5. Mychka V. B., Zhernakova Yu.V., Chazova I. E.
9. Podzolkova N. M., Kuznetsova I. V., Glazkova O. L. Obesity and the reproductive function of women: studies. manual. Moscow, 2020. 28 p .
10. Harlow S.D., Gass M., Hall J.E. et al. Executive Summary of the Stages of Reproductive Aging Workshop + 10: Addressing the Unfinished Agenda of Staging Reproductive Aging // J Clin Endocrinol Metab. 2020. Vol. 97 (4). p.1159–1168
11. Dreval A.V. Menopause (lecture) // Breast cancer. 2020. No. 1(I). pp. 3-7
12. Angelik: innovation in the treatment of patients with menopausal disorders // Pharmacy. – 2020. – № 510 (39).
13. N.M. Romanenko- Climacteric in life of the woman p47.
14. Tatarchuk T. F. Non-hormonal therapy of perimenopausal women / T. F. Tatarchuk, O. O. Efimenko // A woman's reproductive health. – 2020. – № 2 (36). – Pp. 127-130. 7. Yureneva S. V. Hormone replacement therapy: discrediting
15. Grigoryan O.R., Antsiferov M.B. Hormone replacement therapy in women with diabetes mellitus during peri- and postmenopause. A guide for doctors. Moscow, 2019;16.
16. Grigoryan O.R., Andreeva E.N. Menopausal syndrome in women with impaired carbohydrate metabolism. The view of a gynecologist-endocrinologist. A difficult patient. 201;5:9:29-34.
17. Makatsaria A.D. Metabolic syndrome in obstetrics and gynecology. Moscow: Medical Information Agency. 2019;480
18. Recommendations for the management of patients with metabolic syndrome. Clinical recommendations.Moscow;2020.
19. Alligier M., Barres R., Blaak E.E. et al. OBEDIS Core Variables Project: European Expert Guidelines on a Minimal Core Set of Variables to Include in Randomized, Controlled Clinical Trials of Obesity Interventions. Obes Facts. 2020;13(1):1–28. DOI: 10.1159/000505342.
20. Hallajzadeh J., Khoramdad M., Izadi N. et al. Metabolic syndrome and its components in premenopausal and postmenopausal women: a comprehensive systematic review and meta-analysis on observational studies. Menopause. 2019;25(10):1155–1164. DOI: 10.1097/GME.0000000000001136.
21. Protasova A.E., Yureneva S.V., Bayramova N.N., Komedina V.I. Menopause, obesity and comorbidity: possibilities of menopausal hormone therapy. Obstetrics and gynecology. 2019;5:43–48.
22. Collins F.H., Sutherland M.A. Hormone therapy for the management of menopause symptoms. J Obstet Gynecol Neonatal Nurs. 2019;43(2):226–235. DOI: 10.1111/1552-6909.12282.
23. Metabolic syndrome. Textbook / Yu.P. Uspensky, Yu.V. Petrenko, Z.H. Gulunov, N.L. Shaporova, Yu.A. Fomin, R.M.Niyazov–SPb., 2017.–60s.
24. Van Strien T, Frijters JER, Bergers GPA, et al. The Dutch eating behavior questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. International J Eat Disord. 1986;5(2):295-315., Wurst R, Brame J, Ramsenthaler C, et al. A questionnaire to assess eating behavior: structure, validity and responsiveness of a new German eating behavior scale (sev). Appetite.2022;168:105668.doi:10.1016/j.appet.2021.105668, Tyuvina NA, Verbitskaya MS, Stolyarova AE. Atipical depression: criteria for identifications, systematics, approaches to therapy. Neurology, Neuropsychiatry, Psychosomatics.

2020;12(2):98-103. (Tyuvina N. A., Verbitskaya M. S., Stolyarova A.E. Atypical depression: selection criteria, systematics, approaches to therapy. Neurology, neuropsychiatry, psychosomatics. 2020;12(2):98-103. doi:10.14412/2074- 2711-2020-2-98-103.

UO'K: 616-08-035

SEMIZLIKNING YURAK FAOLIYATIGA TA'SIRI VA UNI ZAMONAVIY JARROHLIK USULLARI ORQALI DAVOLASH NATIJALARI TAHILI.

Abduraximova L.A., Eshmurodova D.B., Yoqubov F.G'.
Toshkent Kimyo Xalqaro Universiteti

Annotatsiya: Semizlik jahon miqyosidagi jiddiy sog'liq muammolaridan biri bo'lib, yurak-qon tomir tizimiga salbiy ta'sir ko'rsatadi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, 2030 – yilga borib, dunyo aholisining qariyb 45 foizi semizlikka duchor bo'lishi mumkin. Semizlik gipertoniya, yurak yetishmovchiligi va metabolik sindrom kabi kasalliklarning rivojlanish xavfini oshiradi. Ortiqcha tana vazni yurak yuklanishini kuchaytirib, yurak mushaklarining qisqarish qobiliyatini pasaytiradi va ateroskleroz jarayonini tezlashtiradi. Semizlikni jarrohlik yo'li bilan davolash keng qo'llanilayotgan samarali usullardan biri bo'lib, oshqozon hajmini kichraytirish orqali bemorlarga sezilarli vazn yo'qotish imkonini beradi. Bu amaliyot metabolik parametrlarni yaxshilashga yordam berib, qon bosimini pasaytiradi, insulin sezuvchanligini oshiradi va yurak-qon tomir tizimiga tushadigan bosimni kamaytiradi. Klinik tadqiqotlar shuni ko'rsatadiki, oshqozon hajmini kichraytirish yurakning funksional holatini yaxshilash, yurak yetishmovchiligi rivojlanish xavfini kamaytirish va bemorlarning umumiy hayot sifatini oshirishda muhim rol o'ynaydi.

Kalit so'zlar: *Semizlik, sleeve gastroektomiya, minigastroshuntlash, gipertoniya, tana massasi indeksi (TMI), yurak-qon tomir kasalliklari, metabolik sindrom.*

THE IMPACT OF OBESITY ON CARDIAC FUNCTION AND ANALYSIS OF TREATMENT OUTCOMES USING MODERN SURGICAL METHODS

Abdurakhimova L.A., Eshmurodova D.B., Yoqubov F.G'.
Tashkent International University of Chemistry.

Abstract: Obesity is one of the serious global health issues, adversely affecting the cardiovascular system. According to data from the World Health Organization (WHO), by 2030 nearly 45% of the world's population may suffer from obesity. Obesity increases the risk of developing conditions such as hypertension, heart failure, and metabolic syndrome. Excess body weight heightens the workload on the heart, reduces the contractile capacity of the heart muscles, and accelerates the process of atherosclerosis. Bariatric surgery is one of the widely used and effective methods for treating obesity. By reducing the size of the stomach, this procedure enables patients to lose a significant amount of weight. It helps improve metabolic parameters, lowers blood pressure, enhances insulin sensitivity, and reduces the strain on the cardiovascular system. Clinical studies indicate that reducing the stomach size plays a crucial role in improving the functional state of the heart, lowering the risk of developing heart failure, and enhancing the overall quality of life for patients.

Key bords*: Obesity, sleeve gastrectomy, mini gastric bypass, hypertension, body mass index (BMI), cardiovascular diseases, metabolic syndrome.*

ВЛИЯНИЕ ОЖИРЕНИЯ НА СЕРДЕЧНУЮ ДЕЯТЕЛЬНОСТЬ И АНАЛИЗ РЕЗУЛЬТАТОВ ЛЕЧЕНИЯ С ИСПОЛЬЗОВАНИЕМ СОВРЕМЕННЫХ ХИРУРГИЧЕСКИХ МЕТОДОВ

Абдурахимова Л.А., Эшмуродова Д.Б., Ёкубов Ф. Г.
Ташкентский международный университет химии

Резюме: Ожирение является одной из серьезных проблем со здоровьем в мировом масштабе, оказывая негативное влияние на сердечно-сосудистую систему. По данным Всемирной организации здравоохранения (ВОЗ), к 2030 году около 45% населения мира может столкнуться с ожирением. Ожирение увеличивает риск развития таких заболеваний, как гипертония, сердечная недостаточность и метаболический

синдром. Избыточная масса тела повышает нагрузку на сердце, снижает сократительную способность сердечной мышцы и ускоряет процесс атеросклероза.Хирургическое лечение ожирения является одним из эффективных методов, широко применяемых в медицинской практике. Уменьшение объема желудка позволяет пациентам значительно снизить вес, улучшая при этом метаболические параметры, снижая артериальное давление, повышая чувствительность к инсулину и уменьшая нагрузку на сердечно-сосудистую систему. Клинические исследования показывают, что уменьшение объема желудка играет важную роль в улучшении функционального состояния сердца, снижении риска развития сердечной недостаточности и повышении общего качества жизни пациентов.

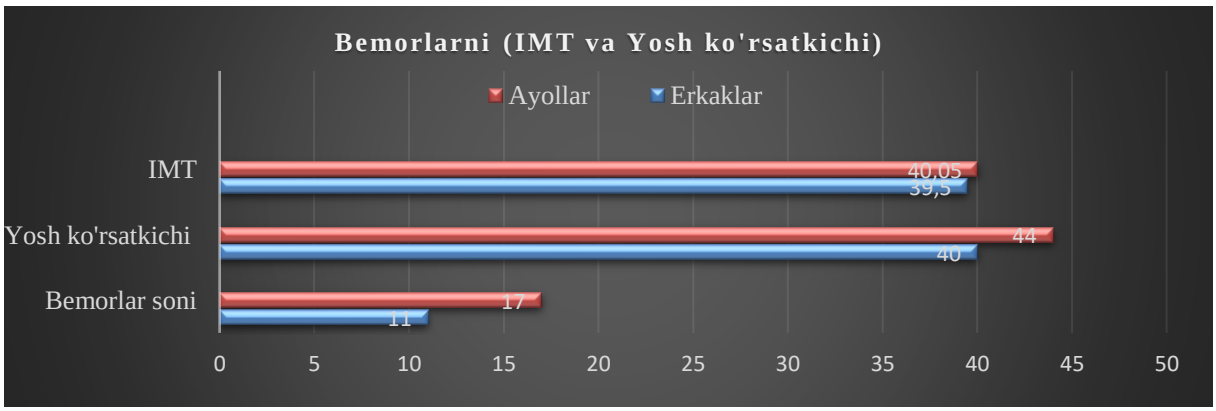
Ключевые слова: *Ожирение, слееве гастроектомия, мини гастрошунтирование, гипертония, индекс массы тела (ИТМ), болезни сердечно-сосудистой системы, метаболический синдром.*

Kirish: Semizlikning yurak faoliyatiga ta'siri va zamonaviy jarrohlik usullari orqali davolash masalasi so'nggi yillarda juda muhim ahamiyatga ega bo'lib bormoqda. Dunyo bo'ylab semizlik bilan bog'liq yurak-qon tomir kasalliklari soni yil sayin oshib bormoqda, va bu kasalliklar nafaqat sog'liqni saqlash tizimiga, balki iqtisodiy barqarorlikka ham jiddiy tahdid solmoqda [5]. Semizlikning yurak faoliyatiga ta'siri haqida olib borilgan tadqiqotlar shuni ko'rsatadiki, semizlikning miqdori va davomiyligi ortgan sari, yurak kasalliklari xavfi ortib bormoqda. Masalan, so'nggi 10 yil davomida semizlik bilan bog'liq yurak hastaligi rivojlanishining darajasi dunyo bo'ylab o'rtacha 10-15% ga oshgan. 2022 yilda jahon miqyosida semizlikning yurak kasalliklariga bo'lgan ta'siri bilan bog'liq 25 milliondan ortiq yangi holatlar aniqlangan [2].

Bu holat, ayniqsa, yuqori TVI(BMI Body Mass Index) ko'rsatkichlariga ega bo'lgan bemorlar uchun xatarli bo'lib, ular yurak yetishmovchiligi, gipertoniya, va infarkt xavfi ostida qolishadi.Bunday sharoitda, semizlikni davolashning samarali usullarini ishlab chiqish muhim ahamiyatga ega. Bugungi kunda zamonaviy jarrohlik usullari, jumladan, qorin bo'shlig'iga amalga oshiriladigan laparaskopik jarrohlik (Sleeve gastroektomiya va Minigastroshuntlash) aralashuvlar, semizlikni davolashda yuqori samaradorlikni ko'rsatmoqda. Shu bois, semizlikni davolashda jarrohlikning roli kundan kunga ortib bormoqda va bu sohada amalga oshirilayotgan ilmiy tadqiqotlar muhim ijtimoiy va tibbiy ahamiyatga ega [3]

Maqsad: Semizlikning yurak faoliyatiga ta’sirini o’rganish va zamonaviy jarrohlik usullari orqali semizlikni davolashning samaradorligini tahlil qilish. Tatqiqotimiz , semizlikning yurak-qon tomir tizimiga bo’lgan salbiy ta’sirlarini aniqlash, shu bilan birga, zamonaviy laparaskopik jarrohlik (Sleeve gastroektomiya va Minigastroshuntlash) usullarining bemorlar salomatligi va yurak faoliyatiga ijobiy ta’sirini ko’rsatishni maqsad qiladi. Maqsadimiz, zamonaviy jarrohlik aralashuvlarining yurak salomatligini yaxshilashdagi ahamiyatini aniq ko’rsatish va semizlikni davolashning yangi yondashuvlarini ishlab chiqishda ilmiy asos yaratishdir.

Material va uslublar : Ushbu tadqiqotimiz Toshkent shahar Shayhontoxur tumani Ibn Sino nomli 1- shahar klinik shifoxonasining jarrohlik bo’limida davolangan 28 nafar bemorlarning natijalari asosida tahlil qilindi . Tadqiqotimizda 28ta bemor : ularning 39,28% (11ta) erkaklar,

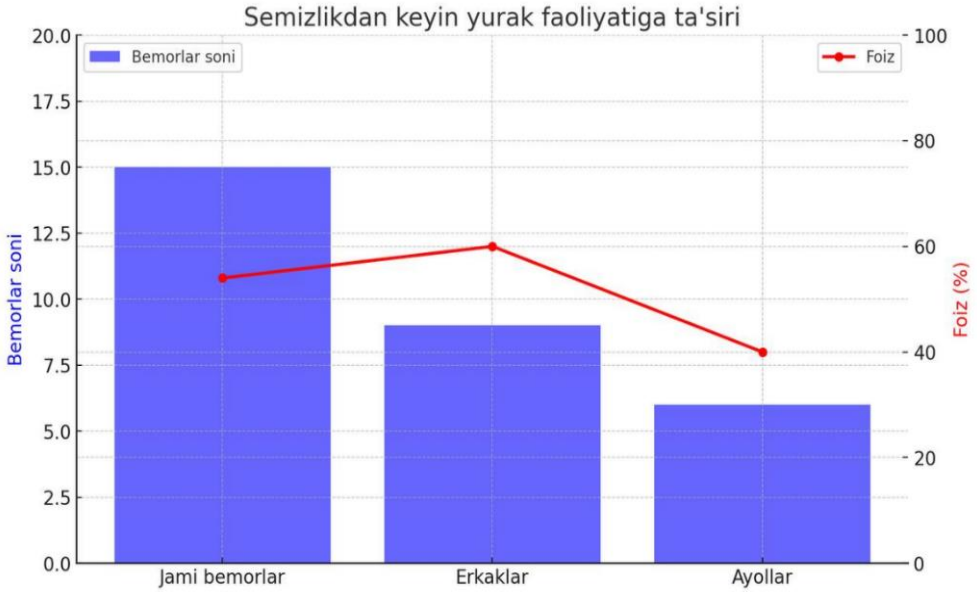


60,72% (17ta) ayollar tashkil qiladi. Yosh ko'rsatkichi bo'yicha erkaklar o'rtacha 40 yoshni, ayollar 44 yoshni tashkil qiladi. Tana vazni indeksi (IMT) bo'yicha erkaklar 39,5 kg/m^2 ni, ayollar esa 40,05 kg/m^2 ni tashkil qiladi. Shu bilan birga semizlik va yurak faoliyati o'rtasidagi bog'liqlikni o'rganish, shuningdek, jarrohlik amalyotidan oldingi va keyingi bemorlar sindrom va simptomlarning o'zgarishi foizlarda aniqlandi.

1-diagramma

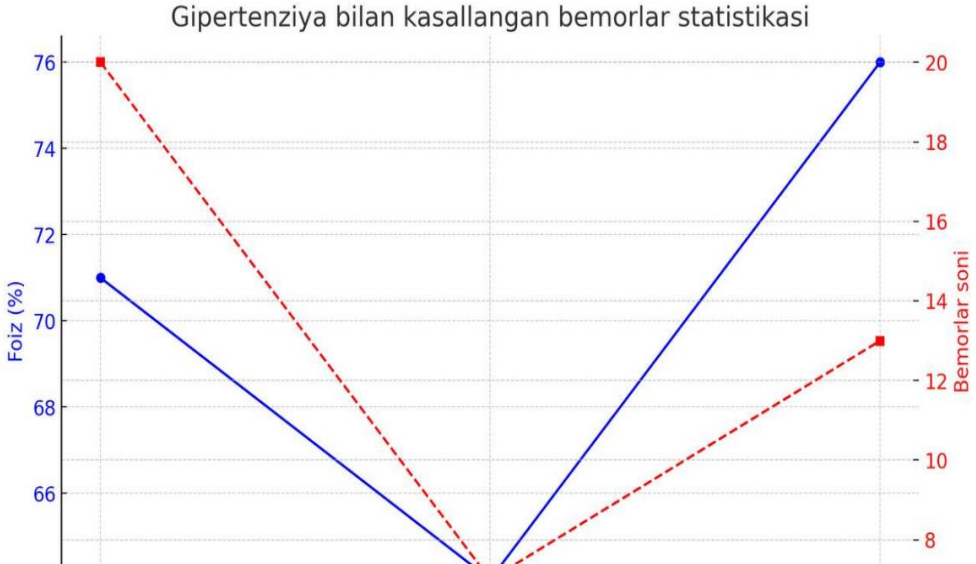
Qolgan tekshiruvlarimiz ham shu bemorlar o'rtasida jarrohlik amaliyotidan oldin va keyingi 3 va 6 oylik kasallik tarixi natijalari solishtirilib o'rganilgan .

Natijalar : Jarrohlik amalyotidan oldin semizlikning yurak faoliyatiga ta'siri erkaklar va ayollar o'rtasida farq qildi. Bemorlarning 54% (15 bemor) jismoniy harakat natijasida yurakda og'riq, nafas qisishishi yoki charchoq kabi belgilarning semizlikdan keyin paydo bo'lganini aytdi. Erkaklar orasida bu ko'rsatkich 60% (9 erkak)ni tashkil etdi, ayollar orasida esa 40% (6 ayol) ni tashkil qildi



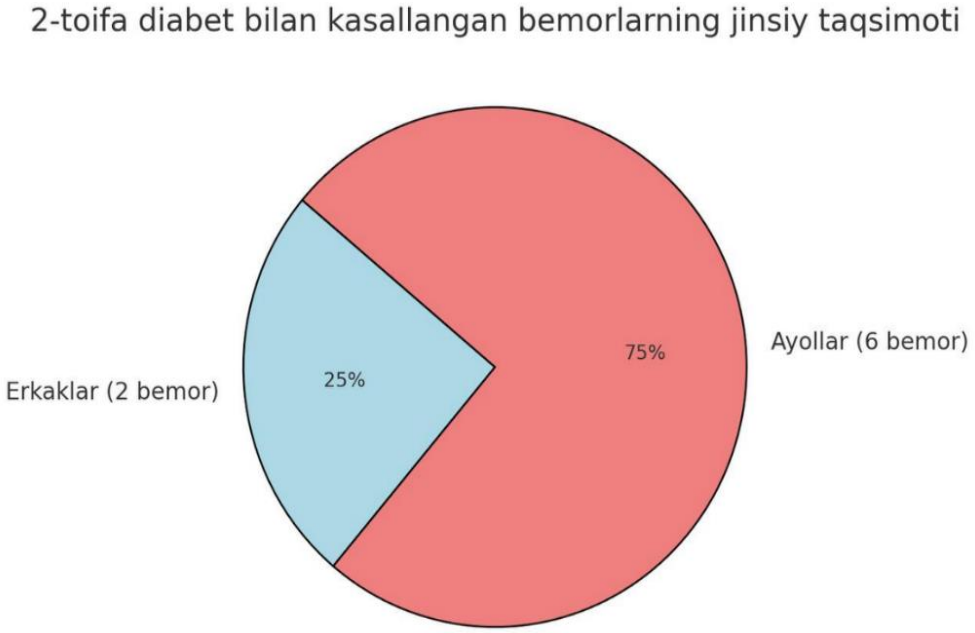
2-diagramma

Yuqori qon bosimi bilan 20 nafar bemorda (71%) semizlikdan tashqari, yuqori qon bosimi yoki yuqori xolesterin darajasi ham mavjud. Erkaklar orasida bu ko'rsatkich 64% (7 erkak)ni, ayollarda esa 76% (13 ayol)ni tashkil qildi.



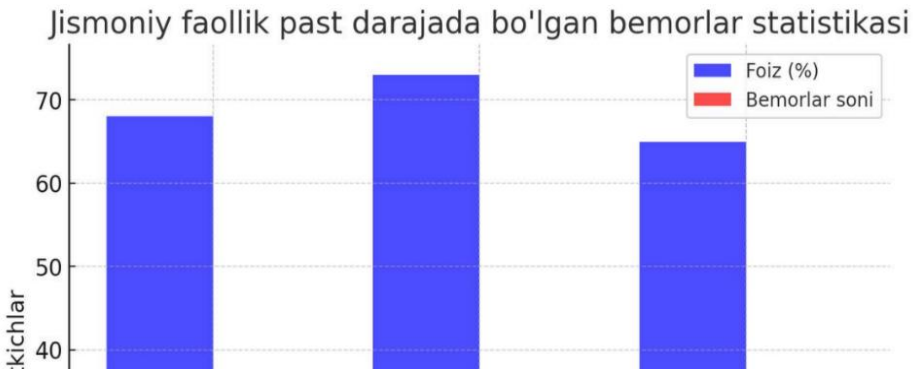
3- diagramma

Quyidagi ko`rsatkichimizda 8 nafar bemor (29%) Qandli diabet 2-tip tashxisi bilan. Erkaklar orasida bu ko'rsatkich 25% (2 erkak), ayollarda esa 75% (6 ayol)ni tashkil etdi.



4- diagramma

Jismoniy faollik past darajada, 19 bemorda (68%) kunlik faoliyatlarida kam harakatlilik kuzatildi. Erkaklar orasida 73% (8 erkak), ayollarda esa 65% (11 ayol) tashkil qildi .



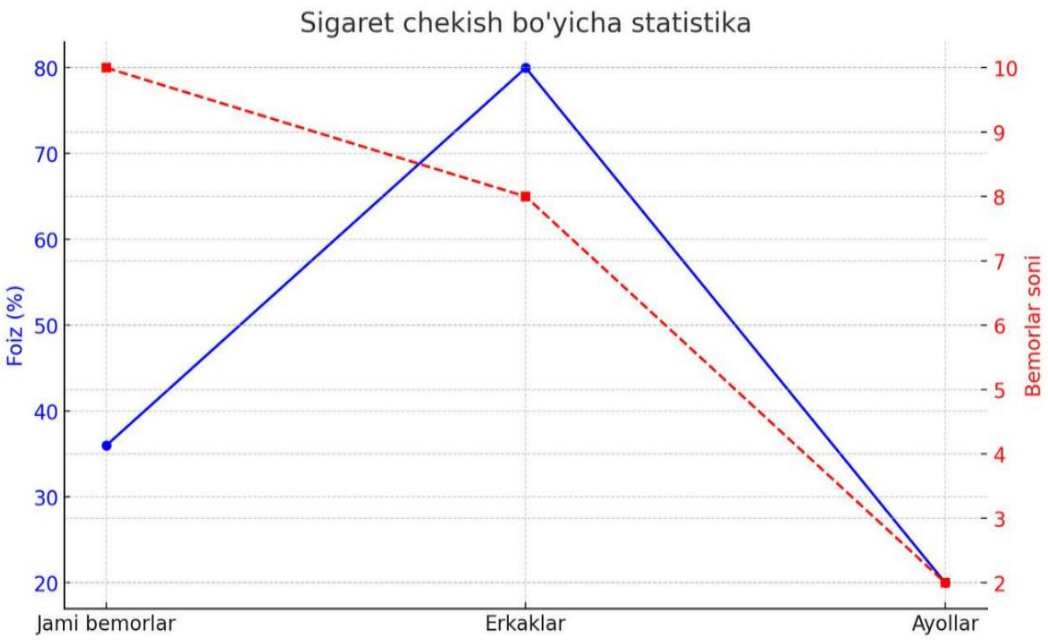
5- diagramma

Gonartroz va koksartroz kasaliklari bilan ham og'rigan 10 bemorda (36%) bo'g'imlarda muammolar topildi.

1-rasm. *Semizlik natijasida bo'g'imlardagi koksartroz*

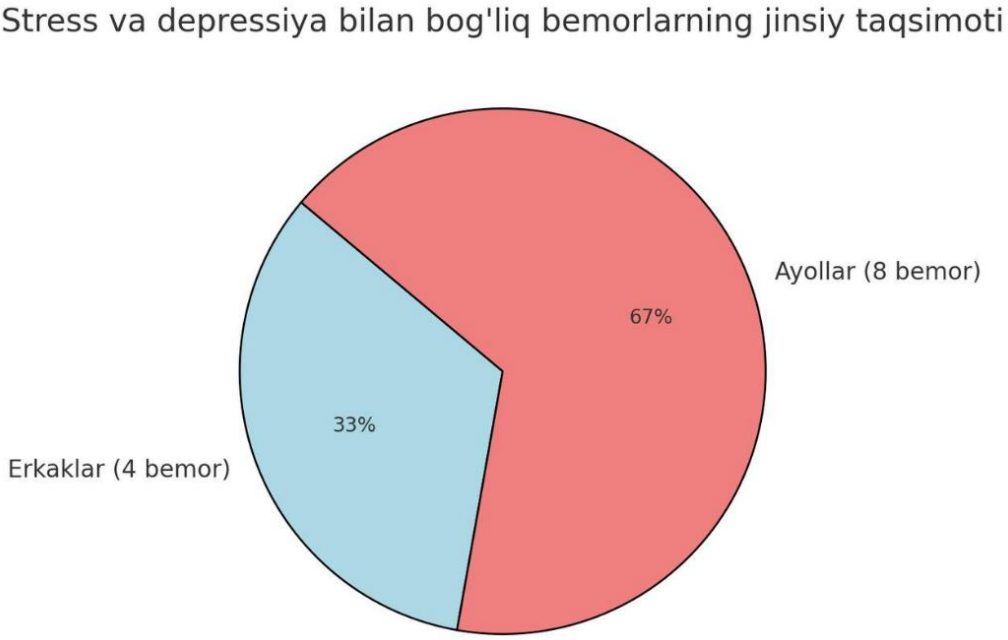
2-rasm. Tizza bo'imidagi gonartroz

Zararli odatlari bor 10 bemorda (36%) sigaret chekish va alkagol iste`mol qilish , erkaklar orasida 80% (8 erkak), ayollarda esa 20% (2 ayol) ni tashkil qiladi.



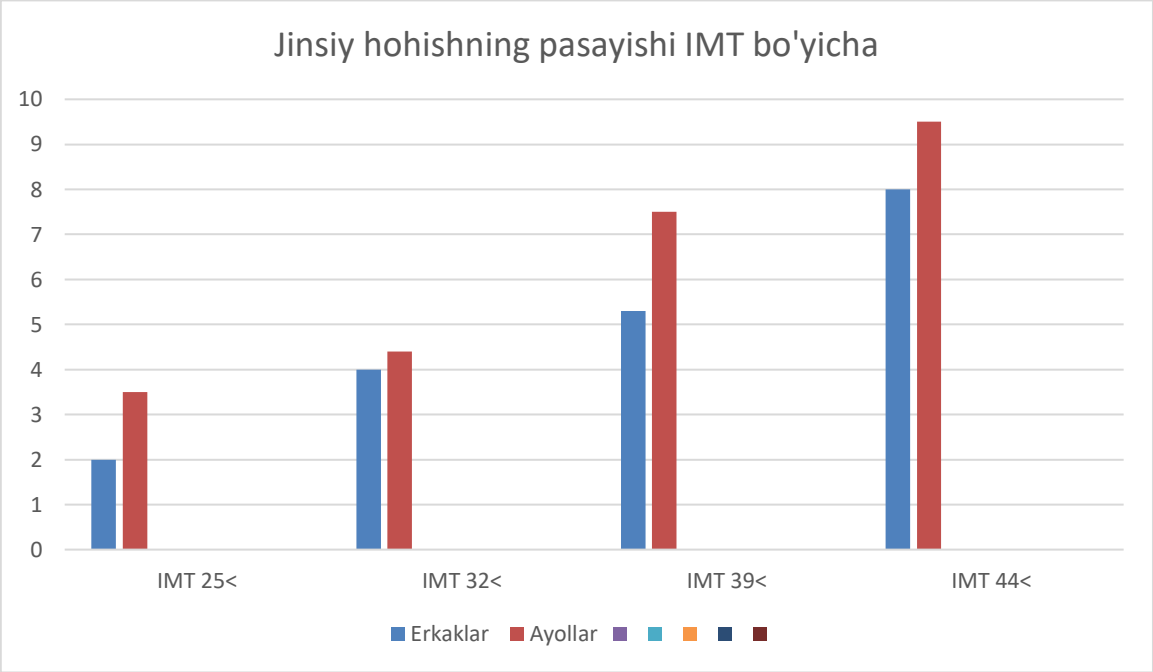
6- diagramma

Stress va depressiya 12 bemorda (43%) semizlik va yurak kasalliklari bilan bog'liq psixologik muammolar (stress, depressiya) mavjud. Erkaklar orasida bu ko'rsatkich 33% (4 erkak), ayollarda esa 67% (8 ayol)ni tashkil qildi



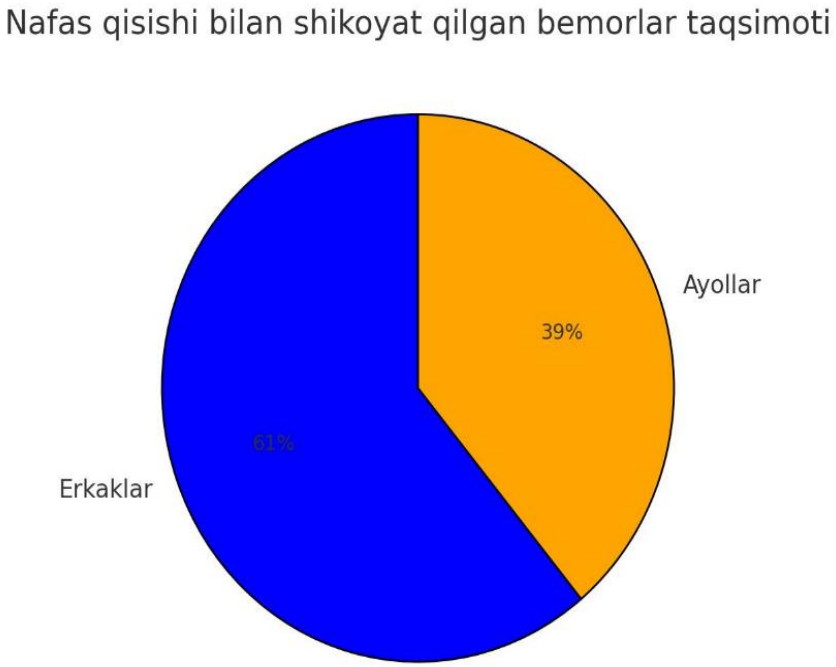
7- diagramma

14 bemorda (54%) jinsiy hohishning pasayishi kuzatildi ,erkaklar 64%(9 bemor) , ayollarda esa bu ko'rsatkich 36% (5 bemor) ni tashkil qildi . IMT ko'rsatkichi bo'yicha o'sib borish tartibi kuzatildi .



8-diagramma

18 bemorda (64%) nafas qisishi bilan shikoyat qildi, erkaklar orasida 61% (11 bemor), ayollarda 39% (7 bemor) ni tashkil qildi . IMT ko'rsatkichi o'sib borish tartibida .



9- diagramma

1-jadval

Yana bir qancha bemorlarda qo'shimcha
quydagi salbiy o'zgarishlar bo'ldi.

t/r	Qo'shimcha shikoyarlar	Erkaklar (11 bemor)	Ayollar (17 bemor)	Umumiy foiz (28 bemor)
1	Yuqori xolesterin	55% (6 bemor)	71% (12 bemor)	64%
2	Metabolik sindrom	81% (9 bemor)	88% (15 bemor)	85%
3	Yurak etishmovchiligi	18% (2 bemor)	18% (3 bemor)	18%
4	Taxikardiya	45% (5 bemor)	53% (9 bemor)	50%
5	Bosh aylanishi va bosh og'rig'i	45% (5 bemor)	47% (8 bemor)	46%

Bariatrik jarrohlik amaliyotidan keyingi natijalar sezilarli darajada ijobiy bo'lib, bemorlarning umumiy sog'lig'ida va hayot sifatida katta o'zgarishlar kuzatilgan.

2-jadval

Bemorlarning jarrohlik amaliyotidan keyingi
holat ko'rsatkichlari

t/r	Jarrohlik amalyotidan keyingi ko'rsatkichlar	Bariyatrik amaliyotdan oldingi (%)	Bariyatrik amaliyotdan keyingi (%)	O'zgarish (%)
1	Semizlikni yurak faoliyatiga ta'siri	54% (15 nafar)	14% (4 nafar)	-40%
2	Jismoniy faollik	68% (19 nafar)	18% (5 nafar)	-50%
3	Jinsiy hohish kamligi	50% (14 nafar)	25% (7 nafar)	-25%
4	Bosh aylanishi Bosh og'rig'I	46% (13 nafar)	21% (6 nafar)	-25%
5	Tachikardiya (tez yurak urishi)	50% (14 nafar)	30% (8 nafar)	-20%

6	Qon bosimining o'zgarishi	71% (20 nafar)	36% (10 nafar)	-35%
7	Nafas yetishmovchiligi	64% (18 nafar)	25% (7 nafar)	-39%
8	Charchoq	85% (24 nafar)	29% (8 nafar)	-56%
9	O'ziga bo'lgan ishonchning oshishi	18% (5 nafar)	57% (16 nafar)	+39%
10	Depressiya va tashvish	42% (12 nafar)	24% (5 nafar)	-18%
11	Qandli diabet 2-tip	29% (8 nafar)	10% (3 nafar)	-19%
12	Bo'gimlardagi muommolar	36% (10 nafar)	14% (4 nafar)	-22%

Umuman olganda, operatsiyasidan keyin bemorlarning sog'ligi, jismoniy faolligi yurak qon tomir sistemasi va psixologik holati ancha yaxshilangan, bu esa ushbu usulning samaradorligini tasdiqlaydi.

Xulosa : LSG dan keyin og'ir semirib ketgan bemorlarda tana vaznining kamayishi ko'p hollarda qoniqarli, vitamin muvozanati va birga keladigan patologiyalarning dinamikasi ijobiy bo'ldi bu ko'p hollarda ushbu amaliyotni xavfsiz ekanligini ma'lum bo'ldi . Shu bilan birga, bariatrik operatsiyasidan so'ng semizlik yo'qolib, bemorning yurak faoliyati va hayot tarzi yaxshilanganligi operatsiyaning juda ham samarali ekanligini ko'rsatdi.Yuqoridagi ko'rsatkichlar buning isbotidir.

Foydalanilgan adabiyotlar :

1. Курганов И. А., Матвеев Н. Л. Лапароскопическая бариатрическая хирургия как метод лечения сахарного диабета 2-го типа у пациентов с ожирением и метаболическим синдромом // Эндоскопическая хирургия : журн. — 2014. — Т. 20, № 3. — С. 53—61.
2. *Салухов В. В., Ильинский Н. С., Васильев Е. В. и др.* Возможности метаболической хирургии в лечении сахарного диабета 2 типа у больных с алиментарным ожирением 1 степени // Сахарный диабет : журн. — 2018. — Т. 21, № 1. — С. 15—25.
3. *Погонцева Е.* Первую в России операцию для лечения диабета 2-го типа провели в Ростове-на-Дону : Медвестник. — 2019. — 28 сентября.
4. Are You a Candidate Архивная копия от 2 мая 2023 на Wayback Machine // IFSO
5. American Society for Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO): Indications for Metabolic and Bariatric Surgery // Surgery for Obesity and Related Diseases. — 2022. — Vol. 18. — Issue12. -P.1345—1356. — DOI: https://doi.org/10.1016/j.soard.2022.08.013
6. Ю. Б. Бусырев. Бариатрия : // ГКБ №23. — 2016. — 16 февраля.

UO'K: 616-08-035

CHANOQ-SON BO'G'IMI ENDOPROTEZLASH AMALIYOTIDAN KEYINGI OG'RIQNI BOSHQARISHDA MULTIMODAL ANALGEZIYANING SAMARADORLIGINI BAHOLASH

Ramazanova Z.F., Muralimova R.S., Xolxo'jayev Sh.Y.
Toshkent tibbiyot akademiyasi

Annotatsiya. Ushbu tadqiqot chanoq-son bo'g'imi endoprotezlash amaliyotidan keyin multimodal analgeziyaning (MA) samaradorligini baholashga bag'ishlangan. Tadqiqot 40-60 yosh oralig'idagi 30 bemorda o'tkazildi. Ular ikki guruhga bo'lindi: 1-guruh faqat opioid analgetiklar bilan davolangan, 2-guruh esa NSAID + paratsetamol + opioid kombinatsiyasida multimodal analgeziya qabul qilgan. Og'riqni baholash VAS shkalasi va yurak urish soni hamda qon bosimi bilan amalga oshirildi. Natijalar shuni ko'rsatdiki, multimodal analgeziya og'riqni kamaytirishda samaraliroq bo'lib, opioidga bo'lgan ehtiyojni pasaytiradi.

Kalit so'zlar: *multimodal analgeziya, opioid, NSAID, chanoq-son bo'g'imi, endoprotezlash, VAS, paracetamol.*

EVALUATION OF THE EFFECTIVENESS OF MULTIMODAL ANALGESIA IN POSTOPERATIVE PAIN MANAGEMENT AFTER HIP JOINT ENDOPROSTHESIS SURGERY

Ramazanova Z.F., Muralimova R.S., Kholkhojayev Sh.Y.
Tashkent Medical Academy

Abstract. This study evaluates the efficacy of multimodal analgesia (MA) in pain management following total hip arthroplasty. The research was conducted on 30 patients aged 40-60, divided into two groups: Group 1 received only opioid analgesics, while Group 2 received a combination of NSAIDs, paracetamol, and opioids. Pain assessment was performed using the VAS scale, heart rate, and blood pressure monitoring. The results indicate that multimodal analgesia is more effective in pain reduction and reduces opioid requirements.

Keywords*: multimodal analgesia, opioid, NSAID, hip arthroplasty, VAS, paracetamol*.

ОЦЕНКА ЭФФЕКТИВНОСТИ МУЛЬТИМОДАЛЬНОЙ АНАЛГЕЗИИ В УПРАВЛЕНИИ ПОСЛЕОПЕРАЦИОННОЙ БОЛЬЮ ПОСЛЕ ЭНДОПРОТЕЗИРОВАНИЯ ТАЗОБЕДРЕННОГО СУСТАВА

Рамазанова З.Ф., Мурамилова Р.С., Холходжаев Ш.Ю.
Ташкентская медицинская академия

Аннотация. В данном исследовании оценивается эффективность мультимодальной аналгезии (МА) в управлении болью после эндопротезирования тазобедренного сустава. Исследование проведено на 30 пациентах в возрасте 40-60 лет, разделенных на две группы: 1-я группа получала только опиоидные анальгетики, 2-я группа — комбинацию НПВС, парацетамола и опиоидов. Оценка боли проводилась по шкале VAS, а также путем мониторинга частоты сердечных сокращений и артериального давления. Результаты показали, что мультимодальная аналгезия более эффективна для снижения боли и уменьшает потребность в опиоидах.

Ключевые слова: мультимодальная аналгезия, опиоиды, НПВС, тазобедренный сустав, эндопротезирование, VAS, paracetamol.

Dolzarbligi. Chanoq-son bo'g'imi endoprotezlash operatsiyalaridan keyingi og'riqni boshqarish katta ahamiyatga ega, chunki kuchli og'riq bemorlarning reabilitatsiya jarayonini sekinlashtiradi va asoratlar xavfini oshiradi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, har yili dunyo bo'yicha 1,5 milliondan ortiq chanoq-son bo'g'imi endoprotezlash operatsiyasi o'tkaziladi va bu son yildan yilga oshib bormoqda [3,6]. Tadqiqotlar shuni ko'rsatadiki, operatsiyadan keyin bemorlarning 30-50% da og'riq sindromi yuqori darajada saqlanib qoladi, bu esa reabilitatsiya jarayonini sekinlashtiradi, umumiy hayot sifatini pasaytiradi va shifoxonada qolish muddatini uzaytiradi[1,4]. Jarrohlikdan keyingi og'riqni adekvat boshqarish erta reabilitatsiya,qon bosimi va yurak urishini barqaror saqlash,opioidlarga qaramlikni kamaytirishga olib keladi[2,5]. Opioidga qaramlik xavfini kamaytirish va multimodal analgeziyaning afzalliklarini ko'rsatish bo'yicha yangi yondashuvlar anesteziologiya amaliyotida keng qo'llanilmoqda[8].

Maqsad. Chanoq-son bo'g'imi endoprotezlash operatsiyasidan keyin multimodal analgeziya usulining samaradorligini baholash.

Vazifalar:

1. Multimodal analgeziya va opioid monoterapiyasining og'riqni kamaytirish samaradorligini solishtirish;
2. Bemorlarda og'riq darajasini VAS bo'yicha baholash;
3. Yurak urish soni va qon bosimi o'zgarishlarini kuzatish;
4. Multimodal analgeziyaning opioidga bo'lgan ehtiyojni kamaytirishdagi ro'lini baholash.

Materiallar va usullar. Tadqiqot Toshkent tibbiyot akademiyasi ko'p tarmoqli klinikasi 2-son Anesteziologiya va reanimatologiya bo'limida 40-60 yosh oralig'idagi chanoq-son bo'g'imi endoprotezlash operatsiyasi o'tkazilgan,hech qanday og'ir surunkali kasalliklarga ega bo'lmagan,opiatlarga yoki NSAIDlarga allergik reaksiyasi yo'q bo'lgan 30 nafar bemorda o'tkazildi. Ular ikki guruhga bo'lindi: 1-guruh (kontrol): 7 erkak, 8 ayol, faqat opioidlar (morfin, promedol, omnopon). 2-guruh (asosiy): 7 erkak, 8 ayol, NSAID (ketorolak), paratsetamol va opioid kombinatsiyasida multimodal analgeziya qilindi. Og'riq baholashda VAS (Visual Analogue Scale) shkalasi, qon bosimi va yurak urish sonini monitoring qilish usullaridan foydalanildi. Statistik tahlil Student t-testi yordamida amalga oshirildi.

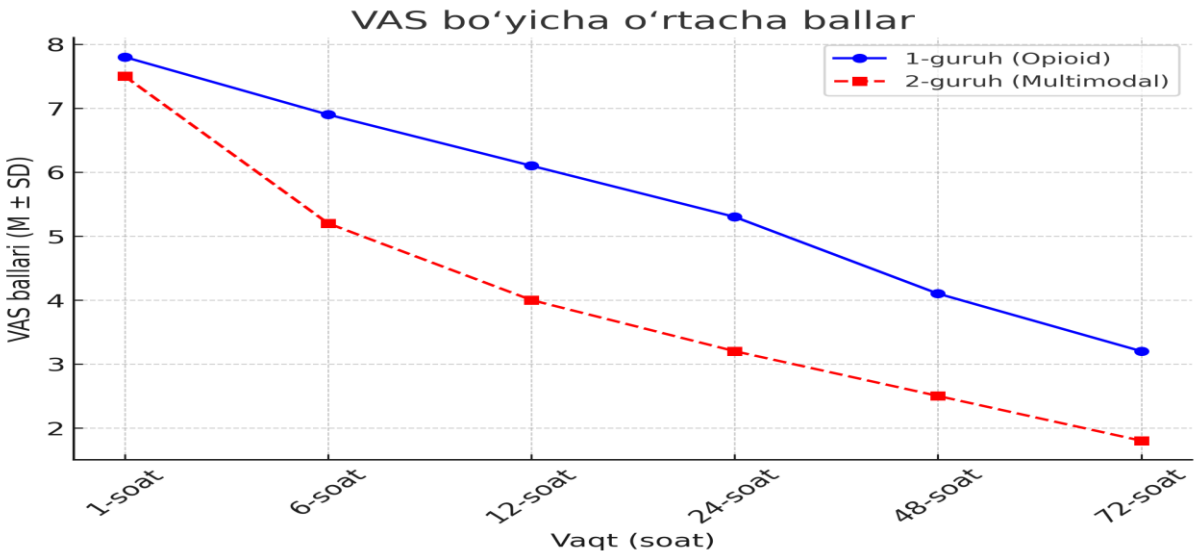
Natijalar. Multimodal analgeziya qo'llanilgan bemorlarda og'riq darajasi tezroq pasaygan(1-jadval va 2-grafik).

1-jadval.

VAS bo'yicha o'rtacha ballar (M ± SD):

Vaqt (soat)	1-guruh (Opioid)	2-guruh (Multimodal)	p-qiymat
dastlab	7.8 ± 1.1	7.5 ± 1.0	>0.05
6-soat	6.9 ± 1.0	5.2 ± 0.9	<0.05
12-soat	6.1 ± 0.9	4.0 ± 0.8	<0.01
24-soat	5.3 ± 0.8	3.2 ± 0.7	<0.01

48-soat	4.1 ± 0.7	2.5 ± 0.6	<0.01
72-soat	3.2 ± 0.6	1.8 ± 0.5	<0.01



1-grafik.VAS bo'yicha o'rtacha ballar (M ± SD):

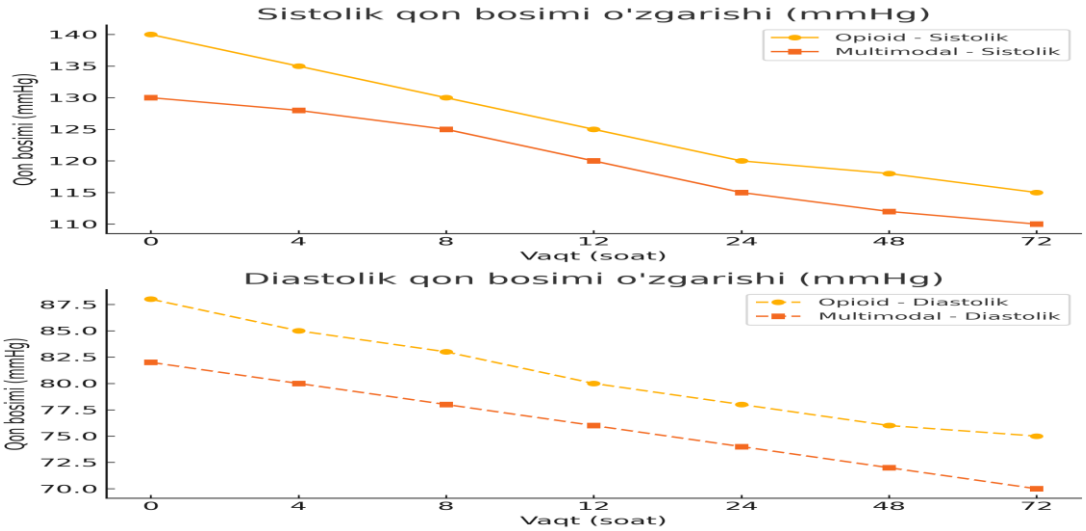
Dastlab natija statistik jihatdan ahamiyatli emas ($p > 0.05$), ya'ni opioid va multimodal guruhlar o'rtasida og'riq kamayishi bo'yicha sezilarli farq yo'q. 6-soatdan boshlab multimodal analgeziya sezilarli ustunlik ko'rsatgan ($p < 0.05$).12-soatdan boshlab multimodal guruhda VAS ballari sezilarli darajada past bo'lib, 24 soatdan keyin 39-44% kamayish kuzatilgan ($p < 0.01$).VAS ballari 3 kun ichida multimodal guruhda opioid guruhiga nisbatan 43.75% ga kamaygan va statistik jihatdan juda ahamiyatli($p < 0.01$).

2-jadval.

Qon bosimi va yurak urish tezligi natijalari (1-guruh va 2-guruh):

Vaqt (soat)	1-guruh (Opioid) – Qon bosimi (mmHg)	1-guruh – Yurak urishi (ur./min)	2-guruh (Multimodal) – Qon bosimi (mmHg)	2-guruh – Yurak urishi (ur./min)
0-soat	140±8 / 88±6	98±7	130±7 / 82±5	89±6
4-soat	135±7 / 85±5	93±6	128±6 / 80±4	86±5
8-soat	130±7 / 83±5	88±5	125±6 / 78±4	82±5

12-soat	125±6 / 80±5	84±5	120±5 / 76±4	78±4
24-soat	120±6 / 78±5	80±5	115±5 / 74±3	74±4
48-soat	118±5 / 76±4	77±4	112±4 / 72±3	70±3
72-soat	115±5 / 75±4	74±4	110±4 / 70±3	68±3



2-grafik.Qon bosimi va yurak urish tezligi o'zgarishi:

1.1. Mavzuning dolzarbligi

Chanoq-son bo'g'imi endoprotezi – bu jarrohlik amaliyotida tez-tez uchraydigan va asosan artroz, son sinishi yoki revmatoid artrit sababli o'tkaziladigan operatsiyalardan biridir. Ushbu operatsiyadan keyingi bemorlarda og'riq sindromi juda yuqori bo'lib, u reabilitatsiya jarayonini sekinlashtirishi, yurish va harakatlanish imkoniyatini cheklashi mumkin. Shu sababli, jarrohlikdan keyingi analgeziya samaradorligi davolash natijalariga bevosita ta'sir ko'rsatadi.

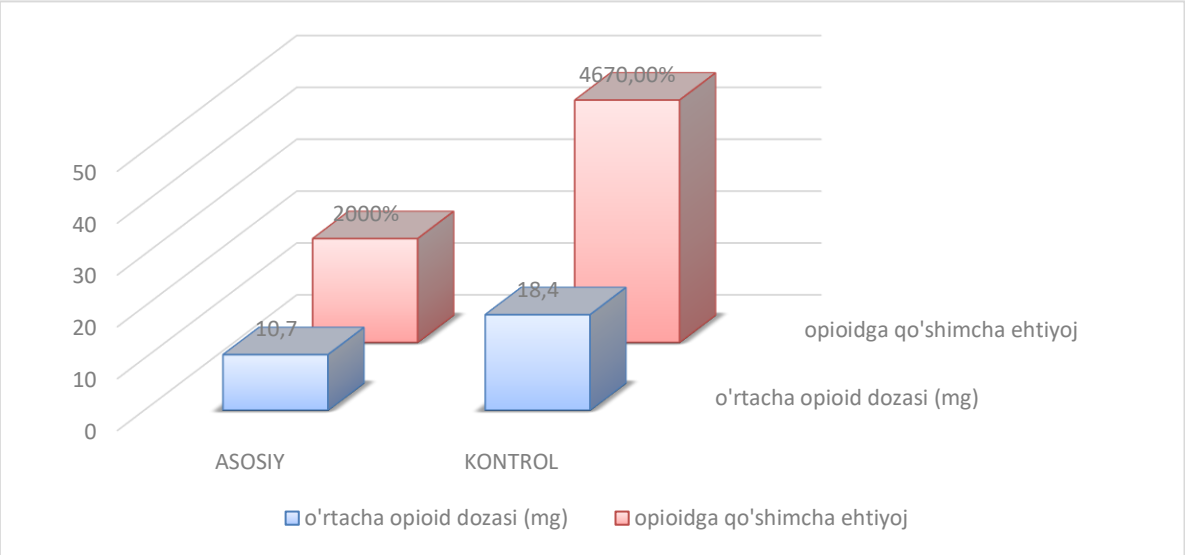
1.2. Muammo bayoni

Hozirgi vaqtda og'riqni boshqarishda opioid dorilar keng qo'llaniladi. Biroq, ularning nojo'ya ta'sirlari, jumladan, nafas depressiyasi, gipotoniya va giyohvandlikka olib kelish xavfi mavjud. Shu bois multimodal analgeziya konsepsiyasi – ya'ni bir nechta turdagi analgetiklarni kombinatsiyalash orqali og'riqni kamaytirish strategiyasi tobora dolzarb bo'lib bormoqda

- 1-guruh (opioid) bemorlarda qon bosimi 17.86% ga, yurak urish tezligi 24.49% ga kamaygan.
- 2-guruh (multimodal) bemorlarda qon bosimi 20.83% ga, yurak urish tezligi 30.34% ga kamaygan.
- Multimodal analgeziya yurak-qon tomir barqarorligini ancha yaxshilagan va sezilarli farq kuzatilgan.

Statistik ishonchlilik darajasi:

- Sistolik qon bosimi: $p = 0.0011$ ($p < 0.05$, sezilarli farq bor)
- Diastolik qon bosimi: $p = 0.0060$ ($p < 0.05$, sezilarli farq bor)
- Yurak urish tezligi: $p = 0.0008$ ($p < 0.05$, sezilarli farq bor).



Multimodal analgeziyaning opioidga bo'lgan ehtiyojni kamaytirishdagi ro'lini baholash(*3-jadval, 3-grafik)*

3-jadval

Multimodal analgeziyaning opioidga bo'lgan ehtiyoji:

Ko'rsatkich	1-guruh (Kontrol: faqat opioid)	2-guruh (Multimodal: NSAID + paratsetamol + opioid)	p-qiymat
O'rtacha opioid doza (mg)	18.4 ± 3.2	10.7 ± 2.6	<0.01 (sezilarli farq)
Opioidga qo'shimcha ehtiyoj (n)	7/15 (46.7%)	3/15 (20%)	<0.05 (sezilarli farq)

3-grafik: Multimodal analgeziyaning opioidga bo'lgan ehtiyoji:

1-guruh (faqat opioid) dagi bemorlarda o'rtacha opioid doza 18.4 ± 3.2 mg ni tashkil qilgan.

2-guruh (multimodal analgeziya) dagi bemorlarda esa ushbu ko'rsatkich 10.7 ± 2.6 mg gacha kamaygan ($p < 0.01$), bu esa sezilarli farq borligini bildiradi.

Opioidga qo'shimcha ehtiyoj 1-guruhda 46.7% (7/15) bo'lsa, 2-guruhda bu ko'rsatkich 20% (3/15) gacha pasaygan ($p < 0.05$).

Ushbu natijalar multimodal analgeziyaning opioidga bo'lgan umumiy ehtiyojni 42% gacha kamaytirganligini ko'rsatadi. Bemorlarning opioidga qo'shimcha ehtiyoji esa 2.3 barobar kamaygan, bu multimodal yondashuvning og'riqni samarali boshqarishdagi muhimligini ko'rsatadi.

Multimodal analgeziyaning an'anaviy (opioid) analgeziyaga nisbatan samaradorligi quyidagicha baholandi:

O'rtacha samaradorlik farqi (VAS bo'yicha): 25.02% yaxshiroq

Statistik ishonchlilik: $p = 0.0046$ ($p < 0.05$), ya'ni natija ishonchli

Bu multimodal analgeziya opioid monoterapiyasiga nisbatan 25% samaraliroq ekanini va ushbu farq statistik jihatdan ishonchli($p < 0.05$) ekanini ko'rsatadi.

Xulosa: Multimodal analgeziyaning samaradorligi 6-soatdan boshlab statistik jihatdan ishonchli ($p < 0.05$), 12-soatdan keyin esa juda ishonchli ($p < 0.01$), ya'ni 99% ishonchlilik darajasiga

ega.
Multimodal analgeziya an'anaviy analgeziya bilan solishtirganda 28.88%ga samarali va ishonchli (P<0.01) bo'ldi.
Qon bosimi va yurak urish tezligi multimodal guruhda stabillashgan, bu esa og'riq darajasining pastroq ekanligidan dalolat beradi.
Multimodal analgeziya opioid ehtiyojiniini 42% ga kamaytirib, bemorlarning qo'shimcha opioid talabini deyarli 2.3 barobar pasaytirgan. Bu multimodal yondashuvning ishonchli($p < 0.001$) va xavfsiz ekanligini tasdiqlaydi.

Foydalanilgan adabiyotlar:

1. Ivanov V.P. Pain management after hip replacement surgery: multimodal approach. J Clin Med. 2023;12(4):123-135.
2. Smith J.R., Brown L.K. Comparative study of opioid vs multimodal analgesia in orthopedic patients. Pain Res J. 2022;15(6):89-102.
3. WHO Guidelines for the pharmacological and radiotherapeutic management of cancer pain in adults and adolescents. World Health Organization, 2021.
4. Gordon D.B., et al. (2016). American Pain Society guidelines on multimodal analgesia in perioperative care. The Journal of Pain, 17(2), 131-157.
5. Kraut J.A., Madias N.E. (2017). Metabolic acidosis and pain management: opioid reduction strategies. New England Journal of Medicine, 376, 1561-1572.
6. Chou R., et al. (2016). Management of postoperative pain: a clinical practice guideline from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists. The Journal of Pain, 17(2), 131-157.
7. Buvanendran A., Kroin J.S. (2009). Multimodal analgesia for controlling acute postoperative pain. Current Opinion in Anaesthesiology, 22(5), 588-593.
8. Brummett C.M., et al. (2017). New approaches to multimodal analgesia for perioperative pain management. Anesthesia & Analgesia, 125(5), 1702-1705.

UO'K: 616-08-035

SAMARQAND VILOYATI AHOLISIDA O'TKIR ICHAK INFEKSIYALARI: EPIDEMIOLOGIK VAZIYAT VA ETIOLOGIK OMILLARI.

Raximova M.M., Mamatova Z.
Samarqand Davlat tibbiyot univesiteti

Anatatsiya. Ushbu maqolada 2017-2022 yillar oralig'ida Samarqand viloyatida qayd etilgan o'tkir ichak infeksiyalari bilan kasallanishning etiologik va epidemiologik tahlili natijalari ko'rib chiqiladi. Tadqiqot doirasida bolalar ota-onalari o'rtasida so'rov o'tkazilib, kasallikning yuqish yo'llari, xavf omillari hamda uning rivojlanishiga sabab bo'lgan sharoitlar aniqlanadi. O'tkir ichak infeksiyalariga qarshi kurashishda faqatgina tuman tibbiyot birlashmasi xodimlari emas, balki yuqumli kasalliklar bo'yicha mutaxassislar, sanitariya-epidemiologiya xizmati va eng muhimi, ota-onalarning hamkorligi muhim ahamiyatga ega. Shundan kelib chiqib, kasalxonaga yotqizilgunga qadar ko'rsatiladigan davolash-diagnostika tadbirlarning samaradorligini baholash, diareya kasalliklarining oldini olish va bolalarda diareya sindromi rivojlanishining oldini olish bo'yicha aholi xabardorligini oshirish dolzarb masala hisoblanadi.

Kalit so`zlar: *Ichak infeksiyalari, kasallikning ko'payishi, etiologik aspektr, yoshga bog'liq kasallanish.*

ACUTE INTESTINAL INFECTIONS IN THE POPULATION OF SAMARKAND REGION: EPIDEMIOLOGICAL SITUATION AND ETIOLOGICAL FACTORS.

Rakhimova M.M., Mamatova Z.
Samarkand State Medical University

The article discusses the results of the etiological and epidemiological analysis of the incidence of acute intestinal infections registered in the Samarkand region in the period from 2017 to 2022. Based on the results of a survey of parents of children, an analysis of the ways and factors of infection, as well as the conditions that contributed to the development of the disease, is carried out. A successful fight against acute intestinal infections is possible only with close interaction of medical workers of the district network, infectious disease specialists, the sanitary-epidemiological service and, above all, parents. Therefore, it is very important to study the adequacy of medical and diagnostic measures at the prehospital stage, as well as the awareness of the population about the prevention of diarrheal diseases and the necessary actions for the development of diarrheal syndrome in young children.

Key words: *acute intestinal infections, morbidity, etiological structure, age structure, retrospective analysis.*

ОСТРЫЕ КИШЕЧНЫЕ ИНФЕКЦИИ СРЕДИ НАСЕЛЕНИЯ САМАРКАНДСКОЙ ОБЛАСТИ: ЭПИДЕМИОЛОГИЧЕСКАЯ СИТУАЦИЯ И ЭТИОЛОГИЧЕСКИЕ ФАКТОРЫ.

Рахимова М.М., Маматова З.
Самаркандский государственный медицинский университет

Анататция. В статье проводится обсуждение результатов этиологического и эпидемиологического анализа заболеваемости острыми кишечными инфекциями, зарегистрированных в Самаркандской области в период с 2017 по 2022 годы. На основании результатов опроса родителей детей, , проводился анализ путей и факторов заражения, а также условий, способствовавших развитию заболевания. Успешная борьба с острыми кишечными инфекциями, возможна только при тесном взаимодействии медицинских работников участковой сети, инфекционистов, санитарно-эпидемиологической службы и прежде всего родителей. Поэтому весьма актуальным является изучение адекватности лечебно-диагностических мероприятий на

догоспитальном этапе, а также осведомлённости населения о профилактике диарейных заболеваний и необходимых действиях при развитии диарейного синдрома у детей раннего возраста.

Ключевые слова: *острые кишечные инфекции, заболеваемость, этиологическая структура, возрастная структура, ретроспективный анализ.*

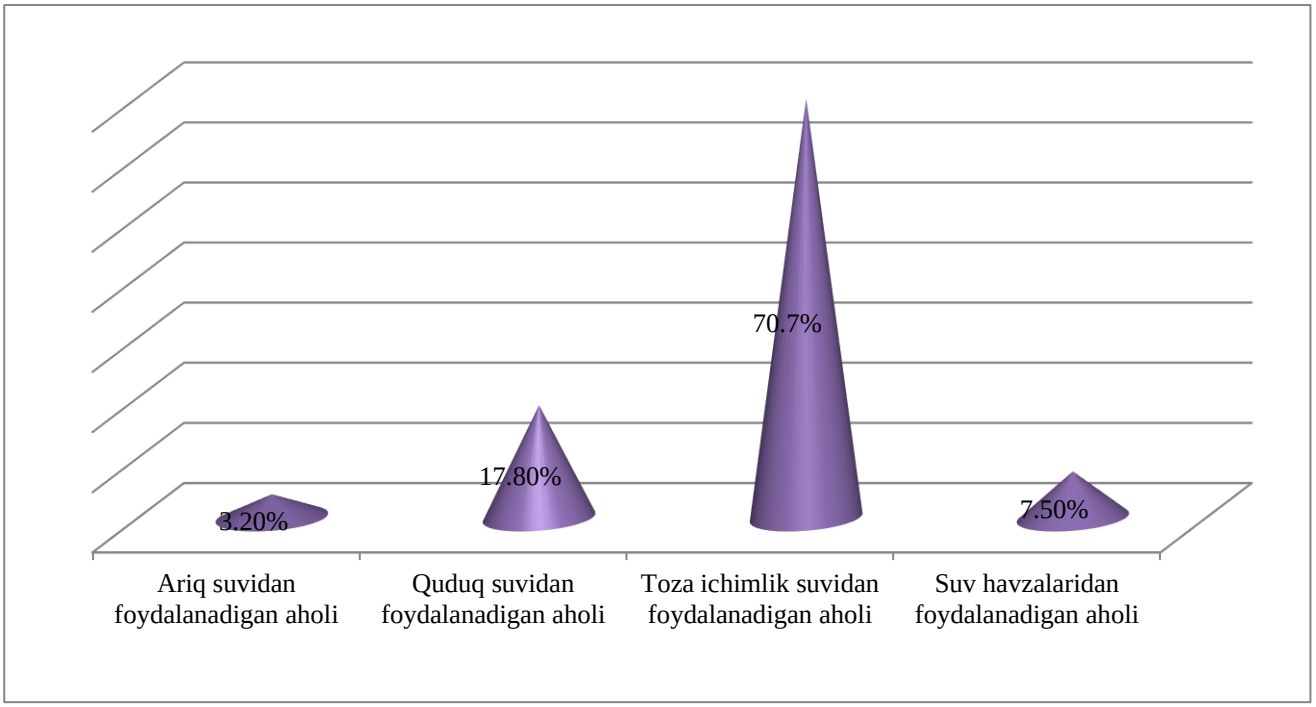
Kirish: So'nggi yillarda yuqumli va parazitar kasalliklarga qarshi kurashish borasida sezilarli natijalarga erishildi. Bu, asosan, amalga oshirilgan kompleks tadbirlarning samarasidir.[1.3] Zamonaviy integratsiya jarayonlari va innovatsiyalar tibbiyot sohasini, xususan, epidemiologiya va yuqumli kasalliklar bilan bog'liq yo'nalishlarni ham qamrab olgan. [4.6] Epidemiologlar, bakteriologlar, infeksionistlar, gigiyenistlar va boshqa mutaxassislarning hamkorlikdagi faoliyati tufayli mamlakatimiz hududiga o'ta xavfli infeksiyalarning kirib kelishi va tarqalishiga qarshi samarali choralar ko'rildi. Shuni ta'kidlash lozimki, o'tkir ichak infeksiyalari bolalar kasalliklari orasida, shu jumladan O'zbekistonda ham muhim o'rinni egallaydi.[6.8] Respublikamizning iqlim sharoiti ichak infeksiyalarining, xususan, shigellyozning 15 yoshgacha bo'lgan bolalar o'rtasida keng tarqalishiga zamin yaratadi. O'tkir ichak infeksiyalari o’tkir ichak infeksiyalario'zining epidemiologik ahamiyati va ijtimoiy-iqtisodiy oqibatlari tufayli O'zbekiston uchun dolzarb muammo hisoblanadi.[5.4] Ushbu kasalliklarning rivojlanishi va tarqalishi ichimlik suvining sifati, suvdan foydalanish sharoitlari, ijtimoiy-iqtisodiy vaziyat va aholining sanitariya-gigiyena bilim darajasi kabi bir qator omillar bilan bog'liq."[7.8]

Tadqiqot usullari va materiallari. Samarqand viloyatida 2017-2022 yillar mobaynida aholi o’rtasida o’tkir ichak infeksiyalarining etiologik va epidemiologik jihatlari Sanitariya-epidemiologik osoyishtalik va jamoat salomatligi markazi tomonidan tahlil qilindi. Aniqlanishicha, Samarqand viloyatida o’tkir ichak infeksiyalari bilan kasallanish darajasi respublikaning boshqa viloyatlariga nisbatan sezilarli darajada oshib ketgan..

Tadiqiqot muhokamasi. Samarqand viloyatida o'tkir ichak infeksiyalari o’tkir ichak infeksiyalarining uzoq muddatli tendensiyalari tahlili shuni ko'rsatdiki, so'nggi yillarda kasallikning tarqalishi ortib bormoqda. Kasallikning eng yuqori ko'rsatkichlari Samarqand shahri, Jomboy, Qo'shrabot va Payariq tumanlarida aniqlangan bo'lib, viloyatning 9 ta tumanida kasallik holatlari soni oshgan. 2017-2022 yillar davomida o’tkir ichak infeksiyalari bilan kasallanishning eng katta o'sishi Samarqand shahrida (+91,5%), Kattaqo'rg'on tumanida (+17,4%), Qo'shrabot tumanida (+13,4%) va Paxtachi tumanida (+13,9%) kuzatilgan. O'tkir ichak infeksiyalarini keltirib chiqaruvchi mikroorganizmlar orasida Klebsiella pneumoniae (1,6%), Proteus mirobilis (3,6%), Staphylococcus aureus (2,1%), Citrobacter (6,6%), Salmonella (16,4%), Enterobacter (6,6%), Pseudomonas aerugenosa (4,1%) va Shigella (2,8%) kabi mikroblar ko'proq uchraydi. Tadqiqotlar davomida o’tkir ichak infeksiyalari kasalligining sabablari asosan shartli patogen mikroflora bilan bog'liqligi aniqlandi. Shigellyozga chalingan bemorlardan ajratib olingan namunalar orasida Fleksner (86%) va Zonne (4,2%) tiplari ustunlik qilgan. Iyul-sentyabr oylarida kasallik eng yuqori darajaga yetgan. Ota-onalar bilan o'tkazilgan suhbatlar shuni ko'rsatdiki, kasallangan bolalarning 42,7 foizi sun'iy oziqlantirilgan, 64,9 foizida esa boshqa kasalliklar ham mavjud bo'lgan. Samarqand viloyatida o’tkir ichak infeksiyalaribilan kasallanish holatlarini retrospektiv tahlil qilish 2017-2022 yillarda kasallikning barqarorlashuvi va shigellyoz bilan kasallanishning kamayish tendentsiyasini aniqladi. o’tkir ichak infeksiyalariva shigellyoz bilan kasallanishning o'rtacha yillik ko'rsatkichlari 2018 yilda avvalgi davrga (2015-2020) nisbatan mos ravishda 20% va 30,8% ga kamaydi. Samarqand viloyatining turli hududlarida o’tkir ichak infeksiyalari va shigellyoz bilan kasallanish darajasini baholash shahar va qishloq joylarida kasallanish ko'rsatkichlarida sezilarli farqlar mavjudligini ko'r. Qishloq aholisi shigellyoz bilan shahar aholisiga qaraganda ko'proq kasallangan. Tadqiqotlar

davomida o’tkir ichak infeksiyalarikasalligining sabablarini aniqlash bilan bog'liq qiyinchiliklar laboratoriyalarning yetarli darajada jihozlanmaganligi, diagnostika vositalarining yetishmasligi va biomateriallarni yig'ish qoidalariga rioya qilmaslik bilan bog'liqligi aniqlandi.

.



1-расм. Samarqand viloyati tumanlarining suv bilan ta`minlanganish holati.

So'nggi yillarda mintaqada markazlashtirilgan suv ta'minoti qamrovining kengayishi kuzatilgan bo'lsada, bu boradagi ko'rsatkich atigi 5,2 foizni tashkil etmoqda. Shahar aholisining to'liq qamrovi (100%) ta'minlangan bo'lsada, qishloq aholisi uchun bu ko'rsatkich 70,7 foizni tashkil etadi (1-rasm). Markazlashtirilgan suv ta'minoti tizimlaridan olingan namunalar tahlili kommunal suv quvurlarida mikrobiologik ko'rsatkichlarning 5,2 foizga, tashkilotlarga tegishli suv quvurlarida esa 7,5 foizga standartlarga nomuvofiqligini ko'rsatdi. Viloyatda kanalizatsiya tizimining rivojlanmaganligi, xususan shahar aholisining 68,9 foizi va viloyat markazlari aholisining atigi 30,2 foizi ushbu xizmat bilan ta'minlanganligi o’tkir ichak infeksiyalarilva shigellyoz kabi kasalliklarning tarqalishi uchun xavf omilini yaratmoqda. Ushbu muammolarni bartaraf etish va kasallanish darajasini kamaytirish maqsadida kasalliklarni epidemiologik jihatdan kuzatish tizimini takomillashtirish, aholi o'rtasida sanitariya-gigiyena bo'yicha tushuntirish ishlarini olib borish hamda kasallik qo'zg'atuvchilarini aniqlash orqali maqsadli profilaktika tadbirlarini amalga oshirish zarur

Xulosa:Tahlil natijalari shuni ko'rsatdiki, o'rganilayotgan davrda Samarqand viloyatida o’tkir ichak infeksiyalarikasalliklari orasida shigellyoz kasalligi bilan bog'liq holatlar soni sezilarli darajada kamaygan. Kasallanishning mavsumiy dinamikasi yoz va kuz oylarida, xususan iyul hamda avgust oylarida keskin ko'tarilish bilan xarakterlanadi. Shuningdek, o’tkir ichak infeksiyalarikasalligi ko'proq 15 yoshgacha bo'lgan bolalarda (65,4%), shigellyoz esa 6 yoshgacha bo'lgan bolalarda 7 barobar ko'proq uchrashi aniqlandi. O'tkir ichak infeksiyalari bilan kasallanish, asosan, oziq-ovqat mahsulotlarini tayyorlash va saqlash qoidalariga rioya qilmaslik, shuningdek, sanitariya talablariga javob bermaydigan suv manbalaridan foydalanish oqibatida kelib chiqadi.

Qishloq joylarda markazlashtirilgan ichimlik suvi bilan ta'minlanganlik darajasi hanuzgacha past bo'lib, atigi 70,7% ni tashkil etadi.

Foydalanilgan adabiyotlar:

1. Воротынцева Н.В., Мазанкина Л.Н."Острые кишечные инфекции у детей. -М.: Медицина, 2001.- 480 с.
2. Жеребцова Н.Ю.Клинико-лабораторные особен-ности острых кишечных инфекций, вызванных условно-патогенными энтеробактериями у детей и подростков: Автореферат дис. канд. мед.наук. -М., 2006. -24 с.
3. Онищенко Г.Г. Эпидемиологическая обстановка в Российской Федерации и основные направления деятельно-сти по ее стабилизации: Материалы к докладу на VIII Всерос. съезде эпидемиологов, микробиологов и паразитологов. -М., 2002. -56 с.
4. Rabbimova, N. T., Ergasheva, M. Y., & Tursunboev, X. S. (2024). The Role of S. Pneumoniae in Excernsation of Chronic Obstructive Pulmonary Disease. European journal of modern medicine and practice, 4(2), 299-304.
5. Yakubovna, E. M., & Isomiddinovna, R. L. (2024). Clinical and epidemiological characteristics of brucelliosis in women of fertil age. Международный журнал теории новейших научных исследований, 2(9), 32-36.
6. Эргашева, М. (2016). Энтеровирусная инфекция: этиология, эпидемиология и патогенетические аспекты заболевания. Журнал проблемы биологии и медицины, (3 (89)), 198-202.
7. Mamatmusaeva, F., Ergasheva, M., & Tursunboev, H. (2023). Big young in people characteristics of laboratory and instrumental diagnostics of pneumococcal meningitis. Science and innovation, 2(D10), 158-163.
8. Ergasheva, M., Ravshanova, L., Jurayeva, K., & Marupova, M. (2023). Фертил ёшдаги аёлларда бруцеллёзнинг клиник-эпидемиологик хусусиятлари. Modern Science and Research, 2(4), 625-631.

UO'K: 613.2-053.4-053.5

SAMARQAND VILOYATI KICHIK MAKTAB YOSHIDAGI BOLALARNING SOMATOMETRIK KO'RSATKICHLARNI GIGIYENIK BAHOLASH

Raximova D.J.
Samarqand davlat tibbiyot universiteti

Annotatsiya: Maktavda va uyda ovqatlanish holati bevosita bolalar jismoniy rivojlanishini belgilovchi asosiy ko`rsatkich hisoblanadi. Maktabda va o'quvchilarining zarur oziq moddalar bilan yetarli darajada ta'minlanmaganligi ularning sog'lig'ida 85% funksional o'zgarishlarga, surunkali kasalliklarning 84% ga oshishiga olib keladi [1, 2, 5, 9, 10, 11].

Tadqiqot maqsadi: Samarqand viloyati kichik maktab yoshidagi bolalarining jismoniy rivojlanish ko`rsatkichlarini gigiyenik baholash.

Materiallar va usullar. Tadqiqotga 800 nafar 7-11 yoshli bolalar olindi. Bolalarning jismoniy rivojlanish ko`rsatkichlari Z-score bo`yicha tahlil qilindi.

Natijalar. Samarqand shahrida yashovchi va Nurobod tumanida yashovchi kichik maktab yoshidagi bolalar jismoniy rivojlanishida barcha ko`rsatkichlar bo`yicha farq aniqlandi. **Xulosa.** Tadqiqotlar kichik maktab yoshidagi bolalar jismoniy rivojlanishda ovqatlanishning nafaqat miqdoriy balki, sifatiy jihatdan roli kattaligini ko`rsatdi.

Kalit so'zlar: *kichik maktab yoshi, z-score, jismoniy rivojlanish.*

HYGIENIC ASSESSMENT OF SOMATOMETRIC INDICATORS OF CHILDREN OF PRIMARY SCHOOL AGE IN SAMARKAND REGION

Rakhimova D.D.
Samarkand State Medical University

Abstract: Nutritional status at school and at home is the most important factor determining the physical development of children. Insufficient provision of schoolchildren with essential nutrients leads to 85% of functional changes in their health and 84% increase in chronic diseases [1, 2, 5, 9, 10, 11].

Objective: To study the hygienic assessment of physical development indicators of primary school children in the Samarkand region.

Materials and methods. The study involved 800 children aged 7 to 11 years. The indicators of physical development of children were analyzed using the Z-score criterion.

Results: Differences in all indicators of physical development were found between primary school children living in Samarkand and Nurabad district. **Conclusion.** Research has shown that nutrition plays an important role in the physical development of primary school children, not only in terms of quantity but also quality.

Keywords: *primary school age, z-score, physical development.*

ГИГИЕНИЧЕСКАЯ ОЦЕНКА СОМАТОМЕТРИЧЕСКИХ ПОКАЗАТЕЛЕЙ ДЕТЕЙ МЛАДШЕГО ШКОЛЬНОГО ВОЗРАСТА САМАРКАНДСКОЙ ОБЛАСТИ

Рахимова Д.Д.
Самаркандский государственный медицинский университет

Аннотация: Состояние питания в школе и дома является важнейшим фактором, определяющим физическое развитие детей. Недостаточное обеспечение школьников необходимыми питательными веществами приводит к 85% функциональных изменений их здоровья и 84% росту хронических заболеваний [1, 2, 5, 9, 10, 11].

Цель: Изучение гигиеническая оценка показателей физического развития детей младшего школьного возраста Самаркандской области.

Материалы и методы. В исследовании приняли участие 800 детей в возрасте от 7 до 11 лет. Показатели физического развития детей анализировались с использованием критерия Z-score.

Результаты. Между детьми младшего школьного возраста, проживающими в Самарканде и Нурабадском районе, выявлены различия по всем показателям физического развития.

Заключение. Исследования показали, что питание играет важную роль в физическом развитии детей младшего школьного возраста, причем не только с точки зрения количества, но и качества.

Ключевые слова: *младший школьный возраст, z-score, физическое развитие.*

Kirish. Maktab o'quvchilarining oziq-ovqat ratsioni organizmning tez o'sishi va bolalarning intensiv hayotiy faoliyati bilan bog'liq bo'lgan barcha energiya ehtiyojlarini qoplashi kerak. Bolani barcha oziq-ovqat tarkibiy qismlari, vitaminlar, makro va mikroelementlar bilan yetarli darajada ta'minlash immuni tizimining holatini yaxshilaydi va tananing salbiy ekologik omillarga chidamliligini oshiradi [2, 3, 4, 6, 8, 10]. Bolalar salomatligining asosiy ko'rsatkichlaridan biri ularning jismoniy rivojlanishi bo'lib, u asosan ovqatlanish bilan bevosita bog'liqdir. Bolalarning antropometrik parametrlarini baholash ovqatlanish adekvatligining muhim ko'rsatkichidir [1, 2, 4, 5, 7, 10, 11]. O'zbekistonda aholining turli qatlamlari orasida, bolalarda ovqatlanish bilan bog'liq kasalliklarni oldini olish, ovqatlanish bilan bog'liq bo'lgan kasalliklarning parhez ovqatlanish bilan samarali davolash, sifatli va xavfsiz oziq-ovqat mahsulotlari bilan ta'minlashning tizimli tartibini yaratish bugungi kunning dolzarb vazifalaridan biridir [6, 7, 8].

Tadqiqotning maqsadi. Samarqand viloyati kichik maktab yoshidagi bolalarining jismoniy rivojlanish ko`rsatkichlarini gigiyenik baholash.

Materiallar va usullar. Tadqiqotga Samarqand viloyati Nurobod tumanidagi № 1, 2, 61- umum ta'lim muassasalari va Samarqand shahridagi № 63, 64 umum ta'lim muassasalari 7-11 yoshli 800 nafar maktab o'quvchilari 46,9% o'g'il bolalar (n =376), qizlar – 53,1% (n =424) olindi. Ularning jismoniy rivojlanish ko'rsatkichlari - bo'yi, tana vazni, ko'krak qafasi aylanasi, tana vazni indeksi Z-score bo`yicha baholandi. Somatometrik ko'rsatkichlarni o'lchashda 0.1sm aniqlikdagi rostomer ishlatildi, tana vazni 50 g aniqlikdagi elektron tibbiy tarozida o'lchandi. Maktab yoshdagi bolalarning jismoniy rivojlanishini individual baholashda jismoniy rivojlanishni individual baholash metodologiyasi, shuningdek, JSST standartlari (2006) Z-score metodi bilan aniqlandi.

Natijalar. JSSTning o'sish standartlari (2006) bo'yicha bolalarning jismoniy rivojlanishi, oziqlanish holati Z-score qiymati asosida aniqlandi.

1-jadval.

7-11 yoshli maktab o`quvchilarining antropometrik ko`rsatkichlari (Samarqand shahri bo`yicha)

Yoshi	Bo`y uzunligi, sm (M±m).	Tana vazni, kg (M±m).	TVI kg/m^2 (M±m).
7 yosh n-108	131,43±0.32	29.12±0.31	16.72±0.22
8 yosh n-83	134,19±0.56	30.79±0.53	17.00 ±0.22
9 yosh n-68	145.63±1.01	42.54±0.98	18.93 ±0.16
10 yosh n-63	151,40±1.14***	45.08±1.14***	19.35 ±0.38*
11 yosh n-67	155,59±0.80***	48.40±0.74***	19.66 ±0.11***

JSST tavsiyalariga muvofiq, olingan Z-score qiymatlari quyidagicha talqin qilish amalga oshirildi: 7 yoshli bolalar (n=108) o`rtacha bo`y uzunligi Samarqand shahrida yashovchi bolalarda o`rtacha 131,43±0.32 sm (Z < -1) 19 nafar, (Z >1) 30 nafar, (-1 ≤ Z ≤ 1), 59 nafarni tashkil qilgan bo`lsa, 8 yoshda (n=83) 134,19±0.56 sm, (Z < -1) 18 nafar, (Z > 1) 20 nafar, (-1< Z < 1) 45 nafar, 9-yoshda (n=68) 145.63±1.01 sm, (Z < -1) 7 nafar, (Z > 1) 20 nafar, (-1< Z <1) 41 nafar, 10 yoshda (n=63) Samarqand shahri bo`yicha 151.40±0.95 sm, (Z < -1) 10 nafar, (Z > 1) 15 nafar, (-1< Z < 1) 38 nafar, 11 yoshda (n=67) 155,59±0.80 sm, (Z<-1) 8 nafar, (Z >1) 24 nafar, (-1≤ Z ≤ 1) 35 nafarni tashkil etgan bo`lsa, o`rtacha tana vazni 7 yoshli bolalarda 29.12±0.31 kg, (Z < -1) 3 nafar, (Z > 1) 22 nafar, (-1 ≤ Z ≤ 1) 83 nafar, 8 yoshda ushbu ko`rsatkich 30.79±0.53 kg, (Z < -1) 17 nafar, (Z > 1) 13 nafar, (-1 ≤ Z ≤ 1) 53 nafar, 9 yoshda 42.54±0.98, Z < -1) 10 nafar, (Z > 1) 14 nafar, (-1 ≤ Z ≤ 1) 44 nafar,10 yoshda 45.08±1.14, Z < -1) 6 nafar, (Z > 1) 20 nafar, (-1 ≤ Z ≤ 1) 37 nafar,11 yoshda 58.40±0.74 kg, Z < -1) 4 nafar, (Z > 1) 33 nafar, (-1 ≤ Z ≤ 1) 30 nafar, ni tashkil etdi.

2-jadval.

7-11 yoshli maktab o`quvchilarining antropometrik ko`rsatkichlari (Nurobod tumani bo`yicha)

Yoshi	Bo`y uzunligi, sm (M±m).	Tana vazni, kg (M±m).	TVI kg/m^2 (M±m).
7 yosh n-109	125.77±0.51	26.26±0.39	16.45±0.23
8 yosh n-86	127.88±0.70	26.33±0.47	16.04±0.22
9 yosh n-70	131.54±0.71	30.08±0.53	17.25 ±0.36
10 yosh n-65	140.71±1.62**	36.78±1.28**	18.55 ±0.62*
11 yosh n-81	146.31±1.18***	40.81±0.99***	18.88 ±0.52***

Nurobod tumanida ushbu ko`rsatkich bir muncha past ya'ni 7 yoshlilarda (n=109) o`rtacha bo`y uzunligi 125.77±0.51 sm, (Z < -1) 27 nafar, (Z >1) 3 nafar, 1 ≤ Z ≤ 1) 79 nafarni, 8 yoshlilarda (n=86) 127.88±0.70 sm, (Z < -1) 37 nafar, (-1< Z < 1) 39 nafar, (Z > 1) 10 nafar, 9 yoshlilarda (n=70) 131.54±0.71 sm, (Z < -1) 19 nafar, (Z > 1) 8 nafar, (-1 < Z < 1) 43 nafar, 10 yoshlilarda (n=65) 140.71±1.62 sm (Z < -1) 26 nafar, (Z > 1) 7 nafar, (-1< Z < 1) 32 nafar, 11 yoshlilarda (n=81) 146.31±1.18 sm, (Z < -1) 30 nafar, (Z > 1) 8 nafar, (-1 < Z < 1) 43 nafar tashkil etdi. O`rtacha tana vazni esa 7 yoshda 26.26±0.39 kg, (Z < -1) 28 nafar, (-1 ≤ Z ≤ 1) 76 nafar, (Z > 1) 5 nafarda, 8 yoshda 26.33±0.47, (Z < -1) 28 nafar, (Z > 1) 6 nafar, (-1 ≤ Z ≤ 1) 52 nafar, 9 yoshda 30.08±0.53, Z < -1) 28 nafar, (Z > 1) 8 nafar, (-1 ≤ Z ≤ 1) 34 nafar, 10 yoshda 36.78±1.28, Z < -1) 28 nafar, (Z > 1) 7 nafar, (-1 ≤ Z ≤ 1) 30 nafar,11 yoshda 40.81±0.99 kg, Z < -1) 19 nafar, (Z > 1) 5 nafar, (-1 ≤ Z ≤ 1) 57 nafar, ni tashkil etildi.

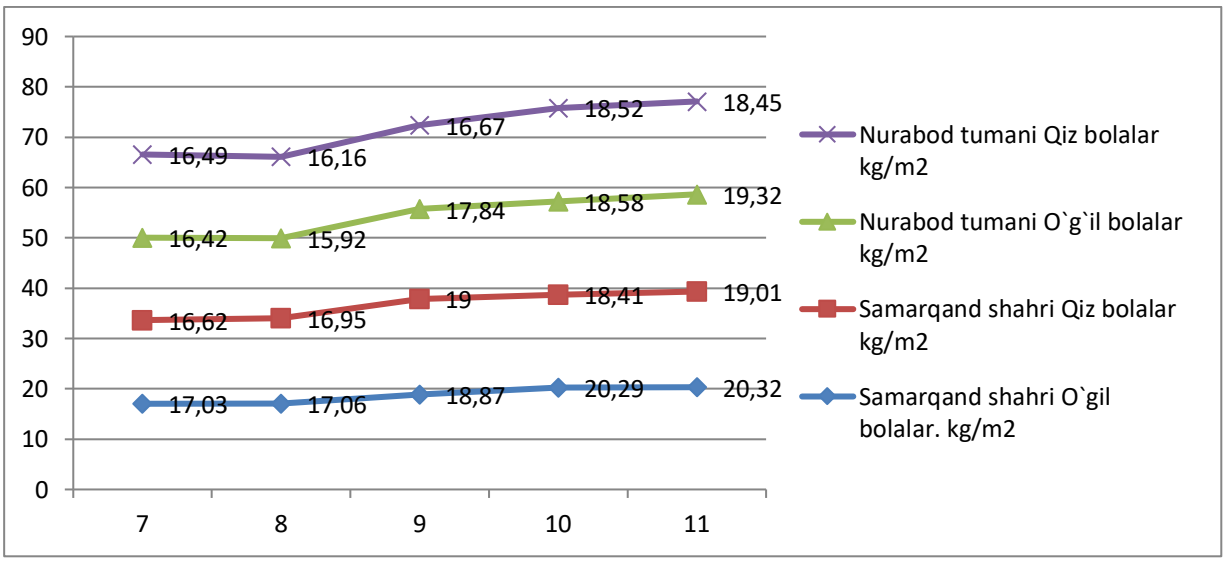
3-jadval.

Kichik maktab yoshidagi o`gil bolalar va qiz bolalarda TVI ko'rsatkichlarning Z-score tahlili.

7-11 yosh	Z-score				
TVI	<-2	-2 dan -1 gacha	-1 dan +1 gacha	+1 dan +2 gacha	>+2

O`gil bolalar	11 (1.37%)	41 (5.12%)	277 (34.62%)	53 (6.62%)	4 (0.5%)
Qizlar	9 (1.12%)	33 (4.12%)	286 (35.75%)	78 (9.75%)	8 (1%)

3- jadvaldan qiz bolalarda tana vazni indeksi Z < -1 -5.25% me'yoriy ko`rsatkichdan pastligini, (-1 ≤ Z ≤ 1) 35.75% me`yorida ekanligini va Z > 1 – 10.75% me'yoriy ko`rsatkichdan yo`qori ekanligi ko`rinadi, o`gil bolalarda esa Z < -1 -6.5% me'yoriy ko`rsatkichdan pastligini, (-1 ≤ Z ≤ 1) 34.62% me'yorda va Z > 1 – 7.12% me'yoriy ko`rsatkichdan yo`qori ekanligi ko`rinadi.



2-rasm. Samarqand shahar va Nurobod tumani 7-11 yoshli bolalar tana vaz indeksi ko`rsatkichlari kg/m^2

Jismoniy rivojlanish ko`rsatkichlari TVI 11.75% bolada me'yoriy ko`rsatkichdan past, 17.87% me'yoriy ko`rsatkichdan yo`qori va 70.37% me'yorida ekanligi aniqlandi.

Tadqiqot davomida olingan ma'lumotlar Pentium - IV shaxsiy kompyuterida Microsoft Office Excel – 2013 dasturiy paketidan foydalangan holda, shu jumladan o'rnatilgan statistik ishlov berish funksiyalaridan foydalangan holda statistik ishlovdan o'tkazildi. O'rganilayotgan ko'rsatkichning o'rtacha arifmetik qiymati (M), standart og'ish (G), o'rtacha standart xato (m), nisbiy qiymatlarni (chastota, %) hisoblashda variatsion parametrik va parametrik bo'lmagan statistika usullari qo'llanildi, o'rtacha qiymatlarni taqqoslashda olingan o'lchovlarning statistik ahamiyati Styudent (t) kriteriysi mezoni bilan va tenglikni tekshirishda xatolik ehtimolini (P) hisoblash va taqsimotning normalligini (ekssess mezoniga ko'ra), umumiy dispersiyalarni (F - Fisher kriteriysi) hisoblash bilan aniqlandi. Muhimlik darajasi R<0,05 statistik jihatdan muhim o'zgarishlar sifatida qabul qilindi (Mamatqulov B.M., 2005; La Mart, Raxmonova N., 2008).

Xulosa. 7 yoshdan 11 yoshgacha bo'lgan Samarqand shahri va Nurobod tumani kichik maktab o'quvchilari jismoniy rivojlanish ko`rsatkichlari bo`y uzunligi, tana vazni, tana vazni indeksi Z-score qiymatlari tahlili o'rganish barcha ko`rsatkichlar bo`yicha farqlarni aniqladi ya'ni Nurobod tumani kichik maktab yoshidagi o`quvchilar Samarqand shahridagiga qaraganda bo`y uzunligi, tana vazni bo`yicha bir muncha past. Natijalarga ko'ra, Samarqand shahar o'quvchilari orasida tana massasi

normadan yuqori bo'lganlar ko'proq ekanligi, Nurobod tumanida esa normadan past bo'lgan o'quvchilar soni ko'proqligi aniqlandi. Bu farq hududlar o'rtasidagi ovqatlanish va turmush tarzidagi tafovutlar bilan bog'liqdir.

Foydalanilgan adabiyotlar:

1. Баранов А.А., Щеплягина Л.А. Фундаментальные и прикладные исследования по проблемам роста и развития детей и подростков // Российский педиатрический журнал. — 2000. — № 5. — С. 5–12. [Baranov AA, Shcheplyagina LA. Fundamental'nye i prikladnye issledovaniya po problemam rosta i razvitiya detei i podrostkov. Russian journal of pediatrics. 2000;(5):5–12. (In Russ)]
2. Басманова Е.Д., Перевощикова Н.К. Особенности физического развития детей в школах разного типа. Рос. педиатр. ж. 2009; (1): 52–57. [Basmanova Ye.D., Perevoshchikova N.K. The physical development in children from schools of various types. Rossiyskiy pediatricheskiy zhurnal. 2009; (1): 52–57. (In Russ.)]
3. Березин И.И., Русакова Н.В., Кретова И.Г. и др. Комплексная оценка физического развития и состояния здоровья учащихся средних общеобразовательных учреждений города Самары. Известия Самар. науч. центра РАН. 2010; 12 (1 (7)): 1802–1807. [Berezin I.I., Rusakova N.V., Kretova I.G. et al. Complex estimation of physical development and health state of pupils from educational establishments in Samara city. Izvestiya Samarskogo nauchnogo tsentra Rossiyskoy akademii nauk. 2010; 12 (1 (7)): 1802–1807. (In Russ.)]
4. Мартинчик А.Н., Батурин А.К., Кэшабянц Э.Э., Пескова Е.В. Ретроспективная оценка антропометрических показателей детей России в 1994–2012 гг. по новым стандартам ВОЗ // Педиатрия. Журнал им. Г.Н. Сперанского. — 2015. — Т. 94. — № 1. — С. 156– 160. [Martinchik AN, Baturin AK, Keshabyants EE, Peskova EV. Retrospective assessment of anthropometric measurements of children in Russia 1994-2012 according to the new WHO standards. Pediatriia. 2015;94(1):156–160. (In Russ).]
5. Особенности физического развития детей школьного возраста г. Уфы / Масагутова А.Г., Поварго Е.А., Зулькарнаева А.Т., Зулькарнаев Т.Р., Зигитбаев Р.Н. // Вопросы школьной и университетской медицины и здоровья. 2013. № 2 – С. 1317.
6. Рахимова Д.Ж., Шайхова Г.И. Оценка физического развития школьников 7-17 лет 2022 №4. СТ-72-77 https://tadqiqot. uz/index.php/uro/ article/ view/6097
7. Рахимова Д.Ж., Наимова З.С., Ҳалимова С.А. "7 ёшдан 14 ёшгача бўлган болаларда озиқланиш муаммолари ва уларни олдини олишда витамин ва минералларнинг ўрни" Ориентал Ренаиссансе: Инновативе, эдусатионал, натурал анд сосиал ссиенсес. 2022. ВОЛУМЕ 2 | ИССУЕ 4 380-385 https://cyberleninka.ru/article/n/7-yoshdan-14-yoshgacha-bo-lgan-bolalarda-oziqlanish-muammolari-va-ularni-oldini-olishda-vitamin-va-minerallarning-o-rni/viewer
8. Islamovna S. G., Jurakulovna R. D., Gulistan K. Current state of the problem of rationalization of schoolchildren's nutrition. – 2022.Zhurakulovna R. D. et al. Establishing the relationship between various metastatic lung lesions with gender and age //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – Т. 2. – №. 2. – С. 104-107.

9. Shaikhova G.I., 2Rakhimova D.J., Khasanova G. Current state of the problem of rationalization of schoolchildren's nutrition. Евразийский вестник педиатрии 4(15) 2022 ст-82-87.
10. World Health Organization. WHO Child growth standards: Methods and development. Geneva: WHO; 2007.
11. Lobstein T, Jackson-Leach R, Moodie ML, et al. Child and adolescent obesity: part of a bigger picture. Lancet. 2015;385(9986): 2510–2520. doi: 10.1016/S0140-6736(14)61746-3.

UDC: 616-08-035

IMPROVING CONSERVATIVE TREATMENTS FOR LUMBAR SPINE INJURIES

Rakhmonov Sh.Sh.
Samarkand State Medical University

Abstract. Today, the analysis of dabos shows that the problem of treating patients with uncomplicated compression fracture of the spine has not lost its relevance to the present day. The above information makes it possible to look for and develop optimal treatment for uncomplicated compressed fractures, which is one of the pressing problems of Traumatology. This work is based on the results of the examination and treatment of 40 patients with a compressed fracture of the umurtqae of the lower thoracic and lumbar sections treated in 2022 in the Samarkand branch of the Republican scientific and practical Center for Traumatology and orthopedics. The study examined the mechanism of injury, the degree of spinal injury, fracture of the umurtqal bodies, kyphotic deformity, and compression (compression index). Based on the results obtained, it was determined the effectiveness and necessity of the recommended method of conservative treatment of compression uncomplicated fractures of the lower thoracic and lumbar umurtqae in the near and long period.

Keywords: *MRT, KT, KI, conservative treatment, reconstruction,rehabilitation, compression, spine.*

BEL UMURTQALARI SHIKASTLANISHLARINING KONSERVATIV DAVOLASH USULLARINI TAKOMILLASHTIRISH

Raxmonov Sh.Sh.
Samarqand davlat tibbiyot universiteti

Annotatsiya. Bugungi kunda adabiyotlar tahlili shuni ko'rsatadiki, umurtqa pog'onasining asoratlanmagan kompressiyali sinishi bilan og'rigan bemorlarni davolash muammosi hozirgi kungacha o'z ahamiyatini yo'qotmagan. Yuqoridagi ma'lumotlar travmatologiyaning dolzarb muammolaridan biri bo'lgan murakkab bo'lmagan kompressiyali sinishlarini optimal davolashni izlash va ishlab chiqishni ko'rib chiqishga imkon beradi. Ushbu ish 2022-yilda Respublika travmatologiya va ortopediya ilmiy-amaliy markazining Samarqand filialida davolangan pastki ko'krak va bel bo'limlari umurtqalarining siqilgan sinishi bo'lgan 40 nafar bemorni tekshirish va davolash natijalariga asoslangan. Tadqiqotda shikastlanish mexanizmi, umurtqa pog'onasining shikastlanish darajasi, umurtqa tanalarning sinishi, kifotik deformatsiya va siqilish darajasi (siqilish indeksi) o'rganildi. Olingan natijalar asosida yaqin va uzoq davrda pastki ko'krak va bel umurtqalarining kompression asoratlanmagan sinishlarini konservativ davolashning tavsiya etilgan usuli samaradorligi va zarurligi aniqlandi.

Kalit sozlar: *MRT, KT, KI, konservativ davo, rekonstruksiya, reabilitatsiya,komprissiya, umurtqa.*

СОВЕРШЕНСТВОВАНИЕ МЕТОДОВ КОНСЕРВАТИВНОГО ЛЕЧЕНИЯ ТРАВМ ПОЯСНИЧНЫХ ПОЗВОНКОВ

Рахмонов Ш.Ш.
Самаркандский Государственный медицинский университет

Аннотация. Сегодня анализ дабиотиков показывает, что проблема лечения больных с неосложненными компрессионными переломами позвоночника не утратила своего значения и по сей день. Приведенные выше данные позволяют рассмотреть поиск и разработку оптимального лечения несложных компрессионных переломов, являющихся одной из актуальных проблем травматологии. Данная работа основана на результатах обследования и лечения 40 пациентов с компрессионными переломами позвонков нижних грудных и поясничных отделений, проходивших лечение в Самаркандском филиале Республиканского научно-практического центра травматологии и ортопедии в 2022 году. В исследовании изучался механизм травмы, степень повреждения позвоночника, переломы тел позвонков, кифотическая деформация и степень компрессии (индекс компрессии). На основании полученных результатов определена эффективность и

необходимость рекомендованного метода консервативного лечения компрессионных неосложненных переломов нижних грудных и поясничных позвонков в тесном и отдаленном периодах..

Ключевые слова. *МРТ, КТ, ИК, консервативное лечение,реконструкция, реабилитация, компрессия, позвоночник.*

Kirish. So'nggi o'n yilliklarda torakal va bel umurtqalarining siqilgan sinishi bilan og'rigan bemorlarni davolash muammosi amaliy tibbiyot va ijtimoiy jihatlar nuqtai nazaridan dolzarb bo'lib qolmoqda. Bu mushak-skelet tizimining shikastlanishining umumiy tarkibida qurbonlar sonining barqaror o'sishi bilan bog'liq [1,2]. Umurtqa pog'onasi sinishi naysimon suyaklar sinishi, ichki organlarning jarohatlanishi va miya shikastlanishidan keyingi o'rinni egallaydi [3]. Turli mualliflarning fikriga ko'ra, mushak-skelet tizimining travmalarining ichida umurtqa pog'onasining barcha shikastlanishlari 1% dan 10% gacha, har million aholiga 1,9 dan 19,9 gacha bo'lgan holatlar uchraydi [5]. Boshqa adabiy manbalarga ko'ra, kompression sinishlari umurtqa pog'onasidagi barcha shikastlanishlarning 0,65% dan 9,47% gacha. Ko'pincha umurtqa pog'onasining sinishi oyoq–qo'llarning shikastlanishi (37-52%), ko'krak qafasi shikastlanishi (5,7-14%), qorin bo'shlig'i a'zolari bilan birga keladi (14,1– 30,8%). Xorijiy mualliflarning ta'kidlashicha, umurtqa pog'onasi shikastlanishining o'rtacha yillik ko'rsatkichi 100 000 aholiga 24,3 ni tashkil qiladi [3]. Bugungi kunda anatomik yoki biomexanik prinsip asosida qurilgan umurtqa pog'onasi shikastlanishining bir nechta tasnifi mavjud. Zarar yetkazuvchi ta'sir mexanizmiga ko'ra quyidagilar ajratiladi: fleksiyon sinishi, ekstensor sinishi, sirkulyar sinishi, eksenel ta'sirdan shikastlanish.

Tadqiqot maqsadi: Ko'krak va bel umurtqalarining kompressiyali asoratlanmagan sinishlarini konservativ davolash usullarini takomillashtirib amaliyotga tatbiq etish.

Material va tekshirish usullar. Ushbu ish pastki ko'krak va bel umurtqalari tanasining siqilgan sinishi bo'lgan 40 bemorni tekshirish va davolash natijalariga asoslangan. Ushbu bemorlar 2022 yilda Respublika travmatologiya va ortopediya ilmiy-amaliy markazining Samarqand filialida davolangan. Tadqiqotda shikastlanish mexanizmi, umurtqa pog'onasining shikastlanish darajasi, umurtqa tanalarning sinishi, kifotik deformatsiya va siqilish darajasi (siqilish indeksi) o'rganildi. Tadqiqotda bemorlarni tanlash uchun asosiy va istisno mezonlari qo'llanilgan, masalan: Inklyuziya mezonlari: 1. Bemorlarning yoshi 18 va undan yuqori; 2. Pastki ko'krak va bel umurtqasining umurtqa tanalarida kompressiyali sinishi bilan zararlanganlar; 3. Pastki torakal va lumbal Umurtqa pog’onasiumurtqalari tanasining sinishi bilan izolyatsiya qilingan (bir darajali) sinish. 4. Shikastlanish muddati 7 kundan kam. Istisno mezonlar: 1. Servikal o'murtqa kompressiyali sinishi bo'lgan bemorlar. 2. Pastki ko'krak va bel umurtqalarining umurtqalariga asoratli zarar yetkazgan bemorlar 3. Nafas olish tizimining patologiyasi bo'lgan bemorlar. Biz o'z ishimizda AO/ASIF tasnifidan foydalanganmiz. Ushbu tasnifga muvofiq barcha bemorlarning orqa miyasi shikastlanishi umurtqa tanasining eksenel siqilishi va umurtqa pog'onasining egilishi natijasida yuzaga keladi.Kompyuter tomografiyasi (KT) 11 bemor tomonidan amalga oshirildi, shikastlanish turini aniq baholash uchun sagittal va frontal tekisliklarda 3D rekonstruksiya qilindi.MRT ma'lumotlariga ko'ra, umurtqa tanasining kompressiyali sinishi 10% dan ortiq umurtqa tanasining sfenoid deformatsiyasi, bu morfologik jihatdan trabekulyar shish va qon ketishiga mos keladi. Bu ventral ustun balandligining pasayishi tufayli umurtqa tanasining sfenoid deformatsiyasi umurtqa tanasining siqilishining mutlaq belgilaridir

Umurtqa pog’onasi sinishlari va kasalliklarini davolashda ko’p ishlatiladigan korsetlarning ba'zi kamchiliklarini bartaraf etish uchun biz shtangalar yordamida tishli kesiklar bilan bog'langan old va orqa ramkalarni qattiq bog'laydigan pnevmatik yostiqli qurilmani yaratdik. Korset (1-rasm) uchta ramkadan iborat: ko'krak, pubik, lomber. Ramkalar qalinligi 2 mm bo'lgan duralumin varag'idan qilingan. barcha ramkalar kengligi 2 sm bo'lgan g’ovak material bilan to'ldirilgan. Old

yuqori va orqa ramkalar 3x18 sm o'lchamdagi to'rtburchak shaklga ega; old pastki (pubik) ramka 24x14 sm o'lchamdagi yarim oval shaklga ega.

Rasm:1. Korset "Umurtqa pog'onasining davolash moslamasi"

Natija va ularning muhokamalari.Tadqiqot natijasida olingan ma'lumotlarning tahlili shuni ko'rsatdiki, torakal va lumbal lokalizatsiyasi sababli umurtqalarning kompressiyali sinishi kuzatuvlarning 57,9% i ayollarga to'g'ri keladi. Umurtqa pog'onasi kompressiyali sinishlarning eng keng tarqalgan lokalizatsiyasi Th12, L1 (39,5% va 34,1%) darajasida kuzatilgan, eng kam uchraydigan umurtqa kompressiyali sinishi lokalizatsiyasi L2 (2,6%) darajasida kuzatilgan. Bemorlarimiz orasida 25(65,8%) bemor jarohatning birinchi kunida, 4 (10,5%) bemor 2 kundan keyin, 2 (5,3%) bemor 3 kundan keyin, 4 (7,9%) bemor 4 kundan keyin, 3 (5,3%) bemor 5 kundan keyin, 3(5,3%) bemor 7 kundan keyin keldi. Bemorlarning 3(5,3%) tasi jarohat olgan kuni; 33 (86,8%) tasi jarohatdan 2-5 kun o'tgach, 4 (7,9%) tasi 6 kundan keyin korsetimizni taqib boshlagan. Qurilmaning o'rtacha o'rnatish vaqti 3-4 kunni tashkil etdi. Anamnezni yig'ishda va bemorlarni davolash bosqichlarida og'riq sindromi va uning kuchayishini tasavvur qilish uchun boshqa korset ishlatilgan. Qabul qilinganida, bemorlarning 21 (55,3%) tasi asosan o'rtacha og'riqni (4 dan 6 ballgacha), kamdan-kam hollarda 15 (39,5%) bemorda kuchli og'riq (7 dan 10 ballgacha), yengil og'riq shikoyatlari (0 dan 3 ballgacha) yoki uning yo'qligi 4 (10%) qayd etilgan. Qurilmani qo'llash boshlanganda, qo'zg'atilgan og'riq (faol harakatlar paytida og'riq, funktsional testlar paytida og'riq) kamroq intensiv bo'lib, bizning ko'rsatkichimizga muvofiq 3-4 ballga kamaydi, bemorni bo'shatish paytida u 3 ballgacha kamaydi va korsetdan 3 hafta o'tgach, og'riq butunlay to'xtadi. Shunday qilib, bemorlarda davolanish jarayonida og'riq sindromi butunlay to'xtatildi bir hafta davom etdi va an'anaviy statik va dinamik yuklamalarda dinamik kuzatuv jarayonida qayta tiklanmadi. Bu bemorlarda umurtqa - motor segmentining shikastlanish darajasida barqarorligi va korsetdan foydalanganda butun umurtqa pog'onasi bo'ylab vaznning bir xil fiziologik taqsimlanishi bilan izohlanadi.

Shunday qilib, ODI natijalari biz qabul paytida, 2, 6, 12, 24 oydan keyin o'rgandik. Shu bilan birga, ODI qiymatlari 20% dan ko'p bo'lmagan hayot sifatining minimal buzilishi, 21 dan 40% gacha – o'rtacha, 41-60% – aniq, 61-80% – nogiron deb hisoblangan [6].

Biz eng yaqin davolash natijalarini yoriqlar kamayganidan keyin, qisqarish davri tugaganidan keyin, bemorlarni ambulatoriya sharoitida va 2 oydan keyin chiqarilishidan oldin

o'rganib chiqdik. Biz yaqin atrofdagi davolanish natijalarini yaxshi, qoniqarli, qoniqarsiz deb baholadik. Agar tananing oldingi balandligini to'liq tiklashga yoki tana balandligi etishmovchiligini 19% qoldiq etishmovchilikka tuzatishga erishilgan bo'lsa, unda eng yaqin natija quyidagicha baholandi "yaxshi". Ammo kifotik deformatsiyalarni yo'q qilish asosiy ahamiyatga ega edi, chunki shikastlangan umurtqaning sagittal deformatsiyasi davolash natijalarini sezilarli darajada yomonlashtiradi. Kifotik deformatsiyani to'liq yo'q qilish va ba'zida uning 8° gacha bo'lgan ko'rsatkichi, bizning kuzatishlarimizga ko'ra, "yaxshi"baholashga to'g'ri keldi. Hayot sifatining minimal buzilishi va o'rtacha deb hisoblangan ODI qiymatlari "yaxshi"deb baholandi. Umurtqaning tana balandligining qoldiq etishmovchiligi 20% yoki undan ko'p; kifotik deformatsiya 8° dan 20° gacha va undan yuqorisi "qoniqarli"deb baholandi.

Xulosa.So'nggi o'n yilliklarda ko'krak va bel umurtqalarining kompressiyali sinishi bilan og'rigan bemorlarni davolash muammosi dolzarb bo'lib qolmoqda. Umurtqal shikastlangan bemorlar sonining ko'payishi transport, ishlab chiqarishdagi shikastlanishlarning ko'payishi, shuningdek balandlikdan yiqilganda jabrlanganlar sonining ko'payishi bilan bog'liq. Hozirgi vaqtda, statistik ma'lumotlarga ko'ra, umurtqa pog'onasining shikastlanishi mushak-skelet tizimining barcha shikastlanishlarining 0,5% dan 8% gacha, bolalarda umurtqa pog'onasining kompressiyali sinishiesa umurtqa pog'onasining barcha shikastlanishlarining 10% gacha. Shu sababli, torakal va bel umurtqalarining kompressiyali sinishibilan og'rigan bemorlarni davolash muammosi bugungi kunda dolzarb bo'lib qolmoqda. Hozirgi vaqtda o'murtqa kompressiyali sinishibo'lgan bemorlarni davolashda funktsional davolash usuli qo'llaniladi. Bu bolaning uzoq vaqt (60 dan 80 kungacha) qattiq yotoqda dam olishini ta'minlaydi. Umurtqa pog'onasi compression singan bemorni ortezlash faqat ushbu uzoq muddat tugagandan so'ng tavsiya etiladi. Hozirgi bosqichda umurtqa tanalarining compression sinishlarida ishlatiladigan ortezlarning spektri juda keng. Ko'pincha shinalar, plastmassa yoki mato korsetlari ishlatiladi, modulli ortezlarning rivojlanishi ham mavjud. Shuni ta'kidlash kerakki, turli ortez maktablarida giperreklinatsiya korsetlarini loyihalash usullari qarama-qarshi bo'lib, asosli ma'lumotlarga qaraganda mutaxassislarning bevosita tajribasiga asoslangan. Hozirgi vaqtda ortez bilan davolanadigan bemorlarni to'g'ri yo'naltirish bo'yicha uslubiy tavsiyalar mavjud emas, ayniqsa erta davrda. Korsetlarning turli xil dizaynlarini tayinlash uchun aniq ko'rsatmalar mavjud emas, shuningdek shikastlanishning lokalizatsiyasiga qarab korset dizayni o'zgartiriladi. Shunday qilib, bemorlarning kasalxonada qolish muddati 22 tasida 2 kundan 5 kungacha, 18 bemorda 6 kundan 8 kungacha bo'lgan. O'rtacha yotoq kuni 5,2 kunni tashkil etdi.

Foydalanilgan adabiyotlar:

1. Аганесов А.Г., Хейло Алексей Леонидович. "Стентирование позвонков при компрессионных переломах" Клиническая и экспериментальная хирургия. №2 (2), 2013, ст. 36-40.
2. Баиндурашвили А.Г.,Залетина А.В.,Виссарионов С.В.,Соловьева К.С. "Диспансеризация детей с компрессионными переломами тел позвонков(на примере Санкт-Петербурга)" Гений ортопедии, vol. 25, №4, 2019, ст. 535-540.
3. Бывальцев Вадим Анатольевич, Калинин Андрей Андреевич. "Анализ результатов редукции кифотической деформации методом минимально-инвазивной транспедикулярной стабилизации у пациентов с травматическими компрессионными переломами грудо-поясничной локализации" Вестник хирургии

имени И. И. Грекова, vol. 176, №. 5, 2017, ст. 64-71.
4. Мягков А.П., Мягков С.А., Семенцов А.С., Наконечный С.Ю. "Методические аспекты магнитно-резонансно томографической диагностики метастатических компрессионных переломов позвоночника" ScienceRise, vol. 6, №. 4 (11), 2015, ст. 9-14.
5. Остапова Е.А. "Роль компьютерной томографии в диагностике травм позвоночника" Клиническая медицина Казахстана, №1 (24), 2012 ст 215.
6. Pace Verity, Adams Roger D, Tofts Louise, Munns Craig F and Nicholson Leslie L, Proprioceptive acuity into knee hypermobile range in children with Joint Hypermobility Syndrome , Pediatric Rheumatology 2014, 12- 40
7. Comparison of Conservative and Surgical Treatment Methods for Lumbar Disc Herniation Rakhmanov Shakhimordon Sherkulovich American Journal of Bioscience and Clinical Integrity(2024) 40-45.
8. Yuldashev Ravshan Muslimovich. "Open vertebroplasty in surgical treatment of metastatic tumors of the spine" European science review, no. 7-8, 2016, pp. 169-171.

UO'K: 616-08-035

ARTROSKOPIK MENISKEKTOMIYADAN KEYINGI OSTEOARTROZ REABILITATSIYA USULLARINI TAKOMILLASHTIRISH

Raxmonov Sh.Sh.
Samarqand davlat tibbiyot universiteti

Annotatsiya. "Artroskopik menskektomiyadan keyingi osteoartroz reabilitatsiya usullarini takomillashtirish" nomli maqolasida osteoartrozni tashxislash, davolash va davolashning zamonaviy yondashuvlari haqida qisqacha umumiy ma'lumot berib o'tilgan. Ushbu ommalashgan kasallikni davolashning asosiy bosqichlari, jumladan, konservativ va fizioterapevtik usullari ko'rib chiqiladi. Osteoartroz bilan og'rigan bemorlarni davolashda dori terapiyasi, artroskopik muolajalarning roliga alohida e'tibor qaratilmoqda. Davolashdan keyin reabilitatsion terapiyasining asosiy jihatlari, shuningdek, asoratlarning oldini olish imkoniyatlari muhokama qilinadi.

Kalit sozlar: *ACL, OXB, artroskop, konservativ davo, rekonstruksiya, reabilitatsiya, tizza bo'g'imi, osteoartroz.*

СОВЕРШЕНСТВОВАНИЕ МЕТОДОВ РЕАБИЛИТАЦИИ ОСТЕОАРТРОЗА ПОСЛЕ АРТРОСКОПИЧЕСКОЙ МЕНИСЭКТОМИИ

Рахмонов Ш.Ш.
Самаркандский Государственный медицинский университет

Аннотация. В статье «Совершенствование методов реабилитации при остеоартрозе после артроскопической операции на мениске» представлен краткий обзор современных подходов к диагностике, лечению и ведению остеоартроза. Рассмотрены основные этапы лечения этого распространенного заболевания, включающие консервативные и физиотерапевтические методы. Особое внимание уделяется роли медикаментозной терапии и артроскопических процедур в лечении больных остеоартрозом. Обсуждаются основные аспекты восстановительной терапии после лечения, а также варианты профилактики осложнений.

Ключевые слова. *ПКС, ОКС, артроскоп, консервативное лечение, реконструкция, реабилитация, коленный сустав, остеоартроз.*

IMPROVEMENT OF OSTEOARTHROSIS REHABILITATION METHODS AFTER ARTHROSCOPIC MENISCECTOMY

Rakhmonov Sh.Sh.
Samarkand State Medical University

Abstract. The article "Improving rehabilitation methods for osteoarthritis after arthroscopic meniscusectomy" provides a brief overview of modern approaches to the diagnosis, treatment and management of osteoarthritis. The main stages of treatment of this common disease, including conservative and physiotherapeutic methods, are considered. Special attention is paid to the role of drug therapy, arthroscopic procedures in the treatment of patients with osteoarthritis. The main aspects of rehabilitation therapy after treatment, as well as the possibilities of preventing complications, are discussed.

Keywords: *ACL, OXB, arthroscope, conservative treatment, reconstruction, rehabilitation, knee joint, osteoarthritis.*

Kirish. Hozirgi vaqtda tizza bo'g'imi jarohatlanishlarida qo'llanilayotgan kaminvaziv operatsiyalarning eng samarali usullari qo'llanilishiga qaramay 10% dan 20% gacha bemorlarda operatsiyadan keyingi davrda nostabillik sababli tizza bo'g'imida ostioartroz rivojlanishiga sabab

bo'lmoqda. Butun dunyo miqyosida barcha surunkali kasalliklarning 38% ini, nogironlik davomiyligining 53% ini, iqtisodiy sarf – xarajatlarning 18% i bo'g'im kasalliklariga tegishli bo'lib ular birinchi o'rinda turadi [3]. Shunday bo'lishiga qaramasdan travmatologiyaning artrologiya muammolari tibbiy ta'lim qo'llanmalarida kam yoritilgan. Natijada bu sohada faoliyat yuritayotgan mutaxassislarning amaliy saviyasi ham o'ziga xos bo'lib kasallikning kech aniqlanishiga sabab bo'lmoqda. Shu bilan birga kasallik patogenezida mikroelementlar, ekologik omillar, mehnat faoliyatining xarakteri ham muhim o'rin tutadi.

Tadqiqot maqsadi: Tizza bo'g'imi Artroskopik meniskektomiyadan keyin rivojlanadigan osteoartroz reabilitatsiya chora-tadbirlarini takomillashtirib amaliyotga tatbiq etish.

Material va tekshirish usullar. Menisk yirtilishi asosan sport va harbiy faoliyatni o'z ichiga olgan faol mehnat tarzi bilan shug'ullanadigan yosh va mehnatga layoqatli katta insonlar orasida ko'p uchraydigan jarohatlanishdir. Bizning tadqiqotimizda shifoxonada davolanayotgan 54 bemorda KT, MRT, Rengenologik va artroskopik ma'lumotlardan foydalaniladi. Tekshirish va davolash ishlari RITOIATM Samarqand filiali yirik bo'g'imlar ortopediyasi bo'limi va poliklinikada 2022 – 2024 yillar davomida davolangan bemorlarda amalga oshirildi. Tekshirishlarda klinik, rentgenologik va laborator tekshiruv usullaridan foydalanildi. Nazoratimizdagi 54 bemorning 33 tasi erkak va 21 tasi ayol bemorlar bo'lib ularning yoshi 40 yoshdan 70 yoshgacha (o'rtacha 56,2±7,4 yosh). Bemorlar yoshga ko'ra tahlil qilinganda ularning asosiy qismi mehnatga yaroqli aholi ulushiga to'g'ri keladi. Mehnatga layoqatli bemorlar 64,8% (35 bemor). Bemorlarning 33.3% ida (18 bemor) semizlik, 10 tasi (18.5%) da og'ir jismoniy mehnat, 10 tasi (18.5%) da sport bilan shug'ullanish va qolgan 16 (30%) da turli muhit o'zgarishlari sabab bo'lgan.

Barcha bemorlarning statsionarga davolanishi uchun kech murojoat qilib kelishlariga yashash joylarida ambulator sharoitda davolanishlari sabab bo'lgan.

Bizning tadqiqotimizda bemorlardagi:

1. Sinovial suyuqligi xarakteri hamda bioximiyaviy tahlili o'rganiladi.

2. Ximyaviy tahlillar asosida ozon (kislorod) va medikamentoz davolash taktikasiga ko'rsatmalar ishlab chiqiladi.

3. Davolash natijalari tahlil qilinib, samarador usullarini amaliyotga tadbiq etish.

Dori preparatlar bilan bazis davolash kasallikni to'la – to'kis davolamasada, lekin (osteoartroz) kasallikni kechish jarayonini boshqarish imkoniyatini beradi. Shuning uchun osteoartrozning xuruj davrini nazorat qilishga erishilgach dorining optimal variantda uzoq muddat qo'llash zarur. Dori preperatlarni qo'llash davomida tanaffus kuzatilganda kasallik (artroz) xurujini kuchaytirish, qo'llanilgan dori vositalarini takror qo'llanilishi samarasiz bo'ladi. Surunkali artrozlarni davolash printsiplariga ko'ra nisbatan erta bazis preparatlar bilan uzluksiz qo'llab davolash "terapevtik piramida" asosida bajariladi. Shunday usulda davolash usuli grafik tasvirlashda "arra tishi" deb yuritiladi va davolash natijalarini yaxshilash imkoniyatini beradi."Arra tishi" strategiyasini qo'llash zarurati dori preparatlarga ikkilamchi moslashuvchanlik (ko'nikish)ni profilaktikasidan iborat.Osteoartrozni bazis terapiyasida folievoy kislota antogonisti-metatreksat digidrofolatreduktazani blokirovka qilib qo'yadi. Chunki digidrofolatreduktaza tetrofolievani (u o'z navbatida DNK sintezini buzadi) parchalaydi. Degidrofolat reduktazani faolligini sustlashuvi metotreksatning antiproliferativ ta'siri bilan bog'liq. Har ikki- uchunchi bemor o'rtaterapevtik dozada (7,5-10 mg xaftada) 3 yildan ortiq muddatda qabul qilish to'xtatilgach noxush holatlar kuzatilgan.Metotreksat antikoagulyantlar aktivligini oshiradi va shu tariqa jigarda prokoagulyant omilining sintezini kamayishi hamda trombotsitlar hosil bo'lish jarayonini buzilishi hisobiga qon ketish xavfini oshiradi. Shuning uchun mazkur preparatlar qabul qilayotgan bemorlar toifasiga

urikodepressantlar (masalan allopurilan) tavsiya etiladi.Asosiy davolovchi dori vositalaridan sulfasalazin yallig'lanishga qarshi va antibiotik preparatlardan bo'lib osteoartrozda nafaqat yallig'lanishga qarshi, balki immun samaradorlikga ham ega bo'lgan dori vositasi hisoblanadi. Sulfasalazin aminoxinolin birikmalari va azitiopringa nisbatan ham samaraliroq bo'lib bemorning hayotda faolligini belgilovchi ko'rsatkichlarini yaxshilash imkoniyatini beradi.Yakuniy tahlillar sulfasalazin ertalabki og'riqni davomiyligini va og'riq kuchini susaytiradi.Osteoartrozda T-limfotsitlar, makrofaglar va yallig'lantiruvchi sitokinlarga qarshi muhim vositalardan – Xlorxin difosfat (delanel) va gidroksixloroxin sulfat (plakvenil).

Mazkur dorilar surunkali osteoartrozda immun samaradorlik bilan xarakterlanadi. Jumladan:

- Antigenlar va autoantigenlar makrofag va T-limfotsitlar bilan sintezlanishini susaytiradi;
- Monotsitlar sintezini blokada qiladi.
- T-limfotsitlar bilan gamma – interferon sintez jarayonini cheklab qo'yadi yoki zaiflashtiradi.
- Mezasomalar membranasini stabillashtiradi.

Gidroksixloroxin (plakvenil) bo'g'imlarning yallig'lanish kasalliklarida immunosupressiv, spetsifik va nospetsifik ta'sir ko'rsatadi. Uning samaradorligi fermentlar (fosfolipaza, xolinesteraza, proteaza, gidolaza) aktivligini o'zaytirib mezasoma membranasini stabillashtiradi, xemotaksis va fagotsitoz jarayonini sekinlashtiradi. Mazkur preparat sutkasiga 200-400 mg dan 2 marta tavsiya etilib 4 oy muddatdan so'ng samaradorlik 66-72% ni tashkil etgan. Kombinatsiyalashtirilgan (auronodin) usulda 75 – 81% samaradorlikka erishish mumkin.

Natija va ularning muhokamalari.Bugungi kunda ommaviylashgan usullardan bo'g'imni punksiya qilish va yallig'lanishni bartaraf etuvchi muolajalar qo'llash patogenetik nuqtai nazardan noto'g'ri usul sifatida ta'kidlanmoqda. Shuning sababli biz kuzatuvimizdagi bemorlarda osteoartrozni kompleks davolash jarayonida sinovit bilan og'rigan bemorlarda yoki asorat sifatida kuzatilganda bo'g'im ichiga xondroprotektorlar, yallig'lanishga qarshi nosteroid preparatlar elektroforez va massaj qo'llaniladi. Xondroprotektorlar bo'g'im tog'ay qavatidagi degenerativ jarayonlarni to'xtatib funktsional holatni tiklanishiga imkoniyat yaratadi. Lekin bizning kuzatuvimizdagi birorta bemorda to'la – to'kis tiklanish kuzatilmasdan faqat og'riq alomatining bartaraf etilishi kuzatildi. Shuning uchun xondroprotektorlar kasallikning xuruj qilish davrida bo'g'imning sinovial muhitida buzilishi ro'y berib bo'g'imning tog'ay qavatida harakat cheklanib qolganda boshqa dori vositalari bilan birga qo'llanilganda samaradorlik kuzatildi. Xondroprotektorlarning ta'sir doirasini ta'minlash va stimulyatsiyalash maqsadida xondroprotektiv samaradorligini stimullash usuli qo'llanildi. Biz Gialuron kislota preparatini bo'g'im ichiga yuborib qo'lladik. Preparat tog'ayli qavatda va sinovial suyuqlik tarkibida plazminogen aktivatorining ingibitori ko'rsatkichini kamaytiradi. Natijada sinovial suyuqlik yopishqoqligini oshiradi va siquvchi kuchlar ta'sirini yutadi.Mazkur preparat qo'llanilganda bemorlarda samaradorlik ya'ni bo'limda og'riqsiz davr 9-13 haftadan 6 oygacha uzayishi kuzatiladi. Mazkur preparatning bemorlar yoshiga ta'sirini kuzatmadik. Ya'ni preparatning yosh bemorlarda ham keksalarda ham davolash natijalariga farq kuzatilmaydi. Yaxshi bo'lib keksa bemorlarda in'ektsiya muolajasi qo'llaniladi.

Bugungi kunda osteoartrozni asosiy (bazis) davolash va amaliyotga joriyetishda qo'yidagi printsiplarga asoslanadi:

A) Butun kasallanish davomida davolash chora-tadbirlarni davom ettirish.

B) Kasallikni erta, boshlang'ich birinchi uch oyida bo'g'im og'rig'iga qarshi (antirevmatik) dori darmonlar qo'llash.

V) Dori preparatlarini "arrasimon" sxemada yoki navbatma-navbat ya'ni birin-ketin, yoxud kombinatsiyalashtirilgan qo'llash. Ikkilamchi xuruj holatlarini bartaraf etish uchun mazkur dori-darmonlarni qo'llash printsiplari kasallikni modifikatsiyalashtirilgan va nazorat qilinadigan preparatlar qo'llashni kengaytirish, klinik samaradorlik kirish davrini, ya'ni ta'sir qilish jarayonini boshlanish muddatini qisqartirish, ta'sir samaradorlik davrini uzaytirish, salbiy ta'sir xususiyat (asorat) larini kamaytirish, davolash natijalarini monitoringini ishonchli tarzda ta'minlashdan iborat.

Xulosa. Bugungi kunda osteoartrozni davolashda asosiy samarali vosita bemorlarni dispanser hisobga olib tibbiy kuzatuv hisoblanadi.Kasallikning remissiya – kompensatsiya davrida (og'riqsiz davr) bemorlar dinamik kuzatuv, sanatoriya sharoitida davolanish ya'ni profilaktik muolajalar qo'llash hisoblanadi.Subkompensatsiya (og'riq xuruj qilgan) davrda bemorlar har olti oyda klinik ko'rikdan o'tkazish, bir yilda bir bor ambulator davolash muolajalarini qo'llash tavsiya etiladi. Ayniqsa kasallik dekompensatsiya davrida statsionar sharoitda davolash yaxshi natijalar beradi.Kasallikni davolashning boshlang'ich davrida analьgetiklar (paratsetamol) tavsiya etish nisbatan samarali bo'lib, oshqozon – ichak yo'llarida kuzatiladigan noxush holatlar eng kam kuzatiladi. Lekin mazkur preparatning samaradorligini bemorlarda platsebo samaradorlik darajasini pastligini ta'kidlaydilar [2,3].

Bo'g'im ichiga qo'llaniladigan in'ektsiya ko'rinishida gialuron kislota samaradorligi yuqori bo'lib (kuzatuvimizda 69%-75%) yaqin ta'sir doirasi turli bemorlarda katta farq qilib kasallik darajasiga bog'liq ekani kuzatiladi.Ko'pgina mualliflar tizza bo'g'imi osteoartrozini davolash maqsadida tizza bo'g'imi ichiga kortikosteroidlar qo'llashni rad qiladilar. Chunki ular bo'g'im ichida osteonekroz va tog'aylar degeneratsiyasi jarayonini kuchaytiradi va davolashda samaradorlik kuzatilmaydi.Osteoartrozni patogenetik davolash usullaridan biri bo'g'im ichiga oksigenoterapiya bo'lib unversal usul hisoblanadi. Chunki mazkur usul biologik davolash usuli bo'lib, shu bilan birga postravmatik kontrakturalarni oldini olish maqsadida, sinovitlarda, periartritlarda va deformatsiyali osteoartrozda qo'llanilganda juda samarali natija beradi. Oksigenatsiya usuli juda oddiy bo'lib, juda ko'plab bemorlarda iqtisodiy xarajatlarsiz qo'llash imkoniyati mavjud, oilaviy va davlat miqyosida ham iqtisodiy jihatdan muhim ahamiyatga ega.

Used literature:

1. Каримов М.Ю., Толочко К.П., Маматкулов К.М.//Тизза бўғимининг олдинги соҳасида оғриқлари бўлган беморлар учун u.m. Kujala сўровномаси// O'zbekiston Tibbiyot jurnali - 2019 №2 стр 111-113. Тошкент.
2. Маматкулов К.М., Холхужаев Ф.И., Рахмонов Ш.Ш.//Пластика Передней Крестообразной Связки Сухожилиями Подколенных Сгибателей Или Сухожилием Длинной Малоберцовой Мышцы/ // The Journal Of Academic Research In Educational Sciences - Volume 2, Issue 2, 2021 – 1214-1219.
3. Синяченко О.В., Диагностики и лечение болезнее суставов. Издатель Засловский А.Ю. 2012, ЭЛБН-СПб, 2012, 559-стр.
4. Kraus Tanja, Heidari Nima, Švehlík Martin, Schneider Frank, Sperl Matthias & Linhart Wolfgang. Outcome of repaired unstable meniscal tears in children and adolescents Acta Orthopaedica, 2012, 83:3, 261-266.
5. Lyle N.J., Sampson M. A., barrett D.S., MRI of intermittent meniscal dislocation in the knee Departments of Radiology and Orthopaedics, The British Journal of Radiology, 82 (2009), 374–379.

6. Mamatkulov K.M., Xolxo'jayev F.I.//Arthroscopic restoration of the anterior cruciate ligament using the "All Inside" method with popliteal flexor tendons or long fibular muscle tendon// //Problems of biology and medicine. 2023№3 стр 150-156. Samarkand.
7. Mamatkulov K., Kholkhudjayev F.//Our experience of plastic surgery of the anterior cruciate ligament using the "all inside" method with the tendons of the popliteal flexors or the tendon of the long fibular muscle// Polish journal of science № 45, Vol 1, 2021 – 42-44. Poland.
8. Pace Verity, Adams Roger D, Tofts Louise, Munns Craig F and Nicholson Leslie L, Proprioceptive acuity into knee hypermobile range in children with Joint Hypermobility Syndrome , Pediatric Rheumatology 2014, 12- 408.
9. Rakhmanov Sh. Sh.// Comparison of Conservative and Surgical Treatment Methods for Lumbar Disc Herniation// American Journal of Bioscience and Clinical Integrity(2024) 40-45.
10. Raxmonov Sh.Sh./Tizza bo'g'imi old xochsimon boylam jarohatlarining artroskopik autoplastika usuli bilan tiklashda qo'llaniladigan "tugma" ning boshqa usullardan afzalligi// Journal of Healthcare and Life-Science Research Vol. 3, No. 11, 2024.55-58.

UO'K: 616-08-035

METABOLIK SINDROM BILAN OG'RIGAN BEMORLARNING STOMATOLOGIK HOLATI

Abduvakilov J.U., Zubaydullayeva M.A.
Samarqand davlat tibbiyot universiteti

Annotatsiya. MS bilan og'rigan bemorlarda og'iz bo'shlig'i holatini o'rganish og'iz bo'shlig'i shilliq qavati to'qimalari kasalliklarining yuqori tarqalishini va natijada stomatologik yordamga sezilarli ehtiyojni aniqladi [1,2]. So'nggi bir necha o'n yillar davomida tish kasalliklari patogenezi va patogen bakteriyalarning roli haqida ko'plab yangi ma'lumotlar olindi, bu esa yangi diagnostika va davolash usullarini keltirib chiqardi.

Kalit so'zlar: *metabolik sindrom, patologik yedirilish, klinik nuqson, arterial gipertenziya, giperlipidemiya, insulin qarshiligi.*

DENTAL STATE OF PATIENTS WITH METABOLIC SYNDROME

Abduvakilov J.U., Zubaydullayeva M.A.
Samarkand State Medical University

Annotation. Studying the condition of the oral cavity in patients with MS revealed a high prevalence of oral mucosal tissue diseases and, consequently, a significant need for dental care [1,2]. Over the past few decades, numerous new data have been obtained on the pathogenesis of dental diseases and the role of pathogenic bacteria, leading to the emergence of new diagnostic and treatment methods.

Keywords*: metabolic syndrome, pathological overeating, clinical defect, arterial hypertension, hyperlipidemia, insulin resistance.*

СТОМАТОЛОГИЧЕСКОЕ СОСТОЯНИЕ БОЛЬНЫХ С МЕТАБОЛИЧЕСКИМ СИНДРОМОМ

Абдувакилов Д.У., Зубайдуллаева М.А.
Самаркандский государственный медицинский университет

Аннотация. Изучение состояния полости рта у пациентов с МС выявило высокую распространенность заболеваний тканей слизистой оболочки полости рта и, как следствие, значительную потребность в стоматологической помощи [1,2]. За последние несколько десятилетий было получено множество новых данных о патогенезе стоматологических заболеваний и роли патогенных бактерий, что привело к появлению новых методов диагностики и лечения.

Ключевые слова: *метаболический синдром, патологическое ожирение, клинический дефект, артериальная гипертензия, гиперлипидемия, инсулинорезистентность.*

Kirish. Metabolik sindrom (MS) - butun dunyo bo'ylab jiddiy tibbiy-ijtimoiy muammo bo'lib, bemorda to'qimalarda insulin qarshiligi, giperinsulinemiya, glyukoza chidamlilik buzilishi, birlamchi arterial gipertenziya, dislipidemiya va giperlipidemiya, shuningdek qorin bo'shlig'idagi semirish, mikroalbuminuriya va giperurikemiya mavjudligi bilan tavsiflanadi [3].

Tadqiqotning maqsadi. Metabolik sindromli bemorlarning tish holatini o'rganish va metabolik kasalliklarning rolini baholash.

Tadqiqot materiallari va usullari.

Samarqand shahridagi viloyat stomatologiya poliklinikasida bir martalik ishlatiladigan stomatologik asboblarning standart to'plamidan foydalangan holda 135 bemorni epidemiologik istiqbolli tekshirish o'tkazildi. Tish holati ko'rsatkichlari maxsus kartaga kiritilgan.

Bemorlarni o'rganish bioetika qoidalariga muvofiq ixtiyoriy rozilik olgandan keyin amalga oshirildi. Rasmiylashtirilgan protokol JSSTning Xelsinki Deklaratsiyasi tamoyillariga muvofiq tuzilgan. Ixtiyoriy xabardor qilingan rozilik konsepsiyasiga muvofiq tekshirilganlarning barchasi tadqiqotning maqsad va vazifalari to'g'risida xabardor qilindi, shundan so'ng so'rovda ishtirok etish uchun xabardor qilingan rozilik shakli imzolandi. SamDTU axloqiy qo'mitasining qarori bilan tadqiqot dizayni ma'qullandi, uning me'yoriy hujjatlar va Qonunchilik talablariga muvofiqligi tasdiqlandi. Tadqiqot protokoliga quyidagilar kiradi: to'liq ism, yosh, jins, tish va gastroenterologik holat, laboratoriya natijalari.

45 yoshdan 65 yoshgacha bo'lgan 124 nafar bemor tekshirildi, ularning o'rtacha yoshi 52,5+2,67 yoshni tashkil etdi, ularning tarkibiy qismlari MS - insulin qarshiligi (IR), arterial gipertenziya (AG) va giperlipidemiya (GL)) SGP fonida rivojlangan. Tekshirilgan bemorlar MS ning yetakchi komponentiga taqsimlandi. Klinik jihatdan, bu guruh yiliga ikki-uch marta kasallikning kuchayishi va asosiy kasallik tufayli nogironlikning chastotasi bilan ajralib turardi.

Olingan natijalarni baholashda materialni variatsion statistikaning umumiy qabul qilingan usullari bilan statistik qayta ishlash amalga oshirildi.

Variatsiya seriyasini tavsiflash uchun statistik ko'rsatkichlardan foydalanilgan: o'rtacha arifmetik, o'rtacha kvadrat og'ish, o'rtacha arifmetik xato, talabaning t-mezoni, chiziqli korrelyatsiya koeffitsienti.

Korrelyatsion tahlil uchun Spirmen va Pirson usullari ishlatilgan.

Matematik ma'lumotlarni qayta ishlash "Windows" uchun "MicrosoftExcel"dasturi yordamida amalga oshirildi.

Natijalar va ularni muhokama qilish

Stomatologik tekshiruvi ma'lumotlarini tahlil qilish shuni ko'rsatdiki, bemorlarning 100 foizi stomatologik davolanishga muhtoj. Ushbu bemorlarga terapevtik tish davolash (15,2%), protezlash (27,2%) va tishlarni olib tashlash (14,7%) kerak. Parodontologik yordamga muhtojlik darajasi sezilarli darajada (13,2%) va professional gigiyena zarurati eng yuqori (45,8%). Ma'lumotlar 1-jadvalda keltirilgan.

1-jadval

Metabolik sindromli bemorlarda stomatologik yordamga bo'lgan ehtiyojni jinsi va yoshiga qarab taqsimlash (%)

Jinsi va yoshiga ko'ra guruhlar	Stomatologik yordamga ehtiyoj				
	Terapevtik	Jarrohlik	Parodontologik	Ortopedik	Profilaktika
19-24	30,0	11,3	1,4	4,5	52,8
25-34	15,0	14,9	5,2	8,3	58,4
35-44	17,6	16,3	7,3	8Д	50,5
45-54	13,9	19,1	25,4	19,7	21,8
55-64	11,3	19,8	22,6	46,2	-

65 va undan katta	3,4	7,4	11,0	78,2	-
Jami	15,2	14,7	13,2	27,2	45,8

Tekshiruvdan so'ng bemorlarga stomatologiya klinikasida davolanish taklif qilindi. Ushbu bemorlarning klinikada paydo bo'lishi muayyan qiyinchiliklarni keltirib chiqardi

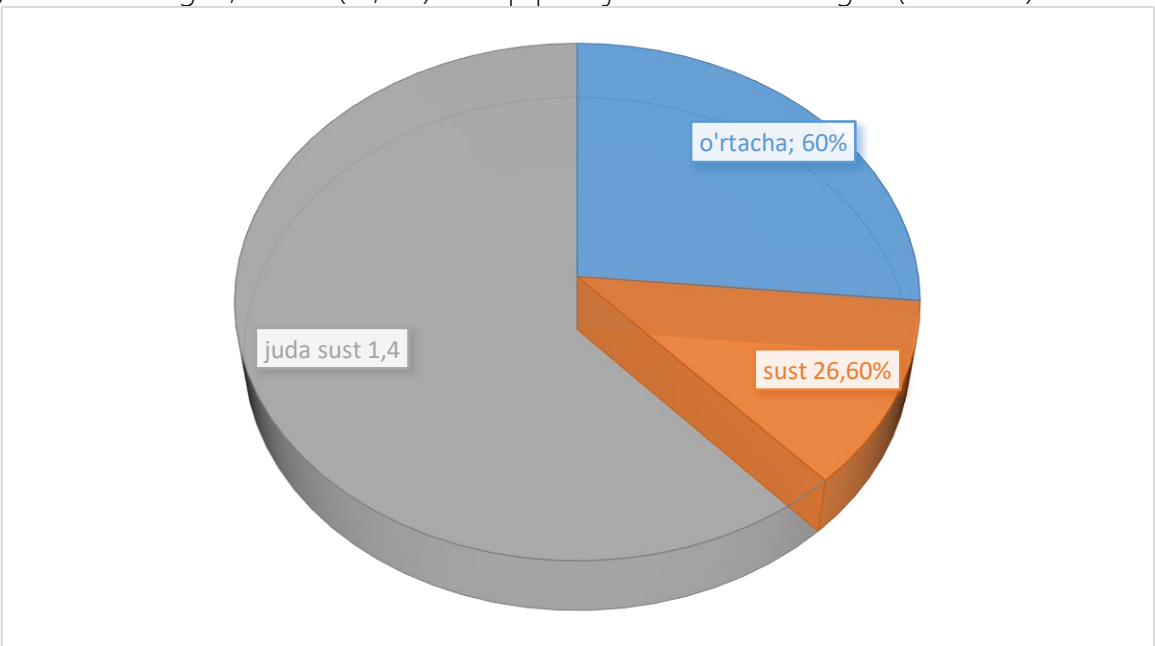
* kam motivatsiya
* ijtimoiy ta'minotning past darajasi (moddiy yetishmovchilik)
* uzoq masofalarga harakatlanishning murakkabligi
* hamrohlik qiladigan kishiga ehtiyoj.

Barcha bemorlar tor mutaxassislar bilan kelishilgan holda tekshiruvdan o'tdilar.

MS bilan og'rigan bemorlarning og'iz bo'shlig'i shilliq qavati to'qimalari va organlarini vizual tekshirishda lab qizil hoshiyasi och pushti rangi aniqlandi. Bemorlarning 50 foizida (15 kishi) xeylit belgilari bor edi. 20 ta bemorda lab epiteliysining tashqi yuzasida qipiqlanish va yoriqlar borligi aniqlandi. Og'iz bo'shlig'ining shilliq qavati 100% hollarda rangpar rang bilan ajralib turardi. Biroq, 20 ta bemorda (66,7%) rangparlik juda aniq bo'lgan va 33,3% hollarda (10 ta bemor) rangparlik siyanotik rang bilan birlashtirilgan [4,5].

19 nafar bemorda (63,3%) tilning rangi och pushti rangga, 11 nafar bemorda (36,7%) esa yorqin pushti rangga ega edi. Tilning ildizida kichik oq rangli karash 10 bemorda (33,3%), tilning ildizi va tanasida 15 (50%) bemorda aniqlangan, 5 bemorda (16,7%) tilning ipsimon so'rg'ichlari tekislangan. Bemorlarning 50 foizida (15 kishi) tilning burmasimon shakli aniqlangan. Tilning uchida yonish hissi MS bilan kasallangan 4 (13,3%) bemor qayd etilgan. 10 nafar (33,3%) bemor ta'm sezish buzilishiga ishora qildi.

Ko'pgina bemorlarda (18 kishi — 60%) shilliq qavat o'rta darajada namlangan, 8 kishi (26,6%) kam namlangan, 4 kishi (13,4%) shilliq qavat juda kam namlangan (rasm. 3.6).



Rasm. 1. MS bilan og'rigan bemorlarda og'iz bo'shlig'i shilliq qavatining namlik darajasi.

Shuningdek, anamnezdan, 21 nafar (70%) bemorda og'iz bo'shlig'ida quruqlik hissi davriy ekanligi aniqlandi. Asosan, og'iz bo'shlig'ining quruq shilliq pardalari gemodializdan keyingi ikkinchi kuni ertalab bemorlarda namoyon bo'ldi. Bunday holda, bemorning 83,3% uremik galitoz borligidan shikoyat qildi. Shu bilan birga, suyuqlik iste'molini cheklash tavsiya etilgan bemorlar og'iz bo'shlig'ini suv bilan yuvish orqali hid va quruqlikni yo'q qilishga harakat qilindi [6].

Surunkali buyrak yetishmovchiligining so'nggi bosqichida bo'lgan barcha bemorlarda regionar limfa tugunlari normal chegaralarda edi.

19 nafar bemorda milk so’rg’ichlari atrofiyasi va silliqligi aniqlandi (35%). Chuqurligi 6 mm va undan ko’p bo'lgan chuqur parodontal cho'ntaklarning mavjudligi, ayniqsa, tishlarning frontal guruhining til yuzasi hududida ko'proq milkusti va milk osti tish cho’kmalari mavjud. Shuni ta'kidlash kerakki, patologik milk cho’ntaklarida yiringli ajralmalar aniqlanmadi.

Obyektiv ko’rikda, MS bilan og'rigan bemorlarning 27 nafari (90%) da parodontal to'qimalarda distrofik jarayonlar ustunlik qildi, bu yuqori va pastki jag'larning alveolyar o’simtasining balandligi pasayishi, tishlar ildizlari ochilib qolishi va 2-3 darajali tishlarning qimirlashi bilan namoyon bo'ladi. Mavjud alomatlarning asosiy sabablari ikkilamchi giperparatiroidizm fonida yuzaga keladigan ko'p miqdordagi qattiq tish cho’kmalari va osteoporoz edi.

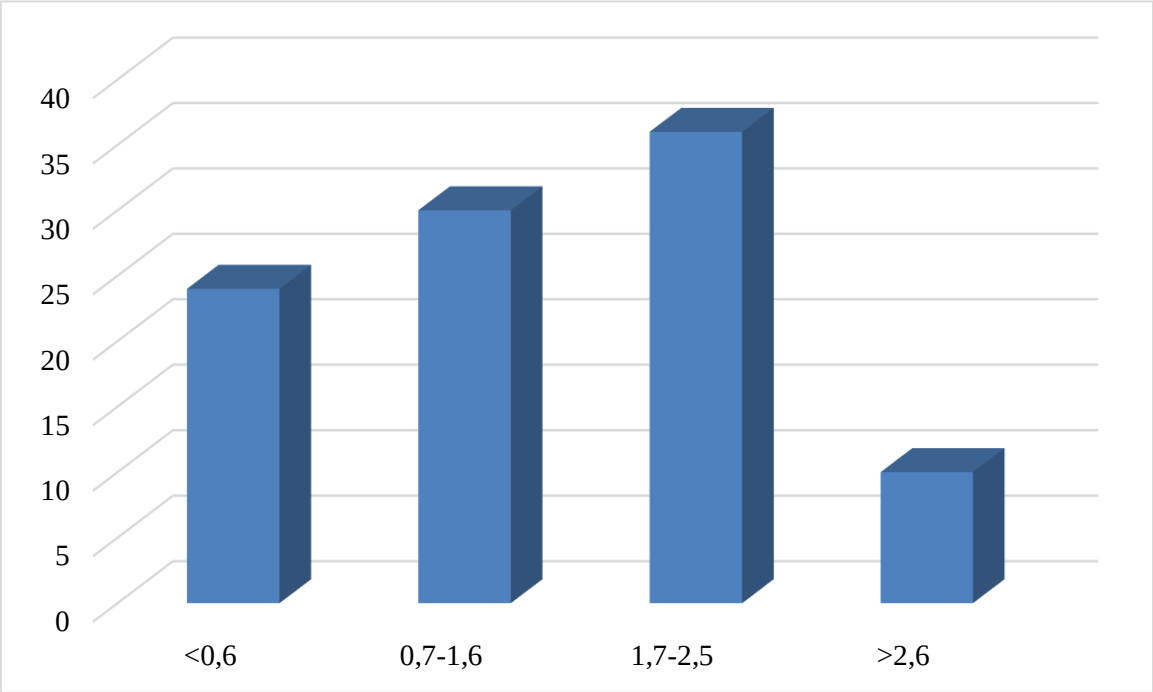
MS bilan og'rigan bemorlarda parodontal to'qimalarning rentgenologik tekshiruvi shuni ko'rsatdiki, jag'larning alveolyar o’simtalarida gorizontal va vertikal rezorptiv jarayonlar ustunlik qiladi, ko'pincha alveolyar qismning kompakt plastinkasini yo'q qilish bilan osteodistrofik xarakterga ega. Shuni ta'kidlash kerakki, bu bemorlarda distrofik o'zgarishlar kompakt plastinka, tishlararo to’siqlar va jag'ning kontrafugasi sohasida namoyon bo'ladi.

17 bemorda (56,6%) qattiq tish to'qimalarining tishlarning bo'yin qismida bir nechta karioz va karioz bo'lmagan shikastlanishlar aniqlangan. Klinik nuqson, asosan yuqori va pastki jag'ning frontal tishlari sohasida aniqlangan.

Tadqiqotga kiritilgan MS bilan og'rigan bemorlarning deyarli 100 foizida tish tojining yedirilishi ko'paygan, bemorlarning uchdan birida tish emalining ko’kish-kulrang rangi bor edi.

Tishlarning patologik yedirilishining tarqalishi yoshga qarab asta — sekin o'sib boradi: 19-24 yoshda - 14,8%, 45-54 yoshda-24,8% ($p<0,05$). Ushbu patologiyaning eng yuqori chastotasi (45,1%) 55-64 yosh guruhida qayd etilgan. 65 va undan katta yoshdagi katta yosh guruhlarida tishlarning yedirilish darajasi asta-sekin 15,3% gacha kamayadi. Erkaklarda ham, ayollarda ham ushbu patologiyaning namoyon bo'lish chastotasida biz farq ko’rmadik (p \ u003e 0,05).

Olingan ma'lumotlarga ko'ra, tekshirilganlar guruhidagi Green-Vermillion gigiyena indeksi 0,1 dan 4,0 gacha o'zgarib, o'rtacha 2,50+1,10 ni tashkil etdi. Shu bilan birga, tekshirilganlarning 10 foizida og'iz bo'shlig'ining yaxshi gigiyenik holati qayd etilgan (0,6 balldan kam). Tekshirilganlarning 30 foizida gigiyena indeksi bu 0,7 dan 1,6 ballgacha bo'lgan, yaxshi og'iz gigiyenasi holati hisoblanadi. Shu bilan birga, tekshirilganlarning 36 foizida gigiyena indeksi 1,7 dan 2,5 ballgacha bo'lgan, bu esa og'iz gigiyenasining yomonligiga mos keladi. Bemorlarning 24% GVK-da 2,6 dan ortiq ball bor edi, bu og'iz bo'shlig'ining juda yomon gigiyenik holatini ko'rsatadi.



Rasm 2. MS bilan og'rigan bemorlarda gigiyena indeksining ko'rsatkichlari

Green-Vermillion gigiyena indeksi 0,8 dan 1,23 gacha bo'lgan nazorat guruhini tashkil etuvchi shaxslarda o'rtacha 1,21+0,20 ni tashkil etdi, bu MS bemorlariga qaraganda ancha past (p<0,001).

Shunday qilib, MS bilan og'rigan bemorlarning gigiyenik holatini tahlil qilish shuni ko'rsatdiki, ularning aksariyati og'iz bo'shlig'i professional gigiyenasi va shaxsiy gigiyena bo'yicha mashg'ulotlarga muhtoj.

MS bilan og'rigan bemorlarda qattiq tish to'qimalarining holatini tekshirishda karies bilan zararlangan tishlar soni o dan 13 gacha bo'lganligi aniqlandi. Erta plombalangan tishlar soni 0 dan 14 gacha va olib tashlangan tishlar soni(to'liq ikkilamchi adentiya bilan kasallanganlar bundan mustasno) 0 dan 17 gacha bo'lgan. Faqat bitta bemorda tekshirilganlar orasida KPO indeksi 0,7 ballni tashkil etdi. O'tkir tekshiruvlarda, agar karies bilan zararlangan tishlari aniqlanmagan bo'lsa ham, ko'p miqdordagi plombalangan tishlar (5 dan 14 gacha) yoki olib tashlangan tishlar (3 dan 14 gacha) aniqlandi. Shunday qilib, o'rganilgan guruhdagi KPO indeksi 0 dan 25 gacha o'zgarib turdi, bu o'rtacha 15,2+6,30 ni tashkil etdi.

Nazorat guruhidagi odamlarda tish qatorlarini tekshirish shuni ko'rsatdiki, og'izda mavjud bo'lgan tishlar soni 20 dan 32 gacha. Karies bilan zararlangan tishlarning soni 1 dan 12 gacha bo'lgan. Plombalangan tishlarning miqdori 1 dan 10 gacha bo'lgan va olib tashlanganlarning soni o dan 10 gacha bo'lgan. Shunday qilib, KPO indeksi o'rganilgan guruhda o dan 25 gacha o'zgarib, o'rtacha 7,91+0,10 ni tashkil etdi.

Shunday qilib, MS bilan og'rigan bemorlarda KPO indeksi buyrak patologiyasi bo'lmagan nazorat guruhiga qaraganda ancha yuqori(p<0,001).

MS bilan og'rigan bemorlarda PMA indeksining qiymatlari 2,1 dan 83,3% gacha o'zgarib,o'rtacha 29,0+6,00% ni tashkil etdi. Shuni ta'kidlash kerakki, PMA indeksi bizning bemorlarimizda keng tarqalgan bo'lib, milk so'rg'ichlari yoki marginal tish milkining yallig'lanishi aniqlanmagan. Aksincha, shilliq qavat biroz shishganligi hisobiga xira rangga ega va zich.

Parodontagi distrofik o'zgarishlarning klinik jihatdan aniq shakllari, MS bilan og'rigan bemorlarda 25% dan 84,3% gacha holatlarda kuzatiladi. Shunday qilib, 35-44 yoshdagi guruhda

parodontal distrofiya ko'proq uchraydi va 45-54 yosh va undan katta yoshdagi guruhda - erkaklarda ham, ayollarda ham. Parodontitning rivojlanish chastotasi 54-65 yosh guruhida maksimal darajaga yetadi. 65 yoshdan boshlab va ushbu patologiyaning yuqoriligi tishlarning yo'qotilishi tufayli kamayadi.

2-jadval

MS bilan og'rigan bemorlarda og'iz bo'shlig'ining asosiy stomatologik indekslari ko'rsatkichlari

Ko'rsatgichlar	Asosiy guruh (MS bor bo'lgan) (b=135)	Nazorat guruhi (MS bo'lmagan bemorlar) (b=40)
Tishlar soni	23±6	28±2*
KPO	15,2±6,30	7,91±3,10*
Gr-VK	2,50±1,10	1,21±0,20*
PMA (%)	29,0± 6,00	1,10±0,01*
PBI (%)	24,0±2,00	0*
Tishlarning qimirlashi	1,61±0,42	0*
Epiteliy to'qimasining yo'qolishi	1,20±0,90	0*

Milklarning qonash darajasi indeksi (PBI) o'rtacha 24,0+2,00 ni tashkil etdi 0 dan 3 gacha bo'lgan nisbatlarda. Tekshirilayotgan biron bir odamda 4 ball qiymatiga mos keladigan zondlash paytida milkning aniq qon ketishi aniqlanmagan. Shu bilan birga, bemorlarning 90 foizi tishlarni tozalash paytida tishlar qonashi qayd etishgan.

Tishlarning qimirlash darajasi tekshirilganlarning 80 foizida aniqlangan. Shu bilan birga, biz 3-darajali tishlarning qimirlashini aniqlamadik. Guruh bo'yicha o'rtacha ko'rsatkich 1,61+0,42 ni tashkil etdi. Shu bilan birga, bir qator bemorlar tishlari tushib ketgani haqida xabar berishdi, bemorlar esa yo'qolgan tishlarning oldingi qimirlashiga e'tibor bermaganlar.

Turli darajadagi epiteliy birikmasining yo'qolishi tekshirilganlarning yarmida sezildi va umuman olganda, ko'rsatkichlar 1 dan 3 mm gacha o'zgarib turadigan guruhda 1,2 mm ni tashkil etdi.

3.3-jadvaldagi ma'lumotlardan ko'rinib turibdiki., nazorat guruhini tashkil etgan MS bemorlari o'rtasidagi tekshirilgan indekslarning barcha ko'rsatkichlari sezilarli darajada oshirildi ($p<0,001$).

MS bilan og'rigan bemorlarda tadqiqot natijalarini o'rganayotganda ortopedik stomatologik yordamga bo'lgan ehtiyojning yoshga bog'liqligi aniqlandi. 19-34 yoshda vortopedik stomatologik yordamga bo'lgan ehtiyoj, tekshirilganlar orasidakontingent, 6,4%, 35 yoshdan 54 yoshgacha — 27,8% ni tashkil etdi va 65,8% ga etadi55 yosh va undan katta yoshdagi guruh. Shu bilan birga, erkaklarning ortopedik stomatologik yordamga bo'lgan ehtiyoji 45 yoshgacha ayollar bilan taqqoslashdan yuqori va 55 yoshdan boshlab bu ehtiyoj ayollarda o'zgara boshlaydi. Tish tishi tekshiruvi shuni ko'rsatdiki, bemorlarning 16% to'liq ikkilamchi adentiyaga ega, 8% esa jag'lardan birida tishlarning to'liq yo'qligiga ega. Bemorlarning qolgan 76 foizida og'izda mavjud bo'lgan tishlar soni 2 dan 31 gacha bo'lib,o'rtacha 23+6 ni tashkil qiladi [7].

Ortopedik davolanishga muhtoj bo'lgan MS bilan kasallangan tish kasalliklarining tarqalishini o'rganish shuni ko'rsatdiki, birinchi navbatda tishlarning qisman yo'qligi (35,4-8%),

ikkinchisida parodontal kasallik (44,1%), uchinchisida-qattiq tish to'qimalarining patologiyalari (20,5%) turadi.

Olingan natijalarni tahlil qilish shuni ko'rsatdiki, MS bilan og'rigan bemorlarning 1,3% tish protezlari bilan ta'minlangan, qisman protez bilan ta'minlangan, qo'shimcha protezlarga ega bo'lganlar-21,6%, lekin ularga ega bo'lmaganlar 77,1% ni tashkil qiladi.

MS bilan og'rigan bemorlarning turli xil ortopedik tuzilmalarga bo'lgan ehtiyojining o'zgarishi dinamikasi shundan iboratki, 20-29 yosh guruhida bitta qoplamaga bo'lgan ehtiyoj ko'proq 41,0% ni tashkil qiladi, ammo shu bilan birga 23,3% allaqachon ko'prikli protezlar bilan davolanishga muhtoj va 26,1% qisman olinadigan protezlarga muhtoj.

Yoshga qarab tishlarning soni va qimirlash darajasi oshadi. Yosh guruh 35-44 yoshda, bitta qoplamaga bo'lgan ehtiyoj kamayadi va 50,7% ni tashkil qiladi. Katta yoshdagi guruhlarda tishlar sonining kamayishi tufayli bu ko'rsatkich asta-sekin kamayadi. Shunday qilib, 65 yosh va undan katta yoshdagi guruh bu ko'rsatkich 4,7% ni tashkil qiladi.

Ushbu bemorlarning ko'priksimon protezlarga bo'lgan ehtiyoji 19-24 yosh guruhida 19,2% ga oshadi va 45-54 yosh guruhida (36,2%) maksimal darajaga yetadi ($p<0,01$). Ushbu fakt yo'qotilgan tishlar sonining ko'payishi va tish qatorlaridagi nuqsonlarning paydo bo'lishi bilan izohlanadi, ularni tiklash ortopedik tuzilmalar, masalan, kombinatsiyalangan protezlar va qisman olinadigan protezlar (jadval. 3).

3-jadval

Ortopedik stomatologik yordamga muhtoj bo'lgan MS bilan og'rigan bemorlarni yoshga qarab ortopedik protezlarning asosiy turlari bo'yicha taqsimlash (%).

Yoshi	Bitta qoplama	Ko'priksimon protezlar	Qisman olinadigan protezlar	To'liq olinadigan protezlar
19-24	82,1	19,2	2,1	-
25-34	74,8	21,4	3,7	-
35-44	50,7	28,0	21,2	-
45-54	27,2	36,2	28,1	8,3
55-64	6,7	25,2	42,1	25,9
65 va undan katta	4,7	9,9	59,7	25,5
Jami	41,0	23,3	26,1	19,9

MS bilan og'rigan bemorlarda qisman olinadigan tuzilmalarga ehtiyoj 19-24 yoshda kuzatiladi va 2,1% ni tashkil qiladi. Qisman olinadigan tuzilmalarga bo'lgan ehtiyoj 55-64 yosh guruhida (42,1%) oshadi va 65 yosh va undan katta yoshdagi guruhda maksimal qiymatiga (59,7%) etadi. Bizning ma'lumotlarimizga ko'ra, bitta yoki bitta jag'da to'liq olinadigan protezlarga ehtiyoj 45-54 yosh guruhida 8,3% ni tashkil qiladi. Yoshning oshishi bilan bu ko'rsatkich 55 yoshdan katta bo'lganida ($p<0,01$) 51,4% gacha ko'tariladi va maksimal ko'rsatkichlarga yetadi [8,9].

To'liq olinadigan protezlarga bo'lgan ehtiyojda erkaklar va ayollarda sezilarli farqlar aniqlanmagan.

Shunday qilib, o'tkazilgan tadqiqot shuni ko'rsatdiki, tekshirilganlarning 27,2 foizi ortopedik davolanishga muhtoj, odamlarning 41,0 foizi bitta qoplamaga, 23,3 foizi ko'priksimon protezlarga, 26,1 foizi qisman olinadigan protezlarga, bemorlarning 19,9 foizi to'liq olinadigan protezlarga muhtoj [10].

Tekshiruvdan so'ng tibbiy yozuvlarni tahlil qilish shuni ko'rsatdiki, MS bilan og'rigan bemorlar orasida terapevtik yordamga ehtiyoj darajasi yoshga bog'liq. Uning eng yuqori darajasi 19-34 yoshda qayd etilgan-81,2% va yoshning oshishi bilan tishlarning katta qismi yo'qolganligi sababli davolanishga muhtoj bo'lganlarning foizi doimiy ravishda kamayadi.

Xulosalar. Shunday qilib, 19-24 yosh guruhida terapevtik yordamga muhtojlarning ulushi eng yuqori bo'lib, 44,2% ni tashkil etdi. Katta yosh toifalarida yo'qotilgan tishlar sonining ko'payishi tufayli jarrohlik va ortopedik davolanishga ehtiyoj ortadi. Shuni ta'kidlash kerakki, 65 yosh va undan katta yoshdagi terapevtik yordamga muhtoj bo'lganlar atigi 5,0 foizni tashkil etdi.

35 yoshdan oshgan MS bilan og'rigan bemorlarda terapevtik yordamga murojaat qilishning pasayishi fonida parodontologik va jarrohlik yordamga murojaat qilish darajasi oshadi. Jarrohlik yordamiga bo'lgan ehtiyojning maksimal ko'rsatkichlari 34-45 yosh toifasida va 45,0% ni tashkil qiladi, eng kam ehtiyoj 19-24 yoshdagi bemorlarda (1,8%) va 65 va undan katta yoshdagi guruhlarda (2,1%) aniqlanadi.

45-54 yoshdagi parodontologik yordamga muhtojlik darajasi 19,4%, 54-65 yosh 24,0%, 65 va undan katta yoshdagilar 9,1% va 19-24 yoshdagi MS bemorlarida eng kam ehtiyoj 2,5% ni tashkil qiladi.

Foydalanilgan adabiyotlar:

1. Абдувакилов Ж. У., Зубайдуллаева М. А. Стоматологические аспекты симптомов метаболического синдрома //ScientificJournalOfMedicalScienceAndBiology. – 2024. – Т. 2. – №. 2. – С. 113-118.
2. Абдувакилов Ж.У., Ризаев Ж. А. Особенности течения воспалительных заболеваний пародонта при метаболическом синдроме //Вісник проблем біології і медицини. – 2018. – Т. 1. – №. 2 (144). – С. 353-355.
3. Абдувакилов Ж., Ризаев Ж. Биохимические маркеры соединительной ткани у больных хроническим воспалительным пародонтитом на фоне метаболического синдрома //Stomatologiya. – 2018. – Т. 1. – №. 1 (70). – С. 11-14.
4. Олейник О. И., Вусатая Е. В., Попова В. С. Комплексный подход к лечению ранних форм воспалительных заболеваний пародонта // Молодой ученый. – 2015. – № 5(85). – С. 75–78.
5. Романенко И.Г., Крючков Д.Ю. Генерализованный пародонтит и метаболический синдром. Единство патогенетических механизмов развития //Крымский терапевтический журнал.-2011.-№1.-С.60-66.
6. Старикова И. В. Биохимические и иммунологические показатели крови у больных хроническим генерализованным пародонтитом на фоне метаболического синдрома / И. В. Старикова, А. Н. Попова, С. В. Крайнов, Е. М. Чаплиева // Фундаментальные исследования. — 2014. — № 10. — С. 973—977.
7. Сычева Ю.А., Горбачева И.А., Орехова Л.Ю., Григорьева Л. Роль нарушения региональной микроциркуляции и метаболических нарушений в патогенезе гипертонической болезни и воспалительных заболеваний пародонта//Пародонтология.-2014.-№2.-С.32-43.
8. Abduvakilov J. U. et al. Assessment of whether patients with metabolic syndrome need orthopedic dental care //Journal of Modern Educational Achievements. – 2023. – Т. 10. – №. 1. – С. 89-95.

9. Abduvakilov J. U. et al. The state of dental status of patients with metabolic syndrome //Journal of Modern Educational Achievements. – 2023. – T. 10. – №. 1. – C. 96-103.
10. Abduvakilov J. U. et al. METABOLIC SYNDROME IN DENTAL PRACTICE //Journal of Modern Educational Achievements. – 2023. – T. 10. – №. 1. – C. 77-88.

UDC: 616-08-035

OPTIMIZATION OF TREATMENT WITH MEDICINAL PLANTS OF PATIENTS WITH SEVERE FORMS ULCERATIVE COLITIS

[1]Askarov I.R., [2]Kodirov Kh. N.
[1]Andijan State University
[2]Andijan State Medical Institute

Annotation. This article provides information on the importance of dietary supplements in traditional medicine, and on the biological significance of medicinal plants used as dietary supplements for the treatment of ulcerative colitis, hypericum, achillea millefolium, plantago, calendula officinalis, inula helenium and matricaria, chemical composition and micro-and macroelements, as well as the mechanism of action of these plants on the colon wall and their discussion.

Keywords: *ulcerative colitis, microelement, macroelement, shypericum, achillea millefolium, plantago, calendula officinalis, inula helenium, matricaria.*

OG'IR SHAKLLI YARALI KOLIT BILAN OG'RIGAN BEMORLARNING DORIVOR O'SIMLIKLARI BILAN DAVOLASHNI OPTIMALLASHTIRISH

[1]Askarov I.R., [2]Kodirov X.N.
[1]Andijon davlat universiteti
[2]Andijon davlat tibbiyot instituti

Annotatsiya. Ushbu maqola biologik faol qo'shimchalarning qanchalik xalq tabobatidagi muhim o'rni va biologik faol qo'shimchalarning yarali kolit davolashda qo'llaniladigan shifobaxsh o'simliklarning ya'ni, dalachoy, zubturum, tirnoqgul va andiz, kimyoviy tarkibi va mikro- va makroelementlarining ahamiyati, shuningdek, ushbu o'simliklar yo'g'on ichak devoriga ta'siri mexanizimi va ularning muhokamasi to'g'risida ma'lumotlar keltirilgan.

Kalit so'zlar: *yarali kolit, makroelement, mikroelement, dalachoy,bo'ymadaron, zubturum, tirnoqgul, andiz, moychechak.*

ОПТИМИЗАЦИЯ ЛЕЧЕНИЯ ЛЕКАРСТВЕННЫМИ РАСТЕНИЯМИ ПАЦИЕНТОВ С ТЯЖЕЛЫМИ ФОРМАМИ ЯЗВЕННОГО КОЛИТА

[1]Аскаров И.Р., [2]Кодиров Х.Н.
[1]Андижанский государственный университет
[2]Андижанский государственный медицинский институт

Аннотация. В этой статье представлена информация о том, насколько важна роль биологически активных добавок в народной медицине, и о биологическом значении лекарственных растений, используемых биологически активных добавок для лечения язвенного колита, а именно, зверобой, тысячелистник, подорожник, календула, девясил и ромашка.химическом составе и микро-и макроэлементы, а также о механизме действия этих растений на стенку толстой кишки и их обсуждении.

Ключевые слова: *язвенный колит, микролемент, макроэлемент, зверобой, тысячелистник, подорожник, календула, девясил, ромашка.*

Ulcerative colitis (UC) and its complications are one of the most difficult problems in coloproctology, with an obvious tendency to increase detectionrates. In the structure of diseases of the digestive system, the prevalence of ulcerative colitis is significantly inferior to other intestinal

diseases, but in terms of the severity of the course, the frequency of complications leading to disability, it occupies one of the first places worldwide. According to the World Health Organization, the incidence of ulcerative colitis is 50-80 people per 100,000 population, with a prevalence of 505 cases per 100,000 population. The economic and social significance of the problem is dueto the fact that people of working age mainly suffer from UC [5].

Despite conflicting data on the pathological influence of microorganisms on the causes of ulcerative colitis, their role as a trigger that supports the inflammatory process is not in doubt. Currently, the role of intestinal microflora in the pathogenesis of the disease and the development of complications has been proven. According to the literature, there is no consensus on prescribing antibacterial drugs to patients with severe UC. Some authors do not include them in the treatment regimens of the disease

Objective : to improve the results of diagnostics and treatment of patients with severe forms of ulcerative colitis by targeted antibacterial therapy selected based on the results of microbiological examination of colon wall biopsies [9].

Scientific novelty For thefirst time, a method for collecting biopsy material for the microbiological diagnosis of ulcerative colitis was developed and introduced into clinical practice. A container for transporting and homogenizing biopsy material for microbiological studies under isothermal conditions was created and introduced into clinical practice. Software has been developed and implemented in clinical practice that allows patients with impaired gastrointestinal function to independently assess their condition and conduct dynamic monitoring of the course of the disease. The immediate and long-term results of treatment of patients with severe ulcerative colitis with left-sided and total colon damage were evaluated from the standpoint of evidence-based medicine[4].

Examination methods InCE, patients were examined on admission to the hospital within the standard framework of medical care. Clinicalo-, laboratory, endoscopic, morphological, microbiological, and radiological studies were performed. The general clinical study of patients included the collection of complaints, anamnesis, identification of the main and general symptoms of ulcerative colitis, and daily measurement of body temperature. The main manifestations of the disease included frequent loose stools, more than 6 times, with an admixture of blood, mucus, false urge to defecate, tenesmus, night defecation. General symptoms were characterized by weakness, weight loss, and fever. Extra-intestinal manifestations included joint lesions (arthralgia, arthritis), skin manifestations in the form of erythema nodosum, pyoderma, stomatitis, sclerosing cholangitis. A physical examination was performed, including examination of the perianal area, finger examination of the rectum. All patients underwent laboratory tests at admission, including general clinical, biochemical blood and urine tests, and a coagulogram. Changes in laboratory parameters are not specific for ulcerative colitis. In the blood test, anemia, leukocytosis, and thrombocytopenia can be noted. During the biochemical study, attention was paid to the indicators of total protein, CRP, alkaline phosphatase and aminotransferases (ALAT, ASAT)[7.12]. Deviations in the clinical urinalysis were rare, mainly in the presence of concomitant pathology. Endoscopic examination is the main method for diagnosing UC. It was performed in all patients on the day of admission, or within 2-3 days after bowel preparation and 1 month after the start of treatment in non-operated patients [11]. All patients with a severe form of ulcerative colitis and the maximum degree of activity of the process, from the main and control groups, respectively, were admitted to the hospital with only a rectoromanoscopy on the RE – VS device.– 2,8/20 – Quartz (Uzbekistan) with a fiber light guide and an obturator with a biopsy channel, due to the

possibility of perforation of deep ulcerative defects the mucous membrane of the large intestine[4.6].

Hypericum, plantago, calendula officinalis and inula heleniumgrass were among the therapeutic agents for ulcerative colitis. hypericum, plantago, calendula officinalis and inula heleniumare used as 1st-line medications for y mild and moderate forms of the disease to induce and maintain remission in patients with ulcerative colitis. The mechanism of action hypericum, plantago, calendula officinalis and inula helenium inhibits inflammatory mediators (peanut acid and pro-inflammatory cytokines), which leads to inflammation of the colon mucosa itself is restored., aminosalicylates have a versatile effect on the synthesis of arachidonic acid metabolites[2].

Thus, the plants hypericum, plantago, calendula officinalis and inula helenium inhibit the production of prostaglandins. Prostaglandins provide the same protective function of the intestinal mucosa as the gastric mucosa in gastric ulcers. Their lack reduces the protective functions of the mucous membrane[1].

1. Pathways of arachidonic acid metabolism and points of application of hydroperoxyicosatetraenoic acids, leukotrienes, prostaglandins, thromboxanes, prostacyclines points of application of drugs IL-1 IL-6 TNF-a IL-2 ;

2. Scheme of intercellular interactions in the lesion and the point of application of drugs for T-lymphocytes, interferon, the enzyme 5-lipoxygenase, the action of which leads to the formation of peroxide and hydroperoxide of fatty acids leukotrienes. The latter, primarily leukotriene, play a key role in the development of inflammation [8]. 1) hypericum, plantago, calendula officinalis and inula heleniumalso inhibits the synthesis of pro-inflammatory cytokines of macrophage origin: interleukins - IL-1 IL-6 TNF-a IL-2 tumor necrosis factor - (TNF) production of antibodies with cytokines, b-lympho, neutralizes free oxygen radicals.

Table 1

Macro- and microelements of medicinal plants

Name of macro-and microelements		Withobsession of elements in 100 g of green mass (mg)					
		Achillea millefolium	Hypericum	Plantago	Inula heleniu m	Calendula officinalis	Matricaria
Zinc	Zn	3.48	0.71	0.91	0.39	3.78	2.06
Selenium	Se	80	5	4.5	364	420	5.48
Ferrum	Fe	8.20	0.11	6.07	0.4	8.1	3
Manganese	Mn	84.3	2.2	1.21	1.8	3,861	1.37
Copper	Su	155.33	0.34	144	0.08	2,655.655	0.49
Potassium	K	3070	168	552	2500	3780	187
Calcium	Ca	1090	7.3	186	100	900	28
Magnesium	Mg	116	0.25	36	750	270	99
Sodium	Na	80.09	0.18	59	75.4	405	7
Sulfur	S	23.7	0.18	87	127	153	38
Phosphorus	P	43	48	50	150	423	95

As can be seen from the table above, this plant has a relatively high content of calcium, potassium, magnesium, phosphorus, selenium and copper, which provides replenishment of the elements necessary for the human body.

Hypericum, plantago, calendula officinalis and inula helenium prevent the absorption of medicinal plants in the jejunum and actually serve as carriers of hypericum, plantago, calendula

officinalis and inula helenium in the colon. Hypericum, plantago, calendula officinalis and inula heleniumare broken down in the colon under the action of bacterial enzymes (azoreductase), and the released ones have an anti-inflammatory effect by blocking the synthesis of mediators in the colon mucosa [3].

Only 60-70%of hypericum, plantago, calendula officinalis and inula helenium are absorbed from the colon. Therefore , the therapeutic dose is prescribed until clinical and endoscopic remission is achieved (within 4-8 weeks), after which it is recommended to take a maintenance dose for the prevention of hypericum, plantago, calendula officinalis and inula helenium for an average of 2 years after the disappearance of ulcerative colitis. However, the duration of contrast therapy may vary more widely (from 6 months to 2 years), depending on the individual nature of the disease and the frequency of relapses). Hypericum, plantago, calendula officinalis and inula helenium have not lost their clinical significance the reason is that it is almost completely absorbed from the colon and metabolized in the liver [10].

conclusions

1. A method developed and implemented in clinical practice for taking biopsy material from the colon wall for microbiological examination and a container for transporting biopsy material allows us to obtain an objective picture of the nature of the microflora in patients with severe ulcerative colitis and, based on the data obtained, prescribe targeted antibacterial therapy.

2. The nature of the microflora obtained from the biopsy material of the colon wall differs significantly from the luminal microflora. Representatives of the order Enterobacteriales and Enterococcus spp were identified in the biopsy material of 80 (100%) patients *Enterobacteriales и Enterococcus* spp. in titers from 102 to 106, a significant proportion (45-47%) of which were resistant to drugs used in standard treatment regimens with empirical prescribing of antibacterial therapy to patients with severe ulcerative colitis.

3. The software developed and implemented in clinical practice for patients with impaired gastrointestinal function allows you to systematize, document and conduct dynamic monitoring of the social and clinical aspects of your condition and, if necessary, contact a specialist in a timely manner.

4. Targeted antibacterial therapy based on microbiological examination of colon wall biopsies in patients with severe ulcerative colitis can reduce the species diversity of the isolated microflora, achieve its eradication and achieve clinical remission of the disease in the main group by 14 days in 34 (85%) patients, while in the control group only in 24 (60.0%) of patients ($p < 0.05$)

Used literature:

1. Asqarov. I.R. "Dalillarga asoslangan xalq tabobati usullari". Toshkent-2023 y. 440-445 b.
2. Asqarov. I.R. "Tabobat qomusi". "Mumtoz so'z" nashriyoti Toshkent-2019 y. 1016-1017 b.
3. Annese V., Daperno M., Rutter M.D. et al. European evidence based consensus for endoscopy in in- flammatory bowel disease. J Crohns Colitis. 2013;7(12):982–1018. doi: 10.1016/j.crohns.2013.09.016.
4. Annese V., Beaugerie L., Egan L. et al. European Evidence-based Consensus: Inflammatory Bowel Disease and Malignancies. J Crohns Colitis. 2015;9(11):945–965. doi: 10.1093/ecco-jcc/jjv141.

5. Bansal J., Jenaw R.K., Rao J. et al. Effectiveness of plain radiography in diagnosing hollow viscus perforation: study of 1,723 patients of perforation peritonitis. Emerg Radiol. 2012;19(2):115–119. doi: 10.1007/s10140-011-1007-y.
6. Burisch J., Pedersen N., Čuković-Čavka S. et al. East-West gradient in the incidence of inflammatory bowel disease in Europe: the ECCO-EpiCom inception cohort. Gut. 2014;63(4):588–597. doi: 10.1136/ gutjnl-2013-304636.
7. Colombel J.F., Ordás I., Ullman T. et al. Agreement Between Rectosigmoidoscopy and Colonosco- py Analyses of Disease Activity and Healing in Patients with Ulcerative Colitis. Gastroenterology. 2016;150(2):389.e3–395.e3. doi: 10.1053/j.gastro.2015.10.016.
8. Cohen R., Robinson D. Jr, Paramore C. et al. Autoimmune disease concomitance among inflamma- tory bowel disease patients in the United States, 2001–2002. Inflamm Bowel Dis. 2008;14(6):738– 743. doi: 10.1002/ibd.20406.
9. Yamamoto-Furusho J.K., Sánchez-Osorio M., Uribe M. Prevalence and factors associated with the pre- sence of abnormal function liver tests in patients with ulcerative colitis. Ann Hepatol. 2010;9(4):397–401.
10. Yoon J.Y., Park S.J., Hong S.P. et al. Correlations of C-reactive protein levels and erythrocyte sed- imentation rates with endoscopic activity indices in patients with ulcerative colitis. Dig Dis Sci. 2014;59(4):829–837. doi: 10.1007/s10620-013-2907-3.
11. Maharshak N., Arbel Y., Gal-Oz A. et al. Comparative analysis of Bayer wide-range C-reactive protein (wr-CRP) and the Dade-Behring high sensitivity C-reactive protein (hs-CRP) in patients with inflam- matory bowel disease. J Dig Dis. 2008;9(3):140–143. doi: 10.1111/j.1751-2980.2008.00335.x.
12. Nguyen G..C, Kaplan G.G., Harris M.L. et al. A national survey of the prevalence and impact of Clostrid- ium difficile infection among hospitalized inflammatory bowel disease patients. Am J Gastroenterol. 2008;103(6):1443–1450. doi: 10.1111/j.1572-0241.2007.01780.x.

UDC: 616-08-035

TREATMENT OF ULCERATIVE COLITIS WITH MEDICINAL PLANTS AND TO STUDY ABOUT PATIENTS' QUALITY OF LIFE

[1]Askarov I.R., [2]Kodirov Kh. N.
[1]Andijan State University
[2]Andijan State Medical Institute

Annotation. This article provides information on the disease ulcerative colitis and the chemical composition of medicinal plants used for its treatment, as well as on the methods of their use and mechanisms of action to evaluate UC patients' quality of life, anxiety, and depression based on dietary supplement disease activity and compare disease activity before and after treatment

Keywords: *ulcerative colitis, SF-36, IBDQ, quality of life, index Meyo, hypericum, achillea millefolium, plantago, calendula officinalis, inula helenium.*

YARALI KOLITNI DORIVOR O'SIMLIKLAR BILAN DAVOLASH VA BEMORLARNING HAYOT SIFATINI O'RGANISH

[1]Askarov I.R., [2]Kodirov X.N.
[1]Andijon davlat universiteti
[2]Andijon davlat tibbiyot institute

Annotatsiya. Ushbu maqolada yarali kolit kasalligi va uni davolash uchun ishlatiladigan dorivor o'simliklarning kimyoviy tarkibi, shuningdek, yarali kolit bilan og'rigan bemorlarda hayot sifati, stres va depressiyani biologik faol qo'shimcha yordamida kasallik faolligiga qarab baholash usullari va ta'sir mexanizmlari haqida ma'lumot berilgan va uni qo'llashdan oldin va keyin kasallik ta'sirini taqqoslash..

Kalit so'zlar: *yarali kolit, SF-36, IBDQ, hayot sifati, dalachoy,bo'ymadaron, zubturum, tirnoqgul, andiz, moychechak.*

ЛЕЧЕНИЕ ЯЗВЕННОГО КОЛИТА ЛЕКАРСТВЕННЫМИ РАСТЕНИЯМИ И ИЗУЧЕНИЕ КАЧЕСТВА ЖИЗНИ ПАЦИЕНТОВ

[1]Аскаров И.Р., [2]Кодиров Х.Н.
[1]Андижанский государственный университет
[2]Андижанский государственный медицинский институт

Аннотация. В этой статье представлена информация о заболевании язвенный колит и химическом составе лекарственных растений, используемых для его лечения, а также о методах их применения и механизмах действия для оценки качества жизни, тревожности и депрессии у пациентов с ЯК на основе активности заболевания с помощью пищевых добавок и сравнения активности заболевания до и после его применения.

Ключевые слова: *язвенный колит, SF-36, IBDQ, качество жизни, зверобой, тысячелистник, подорожник, календула, девясил, ромашка.*

Introduction. In various nations around the world, there are 50 to 80 cases of nospesific ulcerative colitis for every 100,000 people. Patients between the ages of 20 and 40 have a high incidence of the illness. Patients in this category are currently showing a degree of increased

spread of inflammatory illnesses of the large intestine, such as nospesific ulcerative colitis, which is becoming more prevalent than the availability of better and more specialized medical care for those who suffer from it. This is a systemic illness that can lead to increased toxic reactions and intestinal problems, such as perforation, toxic intestinal enlargement, and bleeding. [6].

Because of this, one of the top priorities for the postoperative management of nospesific ulcerative colitis is the adoption of sophisticated, effective treatment—lymphatic approaches.

In order to prevent postoperative complications during the complex diagnosis and treatment of inflammatory bowel diseases, including nospecific ulcerative colitis, on a global scale, scientifically based programs that enhance local homeokinesis and microcirculation must be developed. Numerous scientific investigations are being conducted with the goal of implementing etiopathogenetic therapy methods for ulcerative colitis. The ongoing investigation of the etiopathogenesis and therapy of nospecific ulcerative colitis, one of the worldwide challenges of inflammatory bowel diseases, receives particular interest in the medical field.[11].

Ulcerative colitis (UC) is a chronic, recurrent disease that manifests itself as inflammation of the rectal mucosa with a tendency to spread proximally to the large intestine. Disability, reduced quality of life (QOL), and the age-related peak of morbidity occurring at a young working age determine the social significance of UC. UC is primarily associated with symptoms such as abdominal pain, bloody diarrhea, weight loss, anemia, fatigue, and fever [18].

Furthermore, the disease's activity may be linked to extra-intestinal illnesses (eye, mucosal, liver, and mucous membrane lesions) and chronic, ongoing inflammation (cholelithiasis, steatosis, amyloidosis, and thrombosis of different localizations). Remissions and exacerbations frequently happen over the course of the illness. Several studies demonstrate that UC patients experience anxiety and depression symptoms far more frequently than the age- and sex-matched population. An integrated approach to the patient, which considers clinical, sociodemographic, and psychological traits, is especially significant and instructive from the clinician's perspective. Increased impairment, decreased treatment adherence, and higher medical expenses might result from underreported mental health issues [8.16].

Objective: to evaluate UC patients' quality of life, anxiety, and depression based on dietary supplement disease activity and compare disease activity before and after treatment

Materials and methods. Based on the 2023–2025 ASMI Clinic of Gastroenterology 118 participants participated in a comparative prospective research. Twenty healthy volunteers made up the control group, followed by groups 1–29 with UC in remission, 2–18 with light attacks, 3–26 with moderate attacks, and 4–25 with severe attacks. All patients' cytokine profiles and fecal biomarkers (neopterin, lactoferrin, and calprotectin) were examined in addition to routine investigations. During colonoscopy Meyo, the degree of mucosal inflammation was measured using the Mayo scale. The following formula was used to calculate the clinical activity level index (CAI): 5–12 indicates moderate activity, >12 indicates strong activity, while 1-4 indicates dormant illness [13.17].

Hypericum, achillea millefolium, plantago, calendula officinalis, inula helenium and matricariaplants have proven to be effective in treating colitis. Thanks to its mechanism of action, it helps calm inflammation and reduce symptoms in people with the condition.

It is important to note that medicinal plants should be used under the guidance of medical professionals. They can determine the appropriate dosage and monitor possible side effects [15].

Hypericum, achillea millefolium, plantago, calendula officinalis, inula helenium and matricariaplants are most effective for treating colitis, and other aspects of colitis treatment should

also be considered. This includes lifestyle changes such as eating a healthy diet, reducing stress, and exercising regularly.

The use of medicinal plants in galls in addition to the main treatment of colitis has improved the quality of life[12].

To assess the level of anxiety and depression, the Hospital Anxiety and Depression Scale (Anxiety and DepressionHADS) was used; to assess QOL , the Short Form — 36 (SF-36) non-specific questionnaire was used, consisting of 36 questions, the answers to which are distributed in 8 scales, combined into two total parameters: physical health componentand psychological component of health and specific questionnaire for IBD patients-Inflammatory Bowel Disease Questionnaire (IBDQ), consisting of 4 sections concerning intestinal, systemic, socialand emotional manifestations[14].

The study was carried out in compliance with the Helsinki Declaration's tenets and the guidelines of good clinical practice. Written informed consent was obtained from each patient before they were included in the study[4.7.10].

The MedCalc statistical software tool was used for statistical processing. The Cpirson criterion was used to assess the statistical significance of variations in two or more relative parameters (frequencies, fractions). The Pearson correlation coefficient was used in correlation analysis to elucidate the link between the indicators. For the parametric distribution, the indicators are shown as M (SD), where M is the mean and SD is the standard deviation; for the nonparametric distribution, they are shown as the median (Me) and the 25 and 75 percentiles. The compared indicators' correlations and differences were deemed statistically significant [11.14].

Results

A comparison of the data obtained from the SF-36 and IBDQ questionnaires showed that patients with UC had disorders in all domains in the form of lower average scores compared to patients in the control group.

The mean scores for each domain on the IBDQ questionnaire varied significantly ($p = 0.001$). For every domain, there were significant associations ($p < 0.05$) between the score and CAI. The overall score and the "intestinal factor" domain had the strongest connections ($p = 0.00-1$); the other CAI correlations with the IBDQ questionnaire's domains were moderate to strong ($p = .001$).

Table 1.

Severity of the attack according to the UC activity Index (Meyo Index)

criteria	INDEX (POINTS)			
	0	1	2	3
Stool frequency	Usual	1-2 more per day than usual	3-4 more per day than usual	5 more per day than usual
An admixture of blood in the stool	No	Streaks	Visible blood	A lot of blood
The condition of the mucous membrane	Standard	Minimal activity (1 point on the Schroeder scale)	Moderate activity (2 points on the Schroeder scale)	Marked activity (3 points on the Schroeder

				scale)
General assessment of the condition by a doctor	Normal	Satisfactory	Moderate severity	Heavy
The severity of the UC attack (partial or incomplete Mayo index) is determined by the sum of the scores of 4 parameters from the table: 0-2 points – remission (with an assessment of rectal bleeding and endoscopic mucosal activity = 0 points); 3-5 points – light attack; 6-9 points – medium-heavy attack; 10-12 points – heavy attack.				

displays the Schroeder endoscopic mucosal assessment scale that is utilized in the Mayo Index. Fig. displays variations of the endoscopic pattern.Table 1

The categories of role-based emotional functioning, general health condition, and viability scale had the lowest average scores on the SF-36 questionnaire among UC patients; these differences from the control group were statistically significant ($p < 0.05$). The strongest relationships with CAI ($r > 0.5$) were found for the same domains. In general, CAI correlations with SF-36 domains were less than those with CAI correlations with SF-36 domains were generally lower than with the previous questionnaire, although all but three correlations (role-based emotional functioning, pain scale, and physical functioning) were of moderate strength [9].

We analyzed the relationship between the average scores on both questionnaires and the length of the UC. It is noteworthy that patients with pancolitis have lower values for all domains панколитомcompared to patients with proctitis, which reflects the opposite trend.
proportional dependence of the extent of the lesion and QOL [5.16].

When assessing the QOL of patients with UC using опросникатhe IBDQ questionnaire, it was found that the average value was 115.5 ± 5.1 points and was 20.8% lower than the average value for the control group (140.77 ± 4.5 points;). The average IBDQ score in group 4 was 1.4 times lower than in Group 1 ($p = 0.01$). It is important to note that in a severe attack of the disease, all factors were simultaneously reduced compared to the control group. The most pronounced decrease was observed in the intestinal and emotional spheres: intestinal factor scores in patients with UC were 2.1 times lower than in the control group and by the emotional factor-2.7 times.

Ina cohort of patients with UC, 69.1% (81) of patients had concomitant chronic diseases, of which 52.8% (37) were extra-intestinal manifestations

Discussion

Our study's findings demonstrated that, in comparison to patients in the control group, UC patients had poorer average scores across all dimensions of the SF-36 and IBDQ measures. Many experts point out that a variety of psychological and social factors have a significant impact on the quality of life (QOL) of patients with IBD, in addition to the symptoms and problems that are directly related to the condition. Sexual dysfunction is one of the incapacitating physical and psychological symptoms of ulcerative colitis (UC), a chronic recurring bowel disease. Accordingly, several studies have demonstrated that the majority of IBD patients feel that their quality of life is compromised, irrespective of the level of disease activity.

In recent years, HADS has acknowledged the significance of detecting psychosocial issues during IBD consultations.The data obtained by us demonstrated the relationship between the severity of anxiety and depression and CAI in the form of a positive correlation. Based on the results of a nationwide prospective cohort study

Table 2.

Measures of ulcerative colitis patients' quality of life according to particular standards (IBDQ, SF 36) and to an unanticipated interlocutor in the treatment of the colitis attack (n = 118)Using both particular (IG, SF 36) and non-specific questionnaires, the quality of life of patients with ulcerative colitis was evaluated based on the severity of

Groupe	IBDQ	SF-36	
		PH	MN
1st	92,3 ± 7,8	65,1 ± 2,2	48,8 ± 3,7
2nd	86,8 ± 5,4	21,6 ± 3,2	47,1 ± 3,5
3rd	92,9 ± 6,2	32,6 ± 5,7	46,3 ± 5,8
4th	65,9 ± 3,3	14,9 ± 4,1	42,1 ± 4,9
Control Group	101,9 ± 2,1	11,2 ± 3,9	43,5 ± 3,7

the condition (n = 118).

We examined how these conditions affected UC patients' quality of life based on both questionnaires. According to the IBDQ questionnaire, patients with extra-intestinal signs of UC had higher average scores on the SF-36 questionnaire than patients with chronic illnesses unrelated to UC[5].

In comparison to the control group, the UC patients' average score on the HADS anxiety and depression scale was 9.4 ± 1.1 points, which is considerably higher (9.9 ± 1.1 vs 5.1 ± 0.9; p = 0.01). Although the difference was not reliable, depression was found to be more common than anxiety (8.7 = 1.5 vs. 7.9 = 0.9; p = 0.06). Group 4 patients had the highest average HADS score, which was noticeably higher than 10.1 ± 2.1 vs. 4.2 ± 0.9; p = 0.01 and 10.1 ± 2.1 vs. 5.2 ± 0.8; p = 0.01, respectively, in patients in groups 1 and 2. The HADS and CAI scores, which indicate the intensity of the attack, showed an average strength connection (r = 0.560, p = 0.01) [3].

In order to minimize systemic absorption and maximize therapeutic effectiveness at the lowest feasible dose of the medicine, different pharmacological forms optimize distribution to the affected area of the stomach and intestines, hence reducing side effects [2].
There are various ways that medicinal plants might heal:
1. Antibacterial activity: Anaerobic bacteria are inhibited in their proliferation by medicinal herbs. The inflammation and harm associated with inflammatory bowel disorders and colitis are exacerbated by these bacteria.
2. Decreased inflammatory reactivity: By lowering the synthesis of anti-inflammatory chemicals like cytokines and reactive oxygen species, medicinal herbs aid in regulating the inflammatory response. The symptoms of colitis may be lessened by this anti-inflammatory impact.
3. Immune system regulation: Additionally, medicinal herbs influence the immune system via adjusting the activity of

Of these, significant mood disorders requiring psychological intervention, defined by a HADS score of ≥ 11, were detected in 16.2% (anxiety) and 20.4% (depression) of patients. There was no significant difference in the average HADS score depending on the severity of the disease in this study.[1].

In our study, scores on the particular IBDQ questionnaire had a stronger correlation with UC symptom activity than did scores on the general SF-36 questionnaire. These findings support several earlier research' findings that particular disease-specific questionnaires can be used to forecast the disease's activity or worsening. Our findings illustrated the benefits of using the SF-36 general QOL questionnaire to assess the presence or absence of comorbidities unrelated to UC. On the other hand, IBDQ provided more details regarding UC's extra-intestinal symptoms. This fact is most likely caused by the questionnaire's extreme specialization for IBD patients. The development of interdisciplinary treatment that will enable establishing clinical, endoscopic, biochemical, and histological remission is widely recognized as the ultimate objective of medical professionals treating UC.

Conclusions. 1. When the SF-36 and IBDQ survey data were analyzed, it was found that patients with UC had abnormalities in every domain, as evidenced by lower average scores than those in the control group.

2. According to the SF-36 questionnaire, the domains of viability scale, general health status, and role-based emotional functioning had the lowest average values among UC patients; these domains also had the strongest correlations with CAI ($r > 0.5$), and differences with the control group were comparable ($p < 0.05$).

3. Average scores on the IBDQ questionnaire varied significantly, and correlations between the points earned and CAI for each area were significant ($p = 0.00-1$). The "gut factor" index and the overall score showed the strongest relationships ($p = 0.001$).

4. Patients with chronic conditions unrelated to UC had lower average scores on the SF-36 questionnaire, while patients with extra-intestinal symptoms of UC had higher average scores on the IBDQ questionnaire.

5. The HADS and CAI scores, which indicate the intensity of the UC attack, showed a positive connection of average strength ($r = 0.560$; $p = 0.01$).

Used literature:

1. Asqarov. I.R. "Dalillarga asoslangan xalq tabobati usullari". Toshkent-2023 y. 440-445 b.
2. Asqarov. I.R. "Tabobat qomusi". "Mumtoz so'z" nashriyoti Toshkent-2019 y. 1016-1017 b.
3. Annese V., Daperno M., Rutter M.D. et al. European evidence based consensus for endoscopy in in- flammatory bowel disease. J Crohns Colitis. 2013;7(12):982–1018. doi: 10.1016/j.crohns.2013.09.016.
4. Annese V., Beaugerie L., Egan L. et al. European Evidence-based Consensus: Inflammatory Bowel Disease and Malignancies. J Crohns Colitis. 2015;9(11):945–965. doi: 10.1093/ecco-jcc/jjv141.
5. Bansal J., Jenaw R.K., Rao J. et al. Effectiveness of plain radiography in diagnosing hollow viscus perforation: study of 1,723 patients of perforation peritonitis. Emerg Radiol. 2012;19(2):115–119. doi: 10.1007/s10140-011-1007-y.

6. Budesonide enema in distal ulcerative colitis. A randomized dose-response trial with predni- solone enema as positive control. The Danish Budesonide Study Group. Scand J Gastroenterol. 1991;26(12):1225–1230. doi: 10.3109/00365529108998618.
7. Brunner M., Assandri R., Kletter K. et al. Gastrointestinal transit and 5-ASA release from a new mesalazine extended-release formulation. Aliment Pharmacol Ther. 2003;17(3):395–402. doi: 10.1046/j.1365-2036.2003.01445.x.
8. Burisch J., Pedersen N., Čuković-Čavka S. et al. East-West gradient in the incidence of inflammatory bowel disease in Europe: the ECCO-EpiCom inception cohort. Gut. 2014;63(4):588–597. doi: 10.1136/ gutjnl-2013-304636.
9. Colombel J.F., Ordás I., Ullman T. et al. Agreement Between Rectosigmoidoscopy and Colonosco- py Analyses of Disease Activity and Healing in Patients with Ulcerative Colitis. Gastroenterology. 2016;150(2):389.e3–395.e3. doi: 10.1053/j.gastro.2015.10.016.
10. Cohen R., Robinson D. Jr, Paramore C. et al. Autoimmune disease concomitance among inflamma- tory bowel disease patients in the United States, 2001–2002. Inflamm Bowel Dis. 2008;14(6):738– 743. doi: 10.1002/ibd.20406.
11. Chen J.H., Andrews J.M., Kariyawasam V., Moran N. IBD Sydney Organisation and the Australian Inflammatory Bowel Diseases Consensus Working Group. Review article: acute severe ulcerative colitis – evidence-based consensus statements. Aliment Pharmacol Ther. 2016;44(2):127–144. doi: 10.1111/apt.13670.
12. Cosnes J., Gower-Rousseau C., Seksik P., Corkot A. Epidemiology and natural history of inflamma- tory bowel diseases. Gastroenterology. 2011;140(6):1785–1794. doi: 10.1053/j.gastro.2011.01.055.
13. Danese S., D'Amico F., Bonovas S., Peyrin-Biroulet L. Positioning Tofacitinib in the Treatment Al- gorithm of Moderate to Severe Ulcerative Colitis. Inflamm Bowel Dis. 2018;24(10):2106–2112. doi: 10.1093/ibd/izy076.
14. D'Haens G. Systematic review: second-generation vs. conventional corticosteroids for induction of re- mission in ulcerative colitis. Aliment Pharmacol Ther. 2016;44(10):1018–1029. doi: 10.1111/apt.13803.
15. Danielsson A., Löfberg R, Persson T. et al. A steroid enema, budesonide, lacking systemic effects for the treatment of distal ulcerative colitis or proctitis. Scand J Gastroenterol. 1992;27(1):9–12. doi: 10.3109/00365529209011158.
16. Danese S., Hart A., Dignass A. et al. A multicentre prospective cohort study assessing the effective- ness of budesonide MMX® (Cortiment®MMX®) for active, mild-to-moderate ulcerative colitis. United European Gastroenterol J. 2019;7(9):1171–1182. doi: 10.1177/2050640619864848.
17. Dignass A.U., Bokemeyer B., Adamek H. et al. Mesalamine once daily is more effective than twice daily in patients with quiescent ulcerative colitis. Clin Gastroenterol Hepatol. 2009;7(7):762–769. doi: 10.1016/j.cgh.2009.04.004.
18. Jo'rayeva M.A. "Dorivor o'simliklar atlasi" O'quv qo'llama., Toshkent noshir 2019 y., 52-53 b.

UDC: 616.89-008.441.44

COMPARATIVE CHARACTERISTICS OF THE HEREDITARY BURDEN OF FAMILIAL FORMS OF OLIGOPHRENIA

Dalimova S.A., Rakhimov A.A., Madaminov O.A.
Andijan State Medical Institute

Resume. The problem of oligophrenia is currently one of the most urgent not only in psychiatry, but also in all medicine. The relevance of this problem can be assessed by its prevalence among the world's population, suffice it to say that today the prevalence of oligophrenia is more than 3%. Moreover, 2.5% are the most severe degrees of the disease.

Key words: *familial form of oligophrenia, heredity, comparative characteristics.*

OLIGOFRENIYA OILAVIY SHAKLLARIDA IRSIYAT OG'IRLASHISHINING QIYOSIY XUSUSIYATLARI

Dalimova S.A., Raximov A.A., Madaminov O.A.
Andijon davlat tibbiyot institute

Rezyume. Bugungi kunda oligofreniya muammosi nafaqat psixiatriya, balki butun tibbiyot uchun eng dolzarb masalalardan biridir. Ushbu muammoning dolzarbligini uning dunyo aholisi orasida tarqalishi bilan baholash mumkin, shuni aytish kifoya, bugungi kunda oligofreniyaning tarqalishi 3% dan ortiq. Bundan tashqari, 2,5% kasallikning eng og'ir darajasidir.

Kalit so'zlar: *oligofreniyaning oilaviy shakli, irsiyat, qiyosiy tavsif.*

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА НАСЛЕДСТВЕННОЙ ОТЯГОЩЕННОСТИ СЕМЕЙНЫХ ФОРМ ОЛИГОФРЕНИИ

Далимова С.А., Рахимов А.А., Мадаминов О.А.
Андижанский государственный медицинский институт

Резюме. Проблема олигофрении на сегодняшний день одна из самых актуальных не только психиатрии, но и всей медицины. Актуальность этой проблемы можно оценить её распространённостью среди населения земного шара, достаточно сказать, что на сегодняшний день распространённость олигофрении составляет более 3 %. Причем 2,5 % -это самые тяжелые степени заболевания.

Ключевые слова: *семейная форма олигофрения, наследственность, сравнительная характеристика.*

Relevance. The relevance of oligophrenia can be assessed by its prevalence among the global population, suffice it to say that today the prevalence of oligophrenia is more than 3%. Moreover, 2.5% are the most severe degrees of the disease[3].

In our region, this problem is even more urgent, since closely related marriages are very common in our Republic, especially if one or both parents are oligophrenic, the probability of having a sick child is up to 40%[5]. Based on this, we can say that the problem of oligophrenia among the population is one of the most important, both medically and economically.

The state of health and mental development of children is currently attracting the attention of various specialists: psychiatrists, neuropathologists, pediatricians, sociologists, speech

pathologists, and educators. Official statistics show a significant prevalence of mental pathology in the child population and a significant increase in the number of people under psychiatric supervision.

Mental development is of great importance for a child's mental health. A number of authors have studied the prevalence of oligophrenia: according to various authors, oligophrenia occurs in 2 to 5% of the total child population. Moreover, 5% of them suffer from the most severe degree - idiocy[2]. Oligophrenia is especially common in children aged 5 to 15 years.

The decrease in the number of oligophrenia among the older population groups should be explained by the fact that adults do not seek medical help for this, and the small number of oligophrenia among children under 4 years of age is due to the difficulty of identifying patients[1].

Meanwhile, mental disorders occupy a leading place among the causes of disability in children (18.6%) and in the structure of mental disorders leading to disability, mental retardation occupies a leading place (22.3%), its share has increased to 2.7% over the past decade[4]. However, actively identifying mental disorders among children, and especially at an early age, is not an easy task, since not all parents turn to a psychiatrist, in particular because they underestimate and do not know certain psychopathological disorders.

In addition, pediatricians, not having training in the field of neuropsychiatric health of children and the clinic of mental disorders, do not contribute to the early detection of neuropsychiatric disorders and do not disseminate relevant knowledge among parents[3]. All of the above confirms the relevance of drawing up guidelines for pediatricians and family doctors on the early diagnosis, clinic and psychoprophylaxis of oligophrenia in children.

The purpose of the study. To study the clinical features and course of familial forms of oligophrenia.

Research materials and methods. To solve these tasks, a clinical and psychopathological study of 150 patients with familial oligophrenia registered at the Andijan Regional Neuropsychiatric dispensary was studied.

The results of the study. These results indicate that in the control group, hereditary burden of other mental disorders is significantly more common than in the surveyed group. Marriages between close relatives are particularly dangerous for recessive diseases.

In case of related marriages of apparently healthy family members, in which diseases of a random type have already occurred, the probability of their recurrence in children is high, since both parents may turn out to be hidden carriers of the mutant gene.For example, in most cases, the parents of amorphous children (with severe dementia and vision loss) are relatives. A study of the medical literature shows that in Europe, in at least 15% of cases of this disease, the parents were cousins, and in another 12-16% they were slightly more distant relatives.

These data need to be compared with the fact that in the European population as a whole, marriages between cousins account for less than 1%. Giving heredity a leading role in the origin of oligophrenia, we analyzed the nature of the parents' marriage. An analysis of parental marriage showed that in the study group, parents are not relatives in almost half of the patients (24 families, 48.0%). In the control group, the vast majority of patients come from families with unrelated marriages (41 patients, 82.0%).

Closely related marriages, when the parents are cousins, were found more often in the study group, compared with the control group: 4 (8.0%) and 0, respectively. Related marriages are also more common in the surveyed group of families: respectively. 22 (44.0%) and 9 (18.0%). From these data, it can be seen that closely related and related marriages significantly more often

correlated with the examined group of patients, i.e. they were much more common in familial forms of oligophrenia, respectively. 26 (52.0%) and 9 (18.0%), P less than 0.05. TBI-related oligophrenia was found among patients of only control group 4 (8.0%).

Oligophrenia caused by birth trauma and infection is more common among patients in the control group compared with the examined group: 2 (1.9%) and 6 (12.0%), respectively. In patients of this group, there are no gross abnormalities of the body structure and internal organs, but the symptoms of organic damage to the central nervous system prevail. Therefore, this dementia is very difficult to distinguish from organic dementia. These patients have increased sensitivity to internal and external stimuli. Patients often complain of a headache, which worsens in a stuffy room, under the influence of mental and physical fatigue, accompanied by vegetative-vascular symptoms. Mental retardation ranges from mild stupidity to idiocy.

Clinical features: a sharp decrease in mechanical memory, patients cannot remember even what they understood well, increased exhaustion, signs of organic damage to the central nervous system. Oligophrenia caused by neuroinfection also occurred only among patients of the control group 3 (6.0%). Thus, in the examined group, oligophrenia of an endogenous nature is more common than in the control group: correspondingly. 21 (20.0%) and 2 (4.0%). Whereas, oligophrenias caused by exogenous causes are significantly more common in the control group than in the surveyed group: 33 (66.0%) and 20 (19.1%), respectively.

Conclusion. In patients with familial oligophrenia, the course of the disease was more severe - there was a deeper degree of mental retardation, pronounced emotional-volitional disorders and abnormalities in the structure of the head and body. In the group of thematic patients, hereditary factors are of primary importance in the development of familial forms of oligophrenia, whereas in the control group, the development of oligophrenia is more due to the effects of exogenous hazards that occurred during pregnancy, childbirth and in the early postnatal period.

Related marriages and hereditary mental illness are unfavorable prognostic factors that aggravate the course of oligophrenia in children.

The social adaptation of patients with familial forms of oligophrenia is worse. The majority of such patients are disabled in childhood (81.9%).

Used literature:

1. Butorin G.G. On the problem of organizing specialized assistance services for people with mental retardation / G. G. Butorin, L. A. Benko, H. E. Butorina // Materials of the Russian Academy of Sciences. Conf., the Plenum of the Board of the Russian Society of Psychiatrists, Moscow, 2012, pp. 105-106.
2. Govorin, N. V. Alcohol factor in the depopulation and degradation of the population of Russia and Transbaikalia / N. V. Govorin. Chita: Express Publishing House, 2017. 24 p.
3. Kiryushenkov, A. P. The effect of medicines, alcohol and nicotine on the fetus / A. P. Kiryushenkov, M. L. Tarakhovsky. Moscow: Medicine, 2010. 272 p.
4. Clinical and genetic aspects of mental retardation linked to the fragile X chromosome / D. V. Islamgulov, A. S. Karunas, R. G. Valinurov et al. // Journal of Neuropathology and Psychiatry. 2015. - Issue 8. - pp. 69-73.

UO'K: 616-08-035

YUQORI SIYDIK YO'LLARIDA KATTA TOSHLARI BO'LGAN BEMORLARNI MINIMAL INVAZIV DAVOLASH USULLARI SAMARADORLIKNING QIYOSIY TASNIFI

Egamberdiyev M. B.
Markaziy Osiyo tibbiyot universiteti

Annotatsiya: Bugungi kunda yuqori siydik yo'llarining katta toshlari bo'lgan bemorlarni davolashning eng samarali usuli masalasi hal qilinmagan va bunday bemorlar shoshilinch kasalxonaga yotqizilgan urologik bemorlarning katta qismini tashkil qiladi. Endoskopik texnikaning yaxshilanishi va turli xil litotripsiya usullarining (ultratovush, lazer, pnevmokinetik va boshqalar) paydo bo'lishi bilan KULT ham DLT bilan bir qatorda birinchi qator davolash usuliga aylanadi , bu usulning samaradorligi 98-100% ga yetadi.

Kalit so'zlar:. *endoskop,litotripsiya,DLT*

COMPARATIVE PERFORMANCE CHARACTERISTICS MINIMALLY INVASIVE METHODS OF TREATMENT OF PATIENTS WITH LARGE STONES OF THE UPPER URETERS

Эгамбердиев М.Б.
Central Asian Medical University

Abstract: Today, the issue of the most effective method of treating patients with large stones of the upper urinary tract has not been resolved, and such patients make up a large percentage of urological patients who are urgently hospitalized. With the improvement of endoscopic techniques and the emergence of various lithotripsy methods (ultrasound, laser, pneumokinetic , etc.), the cult also becomes a first line treatment alongside DLT, with the effectiveness of this method reaching 98-100%.

Keywords: *endoscopy, lithotripsia, DLT*

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА ЭФФЕКТИВНОСТИ МАЛОИНВАЗИВНЫХ МЕТОДОВ ЛЕЧЕНИЯ БОЛЬНЫХ С КРУПНЫМИ КАМНЯМИ ВЕРХНИХ ОТДЕЛОВ МОЧЕТОЧНИКОВ

Эгамбердиев М.Б.
Центрально-Азиатский медицинский университет

Аннотация: На сегодняшний день вопрос о наиболее эффективном способе лечения больных с крупными камнями верхних мочевыводящих путей остается нерешенным, и такие пациенты составляют значительную часть урологических больных, госпитализированных в неотложную помощь. С совершенством эндоскопической техники и появлением различных методов литотрипсии (ультразвуковой, лазерной, пневмокинетической и др.) культ также становится лечением первой линии наряду с дл , эффективность этого метода достигает 98-100%.

Ключевые слова: эндоскоп,литотрипсия, ДЛТ

Siydik-tosh kasalligi (STK)-bu biofizik hodisa bo'lib, zichligi yuqori bo'lgan kristallar to'planishi va uning natijasida siydikda toshlarning to'planishi sodir bo'ladi. Konkrementlar buyrakning uro-va gemodinamikasini buzilishiga olib keladi. STK dunyo aholisining 1-3 foizida

uchraydi.(1) Kasallik hamma joyda keng tarqalgan, ammo ba'zi joylarda u tez-tez uchraydi va aholining 30 foizigacha qismi bundan aziyat chekadilar.Bunday hududlar "endemik zonalar"deb ataladi. O'rta Osiyo, Shimoliy Kavkaz, Kavkaz, Belorusiya, Qozog'iston, Oltoy, uzoq Sharqda eng keng tarqalgan. STK tashxisi bemorlarining 70 foizida mehnatga layoqatli yoshda qo'yilgan – 30-60 yosh, erkaklarda ayollarga qaraganda 2 baravar ko'p uchraydi. O'zbekistonda STK barcha urologik kasalliklarning o'rtacha 38,2 foizini va urologik kasalxonadagi bemorlarning 47 foizini tashkil qiladi. Siydik-tosh kasalligining yuqori tarqalishiga qaramay, mutaxassislar bu muammoga etarlicha e'tibor bermaydilar."Urolitiaz" ta'rifi tosh shakllanishining barcha turlarini, shu jumladan mahalliy va ikkilamchi deb ataladigan toshlarni, ayrim turdagi infeksiyalar, og'ir urostaz, begona jismlar va boshqa sabablarga ko'ra tasvirlashni kengroq tushunishni o'z ichiga oladi(2)

Sabablari: Urolitiaz etiologiyasi ekzogen va endogen sabablarni o'z ichiga oladi, ba'zida ular bir-biri bilan chambarchas bog'liqdir. Toshning paydo bo'lishi bir sababga ega bo'lishi mumkin bo'lsa-da, ko'pincha turli xil kombinatsiyalarda bir nechta omillar mavjud. Bir vaqtning o'zida qancha ko'p sabablar ta'sir qilsa, STK patogenezi shunchalik murakkablashadi va tez-tez takrorlanish va toshlarning tez o'sishi tufayli kasallikning kechishi yomonlashadi. Ekzogen va endogen etiologik omillar, organizmdagi metabolik kasalliklarni, buyraklar, siydikdagi o'zgarishlarga qarab, tosh hosil bo'lish turini aniqlaydi(siydik toshlarining kimyoviy tarkibi va mikrostrukturasi).(3)

Diagnostika. Tashxis standart tekshiruvni o'z ichiga oladi: so'rov, anamnez va tibbiy ko'rik. Klinik tashxis tegishli diagnostika usullari bilan tasdiqlanishi kerak.

Birlamchi tekshiruv sifatida ultratovush tekshiruvi (UTT) qo'llaniladi, bu bizga kosachalarda, jom-ureteral va vesikoureteral segmentlarda to'siqlarni aniqlash, shuningdek yuqori siydik yo'llarining kengayishini tashxislash imkonini beradi, bu urodinamika buzilishining belgisidir.

Bemorni tekshirishning keyingi bosqichi ekskretor urografiya bo'lib, u yuqori aniqlik va o'ziga xoslikka ega.(96% dan 100%gacha) So'nggi yillarga qadar bu usul STK diagnostikasida "oltin standart" bo'lgan, ammo hozirgi bosqichda bu joy asta-sekin multispiral kompyuter tomografiyasi (MSKT) tomonidan egallab olingan.(4)

3 mm dan ortiq toshlarda KT sezgirligi 100% ni tashkil qiladi, 3 mm dan kam toshlarda esa sezgirlik 86% gacha kamayadi. Yuqori sezuvchanlikka qo'shimcha ravishda, bu usul DULT samaradorligiga ta'sir qiluvchi o'rtacha konkrement zichligini aniqlashga imkon beradi.

Klinika. Uretral toshlarning 99%i buyraklardan tushadi, ureterolitaza chastotasi STK bilan og'rigan bemorlarning kamida 50% ni tashkil qiladi, ularning 92% buyrak kolikasiga ega.Uretral tosh bilan bemorlarning 30-35% shoshilinch ravishda urologiya bo'limiga qabul qilinadi.

Uretral toshlar bilan o'tkir obstruktiv va rivojlangan asoratlar soni buyrak va siydik pufagi toshlaridagi o'xshash asoratlar sonidan sezilarli darajada yuqori bo'ladi. Buyrak kolikasi bilan kechadigan siydik yo'llarining o'tkir obstruktsiyasi asosan fiziologik torayish zonalaridagi toshlarning o'tishida sodir bo'ladi: jom-ureteral segment, siydik yo'lining yonbosh tomirlari bilan kesishgan joyda va in-tramural qismda.

Urodinamikaning buzilishi o'tkir yoki surunkali rivojlanishi mumkin. O'tkir buzilish buyrak toshlari siydik yo'lining to'liq blokada qilganda sodir bo'ladi. Obstruktsiyaning surunkali rivojlanishi toshning tuzilishida "siydik yo'li" shakllanishi tufayli siydik yo'lining noto'liq bloklanishi , uning to'g'ri shakli, sirtdagi nuqsonlar va boshqa xususiyatlar tufayli yuzaga keladi. Ureterdagi surunkali chandiq o'zgarishlari yoki paraureteral patologik jarayonlar ham unda surunkali obstruktsiyaning rivojlanishiga olib kelishi mumkin.(5)

Davolash. Ureter toshlari 5 mm dan kam, 68% mustaqil ravishda chiqib ketadi. Agar kalsiy antagonistlari va a-adrenoblokatorlar bilan litokinetik terapiya (LKT) o'tkazilsa, ta'sirchanlik 75%-86% gacha yetishi mumkin.

Urologlarning Amerika va Yevropa assotsiatsiyalari ma'lumotlariga ko'ra, siydik yo'llarining yirik toshlariga 1 sm dan katta toshlar kiradi.(3) Xuddi shu assotsiatsiyalarga ko'ra, 8-10 mm o'lchamdagi toshlar 6 hafta ichida faqat 47% da o'z-o'zidan chiqib ketadi. Ushbu o'lchamdagi toshlar uchun litokinetik terapiyaning samaradorligi 20% dan oshmaydi, boshqa hollarda toshni jarrohlik yo'li bilan olib tashlashga murojaat qilish kerak. Buyraklar urodinamikasini erta va o'z vaqtida tiklash va siydik pufagi toshlarini olib tashlash STK ni davolash natijalarini yaxshilashga va tosh shakllanishining takrorlanishini kamaytirishga imkon beradi.(6)

Uretral toshlarni olib tashlash usullari har xil, shu jumladan quyidagi minimal invaziv usullardan foydalaniladi:

* Endoskopik operatsiyalar.
* Distansion litotripsiya(DLT) In situ yoki kateter va stentda bo'lishi mumkin.
* Kontakt retrograd yoki antegrad ureterolitotripsiya;
* Retrograd ureterolitoekstraktsiya (nefrostoma mavjud bo'lganda anterograd).

Tadqiqot materiallari:Tadqiqotlar 2022-2025-yillar oralig'ida 55ta bemorda "Uromed" xususiy klinikasida olib borildi.

Tadqiqot usullari: STK bo'lgan bemorlarda kam invaziv operatsiyalarning afzalliklarini baholash uchun DLT,Endoskopik uretrolitotripsiya tashrixini o'tkizgan bemorlarni holatini o'rganish.

Tadqiqot natijalari: Davolashning turli usullari samaradorligining asosiy mezonlaridan biri bu operatsiyadan keyingi o'rtacha shifoxona davri edi. Guruhlar o'rtasida operatsiyadan keyingi shifoxona davri davomiyligida statistik jihatdan sezilarli farqlar topilmadi. Biroq, ushbu ko'rsatkichni hisoblash hajmiga qarab tahlil qilganda, o'rganilayotgan usullar o'rtasidagi farqni ko'rsatadigan va toshning hajmini hisobga olgan holda ularning har birini qo'llashning ustuvorligi haqida o'ylashga majbur qiladigan natijalar olinadi. Ushbu mezon bo'yicha tahlil qilinganda, toshning kattaligi 15 mm dan oshadigan kichik guruhda statistik jihatdan sezilarli farq olinadi, DLT guruhida bu ko'rsatkich ikki baravar ko'paydi.

Xulosa: Tadqiqot natijalariga ko'ra, ushbu davolash usullarining har birining maqsadga muvofiqligi, afzalliklari va kamchiliklari to'g'risida xulosalar va amaliy tavsiyalar ishlab chiqildi:

1. Tosh hajmi 9 mm gacha va uning bir joyda bo'lish muddati 2 haftagacha bo'lgan vaqt uchun DLT va KULT (siydik yo'llarining 1/3 qismida) afzalroqdir.

2. Tosh hajmi 10-14 mm bo'lgan va 3 haftagacha bir joyda bo'lgan DLT va KULT tavsiya qilinmaydi, Endoskopik uretrolitotripsiya tanlov usuli hisoblanadi.

3. Tosh hajmi 15 mm dan oshganda va uning bir joyda bo'lish muddati 3 haftadan oshganda, DLT samarasiz bo'lib qoladi va bu holatda KULTning samaradorligi uch baravar kamayadi, Endoskopik uretrolitotripsiya tanlov usuli hisoblanadi.

Foydalanilgan adabiyotlar:

1. 1. Авдошин, В.П., Оптимизация растворение уратных конкрементов / В.П. Авдошин, М.И.Андрюхин, Е.В. Ольшанская // Материалы Пленума Правления Российского общества урологов: сб. науч. тр.– Нижний– Новгород – 2019.
2. Акилов, Ф.А. //Экспериментальная и клиническая урология. – 2022.

3. Guidliness –стандарт Европейский асосации урологов : Женева 2024.
4. Аль– Мусави, Ш. Неотложная уретеропиелоскопия в диагностике и лечении заболеваний почек и верхних мочевыводящих путей – Москва, 2023.
5. Новые возможности в лечении мочекаменной болезни / С.Х. Аль– Шукри, А.В. Антонов, П.Б. Новиков, [и др.] // Нефрология. – 2016.
6. Повреждающее действие ударной волны – при выполнении дистанционной ударно– волновой литотрипсии у больных нефролтиазом С.Х. Аль– Шукри, Р.М. Аммо, В.Н. Ткачук. // Нефрология. – 2018.

UO'K: 616.12-008.31-073.96

ERTA YOSH BOLALARDA ANTIARITMIK DORILARNI QO'LLASH XUSUSIYATLARI

Qodirov M.A., Djalilov D.A.
Andijon davlat tibbiyot instituti

Annotatsiya

Strukturaviy normal yurakka ega bo'lgan bolalarda aritmiya mexanizmlari odatda kattalar bemorida bo'lgani kabi bir xil bo'ladi. Ba'zi aritmiyalar, ayniqsa, yosh bilan bog'liq va kattalar bemorlarida juda kam uchraydi. Yurakning strukturaviy kasalliklarida aritmiya asosiy anormallik yoki jarrohlik yo'li bilan bog'liq bo'lishi mumkin. Qoida tariqasida, antiaritmik dorilarni buyurish ushbu ritmning elektrokardiografik hujjatlari bilan aniq tashxis qo'yishni talab qiladi [1, 4]. Bolada aritmiya paydo bo'lganda dori terapiyasining xavf va foyda tahlilini hisobga olish kerak. Profilaktik antiaritmik dori terapiyasi faqat bolani kasallik oxir-oqibat o'z-o'zidan to'xtaguncha shu vaqt ichida takroriy supraventrikulyar taxikardiyadan himoya qilish uchun buyuriladi [3, 5].

Kalit so'zlar: Aritmiya, yangi tug'ilgan chaqaloq

FEATURES OF THE USE OF ANTIARRHYTHMIC DRUGS IN YOUNG CHILDREN

Kadyrov M.A., Djalilov D.A.
Andijan State Medical Institute

Abstract

In children with structurally normal hearts, the mechanisms of arrhythmias are usually the same as in the adult patient. Some arrhythmias are particularly associated with young age and very rarely seen in adult patients. Arrhythmias in structural heart disease may be associated either with the underlying abnormality or result from surgical intervention. Chronic haemodynamic stress of congenital heart disease (CHD) might create an electrophysiological and anatomic substrate highly favourable for re-entrant arrhythmias [1, 4]. As a general rule, prescription of antiarrhythmic drugs requires a clear diagnosis with electrocardiographic documentation of a given arrhythmia. Risk–benefit analysis of drug therapy should be considered when facing an arrhythmia in a child. Prophylactic antiarrhythmic drug therapy is given only to protect the child from recurrent supraventricular tachycardia during this time span until the disease will eventually cease spontaneously [3, 5].

Keywords: paediatrics, arrhythmias, antiarrhythmic drugs, newborn

ОСОБЕННОСТИ ПРИМЕНЕНИЯ АНТИАРИТМИЧЕСКИХ ПРЕПАРАТОВ У ДЕТЕЙ РАННЕГО ВОЗРАСТА

Кадыров М.А., Джалилов Д.А.
Андижанский государственный медицинский институт

Аннотация

У детей со структурно нормальным сердцем механизмы аритмии обычно такие же, как и у взрослого пациента. Некоторые аритмии особенно связаны с молодым возрастом и очень редко наблюдаются у взрослых пациентов. Аритмии при структурных заболеваниях сердца могут быть связаны либо с основной аномалией, либо в результате хирургического вмешательства. Как правило, назначение антиаритмических препаратов требует постановки четкого диагноза с электрокардиографической документацией данной ритмии [1, 4]. Анализ риска и пользы лекарственной терапии следует учитывать при возникновении аритмии у ребенка. Профилактическая антиаритмическая медикаментозная терапия назначается только для защиты ребенка от рецидивирующей суправентрикулярной тахикардии в течение этого промежутка времени до тех

пор, пока болезнь в конечном итоге не прекратится спонтанно [3, 5].

Ключевые слова: pediatriya, aritmiya, antiaritmik dorilar, новорожденный

Tadqiqotning dolzarbligi. So'nggi yillarda yosh bolalarda antiaritmik dorilarni qo'llashga qiziqmaqola ortib bormoqda, bu esa ushbu guruhda aritmiya va yurak-qon tomir kasalliklari holatlarining ko'paymaqolai bilan bog'liq. Ushbu maqola chaqaloqlar va erta yoshdagi bolalarda aritmiyalarni tashxislash va davolash xususiyatlarini o'rganmaqolaga, shuningdek antiaritmik terapiyani tanlashga ta'sir qiluvchi o'ziga xos omillarni aniqlashga qaratilgan [2, 6]. Ushbu maqolada antiaritmik dorilarning asosiy guruhlari, ularning ta'sir qilmaqola mexanizmi va bolalardagi farmakokinetik xususiyatlar muhokama qilinadi. Yoshga bog'liq fiziologik xususiyatlarni, birga keladigan kasalliklarning mavjudligini va terapiyaning mumkin bo'lgan nojo'ya ta'sirini hisobga olgan holda har bir bemorga individual yondashuvning ahamiyati ta'kidlanadi. Aritmiyalarni davolashda, shu jumladan kardiologlar, pediatrlar va anesteziologlarning o'zaro ta'sirida multidissiplinar yondashuv zarurligiga ham e'tibor qaratilgan. Shuningdek, maqolada yosh bolalarda antiaritmik terapiya xavfsizligi va samaradorligini oshirmaqolaga qaratilgan amaldagi klinik ko'rsatmalar va davolash protokollari tahlil qilinadi. Olingan natijalar yurak-qon tomir kasalliklari bo'lgan bolalarga keyingi tadqiqotlar va tibbiy yordamni takomillashtirmaqola uchun asos bo'lib xizmat qilmaqolai mumkin.

Dorilarni ta'siri, nojo'ya ta'siri va qarama-qarshiliklari. Nafaqat kuchli antiaritmik dorilarning samaradorligini, balki belgilangan davolanish xavfsizligini ham hisobga olish kerak. Qoida tariqasida, antiaritmik dorilarning aksariyati, beta-blokatorlar va amiodarondan tashqari, kasalxonada davolashni talab qiladi.

Birinchi darajali antiaritmik dorilar. I sinf antiaritmik dorilar - natriy kanallariga turli darajada ta'sir qiladi, potensial ta'sir muddatiga turli yo'llar bilan ta'sir qiladi. Ushbu dorilar yaxshilab o'rganilgan va to'g'ri buyurilganda ham samarali, ham xavfsiz hisoblanadi. I sinf antiaritmik dorilar yurakning tarkibiy kasalliklari va/yoki sistolik qorincha disfunksiyasi uchun tavsiya etilmaydi, chunki ularning salbiy inotrop ta'siri va proaritmiya rivojlanish xavfi mavjud. I toifadagi dorilarning aksariyati jigarda metabollanadi, siydik bilan chiqariladi va yoshga qarab o'zgarib turadigan turli xil oqsillarni bog'laydigan profillarga ega [3, 6].

QRS комплекси ва PR оралиғининг давомийлигини изчил кузатиш қон зардобидаги препаратнинг концентрациясини аниқлашдан кўра дозани тўғри созлаш учун фойдалидир.

IB sinfidagi dorilar (lidokain va mexiletin) asosan miokard makrolemiyasida samarali bo'lib, bolalarda kam qo'llaniladi. IA sinfidagi dorilarni (xinidin, prokainamid va disopiramid) yuborishdan oldin va keyin QT oralig'ining davomiyligiga alohida ye'tibor qaratish lozim, chunki IA bilan bog'liq senkop bolalarning 20 foizida sodir bo'lishi mumkin [2,6].

Aniq antixolinerjik ta'sir (ayniqsa disopiramiddan foydalanganda) va atriyal chayqalish paytida sikl davomiyligining oshishi tufayli 1:1 AV o'tkazuvchanligi bilan yurak urish tezligining paradoksal o'sishi bo'lishi mumkin, bu antiaritmik dori terapiyasiga olib keladi va bu potensial buzilishlarga olib keladi.yurak-qon tomir tizimi. Sinf IC dorilarining (flekainid va propafenon) ta'siriga kengaytirilgan PR oralig'i bilan o'tkazuvchanlik buzilishi kiradi.

Shunday qilib, dozani sozlash uchun PR intervallari va QRS kompleksining davomiyligini ketma-ket kuzatish mumkin. Kattalardagi i toifadagi dorilar bilan bog'liq aritmologlarning xavotirlariga qaramay, bu bolalarda kamroq ahamiyatga yega. Propafenon-bu natriy kanallarini blokirovka qilish ta'sirini beta-blokirovka bilan birlashtirgan dori kalsiyga qobiliyat va zaif

antagonizm.

SVT yoki qorincha aritmiyasi bo'lgan 772 bolaning retrospektiv tadqiqotida tahlil qilingan og'iz propafenon administratsiyasining nojo'ya ta'siri 151% bemorlarda sezilarli elektr trofiziologik ta'sir va proaritmiyalarni, shu jumladan 0,6% da yurak to'xtashi yoki to'satdan o'limni o'z ichiga oladi, ularning 2/5 qismi Sindrom WPW va 3/5 bemorlari tizimli yurak kasalligiga chalingan. Strukturaviy yurak kasalliklari bemorlarning 32,3 foizida mavjud edi. Umuman olganda, yurakning nojo'ya hodisalari (4,8%) yo'qligiga qaraganda (1,5%) tizimli yurak kasalliklari mavjudligida tez-tez kuzatilgan. Shunday qilib, propafenon bolalik davridagi aritmiyalarni davolash uchun nisbatan xavfsiz dori hisoblanadi, ammo uni tizimli yurak kasalliklari bo'lgan bemorlarda ishlatmaslik kerak. Shuni ta'kidlash kerakki, qorinchalarni erta qo'zg'alishi bilan og'rigan ba'zi bolalarda flekainid qo'llash boshlanganda retsiprok taxikardiya rivojlanishi mumkin. Qorincha asoratlari bundan mustasno, nojo'ya ta'sirlar xira ko'rish, asabiylashish va giperaktivlikni o'z ichiga olishi mumkin.

II sinf antiaritmik dorilar - bu dorilar bilvosita yurak ion oqimlariga ta'sir qiladi, asosan beta-adrenergik blokada orqali simpatik faollikni bostirish, refrakterlikning pasayishini oldini olish va kalsiy kanallarining adrenergik faollashuvini blokirovka qilish. Ba'zi beta-blokatorlar,pindolol va atsebutolol kabi ichki simpatomimetikani faoliyat namoyish etadi, boshqa beta-blokatorlarni qabul qilishda bradikardiya rivojlanayotgan bolalar uchun foydali bo'lishi mumkin bo'lgan [1, 5].

Ko'pgina nojo'ya ta'sirlar ularning yurak mexanizmlari bilan bog'liq bo'lib, bradikardiya, jismoniy faollikning pasayishi, yurak yetishmovchiligi, gipotenziya, AV tugunlarini o'tkazish bloki va arterial obstruksiyani o'z ichiga oladi. Propranolol va bisoprolol gematoensefalicheskiy barer to'sig'idan o'tib, bemorlarda ruhiy o'zgarishlarga olib kelishi mumkin. Nihoyat, esmolol, ultraqisqa beta-adrenoblokator, tomir ichiga yuborilishi mumkin va ba'zi hollarda aritmiyalarni o'tkir nazorat qilish uchun foydali bo'lishi mumkin.

III sinf antiaritmik dorilar. III sinf antiaritmik dorilar kalsiy kanal blokatorlari repolarizatsiyani uzaytirish, bu VT polimorfizmlarini rivojlanish xavfi bilan QT oralig'ining oshishiga olib keladi [5, 6]. Qoida tariqasida, ular kontraktillikka ta'sir qilmaydi. Beta-blokirovka xususiyatiga ega bo'lgan sotalolni og'iz orqali yuborish bolalarda ritm buzilishlarini davolash uchun tobora ko'proq foydalanilmoqda. U asosan siydik bilan o'zgarmagan holda chiqarilganligi sababli, buyrak yetishmovchiligi bo'lgan bemorlar dozani sozlashlari kerak. Preparatning beta-blokirovka qiluvchi ta'siripropranolol kabi standart beta-blokatorlarga nisbatan zaifdir.

Amiodaron III sinf agenti sifatida tasniflangan bo'lsada, u Vogana-Vilyams tasnifining barcha to'rt sinfining xususiyatlariga yega. Amiodaron yog' va boshqa to'qimalarda saqlanadi (juda uzoq yarim chiqish davri 50 kundan ortiq), jigarda metabollanadi va safro va ichak yo'llari orqali chiqariladi. Amiodaron bilan erishilgan QT oralig'ini uzaytirish kamdan-kam hollarda polimorf qorinchalar taxikardiyasiga olib keladi. Amiodaron bilan davolash QRS davomiyligining biroz oshishiga olib kelishi va sinus tuguniga va AV o'tkazuvchanligiga yanada chuqurroq ta'sir qilishi mumkin. Vena ichiga yuborish yurak holatini doimiy kuzatishni o'z ichiga oladi, chunki yurak-qon tomir kollapsi tasvirlangan. Afsuski, amiodarondan foydalanish, asosan, amiodaron molekulasidagi yod tufayli qalqonsimon bez, o'pka, jigar, teri, ko'z va nevrologik organlarning toksik ta'sirini o'z ichiga olgan jiddiy yekstrakardial yon ta'sirining yuqori darajasi bilan bog'liq. Amiodaronni uzoq vaqt qabul qilgan bemorlar, bolalar va o'spirinlarda qalqonsimon bezning ishlash ko'rsatkichlari har 6 oyda jigar faoliyati, o'pka holati va nevrologik holatini tekshirishi kerak. Kattalardagi uzoq muddatli davolanish bilan bog'liq muhim muammo bo'lgan preparatning tizimli yon ta'siri bolalarda kamroq seziladi. Yaqinda amiodaronga o'xshash, ammo

tarkibida yod bo'lmagan, ya'ni dronedaron preparati ishlab chiqildi. Yaqinda amiodaronga o'xshash, ammo tarkibida yod bo'lmagan, ya'ni dronedaron preparati ishlab chiqildi. Ammo shu narsa zarurki, ushbu preparatni go'daklik va bolalik davrida qo'llashning qo'shimcha dalillari, shuningdek, azimilid, dofetilid, ibutilid va vernakalant kabi bolalarda boshqa yangi III sinf dorilaridan foydalanish haqida ham ma'lumotlar kerak bo'ladi [4, 6].

IV sinf antiaritmik dorilar. Digidropiridin bo'lmagan kalsiy kanal blokatorlari verapamil va diltiazem sinus va AV tugunlarida kalsiyga bog'liq kechiktirilgan ta'sir potensialiga ta'sir qiladi. Ushbu dorilar ikkala tugunda diastolik depolarizatsiyani sekinlashtiradi va natijada yurak urish tezligini pasaytiradi. Shuningdek, ular bo'lmachalar fibrillyatsiyasi (BF) paytida yurak tezligini sekinlashtirib, AV tugunining refrakter davrini uzaytiradi. Verapamil va diltiazem periferik vazodilatatsiyaga olib kelishi mumkin, bu ularning sinus va AV tugunini sekinlashtirish ta'sirini qisman qoplashi mumkin. Verapamilni tomir ichiga yuborish yurak faoliyati buzilgan yoki uzoq vaqt davomida beta-blokatorlarni qabul qiladigan bolalar uchun tavsiya etilmaydi. Shuning uchun kalsiy kanallarini to'sib qo'yadigan dorilar yangi tug'ilgan chaqaloqlarda yoki 1 yoshgacha bo'lgan bolalarda mumkin emasdir. Diltiazem asosan jigarda aniq "birinchi o'tish" effekti bilan metabollanadi, bu bemordan bemorga farq qilishi mumkin [1, 3]. Diltiazem va verapamilning qo'llaniladigan dozasining taxminan 35% va 70% siydik bilan metabolitlar sifatida chiqariladi. Boshqa antiaritmik dorilar Adenozindir. Adenozinni tez tomir ichiga yuborish, asosan, sinus va AV tugunlariga salbiy dromotrop va xronotrop ta'sir ko'rsatadi va uni qo'llash doimiy yurak monitoringini talab qiladi. U eritrotsitlar va qon tomir endotelial hujayralar tomonidan tez metabollanadi (yarim umri 10 soniyadan kam) va shuning uchun qisqa ta'sir qiluvchi dori hisoblanadi. Bronxospazm ba'zida bolalarda adenozin qo'llanilgandan keyin qayd yetilgan va bronxial astma tarixi bo'lgan bolalarda monelikdir.

Digitalis. Digitalis vagus nervining faolligini oshiradi va shu bilan sinus tugunining avtomatizmini sekinlashtiradi, AV tugunining o'tkazuvchanligini va refrakterligini uzaytiradi [2, 3]. Terapevtik dozalarda nojo'ya ta'sirlar kam va bashorat qilinadi, ammo dozani oshirib yuborish ko'pincha o'limga olib keladi, bu buyrak faoliyatini tekshirishni talab qiladi. Kattalar bilan taqqoslaganda, simpatik tizim tonusi oshgan yosh bemorlarda digitalis samarasiz bo'lishi mumkin. Digoksin 1 yoshgacha bo'lgan WPW sindromli bolalarda mumkin emas bo'lsada, 1 yoshgacha bo'lgan chaqaloqlarda og'iz orqali digoksin terapiyasi paytida qorinchalar fibrillyatsiyasi (QF) rivojlanishining sezilarli xavfi mavjudmi yoki yo'qmi, uni qo'llash hali aniqlanmagan.

Natijalar/Xulosa. Shaxsiy yondashuv: aritmiya bilan og'rigan bolalarni davolashda individual yondashuvning ahamiyati ularning tanasining fiziologik xususiyatlari va dorilar almashinuvidagi farqlar bilan bog'liq. Bolaning yoshi, vazni, birga keladigan kasalliklari va umumiy holatini hisobga olish kerak.

Xavfsizlik va samaradorlik: antiaritmik dorilar samarali bo'lishi mumkin, ammo ulardan foydalanish nojo'ya ta'sirlar xavfi bilan bog'liq. Bemorning ahvolini muntazam ravishda kuzatib borish va klinik holatga qarab dozani sozlash kerak.

Multidissiplinar yondashuv: bolalarda aritmiyalarni davolash terapiyani optimallashtirish va tibbiy yordam sifatini yaxshilash uchun turli mutaxassislar, jumladan pediatrlar, kardiologlar va anesteziologlarning hamkorligini talab qiladi.

Keyingi tadqiqotlar zarurati: mavjud klinik ko'rsatmalar bolalarda antiaritmik dorilarning xavfsizligi va samaradorligi to'g'risidagi yangi ma'lumotlar asosida yangilanishi kerak, bu esa ushbu sohadagi keyingi tadqiqotlarning muhimligini ta'kidlaydi.

Shunday qilib, yosh bolalarda antiaritmik dorilarni qo'llash xavf va foydalarni to'liq baholashni, shuningdek, eng yaxshi klinik natijalarga erishish uchun bemorning ahvolini doimiy nazorat qilishni talab qiladi.

Foydalanilgan adabiyotlar:

1. Жуков, А. В., & Петрова, И. С. (2021). "Фармакология антиаритмических средств у детей." Журнал неотложной медицины, 15(3), 112-118.
2. Соловьев, Д. А., & Григорьева, А. И. (2021). "Антиаритмическая терапия у детей с врожденными пороками сердца." Педиатрическая кардиология, 5(3), 60-67.
3. Соловьев, Д. А., & Григорьева, А. И. (2021). "Антиаритмическая терапия у детей с врожденными пороками сердца." Педиатрическая кардиология, 5(3), 60-67.
4. Awad MM, Calkins H, Judge DP. Mechanisms of disease: molecular genetics of arrhythmogenic right ventricular dysplasia/cardiomyopathy. Nat Clin Pract Cardi ovasc Med 2008;5:258–67.
5. Blume, W. (2019). "Pediatric Arrhythmias: A Review." Journal of Pediatric Cardiology, 32(4), 345-356.
6. Bhatia, S., & Goyal, S. (2020). "Antiarrhythmic Drug Therapy in Children: A Comprehensive Review." Pediatric Drugs, 22(2), 123-135.

UO'K: 616.12-008.31-073.96

BOLALARNING OVQATLANISHIDA MIKRONUTRIYENT, VITAMIN VA MINERALLARDAN KOMPLEKSLI FOYDALANISH

Saidova F.S.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Ma'lumki, vitaminlar va muhim makro- va mikroelementlarning optimal ta'minoti bolalarning normal o'sishini, ularning aqliy o'sishini belgilaydi va jismoniy rivojlanishi, shuningdek, umuman sog'lik ko'rsatgichlarini ta'minlaydi. Bolalarga mikroelementlarni qoshimca buyurish vitaminlar va minerallarga bo'lgan ehtiyojni ta'minlash va qoplash maqsadida tavsiya etiladi. Vitamin va minerallarga bo'lgan inson ehtiyoji moddalar yoki fiziologik ehtiyoj jarayonida yuzaga keladi va ob'ektiv holat tavsiya etishda eng muhim mezon hisoblanadi.

Kalit so'zlar: vitamin va mineral komplekslar, bolalar, vitamin yetishmovchiligi, poligipovitaminoz, allergiya

COMPREHENSIVE USE OF TRACE ELEMENTS, VITAMINS, AND MINERALS IN THE NUTRITION OF INFANTS

Saidova F.S.
Samarkand State Medical University

Abstract

As it is known, optimal supply of vitamins and important macro- and microelements determines the normal growth of children, their mental growth and provides physical development, as well as indicators of health in general. Supplementary administration of microelements to babies is recommended in order to provide and compensate for the need for vitamins and minerals. The human need for vitamins and minerals arises in the process of substance or physiological need, and an objective condition is the most important criterion for recommendation.

Keywords: vitamin and mineral complexes, children, vitamin deficiency, polyhypovitaminosis, allergies

КОМПЛЕКСНОЕ ИСПОЛЬЗОВАНИЕ МИКРОЭЛЕМЕНТОВ, ВИТАМИНОВ И МИНЕРАЛОВ В ПИТАНИИ МАЛЫШЕЙ

Саидова Ф.С.
Самаркандский государственный медицинский университет

Аннотация

Как известно, оптимальное поступление витаминов и важных макро- и микроэлементов определяет нормальный рост детей, обеспечивает физическое развитие и их умственный рост, а также показатели здоровья в целом. Рекомендуется дополнительное введение микроэлементов малышам с целью обеспечения и компенсации потребности в витаминах и минералах. Потребность человека в витаминах и минералах возникает в процессе возникновения потребности в веществе или физиологической потребности, и объективное состояние является важнейшим критерием для рекомендации.

Ключевые слова: витаминно-минеральные комплексы, дети, авитаминоз, полигиповитаминоз, аллергия

Vitaminlar va minerallar kompleksi yoshga mos tavsiya etishda (VMK) qabul qilishni tashkil etish tadqiqot va kuzatuvlar natijalari bolaning fiziologik ehtiyojlarga asoslanadi [1]. Bolalar tanasining ehtiyojlari yoshi bilan tabiiy ravishda ortadi, asta-sekin yuqori korsatgichga yetib bo-

radi. Quyida vitamin iste'mol qilish darajasi eng sog'lom odamlarda, ma'lum bir yetishmovchilikning belgilari bir muddat davomida yuz bergan, iste'mol yetarli bo'lmagan, gipovitaminoz - organizmdagi vitamin zaxiralarining sezilarli pasayishi bo'lib, bu nospetsifik va yengil klinik alomatlarni keltirib chiqaradi.

Poligipo vitaminoz esa bir nechta vitaminlar tanqisligi aralash holda bo'lishi hisoblanadi. Bolalarda mikronutriyentlarning optimal ta'minoti ularning normal o'sishini, aqliy va jismoniy rivojlanishini shuningdek umumiy sog'lomligini ta'minlaydi. Bolala ratsionini tabiiy mahsulotlardan tashkil topishi energiya sarflashga va hatto kaloriyalarda ortiqcha miqdorda bo'lsa-da, ularning tanasini bir qator mikroelementlar bilan to'yinishini ta'minlamaydi. Bola tanasiga yoki xonaga uzoq vaqt quyosh nurining yetarli darajada ta'sir qilishi tufayli endogen ultrabinafsha nurlanish ta'siri ostida terida D vitamini sintezlanishi tananing ehtiyojlarini yetarlicha ta'minlab bermaydi. Odatda, vitamin va minerallarning organizmda umumiy tanqisligi mavjud bo'lgan hollardagina, vitamin va mineral komplekslarni (VMK) qabul qilish tavsiya etiladi. Poligipovitaminoz holatining yuzaga kelish ehtimoli asosan bolalarning dietasida vitaminlarning kombinatsiyalangan shakllaridan foydalanishni taqazo etadi.

Vitaminlarni bir vaqtning o'zida iste'mol qilish ko'proq odatiy bo'lib, ularning kombinatsiyasi esa har birining alohida yoki alohida retsepti bilan solishtirganda yanada samarali bo'ladi.

Tabiiyki, bolaning tanasi vitaminlarni oziq-ovqat tarkibidan oladi. Vitaminlar to'planmaydi va organizmdan tezda chiqariladi. Shuning uchun inson har kuni doimiy vitamin miqdorini saqlab qolish uchun ularni qabul qilishi, tanada yetarli darajada ta'minlanib turilishi kerak. Shu o'rinda, oziq-ovqat bilan kerakli miqdorda foydali asosiy mikroelementlarni olish qiyin. Sabzavotlar va mevalar tarkibida asosan karotin (A vitamin unumi), boshqa karotenoidlar, askorbin kislotasi, foliy kislotasi va K vitamini mavjud. O'simlik yog'lari E va K1 vitaminlari manbai bo'lib hisoblanadi. B12 vitamini bilan ta'minlash uchun faqat go'sht va go'sht mahsulotlari muhim ahamiyatga ega bo'lib B1, B2, B6 vitaminlari bilan ta'minlashga ham muhim hissa qo'shadi. Sut va sut mahsulotlarini iste'mol qilish, inson tanasini A vitamini ehtiyojni hamda 50% gacha vitamin B2 ehtiyojini, o'simlik yog'lari - vitamin E, hayvon yog'lari - vitamin A va D kunlik ehtiyojlarni ta'minlab beradi [2]. Biroq, muvozanatsiz parhez, shuningdek, oziqaviy quvvatga ega bo'lgan mahsulotlarning sifati zamonaviy texnologiyalaridan foydalangan holda ishlab chiqarilishi vitamin va minerallarning miqdori sezilarli darajada kamayishiga sabab bo'lmoqda.

Optimal ovqatlanish tavsiyalariga muvofiq bolalarga sabzavotlar kuniga 3-6 portsiyada iste'mol qilish tavsiya etiladi. Yangi meva 2-4 porsiya, kamida 2 marta sut va sut mahsulotlari, 2-3 ta porsiya go'sht yoki baliq maxsulotlarini kiritish muhim hisoblanadi [3]. Kuzatishlar ma'lumotlariga ko'ra Davlat statistikasi, bolalarning katta qismi ushbu mahsulotlarni yetarli miqdorda iste'mol qilmaydi [4]. Masalan, bolalarning faqat yarmida kundalik ratsionida sut bor va 35% bolalar haftasiga bir necha marta sut iste'mol qilishi mumkin [5]. Dengiz yog'li baliqlarini iste'mol qilish imkoniyatining yetishmasligi D vitaminini, yod, to'yinmagan muhim yog' kislotalarining (dokosaheksaenoik kislota) yetishmasligiga olib keladi. Aholi oziqlanishning asosiy buzilishiga so'nggi yillarda mamlakatimizda aholining yog'li ovqatlarni tartibsiz iste'mol qilish (kaloriyalarning 35% dan ortig'i), shakar va tuz B, D, C, E vitaminlarini kam iste'mol qilish bilan karotenoidlar, ba'zi minerallar, shu jumladan tabiiy yod etishmovchiligi sharoitida yuqori kaloriyada iste'mol qilish energiya sarflash darajasidan ortiqcha (bolalarning deyarli 20 foizida) bo'lib ortiqcha vazn va semirishga olib keladi. Maxsulotlar tarkibidagi vitamin barqarorligiga ta'sir qiluvchi omillar asosan oziq-ovqat mahsulotlarini saqlash vaqti va usuli, qayta ishlash paytida, kislotalik, havoda-

gi kislorod, yorug'lik va oksidlovchi yoki qadoqlash, va boshqalar pishirish jarayonida vitaminlarni yo'qotilishiga sabab bo'ladi. Mahsulot turiga va qayta ishlash usuliga qarab vitamin yo'qotilishi 10-30 dan 40-90% gacha bo'lishi mumkin. Vitaminlarning katta qismi oziq-ovqat mahsulotlarini saqlash va jadal texnologik qayta ishlash paytida yo'q qilinadi. Biomavjudlik, ya'ni darajasi turli xil ovqatlardan turli vitaminlarni o'zida saqlaydi va kimyoviy usullar bilan o'lchanadigada umumiy tarkibi - 5 dan 80 foizigacha o'zgaradi. Masalan, go'sht va sut mahsulotlaridan B2 vitaminini so'rib olish 90-100% ga, dondan esa - faqat 40–70%. Kuzatuv mintaqalaridagi bolalarining vitamin holatini tahlil qilinganda vitamin yetishmovchiligini ko'rsatadi B guruhi (siydikda yoki qon zardobida kamligi darajada) tekshirilganlarning taxminan 60% da uchraydi, 30-40 foizda E vitamini, 17 foizda A vitamini, 8 foizda C vitamini. Tahlil natijalariga ko'ra yoshi, yil mavsumi va yashash joyidan qat'iy nazar bolalarning katta qismida poligipovitaminoz holatlari, D vitamini yetishmaslik, [4]; aksariyat (70-80%) uch yoki undan ortiq vitaminlarning yetishmasligi aniqlanadi. D vitamininig endogen sinteziga qaramay ta'sirlangan teri sirtining yetarlicha B spektr ultrabinafsha nurlanishi (to'lqin uzunligi 290-315 nm) nurlanishi orqali terida amalga oshirilishi mumkin. Bolaning tanasi qoidalar asosida quyosh orqali yetarli darajada ta'sir qilish va aksincha, bino ichida uzoq muddat ta'sir qilish ham vitamin bilan yetarli darajada ta'minlanmaydi. Bola quyoshli ob-havoda yursa ham, bu shahar havosi (tutun, zaharli gazlar) yoki chang muhitida shuningdek quyosh kremlari va kiyim-kechaklardan foydalanganda D vitamin sintezi yetarli bo'lmaydi. Shunday qilib, organizmda vitaminlarning optimal bo'lmagan ta'minoti bu bolaning tanasida umumiy tanqinslik holatiga aylandi.

Zarur oziq moddalarning, shu jumladan vitamin va minerallarning yetishmasligi bolaning sog'lig'iga salbiy ta'sir qiladi. Bugungi kunda vitamin yetishmovchiligi ko'plab oziq-ovqat mahsulotlariga bog'liq kasalliklarning (ateroskleroz, gipertoniya, giperlipidemiya, semizlik, diabet, osteoporoz, podagra, ba'zi neoplazmalar) rivojlanish xavf omili ekanligi aniqlangan. Shunday qilib, epidemiologik tadqiqotlar organizmning D vitamini bilan yetarli darajada ta'minlanishi va uchta rivojlanish o'rtasida aniq bog'liqlikni, o'zaro patologik jarayonlar - oksidlovchi stress, yallig'lanish, endotelial disfunktsiyani aniqlandi. Shu bilan birga, yallig'lanish, universal patologik jarayon bo'lib, semizlik, gipertoniya, dislipidemiya, insulin rezistentligi, bolalar va o'smirlarning semirib ketishi bilan bog'liq holatlar, adiponektin miqdori kamayishi va immunitet pasayishi D vitamini tanqislik bilan bog'liq bo'lib kelmoqda [3]. Boshqa vitaminlar (C, B6, B2, foliy kislotasi, E) yetishmasligi ham D vitaminining funktsional yetishmovchiligini keltirib chiqarishda muhim ahamiyatga ega. Bu vitaminlar tarkibiy buzilishlari esa metabolik faol gormonal shakllanishida salbiy ta'sir qiladi [4, 5]. Bundan tashqari, vitaminlar (B1, E, C, B6) bilan ta'minlash organizmning individual antioksidant holati ta'sirga ega. Bundan D vitamini va boshqa vitaminlarning birlashgan tanqisligi qanchalik xavfli ekanligi aniq bo'ladi.

O'z o'rnida bola organizmida mikronutrient tanqislik holatini korreksiyalash ehtiyoji hmuhim hisoblanadi. Oziq-ovqat bilan yetarli miqdorda vitaminlar iste'mol qilish bilan ratsionni boyitish yetishmovchilikni to'ldiradi. Oziq-ovqat mahsulotlarini ishlab chiqarishda ishlatiladigan xom ashyoni boyitish natijasida oziq-ovqat mahsulotlarining texnologik modifikatsiyasi (masalan, nonvoyxonada unni, sumalak pechenelari), yoki oziq-ovqat mahsulotlarini vitaminlar bilan fortifikatsiya qilish ommaviy iste'mol, ya'ni ishlab chiqarish jarayonida oziq-ovqat mahsulotiga vitamin yoki vitaminlar aralashmasini to'g'ridan-to'g'ri qo'shish orqali [6]. Yana bir usul- mineral komplekslar va vitaminlardan foydalanish.

Bolalar uchun vitamin va mineral talablar kompleks tarzda ta'minlanishi maqsadga muvofiq. Bolalar uchun tarkibida vitaminlar dozalari vitaminlar dori emas - ular oziq-ovqat tarkibiy qismla-

ri bo'lib, ulardan foydalanish Oziqlanish yetishmovchiligidan kelib chiqqan gipo- va vitamin yetishmovchiligini oldini olish va davolash tavsiya etiladi. Umuman olganda, oziqlanishda turli dozadagi vitaminlardan tez-tez foydalanish ko'plab kasalliklarni davolashda nospesifik dorilar sifatida asossiz foydalanish ushbu muhim mikroelementlar haqidagi fikrlarning buzilishiga olib keldi [4]. Fiziologik dastur ehtiyojdan ko'p miqdorda yuqori dorivor dozalarda bo'lgan vitaminlar qabul qilish salbiy reaktsiyalarning rivojlanishi oshirib, tibbiy nazoratni ehtiyotkorlik bilan talab qiladi. Terapevtik dozalarda vitaminlarni retsept bo'yicha ko'rsatma faqat shifokor tomonidan belgilanadi. Oziq-ovqat mahsulotlari (ovqatlanish va allergiya bo'yicha komissiya, davlat oziq-ovqat xavfsizligi agentligining oziq-ovqat qo'mitasi, oziq-ovqat mahsulotlari, ovqatlanish va ovqatlanish bo'yicha ilmiy yo'riqnoma, oziq-ovqat xavfsizligi boshqarmasining allergiyasi, EFSA, NDA) tegishli ma'lumotlarni batafsil o'rganish asosida vitaminlar va minerallar, ularni iste'mol qilishning yuqori ruxsat etilgan darajasini [6], ya'ni sog'lom odamlarning aksariyati uchun xavfsiz va ba'zilari uchun yuqori bo'lgan iste'mol qilish miqdori, ularning nojo'ya ta'siri va toksiklik belgilari biroz vaqt o'tgach paydo bo'lishi mumkin (Jadval). Tavsiya etilgan kunlik 1,5 yoshdan 3 yoshgacha bo'lgan bolalar uchun korreksion usul tarkibida kunlik vitaminlar va minerallar dozasi bo'lmasligi kerak kundalik fiziologik ehtiyojning 50 foizidan oshishi kerak ushbu moddalarda Davlat Bojxona ittifoqiga a'zo davlatlarning qonunchiligi (bojxona sanitariya-epidemiologik nazorati bo'lishga tortiladigan tovarlarga nisbatan yagona sanitariya-epidemiologik va gigiyena talablari YevrosAz Ittifoqi). 3 yoshdan oshgan bolalar uchun kunlik doza A, D vitamini, minerallar (selen, mis, sink, yod, temir) 100% dan oshmasligi kerak, suvda eriydigan vitaminlar uchun - 200%. Ba'zi IUDlar dori sifatida ro'yxatga olinadi, garchi mikronutriyentlarning tarkibi ular vijdonsiz yetkazib beruvchilar reestrining 100% dan oshmaydi. Bunday IUDlar bolaning ratsionida vitaminlar iste'mol qilmasligini to'ldirish uchun ishlatiladi. Dorixonalar tarmog'ida taqdim etilgan VMK lar tarkibi (vitaminlar va minerallar to'plami) va dozalari juda muvozanatsiz bo'lishi mumkin (vitaminlardan birining tarkibi bo'lishi mumkin tavsiya etilgan kunlik nafaqaning taxminan 100% bo'lishi kerak iste'mol qilish, ikkinchisi esa zo'rg'a 15% ga etadi. Vitaminning dozasi qancha past bo'lsa, shuncha ko'p ekanligi ko'rsatilgan Vitaminni yo'qotish uchun uzoq vaqt talab etiladi etishmovchiligi va aksincha, dozasi qanchalik yuqori bo'lsa, vitamin ta'minotini qanchalik qisqa bo'lsa muddati optimallashadi [1, 2]. Shu bilan birga, qo'llash muddati, qondagi ma'lum bir vitaminning kontsentratsiyasini ishonchli oshirish uchun zarur bo'lgan turli vitaminlar uchun juda farq qiladi. 30-50% dozalari organizmning vitaminlar uchun fiziologik ehtiyoji, vitamin ta'minotining yomonlashuvi qisqa vaqt ichida mavjud yetishmasligi bartaraf etilmaydi, lekin faqat oldini olish uchun javob beradi [2, 3]. Vitamin D yetishmovchiligining tarqalishini hisobga olgan holda va bolalarda mo'ljallangan B guruhi, ya'ni ular uchun ushbu mikronutrientlarning dozalari RNPning 100% ga yaqin bo'lishi kerak.

1-jadval.

Bolalarda ma'lum vitaminlar va minerallarni iste'mol qilishning muhosaba qilinadigan yuqori darajasi

Vitaminlar va minerallar moddalar	Yoshi, yil				
	1-3	4-6	7-10	11-14	15-17
A, mg RE	800	1100	1500	2000	2600
Beta-karotin, mg	n / a	n / a	n / a	n / a	n / a
D, mkg	25(1000 IU)	25 (1000 IU)	25 (1000 IU)	50 (2000 IU)	50 (2000 IU)
E, mg TE	100	120	160	220	260
B6, mg	5	7	10	15	20
Folik kislotasi, mg	0,2	0,3	0,4	0,6	0,8
Nikotin kislota, mg	2	3	4	6	8

Nikotinamid, mg	150	220	360	600	700

Izoh. RE - retinol ekvivalenti, TE - tokoferol ekvivalenti, n / a – noaniq/aniqlanmagan.

Shaxsiy vitaminlarni ishlatish tavsiya etilmaydi. Chunki ularning komplekslari (tarkibida mikroelementlarning kombinatsiyasi IUD), bolalarda poligipovitaminoz (bir vaqtning o'zida bir necha vitaminlar yetishmasligi), shuningdek mavjudligi sababli organizmdagi bu muhim mikronutrientlarning intervitamin funktsional aloqalari, organizmdagi vitamin B2 yetishmovchiligi vitamin B2 ga bog'liq fermentlarning faoliyatining pasayishiga olib keladi. Faol koferment shakllari o'z navbatida, vitamin B6 yetishmovchiligi, sintezni buzadi. Nikotinamid kofermentlari – biologik faol nikotin shakllari (vitamin PP). Bu uchun asos bo'ldi B vitaminlarining ikkilamchi endogen yoki bir vaqtda tanqisligi tushunchasini anglatadi. Ma'lumki, ko'p hollarda vitaminlar o'zaro ularning fiziologik ta'sirini oshiradi (foliy kislotasi va siyanokobalaminning gematopoezga ta'siri). Barcha B vitaminlari sinergetik bo'lib, ya'ni bir-birining ta'sirini kuchaytiradi. Shunga ko'ra, bitta Vitamin boshqa vitaminni biologik faol koferment shakliga samarali aylantirishga hissa qo'shishi mumkin. B6 vitaminining koferment shakli retseptorlar tuzilishini (retseptorlar o'zgartirishda D vitamini muhim rol o'ynaydi) gormonal faollaydi [5]. D vitamini K vitamini post-translatsiyada ishtirok etadi, kaltsiy bog'lovchi oqsillarni modifikatsiyalar, shu jumladan kaltsiy bilan bog'lovchi oqsil, genetik darajada sintezi gormonal faol shaklni keltirib chiqaradi. Shunday qilib, D vitamini zaruriy shart gomeostazni amalga oshirish uchun, saqlashdagi vazifalari kaltsiy va skelet remodeling bevosita ishtirok etadigan barcha boshqa vitaminlar bilan tananing optimal ta'minotidir hisoblanadi. Vitamin D faol shakllarini shakllantirishda yetishmovchilik ushbu vitaminlarning, hatto organizmga D vitamini normal ta'minoti bilan ham, uning funktsiyasini bajarishga to'sqinlik qiladi. Vitamin D yetishmovchiligini yo'q qilish va shartli bolada raxit boshqa vitaminlar (C, E, K, B guruhi) yetishmasligini bartaraf qilmasdan mumkin emas [4, 5]. Boshqacha qilib aytganda, agar tana boshqa vitaminlar bilan yetarli darajada ta'minlanmagan bo'lsa, D vitamini faol shakllarining yetishmasligi har doim ham kasalliklarni tuzatishi mumkin bo'lmaydi. Shu munosabat bilan, raxitning oldini olishda va xavfini kamaytirishda D vitaminidan samarali foydalanish maqsadida aniq bo'ladi. Ushbu vitaminning yetishmasligi sababli kasalliklar, bu to'liq to'plam bilan birgalikda ishlatilishi kerak uning biologik dasturlarini amalga oshirish uchun zarur bo'lgan barcha vitaminlarning xossalari va shunga mos dozalarda tananing yoshga bog'liq fiziologik ehtiyojlariga muvofiq tatavsiya qilinishi kerak.

Xulosa. Bolalar o'rtasida vitamin yetishmasligining oldini olish o'sib borayotgan organizmning ehtiyojlarini to'liq bajarishga qaratilgan vitaminlar va ularni oziq-ovqat bilan iste'mol qilishni taqazo etadi. Ro'yxatga olingan vitaminlar ta'sirining xususiyatlari, intervitamin mavjudligi, shuningdek, bolalarda poligipovitaminozlarning paydo bo'lish chastotasi yuqori shartlar vitaminlarning kombinatsiyalangan shakllarini qo'llash uchun asos bo'lib xizmat qiladi. Bir vaqtda Vitaminlarni iste'mol qilish ko'proq fiziologik, ularning kombinatsiyasi alohida yoki alohida bilan solishtirganda yanada samarali bo'ladi. Hech shubha yo'qki, VMK tanlashda bolalarga vitaminlarning to'liq to'plamini o'z ichiga olgan komplekslarga (tavsiya etilgan kunlik iste'mol qilish bilan taqqoslanadi) va bir qator yetishmasligi eng keng tarqalgan minerallar defitsiti bartaraf etiladi.

Orol buyi bolalar populyatsiyasida (yod, kaltsiy, temir, magniy, sink) mikronutriyent defitsiti tez-tez kuzatiladi. Bolalar uchun VMKga bo'lgan asosiy talab quyidagilardan iborat: ularda vitaminlar to'plami to'liq bo'lishini va dozalarini ta'minlash uchun vitaminlar yoshga bog'liq fiziologiyaga mos tanlanishi kerak va yil davomida doimiy ravishda oling. Shuni yodda tutingki, aksariyat bolalar mikroelementlar bilan yetarli darajada ta'minlanmagan. Shu bilan birga, vita-

minlar retsepti tuzatishi mumkinligini tushunish kerak faqat bu aynan ularning kamchiliklari metabolik kasalliklar sabab bo'ladi. IUD tayinlanishi davolanish uchun qulay fon yaratadi. Mutanosiblik Rossiya Sog'liqni saqlash vazirligining 21.06.2013 yildagi 395-sonli buyrug'i bilan "Terapevtik ovqatlanish normalarini tasdiqlash haqida" dietadan so'ng terapevtik ovqatlanishni IUDlar kiritadi iste'mol fiziologik normasining 50-100% dozasida ta'minlaydi. Kelgusida bir maqsadli yaratish Turli xil klinik muammolarni hal qilish bo'yicha harakatlar — terapevtik va profilaktika, shuningdek IUD turli toifadagi bemorlarga qaratilgan. VMK tanlovi birinchi VMK tarkibi bilan muvozanatli asosiy vitaminlar tarkibi va kombinatsiyasi bo'yicha va ma'lum bir yoshdagi minerallar bolalar guruhlari uchun vitamin va mineral komplekslar o'sha IUDlarga bolalar uchun bo'ladi. Yaratilgan ishlab chiqarish jarayoni zamonaviy ilmiy ishlanmalar va texnologiyalardan foydalanishni o'z ichiga olgan Evropa va O'zbekiston qonunchiligiga muvofiq, yuqori sifat va yo'qligi tasdiqlanadi sun'iy ranglar va konservantlar tarkibisiz bo'lishi nazarda tutiladi. Ushbu IUDlarning dozalari turli xil ehtiyojlarni hisobga oladi bolalar yosh guruhlari va imkoniyatni bola uchun qulay dozani tanlashni ko'zda tutadi. Biologik faol tarkib to'g'risida ishonchli ma'lumot Davlat ro'yxatidan o'tgan qo'shimchalar va O'zbRes. hududida olib kirish va muomala qilish uchun ruxsat etiladigan, shuningdek ularning gigienasi to'g'risidagi ma'lumotlar xususiyatlari, qo'llanilish ko'rsatmasi, dozalari va qo'llash usuli rasmiy veb-saytda joylashtirilgan Huquqlarni himoya qilishni nazorat qilish davlat xizmati iste'molchilar va inson farovonligi ta'minlaydi.

Foydalanilgan adabiyotlar:

1. Саидова, Ф. С., Г. У. Самиева, and Г. А. Абдирашидова. "Дефицит микронутриентов у детей дошкольного возраста." Журнал биомедицины и практики 7.1 (2022).
2. Расулов С. К., Саидова Ф. С., Мамедов А. Н. Эпидемиология кишечных паразитозов в детском возрасте //Инфекция, иммунитет и фармакология.–2022. – 2022. – Т. 1. – С. 183-189.
3. Саидова, Фируза Саломовна, and Мулкижаҳон Фазлидиновна Фазлидинова. "Коррекция решения микронутриента у дошкольников." Science and Education 4.2 (2023): 498-508.
4. Khasanovna, Rustamova Khabiba, Akhmadova Rukhshona Zoirjan, and Davronova Zebo Mehrozhovna. "Modern Methods of Diagnosing Iron Deficiency Anemia in Pregnant Women and Criteria for Evaluating the Effectiveness of Ferrotherapy." International Journal of Integrative and Modern Medicine 2.6 (2024): 14-17.
5. Громова ОА, Торшин ИЮ. Витамины и микроэлементы: между Сциллой и Харибдой. М.: МЦНМО. 2013. 702 с.
6. Громова ОА, Торшин ИЮ, Учайкин ВФ, Лиманова ОА. Роль витамина D в поддержании противотуберкулезного, антивирусного и общего противоинфекционного иммунитета. Инфекционные болезни. 2014;12:65–74.

UDC: 616.155.392.8+618.2

CLINICAL CASE OF TREATMENT TACTICS FOR A PREGNANT WOMAN WITH ACUTE MYELOGENOUS LEUKEMIA

Saliev K.K., Saliev D.K., Saliev A.K., Salieva M.O., Salieva M.A.
Andijan State Medical Institute

Abstract

In children with structurally normal hearts, the mechanisms of arrhythmias are usually the same as in the adult patient. Some arrhythmias are particularly associated with young age and very rarely seen in adult patients. Arrhythmias in structural heart disease may be associated either with the underlying abnormality or result from surgical intervention. Chronic haemodynamic stress of congenital heart disease (CHD) might create an electrophysiological and anatomic substrate highly favourable for re-entrant arrhythmias [1, 4]. As a general rule, prescription of antiarrhythmic drugs requires a clear diagnosis with electrocardiographic documentation of a given arrhythmia. Risk–benefit analysis of drug therapy should be considered when facing an arrhythmia in a child. Prophylactic antiarrhythmic drug therapy is given only to protect the child from recurrent supraventricular tachycardia during this time span until the disease will eventually cease spontaneously [3, 5].

Keywords: paediatrics, arrhythmias, antiarrhythmic drugs, newborn

КЛИНИК ХОЛАТ ХОМИЛАДОРДА ЎТКИР МИЕЛОЛЕЙКОЗНИ ДАВОЛАШ ТАКТИКАСИ

Салиев К.К., Салиев Д.К., Салиев А.К, Салиева М.О., Салиева М.А.
Андижон давлат тиббиёт институти

Аннотация

Қон ўсма касалликларида даволаш тактикасини танлаш ўзига хос ечимни талаб қилади. Хомиладорликнинг охирги муддатларида тирозинкиназа ингибиторларини сурункали миелолейкозларни даволашда қўллаш, ремиссияга эришиш ва соглом бола тугилиши тўла ечими топилмаган масала. Ўткир миелолейкоз билан касалланган 36 хафтали хомиладор аёл переферик қонида миелобластлар 81%, суяк кўмиги миелограммасида бласт хужайралар 76%, бўлганда она ва бола хаёти учун юкори даражадаги хавф тугилади ва ечимини талаб қилади. Амалда қўлланилган полихимиотерапия 5+2 протоколи ва туғруқни тезлаштирилганда соғлом бола туғилиши билан якунланди.

Калит сўзлар: хомиладор аёл, ўткир миелолейкоз

КЛИНИЧЕСКИЙ СЛУЧАЙ ТАКТИКИ ЛЕЧЕНИЯ БЕРЕМЕННОЙ ЖЕНЩИНЫ БОЛЬНОЙ С ОСТРЫМ МИЕЛОЛЕЙКОЗОМ

Салиев К.К., Салиев Д.К., Салиев А.К, Салиева М.О., Салиева М.А.
Андижанский государственный медицинский институт

Аннотация

Выбор терапии у больных значительной массой опухоли является проблемой не стандартного решения. Применения в лечении ингибиторов тирозинкиназы с длительной выживаемостью больных хроническим миелолейкозом при хорошем качестве жизни на поздних сроках беременности возможно рождения здоровых детей, хотя риск остаётся не до конца изученным. Выбор тактики терапии у больной женщины острым миелолейкозом во время беременности 36 недель, миелобластами 81% в периферической крови, 76% бластными клетками в миелограмме костного мозга является высокой степени риска для жизни матери и плода - ребенка служит предметом острой дискуссии. В результате предпринятой тактики лечения курса

полихимиотерапии по протоколу 5+2 и ускорения рода разрешения закончилась рождением здорового мальчика.

Ключевые слова: беременные женщины, острый миелолейкоз

Relevance. A woman suffering from acute myeloid leukemia (AML) carrying a pregnancy to term and giving birth is an extremely rare event throughout the entire history of over 50 years in the hematology department not only of ASMI clinic but also in the republic. The study of this phenomenon is relevant both scientifically and in terms of practical healthcare.

Goal. To study and analyze the outcomes of pregnancy and treatment strategies for a woman with AML during early and late stages of pregnancy.

Materials and methods. The subject of the study was a woman with AML at 36 weeks of pregnancy. The methods of investigation included peripheral blood hemograms, myelograms from bone marrow punctures, cytochemical studies with myelogram blasts, and the study of the family pedigree of the patient.

Discussion. On August 27, 2014, a 21-year-old woman, K, was admitted to the hematology department of the ASMI clinic at 36 weeks of pregnancy in serious condition, with complaints of severe weakness, dizziness, and darkening of vision.

Her overall condition was severe, consciousness clear, with a bedridden posture and a normal body type. The skin appeared pale with a slight icteric tint, and subcutaneous adipose tissue was sufficiently pronounced. On palpation, peripheral lymph nodes were not enlarged. Auscultation revealed vesicular breathing in the lungs, clear heart sounds, and no pathological murmurs. Blood pressure was 115/70 mmHg, and the pulse was 120 beats per minute and rhythmic. The tongue was coated with a whitish film. The liver was 1-2 cm below the costal margin and was painless, while physiological excretions were normal.

The study of genetic issues related to leukemia, its hereditary transmission to children, grandchildren, and great-grandchildren from their ancestors, both in theoretical and practical healthcare, is of exceptional interest. Therefore, we present our observations below.

As a result of a carefully collected life and medical history, we were able to construct the family pedigree of patient K and discovered that her paternal grandmother (II-11) died from AML at the age of 42, 15 years ago, in the hematology department of the ASMI clinic.

From the pedigree of K, it was possible to determine that the older sisters (II-4, 5, 6, 8, 9, 10), six girls, and the older brother (II-3) of patient K's grandmother all died at ages 4, 5, 6, 8, and 9 years old. Another brother (II-2) was married but had no children; he also died from unknown causes. The reasons for their deaths remain unclear, as they all passed away in early childhood at home without seeking medical help. This naturally raises the question of what serious illnesses they suffered from and whether it could have been leukemia, which is suggested by patient K (IV-1) developing AML due to hereditary genes of hematoblastosis from her grandmother.

It should be noted that after thorough examination of the peripheral blood of the patient, the following results were found: hemoglobin – 51.5 g/L, erythrocytes 2.45x10^12/L, color index - 0.6, platelets 98x10^9/L, myeloblasts 81%, promyelocytes 5%, segmented neutrophils 8%, lymphocytes 6%, ESR 68 mm/h. In the bone marrow aspirate, myeloblastic cells comprised 76%. The cytochemical reaction for peroxidase was positive. The conclusion is AML, leukemic form, pregnancy at 36 weeks with a severe anemic syndrome.

Chelusheva E.Yu. et al. (2014) state that pregnancy in chronic myeloid leukemia (CML) is a rare event, and the introduction of patients with CML is limited. However, family planning issues are relevant for young patients with CML, considering the high effectiveness of treatment with tyrosine kinase inhibitors (TKIs) and the long survival of patients with a good quality of life. Therapeutic approaches for CML patients during pregnancy are a subject of discussion. Preventing disease progression in the mother and ensuring fetal safety are the primary concerns of CML therapy during pregnancy.

It should be noted that the choice of treatment strategy for a pregnant woman with AML at 36 weeks poses a high degree of risk for both the mother and the life of the fetus – child, and this is a subject of intense discussion. Preventing disease progression in the mother and ensuring fetal safety are the main issues in treating acute myeloid leukemia during pregnancy. After thoroughly discussing the health of both the mother and the fetus, we decided to conduct one course of polychemotherapy (PCT) following the 5+2 protocol with cytarabine and daunorubicin (from August 28 to September 1, 2014) and provide symptomatic, anti-anemic therapy. Immediately thereafter, in coordination with the obstetricians-gynecologists, the patient was transferred to Maternity Hospital No. 1 to expedite labor to save the lives of both the mother and the child.

On September 3, 2014, patient K gave birth to a healthy boy weighing 2600 g. Three days after birth, a complete peripheral blood analysis was taken from the child: Hb - 150 g/L, erythrocytes 5.0x10^12/L, platelets 290x10^9/L, leukocytes 22.4x10^9/L, ESR 4 mm/hour. It is extremely rare for a woman with acute myeloblastic leukemia to carry a pregnancy to term and give birth to a healthy baby from a mother with acute leukemia, making this a unique occurrence in the entire history of the ASMI clinic.

From the pedigree, it is clear that patient K inherited traits from her grandmother (II-11) and father, as six older sisters and one brother all died in early childhood and were not examined in medical facilities. On the maternal side, from the grandmother (II-16), five younger sisters (II-22, 24, 26) and brothers (II-19, 21) were all healthy, with no recorded fatalities in childhood (see the pedigree of patient K, age 21).

The role of heredity in leukemias appears to be very complex. This fact became particularly significant with the description of leukemia in two monozygotic twins, its occurrence in multiple generations, and in three or four members of the same family. The first genealogical analysis of such cases was conducted by S. N. Ardashnikov in 1934. Videback, in studies examining the incidence of leukemia among the relatives of probands, found that the incidence of leukemia among relatives was 8.1%, while among the relatives of healthy individuals it was only 0.5%. The role of genetic factors in the development of leukemias is also indicated by the occurrence of several children in one family, monozygotic twins, and cases of congenital leukemia. It is known that among individuals with Down syndrome, the incidence of acute leukemia is 20 times higher than in the general population.

The reason for the increased frequency of acute leukemia in Down syndrome remains unclear. It is hypothesized that chromosome 21 contains a locus for a gene or genes that control hematopoiesis. It is suggested that the inheritance of leukemia may be dominant with low penetrance, or autosomal recessive with high or low penetrance. Chromosomal changes in both acute and chronic leukemia are variable and inconsistent. They are associated with the manifestation of somatic mutations in hematopoietic cells. However, once established, they are consistently found in the bone marrow during the acute stages of the disease (in the initial form

before treatment and in relapses after treatment) for months or years after the onset of the disease. In acute leukemia, they are characterized by aneuploidy and structural chromosomal abnormalities. The latter are more frequently found in groups C, D, E. The nature of aneuploidy depends on the cytomorphological variant of acute leukemia – in lymphoblastic leukemia, a polyploid set of chromosomes is more often observed, while in myeloblastic leukemia, a diploid set is seen. In chronic myelogenous leukemia, specific chromosomal changes are found in one of the autosomes of the 21st pair in the form of deletion (or translocation) of the long arms. This altered chromosome was named the Philadelphia chromosome (Ph1) after the city where it was first discovered by Tough and others in 1961. It appears that leukemogenic changes occur in the genes responsible for the hematopoietic system as a whole, but a particular pathological feature may not manifest for several years or may sometimes appear immediately after birth (congenital acute leukemia). However, there is an opinion that the role of genetic factors in the development of leukemias is determined by the inheritance of a non-dominant or recessive "leukemia" gene, rather than constitutional traits that facilitate the development of this disease (such as macrosomia with hyperfunction of the thymus, congenital metabolic disorders of tryptophan with the accumulation of endogenous leukemic agents - certain metabolites of this acid, etc.).

Gorbunova Z.V. et al. (1969) summarized data from both domestic and foreign literature, reporting 216 cases of the combination of acute leukemia and pregnancy (G.A. Dashtayan, 1958; Z.A. Shapiro, 1957; V.V. Akerman, 1967; Dameschek, Gunz, 1958, and others) and 17 personal observations. The average age of the patients was 30 years. The variants of leukemia included myeloblastic leukemia (25.9%), monocytoblastic leukemia (6.9%), lymphoblastic leukemia (12%), and undifferentiated rare forms in 55.2% of cases.

The adverse effects of leukemia on pregnancy were as follows: term delivery was observed in 34.2% of patients, premature delivery in 33.3%, intrauterine fetal death spontaneous abortion in 7.8%, clinical abortion in 6.4%, and cesarean section in 6.9% of patients; 10.2% of women died during pregnancy. Only 47.6% of women gave birth to viable children. Among the 153 children born to mothers with leukemia, 67.3% were healthy (observations ranged from 1 to 13 years of age), 11.7% were non-viable, 13% were stillborn, 3.3% were macerated, and 4.6% died soon after birth.

Thus, the management strategy for pregnancy in patients with leukemia should prioritize safe delivery methods over life-threatening complications such as bleeding, abortions, or cesarean sections. In the first trimester, artificial interruption of pregnancy is advisable. In the second and third trimesters, it is better to avoid traumatic procedures for pregnancy termination. A cesarean section is permissible for the purpose of preserving the child.

Johnson found three children with acute leukemia in one family and one child with malignant lymphoma. Steinberg reported four children with acute leukemia (citation from Vorontsov I.M. et al. 1972). I.A. Kassirskiy also reported a family where all four children died from leukemia at the ages of 6 to 8 months. Anderson (cited from Vorontsov I.M. et al. 1972) described a family where five out of eight children died from leukemia at the ages of 4 to 8 years, and the sixth child in this family died from pneumonia accompanied by a leukemoid reaction.

In the literature, we could not find similar data regarding women with acute myelogenous leukemia during pregnancy, especially in the later stages. In medical practice, it has been observed that therapeutic approaches vary depending on the degree of remission of

chronic myelogenous leukemia (CML) and the timing of pregnancy. The choice of therapy for patients with significant tumor mass poses a non-standard problem. When using tyrosine kinase inhibitors (TKIs), which allow for prolonged survival with good quality of life in the late stages of pregnancy, it is possible to give birth to healthy children, although the risks remain incompletely studied and require further investigation, particularly for achieving molecular remission and planning pregnancy.

In conclusion, it should be noted that the choice of therapy tactics for a woman with acute myelogenous leukemia at 36 weeks of pregnancy (late term) with 81% myeloblasts in peripheral blood and 76% blast cells in the bone marrow myelogram presents a high degree of risk for both the mother and the child, which remains a subject of acute discussion. Preventing disease progression in the mother and ensuring fetal safety are the main issues in the treatment of acute myelogenous leukemia during late pregnancy. As a result of the treatment strategy we implemented, which involved one course of chemotherapy (CT) according to the 5+2 protocol and expedited delivery, a healthy boy weighing 2600 grams was born. The child's hemoglobin on the third day after birth was 150 g/L, with erythrocytes at 5.0 x 10^12/L, platelets at 290 x 10^9/L, leukocytes at 22.4 x 10^9/L, and ESR at 4 mm/h.

Further objectives involve fighting for the life of the mother with acute myelogenous leukemia, which includes conducting two more courses of chemotherapy according to the 7+3 protocol and achieving clinical and hematological remission. The final outcome remains a challenging issue, as this question is not always resolved in favor of the pregnant woman.

Used literature:

1. Badalyan L.O. Hereditary Diseases. Tashkent Medgaz Handbook 1980. pp. 105-106.
2. Bugri L.A., Vecherina D.N., Yablonsky G.B. Acute Leukemia in Children. Leningrad 1972. pp. 39-48 and 167-169.
3. Vorobyov L.I. Guide to Hematology. Moscow 1485. Volume 1. p. 234. Lazorko N.S., Lomin E.G., Romanova E.G. et al. Toxicity of second-generation tyrosine kinase inhibitors in the treatment of patients with chronic myelogenous leukemia. Bulletin of Hematology Vol. 2, 2014. pp. 37-38.
4. Vorontsov I.M., Kuracheva N.A., Mironovich V.K., edited by Academician, Professor A.F. Tur.
5. Gorbunov Z.V., Streneva T.N. On the issue of the combination of leukemia and pregnancy. XII International Congress on Blood Transfusion. Moscow 1969. Published by Medicine 1972. pp. 589-590 and 620.
6. Kassirskiy I.A. Genetics in Hematology. Moscow 1967. p. 249.
7. Kassirskiy I.A., Yushkevich L.B. The issue of hematology and blood transfusion. 1963.
8. Lazereva O.V., Tusarova G.A., Chelysheva E.Y. et al. Results of 12 years of therapy in patients in the late chronic phase of CML who received tyrosine kinase inhibitors after unsuccessful IFN-A treatment. Bulletin of Hematology Vol. X, 2014. pp. 36-37.
9. Chelysheva E.Y., Galeyko M.V., Kolosheynova T.I. et al. Tactics for managing patients with chronic myelogenous leukemia during pregnancy. Scientific and Practical Journal. Bulletin of Hematology Vol. X No. 2, 2014. p. 77.
10. Damechek W. Asta Haematol. 1964. 31, 4, 187.

UO'K: 616.61

SURUNKALI GLOMERULONEFRIT KASALLIGINING PROFILAKTIKASIGA ZAMONAVIY QARASHLAR

Sapayeva Z.A.
Toshkent tibbiyot akademiyasi Urganch filiali

Annotatsiya

Maqolada surunkali glomerulonefrit (SGN) kasalligini oldini olish bo'yicha zamonaviy yondashuvlar tahlil qilinadi. SGN – buyrak glomerulalarining uzoq muddatli yallig'lanishi bilan tavsiflangan kasallik bo'lib, progressiv buyrak yetishmovchiligiga olib kelishi mumkin. Profilaktika tadbirlari birlamchi, ikkilamchi va uchlamchi choralarga bo'linib, kasallikni keltirib chiqaruvchi omillarni bartaraf etish, rivojlanishini sekinlashtirish va asoratlarni kamaytirishga qaratilgan. Genetik predispozitsiya, atrof-muhit omillari va immunologik mexanizmlarning roli ko'rib chiqiladi. Tadqiqotlar erta tashxis, individual davolash va profilaktik choralarning samaradorligini ta'kidlaydi.

Kalit so'zlar: surunkali glomerulonefrit, profilaktika, biomarkerlar, genetik tadqiqotlar, immunomodulyatorlar, nutrigenomika

MODERN PERSPECTIVES ON THE PREVENTION OF CHRONIC GLOMERULONEPHRITIS

Sapayeva Z.A.
Urgench branch of TMA

Abstract

The article analyzes modern approaches to the prevention of chronic glomerulonephritis (CGN). CGN is a disease characterized by prolonged inflammation of the renal glomeruli, which can lead to progressive kidney failure. Preventive measures are divided into primary, secondary, and tertiary strategies aimed at eliminating causative factors, slowing disease progression, and reducing complications. The role of genetic predisposition, environmental factors, and immunological mechanisms is examined. Studies emphasize the importance of early diagnosis, individualized treatment, and the effectiveness of preventive measures.

Keywords: chronic glomerulonephritis, prevention, biomarkers, genetic research, immunomodulators, nutrigenomics

СОВРЕМЕННЫЕ ВЗГЛЯДЫ НА ПРОФИЛАКТИКУ ХРОНИЧЕСКОГО ГЛОМЕРУЛОНЕФРИТА

Сапаева З.А.
Ургенчский филиал ТМА

Аннотация

В статье анализируются современные подходы к профилактике хронического гломерулонефрита (ХГН). ХГН — это заболевание, характеризующееся длительным воспалением клубочков почек, которое может привести к прогрессирующей почечной недостаточности. Профилактические мероприятия делятся на первичные, вторичные и третичные меры, направленные на устранение факторов, вызывающих заболевание, замедление его прогрессирования и снижение осложнений. Рассматривается роль генетической предрасположенности, факторов окружающей среды и иммунологических механизмов. Исследования подчеркивают важность ранней диагностики, индивидуального лечения и эффективности профилактических мер.

Ключевые слова: хронический гломерулонефрит, профилактика, биомаркеры, генетические исследования, иммуномодуляторы, нутригеномика

Kirish. Surunkali glomerulonefrit (SGN) – bu buyraklarning surunkali yallig'lanish kasalligi bo'lib, asosan immunologik va genetik omillar ta'sirida rivojlanadi. Ushbu kasallik asta-sekin

rivojlanib, oxir-oqibat buyrak yetishmovchiligiga olib kelishi mumkin [1, 3, 7]. SGN diagnostikasi va davolash muolajalari zamonaviy tibbiyotda yetarlicha rivojlangan bo'lsa-da, ushbu kasallikning oldini olish, ya'ni profilaktikasi juda muhim ahamiyatga ega. Profilaktika choralari kasallikning boshlang'ich bosqichlarida qo'llanilganda, uning rivojlanish ehtimolini sezilarli darajada kamaytirish mumkin. Surunkali glomerulonefritning rivojlanishiga bir nechta asosiy etiologik omillar sabab bo'lishi mumkin. Bular quyidagi omillardir [4, 7]:

- Streptokokk infeksiyalari
- Avtoimmun kasalliklar
- Genetik moyillik
- Giperoniya va metabolik sindrom
- Zaharlanish va toksik moddalar ta'siri
- Surunkali yuqumli kasalliklar
- Noto'g'ri ovqatlanish va nosog'lom turmush tarzi
- Allergik reaksiyalar va surunkali yallig'lanish jarayonlari

Bu omillarning oldini olish va ularni bartaraf etish bo'yicha chora-tadbirlar amalga oshirilishi lozim. Bu chora tadbirlar birlamchi, ikkilamchi va uchlamchi profilaktika ko'rinishida amalga oshiriladi.

-**Birlamchi profilaktika** SGN rivojlanishining oldini olishga qaratilgan bo'lib, quyidagi tadbirlarni o'z ichiga oladi:

- Immun tizimini mustahkamlash: Vitamin va minerallar bilan boyitilgan ovqatlanish tartibiga rioya qilish, immunitetni mustahkamlovchi dorilar va tabiiy mahsulotlardan foydalanish.
- Yuqumli kasalliklarni o'z vaqtida aniqlash va davolash: Bakterial va virusli infeksiyalarni erta aniqlash va ularni kompleks terapiya bilan davolash.
- Sog'lom turmush tarziga rioya qilish: Jismoniy faollikni oshirish, zararli odatlardan voz kechish.
- To'g'ri ovqatlanish: Tuz miqdorini cheklash, suyuqlik iste'molini nazorat qilish, kaliy va magniyga boy mahsulotlarni iste'mol qilish.
- Shaxsiy gigiyena qoidalariga amal qilish: Qo'llarni muntazam yuvish, bakterial infeksiyalardan saqlanish.
- Tug'ma va irsiy moyilligi bor shaxslarda muntazam tibbiy tekshiruvlar o'tkazish.

- **Ikkilamchi profilaktika** SGNga chalingan bemorlarning kasallik rivojlanish tezligini sekinlashtirishga va asoratlarni kamaytirishga qaratilgan:

- Bemorlarni doimiy tibbiy nazorat ostida saqlash: Ular uchun maxsus rejalashtirilgan tibbiy tekshiruvlarni muntazam o'tkazish.
- Gipertoniya va boshqa xavf omillarini nazorat qilish: Qon bosimini normallashtirish, tuz iste'molini kamaytirish.
- Antibakterial terapiya va immunosupressiv dorilarni o'z vaqtida qo'llash: Shifokor tavsiyalariga qat'iy rioya qilish.
- Dieta va suyuqlik iste'molini boshqarish: Buyraklar yuklamasini kamaytirish uchun muvozanatli ovqatlanish rejimini ishlab chiqish.
- Psixologik qo'llab-quvvatlash va stressni kamaytirish: Stress buyrak funktsiyasiga salbiy ta'sir ko'rsatishi mumkin, shuning uchun stressni boshqarish usullaridan foydalanish muhim.

- **Uchlamchi profilaktika** buyrak yetishmovchiligi rivojlanishini oldini olish va hayot sifatini

yaxshilashga yo'naltirilgan:

- Gemodializ va peritoneal dializga tayyorgarlik: Bu bosqichda bemor dializ jarayonlariga moslashtiriladi va tegishli muolajalar olib boriladi.
- Buyrak transplantatsiyasini rejalashtirish: Buyrak yetishmovchiligi bosqichiga kelib qolgan bemorlar uchun donor topish va transplantatsiya jarayoniga tayyorlash ishlari amalga oshiriladi.
- Reabilitatsiya va parhezga qat'iy rioya qilish: Kasallik bilan yashash sifatini yaxshilash uchun individual parhezlar ishlab chiqiladi.

Bundan tashqari hozirgi kunda SGN profilaktikasida quyidagi zamonaviy yondashuvlar qo'llanilmoqda:

Biomarkerlardan foydalangan holda erta tashxis qo'yish: Biomarkerlar – bu kasallikning mavjudligini, bosqichini yoki prognozini aniqlashda yordam beruvchi biologik ko'rsatkichlar bo'lib, surunkali glomerulonefrit diagnostikasida muhim ahamiyat kasb etadi. Zamonaviy tibbiyotda turli biomarkerlardan foydalanish orqali kasallikni erta aniqlash va terapiya samaradorligini baholash mumkin[2, 5, 7]

1. Qon va siydik biomarkerlari

1.1. Protein va ferment biomarkerlari

SGN diagnostikasida qon va siydik tarkibida kuzatiladigan protein va ferment biomarkerlari asosiy ahamiyatga ega. Ular yordamida kasallikning erta bosqichlarini aniqlash va buyrak shikastlanishining darajasini baholash mumkin. Quyida eng ko'p o'rganilgan protein va ferment biomarkerlar keltirilgan:

- Albuminuriya: Buyrak filtratsiya tizimining shikastlanganligini ko'rsatib beradi. Albuminning siydik tarkibida me'yordan ortiq bo'lishi SGN rivojlanishini bildiradi. Mikroalbuminuriya bosqichida tashxis qo'yish kasallikning oldini olishga imkon beradi.
- Kreatinin va GFR (glomerulyar filtratsiya tezligi): Buyraklarning filtratsiya qobiliyatini baholashda ishlatiladi. Kreatinin darajasi oshishi buyrak yetishmovchiligining rivojlanayotganidan dalolat beradi, GFR esa filtratsiya jarayonining samaradorligini baholashda muhim hisoblanadi.
- Nefrin va podokaliksin: Podotsitlarning shikastlanganligini ko'rsatuvchi markerlar bo'lib, SGN erta tashxisida muhim rol o'ynaydi. Bu proteinlarning siydik tarkibida ortishi podotsitlarning yo'qolayotganini bildiradi.
- Cystatin C: Buyrak funktsiyasini baholash uchun ishlatiladi va kreatininga nisbatan aniqroq natijalar beradi. Ayniqsa, buyrak kasalliklari bilan bog'liq bo'lgan subklinik o'zgarishlarni aniqlashda muhim ahamiyatga ega.
- Beta-2 mikroglobulin: Buyrak proksimal naychalari shikastlanganda siydik tarkibida ortib boradi va buyrak funksiyasining buzilganligini ko'rsatadi.
- NGAL (Neutrophil Gelatinase-Associated Lipocalin): Buyrak tubulalari shikastlanishining erta indikatori bo'lib, o'tkir va surunkali buyrak kasalliklarini aniqlashda qo'llaniladi.
- KIM-1 (Kidney Injury Molecule-1): Buyrak shikastlanishining biomarkeri bo'lib, naychalar shikastlanganida siydik tarkibida ortadi va kasallikning og'irligini baholashga yordam beradi.
- L-FABP (Liver-type Fatty Acid Binding Protein): Buyrak naychalari tomonidan chiqariladigan marker bo'lib, buyrakning surunkali shikastlanishlarini baholash uchun ishlatiladi.

Protein va ferment biomarkerlarining birgalikda qo'llanilishi SGN tashxisini yanada aniqroq qo'yishga imkon beradi. Masalan, kreatinin va Cystatin C kombinatsiyasi yordamida

KFTni aniq baholash, NGAL va KIM-1 yordamida esa buyrak shikastlanishining erta bosqichlarini aniqlash mumkin.

1.2. Immunologik biomarkerlar

SGN ko'pincha autoimmun kasalliklar bilan bog'liq bo'lgani sababli, immunologik biomarkerlar diagnostikada muhim ahamiyatga ega. Immun tizimining o'z to'qimalariga noto'g'ri hujum qilishi natijasida glomerulonefrit rivojlanadi, shuning uchun immunologik markerlarni erta aniqlash muhimdir. Quyida SGN tashxisida eng ko'p ishlatiladigan immunologik biomarkerlar keltirilgan:[5]

- Anti-GBM (glomerulyar bazal membranaga qarshi antitanalar): Glomerulyar bazal membrana komponentlariga qarshi immun javob rivojlanishi SGNning ayrim shakllari, xususan, Goodpasture sindromi bilan bog'liq.
- ANCA (antineytrofil sitoplazmatik antitanalar): ANCA asosidagi testlar autoimmun vaskulitlar, ayniqsa, mikroskopik poliangiit va Vegeners granulomatozi tashxisida qo'llaniladi.
- Komplement tizimi komponentlari (C3, C4, CH50): SGN bilan bog'liq bo'lgan yallig'lanish jarayonlarida muhim ahamiyatga ega. C3 va C4 darajasining kamayishi komplement tizimi orqali vositachilik qilingan immun kompleks kasalliklarini ko'rsatishi mumkin.
- IL-6 va TNF-α (interleykin-6 va tumor nekroz faktori alfa): Bu sitokinlar yallig'lanish jarayonida muhim rol o'ynaydi. IL-6 va TNF-α darajasining oshishi buyrak to'qimalarida davomli shikastlanish jarayonining borayotganini bildiradi.
- BAFF (B-cell activating factor): Bu biomarker B-limfotsitlarning faolligini oshiradi va autoimmunitet bilan bog'liq glomerulonefrit holatlarida yuqori darajada kuzatiladi.
- sCD163 (solubil CD163): Makrofaglar va monotsitlar faolligini ko'rsatuvchi biomarker bo'lib, buyrak ichida yallig'lanish darajasini aniqlashda qo'llaniladi.
- HLA (odam leykotsit antigeni) polimorfizmlari: Ba'zi HLA variantlari SGN rivojlanishiga moyillik tug'diradi va individual immunogenetik predispozitsiyani baholash uchun qo'llaniladi.

Immunologik biomarkerlar klinik diagnostikada SGN shaklini aniqlash va differensial tashxis qo'yishda muhim ahamiyatga ega. Ushbu biomarkerlar asosida individual yondashuv ishlab chiqilib, bemorlar uchun mos keluvchi terapiya rejasi tanlanishi mumkin.[1;5]

2. Genetik tadqiqotlar va SGN diagnostikasi: Genetik tadqiqotlar surunkali glomerulonefritning rivojlanish mexanizmini tushunishda va erta tashxis qo'yishda muhim ahamiyatga ega. Genetik omillar SGN rivojlanish xavfini oshiruvchi asosiy sabablar qatoriga kiradi. So'nggi yillarda genetik texnologiyalarning rivojlanishi tufayli turli genomik biomarkerlarga asoslangan diagnostika usullari ishlab chiqilmoqda.[3]

2.1. HLA (odam leykotsit antigeni) polimorfizmlari

HLA genlari immun tizimining funksional holatini belgilaydi va autoimmun kasalliklarga moyillikni shakllantiradi. SGNning ayrim shakllari, xususan, IgA nefropatiyasi, lupus nefriti va anti-GBM glomerulonefriti, muayyan HLA genotiplari bilan bog'liq ekanligi aniqlangan. Masalan:

- HLA-DRB1 va HLA-DQA1 allellari IgA nefropatiyasi rivojlanish xavfini oshiradi.
- HLA-DR3 va HLA-DR4 lupus nefriti bilan bog'liq bo'lib, kasallikning og'ir kechishini taxmin qilishga yordam beradi.

2.2. APOL1 gen mutatsiyalari

APOL1 geni Afrikaning ba'zi mintaqalarida yashovchi populyatsiyalarda buyrak kasalliklariga moyillikni oshiruvchi omil sifatida aniqlangan. Ushbu genning G1 va G2 variantlari glomerulonefrit va boshqa buyrak kasalliklari rivojlanish xavfini oshiradi. Tadqiqotlar shuni

ko'rsatdiki, APOL1 mutatsiyalariga ega shaxslarda buyrak yetishmovchiligi rivojlanish ehtimoli yuqori bo'ladi.

2.3. COL4A3, COL4A4 va COL4A5 genlari

Ushbu genlar glomerulyar bazal membrananing tuzilishini shakllantiradi. COL4A5 mutatsiyalari Alport sindromi bilan bog'liq bo'lib, bu genetik kasallik buyrak yetishmovchiligi va eshitish qobiliyatining buzilishi bilan tavsiflanadi. COL4A3 va COL4A4 genlarining mutatsiyalari esa dominant meros qilib olinadigan nefropatiyalarning sabablaridan biridir.

2.4. CFHR1 va CFHR3 genlarining deleksiya mutatsiyalari

Komplement tizimining faollashuvi SGN patogenezida muhim rol o'ynaydi. CFHR1 va CFHR3 genlarining deleksiyasi atipik gemolitik-uremik sindrom (aHUS) va komplement vositasida rivojlanadigan glomerulopatiyalarning paydo bo'lishiga sabab bo'lishi mumkin. Bu mutatsiyalar mavjud bo'lganda bemorlar monoklonal antikorlar bilan davolanishga yaxshi javob berishi mumkin.

2.5. Genetik diagnostika usullari

Genetik tadqiqotlar orqali SGN xavfini baholash va erta tashxis qo'yish uchun quyidagi texnologiyalardan foydalaniladi:

- Butun ekzom sekvensiyasi (WES) – SGN bilan bog'liq bo'lishi mumkin bo'lgan genetik mutatsiyalarni aniqlashda ishlatiladi.
- Butun genom sekvensiyasi (WGS) – butun genom bo'ylab aniqlik bilan tahlil qilinadi va noyob genetik mutatsiyalar topiladi.
- Polimorfizm tahlillari (GWAS – Genome-Wide Association Studies) – keng populyatsiyalar bo'ylab SGN bilan bog'liq genetik variantlarni aniqlashda qo'llaniladi.

2.6. Personalizatsiyalangan tibbiyot va genetik ma'lumotlar asosida davolash- Genetik tadqiqotlar natijalari personalizatsiyalangan terapiya ishlab chiqishda katta ahamiyatga ega. SGNning individual genetik xususiyatlarini hisobga olish quyidagi maqsadlarni amalga oshirishga yordam beradi:

- Kasallik rivojlanish xavfini baholash va genetik skrining asosida oldini olish strategiyalarini ishlab chiqish.
- Maqsadli dori vositalarini tanlash, masalan, APOL1 mutatsiyalariga ega bemorlar uchun aniq yo'naltirilgan terapiyalar ishlab chiqish.
- Gen terapiyasi va CRISPR texnologiyalari yordamida buzilgan genlarni tuzatish imkoniyatlarini o'rganish.

3. Innovatsion dori vositalari: So'nggi yillarda SGNni davolashda yangi innovatsion dori vositalari ishlab chiqilmoqda. Bu dorilar kasallik patogenezini aniq nishonga olgan holda samarali terapiya ta'minlashga yordam beradi. Quyida zamonaviy yondashuvlar va yangi dori vositalari ko'rib chiqiladi:

Biologik dorilar – bu tirik organizmlar yoki ularning komponentlari asosida ishlab chiqilgan preparatlar bo'lib, ular immun tizimi va yallig'lanish jarayonlariga ta'sir qiladi.

- Rituksimab – CD20 antigeniga bog'langan monoklonal antikor bo'lib, autoimmun glomerulonefritlarni davolashda qo'llaniladi. U B-limfotsitlarni yo'q qilib, immun tizimining buzilgan faolligini kamaytiradi.
- Belatacept – T-limfotsitlarning faollashuvini bostirib, immun tizimining o'ta reaktivligini pasaytiradi. Bu dorining surunkali glomerulonefritning immunologik komponentlarini boshqarishda samaradorligi tadqiq etilmoqda.
- Eculizumab – komplement tizimini bostiruvchi dori bo'lib, atipik gemolitik-uremik sin-

drom va komplement vositasida yuzaga keluvchi glomerulopatiyalarda qo'llaniladi.

Ko'plab farmatsevtik kompaniyalar SGNni innovatsion ravishda davolashga yo'naltirilgan yangi dorilar ishlab chiqmoqda:

- Nefron-himoya qiluvchi dori vositalari – bu dorilar buyrak to'qimalarini mustahkamlash va filtratsiya tizimini saqlab qolishga yordam beradi.
- Immunomodulyator dorilar – immun tizimi faoliyatini tartibga solish orqali yallig'lanish jarayonlarini kamaytiradi.
- Antifibrotik dorilar – buyrak to'qimalarida fibroz jarayonlarini kamaytirib, buyrak funktsiyasini uzoqroq saqlab qolishga yordam beradi.

Gen terapiyasi va CRISPR texnologiyasi - SGNni genetik darajada tuzatish imkonini beradi.

- CRISPR-Cas9 texnologiyasi orqali patologik genlarni o'zgartirish va kasallikni molekulyar darajada tuzatish mumkin.
- Gen transferi orqali muayyan genetik mutatsiyalarni barqarorlashtirish va hujayralarni sog'lom ishlashga qaytarish mumkin.
- mRNA terapiyasi – genetik darajada o'zgarishlar kiritish orqali buyrak hujayralarining funksiyalarini tiklashga yordam beruvchi yangi yondashuvlardan biridir.

Personalizatsiyalangan farmakoterapiya-Genetik testlar asosida har bir bemorga individual mos keladigan dori terapiyasi tanlanmoqda. Bu yondashuv bemor organizmining genetik xususiyatlariga qarab optimal dori vositasini tanlashga yordam beradi va nojo'ya ta'sirlarni kamaytiradi.

Staminal hujayra terapiyasi

- Mezenximal stem hujayralar – buyrak to'qimalarini tiklash va yangilashda muhim rol o'ynaydi.
- Induktsiyalangan pluripotent stem hujayralar (iPSCs) – bemorning o'z hujayralari asosida ishlab chiqilib, individual terapiya uchun moslashtirilgan yondashuvni ta'minlaydi.

4. Telemeditsina va monitoring tizimlari: Telemeditsina va monitoring tizimlari SGN profilaktikasida va bemorlarni uzoq muddatli kuzatishda muhim rol o'ynaydi. Zamonaviy texnologiyalar bemorlarning holatini real vaqt rejimida kuzatish va o'z vaqtida tibbiy aralashuv qilish imkonini beradi. Quyida telemeditsina va monitoring tizimlarining asosiy jihatlari ko'rib chiqiladi:

4.1. Masofaviy diagnostika va konsultatsiyalar

Telemeditsina yordamida bemorlar shifokorlar bilan masofaviy bog'lanib, o'z holatlari haqida maslahat olishlari mumkin. Ayniqsa, qishloq hududlarida yashovchi yoki harakatlanish imkoniyati cheklangan bemorlar uchun telekonsultatsiyalar muhim ahamiyat kasb etadi.

- Videoqo'ng'iroqlar va onlayn platformalar – bemor va shifokor orasidagi interaktiv aloqa uchun ishlatiladi.
- Elektron tibbiy yozuvlar (EMR) – bemorlarning barcha ma'lumotlarini saqlash va ulardan uzoq muddatli monitoring uchun foydalanish imkonini beradi.

4.2. IoT qurilmalar va masofaviy monitoring

Internetga ulanadigan qurilmalar (IoT) SGN bilan kasallangan bemorlarni doimiy kuzatish imkonini yaratadi. Bu qurilmalar yordamida buyrak faoliyati, qon bosimi, siydik tarkibi va boshqa muhim ko'rsatkichlarni kuzatish mumkin.

- Smart-sensorlar – siydik tarkibini, oqsil miqdorini va boshqa biomarkerlarni tahlil qilishga yordam beradi.

- **Yurak va qon bosimi monitoringi** – SGN bemorlarida ko'pincha gipertoniya rivojlanishi mumkinligi sababli muhim hisoblanadi.
- **Aqlli soatlar va bilaguzuklar** – umumiy sog'liq holatini kuzatib, nojo'ya o'zgarishlar haqida signal beradi.

4.3. Sun'iy intellekt va ma'lumotlarni tahlil qilish

Sun'iy intellekt (SI) tibbiy ma'lumotlarni tahlil qilish va individual profilaktik chora-tadbirlarni ishlab chiqishda foydalaniladi. SI algoritmlari yordamida quyidagilar amalga oshiriladi:

- **Kasallik xavfini oldindan bashorat qilish** – biomarkerlar, genetik ma'lumotlar va klinik ko'rsatkichlarga asoslangan diagnostika.
- **Davolash samaradorligini baholash** – har bir bemor uchun individual terapevtik rejalarni optimallashtirish.
- **Avtomatlashtirilgan signalizatsiya** – bemor holatining yomonlashishini oldindan aniqlash va shifokorlarga ogohlantirish yuborish.

4.4. Mobil ilovalar va sog'liq monitoringi

Mobil ilovalar bemorlarga o'z sog'lig'ini mustaqil kuzatish imkonini beradi. Ular quyidagilarni o'z ichiga oladi:

- **Dori qabul qilish eslatmalari** – bemorlarga o'z vaqtida dori ichishni eslatib turadi.
- **Siydik analizlarini qayd etish** – bemorlar uy sharoitida tahlillar olib borib, natijalarni ilovaga kiritishlari mumkin.
- **Sog'liq jurnali** – bemorlarning umumiy sog'lig'ini kuzatish va o'zgarishlarni qayd qilish.

5. Regenerativ tibbiyot va hujayra terapiyasi

Regenerativ tibbiyot va hujayra terapiyasi surunkali glomerulonefrit (SGN)ni davolashda istiqbolli yo'nalishlardan biri hisoblanadi. Ushbu yondashuv hujayralarni yangilash, buyrak to'qimalarini qayta tiklash va kasallikning progressiv rivojlanishini sekinlashtirishga qaratilgan.

5.1. Staminal hujayra terapiyasi

Staminal hujayralar organizmda turli to'qimalarga aylanib, zararlangan hujayralarni tiklash qobiliyatiga ega. SGN davolashda quyidagi staminal hujayra turlaridan foydalanish istiqbollari mavjud:

- **Mezenximal hujayralar** – yallig'lanishni kamaytiradi, immunomodulyator ta'sirga ega va buyrak fibrozini oldini olishga yordam beradi.
- **Indutsirlangan pluripotent staminal hujayralar (iPSCs)** – bemorning o'zidan olingan hujayralar asosida ishlab chiqariladi va individual terapiya imkoniyatini yaratadi.
- **Gematopoetik staminal hujayralar** – immunitet tizimini boshqarish va autoimmun jarayonlarni barqarorlashtirishda foydali hisoblanadi.

5.2. Bioinjeneriya va buyrak organoidlari

Zamonaviy texnologiyalar yordamida sun'iy buyrak to'qimalari ishlab chiqarish imkoniyati oshmoqda. Laboratoriya sharoitida yetishtirilgan **buyrak organoidlari** quyidagi afzalliklarga ega:

- Buyrak to'qimalari regeneratsiyasiga yordam beradi.
- Farmakologik tadqiqotlarda yangi dorilarni sinash uchun model sifatida ishlatiladi.
- Individual terapiya ishlab chiqish uchun yangi imkoniyatlar yaratadi.

5.3. Ekzosomalar va regenerativ terapiya

Ekzosomalar – bu hujayralar tomonidan chiqariladigan kichik membranali vesikulalar bo'lib, ularda oqsillar, RNK va boshqa bioaktiv moddalarning yuqori konsentratsiyasi mavjud. Ular SGN davolashda quyidagi jihatlarga ega:

- **Immunoregulyatsiya** – buyrak to'qimalaridagi yallig'lanishni kamaytiradi.

- Hujayralarni rejeniratsiya qilish – zararlangan buyrak hujayralarini qayta tiklashga yordam beradi.
- Fibrozni oldini olish – buyrakning chandiqlanish jarayonini sekinlashtiradi.

5.4. Gen terapiyasi va CRISPR texnologiyasi

CRISPR/Cas9 texnologiyasi genetik nuqsonlarni tuzatish va SGN rivojlanishiga sabab bo'luvchi mutatsiyalarni bartaraf etishda ishlatilmoqda. Bu usul orqali:

- Buyrak hujayralarining genetik muvozanati tiklanadi.
- Autoimmun reaksiyalar kamaytiriladi.
- Personalizatsiyalangan terapiya imkoniyati yaratiladi.

Regenerativ tibbiyot va hujayra terapiyasi hozircha klinik tadqiqot bosqichida bo'lsa-da, kelajakda SGN bemorlari uchun samarali va uzoq muddatli davolash usuli sifatida katta istiqbolga ega.

6. Nutrigenomika va individual parhez strategiyalari

Nutrigenomika – bu oziq-ovqat va genetik xususiyatlarning o'zaro ta'sirini o'rganadigan fan sohasi bo'lib, SGNni oldini olish va boshqarishda muhim ahamiyat kasb etadi. Individual parhez strategiyalarini ishlab chiqish orqali bemorlarning metabolik jarayonlarini yaxshilash, yallig'lanish reaktsiyalarini kamaytirish va buyrak faoliyatini qo'llab-quvvatlash mumkin.

6.1. Nutrigenetik tahlil va individual yondashuv-Nutrigenetik tahlillar bemorning genetik xususiyatlariga asoslangan holda maxsus parhez rejalarini ishlab chiqishga yordam beradi. Masalan, ba'zi genetik variantlar natriy yoki oqsil metabolizmini o'zgartirishi mumkin, bu esa bemorlarga individual parhez tavsiyalarini berishga imkon yaratadi.

6.2. Antiyallig'lanish parhez tamoyillari-SGN bilan kasallangan bemorlar uchun yallig'lanishni kamaytirishga qaratilgan parhez muhim rol o'ynaydi. Quyidagi komponentlarga alohida e'tibor qaratish lozim:

- Omega-3 yog' kislotalari – baliq yog'ida, yong'oq va zig'ir urug'ida mavjud bo'lib, buyraklardagi yallig'lanish jarayonlarini kamaytirishga yordam beradi.
- Antioksidantlar – C va E vitaminlari, polifenollar (zaytun moyi, rezavor mevalar, yashil choy) buyrak hujayralarini oksidativ stressdan himoya qiladi.
- Probiotik va prebiotiklar – ichak mikroflorasini yaxshilash orqali buyraklarning toksik yukini kamaytirishga yordam beradi.

6.3. Oqsil iste'molini muvozanatlash-SGN bilan og'rigan bemorlar uchun oqsil iste'moli muhim jihat hisoblanadi. Haddan tashqari ko'p oqsil iste'moli buyraklarga yuk bo'lishi mumkin, ammo yetarli darajada sifatli oqsil olish organizmning muhim ehtiyojlarini qondirishga yordam beradi. Optimal oqsil manbalari sifatida:

- O'simlik oqsillari (loviya, no'xat, soya mahsulotlari)
- Past yog'li sut mahsulotlari
- Tuxum va parranda go'shti tavsiya etiladi.

6.4. Tuz va natriy iste'molini cheklash-Ortiqcha natriy buyrak faoliyatiga salbiy ta'sir ko'rsatadi va qon bosimini oshiradi. Shuning uchun SGN bemorlariga quyidagi tavsiyalar beriladi:

- Kunlik natriy iste'molini 2–3 grammgacha cheklash.
- Tuz o'rniga ziravorlar va o'simliklar (limon, sarimsoq, kekik)dan foydalanish.
- Tayyor va qayta ishlangan mahsulotlardan (konservalangan oziq-ovqat, tez tayyor bo'ladigan ovqatlar) voz kechish.

6.5. Suv balansini saqlash-Buyrak kasalliklarida suyuqlik iste'moli muhim omillardan biri

hisoblanadi. Optimal gidratatsiya darajasini saqlash quyidagilarni o'z ichiga oladi:

- Bemorning holatiga qarab suv miqdorini aniqlash – ba'zi bemorlarga suyuqlik cheklovi kerak bo'lishi mumkin.
- Gazlangan va shakarli ichimliklardan voz kechish.
- Siydik haydovchi tabiiy vositalar (masalan, tarvuz, bodring)dan foydalanish.

6.6. Individual parhez rejalarini yaratish-Har bir bemorning individual ehtiyojlariga mos ravishda maxsus parhez dasturlarini ishlab chiqish muhimdir. Zamonaviy nutrigenetik testlar va metabolik tahlillar yordamida quyidagilar amalga oshiriladi:

- Shaxsiylashtirilgan ovqatlanish rejalarini yaratish
- Parhez orqali kasallik rivojlanishini sekinlashtirish
- Bemorlarning hayot sifatini yaxshilash

Xulosa: Shunday qilib, surunkali glomerulonefrit kasalligining profilaktikasi zamonaviy tibbiyotning dolzarb yo'nalishlaridan biri hisoblanadi. Ushbu kasallikning oldini olishda birlamchi, ikkilamchi va uchlamchi profilaktika choralari muhim rol o'ynaydi. Birlamchi profilaktika infektsion kasalliklarning oldini olish, immunitetni mustahkamlash va sog'lom turmush tarzini targ'ib qilishga asoslangan. Ikkilamchi profilaktika esa kasallikning dastlabki bosqichlarida uni erta aniqlash va samarali davolash orqali asoratlarning oldini olishga qaratilgan. Uchlamchi profilaktika esa buyrak yetishmovchiligini oldini olish va bemorlarning hayot sifatini oshirishga yo'naltirilgan.

Zamonaviy yondashuvlar orasida genetik tadqiqotlar, biomarkerlarga asoslangan erta tashxis usullari, innovatsion dorilar va parhez-terapiya muhim ahamiyat kasb etmoqda. Shuningdek, kasallik xavfini kamaytirish uchun ekologik omillarni nazorat qilish va aholining tibbiy savodxonligini oshirish zarur. Shu bois, surunkali glomerulonefrit profilaktikasiga kompleks yondashish va zamonaviy tibbiy texnologiyalarni qo'llash kasallik tarqalishini kamaytirishda muhim omillardan biri bo'lib qolmoqda.

Foydalanilgan adabiyotlar:

1. KDIGO (2021). KDIGO 2021 Clinical Practice Guideline for the Management of Glomerular Diseases. Kidney Disease: Improving Global Outcomes (KDIGO). Kidney International Supplements, 11(3), 1-150. DOI: 10.1016/j.kisu.2021.05.001
2. Toto, R. D., & Levin, A. (2023). Advances in the management and therapy of chronic glomerulonephritis. Nephrology Journal, 24(1), 45-60. DOI: 10.1016/j.nephj.2023.01.003
3. Glassock, R. J., & Fervenza, F. C. (2022). The pathogenesis and treatment of glomerulonephritis. Nature Reviews Nephrology, 18(5), 310-325. DOI: 10.1038/s41581-022-00500-6
4. O'zbekiston Respublikasi Sog'liqni Saqlash Vazirligi (2022). Nefrologiya bo'yicha klinik protokollar va tavsiyalar. Respublika ixtisoslashtirilgan nefrologiya markazi. Tashkent.
5. Sharma, R., & Singh, P. (2021). Immunological aspects of chronic glomerulonephritis. Journal of Immunopathology, 43(2), 175-189. DOI: 10.1016/j.jimpath.2021.02.005
6. Toblli, J. E., & Cao, G. (2020). Role of renin-angiotensin-aldosterone system inhibitors in chronic kidney disease. Kidney International Reports, 5(4), 561-574. DOI: 10.1016/j.ekir.2020.01.004
7. World Health Organization (WHO) (2021). Global perspectives on chronic kidney disease prevention and control. World Health Organization Report. DOI: 10.1136/bmjgh-2021-005654

UO'K: 616.85:159.961:615.851.2

FOBIK BUZILISHLAR BILAN KUZATILGAN NEVROZGA CHALINGAN BEMORLARDA PSIXOTERAPIYA

Sarboeva N.K., Saliev M.M., Ubaydullaeva R.R.
Andijon davlat tibbiyot instituti

Annotatsiya

So'nggi yillarda dunyo miqyosida fobik buzilishlar bilan kuzatilgan psixopatologik buzilishlar ortib bormoqda. Nima uchun fobik buzilishlarga katta ahamiyat berilmoqda? Fobik buzilishlar – bu birdan – bir situatsion vahima hisoblanadi. Bog'langan qo'rquv yoki uchun fobiya uchun holatiy reaksilar xos sanaladi.

Kalit so'zlar: gipnoz, fobiya, nevroz, qo'rquv, buzilish, psixopatologiya

PSYCHOTHERAPY IN THE TREATMENT OF PHOBICAL DISORDERS IN PATIENTS WITH NEUROSES

Sarboeva N.K., Saliev M.M., Ubaidullaeva R.R.
Andijan State Medical Institute

Abstract

In recent years, the world has seen an increase in psychopathological disorders with phobic inclusions. And the phobic component becomes more and more significant. Phobic disorders are a form of situational anxiety. For obsessive fears or phobias, a reaction of avoidance is characteristic.

Key words: hypnosis, phobia, neurosis, fear, frustration, psychopathology

ПСИХОТЕРАПИЯ В ЛЕЧЕНИИ ФОБИЧЕСКИХ РАССТРОЙСТВ У БОЛЬНЫХ НЕВРОЗАМИ

Сарбоева Н.К., Салиев М.М., Убайдуллаева Р.Р.
Андижанский государственный медицинский институт

Аннотация

В последние годы во всем мире отмечается рост психопатологических расстройств с фобическими включениями. Причем фобический компонент становится все более значительным. Фобические расстройства - это одна из форм ситуационной тревоги. Для навязчивых страхов или фобий характерна реакция избегания.

Ключевые слова: гипноз, фобия, невроз, страх, расстройства, психопатология

Dolzarblik. Obsessiv buzilishlarning kuchayishi va ularning insonning hayot faoliyatiga ta'siri keng tarqalgan. Turli klinik belgilari bilan birga turli fobik buzilishlar mavjud: kanserofobiya-saratonga chalinishdan qo'rqish, nozopfobiya-kasallik qo'rquv, neofobiya-o'zgarishlar, yangiliklar va har qanday o'zgarishlar, kardiofobiya - yurak-qon tomir kasalliklaridan qo'rqish, fobofobiya qo'rquvdan qo'rqish, maniofobiya – aqldan ozishdan qo'rqish, klaustrofobiya-yopiq, berk joylardan qo'rqish. Lev Valensi ta'kidlaganidek, tashvish-fobik davlatlarning barcha xilma-xilligi "yunon ildizlarining bog'i"dan boshqa narsa emas.

Asosiy joyda davolash tashvish – qo'rquv shart-sharoitlar hisoblanadi band tomonidan an'anaviy usullari: antidepressantlar (amitriptilin, iksel, portal, zoloft), sakinleştirici (fenazepam, nozepam, valium), anksiolitik (ataraks), neyroleptik (triftazin, eglonil).

So'nggi yillarda fobik kasalliklarni davolashda psixoterapiyadan foydalanishga qiziqish ortib bormoqda.

Tadqiqot maqsadi. Nevrozlar bilan og'rigan bemorlarda fobik kasalliklarni faqat dorivor usullar bilan va psixoterapiya bilan birgalikda davolash samaradorligini qiyosiy o'rganishdan iborat.

Tadqiqot materiallari va usullari. Bu vazifalarni hal qilish uchun nevrozlar bilan kasallangan 87 nafar bemorni klinik va psixopatologik tekshiruvdan o'tkazdik, klinik ko'rinishida fobik buzilishlar eng katta ulushni egalladi. Anik bemorlarning yoshi 21 dan 52 yoshgacha bulgan (urtacha yoshi 34.2 g±1.2). Kasallikning davomiyligi 3 oydan 3 yilgacha (o'rtacha 9.5±0.5 oy) o'zgargan. O'rganilgan guruh orasida AVPND ambulator davolanishda bo'lgan turli fobik kasalliklarga chalingan 38 nafar erkak (43,6%) va 49 nafar ayol (56,3%) mavjud bo'ldi. Tadqiqotning asosiy usuli klinik va psixopatologik usul bo'lib, davolashning yetakchi usuli gipnoterapiya bo'ldi.

Tashxis KXT 10 (sinfiga moslashtirilgan versiya) /F40/ da belgilangan mezonlar asosida amalga oshirildi. Tashvishli fobik buzilishlar /F 40.0/, unda tashvish nafaqat yoki asosan muayyan vaziyatlar (tashqi jihatdan mavzuga nisbatan) tufayli yuzaga keladi, bu hozirda xavfli emas. Agorafobiya /F40.1/ nafaqat ochiq joylardan, balki olomonning mavjudligi va darhol xavfsiz joyga (odatda uyga) ga qaytmas vaziyatlardan ham qo'rquvni o'z ichiga oladi. Pettofobiyalar/F40.2/ erkaklarda ham, ayollarda ham birdek keng tarqalgan. Asosiy mezon-o'z-o'zini hurmat qilish va tanqiddan qo'rqish.. O'ziga xos mono "izolyatsiyalangan" fobiyalar/F 41.0/, ular ayrim hayvonlar yaqinida bo'lish, balandlik, momaqaldiroq, qorong'ilik, samolyotlarda uchish, yopiq joylar kabi muayyan holatlar bilan qat'iy chegaralanadi. Ishga tushirish holati yakkalanib qolganiga qaramay, unga kirishish vahimaga olib kelishi mumkin. Vahima buzilishi (yepizodik paroksismal bezovtalik) asosiy belgi bo'lib, ma'lum bir vaziyat yoki holatlar bilan chegaralanmagan va shuning uchun oldindan aytib bo'lmaydigan og'ir tashvish (vahima) ning takroriy hurujlari hisoblanadi.

Barcha tematik bemorlar 2 guruhga bo'lindi: guruh 1 an'anaviy dori davolash 42 (48,2%) olgan bemorlar iborat. 2-guruh dori-darmon bilan birga psixoterapiya, 45 (51%) olgan bemorlardan iborat bo'ldi. Bundan tashqari, psixoterapiya, ya'ni gipnoterapiya asosiy davolash usulidan iborat bo'ldi.

Qabul paytida bemorlar umumiy klinik, klinik-psixologik va psixopatologik tekshiruvlar va patopsixologik tekshiruvlardan o'tdi, ya'ni xvotir shkalasi (Spilberg) va depressiya shkalasi (Bek), klinik tadqiqotlar natijasida ularning travmatik vaziyatga javobining o'ziga xos xususiyatlari va bemorlarning turli premorbid shaxs xususiyatlari aniqlandi.

Klinik, psixopatologik va patopsixologik tekshirish natijasida tekshirilayotgan bemorlarda quyidagi shaxsiy xususiyatlar aniqlandi.

Birinchi variant, psixoastenik 29 (33.5%) tashvish-shubhali belgi belgilarning ustunligi bo'lgan bemorlar yedi. Ular harakatga g'oyalar, ruhiy tasvirlar yoki impulslar shaklini oldi, bu harakatlar mazmunan juda farq qiladi, lekin mavzu uchun deyarli har doim yoqimsiz. Xarakterli xususiyatlar taklif qilingan harakatlarning shubhalanishi va qat'iyasizligi bo'ldi.

Ikkinchi variant, isterik 26 (29.8%) isteroipoxondrik belgi belgilari bo'lgan bemorlar edi. Buning uchun katta o'zgaruvchanlik va mozaik holat mavjud edi. Ushbu holatning o'ziga xosligi bemorning bu holat bilan bog'liq tajribasi bo'lib, asosiy alomatlar uyqu buzilishi, bosh og'rig'i edi; bunday bemorlar doimo sog'ligi va kundalik ishlarni bajarishdan shikoyat qildilar.

Uchinchi variant -19 (21.8%) astenik xarakter xususiyatlarining ustunligi bilan bo'lib, unda asosiy mezonlar: charchashning ortishi, tez toliqish, ishlashning pasayishi, pastga qarab kayfiyatning o'zgarishi edi.

To'rtinchi variant, giperstenik turi 8 (9.1%) qattiq belgi xususiyatlari bir ustunlik bilan bemorlar, hayajonlanish va bir vaqtning o'zida oshdi toliqish, shuningdek befarqligi, sabrsizlik, haddan tashqari faoliyati o'tish edi.

Beshinchi variant esa aralash turi 5 (5.7%) belgi turlarini o'z ichiga olgan: shizoid, depressiv va eksploziv. Aralash turi, ya'ni shizoid turi, ular juda nozik, zaif, ta'sirchan "daraxt kabi tugagan" juda nozik va moslashuvchan bo'lgan yagona, yopiq turmush tarziga ega bo'lgan mavzular bilan ajralib turadi. Depressiv-eksploziv tip asabiylashish, atrofdagilarga qaratilgan ziddiyatlarga moyillik ortishi bilan xarakterlanadi. Bu odamlar spirtli ichimliklar va giyohvandlikka moyil.

1-jadval

Davolash samaradorligini shaxsning tipologik xususiyatlariga qarab qiyosiy baholash.

Shaxs xususiyatlari tipi	Davolash samaradorligi						P
	Sezilarli samaradorlik		O'rtacha samaradorlik		Past samaradorlik		
	abs	%	abs	%	abs	%	
psixoastenik tip (tashvishli – vaximali xarakter bilan)	19	37,3	8	27,6	1	14,3	P < 0.05
isterik tip (istero ipox-ondrik xarakter bilan)	13	25,5	12	41,4	1	14,3	P < 0.05
astenik tip	11	21,6	6	20,6	2	28,6	P < 0.01
giperstenk tip (rigid xarakter bilan)	5	9,8	2	6,9	2	28,6	P < 0.01
Aralash tip (shizoid, eksploziv, depressiv)	3	5,8	1	3,5	1	14,3	P < 0.05
Jami:	51	100,0	29	100,0	7	100,0	87

2-jadval

Davolash samaradorligini mavzuga doir bemorlarda qiyosiy baholash

Davolash samaradorligi ko'rsatkichi	I Umumiy davo olganlar		II Gipnoz olganlar		R
	abs	%	abs	%	

1 Sezilarli samaradorlik	8	19,0	27	60,0	P<0,001
2 O'rtacha samaradorlik	9	21,5	15	33,3	P<0,05
3 Past samaradorlik	25	59,5	3	6,7	P<0,05
Jami	42	100	45	100	

Dastlabki davolash davri psixoterapiyaning qaysi usuli bemorga mos kelishini aniqlab, unga gipnoz yordamida psixikaga ta'sir etish zarurligining sababini tushuntiradi. Keyin har bir bemor uchun autosuggestionning alohida terapevtik formulalari tuzildi. Shundan so'ng bemor gipnotik sessiya bosqichi uchun tayyorlangan bo'lib, unda o'rnatish qulay pozaga berilgan, keyin manzil motor apparatini yengillashtirish, interotseptiv yengillik, atrof-muhitdan uzilish, tinch-lantirish, shaxsiy tajribalardan uzilish takliflariga qaratilgan. Shundan so'ng o'rnatish umumiy yengillik, dam olishni uyquchanlikka o'tkazish uchun beriladi. Asosiy nuqta uyquchanlikni gip-notik uyquga o'tkazish, gipnoz holatining potensiali va terapevtik takliflar, keyin gipnozning harakatlarini keyinchalik gipnozga o'tish bilan uzaytirishdir. Gipnoz seansining butun bosqichi 45 daqiqadan tashkil topdi. Davolash davrida har kuni 10-15 ta sessiya o'tkazildi.

Davolash samaradorligi ko'rsatkichlari quyidagi mezonlar asosida baholandi:

1. klinik davo, shikoyatlarning to'liq yo'qolishi va kasallikning ob'ektiv belgilari
2. psixopatologik belgilarning sezilarli darajada kamayishi va kuchsizlanishi
3. yaxshilanishning ijobiy dinamikasining yetishmasligi klinik jihatdan minimal

Gipnoz davolash jarayonida psixoastenik, isterik va astenik belgilar bilan og'rigan bemorlar hafta davomida uyquni sezilarli darajada yaxshilashdi, kayfiyat 10 kun ichida yaxshilandi, umumiy tashvish holati kamaydi va bir oydan so'ng gipnoz terapiyasining dastlabki bosqichida kuzatilgan obsessiv qo'rquvlar yo'qoldi (1-jadval).

Bemorlar o'zlarining kundalik ishlariga aralasha boshladilar, ular o'tmishda ularni yuklagan vaziyatga xotirjam munosabatda bo'lishdi. Giperstenik xarakterga ega bo'lgan bemorlar, shuningdek, aralash variantlar (shizoid, depressiv va portlovchi) dam olish qiyin bo'ldi. Ba'zi bemorlar psixoterapiyaning bu turiga salbiy munosabatda bo'lganlar (2-jadval).

Xulosa. Shunday qilib, o'tkazilgan kuzatishlar turli tipologik xususiyatlarga ega bo'lgan shaxslar nevrozlarining fobik shakllarini davolashda gipnoterapiyadan foydalanishga tabaqalashtirilgan yondashuvning samaradorligini ko'rsatadi.

Foydalanilgan adabiyotlar:

1. Алимов У. Х., Харабара Г.И., Абдулкасымов Ф.Б. Клиническое руководство: Модели диагностики и лечения психических и поведенческих расстройств. Ташкент, 2003.
2. Каменеский Д.А. Неврозология и психотерапия. Москва,2001
3. Клиническая психиатрия. Под. ред. Дмитриевой Т.Б. Москва, 1998.
4. Рустанович А.В., Шамрей В. К. Клиническая психиатрия (в схемах, таблицах и рисун-ках). Санкт-Петербург, 2003.
5. Современная клиническая психиатрия. Попов Ю.В, Вид В.Д. С-
6. Г.И.Каплан, Б.Дж.Седок. «Клиническая психиатрия» Москва 1999 г.

7. М.Л. Аграновский «Общая медицинская психология и психопатология» Андижан 2003 - 203 с.

UDC: 612.017.1:591.441:616-092.9

AGE HISTOPHYSIOLOGY OF THE WHITE SPLEEN PULP IN EARLY POSTNATAL ONTOGENESIS

Sattibayev I.I.
Andijan State Medical Institute

Abstract

The spleen is the largest lymphoid organ in humans and mammals, making a significant contribution to the development and maintenance of the cellular and humoral immune response, innate and acquired immunity, the quantitative and qualitative composition of immunocytes in blood, lymph and other lymphoid organs.

Its development in early postnatal ontogenesis is accompanied by interaction and establishment of connections between hematopoietic and stromal cell populations of numerous microanatomical zones on the territory of the organ.

The lymphodestructive, lymphodegenerative and lymphoproliferative effects of stress can change these relationships and lead to a long-term impairment of the immune response.

Key words: spleen, ontogenesis, postnatal age

ERTA POSTNATAL ONTOGENEZDA TALOQ OQ PULPANI YOSHGA BOG'LIQ GISTOFIZIOLOGIYASI

Sattiboev I.I.
Andijon davlat tibbiyot instituti

Annotatsiya

Taloq odam va sut emizuvchilar organizmidagi eng katta limfoid organ bo'lib, hujayrali va gumoral immun javobni, tug'ma va orttirilgan immunitetni, qon, limfa va boshqa limfoid a'zolardagi immunotsitlarning miqdoriy va sifat tarkibini rivojlantirish va saqlashga katta hissa qo'shadi.

Erta postnatal ontogenezda uning rivojlanishi organ ichidagi ko'plab mikroanatomik zonalarning gematopoetik va stromal hujayralar populyatsiyalari o'rtasidagi o'zaro ta'sir va aloqalarni o'rnatish bilan birga keladi.

Stressning limfodestruktiv, limfodegenerativ va limfoproliferativ ta'siri bu munosabatlarni o'zgartirishi va immunitetning uzoq muddatli buzilishiga olib kelishi mumkin.

Kalit so'zlar: taloq, ontogenez, tug'ruqdan keyingi davr

ВОЗРАСТНАЯ ГИСТОФИЗИОЛОГИЯ БЕЛОЙ ПУЛЬПЫ СЕЛЕЗЕНКИ В РАННЕМ ПОСТНАТАЛЬНОМ ОНТОГЕНЕЗЕ

Саттибаев И.И.
Андижанский государственный медицинский институт

Аннотация

Селезенка является крупнейшим лимфоидным органом в организме человека и млекопитающих, вносящим весомый вклад в развитие и поддержание клеточного и гуморального иммунного ответа, врожденного и приобретенного иммунитета, количественный и качественный состав иммуноцитов крови, лимфы и других лимфоидных органов.

Ее развитие в раннем постнатальном онтогенезе сопровождается взаимодействием и установлением связей между гемопоэтическими и стромальными клеточными популяциями многочисленных микроанатомических зон на территории органа.

Лимфодеструктивное, лимфодегенеративное и лимфопролиферативное действие стресса способно изменить эти взаимоотношения и привести к продолжительному нарушению иммунного ответа

Ключевые слова: селезенка, онтогенез, постнатальной период

Relevance. It is known that with age the probability of developing autoimmune, endocrine, infectious and cancerous diseases increases[2]. In the aging of the immune system, the most important role is played by heterogeneous involution of the thymus. In elderly and senile people, a significant part of the thymus is replaced by adipose and connective tissue.

At the same time, involutional changes in the spleen have not been sufficiently studied and it is likely that with aging, some of the functions of the thymus are delegated to the spleen [4].

This review analyzes data on the development and age-related changes in the spleen from the point of view of immunology [1].

In humans, the spleen is laid down at 5-6 weeks of embryonic development in the thickness of the dorsal mesentery, where lymphoid cells migrate. At the beginning of development, the spleen is a dense accumulation of mesenchymal cells penetrated by primary blood vessels. Later, some of the cells differentiate into reticular tissue, which is populated by stem cells [3].

At 7-8 weeks of development, macrophages appear in the spleen. At 2-4 months of embryogenesis, strands grow into the spleen, starting from the capsule, from which trabeculae are subsequently formed. At 12 weeks of spleen development, B-lymphocytes first appear in it. During this period, sinusoidal capillaries and other blood vessels are formed, and wide venous sinuses appear in the vascular bed of the spleen, dividing it into islets.

At 3-4 months of intrauterine development, islets of hematopoietic cells are evenly distributed around the artery (T-zone), whereas at the end of the 4th and during the 5th month, lymphocytes and macrophages are concentrated on the side of the artery (B-zone). Subsequently, periarterial lymphoid cuffs and lymphoid nodules are formed from lymphocytes.

The processes of myelopoiesis in the human spleen reach their maximum development in the 5th month of the intrauterine period, after which their activity decreases and ceases by the time of birth. The main function of myelopoiesis in the antenatal period is performed by the red bone marrow [2].

Simultaneously with the development of nodules, the formation of red pulp occurs, which becomes morphologically distinguishable in the 6th month of intrauterine development. In the 9th month of embryogenesis, centers of immune cell proliferation appear in the lymphoid nodules, indicating an increase in lymphopoiesis in the spleen by the time of birth.

Purpose of the study. The purpose of this study was to study the age dynamics of the B-zones of the spleen of experimental animals in early postnatal ontogenesis.

Materials and methods of the study. We conducted an immunohistochemical study of the B-lymphocyte population of the white pulp of the spleen of white Sprague Dawley rats: newborns, 5, 10, 15, 20, 25 and 30 days old - 8 animals in each group. Paraffin sections of formalin-fixed spleen were stained immunohistochemically for CD20 (a B-lymphocyte marker) using the avidin-biotin-peroxidase method, followed by quantitative image evaluation in the Image Pro+ image analysis program.

Results of the study. The obtained results demonstrated that B-lymphocytes are present in the spleen starting from the neonatal period. At the age of 5 days, the organ already contains elements of T-zonality, but the zones do not yet have distinct contours, while B-zones are not determined.

At the age of 10 days, the contours of the largest B-cell compartment of the spleen appear - its marginal zone, but the density of CD20+ immunoreactive cells in it is still low. At the

age of 15 days, the contours of single primary lymphoid follicles begin to appear in the white pulp, the cell density of which increases significantly by the 20th day of life, corresponding to the period of transition to independent nutrition.

At the age of 25 days, rare secondary lymphoid nodules appear in the spleen. By the 30th day, the spleen demonstrates a definitive microstructure with a voluminous white pulp, wide rims of the marginal zone around its compartments, a high density of CD20+ immunoreactive cells not only in the lymphoid follicles, but also in the marginal zone. Quantitative immunohistochemical analysis showed that the boundary age periods for the development of B-zones of the spleen white pulp are 10 days (infant period), 20 days (the period of transition to independent nutrition) and 25 days (infant period).

According to image analysis, there is a sharp increase in the specific area of CD20-immunoreactive cells during the transition from the infant to the suckling period ($p<0.01$) and from the suckling to the infant period ($p<0.05$), which corresponds to the general trend of B-zone growth in early postnatal ontogenesis. In its formation in early postnatal ontogenesis, quantitative shifts are clearly manifested, generally reflecting the increasing natural antigen load on the growing organism of experimental animals during the described age periods.

Conclusion. Thus, according to the immunohistochemical study, the B-cell compartment in the spleen of rats, which lags behind the T-zones in development, nevertheless begins to form earlier than was previously believed, based on the results of routine histological examination.

Used literature:

1. Bakhmet A.A. Structure of lymphoid structures of the spleen of rats under the influence of acute emotional stress // Morphology.- 2014.-V.126.-N1.- P.55-58.
2. Kapitonova M.Yu., Kuznetsov S.L., Klaucek S.V., Mohd Ismail Z.I., Ulla M., Fedorova O.V. Features of accidental involution of the thymus in a growing organism under the influence of various types of stressors // Morphology. - 2016. - Vol. 130. - N6. - P. 56-61.
3. Shalyapina V.G., Bedrov Ya.A., Ordnp N.E., Ventsov A.V., Pivina S.G. Characteristics of the main parameters of the hormonal function of the adrenal cortex and its modification in ontogenesis in rats // Zhurn. evolyuts. biochemistry and physiology. - 2011. - Vol. 37. - N2. - P. 134-138.
4. Aviles H., Johnson M.T., Monroy F.P. Effects of cold stress on spleen cell proliferation and cytokine production during chronic Toxoplasma gondii infection //Neuroimmunomodulation.- 2014.- Vol.11.- N2.- P.93-102

UO'K: 616-089

VAKSINOPROFILAKTIKA VA INSON SALOMATLIGI

Shamansurova E.A., Mannapova M.A.
Toshkent pediatriya tibbiyot instituti

Annotatsiya

Immunoprofilaktika - bu sun'iy immunitetni yaratish yoki mustahkamlash orqali aholini kasalliklardan yakka yoki ommaviy himoya qilish usuli. Immunizasiya-bu tasdiqlangan, tejamkor sog'liqni saqlash chorasi, u millionlab bolalarning hayotini saqlab qoladi va millionlab odamlarni kasalliklar va nogironliklardan himoya qiladi. Ko'pgina mamlakatlarda bolalar populyasiyasini emlashda muammolar mavjud. Vaziyatning xavfi nafaqat emlanmagan bolalarda yuzaga keladigan infeksiyalarning asoratlari mavjudligida, balki aholi immunitetining samarasizligi bilan kasallikning keng tarqalishidadir. Shuning uchun hamshira faoliyatining aholini ommaviy emlashni yoritishga ta'sirini o'rganishning dolzarbligi shubhasizdir, chunki aynan hamshiralar emlashni tashkil etish jarayoni uchun mas'ul mutaxassislar xisoblanadi va ota-onalar va vasiylar bilan ishlashda asosiy instruktor hisoblanadi.

Kalit suzlar: xamshiralik ishi, vaksina, emlash, immunoprofilaktika

VACCINATION AND HEALTH

Shamansurova E.A., Mannapova M.A.
Tashkent Pediatric Medical Institute

Abstract

Immunization is a method of individual or mass protection of the population from diseases by creating or strengthening artificial immunity. Immunization is a proven, cost–effective public health measure; it saves lives of millions of children and protects millions from diseases and disabilities. In many countries, there are problems in the vaccination coverage of the child population. The danger of the situation lies not only in the presence of complications of infections that occur in unvaccinated children, but also in the widespread spread of the disease with the ineffectiveness of population immunity. Therefore, the relevance of studying the impact of the nurse's activities on the coverage of mass immunization of the population is undeniable, since it is nurses who often become specialists responsible for the process of organizing vaccination, and are the main instructors in educating parents and guardians about the preventive effectiveness of vaccines and their safety.

Key words: nursing, vaccine, vaccination, immunoprophylaxis

ВАКЦИНОПРОФИЛАКТИКА И ЗДОРОВЬЕ

Шамансурова Э.А., Маннапова М.А.
Ташкентский педиатрический медицинский институт

Аннотация

Иммунопрофилактика — метод индивидуальной или массовой защиты населения от заболеваний путём создания или усиления искусственного иммунитета. Иммунизация – это доказавшее свою действенность, экономически эффективное мероприятие по охране общественного здоровья миллионам детей она спасает жизни и миллионы ограждает от заболеваний и инвалидности. Во многих странах существуют проблемы в охвате вакцинацией детского населения. Опасность ситуации заключается не только в наличии осложнений инфекций, возникающих у непривитых детей, но и в широком распространении болезни при неэффективности популяционного иммунитета. Поэтому, актуальность изучения влияния деятельности медицинской сестры на охват массовой иммунизацией населения несомненна, так как именно медсестры зачастую становятся специалистами, ответственными за процесс организации вакцинации, и являются основными инструкторами в просвещении родителей и опекунов в вопросах профилактической эффективности вакцин и их безопасности.

Ключевые слова: сестринское дело, вакцина, прививка, иммунопрофилактика

So'nggi yillarda vaksinoprofilaktika masalalari global tibbiy va ijtimoiy muammoga aylandi. JSST ma'lumotlariga ko'ra, vaksinalar har yili 3 million bolaning hayotini saqlab qoladi.

Va yaqin 5-15 yil ichida ishlab chiqiladigan yangi vaksinalar yordamida yiliga yana 8 million bola o'limining oldini olish mumkin bo'ladi. Poliomiyelitga qarshi emlash tufayli falaj bo'lib qolishi mumkin bo'lgan 20 milliondan ortiq odam endi yurishi mumkin. Bugungi kunda dunyo poliomielitni butunlay yo'q qilish arafasida turibdi. Bolalarning omon qolishi bo'yicha erishilgan yutuqlar butun dunyo bo'ylab emlash taraqqiyotini himoya qilish va pandemiya davrida bir yoki bir nechta vaksinalarni o'tkazib yuborgan 67 million Bolani vaksinatsiya bilan qamrab olish uchun sa'y-harakatlarni jadallashtirish muhimligini ta'kidlaydi. Tadqiqot shuni ko'rsatadiki, Emlash bo'yicha kengaytirilgan dastur boshlanganda butun dunyo bo'ylab chaqaloqlarning 5 foizdan kamrog'ini muntazam emlash imkoniyati bor edi. Bugungi kunda chaqaloqlarning 84 foiz difteriya, qoqshol va ko'kyo'talga qarshi uch dozali vaksina bilan himoyalangan, bu emlash qamrovining global ko'rsatkichidir (Statistik tahlil natijalari MKT). Kengaytirilgan emlash dasturining keyingi 50 yili nafaqat emlanmagan bolalarni, balki keksalarni grippdan, onalarni qoqsholdan, o'smirlarni odam papillomasi virusidan, barchani sil va boshqa ko'plab yuqumli kasalliklardan himoya qilishni talab qiladi. Tadqiqotlar shuni ko'rsatadiki, emlash bolalarning nafaqat birinchi tug'ilgan kunigacha omon qolishi, balki balog'at yoshiga etganida ham sog'lom bo'lib qolishini ta'minlash uchun sog'liqni saqlashga qaratilgan eng katta hissadir (YUNISEF-2023).

Jahon miqyosida ham e'tirof etilgan O'zbekistondagi muvaffaqiyatli natijalardan biri shundaki, O'zbekistonda pandemiya yosh bolalarni muntazam emlash jarayoniga ta'sir ko'rsatmadi. Ko'pgina mamlakatlarda aynan pandemiya davrida milliy taqvimlar doirasida muntazam emlash bilan qamrab olish darajasi keskin pasaydi. Bizdagi ma'lumotlarga ko'ra, O'zbekistonda 96–97 foizga yaqin qamrov bo'lgan. Ba'zi hollarda kasallikning ayrim turlari uchun 99 foizgacha qamrovga erishildi. Bu juda yaxshi qamrov, biz buni boshqa mamlakatlar uchun ijobiy tajriba sifatida ta'kidlaymiz. Chunki tizim yo'lga qo'yilgan, u ishlamoqda (JSST ma'lumotlari 2023).

Vaksinalar yaratilishi mumkin bo'lgan infeksiyalar soni doimiy ravishda o'sib bormoqda. 30 yil ichida u 2 barobar oshdi. Emlash yo'lida ikkilamchi immunitet tanqisligi holatlari, allergiya, surunkali infeksiyalar, onkologik kasalliklarni davolash va oldini olish muammosi muvaffaqiyatli hal qilinishini anglash mumkin. Shu bilan birga, erishilgan ta'sirchan muvaffaqiyatlar fonida shartli patogen flora keltirib chiqaradigan kasalliklarning sezilarli o'sishi kuzatildi, bu odatda o'zgargan ekologik muhit tufayli immuniteti zaif odamlar sonining ko'payishi, immunitet tizimining kasalliklari sonining ko'payishi bilan izohlanadi. Ushbu kasalliklarning qo'zg'atuvchisi patogen streptokokklar, stafilokokklar, klebsiella, ichak tayokchasi va boshqalar. Ular odatda nafas yo'llarida va qo'shni kulokga lokalizasiya qilinadi. Nafas olish yo'llarining tez-tez kasalliklari surunkali bronx yullari kasalliklarining shakllanishiga va buning natijasida, surunkali sinusit, tonzillit, otitga olib keladi; allergik patologiyani shakllantiradi, jismoniy va psixomotor rivojlanishning kechikishiga hissa qo'shishi mumkin. Maxsus bo'lmagan profilaktika usullari (kontaktlarni cheklash, individual dasturga muvofiq sog'lomlashtirish faoliyati va boshqalar) tashkiliy qiyinchiliklar, shuningdek, nafas yo'llari va kulok kasalliklarini keltirib chiqaradigan yuqumli patogenlarni yuqtirish qulayligi tufayli samarasiz. Vaksina va immunomodulyasion vositalarning kombinasiyalangan xususiyatlariga ega bo'lgan, o'ziga xos bo'lmagan himoya tizimlariga ta'sir qiluvchi va "tanlab" o'ziga xos yuqumli agentlarga qarshi immunitetni rivojlanishiga olib keladigan dorilar eng istiqbolli hisoblanadi. Nafas olish kasalliklarini davolash va oldini olishda ushbu yo'nalish odatda "immunoreabilitasiya" tushunchasiga kiritilgan immunokorreksiya (yoki immunoterapiya) deb ataladi [1, 14].

Immunoreabilitasiya (immunoreabilitologiya) - tibbiyot yo'nalishi bulib, bemorning to'liq tiklanishiga erishish uchun terapevtik va profilaktika choralari majmuasi ta'siri ostida immun tizimining funksiyasini fiziologik me'yorga qaytarish jarayonlarini o'rganadigan fan (kasallikning o'tkir shaklida) yoki doimiy klinik va immunologik remissiya kuzgatuvchilarning yo'qolishi yoki kamayishi bilan (surunkali shaklida) [2, 11]. Maxsus va o'ziga xos bo'lmagan immunoterapiya mavjud. Immun tizimining funksiyasiga nonspesifik ta'sir patologik jarayonning patogeniga (antigeniga) nisbatan nospesifik bo'lgan omillarni o'z ichiga oladi. Maxsus ta'sir antigen preparatlari (allergenlar) yoki kasallikning qo'zg'atuvchisiga (antigen, alergenlar) xos antitelalardan foydalanish natijasida yuzaga keladi. Immunoterapiya faol va passiv bo'lishi mumkin. Faol immunoterapiya uchun vaksinalar, probiyotiklar, allergenlar, turli Immunomodulyatorlar, passiv immunoterapiya uchun — immunoglobulinlar, immun sarumlar, monoklonal antikorlar, sitokinlar, immunokompetent hujayralar qo'llaniladi[3,10].

Yuqumli kasalliklarning oldini olish davlat sog'liqni saqlash siyosatining strategik yo'nalishlaridan biridir. Emlash aholining epidemiologik farovonligini ta'minlashning eng samarali vositalaridan biri ekanligini isbotladi. XX asrda umr ko'rish davomiyligi 25 yilga, emlash tufayli esa 20 yilga oshdi. Zamonaviy xavfsiz va immunogen vaksinalarning mavjudligi, emlashni tashkil etish bo'yicha yarim asrdan ortiq tajriba "nazorat qilinadigan" infeksiyalarni sporadik darajada bartaraf etish yoki barqarorlashtirish bo'yicha sog'liqni saqlash maqsadlarini belgilashga imkon beradi. Vaksinaning oldini olish tadbirlarini amalga oshirishga turli mutaxassisliklarning shifokorlari va o'rta tibbiyot xodimlari jalb qilingan. Emlash bilan bog'liq muammolar bo'yicha aholining bilimining etishmasligi ota-onalarning emlashlar haqida noto'g'ri ma'lumotni aholi orasida tarqatishiga sabab bo'ladi. Aholining emlashdan bosh tortishi ularning malakasi yo'qligi va yuzaga kelishi mumkin bo'lgan oqibatlar uchun javobgar emasligini ko'rsatadi [7, 13, 4, 3].

Emlashning aholi salomatligiga qo'shgan ulkan hissasi umume'tirof etilgan haqiqatdir. Emlash tufayli ikkita eng xavfli infeksiyani – vabo va chechakni yo'q qilishga erishish mumkin edi. 1974 yilda JSSTning Kengaytirilgan emlash dasturining tashkil etilishi va 2000 yilda emlash va emlash bo'yicha Global Alyans emlash qamrovini oshirishda sezilarli yutuqlarga erishdi. Poliomielitni yo'q qilishga amalda erishildi va qizamiqni nazorat qilishda ham yutuqlarga erishildi. Ushbu yutuqlarga qaramay, har yili 6,6 millionga yaqin bola vafot etadi va bu o'limlarning yarmi infeksiyalar, jumladan, pnevmoniya va diareya tufayli yuzaga keladi, bu vaksinalar yordamida oldini olish mumkin. Bezgak, sil, OIV kabi murakkab infeksiyalarga qarshi vaksinalarni ishlab chiqish qiyinroq vazifa bo'lib, bu sohadagi hozirgi yutuqlar hali ta'sirli emas. Ba'zi yuqumli bo'lmagan kasalliklarni, shu jumladan saraton, diabet, gipertoniya va Alsgeymer kasalligini nazorat qilishga qodir vaksinalarni yaratish sohasidagi tadqiqotlar juda istiqbolli [8, 1].

Tibbiyot muassasalari tomonidan emlash qamrovining o'sishiga to'sqinlik qiluvchi quyidagi omillar paydo bo'lishi mumkin: emlash uchun ko'rsatmalar va qarshi ko'rsatmalar haqida etarli ma'lumot yo'qligi, sifatsiz tibbiy hujjatlar, shifokorga o'tkazib yuborilgan tashriflar, bolalarning ota-onalari bilan etarli darajada aloqa qilmaslik [4, 7, 12].

Evropa va Markaziy Osiyoning aksariyat mamlakatlarida aholining kamida 95% difteriya, qoqshol va ko'kyo'talga qarshi uch martta emlanadi, bu ko'rsatkich ko'pincha mamlakatda emlash muvaffaqiyatining o'lchovi sifatida qaraladi. Biroq, difteriya, qoqshol va ko'kyo'talga qarshi o'rtacha mamlakatda emlash ko'rsatkichlarining aksariyati ancha yuqori bo'lishiga qaramay, mintaqaning emlangan aholisining o'rtacha ulushi taxminan 92% ni tashkil qiladi (o'tgan yilga nisbatan biroz pasayish) va bu butun aholining immunitetini kafolatlash uchun etarli emas kasalliklarga (Statistik tahlil natijalari MKT) [4, 2, 6].

Muayyan mamlakatda emlash qamrovining ko'payishiga to'sqinlik qiladigan to'siqlar manbalarini uch guruhga bo'lish mumkin. Birinchi guruhga milliy sog'liqni saqlash tizimi tomonidan emlashni tashkil etish bilan bog'liq muammolar kiradi. Ikkinchi guruhda bolalar va o'spirinlar emlash imkoniyatiga ega bo'lgan tibbiy va profilaktika muassasasida yuzaga keladigan omillarni to'plash mumkin. Oiladagi moddiy, ijtimoiy, diniy vaziyatlar, shuningdek, ota-onalar va bolaning sog'lig'i uchun mas'ul bo'lgan boshqa shaxslarning tibbiy savodxonligi darajasi tufayli yana bir to'siqlar paydo bo'lishi mumkin. Emlash faoliyatini tashkil etishdagi aniq muammolardan biri emlash preparatlarining kamayishi yoki etishmasligi bo'lishi mumkin. Bunday vaziyatning sababi ko'pincha ishlab chiqarish quvvatining pasayishi hisoblanadi: masalan, Qo'shma Shtatlarda gripp, qoqshol va KPK ga qarshi vaksinalar ishlab chiqarishda davriy uzilishlar mavjud [10, 1, 15].

1997 yildan beri virusning qattiq shtammidan kelib chiqqan poliomielit holatlari qayd etilmagan. 90-yillarda emlash qamrovining pasayishi natijasida ko'paygan difteriya, ko'k yo'tal, qizamiq bilan kasallanish muvaffaqiyatli bostirildi va hatto 0 yoshdan 14 yoshgacha bo'lgan bolalarda sil kasalligi bilan kasallanish cheklandi va hatto kamaytirildi. kattalar orasida sil kasalligi bilan kasallanish aholi soni ancha yuqori.. Qizamiq bilan kasallanish sporadik raqamlarga keltirildi, xuddi shu narsa parotit uchun ham amal qiladi, unga qarshi ikki martalik emlash sxemasi qizamiq tomonidan ancha keyin kiritilgan. Gepatit B bilan kasallanish 20 baravar, qizilcha bilan kasallanish deyarli 400 baravar kamaydi. So'nggi yillarda JSSTning asosiy yo'nalishlari innovasion xavfsiz immunobiologik vaksinalarni ishlab chiqishdir [3, 9].

Sog'liqni saqlash xodimlari o'rtasida emlashning afzalliklari to'g'risida etarli ma'lumot yo'qligi ommaviy emlashni qamrab olishga salbiy ta'sir ko'rsatadi. Birlamchi sog'liqni saqlash va ijtimoiy yordam tizimi mutaxassislari ota-onalarga ta'lim berish va vaksinalarning samaradorligi va xavfsizligi to'g'risida ma'lumot tarqatishda Markaziy rol o'ynaydi, shuningdek, ular emlash bilan bog'liq har qanday shubha va noto'g'ri tushunchalar to'g'risida ota-onalar bilan tushuntirish ishlarini olib borishlari mumkin. Shu bilan birga, amaliy sog'liqni saqlash tizimi mutaxassislari bolani emlash to'g'risida qaror qabul qilishda asosiy ma'lumot manbai hisoblanadi, ba'zi tadqiqotchilar emlashni rad etish va shifokordan olingan ma'lumotlarning sifatidan norozilik o'rtasidagi bog'liqlikni qayd etishadi [5, 1]. Farzandlarini emlashdan bosh tortgan ota-onalar bilan ishlash bu bolalar hayoti va sog'lig'ini saqlashda emlashning ijobiy rolini o'z ishonchiga asoslanib, shifokordan sabr-toqat va xushmuomalalikni talab qiladigan qiyin vazifadir [4, 1, 15].

Hamshiralar va boshqa tibbiyot xodimlari emlash zarurati va emlashning yuqori darajasi to'g'risida samarali muloqotga mas'uliyatli professional yondashuvni shakllantirish va ta'minlashda asosiy rol o'ynaydi: ota-onalarga o'quv materiallari bilan ta'minlashdan tortib, ularning savollariga javob berish imkoniyatigacha va agar ota-onalar ushbu maqsad uchun boshqa kunni tanlasalar, emlashni ta'minlash [3, 15]. Hamshiralar ko'pincha emlash jarayoni uchun mas'ul bo'lgan mutaxassislarga aylanishadi, bundan tashqari ular ota-onalar va bemorlarga vaksinalarning profilaktik samaradorligi va ularning xavfsizligi to'g'risida ma'lumot berishda asosiy rol o'ynaydi. Tadqiqot natijalariga ko'ra (Salmon va boshqalar 2005) sog'liqni saqlash xodimlari vaksinalar haqida asosiy ma'lumot manbai bo'lib, hamshiralar emlashning muhimligini tushunishlari va bu xabarni ota-onalarga etkazishlari juda muhimdir [9]. Bundan tashqari, hamshiralar emlangan odamlarga tibbiy yordam zarur bo'lganda vaksinalarning yon ta'siri bilan shug'ullanadigan mutaxassislarga aylanadi. Shu sababli, tarbiyaviy ishlarni takomillashtirish va aholini emlash masalalari bo'yicha faol tayyorlashga qaratilgan bilim,

ko'nikma va yondashuvlarni o'rganishga qaratilgan tadqiqotlar juda muhimdir [1, 14].

Emlash xonasining hamshirasi (vaksinator) - bu keng ko'lamli vazifalarni bajaradigan o'rta tibbiyot xodimlar. Ushbu lavozimni o'rta kasbiy tibbiy ma'lumotga ega bo'lgan, maxsus tayyorgarlikdan o'tgan shaxslar egallashi mumkin. Hamshiralar kattalar va bolalarni emlash ishlarini bajaradilar. Ularning bevosita vazifalariga quyidagilar kiradi:

- Tibbiy xizmat faoliyatini tartibga soluvchi normativ-huquqiy hujjatlarni, shuningdek, sog'liqni saqlash xodimlarining mehnat muhofazasi qoidalari va standartlarini, yong'in xavfsizligini bilish;
- emlash tamoyillari va usullarini bilish;
- shoshilinch yordam, shu jumladan emlashdan keyin asoratlar bo'lsa;
- sovuq zanjirga muvofiqlik usullarini bilish;
- tibbiy asboblar va uskunalar bilan ishlashda, shuningdek tibbiy chiqindilar bilan ishlashda xavfsizlik qoidalariga rioya qilish;
- tibbiy muassasaning ichki qoidalariga rioya qilish.

Hamshirani emlashda roli juda axamiyatli. Bunda ko'plab yuqumli kasalliklar (poliomielit, ko'k yo'tal, qoqshol, difteriya) bilan kasallanishning kamayishiga aholini ommaviy emlash orqali erishildi [2, 12].

Xulosa: O'zbekistonda vaksinatsiya qilishning samaradorligini oshirish uchun tibbiyot xodimlarining roli juda muhimdir. Vaksina olgan bolalar va kattalar salomatligini himoya qilishda vaksinatsiya samarali vosita hisoblanadi, ammo vaksina olishga qarshi kayfiyatlarning mavjudligi bu jarayonni qiyinlashtiradi. Ota-onalar orasidagi noto'g'ri tushunchalar va vaksina haqidagi xato ma'lumotlar, ayniqsa ijtimoiy tarmoqlar orqali tez tarqalishi, vaksina olishga qarshi qarashlarni kuchaytiradi. Shuning uchun, vaksinatsiya jarayonida tibbiyot xodimlarining ishtiroki va ularning ota-onalar bilan samarali muloqoti ahamiyatli. Tibbiyot xodimlarining ilmiy asoslangan ma'lumotlarni aholi orasida tarqatishdagi roli faqat vaksina olishning samaradorligini oshirishga yordam bermaydi, balki jamoat salomatligini yaxshilashga ham katta hissa qo'shadi. O'zbekistonda tibbiyot xodimlarining vaksina haqida ilmiy va aniq ma'lumotlarni tarqatishlari, vaksina haqida noto'g'ri tushunchalarni bartaraf etish va ijtimoiy shubhalarni kamaytirish uchun zarurdir. Shuningdek, hamshiralar, shifokorlar va boshqa tibbiyot xodimlari ota-onalarga vaksina haqida to'g'ri va aniq ma'lumotlarni yetkazishda asosiy mutaxassislar bo'lishi kerak. Vaksinatsiya bo'yicha jamoat salomatligi dasturlarini kuchaytirish, vaksina haqidagi noto'g'ri ma'lumotlarga qarshi kurashish va aholi orasida vaksina haqida ko'proq bilim tarqatish uchun ilg'or yondashuvlar va maxsus ta'lim dasturlarini tashkil etish zarur. Bu nafaqat vaksina olish darajasini oshiradi, balki jamiyatda umumiy salomatlikni yaxshilaydi, kasalliklarning oldini olishda muhim rol o'ynaydi. Bundan tashqari, tibbiyot xodimlarini vaksina haqidagi bilimlarni muntazam yangilash va ularni ota-onalar bilan ishlashga tayyorlashga qaratilgan treninglar o'tkazish kerak. Vaksinatsiya jarayonida har bir mutaxassisning ishtiroki va bilimlarini oshirish, vaksina rad etish holatlarini kamaytirish va aholi orasidagi ishonchni oshirishga olib keladi. Vaksina olgan insonlar nafaqat o'zini, balki atrofdagilarni ham himoya qilmoqda. Shuning uchun, vaksina qilishning ahamiyatini tushuntirish va aholi orasida bu jarayonni qo'llab-quvvatlash uchun tibbiyot xodimlarining ta'limi va muloqot ko'nikmalarini rivojlantirish zarur. Vaksinatsiya yordamida kasalliklarning oldini olish, salomatlikni yaxshilash va umr davomiyligini oshirish mumkin. O'zbekistonda vaksinatsiya dasturlarini yanada rivojlantirish va samarali amalga oshirish uchun davlat va jamoat sektorining birgalikdagi sa'y-harakatlari talab etiladi.

Foydalanilgan adabiyotlar:

1. Алтынай А. Мамедалиева, Майя Н. Жакупова, Динара А. Оспанова, Роль медицинской сестры при вакцинации детей //Science & Healthcare, 2019, (Vol. 21) 3
2. Гаевая Л. А Сестринское дело и вакцинопрофилактика
3. Караулов А.В., Калюжин О.В. Иммунотерапия инфекционных болезней: проблемы и перспективы // Терапевтический архив, 2013; Т. 85, № 11. С. 100—108.
4. Маннапова М.А., Шамансурова Э.А. Эмлашнинг ахоли саломатлигига таьсири ва тиббиёт ходимларининг вазифалари // Uzbek Journal Of Case Reports Том 3. Самарканд 2023
5. Малов В.А. Сестринское дело при инфекционных заболеваниях
6. Сепиашвили Р.И. Иммунореабилитология на рубеже веков // Int. J. Immunorehabil. 2000. Т. 2, № 1. С. 5—10.
7. Шамшева О. В. Вакцинация и здоровье человека// Детские инфекции, 2015, №4, С. 6—12.
8. Вакцины работают для каждого ребенка. (2017 г.) – ЮНИСЕФ
9. Burnett R.J., Larson H.J., Moloi M.H. et al. Addressing public questioning and concerns about vaccination in South Africa: a guide for healthcare workers. //Vaccine. 2012; 30: C.72–C.78
10. Barreto ML, Pereira SM, Ferreira AA. 2016. BCG vaccine: efficacy and indications for vaccination and revaccination.
11. Esposito S., Tremolati E., Bellasio M., and V.I.P. Study Group. Attitudes and knowledge regarding influenza vaccination among hospital health workers caring for women and children // Vaccine. 2017; 25: 5283–5289
12. Greenwood B. The contribution of vaccination to global health: past, present and future. Philosophical transactions of the Royal Society of London. //Series B, Biological sciences. - 2014; 369(1645):20130433. Published. doi:10.1098/rstb.2013.0433
13. Mannapova M.A "Prevention of side effects of vaccination." Eurasian journal of Medical and natural sciencies: 3(1), 14–16.
14. Salmon D.A., Moulton L.H., Omer S.B., DeHart M.P., Stokley S., Halsey N.A. Factors associated with refusal of childhood vaccines among parents of schoolaged children: a case-control study // Archives of Pediatric and Adolescent Medicine. 2015;159(5):470–476
15. Sundar S. Shrestha, Gregory S. Wallace, Martin I. Meltzer, Modeling the national pediatric vaccine stockpile: Supply shortages, health impacts and cost consequences, Vaccine, Volume 28, Issue 38, 2010, Pages 6318-6332

UO'K: 616-089

BOLALARDA NAFAS YO'LLARI YOT JISMIDA DIAGNOSTIKA VA DAVOLASHDA ZAMONAVIY YONDASHUV

Shamsiyev J.A.[1], Atakulov J.A.[1], Ruziyev J.A.[1], Isoqov A.M.[1], Jumanov Sh.G.[2]
Samarqand davlat tibbiyot universiteti
SamDTU ixtisoslashgan bolalar xirurgik klinikasi

Annotatsiya

Traxeobronxial daraxt kasalliklarini aniqlash va davolashda erishilgan yutuqlarga qaramay, bolalar orasida nafas yo'llariga tushgan yot jismlar dolzarb muammo bo'lib kelgan va shunday bo'lib qolmoqda. Ma'lumki, pastki nafas yo'llaridagi yot jismlar pediatriyada zudlik bilan chora ko'rishni talab qiladigan shoshilinch holatlardan biri hisoblanadi. Bronxoskopiya bolalarda nafas olish tizimi kasalliklarini aniqlashda asosiy usullardan biri sifatida muhim o'rin tutadi.

Nafas yo'llaridagi organik yot jismlar Rentgen nokontrast bo'lganligi uchun tashxis qo'yish qiyinroq va bronxlarda uzoq vaqt qolishi mumkin. Bu patologiyani aniqlash qiyin vazifa bo'lib, ko'pincha to'g'ri va puxta to'plangan anamnez muhim ahamiyat kasb etadi. Yot jism aspiratsiyasi haqida ishonch bilan gapirishga imkon beradigan o'ziga xos klinik belgilar mavjud emas. Ko'p hollarda to'g'ri tashxis qo'yishning yagona usuli diagnostik bronxoskopiya hisoblanadi. Nafas yo'llariga yot jismlar aspiratsiyasi og'ir asoratlarga olib keladi, o'limga olib kelish ehtimoli, noaniq klinik ko'rinishda tashxis qo'yishning qiyinligi, shuningdek, bronx-o'pka tizimining surunkali zararlanishi xavfi nafas yo'llaridagi yot jismlar muammosini, ayniqsa erta tashxislash va davolash masalalarida dolzarb qiladi.

Kalit so'zlar: organik yot jismlar, videobronxoskopiya, bolalar, endobronxit

A MODERN APPROACH TO THE DIAGNOSIS AND TREATMENT OF FOREIGN BODIES IN THE RESPIRATORY TRACT IN CHILDREN

Shamsiyev Zh.A.[1], Atakulov Zh.A.[1], Ruziev Zh.A.[1], Isakov A.M.[1], Zhumanov Sh.G.[2]
Samarkand State Medical University
Specialized Children's Surgical Clinic of SamSMU

Abstract

Despite the advances in the diagnosis and treatment of tracheobronchial tree diseases, foreign bodies in the respiratory tract have been and remain a pressing problem in the pediatric population. It is well known that foreign bodies in the lower respiratory tract are one of the urgent conditions in pediatrics that require immediate action. Bronchoscopy occupies one of the leading places in the diagnosis of respiratory diseases in children.

Organic foreign bodies in the respiratory tract, being radiopaque, are more difficult to diagnose and can remain in the bronchi for a long time. Diagnosis of this pathology is a difficult task and often a correctly collected anamnesis is of great importance. There are no specific clinical symptoms that allow us to speak with a high probability about aspiration of a foreign object. Often, the only way to establish a correct diagnosis is diagnostic bronchoscopy. The presence of severe complications with aspiration of foreign bodies into the respiratory tract, the possibility of a fatal outcome, the difficulties of diagnosis with an uncertain clinical picture, as well as the possibility of chronic damage to the bronchopulmonary system make the problem of foreign bodies in the respiratory tract relevant, especially in matters of early diagnosis and treatment.

Key words: organic foreign bodies, video bronchoscopy, children, endobronchitis

СОВРЕМЕННЫЙ ПОДХОД К ДИАГНОСТИКЕ И ЛЕЧЕНИЮ ИНОРОДНЫХ ТЕЛ ДЫХАТЕЛЬНЫХ ПУТЕЙ У ДЕТЕЙ

Шамсиев Ж.А.[1], Атакулов Ж.А.[1], Рузиев Ж.А.[1], Исаков А.М.[1], Жуманов Ш.Г.[2]
Самаркандский государственный медицинский университет
Специализированная детская хирургическая клиника СамГМУ

Аннотация

Несмотря на достигнутые успехи в диагностике и лечении заболеваний трахеобронхиального дерева, инородные тела дыхательных путей были и остаются актуальной проблемой в детской популяции. Общеизвестен тот факт, что инородные тела нижних дыхательных путей являются одним из ургентных состояний в педиатрии, требующих проведения незамедлительных мероприятий. Бронхоскопия занимает одно из ведущих мест в диагностике заболеваний органов дыхания у детей.

Органические инородные тела дыхательных путей, будучи рентгеннеконтрастными, сложнее диагностируются и могут длительное время оставаться в бронхах. Диагностика этой патологии является трудной задачей и часто большое значение при этом имеет правильный тщательно собранный анамнез. Нет специфических клинических симптомов, которые позволяют с большой вероятностью говорить об аспирации чужеродного предмета. Нередко единственным способом установить правильный диагноз является диагностическая бронхоскопия. Наличие тяжелейших осложнений при аспирации инородных тел в дыхательные пути, возможность возникновения летального исхода, трудности диагностики при неопределенной клинической картине, а также возможность возникновения хронического поражения бронхолегочной системы делают проблему инородных тел в дыхательных путях актуальной, особенно в вопросах ранней диагностики и лечения.

Ключевые слова: органические инородные тела, видео бронхоскопия, дети, эндобронхит

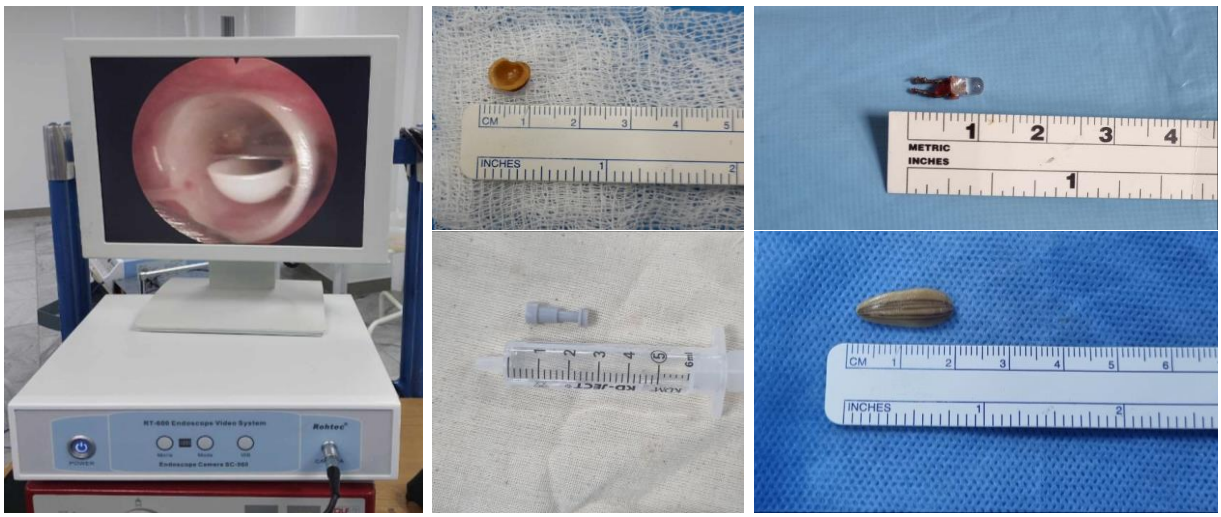
Tadqiqot maqsadi: nafas yo'llariga yot jismlar aspiratsiyasi bo'lgan bolalarni davolash usullarini tahlil qilish.

Tadqiqot tekshirish usullari va metodlari. Samarqand va qo'shni viloyatlardan nafas yo'llarida yot jism borligiga shubha qilingan bolalar shoshilinch tarzda Samarqand davlat tibbiyot universitetining ixtisoslashtirilgan bolalar jarrohlik klinikasiga yotqizilmoqda.

Klinikaning torakal jarrohlik bo'limida 3 yil mobaynida nafas yo'llarida yot jismlari bo'lgan 240 nafar bemor davolandi. Ularning 163 nafari (68%) o'g'il bolalar, 77 nafari (32%) qiz bolalar edi. Bemorlarning yosh bo'yicha taqsimoti quyidagicha: 3 yoshgacha - 139 nafar (58%), 4 yoshdan 10 yoshgacha - 60 nafar (25%), 11 yoshdan 14 yoshgacha - 41 nafar (17%).

Natijalar. Bemorlarni ikki guruhga bo'ldik. Asosiy guruhga tashxis qo'yish va davolash maqsadida Fridel bronxoskopi to'plami yordamida an'anaviy qattiq bronxoskopiya o'tkazilgan 217 nafar bemor kiritildi.

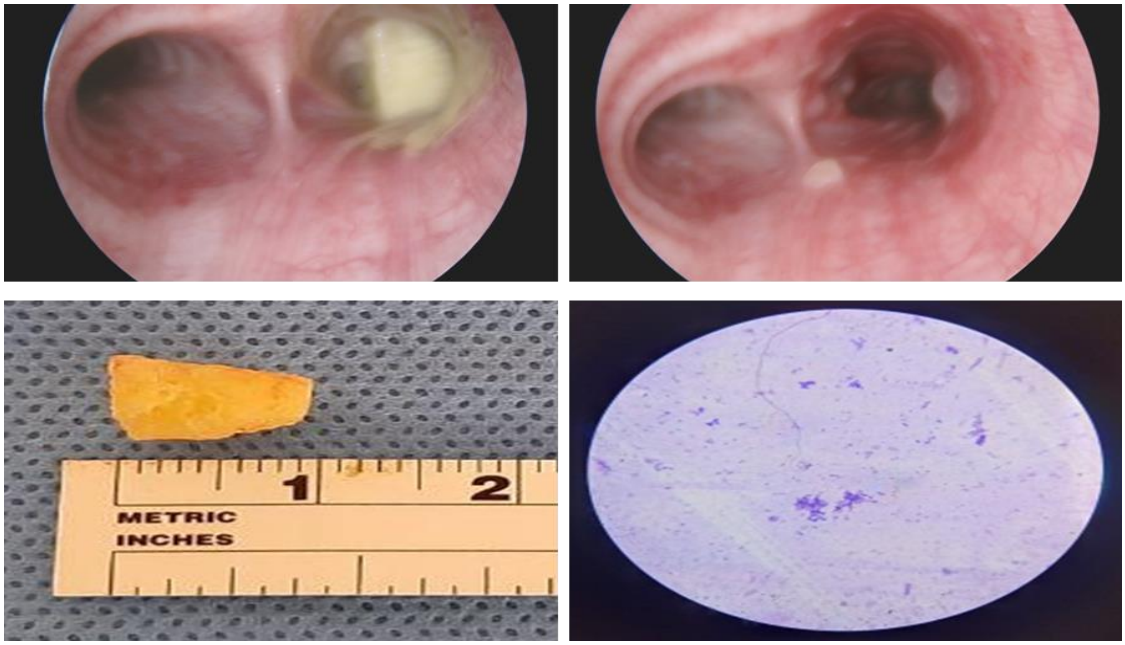
Nazorat guruhidagi 2 yoshdan katta 23 nafar bemorga "videobronxoskopiya" usuli qo'llanildi. O'pkani sun'iy shamollatishdan so'ng, gemodinamik ko'rsatkichlarni nazorat qilgan holda, yot jismning xususiyatini aniqlash maqsadida traxeobronxial daraxt ko'zdan kechirildi. Yot jism aniqlanganidan keyin, u vizual nazorat ostida qisqichlar yordamida olib tashlandi. Shundan so'ng, nazorat videobronxoskopiyasi va ozonlashtirilgan fiziologik eritma bilan bronxolavaj (mikroskopiya) o'tkazildi. Jarayon yakunida traxeobronxial daraxtga atsetilsistein eritmasi



yuborildi.

1-rasm. Videpbronxoskopiya. Organik va noorganik tipdagi yod jismlar.

Nazorat guruhidagi bemorlarda yot jism butunlay olib tashlanganda, qayta sanatsiya bronxoskopiyasiga ehtiyoj bo'lmadi. Biroq, asosiy guruhda 11 ta (5,07%) bemorda qayta sanatsiya bronxoskopiyasi o'tkazildi. "Videobronxoskopiya" qo'llanilishi natijasida muolaja davomiyligi qisqardi, bemorlarning shifoxonada yotish muddati kamaydi, takroriy sanatsiya bronxoskopiyalari va rentgenologik tekshiruvlar soni sezilarli darajada kamaygani kuzatildi.



2-rasm. Kataral endobronxit. Romanovskiy-Gimza bo'yicha bo'yash. 1000 marta kattalashtirilgan. Bemor: Z.I. Yoshi: 5 yosh 9 oy. O'ng asosiy bronxdagi yot jism sabzi bo'lagi 5 soatlik muddat. O'ng tomonlama chegaralangan mahalliy kataral endobronxit.

Nafas yo'llaridagi yot jismlarning aksariyati (71%) organik tabiatli bo'lib, asosan oziq-ovqat mahsulotlaridir. Ta'kidlash joizki, asoratlar ko'pincha organik kelib chiqishli yod jismlarda kuzatiladi (75,8% hollarda), noorganik yot jismlarda esa sezilarli darajada kam (17,4% hollarda) uchraydi. Bu holat nafas yo'llaridagi tabiiy kelib chiqqan yot jismlarning sezilarli darajada ko'p uchrashi bilan bog'liq.

Xulosalar. Bronxlarda yot jism borligiga shubha qilingan barcha bemorlar uchun diagnostik videobronxoskopiya o'tkazilishi ko'rsatma xisoblanadi.

Yot jismni aspiratsiyasida endoskopik topilmalar kasallikning davomiyligiga va bolaning yoshiga bog'liq bo'lib, nafas olish yo'llarida yot jismning uzoq muddatli turib qolioshiga va yot jism xarakteriga bog'liq bo'ladi.

Yiringli endobronxitning paydo bo'lish chastotasi birinchi kunida organik tabiatdagi yot jismlar bilan keskin ortadi va yod agentning tabiatidan qat'i nazar, nafas olish yo'llarida mavjud bo'lish davomiyligining oshishi bilan bog'liqdirr. Bir sutkagacha yot jism mavjud bo'lganda endobronxitning yiringli shakllari 5,4% hollarda, 1 kundan ortiq davom etishi esa 66,3% hollarda

kuzatiladi, bu sitologik jihatdan tasdiqlangan.

Bolalarda yot jismlarni olib tashlash muolajasining samaradorligi va xavfsizligi tibbiyot muassasasining jihozlanganlik darajasi hamda endoskopist shifokorning tajribasiga bog'liq bo'ladi.

Foydalanilgan adabiyotlar:

1. Акопов А.Л., Молодцова В.П., Чистяков И.В., Ильин А.А., Васильева М.А. Редкий случай недиагностированного инородного тела бронха // Вестник хирургии. 2015. Т. 174. № 5. С. 82-85.
2. Бочарников Е.С., Кугаевских В.Н., Ситко Л.А., Полещук В.В., Пономарев В.И. Анализ результатов лечения длительно стоящих инородных тел бронхиального дерева с использованием метода криодеструкции и механического разрушения грануляционного стеноза // Фундаментальные исследования. 2013. № 12. С. 180-185.
3. Бычков В.А., и др. Сравнительная эффективность современных методик анестезиологического пособия при бронхоскопиях у детей // Вестник РУДН. 2010. № 1. С. 64-68.
4. Гнездилова Е.В., Чернышева Н.С. Сухов В.М. Показатели циторгамммы жидкости бронхоальвеолярного лаважа у больных с хроническим обструктивным бронхитом // казанский медицинский журнал. 2002. Том 83, № 2. С. 91 - 94.
5. Дьяконов В.Л. Вопросы ургентной терапии при инородных телах бронхов у детей: Автореф. дисс. ... канд. мед. наук. Самара, 1993: 24 с.
6. Егоров В.И., Мустафаев Д.М. Наш опыт лечения инородных тел в нижних отделах дыхательных путей у детей // Наука и инновации в медицине. 2018. № 1 (9). С. 11-14.
7. Зегнер В.Г. Инородные тела бронхов у детей // Лечащий врач. — 2005. — № 3.
8. Кажина В.А., и др. Удаление инородных тел из трахеобронхиального дерева у детей гродненской области: 10-летний опыт ригидной бронхоскопии с видеовизуализацией // Журнал Гродненского государственного медицинского университета. 2015. № 15. С. 108-113.
9. Касимова Д.А., Уктамова З.Р., Махмудов Н.И. Диагностика и лечебная тактика при аспирации инородных тел в бронхолёгочной системе у детей // Молодой ученый. 2014. № 9 (113). С. 384-387.
10. Климанская Е.В. Основы детской бронхологии. – М., 1972. – 173 с
11. Козырева Н.О. Характеристика поражений трахеобронхиального дерева в ближайшие и отдаленные сроки при аспирации инородных тел у детей: автореф. дис. ... кан. мед. наук. Ростов-на-Дону, 2010. 26 с.
12. Кугаевских В.Н., Бочарников Е.С., Полещук В.В., Пономарев В.И. Десятилетний опыт оказания помощи пациентам с инородными телами дыхательных путей. //Фундаментальные исследования // 2012. № 12. С. 284-288.
13. Молодцова Е.В., Юнусов А.С., Корсунский А.А. Реабилитация детей с осложнениями при инородных телах полости носа // Материалы V Республиканской научно-практической конференции оториноларингологов Республики Дагестан с всероссийским участием: тез. докл. конф. (г. Махачкала, 5 августа 2016г.).- ДГМА.- С.180.

14. Мустафаев Д.М. Инородное тело трахеи (булавка). //Вестник оториноларингологии. 2016;81(5):86—88. doi: 10.17116/otorino201681586-88.
15. Мустафаев Д.М., Егоров В.И. Необычные инородные тела дыхательных путей у детей // Medicine of Extreme Situations. 2018. 20 (1). С. 115 – 120.
16. Пюрова Л.П., Дуйсебаев У.С., Каржауов К.С. Лечебная трахеобронхоскопия в условиях отделения реанимации и интенсивной терапии // Вестник КазНМУ. 2015. № 4. С. 402-404.
17. Рокицкий М.Р. Хирургические заболевания легких у детей. – Л.: Медицина.1988.
18. Ж.А. Шамсиев, Ж.А. Рузиев. Диагностика и лечение инородных тел дыхательных путей у детей. Вестник экстренной медицины, 2020, том 13, № 4. С. 45-49.
19. Шамсиев Ж.А., Рузиев Ж.А. Анализ оказания медицинской помощи детям с инородными телами дыхательных путей. Проблемы биологии и медицины. 2020, №3. С. 133-136.
20. Analysis of aspirated foreign bodies of the respiratory ways in children Jamshid Shamsiev1, Azamat Shamsiev, Jasur Ruziev, Abdurauf Isakov, Sukhrob Zainiev, Karshiboy Boboyarov6, Otabek Ibragimov. International Journal of Pharmaceutical Research | Jan - Mar 2020 | Vol 12 | Issue 1Акопов А.Л., Молодцова В.П., Чистяков И.В., Ильин А.А., Васильева М.А. Редкий случай недиагностированного инородного тела бронха // Вестник хирургии. 2015. Т. 174. № 5. С. 82-85.

UO'K: 616-089

BOLALARDA QOVUQ-SIYDIK NAYI REFLYUKSINI TASHXISLASH VA DAVOLASH

Shamsiyev J.A.[1], Yusupov Sh.A.[1], Daniyarov E.S.[1], Suvonqulov U.T.[1], Safarov S.Sh.[2]
Samarqand davlat tibbiyot universiteti
SamDTU ixtisoslashgan bolalar xirurgik klinikasi

Annotatsiya

Bolalar va o'smirlar orasida qovuq-siydik nayi reflyuksi (QSNR) 1% hollarda uchraydi, ikki tomonlama reflyukslar ulushi esa 50,9% gacha yetadi [I]. Bunda 50% hollarda reflyuks darajasi turli tomonlarda har xil bo'ladi. Tadqiqotimizning maqsadi bolalarda qovuq-siydik nayi reflyuksini davolashning eng maqbul usullarini aniqlashdan iborat edi. Tadqiqotimizda Samarqand davlat tibbiyot universitetining Ixtisoslashtirilgan bolalar jarrohlik klinikasida statsionar davolangan 8 oylikdan 18 yoshgacha bo'lgan QSNR bilan kasallangan 110 nafar bolani davolash natijalarini tahlil qildik. Bolalarning asosiy guruhini 78 nafar bola tashkil etdi. Qizlar o'g'il bolalarga (40,0%) nisbatan ko'proq (60,0%) aziyat chekadi. Siydik nayi siydik nayi-vezikal segmentining endokollagenoplastikasi barcha 78 nafar bemorda (144 nafar siydik nayi), shu jumladan 33 nafar bolada bir vaqtning o'zida ikkala tomondan amalga oshirildi. PMRni tuzatish usulini tanlash qat'iy individual bo'lishi va shifokor tomonidan tekshiruv ma'lumotlarini obyektiv tahlil qilish va ma'lum bir bemorda PMRni bartaraf etishning barcha mavjud usullaridan foydalanish imkoniyatini baholashga asoslanishi kerakligi aniqlandi.

Kalit so'zlar: kovuq-siydik nayi reflyuksi, endoskopiya, bolalar

DIAGNOSIS AND TREATMENT OF VESICOURETERAL REFLUX IN CHILDREN

Shamsiyev J.A.[1], Yusupov Sh.A.[1], Daniyarov E.S.[1], Suvonqulov U.T.[1], Safarov S.Sh.[2]
Samarkand State Medical University
Specialized Children's Surgical Clinic of SamSMU

Abstract

Despite the advances in the diagnosis and treatment of tracheobronchial tree diseases, foreign bodies in the respiratory tract have been and remain a pressing problem in the pediatric population. It is well known that foreign bodies in the lower respiratory tract are one of the urgent conditions in pediatrics that require immediate action. Bronchoscopy occupies one of the leading places in the diagnosis of respiratory diseases in children.

Organic foreign bodies in the respiratory tract, being radiopaque, are more difficult to diagnose and can remain in the bronchi for a long time. Diagnosis of this pathology is a difficult task and often a correctly collected anamnesis is of great importance. There are no specific clinical symptoms that allow us to speak with a high probability about aspiration of a foreign object. Often, the only way to establish a correct diagnosis is diagnostic bronchoscopy. The presence of severe complications with aspiration of foreign bodies into the respiratory tract, the possibility of a fatal outcome, the difficulties of diagnosis with an uncertain clinical picture, as well as the possibility of chronic damage to the bronchopulmonary system make the problem of foreign bodies in the respiratory tract relevant, especially in matters of early diagnosis and treatment.

Key words: organic foreign bodies, video bronchoscopy, children, endobronchitis

ДИАГНОСТИКА И ЛЕЧЕНИЕ ПУЗЫРНО-МОЧЕТОЧНИКОВОГО РЕФЛЮКСА У ДЕТЕЙ

Шамсиев Ж.А.[1], Юсупов Ш.А.[1], Дониёров Э.С.[1], Сувонкулов У.Т.[1], Сафаров С.Ш.[2]
Самаркандский государственный медицинский университет
Специализированная детская хирургическая клиника СамГМУ

Аннотация

Среди детей и подростков пузырно-мочеточниковый рефлюкс (МПР) встречается в 1% случаев, доля двусторонних рефлюксов составляет до 50,9% [I]. При этом в 50% случаев степень рефлюкса с разных сторон различна. Целью нашего исследования было определение наиболее оптимальных трактов для лечения пузырно-мочеточникового рефлюкса у детей. В нашем исследовании мы проанализировали результаты лечения 110 детей с ПМР от 8 месяцев до 18 лет, находившихся на стационарном лечении в Специализированной детской хирургической клинике Самаркандского государственного медицинского университета. Основную группу детей составили 78 ребенка. Девочки страдают чаще (60,0%) по сравнению с мальчиками (40,0%). Эндоколлагенопластика мочеточниково-везикального сегмента мочеточника выполнена во всех 78 пациентах (144 мочеточника), в том числе у 33 детей с обеих сторон одновременно. Выявлено, что выбор метода коррекции ПМР должен быть строго индивидуальным и основываться на объективном анализе врачом данных обследования и оценке возможности использования всех доступных методов устранения ПМР у данного конкретного пациента.

Ключевые слова: пузырно-мочеточниковый рефлюкс, эндоскопия, дети

Kirish. Xozirgi kunda qovuk siydik nayi reflyuksi (QSNR) bolalar urologiyasida keng tarqalgan patologiyalaridan biri bo'lib bolalar populyatsiyasining taxminan 1-2% da uchraydi, siydik yullari infeksiyasi bo'lgan bolalarda QSNR 25-40% uchraydi. Aholi sonining o'sishi bilan birga yildan yilga kasallar soni oshib bormoqda. QSNR diagnostikasi o'ziga xos alomatlarning yo'qligi bilan bog'liq muayyan qiyinchiliklarni keltirib chiqaradi. Kasallikni aniqlash uchun faqat ixtisoslashgan shifoxonalarda mumkin bo'lgan keng qamrovli urologik tekshiruvni o'tkazish kerak. Odatda, QSNR siydik yo'li infeksiyasining rivojlanishi sodir bo'lganda namoyon bo'ladi. Murakkab holatlarda buyrak funksiyasining buzilishi xarakterlidir. Ayni paytda QSNR bilan kasallanish sonini ortib borishi, klinik kechishining o'ziga xos xususiyatlari, bolalarda uning rivojlanish sabablari, og'ir holatlarda buyrak funksiyasining buzilishi kabi asoratlar yuzaga kelishini hisobga olgan holda diagnostik va maqbul jarroxlik davo muolajalarini buyurish tibbiyotda yechimi topilishi zarur bo'lgan muammo hisoblanadi.

Tadqiqotning maqsadi minimal invaziv usullar yordamida diagnostika va davolashni optimallashtirish orqali bolalarda qovuq-siydik nayi reflyuksni davolash natijalarini yaxshilashdan iborat.

Tadqiqot materiallari va usullari. Ish 1989 yildan 2022 yilgacha Samarqand davlat tibbiyot universiteti ixtisoslashtirilgan bolalar xirurgik klinikasida 8 oylikdan 18 yoshgacha bo'lgan tug'ma qovuk siydik nayi reflyuksi (QSNR) bilan og'rigan 110 nafar bemorning diagnostikasi va davolash natijalarini baholashga asoslangan.

110 bemordan 32 (29,1%) bemor nazorat guruhini (NG1989-2011y) tashkil etdi, unda QSNRni ananaviy ochiq jarrohlik davolash usuli yordamida amalga oshirildi. Qolgan 78 (70,9%) bolalar asosiy guruhga (AG2012-2022) kiritilgan bo'lib, ularga siydik nayining kirish teshigiga "xajmli hosila" hosil qiluvchi moddani kiritish orqali endourologik davolash usuli o'tkazilgan (1-jadval).

1-jadval

Bemorlarni guruhlar va yosh bo'yicha taqsimlanishi (n=110)

Yosh	Guruhlar		Jami
	qiyosiy (n=32)	asosiy (n=78)	
4 yoshgacha	13 (40,6%)	34 (43,6%)	47 (42,7%)
5–9 yosh	11 (34,4%)	25 (32,1%)	36 (32,7%)
10–14 yosh	7 (21,9%)	16 (20,5%)	23 (20,9%)

15–18 yosh	1 (3,1%)	3 (3,8%)	4 (3,7%)
Umumiy	32 (100%)	78 (100%)	110 (100%)
χ^2 = 0,137; kritik qiymat χ^2 (p<0,05) = 7,815; r>0,05; r=0,988			

1-jadval shuni ko'rsatadiki, yosh va QSR chastotasi o'rtasidagi bog'liqlik aniqlangan. Kasallik asosan 9 yoshda sodir bo'ladi – 75,4% (5 yoshgacha – 42,7%, 5-9 yil – 32,7%), III daraja ustunligi bilan – 67,3%. Bemorlar o'rtasida qizlar 60,0% ni, o'gil bolalar 40,0% ni tashkil qiladi.

110 ta holatning umumiy sonidan 34 tasi (31,0%) ikki tomonlama kasallangan va shuning uchun siydik yo'llarining umumiy soni 144 tani tashkil etgan. QSRning og'irligiga qarab, AG va KG holatlari sonida sezilarli (p>0,05) farqlar yo'q edi (2-jadval).

2-jadval

QSR holatlarini darajasiga qarab guruhlarga taqsimlash

QSR darajasi	AG	QG
II	20 (19,2%)	3 (7,5%)
III	67 (64,4%)	25 (62,5%)
IV	17 (16,4%)	12 (30,0%)
Umumiy siydik yo'llari	104 (100%)	40 (100%)
χ^2 = 5,18; kritik qiymat χ^2 (p<0,05) = 5,99; r>0,05; r=0,075		

2-jadvalda keltirilgan ma'lumotlardan shuni ta'kidlash kerakki, ikki tomonlama zararlanish uchun davolash natijalarini tahlil qilishda siydik yo'llari emas, balki og'irroq zararlanish darajasi va bemorlar soni hisobga olingan.

9 yoshgacha bo'lgan bemorlar uchun xarakterli simptomlar majmuasi: leykotsituriya (92,8%), tana haroratining ko'tarilishi (88,0%), pielonefrit xurujlari (82,0%), siyish paytida qorin va bel og'rig'i (57,8%), 10 yoshdan oshgan bolalarda asosan leykotsituriya ham namoyon bo'ldi (96,3%), ammo klinik ko'rinishlarning keyingi triadasi teskari tartibda sodir bo'ldi. Shunday qilib, 10 yoshdan oshgan bolalarda, yosh bolalardan farqli o'laroq, siyish paytida qorin va bel og'rig'i ikkinchi o'rinda (77,8%), so'ngra pielonefrit xurujlari (74,1%) va tana haroratining ko'tarilishi (66,7%) holatlari kuzatildi. Bu kasallikning umumiy klinik ko'rinishlari yosh bolalar uchun ko'proq xos ekanligini ko'rsatadi (3-jadval).

3-jadvalda bemorlarning yoshiga qarab QSR klinik ko'rinishlarining ba'zi xususiyatlari ko'rsatilgan. Leykotsituriya II darajali QSR bilan 15 (88,2%), III daraja bilan 65 (92,9%) va IV daraja bilan 23 (100%) aniqlangan. QSR darajasining oshishi bilan boshqa alomatlar chastotasida o'zgarish bo'lmadi. Pielonefritning kuchayishi bilan QSRning turli darajalari bo'lgan bemorlarda tana haroratining ko'tarilishi kuzatildi.

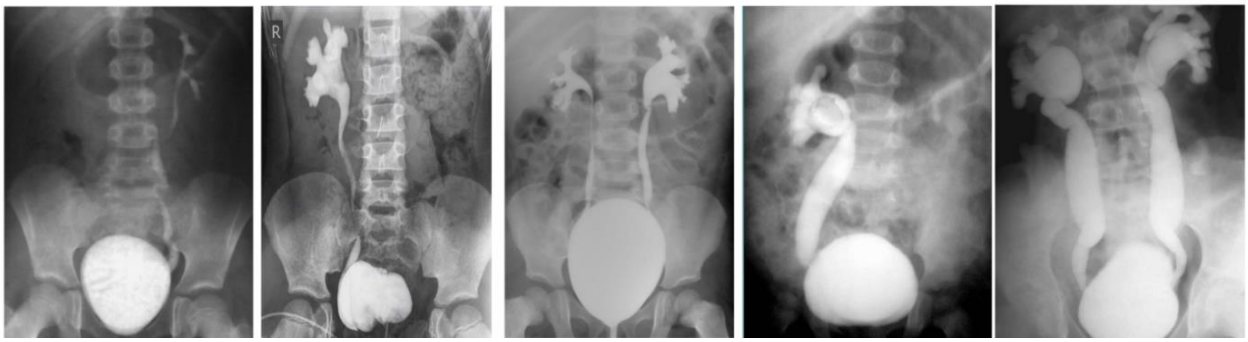
3- jadval

Yoshga qarab QSRning asosiy ko'rinishlarining xususiyatlari

№	Klinik ko'rinishlar	QSR ning darajalari			Jami* (n=110)
		II daraja (n=17)	III daraja (n=70)	IV daraja (n=23)	
1	Leykotsituriya	15(88,2%)	65(92,9%)	23(100%)	103(93,6%)
2	Pielonefrit xurujlari	14(82,4%)	56(80,0%)	18(78,3%)	88(80,0%)
3	Qorinda va bel soxasidagi og'riqlar	11(64,7%)	43(61,4%)	15(65,2%)	69(62,7%)
4	Tez-tez siyish	5(29,4%)	18(25,7%)	6(26,1%)	29(26,4%)
5	Og'riqli siyish	4(23,5%)	17(24,3%)	7(30,4%)	26(23,6%)

6	Kunduzgi siydik tutolmaslik	1(5,9%)	5(7,1%)	3(13,0%)	9(8,2%)
7	Enurez	1(5,9%)	5(7,1%)	2(8,7%)	8(7,3%)
*χ2 = 63,38; kritik qiymat χ2 (p<0,001)=22,46; p<0,001; r=9,24×10−12.					

Vizual diagnostika usullari QSRni aniqlashda va zararlanish darajasini baholashda muhim rol o'ynaydi, siydik tizimining tuzilishi va funksiyasi haqida muhim ma'lumotlarni beradi. QSR kompleks diagnostikasida asosiy tekshiruv usuli miksion sistografiya xisoblanadi (1-rasm).



1-rasm. Qovuq siydik nayi reflyuksining sistografiyalarda aks etishi. QSNR II QSNR III QSNR III QSNR IV QSNR IV chapdan o'ngdan 2-tomonlama o'ngdan 2-tomonlama

QSR bilan kasallangan barcha 110 bemorning 5 tasida bemorlarda reflyuks klinikasi bo'lganida, miksion sistografiya samarasiz edi (noto'g'ri salbiy natijalar). Bunday hollarda QSR tashxisini gazli sistografiyasi usuli yordamida qo'yildi (2-rasm). Ushbu kuzatuvlarda bemorlarda intermetirlanuvchi reflyuks kuzatildi. Qolgan 105 holatda sistografiya samarali bo'lgan.

2-rasm. Gazli sistografiya QSNR yo'q QSNR bor. Gaz pufakchalari buyrak jomida

Tadqiqot natijalarini tahlil qilish QSRda miksionsistografiyaning yuqori diagnostik informativligini isbotladi: sezgirlik – 95,4%, o'ziga xoslik – 100% va aniqlik – 96,7%.

Ochiq jarrohlik amaliyotining samaradorligini baholash uchun NG ni tashkil etgan QSR bo'lgan 32 nafar bolani davolash natijalari tahlil qilindi.

32 bemorda 40 siydik nayi bo'yicha operatsiyalar o'tkazildi. NGda 21 (65,6%) bolalarda Lich-Gregoir operatsiyasi 25 (62,5) siydik nayida o'tkazildi. Cohen operatsiyasi 5 (15.6%) bemorda 9 (22.5%) ta siydik nayida amalga oshirildi. Politano–Leadbetter 6 (18.8%) bemorlarda 6 (15%) siydik nayi operatsiya qilindi.

Endoskopik davolash asosiy guruhda QSR bo'lgan 78 bemorda qo'llanilgan. AG bilan kasallangan 78 bemorning 26 tasida (33,3%) patologiya ikki tomondan aniqlangan. QSRni endoskopik davolash 104 siydik nayida amalga oshirilgan.

Asosiy guruhdagi bemorlarning aksariyati III darajadagi QSR – 67 (64,4%) aziyat chekishgan. 21 (20,2%) bemorlarda II daraja, 16 (15,4%) – IV daraja QSR tashxisi qo'yilgan

QSRni endoskopik davolash, NGdan farqli o'laroq, faqat vena ichiga umumiy og'riqsizlantirish ostida amalga oshirildi. AGda to'qima diseksiyasi yo'qligi sababli endojarrohlik aralashuvining davomiyligi NG ga qaraganda qisqarishi kuzatildi (4-jadval).

4-jadval

Taqqoslangan guruhlarda jarrohlik aralashuvning davomiyligi

Taqqoslash guruhi	QSR operatsiya davomiyligi (min)		O'rtacha davomiylik
	Bir tomonlama	Ikki tomonlama	
NG (n=32)	51,7±3,4 (n=24)	75,4±5,1 (n=8)	57,5±2,87
AG (n=78)	15,3±2,4* (n=52)	21,1±3,1* (n=26)	17,3±1.16*

*Eslatma: * - NG (r<0.01) nisbatan farqlar ishonchliligi.*

QSRni endoskopik davolashdan keyingi 7-10-kunlarda siydikda ikkitagina leykotsitlar topildi va ularning soni NG ga qaraganda ancha past edi. Operatsiyadan keyingi 14-17 kunlarda AGda leykotsitlar soni bittagacha etdi, NG da esa bu ko'rsatkich ancha yuqori (r<0,05) va 4,1±2,1 ni tashkil etdi.

Endoskopik koreksiya natijalari QSRning 71 (91%) bemorida pielonefrit atakalarining yo'qolishiga olib keldi. Miksion sistografiya ma'lumotlariga ko'ra, II va III darajali reflyuks bilan 55 (70,5%) bemorda reflyuks aniqlanmadi.

12 (15,4%) bemorda reflyuks darajasi IIIdan I (9) va IVdan II (3) darajaga kamaydi. Bir martalik endoskopik davolashning samaradorligi 85,9% bo'ldi.

Qolgan 11 (14,1%) bemorda bilateral reflyuks III va IV darajalari bilan, bir martalik endoskopik koreksiyadan so'ng 5 (6,4%) bemorda reflyuks darajasi bir darajaga kamaydi, 6 (7,7%) bemorda esa kasallik darajasi o'zgarmagan holda qoldi. Bu 11 bemorning davolash natijalari qoniqarsiz deb baholandi va 6-12 oydan keyin qayta endoskopik koreksiya o'tkazildi. Qayta koreksiya natijasida 11 bemordan 6 (54,5%) bemorda QSRning to'liq yo'qolishiga erishildi. Pielonefritning davom etishi va qayta endoskopik koreksiyaning samarasizligi sababli, ota-onalarning talabiga ko'ra 5 (45,5%) bemorga ochiq operatsiya amalga oshirildi.

QSRni xirurgik korreksiyalash natijalari bemorning dastlabki holati, klinik va laborator ko'rsatkichlar yaxshilanish darajasi, shuningdek, operatsiyadan keyingi davr asoratlarsiz o'tganligini hisobga olingan holda baholangan. Natijalar yaxshi, qoniqarli va qoniqarsiz deb tasniflangan.

Yaxshi natijalar deb, bemor dizuriya va QSR bilan bog'liq boshqa simptomlarni sezmasligi, UTTda buyrak va ureterning yoshga mos kelgan normalarda qolishi, miksion sistografiyada siydik qaytib chiqishi aniqlanmagan holatlar hisoblangan. Laborator tadqiqotlarda infeksiya belgilari ko'rsatilmagan.

Qoniqarli natijalarda QSR simptomlari sezilarli, ammo to'liq bo'lmagan holda kamaymagan, UTT va MISda reflyuks darajasi kamaygan, lekin kam epizodlarda siydik yo'llari infeksiyalari qaytalanish holatlari uchrab ozgina mediakmentoz davolanish bilan bartaraf etilgan.

Qoniqarsiz natijalarga operatsiyadan so'ng simptomlar kamaymagan, UTTda siydik yo'llari strukturasi progressiv o'zgargan yoki kollektor tizimining o'lchamlari oshgan, MISda

QSRning avvalgi yoki progressiv darajasi aniqlangan, va tez-tez medikamentoz usulda bartaraf etilmagan infeksiyalar bo'lgan holatlar kiritilgan. Bunday bemorlar qayta operatsiyaga muhtoj bo'lgan.

Kompleks baholash natijalari endourologik metodlarning samaradorligi QSR xirurgik korreksiyasida yaxshi va qoniqarli natijalarni NGdagi 81,2%dan AGda 93,6%ga oshirish, qoniqarsiz natijalarni esa 18,8%dan 6,4%ga kamaytirish imkonini berganini ko'rsatdi (5-jadval).

5-jadval

Guruhlarga ko'ra QSRning xirurgik davolash samaradorligini taqqoslash

Davolash samaradorligi	Taqqoslash guruhlari	
	asosiy (n=78)	nazorat (n=32)
yaxshi	61 (78,2%)	21 (65,6%)
qoniqarli	12 (15,4%)	5 (15,6%)
qoniqarsiz	5 (6,4%)	6 (18,8%)

Shunday qilib, ushbu tadqiqot natijalari, QSRni davolashda endourologik usullarning ochiq operatsiyalarga nisbatan yuqori samaradorligi va xavfsizligini tasdiqlaydi.

Foydalanilgan adabiyotlar:

1. Бабанин И.Л. Метод профилактики миграции синтетических имплантатов при эндоскопическом лечении пузырно-мочеточникового рефлюкса у детей / И.Л.Бабанин, В.Г. Гельдт, И.В. Казанская // Детская хирургия. – 2012. – № 4. – С.15-18.
2. Ибодов Х., Икромов Т.Ш., Мираков Х.М., Сайёдов К.М., Рофиев Р., Асадов С.К. Лечение пузырно-мочеточникового рефлюкса у детей. Здравоохранение Таджикистана. 2021;(3):21-27.
3. Рудин Ю.Э. Эндоскопическая коррекция пузырно-мочеточникового рефлюкса препаратом Vantris®: три года наблюдения / Ю.Э. Рудин, Д.В. Марухненко, Т.Н. Гарманова, Д.К. Алиев // Экспериментальная и клиническая урология. – 2014. – № 1. – С. 76-79.
4. Рябцева А., Фомин Д., Яцык С., Шарков С., Абрамов К. Исторические аспекты изучения пузырно-мочеточникового рефлюкса у детей // Педиатрическая фармакология. 2008. Т. 5, № 6. С. 72.
5. Туракулов З.Ш, Гафуров А.А., Туйчиев Г.У. Сравнительная оценка отдалённых результатов лечения пузырно-мочеточникового рефлюкса у детей. Международный журнал научной педиатрии, 2(3), 110–113.
6. Шамсиев А.М Данияров Э.С. Бабанин И.Л. Шамсиев Ж.А. Ибрагимов Ш.Ш. Эффективность эндохирургического лечения обструктивных уропатий у детей. Журнал «Детская хирургия», Москва, 2012 г. №4, с. 4-6
7. Шамсиев Ж.А., Данияров Э.С., Исаков А.М., Махмудов З.М. Лечебная тактика при пузырно-мочеточниковом рефлюксе у детей. г. Самарканд, журнал «Проблемы биологии и медицины» №6, 2021 г., с. 258-261

8. Шамсиев Ж.А., Данияров Э.С., Сувонкулов У.Т., Юсупов Ш.А., Возможности эндоскопических методов при лечении пузырно мочеточникового рефлюкса в педиатрической урологии. Доктор ахборотномаси № 1 (113) —2024. С.116-119.
9. Daniyarov E.S. Shamsiev J.A. Vesicoureteral reflux in children: modern diagnosis and treatment American journal of medicine and medical sciences 2022. 12(8), c.845-847.

UDC: 616-089

DIAGNOSIS AND TREATMENT OF VESICOURETERAL REFLUX IN CHILDREN

Shamsiyev A.M.[1], Shamsiyev Zh.A.[1], Ruziev Zh.A.[1], Mutalibov I.A.[2], Isakov A.M.[1]
Samarkand State Medical University
Specialized Children's Surgical Clinic of SamSMU

Abstract

Surgical correction is the only effective method for treating funnel chest deformity in children, as evidenced by numerous studies that report an improvement in the quality of life. The duration and methods of preoperative preparation for radical surgery depend on the degree of impairment in the functional state of the patient's cardiorespiratory system.

Key words: congenital chest deformity, computed tomography, thoracoplasty according to D. Nuss, video-assisted thoracoplasty

KO'KRAK QAFASINING TUG'MA GIRDONBSIMON DEFORMASIYASIDA XIRURGIK DAVOLASHDA INNOVATSION TEXNOLOGIYALAR

Shamsiyev A.M.[1], Shamsiyev J.A.[1], Ruziyev J.A.[1], Mutalibov I.A.[2], Isoqov A.M.[1]
Samarqand davlat tibbiyot universiteti
SamDTU ixtisoslashgan bolalar xirurgik klinikasi

Annotatsiya

Bolalarda ko'krak qafasining tug'ma girdobsimon deformasiyasini davolashning yagona samarali usuli xirurgik davo bo'lib, ko'plab tadqiqotlar hayot sifatini yaxshilash haqida xabar beradi. Radikal jarrohlik uchun operatsiyadan oldingi tayyorgarlikning davomiyligi va usullari bemorning kardiorespirator tizimining funktsional holatining buzilish darajasiga bog'liq.

Kalit so'zlar: ko'krak qafasining girdobsimon deformatsiyasi, kompyuter tomografiyasi, D. Nass bo'yicha torakoplastika, video-assistli torakoplastika

ИННОВАЦИОННЫЕ ТЕХНОЛОГИИ В ХИРУРГИЧЕСКОМ ЛЕЧЕНИИ ВРОЖДЕННОЙ ВОРОНКООБРАЗНОЙ ДЕФОРМАЦИИ ГРУДНОЙ КЛЕТКИ

Шамсиев Ж.А.[1], Шамсиев Ж.А.[1], Рузиев Ж.А.[1], Муталибов И.А.[1], Исаков А.М.[2]
Самаркандский государственный медицинский университет
Специализированная детская хирургическая клиника СамГМУ

Аннотация

Хирургическая коррекция является единственным эффективным методом лечения воронкообразной деформации грудной клетки у детей, что подтверждается многочисленными исследованиями, сообщающими об улучшении качества жизни. Длительность и методы предоперационной подготовки к радикальной операции зависят от степени нарушения функционального состояния кардиореспираторной системы пациента.

Ключевые слова: врожденная деформация грудной клетки, компьютерная томография, торакопластика по Д. Нассу, видеоассистированная торакопластика

Relevance. "Congenital deformities of the chest are malformations associated with changes in its shape. The most common chest deformity, excavated chest deformity (ECHD),

occurs in up to 2.3% of cases, and according to foreign authors, it accounts for up to 1.3% of all malformations in children [1, 2, 9]." Funnel-shaped deformity of the chest, as a manifestation of dysplasia of the connective tissue throughout the body, is usually associated with changes in the cardiorespiratory system (such as impaired myocardial infarction, increased heart rate and minute blood volume, decreased contractility of the heart, changes in the valvular apparatus of the heart, etc.).

According to the data of various authors, when examining children with (ECHD), changes were found in 90-95% even in the preoperative period, which must be taken into account to reduce the risk of surgery and prevent postoperative complications [4, 5].

In the pathogenesis of the disease, due to the curvature of the sternocostal complex, the retrosternal space decreases, which has an adverse effect on the mediastinal organs. Compression, rotation, displacement of the heart and blood vessels impedes the outflow and flow of blood to the heart and entails stagnation in the pulmonary circulation, an increase in resistance in it, pulmonary hypertension with the development of heart failure. Dysfunction of the respiratory system is associated with a restriction of respiratory excursion, weakening of the respiratory muscles, ventilation and vital capacity of the lungs, impaired drainage function of the bronchial tree with a decrease in respiratory reserves. This explains the susceptibility of children with this pathology to bronchitis, pneumonia, bronchiectasis [3, 6, 8].

Purpose of the study - To improve surgical correction of congenital pectus excavatum in children.

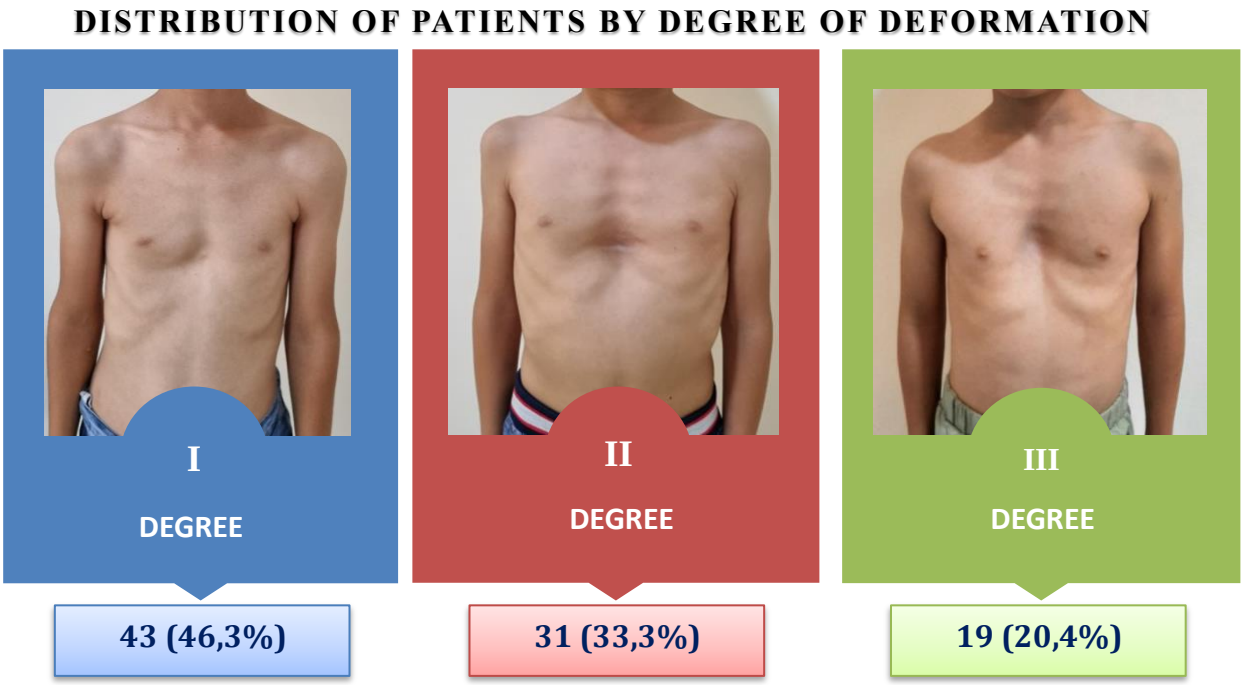
Material and methods: According to official statistics, the child population of the Samarkand region is more than 1.5 million people, of which 702 (0.0445%) had funnel chest deformity. At the same time, the incidence of this defect in children in our region was 1:2000.

We observed 93 patients with funnel chest deformity aged from 9 months to 18 years, who were hospitalized from 2012 to 2022.

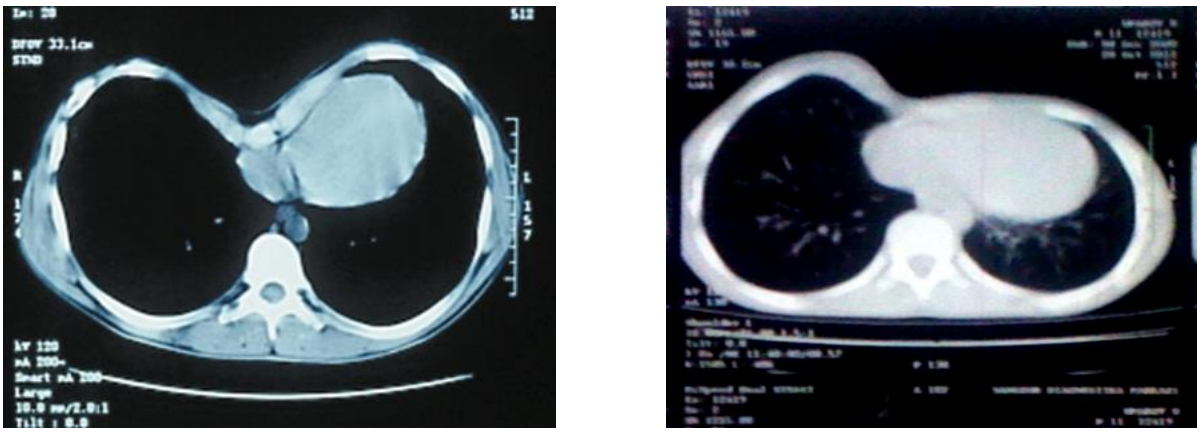
The majority of patients were children aged 5 to 9 years, or 44%. There were more boys than girls, in a ratio of 3:1.

With the first degree of the defect was 46%, with the second degree - 33% and with the third - 20% of patients. In our observations, the usual form of pathology was encountered in 96%. Symmetrical form of funnel-shaped deformation was detected in 86.0%, asymmetrical was in 14.0% of children.

In 97% typical curvature of the sternum was observed, while screw and saddle-shaped were much less common. Pic. 1.



The examination complex consisted of collecting anamnestic, objective, anthropometric data, chest X-ray and MSCT, ECG, echocardiography, spirometry and ultrasound. Pic. 2.



A B

Picture-2. Computed tomogram with a typical symmetric (a) and asymmetric (b) 3-stage of excavated chest deformity.

22 patients were treated with the method of minimally invasive video-assisted thoracoplasty developed in the clinic. In advance, a day before the operation, for each patient individually, using the device we developed, a corrective T-shaped metal plate was prepared according to a template taken from the patient's chest. After modeling, the plate was sterilized. This reduced the duration of anesthesia.

Unlike traditional thoracoplasty, a wide, traumatic subcutaneous tunnel was not created. The trauma of the operation was reduced by making TWO incisions on each side of the chest: a medial incision at the edge of the sternum and a lateral incision along the midaxillary line. A

guide instrument was inserted through the left medial incision and directed into the chest cavity behind the sternum. A thread was tied to the guide, which was brought out from the right-side medial approach. Under videothoracoscopy control, the plate was passed along the thread along the formed tunnel behind the sternum with the convex side toward the spine. All the main stages of the operation were performed under stereo-videothoracoscopic control, which made it possible to avoid damage to organs and soft tissues in the chest cavity, which significantly facilitated the surgeon's work and reduced the time of the operation.

Then the plate was turned 180° around the axis. Taking into account the increase in the child's chest as it grows, a gap of 0.5 - 0.8 cm was left between the ends of the plate and the chest wall. The ends of the plate were fixed with sutures to the ribs.

Indications for surgical correction of PVD are II and III degrees of the defect. Among the operated patients, there were mainly children aged 5 to 9 years - 27 (65.9%).

In the postoperative period, the tactics of patient management included the following principles: adequate relief and prevention of pain syndrome, constant monitoring of hemodynamic parameters, respiration, balance of water-electrolyte metabolism, rational antibiotic therapy and early activation of patients after surgery.

Results. Children begin to sit on the 2nd or 3rd day and walk on the 3rd or 4th day after the operation. After 7-10 days, patients are discharged for outpatient treatment. Subsequently, children are advised to be exempt from physical education classes for 6 months and to participate in swimming, exercise therapy, and massage. Later, operated children are recommended to follow the usual age-appropriate routine, with restrictions on physical activity lifted.

Conclusions. Thus, the implementation of the proposed method into practice significantly reduced anesthesia time (77→56) and the duration of the operation (58→47). Additionally, in the postoperative period, the duration of pain decreased (3→1.7), and the average length of patients' hospital stay was reduced (22→17). The use of the proposed method of metal correction for CChWD resulted in good or satisfactory outcomes in 97.6% of patients.

Used literature:

1. Azizov M.J., Khodjanov I.Yu., Khakimov Sh.K., Khujanazarov I.E., Mirzakarimov B.Kh., Kasymov Kh.A. Comparative evaluation result of the excavated chest deformity in usage of the variety methods of thoracoplasty in children (long-term results) // Genius orthopedy. 2015. No. 3. S. 38-44.
2. Afanasiev A., Komolkin I., Capros N., Tagadiuc A., Ungureanu V., Stupac I., Stupac I. Orthopaedic-surgical treatment of children with chest funnel deformity and scoliosis. //Archives of the balkan medical union. 2017. vol. 52. no. 1. P. 167-169.
3. Kurkov AV, Shekhter AB, Paukov VS. Costal cartilage structural and functional changes in children with a funnel or keeled chest. //Arkh Patol. 2017; 79(5): 57-62.
4. Komissarov I.A., Komolkin I.A., Afanasyev A.P., Schegolev D.V. Modification of the method of surgical treatment according to D. Nuss for EDHC in children // Genius Orthopedy. - 2013. - No. 1. - P. 98-102.

5. Mishina T. P., Isalabdulaeva P. A., Makhachev S. M., Shaitor V. M., Magomedov A. D. / Assessment of cardiorespiratory function before and after surgical correction of excavated chest deformity in children // Pediatric surgery. 2013. No.C. 33-37.
6. Plyakin V.A., Kulik I.O., Sarukhanyan O.O. Comparative evaluation of Nass and Ravich operations for the treatment of excavated chest deformity // Pediatric surgery. 2013. No. 3. S. 60-64.
7. Razumovsky A.Yu., Alkhasov AB, Razin MP, et al. Comparative characteristics of the effectiveness of various methods of surgical treatment of excavated chest deformity in children: a multicenter study // Pediatric Traumatology, Orthopedics and Reconstructive Surgery. - 2018. - T. 6. - Iss. 1. - P.5-13.
8. Stalmakhovich V.N., Dudenkov V.V., Dyukov A.A. Treatment of excavated chest deformity in children //, Orthopedy, Traumatology and Pediatric reconstructive surgery. - 2017. - T. 5. - Iss. 3. - P.17-24.

UO'K: 616-089

BOLALARDA ICHAK INVAGINATSIYASINI TASHXISLASH VA DAVOLASHGA ZAMONAVIY QARASHLAR

Shamsiyev A.M.[1], Shamsiyev J.A.[1], Ataqulov J.O.[1], Tagayev I.U. [2], Maxmudov Z.M.[1,2]
Samarqand davlat tibbiyot universiteti
SamDTU ixtisoslashgan bolalar xirurgik klinikasi

Annotatsiya

Ichak invaginatsiyasi diagnostikasi nafaqat kasalxonadan oldingi bosqichda, balki ixtisoslashtirilgan shifoxonadagi shifokor uchun ham ma'lum qiyinchiliklarni keltirib chiqaradi. Invaginasiya - bolalik davrida orttirilgan ichak tutilishining eng keng tarqalgan shakli bo'lib, barcha turdagi 70-80% ni tashkil qiladi va shoshilinch qorin bo'shlig'i patologiyalari orasida ikkinchi o'rinda turadi.

Tadqiqotning maqsadi: bolalarda ichak invaginatsiyasini tashxislash va davolash usullarini takomillashtirish edi. Tadqiqot vazifalari: ichak invaginasiyasini tashxislashda zamonaviy nurlanish va laboratoriya usullari majmuasining informativligi va ahamiyatini o'rganish, konservativ davolash uchun gidroexokolonografiya gidrostatik to`g`rilash texnikasini joriy etish.

Tadqiqot materiallari va usullari: buning uchun 132 bolaning kasallik tarixi tahlil qilindi. Ushbu bemorlar ikki guruhga bo'lingan: 59 bemorni (44,7%) o'z ichiga olgan nazorat guruhida pnevmoirrigoskopiya tashxis qo'yish va davolash uchun ishlatilgan, bunda 30 bemorning 23 tasida (39%) konservativdezinvaginatsiya qilingan . 73 nafar boladan iborat asosiy guruhda (55,3%) ultratovush nazorati ostida gidroekolonografiya qo'llanilgan, shu bilan birga 52 nafar bemorning 39 nafarida(53,4%) konservativ dezinvaginatsiya qilingan. Gidroekokolonografiyadan foydalanish o'z samarasini ko'rsatdi, kasal bolalarda ko'p hollarda invaginatni konservativ tarzda dezinvaginatsiya qilishga muvaffaq bo'lindi, ba'zida bir necha marta dezinvaginatsiya urinishlari qilindi, 1 kundan keyin kelgan ba'zi bemorlarda ham ushbu usuldan muvaffaqiyatli foydalanildi.

Kalit so`zlar: Ichak invaginatsiyasi, bolalar, rentgenografiya, UTT, gidroexokolonografiya, konservativ davolash

MODERN VIEWS ON THE DIAGNOSIS AND TREATMENT OF INTESTINAL INTUSSUSCEPTION IN CHILDREN

Shamsiyev A.M.[1], Shamsiyev Zh.A.[1], Ataqulov Zh.O.[1], Tagaev I.U. [2], Makhmudov Z.M.[1,2]
Samarkand State Medical University
Specialized Children's Surgical Clinic of SamSMU

Abstract

Timely and accurate diagnostics are crucial for effective management and prevention of complications such as intestinal necrosis and perforation. Diagnostics of intestinal intussusception presents certain difficulties not only at the pre-hospital stage, but also for the physician of a specialized hospital. Intestinal intussusception is the most common form of acquired intestinal obstruction in childhood, accounting for 70-80% of all its types and ranking second among emergency abdominal pathologies.

The purpose of the study: this work was to improve the methods of diagnosis and treatment of intestinal invagination in children. Research objectives: To study the information content and significance of a complex of modern radiation and laboratory methods in the diagnosis of intestinal intussusception, to introduce a method of hydrostatic correction of hydroechocolonography for conservative treatment.

Research materials and methods: For this purpose, the medical records of 132 children were analyzed. These patients were divided into two groups: in the control group, which included 59 patients (44.7%), pneumoirrigoscopy was used for diagnosis and treatment, during which 23 (39%) out of 30 patients were disinfected. In the main group, consisting of 73 children (55.3%), ultrasound-controlled hydroechocolonography was used, while 39 (53.4%) of 52 patients were disinvaginated. The use of hydroechocolonography has shown its effectiveness, in most cases, sick children were able to straighten the invaginate conservatively, straightening attempts were sometimes

carried out up to several times, and this method was also successfully applied to some patients who were admitted later than a day.

Key words: Intussusception, children, radiography, ultrasound, hydroechocolonography, conservative treatment

СОВРЕМЕННЫЕ ВЗГЛЯДЫ НА ДИАГНОСТИКУ И ЛЕЧЕНИЕ ИНВАГИНАЦИИ КИШЕЧНИКА У ДЕТЕЙ

Шамсиев А.М.[1], Шамсиев Ж.А.[1], Атакулов Ж.О.[1], Тагаев И.У.[1], Махмудов З.М.[1,2]

Самаркандский государственный медицинский университет

Специализированная детская хирургическая клиника СамГМУ

Аннотация

Своевременная и точная диагностика имеет решающее значение для эффективного ведения и профилактики осложнений, как некроз кишечника и перфорация. Диагностика инвагинации кишечника, представляет определенные трудности не только на догоспитальном этапе, но и для врача специализированного стационара. Инвагинация кишечника является наиболее частой формой приобретенной кишечной непроходимости в детском возрасте, составляя 70-80% от всех ее видов и занимающая второе место среди экстренной абдоминальной патологии.

Цель исследования. Было совершенствование методов диагностики и лечения инвагинации кишечника у детей. Задачи исследования: Изучить информативность и значимость комплекса современных лучевых и лабораторных методов в диагностике кишечной инвагинации, внедрить методику гидростатической коррекции гидроэхоколонографии для консервативного лечения.

Материал и методы исследования: Для этого проведен анализ историй болезни 132 детей. Данные больные были разделены на две группы: в контрольной, включающей 59 пациентов (44,7%), с целью диагностики и лечения применена пневмоирригоскопия, при который удалось дезинвагинировать 30 больных 23(39%). В основной группе, состоящей из 73 детей (55,3%), применена гидроэхоколонография под контролем ультразвука, при этом дезинвагинирован из 52 больных у 39(53,4%). Применение гидроэхоколонографии показало свою эффективность, больным детям в большинстве случаев удалось расправить инвагинат консервативно, попыток расправления иногда проводилось до нескольких раз, некоторым больным поступившим позже суток также успешно был применен данный метод.

Ключевые слова: Инвагинация кишечника, дети, рентгенография, УЗИ, гидроэхоколонография, консервативное лечение

O'tkir ichak tutulishining bir turi ichak invaginatsiyasi (II) hisoblanadi. II, ichakning bir segmentini qo'shni segmentga kirib qolishi bilan kechadigan holat bolalarda qorin bo'shlig'ida kechiktirib bo'lmaydigan shoshilinch xirurgiyada keng tarqalgan sabablaridan hisoblanadi [1, 4,]. O'z vaqtida va aniq tashxis qo'yish ichak nekrozi va perforatsiya kabi asoratlarni samarali yuritish va oldini olishda hal qiluvchi ahamiyatga ega. II diagnostikasi nafaqat kasalxonagacha bo'lgan bosqichda, balki ixtisoslashtirilgan statsionar shifokori uchun ham muayyan qiyinchiliklarni keltirib chiqaradi [5].

II-ni aniq tashxislash uchun bolalarda ultratovush diagnostikasi, kompyuter tomografiyasi, rentgenografiya va diagnostika kolonoskopiyasi kabi turli tekshiruv usullaridan foydalaniladi. Biroq, keng ko'lamli usullarga qaramay, diagnostikaning aniqligi va qulayligini yaxshilash zarurati mavjud [2]. II bilan og'rigan bemorlarni davolash ko'rsatkichlarini yaxshilashda aniqlovchi jihat qo'shimcha somatik patologiyalar va asoratlarni hisobga olgan holda davolashning turli bosqichlarida bemorlarni erta tashxis qo'yish, davolash taktikasini yanada yaxshilash, shuningdek, ushbu patologiyani jarrohlik yo'li bilan davolash usullarini takomillashtirishdir [3].

Tadqiqotning maqsadi. Invaziv bo'lmagan vizualizatsiya usullarini qo'llash orqali bolalarda ichak invaginatsiyasini tashxislash va davolashni takomillashtirish.

Tadqiqot vazifalari:

1. Ichak invaginasiyasini tashxislashda zamonaviy nurlanish va laboratoriya usullari majmuasining informativligi va ahamiyatini o'rganish,
2. Konservativ davolash uchun gidroexokolonografiya gidrostatik to`g`rilash texnikasini joriy etish.

Tadqiqot materiallari va usullari: Ish 2000 yildan 2023 yilgacha SamDTUning 1-umumiy jarrohlik bo'limi, Ixtisoslashtirilgan bolalar jarrohlik klinikasiga kelib tushgan 2 oylikdan 10 yoshgacha bo'lgan 132 bemorni tekshirish va davolash natijalariga asoslangan.

Asosan kasallik 6 oydan 1 yoshgacha bo'lgan bemorlarda – 68 (51,5%), 6 oygacha 21 (15,9%) va 1 yoshdan katta bolalarda 43 (32,6%) kuzatilgan. Jinsiga ko'ra, o'g'il bolalar - 93 (70,5%) foizni, qiz bolalarda - 39 (29,5%) foizni tashkil etgan.

Kasallik anamnezini o'rganish shuni ko'rsatdiki, kasallikning rivojlanishida eng ko'p uchraydigan omillar quyidagilardan iborat: ichak kasalliklari 35 (26,5%), ratsionga yangi mahsulotlar q o'shish (qo'shimcha ovqatlanish) 44 (33,3%), ovqatlanishdagi xatolari 27 (20,5%) va rivojlanishning tug'ma nuqsonlari 2 (1,5%). O'tkir respirator infeksiya sharoitida 4 (3,0%) bolada II paydo bo'ldi. 20 (15,2%) holatda kasallik rivojlanishida hech qanday omillar aniqlanmadi.

Tekshiruv majmuasi anamnez yig'ish, ko'zdan kechirish, dori-darmon uyqusi ostida qorin palpatsiyasi, barmoq rektal tekshiruvi, laboratoriya tekshiruvi, rentgenografiya, pnevmoirrigoskopiya va ultratovush tekshiruvlarini o'z ichiga olgan.

Diagnostika usullari va jarrohlik davolash taktikasiga qarab, ichak invaginatsiyasi bilan og'rigan 132 nafar bemor ikki guruhga bo'lingan. Nazorat guruhi (NG) 2000-2014 yillarda davolangan 59 (44, 7%) bemordan iborat bo'lib, ular tomonidan II diagnostikasi va davolashning an'anaviy usullari qo'llanilgan.

Kompleks diagnostika diagnostikaning nurli usullarini (qorin bo'shlig'ining rentgenografiyasi va pnevmoirrigoskopiya) o'z ichiga olgan. Jarrohlik davolash taktikasini tanlash asosan kasallikning vaqtiga bog'liq edi. Kasallik muddati 12 soatgacha bo'lganda konservativ dezinvaginatsiya usuli - pnevmoirrigoskopiya (PIS) qo'llanilgan. Ichak invaginatsiyasi 13 soatdan 24 soatgacha bo'lgan bemorlarda pnevmoirrigoskopiya ehtiyotkorlik bilan qo'llanilgan. Kasallik boshlanganidan 18 soatdan ortiq vaqt o'tgan hollarda, og'riqli shok klinikasi yoki va peritonit klinikasi mavjud bo'lganda, operatsiyadan oldingi tayyorgarlikdan so'ng laparotomiya qilingan.

Asosiy guruh (AG) 2014 yildan 2023 yilgacha klinikada davolangan 73 nafar (55,3%) bemorni tashkil etgan. AG bilan og'rigan bemorlarga, NGdan farqli o'laroq, pnevmoirrigoskopiya qo'llanilmadi. 2014 yildan boshlab II diagnostikasining asosiy usuli sifatida ultrasonografiya joriy etildi. Ultratovush tekshiruvida klassik II exosimptomlari - «nishon» va «psevdopochka» alomatlari aniqlandi (1-rasm).

1- rasm. Qo'rin bo'shli g'ida «nishon» simptomi UT tekshiruvida

IIni davolash gidroexokolonografiyani (GEK) qo'llashga asoslangan edi. Rentgenologik usuldan farqli o'laroq, GEK nurlanishni bermaydi, chunki u ultratovush tekshiruvi nazorati ostida bajariladi. GEK yordamida dezinvaginatsiya qilish asosan medikamentoz uyqy ostida o'tkazilgan. Dastlab qorin bo'shlig'idagi invaginatning aniq holatini aniqlash uchun dori-darmon bilan uyqu holatida qorin parpatsiyasi amalga oshirildi. Muolaja y o'g'on ichakni retrograd suyuqlik bilan to'ldirishdan boshlanib, bir vaqtning o'zida gidrostatik dezinvaginatsiya jarayonini exoskopik nazorat qilingan.

Bugungi kunda bolalarda IIni konservativ davolashning sezilarli afzalliklari umum e'tirof etilgan. IIni davolash taktikasini tanlashga ta'sir ko'rsatuvchi muhim omillardan biri kasallikning boshlanish vaqtidir. Kasallik boshlanishidan 12 soatgacha bo'lgan muddatda konservativ davolash usuli so'zsiz tanlov hisoblanadi. Shuningdek, kasallik muddati 48 soatdan ortiq bo'lganda jarrohlik aralashuvining ustuvorligiga e'tiroz bildirilmaydi. II bilan og'rigan bemorlarni davolash taktikasini tanlashda qiyinchiliklar kasallik 13-24 soat davom etganda yuzaga keladi. Ichak invaginatsiyasini (II) davolashga an'anaviy yondashishda kasallikning 25-48 soatlik muddati o'tganda barcha hollarda faol tezkor taktikaga amal qilindi. AG da GEK 25-48 soat muddatda ham qo'llanilgan, GEKni o'tkazishga yagona qarshi ko'rsatma peritonit klinikasi bo'lgan. Asosan 6 oydan 1 yoshgacha bo'lgan bolalarda II yuzaga kelgan (67,4%). Tekshirilayotgan ikkala guruhda ham bemorlarning aksariyati o'g'il bolalar - 93 (70,5%), qizlar esa 2,7 barobar kam kasallanganlar - 39 (29,5%). Bemorlarning 105 nafari (79,5 foizi) qishloq aholisi, 27 nafari (20,5 foizi) shahar aholisini tashkil etgan.

1-jadval.

Kasallikning davomiyligi bo'yicha guruhlarga bo'linishi

Kasallikning davomiyligi	NG n= 59	AG n=73	jami n=132
12 soatgacha	18(30,5%)	16(21,9%)	34 (25,8%)
13-24 soatgacha	9(15,3%)	20(27,4%)	29 (21,9%)
25-48 soatgacha	11(18,6%)	23(31,5%)	34 (25,8%)
48 soatgacha va undan yuqori	21(35,6%)	14(19,2%)	35 (26,5%)
jami	59 (100%)	73 (100%)	132(100%)

Ushbu jadvalda (1-jadval) kasallik boshlanganidan 12 soatgacha bemorlarning jami 34

(25,8%) nafari, qolgan 98 (74,2%) nafari esa 12 soatdan kechikkan muddatlarda kelib tushganligi aniqlangan.

Tadqiqot natijalari va ularning muhokamasi: NGda 59 bemordan 30 nafariga (50,8%) PIS tashxis qo'yish va konservativ dezinvaginatsiya usuli qo'llanilgan. 12 soatgacha kelgan 18 nafar (30,5%) va 12 soatdan keyin (13 soatdan 48 soatgacha) kelgan 5 nafar bemorda. Ushbu usul 23 (39,0%) bemorda muvaffaqiyatli bo'ldi, 7 (11,9%) bemorda ushbu usul kech qo'llanildi, bu esa PIS ni muvaffaqiyatsizligiga bog'liq bo'lishi mumkin (2-jadval).

2-jadval

NG da o'tkazilgan davolash turlari

VAQT	PIS	PIS + operatsiya	operatsiya	jami
12 soatgacha	18(30,5%)	-	-	18(30,5%)
13-24 soatgacha	5(8,5%)	1(1,7%)	3(5,1%)	9(15,3%)
25-48 soatgacha		3(5,1%)	8(13,6%)	11(18,6%)
48 soatgacha va undan yuqori	-	3(5,1%)	18(30,5%)	21(35,6%)
jami	23(39%)	7(11,9%)	29(49,1%)	59(100%)

PIS manometr yordamida to'g" ri ichakka kiritiladigan havo yuborish yo'li bilan o'tkazildi, bunda yo'g "on ichakdagi bosim 80-100 mm simob ustunigacha gacha ko'tariladi. Muolaja rentgenoskopiya ostida o'tkaziladi, o'rtacha 15 daqiqa davom etadi, bunda bemor ham, tibbiyot xodimlari ham rentgen nurlari ta'sirida bo'ladi. NG bilan kasallangan barcha bemorlarda ushbu muolaja bir marta bajarilgan, ikkinchi urinish asoratlar xavfi tufayli bajarilmagan. Muvaffaqiyatli PIS o'tkazilgandan so'ng, bemorga kasallikning takrorlanishiga yo'l qo'ymaslik uchun bariy eritmasi bilan oshqozon-ichak trakti passaji o'tkazilgan va qorin boshligi rentgenografiyasi qilingan.

2014 yildan boshlab AG da nisbatan yangi konservativ davolash usulini qo'lladik: ultratovush tekshiruvi nazorati ostidagi GEK. Ushbu usulning afzalliklariga quyidagilar kiradi: nurlanish yuklamasining yo'qligi, invaginat to'- g'rilanishini vizual nazorat qilish imkoniyati, rangli doppler kartalash (RDK) usuli bilan ichak devorining hayotiyligini xolisona baholash. IIni UTT nazorati ostida to'g'rilash yo'g'on ichakni suyuqlik bilan to'ldirishni va bu suyuqlikning bosimi ostida dezinvaginatsiyani o'z ichiga oladi. Bu usul bir vaqtning o'zida yo'g "on ichak funksiyasini kuzatish, uning mazmuni va yorqinligini, ichak devorining tuzilishini real vaqt rejimida ko'rish imkonini beradi.

Ushbu uslub bo'yicha davolanish, kasallikning boshlanish vaqti va bolaning yoshidan qat'i nazar, ultratovush tekshiruvidan so'ng, peritoneal holatlar, shok va ingichka ichak invaginatsiyasi mavjud bo'lmaganda, kelib tushgan barcha bolalarga qo'llanilgan.

AG da GEK umumiy bemorlarning 52 nafari (71,2 foizi) da qo'llanilgan. Bunda 57 bemor (78,1%) 73 bemordan 12 soatdan keyin qaqbul qilingan. 39 (53,4%) bemor konservativ ravishda dezinvaginatsiya qilingan, 13 (17,8%) bemorlarda urinishlar muvaffaqiyatsiz bo'lgan. Bu bemorlar muvaffaqiyatsiz urinishlardan so'ng operativ davolangan. 15 nafar bemorlarda GEK 5-6 ta urinishini bajarishga to'g'ri kelgan (3-jadval).

3-jadval

AG da o'tkazilgan davolash turlari

VAQT	GEK	GEK + operatsiya	operatsiya	jami
12 soatgacha	16(21,9%)	-	-	16(21,9%)

13-24 soatgacha	16(21,9%)	3(4,1%)	1(1,4%)	20(27,4%)
25-48 soatgacha	7(9,6%)	8(11,0%)	8(11,0%)	23(31,5%)
48 soatgacha va undan yuqori	-	2(2,7%)	12(16,4%)	14(19,2%)
jami	39(53,4%)	13(17,8%)	21(28,8%)	73(100%)

Har ikki guruhda o'tkazilgan davolash tahlili shuni ko'rsatdiki, konservativ davo choralari AG da ko'proq bo'lgan va 73 bemordan 39 nafarini (53,4%) tashkil etgan bo'lsa, NGda bu ko'rsatkich 59 boladan 23 nafarini (39,0%) tashkil etgan. SHuningdek,AGga GEKni muvaffaqiyatli otkazgan bemorlar 2-3 sutka davomida statsionardan chiqarilib, IIning qaytalanishini nazorat qilish ultratovush tekshiruvi yordamida amalga oshirilgan bo'lsa, NGda bemorlar 4-5 sutka davomida statsionardan chiqarilib, qaytalanishni nazorat qilish oshqozon-ichak trakti kontrast passaji -rentgen nazorati yordamida amalga oshirilgan, bolalarda qo'shimcha nurlanishi bo'lgan.

Xulosalar.

1. Rentgenologik tadqiqotlarning an'anaviy usullari 12 soatgacha bo'lgan muddatda past diagnostika samaradorligiga ega. Ichak invaginatsiyasi diagnostikasining eng axborot beruvchi qo'shimcha usuli ultrasonografik skanerlash bo'lib, u kelib tushish vaqtidan qat'i nazar, 100% hollarda «nishon» alomati bilan aniqlangan bo'lib, bu qisqa muddatda davolashning keyingi taktikasini aniqlash imkonini beradi.

2. Bolalarda IIda GEKning taklif etilayotgan usuli konservativ davolash samaradorligini 10% ga (53,4%) oshirish, operatsiyalar sonini 20% ga (46,6%) qisqartirish va anastomoz qo'llash ko'rsatkichlarini kengaytirish va vaqtinchalik stomalarni qisqartirish hisobiga takroriy operatsiyalar sonini qisqartirish imkonini berdi.

Foydalanilgan adabiyotlar:

1. Беляев МК. Экспериментальное обоснование безопасности консервативного лечения инвагинации у детей // журнал Детская хирургия. 2004. № 3. С.11–14.
2. Гераськин, А.В. Детская колопроктология: руководство для врачей/ А.В.Гераськин, А.Ф. Дронов, А.Н. Смирнов. – М.: Контэнт, 2012. – 658 с.
3. Шамсиев Ж. А., Тогаев И. У., Махмудов З. М., Шамсиев Ш. Ж., Шамсиев Б. М. Оптимизация методов диагностики и лечения инвагинации кишечника у детей // журнал «Проблемы медицины и биологии». 2021, № 6.1 (141), С.461-465.
4. Tripalo-Batoš, A. Ultrasound guided of ileocolic intussusception in children / A. Tripalo-Batoš, T. Grmoya, G. Roil // Pediatric. Today. – 2016. –Vol. 12, №1. – P. 149-159. doi: 10.5457/p2005-114.151.
5. Usang, U.E. Intussusception in children: comparison between ultrasound diagnosis and operation findings in a tropical developing country / U.E. Usang, G.B. Inyang, A.T. Ekabua // Pediatrics. – 2013. – Vol. 10, №2. – P.87-90. doi:10.4103/0189-6725.115029.

UO'K: 616-089

BOLALARDA JIGAR EXINOOKKOZIDA VIDEOLAPAROSKOPIK EXINOKOKKEKTOMIYA

Shamsiyev J.A.[1], Tagayev I.U.[2], Ruziyev J.A.[1], Shamsiyev Sh.J.[1], O'lmasov X.R.[2]
Samarqand davlat tibbiyot universiteti
SamDTU ixtisoslashgan bolalar xirurgik klinikasi

Annotatsiya

Exinokokkoz ko'pincha odamlarda uchraydigan ko'plab parazitar kasalliklardan biridir. Zamonaviy ma'lumotlarga ko'ra, echinokokkoz butun dunyo bo'ylab notekis tarqalgan. Echinococcus har qanday organga ta'sir qilishi mumkin, lekin ko'p hollarda u jigar, o'pka va miya kabi organlarga ta'sir qiladi. Shu munosabat bilan zamonaviy minimal invaziv davolash usullarini ishlab chiqish doimiy ravishda talab qilinadi.

Tadqiqot maqsadi. Bolalarda laparoskopik jigar echinokokkektomiyasi natijalarini tahlil qilish.

Tadqiqot vazifalari: bolalarda jigar echinokokkozini videolaparoskopik davolashni amalga oshirish, operatsiyadan keyingi davrda echinokokkozning takrorlanishining oldini olish uchun albmedazoldan foydalanish.

Tadqiqot materiallari va usullari: 2017-2025-yillarda klinikada 83 nafar bemorda jigarga laparoskopik exinokokkektomiya operatsiyasi o'tkazilgan. 44 nafar o'g'il (53,0 %), 39 nafar qiz (47,0 %) bolalarda. 5 yoshgacha bo'lgan bolalar 9 nafar (10,8%), 5 yoshdan 10 yoshgacha bo'lganlar 38 nafar (45,8%), 10-14 yoshdan 22 nafar (26,5%), 14 yoshdan kattalar 14 nafarni (16,9%) tashkil etgan. Gidatid kistalarni tashxislash uchun ultratovush, KT va MRT ishlatilgan. Yagona kamerali echinokokkli jigar kistalari 55 (66,3%) nafar bemorda, ko'plab exinokokk kistalari (2 tadan 6 tagacha kistalar) - 28 (33,7%) nafar bemorlarda kuzatilgan. Xamma bemorlarga videolaparoskopik exinokokkektoviya o`tkazilgan.

Kalit so'zlar: jigar, echinokokkektomiya, videolaparoskopik, minimal invaziv

VIDEOLAPAROSCOPIC ECHINOCOCCECTOMY OF THE LIVER IN CHILDREN

Shamsiyev Zh.A.[1], Tagaev I.U.[2], Ruziyev Zh.A.[1], Shamsiyev Sh.Zh.[1], Ulmasov Kh.R.[2]
Samarkand State Medical University
Specialized Children's Surgical Clinic of SamSMU

Abstract

Echinococcosis is one of many parasitic diseases often found in humans. According to modern data, echinococcosis is distributed unevenly around the globe. Echinococcus can affect any organ, but in most cases it affects organs such as the liver, lungs and brain. In this regard, the development of modern minimally invasive treatment methods is constantly required.

The purpose of the study. Analysis of the results of using laparoscopic liver echinococcectomy in children.

Research objectives: implementation of videolaparoscopic treatment of liver echinococcosis in children, use of albendazole for prevention of recurrence of echinococcosis in the postoperative period.

Research materials and methods: In 2017-2025, 83 patients underwent laparoscopic liver echinococcectomy in the clinic. Among the children, there were 44 boys (53.0%) and 39 girls (47.0%). Children under 5 years old accounted for 9 people (10.8%), 38 people (45.8%) aged 5 to 10 years, 22 people (26.5%) aged 10 to 14 years, and 14 people (16.9%) aged 14 years and older. Ultrasound, CT, and MRI are used to diagnose echinococcal cysts. Unilocular echinococcal cysts of the liver were observed in 55 (66.3%) patients, and multiple echinococcal cysts (from 2 to 6 cysts) were observed in 28 (33.7%) patients. All patients underwent videolaparoscopic echinococcectomy.

Key words: liver, echinococcectomy, video laparoscopic, minimally invasive

ВИДЕОЛАПАРОСКОПИЧЕСКАЯ ЭХИНОКОККЭКТОМИЯ ПЕЧЕНИ У ДЕТЕЙ

Шамсиев Ж.А.[1], Тагаев И.У.[1], Рузиев Ж.А.[1], Шамсиев Ш.Ж.[1], Улмасов Х.Р.[2]
Самаркандский государственный медицинский университет
Специализированная детская хирургическая клиника СамГМУ

Аннотация

Эхинококкоз – одно из многих паразитарных заболеваний, часто встречающихся у человека. По современным данным эхинококкоз распространен на земном шаре неравномерно. Эхинококк может поражать любой орган, но в большинстве случаев он поражает такие органы, как печень, легкие и мозг. В связи с этим постоянно требуется разработка современных малоинвазивных методов лечения.

Цель исследования. Анализ результатов применения лапароскопической эхинококкэктомии печени у детей. Задачи исследования: внедрение видеолапароскопического лечения эхинококкоза печени у детей, применение альбендазола для профилактики рецидивов эхинококкоза в послеоперационном периоде.

Материалы и методы исследования: В 2017-2025 гг. в клинике 83 пациентам выполнена лапароскопическая эхинококкэктомия печени. Среди детей было 44 мальчика (53,0%) и 39 девочек (47,0%). Дети до 5 лет составили 9 человек (10,8%), в возрасте от 5 до 10 лет – 38 человек (45,8%), в возрасте от 10 до 14 лет – 22 человека (26,5%), в возрасте 14 лет и старше – 14 человек (16,9%). Для диагностики эхинококковых кист используются УЗИ, КТ и МРТ. Однокамерные эхинококковые кисты печени наблюдались у 55 (66,3%) больных, а множественные эхинококковые кисты (от 2 до 6 кист) – у 28 (33,7%) больных. Всем пациентам была выполнена видеолапароскопическая эхинококкэктомия.

Ключевые слова: печень, эхинококкэктомия, видеолапароскопическая, малоинвазивная

Exinokokkoz - ichki organlar (jigar, o'pka, yurak, miya va boshqalar) shikastlanishi va ularda exinokokk kistalari hosil bo'lishi bilan kechadigan echinokokkning tasma gelminti lichinkali bosqichi parazitar invaziyasidir. Exinokokkozning nospetsifik belgilari zaiflik, qichishish, haroratning ko'tarilishini o'z ichiga oladi; spetsifik parazit joylashgan joyga bog'liq va mahalliy og'riqlar, ko'ngil aynishi, sariqlik, yo'tal, o'choq nevrologik alomatlari, kardialgiya, aritmiya va boshqalar bilan ifodalanishi mumkin. Exinokokkoz diagnostikasi instrumental tadqiqotlar (rentgen, sintigrafiya, ultratovush, KT, MRT) va serologik namunalar ma'lumotlariga asoslanadi. Exinokokkozni jarrohlik yo'li bilan davolanadi.

Tadqiqot maqsadi. Bolalarda laparoskopik jigar echinokokkektomiyasi natijalarini tahlil qilish.

Tadqiqot vazifalari:

1. bolalarda jigar echinokokkozini videolaparoskopik davolashni amalga oshirish.
2. operatsiyadan keyingi davrda echinokokkozning takrorlanishining oldini olish uchun albmedazoldan foydalanish.

Tadqiqot materiallari va usullari: 2017-2025-yillarda klinikada 83 nafar bemorda jigarga laparoskopik exinokokkektomiya operatsiyasi o'tkazilgan. 44 nafar o'g'il (53,0 %), 39 nafar qiz (47,0 %) bolalarda. 5 yoshgacha bo'lgan bolalar 9 nafar (10,8%), 5 yoshdan 10 yoshgacha bo'lganlar 38 nafar (45,8%), 10-14 yoshdan 22 nafar (26,5%), 14 yoshdan kattalar 14 nafarni (16,9%) tashkil etgan.

Gidatid kistalarni tashxislash uchun ultratovush, KT va MRT ishlatilgan. Yagona kamerali echinokokkli jigar kistalari 55 (66,3%) nafar bemorda, ko'plab exinokokk kistalari (2 tadan 6 tagacha kistalar) - 28 (33,7%) nafar bemorlarda kuzatilgan.

Tadqiqot natijalari va ularning muhokamasi: Jigarning laparoskopik echinokokkektomiyasi uchun bizning texnikamiz quyidagicha. Kistaning punksiya joyi va uning tarkibini evakuatsiya

qilish bilan kistaning keyingi ochilishi joyi iloji boricha yuqori bo'lishi kerak, chunki parazitning gidatida elementlarining cho'kishi va ponksiyon joyidan hidatid suyuqlik bilan gidatida elementlarini oqib chiqishi minimal miqdorda bo'ladi.

Punksiya joyi 70 gradus issiq glitserin bilan namlangan doka salfetkalar bilan izolyatsiya qilinadi. Punksiyadan oldin qorin bo'shlig'idagi bosim imkon qadar pasaytiriladi, vizual nazorat ostida ponksiyon ignasining uchi ponksiyon joyiga joylashtiriladi. Punksion ignasiga ulangan aspirator yoqilgan bo'lsa, kista punksiya qilinadi. Kistaning fibroz kapsulasi ponksiyon joyida ushlanadi. Gidatid suyuqlik aspiratsiya qilinadi. Keyinchalik, qorin bo'shlig'idagi bosim 10-14 mm simob ustuniga o'rnatiladi va operativ muolaja bosqichma-bosqich amalga oshiriladi: – sistotomiya va xitin qobiqi endokonteynerga evakuatsiya qilinadi; - kistaning qolgan tarkibini aspiratsiya qilinadi, sistobiliar oqma mavjudligini tekshiladi; - 5 daqiqali ta'sir qilish bilan kista bo'shlig'iga steril 70 daraja qizdirilgan glitserinni yuboriladi; – fibroz kapsulaning erkin chetlari kesiladi , kerak b o'lsa drenaj naycha o'rnatiladi.

1-rasm. Jigarning videolaparoskopik echinokokkektomiyasi

Laparoskopik echinokokkektomiya 75 ta holatda muvaffaqiyatli amalga oshirildi. 3 (4%) nafar bemorda operatsiya davomida aniqlangan bir nechta mayda kichik hajmdagi kistalar mavjudligi sababli laparotomiya amalga oshirildi. Laparoskopik jarrohlikning o'rtacha davomiyligi 55 ± 15 daqiqa, an'anaviy laparotomiya esa 90 ± 20 minut davom etadi. Laparoskopik jarrohlik paytida intraoperatif qon yo'qotish minimal (50-150 ml) tashkil etadi.

Operatsiyadan keyingi ko'rsatkichlar:

Laparoskopiyadan keyin kasalxonaga yotqizishning o'rtacha davomiyligi 5,2 ± 1,1 kunni, laparotomiyadan keyin esa 9,3 ± 2,5 kunni tashkil etadi.

Operatsiyadan keyingi davrda og'riq sindromi laparotomiya (6,1 ± 1,4) bilan solishtirganda laparoskopiya (o'rtacha VASH ball - 3,2 ± 0,8) paytida sezilarli darajada kamroq

buladi.

Laparoskopiyadan keyingi asoratlar 4 nafar (5,3%) bemorda qayd etilgan:

Biliar oqma - 2 nafar (2,7%) bemorda,

Mahalliy infektsiya – 1 ta (1,3%) bemorda,

Subkapsulyar gematoma – 1ta (1,3%) bemorda.

Operatsiyadan keyingi barcha bemorlarga 14 kunlik tanaffuslar bilan 3 oylik kurslarda albendazol (10 mg/kg/kun) bilan residivga qarshi konservativ davolash buyurildi. Barcha bemorlar davolashni qoniqarli darajada qabul qilishdi. Kuzatuvning birinchi yilida kasallikning qaytalanishi 2 (2,7%) bemorda qayd etilgan.

Xulosa. Shunday qilib, o'z vaqtida erta tashxis qo'yish va jigarning video laparoskopik echinokokkektomiyasi texnikasi, keyinchalik ushbu patologiyasi bo'lgan bemorlarga albendazol bilan kimyoterapiya o'tkazish malakali yordam ko'rsatishga imkon beradi, operatsiya muddatini qisqartiradi, operatsiyadan oldingi asoratlar sonini kamaytiradi, operatsiyadan keyingi og'riqlar davrini qisqartiradi, yaxshi kosmetik ta'sirga erishiladi va kasallikning qaytalanishini kamaytiradi.

Jigarning laparoskopik echinokokktomiyasi sifat jihatidan an'anaviy laparotomiyaning bevosita natijalaridan kam emas. Kasalxonada davolanishning muddati qisqaradi, shuningdek, laparoskopik operatsiyalar uchun erta reabilitatsiyaning an'anaviy afzalliklari va yaxshi kosmetik effect beradi, jigar echinokokkektomiyasi uchun laparoskopik variantni yaratadi.

Foydalanilgan adabiyotlar:

1. Minaev S. V., Mashchenko A. N., Aydemirov A. N., Anisimov I. N., Gerasimenko I. N. [et al.] Epidemiological Characteristics of Echinococcosis in Adults and Paediatric Populations of Stavropol Region. Doctor Ru. 2018;7(151):35-38. https://doi.org10.31550/1727-2378-2018-151-7-35-38
2. Shamsiev J. A. Puti uluchshenija rezul'tatov hirurgicheskogo lechenija i profilaktiki recidivov jehinokokkoza u detej: dis. ... d-ra med. nauk. Tashkent,2015.
3. Minaev S. V., Gerasimenko I. N., Kirgizov I. V., Shamsiev A. M., Bykov N. I. [et al.] Laparoscopic Treatment in Children with Hydatid Cyst of the Liver. World J. Surg. 2017;41(12):3218-3223. https://doi.org/10.1007/s00268-017-4129-x
4. Agudelo Higuita N. I., Brunetti E., McCloskey C. Cystic echinococcosis. J. Clin. Microbiol. 2016; 54:518-523. https://doi.org/10.1128/JCM.02420-15.
5. Toro A., Schembari E., Mattone E., Di Carlo I. Hydatid Cyst of the Liver: A Challenge that can be Amplified Shifting from Open to Laparoscopic Surgery. World. J. Surg2018; 42(9): 2383-2383. https://doi.org/10.1007/s00268-018-4484-2

UO'K: 616-089

ST ELEVATSIYALI MIOKARD INFARKTI BO'LGAN BEMORLARDA TROMBOLITIK TERAPIYA VA BIRLAMCHI TERI ORQALI KORONAR ARALASHUVINING KASALXONA ICHI ASORATLARIGA TA'SIRINI BAHOLASH

Shamsiev K.Yu.
Buxoro davlat tibbiyot instituti
Respublika shoshilinch tibbiy yordam ilmiy markazi Buxoro filiali

Annotatsiya

Kirish. O'tkir miokard infarkti (O'MI) dunyo bo'ylab yuqori kasallanish va o'lim bilan keng tarqalgan klinik sindrom [1,15]. ST-segment elevatsiyali miokard infarkti (STEMI) doimiy ST segment ko'tarilishi bilan tavsiflanadigan elektrokardiogramma (EKG) yoki gis tutami chap oyoqchasi blokadasi va miokard nekrozi bilan bog'liq biomarkerlarning ko'payishi bilan birga miyokard ishemiyasining xarakterli belgilari ko'rish mumkin [1,14].

Maqsadi. O'tkir STEMI bilan og'rigan bemorlarda Trombolitik terapiya yoki birlamchi Teri orqali koronar aralashuv o'tkazgan bemorlarda kasalxona ichi qon ketish, insult va o'lim ko'rsatkichlarini solishtirishdir, chunki rivojlanayotgan mamlakatlarning ko'plab shifoxonalarida 24/7 tartibda ish yuritadigan birlamchi teri orqali koronar aralashuvi jihozlari mavjud emas.

Materiallar va usullar. Tadqiqotimiz TT (Trombolitik terapiya) yoki birlamchi TOKA (Teri orqali koronar aralashuv) dan o'tgan o'tkir STEMI bilan og'rigan 111 ta retrospektiv skrining qilingan bemorlarda olib borildi. Bemorlarning klinik xususiyatlari, kasalxona ichi asoratlariga ta'siri baholandi.

Tadqiqot natijalari. Bizning tadqiqotimiz 111 ta o'tkir STEMI (73 erkak, 65 ayol) bemor bilan o'tkazildi. Bemorlarning 66 (59,5%) trombolitik terapiya bilan davolangan va 45 (40,5%) bemor birlamchi TOKA dan o'tgan. Bemorlarning yoshi 65 yoshdan 87 yoshgacha bo'lgan. TT guruhidagi bemorlarning o'rtacha yoshi 74,17±5,08 yoshni, birlamchi TOKA guruhidagi bemorlarning o'rtacha yoshi 72,18±6,77 yoshni tashkil etdi; guruhlar o'rtasida sezilarli farq yo'q edi ($p > 0,05$). Bemorlarning 73 nafari (65,8%) erkak va 38 nafari (34,2%) ayol edi. Birlamchi TOKA va TT guruhi o'rtasida gender taqsimoti bo'yicha statistik jihatdan sezilarli farq yo'q edi ($p > 0.05$).

Kalit so'zlar: Birlamchi teri orqali koronar aralashuv, trombolitik terapiya,ST elevatsiyali miokard infakti

EVALUATING THE EFFECT OF THROMBOLYTIC THERAPY AND PRIMARY PERCUTANEOUS CORONARY INTERVENTION IN PATIENTS WITH ACUTE ST-ELEVATION MYOCARDIAL INFARCTION ON IN-HOSPITAL COMPLICATIONS

Shamsiev K.Yu.
Bukhara State Medical Institute
Bukhara branch of the Republican Scientific Research
Center for Emergency Medical Care

Abstract

Introduction. Acute myocardial infarction (AMI) is a common clinical syndrome with high morbidity and mortality worldwide [1,15]. ST-segment elevation myocardial infarction (STEMI) can be seen on electrocardiogram (ECG) characterized by persistent ST-segment elevation, or left bundle branch block (LBBB) and an increase in biomarkers associated with myocardial necrosis, as well as characteristic signs of myocardial ischemia [1,14].

Objective. The objective of this study is clear: to compare in-hospital bleeding, stroke, and mortality in patients with acute STEMI undergoing thrombolytic therapy or primary percutaneous coronary intervention. This is

of particular importance in developing countries, where many hospitals lack 24/7 primary percutaneous coronary intervention facilities.

Materials and Methods. The study was conducted on 111 patients with acute STEMI who underwent TT (thrombolytic therapy) or PCI (percutaneous coronary intervention). We evaluated the clinical features of the patients and the impact on in-hospital complications.

Results of the study. Our study included 111 patients with acute STEMI (73 men, 65 women). Of these, 66 (59.5%) patients received thrombolytic therapy (TT) and 45 (40.5%) patients underwent primary PCI.The patients ranged in age from 65 to 87 years. The mean age of patients in the TT group was 74.17 ± 5.08 years, while the mean age of patients in the primary buckle group was 72.18 ± 6.77 years, showing no significant difference between the groups (p > 0.05).Of the patients, 73 (65.8%) were male and 38 (34.2%) were female. There was no statistically significant difference in gender distribution between the primary buckle and TT group (p> 0.05).

Keywords: Primary percutaneous coronary intervention, thrombolytic therapy, acute ST-segment elevation myocardial infarction

ОЦЕНКА ВЛИЯНИЯ ТРОМБОЛИТИЧЕСКОЙ ТЕРАПИИ И ПЕРВИЧНОГО ЧРЕСКОЖНОГО КОРОНАРНОГО ВМЕШАТЕЛЬСТВА У ПАЦИЕНТОВ С ОСТРЫМ ИНФАРКТОМ МИОКАРДА С ПОДЪЕМОМ СЕГМЕНТА ST НА ВНУТРИБОЛЬНИЧНЫЕ ОСЛОЖНЕНИЯ

Шамсиев К.Ю.

Бухарский государственный медицинский институт

Бухарский филиал Республиканского научного центра

экстренной медицинской помощи

Аннотация

Введение. Острый инфаркт миокарда (ОИМ) - распространенный клинический синдром с высокой заболеваемостью и смертностью во всем мире [1,15]. Инфаркт миокарда с подъемом сегмента ST (STEMI) можно увидеть на электрокардиограмме (ЭКГ), характеризующейся постоянным подъемом сегмента ST, или блокадой левей ножки пучки гиса (ПБЛНПГ) и увеличением биомаркеров, связанных с некрозом миокарда, а также характерными признаками ишемии миокарда [1,14].

Цель. Это сравнение внутрибольничных кровотечений, инсультов и смертности у пациентов с острой STEMI, перенесших тромболитическую терапию или первичное чрескожное коронарное вмешательство, поскольку во многих больницах развивающихся стран нет оборудования для первичного чрескожного коронарного вмешательства, которое работает круглосуточно и без выходных.

Материалы и методы. Наше исследование проводилось на 111 ретроспективно обследованных пациентах с острыми STEMI, перенесших ТТ (тромболитическая терапия) или ЧКВ (чрескожное коронарное вмешательство). Оценивались клинические особенности больных, влияние на внутрибольничные осложнения.

Результаты исследования. В нашем исследовании приняли участие 111 пациентов с острой STEMI (73 мужчины, 65 женщин). Из них 66 (59,5%) пациентов получали тромболитическую терапию (ТТ), а 45 (40,5%) пациентов прошли первичную ЧКВ. Возраст пациентов составлял от 65 до 87 лет. Средний возраст пациентов в группе ТТ составлял 74,17±5,08 года, в то время как средний возраст пациентов в группе первичной пряжки составлял 72,18 ± 6,77 года; существенной разницы между группами не было (p> 0,05). Из пациентов 73 (65,8%) были мужчинами и 38 (34,2%) женщинами. Статистически значимой разницы в гендерном распределении между первичной пряжкой и группой ТТ не было (p> 0,05).

Ключевые слова: Первичное чрескожное коронарное вмешательство, тромболитическая терапия, острым инфарктом миокарда с подъемом сегмента ST

Kirish. Oxirigi 10 yil ichida jahon hamjamiyati nafaqat tibbiyot sohasidagi, balki mamlakatlar uchun ijtimoiy- iqtisodiy ahamiyatga ega global muammoga duch keldi - aholi

orasida surunkali ishemik kasalligi bor yuqumli bo'lmagan kasalliklarning pandemiyasi va ularning asoratlanishi oqibatida o'lim va nogironlikning yil sayin oshib borishi muammosiga duch kelmoqda. Ayniqsa, yurak ishemik kasalliklari, O'tkir koronar sindrom, gipertoniya, qandli diabet, semizlik kabi birlamchi va raqobatdosh kasalliklar bilan kasallanish va ular oqibatida nogironlik va o'lim ko'rsatkichini oshib borayotganligi ilmiy-amaliy tadqiqotlar asosida ko'rsatib berilmoqda.

Mamlakatimizda sog'liqni saqlash tizimini rivojlantirishning eng so'ngi va zamonaviy jihozlarni kirib kelishi, kasalliklarni birlamchi ko'rikda tez va samarali aniqlash orqali STEMI bilan og'rigan bemorlarni davolash natijalarini yaxshilashga qaratilgan chora-tadbirlar o'z ichiga oladi. Yangi O'zbekistonning 2022-2026 yillarga moljallangan yeti ustuvor yonalish bo'yicha axoliga malakali tibbiy xizmatni yanayam yaqinlashtirish vazifalari ko'rsatilgan.

O'tkir miokard infarkti (O'MI) dunyo bo'ylab yuqori kasallanish va o'lim bilan keng tarqalgan klinik sindrom [1, 15]. ST-segment elevatsiyali miokard infarkti (STEMI) doimiy ST segment ko'tarilishi bilan tavsiflanadigan elektrokardiogramma (EKG) yoki gis tutami chap oyoqchasi blokadasi va miokard nekrozi bilan bog'liq biomarkerlarning ko'payishi bilan birga miyokard ishemiyasining xarakterli belgilari ko'rish mumkin [1,14]. Bugungi kunda miokard infarkti bilan og'rigan bemorlarning 25% dan 40% gacha STEMI borligi ma'lum [2]. So'nggi yillarda shifoxona ichi o'lim ko'rsatkichi taxminan 5-6%ga, 1 yillik STEMI bilan bog'liq o'lim ko'rsatkichlarining 7-18% ga pasayishi zamonaviy aralashuvlar va kechiktirib bo'lmas fibrinolitik va teri orqali koronar aralashuvlarda o'z aksini topdi [3]. Davolashda STEMI ni erta tashxis qo'yish va kechiktirib bo'lmas reperfuziya muhim ahamiyatga ega. Reperfuziyaning kechikishi o'lim va kasallanishning ko'payishi bilan bog'liq deb topilgan [4]. Trombolitik terapiya (TT) yoki birlamchi teri orqali koronar aralashuv (BTOKA) STEMI paytida tromb bilan yopilgan koronar arteriyada qonning o't-kazuvchanligini va qayta oqishini tiklash uchun ishlatiladi. Reperfuziyaning asosiy maqsadi tegishli va o'z vaqtida davolash orqali umumiy ishemiya vaqtini qisqartirishdir [5]. Umumiy ishemiya davomiyligini baholash uchun kasalxona eshikidan ignagacha bo'lgan vaqt va eshikdan balon koronar aralashuvi vaqti kabi ba'zi ishlash choralari ishlab chiqilgan. Bugungi kunda rivojlanayotgan mamlakatlarning ko'plab shifoxonalarida birlamchi TOKA etishmasligi tufayli reperfuziya davrini uzaytirilishiga, bu esa kasalxona ichi va uzoq muddatli o'limga salbiy ta'sir qiladi. Birlamchi TOKA mavjud bo'lmagan hollarda, TT kechiktirmasdan boshlanishi kerak bo'ladi[1, 13].

O'tkir miokard infarkti keksa odamlarda ko'proq uchraydi, ularda o'lim va kasallanish yosh aholiga nisbatan yuqori. STEMI tufayli shifoxonalarga yotqizilgan bemorlarning 40-50% 65 va undan katta yoshdagi odamlardan iborat [6]. Miyokard infarkti bilan bog'liq o'limning 60% dan ortig'i ushbu yosh guruhida uchraydi [7]. Ko'pgina tadqiqotlarda birlamchi TOKA muvaffaqiyatli reperfuziyaga erishishda TT dan ustun ekanligi aniqlandi [8]. Birlamchi TOKA reperfuziya muvaffaqiyati jihatidan ayniqsa keksa bemorlarda TT dan ustundir [9]. Shu sababli, STEMI bilan og'rigan keksa bemorlarda BTOKA ni bajarish tendentsiyasi mavjud, ammo STEMI bilan kasallangan keksa bemorlarning aksariyati TT bilan davolanadi, chunki rivojlanayotgan mamlakatlarning ko'plab markazlarida 24 soatlik birlamchi TOKA imkoniyati hali ham mavjud emas.

Materiallar va usullar. Bizning tadqiqotimiz o'tkir STEMI tashxisi bilan 2023 yildan 2024 yilgacha TT yoki birlamchi TOKA dan o'tgan bemorlarning fayllarini ko'zdan kechirish orqali retrospektiv tarzda amalga oshirildi va RSHTYIM BF kasalxonasida quyidagi intensive terapiya bo'limlarida kuzatildi: shok zalida, shoshilinch kardioterapeftik reanimatsiya, shoshilinch kardiologiya I, shoshilinch kardiologiya II. Tadqiqot protokoli uchun Buxoro davlat tibbiyot institute

qoshidagi mahalliy Etika qo'mitasining roziligi olindi. Tadqiqotning inklyuziya mezonlari quyidagilardan iborat: doimiy ko'krak qafasidagi noxushlik xissi yoki ishemiyaga sabab bo'luvchi og'riq omili va ST segmentining ko'tarilishini ko'rsatadigan EKG dagi ikkitadan kam bo'lmagan ulagichlarda namoyon bo'luvchi o'tkir STEMI sifatida ko'rildi. Istisno mezonlari quyidagilar: kasallikni o'tkir osti bosqichda qabul qilingan bemorlar (simptomning boshlanishi-qabul qilish > 12 soat), O'MI natijasida yurak xurujidan o'tgan va suniy o'pka ventilatsiyasi va kardiogen shok namoyon bo'lgan bemorlarda.

Bemorlar umumiy ma'lumotlari kasallik tarixidan olingan: bemorlarning yoshi, jinsi, gipertoniya kasalligi, qandli diabet, chekish anamnezi, koronar qon-tomir arteriyalar kasalligi tarixi, eshikdan balonga va eshikdan ignaga o'tish vaqtlari, lipid profili, kreatinin, umumiy qon tahlili, gematokrit va qonda glyukoza miqdorlari olingan. O'tkir STEMI lokalizatsiyasi qabul paytida olingan EKG yozuvlariga muvofiq aniqlandi.

Bizning shifoxonamizda o'sha vaqtda 24/7 tartibda invaziv kateter laboratoriyasi ochilmaganligi sababli, ish vaqtidan tashqari qabul qilingan O'tkir STEMI bilan kasallangan bemorlar TT ni qabul qilishdi. Shoshilinch tibbiy yordam bo'limida Asetilsalitsil kislotasi va klopidogrel bilan bir vaqtda davolashdan so'ng, TT ni maqsadli olmoqchi bo'lgan bemorlar fibrinolitik terapiya uchun tegishli intensiv terapiya bo'limiga o'tkazildi. Maqsadli TT haqida va uning asoratlari haqida to'liq tushuntirildi va bemor va uning yaqinlari tomonidan rozilik xati olindi. Tegishli bemorlarga vena ichiga streptokinaza yoki alteplaza berildi. Trombolizdan keyin bemorlar qon reperfuziyasi baholandi. Reperfuziyasiz bemorlar shoshilinch TOKA uchun kateter laboratoriyasiga olib borildi. TT dan keyin bemorlarda erta koronar angiografiya o'tkazildi. 66 bemordan faqat uchtasi koronar angiografiya olmagan, chunki bemor va qarindoshlari protseduraga rozi bo'lmagan. Birlamchi teri orqali koronar aralashuvidan o'tgan barcha bemorlar tegishli ravishda atsetilsalitsil kislotasi berildi va shoshilinch tibbiy yordam bo'limida klopidogrel bilan bir vaqtda davolashdan so'ng kateter laboratoriyasiga olib borildi va bekilgan koronar arteriyada birlamchi TOKA (balon angioplastikasi va / yoki stent implantatsiyasi) o'tkazildi. BTOKA dan so'ng, barcha bemorlar tegishli intensive bo'limlarga yotqizildi. Amaldagi ko'rsatmaga muofiq bemorlarga antiaggregant, antikoagulyant, iAPF/ARB, beta-blokatorlar va statinlar buyurildi.

Statistik tahlil. SPSS 20.0 (SPSS Inc., Chicago, IL) dasturiy ta'minoti tadqiqot natijalarini statistik tahlil qilish uchun ishlatilgan. Tadqiqotdan olingan raqamli ma'lumotlar o'rtacha standart og'ish sifatida taqdim etildi va kategorik ma'lumotlar foizlar (%) sifatida ifodalandi. Kategorik o'zgaruvchilar uchun $\chi 2$-testdan foydalanilgan. Talabaning *t*-testi uzluksiz o'zgaruvchilarni normal taqsimot bilan taqqoslash uchun ishlatilgan. Barcha taqqoslashlarda $p < 0.05$ statistik jihatdan ahamiyatli o'lim bilan bog'liq mustaqil omillarni ko'rsatish uchun ikkilik logistik regressiya tahlili o'tkazildi.

Natijalar. Bizning tadqiqotimiz 111 ta o'tkir STEMI (73 erkak, 65 ayol) bemor bilan o'tkazildi. Bemorlarning 66 (59,5%) trombolitik terapiya bilan davolangan va 45 (40,5%) bemor birlamchi TOKA dan o'tgan. Bemorlarning yoshi 65 yoshdan 87 yoshgacha bo'lgan. TT guruhidagi bemorlarning o'rtacha yoshi 74,17±5,08 yoshni, birlamchi TOKA guruhidagi bemorlarning o'rtacha yoshi 72,18±6,77 yoshni tashkil etdi; guruhlar o'rtasida sezilarli farq yo'q edi ($p > 0,05$). Bemorlarning 73 nafari (65,8%) erkak va 38 nafari (34,2%) ayol edi. Birlamchi TOKA va TT guruhi o'rtasida gender taqsimoti bo'yicha statistik jihatdan sezilarli farq yo'q edi ($p > 0.05$). Gipertenziya, qandli diabet, chekish, giperlipidaemiya, koronar arteriya kasalligi tarixi va oila tarixi bo'yicha ikki guruh o'rtasida statistik jihatdan sezilarli farq yo'q ($p > 0.05$). Eshikdan ignaga o'tish vaqti TT guruhida 25,9±7,8 min, eshikdan balonga o'tish vaqti esa TOKA guruhida

84,4±20,0 min edi. Ko'krak qafasidagi ishemik og'riqning boshlanishi (o'tkir miokard infarktining eng muhim alomati) kasalxonaga yotqizilishgacha bo'lgan vaqt oralig'i trombolitik guruhda 213,6min, trombolitik guruhda 158,4 min va TOKA guruhida 166,8 va PCI guruhida 112,8 min ni tashkil etdi va bu ikki guruh o'rtasida statistik jihatdan sezilarli farq yo'q edi ($p > 0,05$). Rescue TOKA reperfuziya etishmasligi tufayli TT guruhidagi 7 (10,6%) bemorda amalga oshirildi. TT guruhida 35 (53%) bemorda oldingi MI bor edi, birlamchi TOKA guruhidagi 21 (46,7%) bemorda oldingi MI bor edi (I jadval). I jadvalda ikkala guruhning demografik va klinik xususiyatlari ko'rsatilgan.

1-jadval

Bemorlarning demografik va klinik xususiyatlari

Ko'rsatkichlar	Barcha bemorlar (*n* = 111)	Trombolitik terapiya guruhi (*n* = 66)	Birlamchi TOKA guruhi (*n* = 45)	*P* qiymati
Yoshi	63.4 ±5.9	64.2 ±5.1	62.2 ±6.8	0.080
Ayol jinsi, *n* (%)	38 (34.2)	22 (33.3)	16 (35.5)	0.809
Qandli diabet, *n* (%)	28 (25.2)	16 (24.2)	12 (26.7)	0.773
Gipertenziya, *n* (%)	62 (55.8)	33 (50.0)	29 (64.4)	0.132
Giperlipidemiya, *n* (%)	43 (38.7)	27 (40.9)	16 (14.4)	0.570
Chekish, *n* (%)	19 (17.1)	11 (16.7)	8 (17.8)	0.879
Oila tarixi, *n* (%)	28 (25.2)	15 (22.7)	13 (28.9)	0.463
Simptomlarning boshlanishi va qabul qilish o'rtasidagi vaqt [min]	194.4 ±142.8	213.6 ±158.4	166.8 ±112.8	0.089
Eshikdan balonga vaqt [min]	–	–	84.4 ±20.0	–
Eshikdan ignaga vaqt [min]	–	25.9 ±7.8	–	–
Old MI, *n* (%)	56 (50.4)	35 (53.0)	21 (46.7)	0.975

2-jadval

Bemorlarning kasalxonadagi natijalari

Ko'rsatkichlar	Barcha bemorlar (*n* = 111)	Trombolitik terapiya guruhi (*n* = 66)	Birlamchi TOKA guruhi (*n* = 45)	*P* qiymati
Kasalxonada o'lim, *n* (%)	13 (11.7)	8 (12.1)	5 (11.1)	0.871
Qaytalanuvchi infarkt, *n* (%)	7 (6.3)	5 (7.6)	2 (4.4)	0.505
Gemorragik bo'lmagan insult, *n* (%)	5 (4.5)	1 (1.5)	4 (8.9)	0.066
Asosiy qon ketish, *n* (%)	8 (7.2)	4 (6.1)	4 (8.9)	0.572

TT guruhidagi 5 (7,6%) va TOKA guruhidagi 2 (4,4%) bemorlarda takroriy infarkt kuzatildi. Trombolitik boshqariladigan guruhdagi 1 (1,5%) bemorda va TOKA guruhidagi 4 (8,9%)

bemorda tranzitor ishemik insult (TTI) kuzatilgan. Tadqiqotga kiritilgan bemorlarning birortasida intrakranial qon ketish kuzatilmagan. Asosiy qon ketish TT guruhidagi 4 (6,1%) bemorlarda va birlamchi TOKA guruhidagi 4 (8,9%) bemorlarda kuzatilgan. TT guruhidagi asosiy qon ketishlar oshqozon-ichak tizimidan kelib chiqqan, birlamchi TOKA guruhida esa ikkita oshqozon-ichak trakti va birlamchi TOKA aralashuvi joyi tufayli ikkita qon ketish holatlari bo'ldi. Ikkala reperfuzion terapiyadan so'ng statsionar kuzatuvda takroriy infarkt, gemorragik bo'lmagan insult, katta qon ketish va o'lim ko'rsatkichlari bo'yicha guruhlar o'rtasida sezilarli farq yo'q edi ($p > 0.05$). Bemorlarning kasalxonadagi o'lim natijalari II jadvalda keltirilgan. Tenglamaga yoshi, jinsi, qandli diabet mavjudligi, MI lokalizatsiyasi, terapiya turi (TOKA va TT) va simptom boshlanishidan qabul qilishgacha bo'lgan vaqt kiritildi.

Muhokama. ST elevatsiyali miokard infarkti uchragan bemorlarda davolashning eng so'ngi ko'rsatkichlari kasallikni klinik surati, xayotiy xavf tug'diradigan erta asoratli kechish suratini kamaytiradi. O'tkir miokard infarkti bo'lgan bemorlarda erta asoratlarni pragnoz qilish va uchrash tezligini kamaytirishga qaratilgan reabilitatsion chora-tadbirlarni tez amalga oshishiga olib keladi. Bemorlarning faol ijitimoiy-mehnat va xayotiy sifat samaradorligini oshiradi.

Keksa odamlarda birlamchi TOKA reperfuziya strategiyasi sifatida tavsiya etiladi, uni bir necha sabablarga ko'ra afzal ko'rish kerak. Birinchidan, birlamchi TOKA TT ga qaraganda samaraliroq va xavfsizroq reperfuzion terapiya hisoblanadi. Tadqiqotlar shuni ko'rsatdiki, birlamchi TOKA bilan og'rigan bemorlarda muvaffaqiyatli reperfuziya darajasi trombolitiklar bilan davolangan bemorlarga qaraganda yuqori [9, 10]. Biroq, trombolitik terapiyaning qarama-qarshiliklari va uning asoratlari keksa odamlarda jiddiyroq. Trombolitik terapiyaning eng qo'rqinchli asoratlari intrakranial qon ketishdir, bu keksa bemorlarda tez-tez uchraydi, lekin birlamchi TOKA da kam uchraydi [11]. Bizning tadqiqotimizda intrakranial qon ketish hech bir guruhda topilmadi. Bundan tashqari, birlamchi TOKA murakkab jarayon bo'lib, kateterni to'liq tayyorlash va laboratoriya tekshiruvini talab qiladi, bu esa vaqtni sezilarli darajada yo'qotishiga olib keladi. Biroq, TT - bu qisqa vaqt ichida qo'llanilishi mumkin bo'lgan davolash usuli va og'riq paydo bo'lishi va davolanish o'rtasidagi vaqt tez davolanish bilan kamayadi [12,14]. Bizning tadqiqotimizda eshikdan ignagacha bo'lgan vaqt taxminan 26 daqiqa, eshikdan balongacha bo'lgan vaqt esa taxminan 84 daqiqa edi.

Xulosa. Xulosa qilib aytganda, bizning tadqiqotimiz natijalariga ko'ra, birlamchi TOKA va TT o'tkir STEMI bilan og'rigan bemorlarni davolashdagi kasalxona ichi asoratlariga va o'lim ko'rsatkichlariga o'rtasida o'xshash ta'sir ko'rsatdi. Bundan tashqari, gemorragik bo'lmagan insult, ko'p qon ketish va takroriy infarkt holatiga ko'ra o'xshash deb topildi. Keksa bemorlarda kasallikning kuchayishi va qon ketishining asoratlari tufayli shifokorlar TTdan qochishadi. Tadqiqot natijalariga ko'ra, ular o'xshash reperfuziya davrlariga ega bo'lganligi sababli, trombolitik davolash markazlarda bemorlarda birlamchi TOKA uchun 24/7 tartibda xizmat ko'rsatish qo'llanilishi mumkin, bu interventsion xodimlar va kateter laboratoriyasini tayyorlashni talab qiladi.

Foydalanilgan adabiyotlar:

1. Ibanez B, Jeyms S, Agevoll S va boshq. 2017 ST-segment yuksalishi bilan taqdim bemorlarda o'tkir miokard infarkti boshqarish uchun ESC ko'rsatmalar: kardiologiya Evropa jamiyati (ESC) Eur yurak J. 2018 ST-segment yuksalishi bilan taqdim bemorlarda o'tkir mio-

kard infarkti boshqarish uchun vazifa kuchi;39:119-77. doi: 10.1093/eurheartj / ehx393.1. [DOI] [PubMed] [Google Scholar]

2. Mehta RH, Parsons L, Rao SV, Peterson ED, reperfusion qabul ST-segment balandlik miokard infarkti bilan qora va oq bemorlarda qon ketishi va in-kasalxonada o'lim miokard infarkti (NRMI) tergovchilar uyushmasi Milliy ro'yxatga olish. Aylanish. 2012;125:1727–34. doi: 10.1161 / CIRCULATIONAHA.111.068668.2. [DOI] [PubMed] [Google Scholar]
3. Yeh ru, Sidney S, Chandra M, Sorel M, Selby QK, sifatida borib. O'tkir miokard infarkti bilan kasallanish tendentsiyalari va natijalari. N Engl J Midiya. 2010;362:2155–65. doi: 10.1056 / NEJMoa0908610.3. [DOI] [PubMed] [Google Scholar]
4. Terkelsen CJ, Scekhrensen JT, Meng M, va boshq. Birlamchi teri osti koronar aralashuvi bilan davolangan STEMI bilan og'rigan bemorlar orasida tizimning kechikishi va o'limi. JAMA. 2010;304:763–71. doi: 10.1001 / jama.2010.1139.4. [DOI] [PubMed] [Google Scholar]
5. Armstrong, Boden biz. St-segment balandlik miokard infarkti Reperfusion paradoks. Ann Stajyor Med. 2011;155:389–91. doi: 10.7326/0003-4819-155-6-201109200-00008.5. [DOI] [PubMed] [Google Scholar]
6. Aleksandr KP, NYUBY LK, Armstrong, va boshq. Qariyalarda o'tkir koronar parvarish, II qism: ST-segment-balandlik miokard infarkti: Amerika yurak assotsiatsiyasi klinik kardiologiya Kengashining sog'liqni saqlash mutaxassislari uchun ilmiy bayonot: geriatrik kardiologiya jamiyati bilan hamkorlikda. Aylanish. 2007;115:2570–89. doi: 10.1161 / CIRCULATIONAHA.107.182616.6. [DOI] [PubMed] [Google Scholar]
7. Haase KK, Schiele R, Vagner S, va boshq. O'tkir miokard infarkti bo'lgan keksa bemorlarning kasalxonada o'limi: MITRA ma'lumotlari (o'tkir miokard infarktida maksimal Individual terapiya) reestri. Clin Cardiol. 2000;23:831–6. doi: 10.1002 / clc.4960231109.7. [DOI] [PMC bepul maqola] [PubMed] [Google Scholar]
8. Tosh, Brodi BR, Griffin JJ va boshq. O'tkir miokard infarktida birlamchi stentlashning xavfsizligi va maqsadga muvofiqligini istiqbolli, ko'p markazli o'rganish: kasalxonada va pami stent sinovining 30 kunlik natijalari. J Emasman Coll Cardiol. 1998;31:23–30. doi: 10.1016 / s0735-1097(97)00439-7.8. [DOI] [PubMed] [Google Scholar]
9. Keeley EC, Boura JA, GRINES CL. O'tkir miokard infarkti uchun vena ichiga trombolitik terapiyaga qarshi birlamchi angioplastika: 23 randomizatsiyalangan sinovlarning miqdoriy tekshiruvi. Lanset. 2003;361:13–20. doi: 10.1016 / S0140-6736(03)12113-7.9. [DOI] [PubMed] [Google Scholar]
10. Berger AK, Schulman KA, Gersh BJ, va boshq. Keksa bemorlarda o'tkir miokard infarktini boshqarish uchun birlamchi koronar angioplastika va trombolitiklar. JAMA. 1999;282:341–8. doi: 10.1001 / jama.282.4.341.14. [DOI] [PubMed] [Google Scholar]
11. Brass LM, Lichtman JH, dev Y, Gurvits JH, Radford MJ, KRUMHOLZ HM. O'tkir miokard infarkti bo'lgan keksa bemorlar uchun trombolitik terapiya bilan bog'liq intrakranial qon ketish: kooperativ yurak-qon tomir loyihasi natijalari. Insult. 2000;31:1802–11. doi: 10.1161/01.str.31.8.1802.17. [DOI] [PubMed] [Google Scholar]
12. Zahn R, Schuster S, Schiele R, et al. O'tkir miokard infarkti bo'lgan bemorlarda birlamchi angioplastikani konservativ terapiya bilan taqqoslash va trombolitik terapiya uchun kontrendikatsiya. O'tkir miokard infarkti (MITRA) tadqiqot guruhida maksimal Individual tera-

piya. Kateter Cardiovasc Interv. 1999;46:127–33. doi: 10.1002 / (SICI)1522-726X(199902)46:2<127::yordam-CCD2>3.0.CO;2-G.18. [DOI] [PubMed] [Google Scholar]

13. Eagle KA, Goodman SG, Avezum A, Budaj A, Sullivan sm, Lopez-Sendon J, GRACE tergovchilar st-segment–balandlik miokard infarkti reperfusion uchun o'zgarish va o'tkazib yuborilgan imkoniyatlar amalda: o'tkir koronar voqealar (GRACE) Lancet Global ro'yxatga olish topilmalar. 2002;359:373–7. doi: 10.1016 / S0140-6736(02)07595-5.19. [DOI] [PubMed] [Google Scholar]
14. Аляви А.Л., Аляви Б.А. Реперфузионная терапия при остром коронарном синдроме с элевацией сегмента ST // Рац. фармакотерапия в кардиологии. – 2009. – №3. – С. 46-50
15. Аляви А.Л., Маджитов Х.Х., Алимов Д.А., Кенжаев М.Л., Пайзиев Ж. Клиническая значимость времени «симптом-баллон» при эндоваскулярном лечении острого коронарного синдрома с подъемом ST // Кардиоваск. терапия и профилактика. – 2011. – Т. 10, №8. – С. 52-56.

UO'K: 616-089

TIBBIYOT OLIY TA'LIM MUASSASALARIDA "TIBBIY BIOLOGIYA. UMUMIY GENETIKA" FANINI O'QITISHDA VERTUAL LABORATORIYA DASTURIY TUZILMALARDAN FOYDALANISHNING AFZALLIKLARI

Sharipova F.S.
Toshkent tibbiyot akademiyasi Termiz filiali

Annotatsiya

Ushbu maqolada oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" fanini o'qitish metodlari tizimida o'quv jarayonini tashkil etish texnologiyasi, metodik ta'minoti, faoliyatga oid kompetensiyalar tizimi va siklik diagnostikasi mexanizmlarini takomillashtirish, virtual laboratoriyalar ularning darsllarda qo'llashning avzalliklari haqida yoritilgan.oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" fanini o'qitish metodikasini takomillashtirishning pedagogik imkoniyatlari tabiiy-ilmiy dunyoqarashni kengaytirishga yo'naltirilgani motivatsion-qadriyatli, kognitiv-faoliyatli, shaxsiy-refleksiv mezonlar integrativ yaxlitligini ta'minlash, elektron muhitda faol axborot almashinish, loyihalash faoliyatiga yo'naltirish hamda interfaol dasturiy vositalardan foydalanishning funksional komponentlarini faktik tasniflash asosida aniqlashtirilgan.

Oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" fanini o'qitish metodikasini takomillashtirish samaradorligi pedagogik jarayonning tashkiliy infratuzilmasini shakllantirish, ta'limiy-didaktik maqsadlarni bajarishga yo'naltirilgan mantiqiy-tuzilmali, diagnostik-natijaviy ta'lim elementlarini o'zlashtirish hamda ta'lim subyektlarining tashabbuskorlik sifatlarini bosqichma-bosqich rivojlantirish asosida takomillashtirilgan.

Kalit so'zlar: interfaol, innovatsiya, baholash mezonlari, virtual laboratoriya

"MEDICAL BIOLOGY GENERAL GENETICS " IN HIGHER EDUCATION INSTITUTIONS. ADVANTAGES OF USING VIRTUAL LABORATORY SOFTWARE IN TEACHING

Sharipova F.S.
Termez branch of the Tashkent Medical Academy

Abstract

This article discusses the technology of organizing the educational process, methodological support, improvement of the system of activity-related competencies and mechanisms of cyclic diagnostics in the system of teaching methods for the subject "Medical Biology. General Genetics" in higher educational institutions, the advantages of using virtual laboratories in lessons. It is clarified that the pedagogical possibilities of improving the teaching methodology for the subject "Medical Biology. General Genetics" in higher educational institutions are aimed at expanding the natural-scientific worldview, ensuring the integrative integrity of motivational-value, cognitive-activity, personal-reflexive criteria, active information exchange in the electronic environment, orientation to design activities, and the use of interactive software tools on the basis of a factual classification of functional components;

The effectiveness of improving the teaching methodology of the subject "General Genetics" is improved based on the formation of the organizational infrastructure of the pedagogical process, the mastery of logical-structural, diagnostic-resultative educational elements aimed at achieving educational and didactic goals, and the gradual development of the initiative qualities of educational subjects.

ПРЕИМУЩЕСТВА ИСПОЛЬЗОВАНИЯ ПРОГРАММЫХ СТРУКТУР ВИРТУАЛЬНЫХ ЛАБОРАТОРИЙ ПРИ ОБУЧЕНИИ ПРЕДМЕТА «МЕДИЦИНСКАЯ БИОЛОГИЯ ОБЩАЯ ГЕНЕТИКА» В МЕДИЦИНСКИХ ВУЗАХ

Шарипова Ф.С.
Термезский филиал Ташкентской медицинской академии

Аннотация

В статье рассматривается преподавание дисциплины «Медицинская биология. Общая генетика» в высших учебных заведениях. Система методов обучения по предмету «Медицинская биология. Общая генетика» охватывает технологию организации учебного процесса, методическое обеспечение, совершенствование системы компетенций по видам деятельности и механизмам цикловой диагностики, виртуальные лаборатории и преимущества их использования на уроках. Курс «Медицинская биология. Общая генетика» Выяснены педагогические возможности совершенствования методики преподавания предмета «Медицинская биология. Общая генетика» исходя из того, что она направлена на расширение естественно научного мировоззрения, обеспечение интегративной целостности мотивационно-ценностных, познавательно-деятельностных, личностно-рефлексивных критериев, ориентацию на активный информационный обмен в электронной среде, проектную деятельность, использование интерактивных программных средств.

«Медицинская биология. Общая генетика» в высших учебных заведениях. Эффективность совершенствования методики преподавания предмета «Медицинская биология. Общая генетика» повышается на основе формирования организационной инфраструктуры педагогического процесса, освоения логико-структурных, диагностико-результативных элементов обучения, направленных на достижение учебно-дидактических целей, и поэтапного развития инициативных качеств субъектов образования.

Mavzuning dolzarbligi Respublikamizda so‘nggi yillarda oliy ta’lim muassasalarining “Tibbiy biologiya Umumiy genetika” fani doirasida o‘quv-metodik resurslari bazasini keng qamrovli innovatsion yondashuvlar asosida rivojlantirish, moddiy texnik bazasini mustahkamlash, pedagog kadrlar tayyorlash tizimini rivojlantirishning me’yoriy asoslari yaratilmoqda. “Ta’lim va o‘qitish sifatini baholashning xalqaro standartlarini joriy etish asosida oliy ta’lim muassasalari faoliyatining sifati hamda samaradorligini oshirish” ustuvor vazifa sifatida belgilandi. Natijada, Tibbiy biologiya. Umumiy genetika fanini o‘qitish metodlari tizimida o‘quv jarayonini tashkil etish texnologiyasi, metodik ta’minoti, faoliyatga oid kompetensiyalar tizimi va siklik diagnostikasi mexanizmlarini takomillashtirish muhim ilmiy-amaliy ahamiyat kasb etadi. O‘zbekiston Respublikasi Prezidentining 2022 yil 28 yanvardagi PF-60-son “2022-2026-yillarga mo‘ljallangan Yangi O‘zbekistonning taraqqiyot strategiyasi to‘g‘risida” qarorlari hamda mazkur sohaga tegishli boshqa me’yoriy-huquqiy hujjatlarda belgilangan vazifalarni amalga zarur.

Tadqiqotning maqsadi va vazifalari oliy ta’lim muassasalarida “Tibbiy biologiya. Umumiy genetika” fanini o‘qitish metodikasini takomillashtirishdan iborat.oliy ta’lim muassasalarida “Tibbiy biologiya. Umumiy genetika” fanini o‘qitish metodikasini takomillashtirishning pedagogik imkoniyatlarini aniqlash;

Oliy ta’lim muassasalarida “Tibbiy biologiya. Umumiy genetika” fanini o‘qitishning didaktik va metodik ta’minotini ishlab chiqish;

Tadqiqotning usullari tadqiqot jarayonida pedagogik kuzatuv, qiyosiy tahlil, so‘rovnoma, test, tajriba-sinov, matematik modellashtirish, statistik va tahlil usullaridan foydalanilgan.

Tadqiqotning ilmiy yangiligi quyidagilardan iborat:

oliy ta’lim muassasalarida “Tibbiy biologiya. Umumiy genetika” fanini o‘qitish metodikasini

takomillashtirishning pedagogik imkoniyatlari tabiiy-ilmiy dunyoqarashni kengaytirishga yo'naltirilgani motivatsion-qadriyatli, kognitiv-faoliyatli, shaxsiy-refleksiv mezonlar integrativ yaxlitligini ta'minlash, elektron muhitda faol axborot almashinish, loyihalash faoliyatiga yo'naltirish hamda interfaol dasturiy vositalardan foydalanishning funksional komponentlarini faktik tasniflash asosida aniqlashtirilgan;

oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" fanini o'qitish metodikasini takomillashtirish samaradorligi pedagogik jarayonning tashkiliy infratuzilmasini shakllantirish, ta'limiy-didaktik maqsadlarni bajarishga yo'naltirilgan mantiqiy-tuzilmali, diagnostik-natijaviy ta'lim elementlarini o'zlashtirish hamda ta'lim subyektlarining tashabbuskorlik sifatlarini bosqichma-bosqich rivojlantirish asosida takomillashtirilgan.

Zamonaviy ta'lim tizimining asosini yuqori sifatli va yuqori texnologiyali muhit tashkil etadi. Uning yaratilishi va rivojlantirilishi texnik jihatdan murakkab, ammo bunday muhit ta'lim tizimini takomillashtirishga, ta'limda axborot kommunikasiya texnologiyalarini joriy etishga xizmat qiladi. Hozirda ta'lim muassasalarida elektron shaklda turli pedagogik axborot-ta'lim resurslari yaratilgan, ammo ulardan foydalanishning tashkiliy asoslarini yaratish borasidagi tadqiqotlar yetarli deb bo'lmaydi. Bugungi kunda talabalarning zamonaviy talablarga mos bilim olishini ta'minlash maqsadida barcha oliy ta'lim muassasalari ta'lim muhitida innovasion texnologiyalardan foydalanishga alohida e'tibor qaratilmoqda.

Xorijlik olimlar A.Sorgova S. Kosijanslarning fikricha, biologiyadan suv muhitida kuzatish imkoni bo'lmagan murakkab hodisa yoki jarayonlarni interfaol mashg'ulotlarda kompyuterlashtirish tajribalari orqali ko'rsatish va talabalarga tushuntirish mumkin.

Interfaol testlar yoki darslar yordamida teskari aloqani ta'minlash orqali ta'lim jarayonida nafaqat ta'lim sifatini orttirish, balki ta'limga oid resurslarni iqtisod qilish, xavfsiz va ekologik muhit yaratish imkoni mavjud. [2; 56-59 –b.] Shuningdek, turli fanlardan qiziqarli interfaol dars va laboratoriya ishlarini uy sharoitida ham o'tkazish; virtual laboratoriya ishlarini ma'ruza materiallariga qo'shimcha material sifatida ham namoyish etish; kompyuter bilan jihozlangan xonalarida talabalarning bilimlarni o'zlashtirishini nazorat qilish, turli tanlovlar o'tkazish maqsadida ham foydalanish mumkin. [3; 25-30 –b.]

Virtual tajriba tizimlari talabalarga "virtual laboratoriya" da tajriba o'tkazishga imkon beradigan dasturiy tizimlardir. Ularning asosiy afzalligi shundaki, ular o'quvchiga xavfsizlik nuqtai nazaridan, vaqt xususiyatlari va hokazolar tufayli haqiqatan ham mumkin bo'lmagan ajribalarni o'tkazishga imkon berishadi. Bunday dasturlarning asosiy kamchiligi shundaki, ularda o'rnatilgan modelning tabiiy cheklanishi bo'lib, undan tashqarida tinglovchi virtual eksperiment doirasiga kira olmaydi.

Talabalarning fan-texnikani so'nggi yutuqlaridan amaliy faoliyatlarida bevosita samarali foydalanishlarini nazarda tutgan holda, interfaol dasturiy vositalar yordamida ta'lim jarayonini integrasiyalab o'qitishning o'ziga xos shart-sharoitlari va ahamiyatini tahlil qilish zarur. "Tibbiy biologiya. Umumiy genetika" darslarida kompyuterdan, multimedia vositalaridan foydalanish, virtual laboratoriya mashg'ulotlarini tashkil etish va o'tkazish talabalarga tushunish qiyin bo'lgan mavzularni o'zlashtirishga qiynalmaydigan tarzda berish imkoniyatini yaratadi. [1; 23-35 –b.]

Natija. "Tibbiy biologiya. Umumiy genetika" fanidan virtual laboratoriya mashg'ulotlarining sifatli amalga oshirilishi, bunda zarur bo'lgan asbob-uskunalarning dasturlashtirilishi, kompyuter yordamida tashkil etilishi ham ilmiy ham estetik jihatdan qulaylik tug'diradi. Muhimi virtual laboratoriya mashg'ulotlari vositasida tashkil etilgan o'quv jarayonlarida o'qituvchi va talabaning vaqti tejalishi hisobiga, o'quv materialllarini zaruriy o'quv

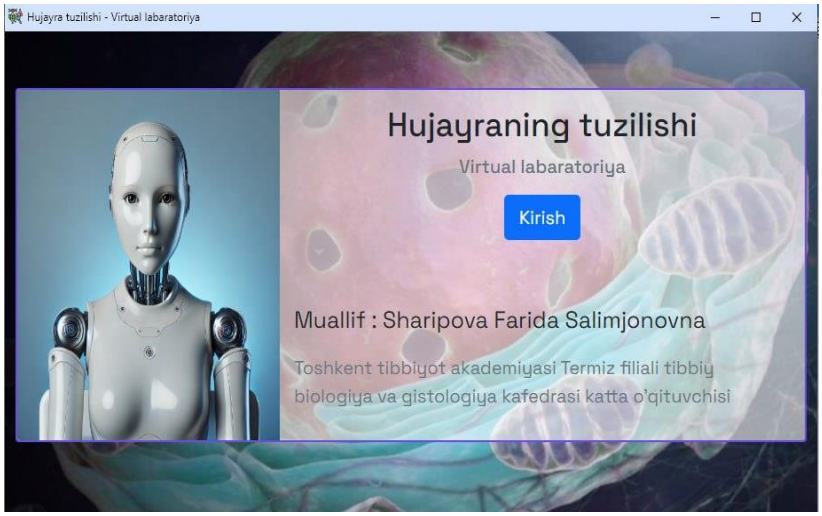
adabiyotlari yordamida o'zlashtirishlariga ham yordam beradi. Shu bois, virtual laboratoriya texnologiyalari yordamida o'simliklarda kechadigan hodisa va jarayonlarni video, multimedia, animatsiyalar vositasida ko'rgazmali bayon etish va qaytuvchan aloqani tashkil etish imkoniyatlarini beradi.

Bu kabi ijobiy fikrlarni ko'plab keltirish mumkin. Lekin hozirda "Tibbiy biologiya. Umumiy genetika" fanidan virtual laboratoriya texnologiyalaridan foydalanishga bo'lgan e'tibor juda sust deyish mumkin. "Tibbiy biologiya. Umumiy genetika" fani doirasida bir necha elektron vositalar tayyorlangan. Ularning ijobiy tomoni asosan materialdan darsda va darsdan tashqari mashg'ulotlarda erkin foydalanish imkoniyatining mavjudligidir.

Shuningdek, elektron vositada mutaxassisning fikrlari kamligi ko'rinadi. Rossiyalik olimlar tomonidan yaratilgan elektron darslikda esa, ko'proq rasmlardan foydalanilgan bo'lib, animatsion ko'rinishlar kamchilikni tashkil etadi. "Tibbiy biologiya. Umumiy genetika" fanidan yaratilgan elektron vositalarning sifat darajasini yanada oshirish uchun uning ilmiy-nazariy tomonlarini tadqiq etish talab etiladi. [4; 36-79 –b.]

Virtual ta'lim masofaviy o'qish bilan chambarchas bog'liq bo'lsada, faqat u bilan cheklanmaydi. U o'qituvchilar, talabalar va o'rganilayotgan obektlarning bevosita odatdagi hamkorligi jarayonida ham sodir bo'ladi.

Virtual ta'lim, shuningdek insonning umuman ta'lim olishi uning real dunyoda insonga xos o'rni va yutuqlarini, shu jumladan virtual mazmunini aniqlashga xizmat qiladi. Quyidagi "Hujayraning tuzilishi" mavzusida virtual laboratoriya Python dasturlash tilida tayorlandi.



1-rasm. "Hujayraning tuzilishi" mavzusida virtual laboratoriya ishini tuzilishi.

2-rasm.Virtual laboratoriyadagi test

Ta'limni axborotlashtirishda, bo'lajak kadrlarning axborot kommunikatsion texnologiyalarni o'zlashtirishlari bilan bir qatorda, aniq fan sohasida kadrlar tayyorlashni axborot va kommunikatsion texnologiyalari vositalari yordamida jadallashtirish talab etiladi. Shu bois ta'lim berish jarayonida yangi "Virtual laboratoriya" atamasi paydo bo'ldi.

Pedagogik ensiklopediyada virtual, virtual aniqlik tushunchalari quyidagicha tavsiflanadi: virtualli 1) mumkin bo'lgan; aniqlangan sharoitlarda mumkin yoki namoyon bo'lishi zarur; 2) kompyuter grafikasi vositasida yaratiladi.

Virtual reallik (virtual aniqlik) – kompyuter qurilmalari yordamida aniq holatni imitatsiyalash (ovozlar, ko'rgazmali obrazlar, hissiy, taktil sezish, masalan, sensorli qo'lqoplar); o'quv maqsadlarining asosiy ko'rinishi sifatida qo'llanadi (uchuvchilar, tankchilar tayyorlash, ishlab chiqarish korxonalarida boshqaruvchi va x.k.). Ta'lim beruvchi dasturlar, tizimlar va majmualar ishlab chiqishning ancha samarali yo'nalishlaridan biri.

Virtual laboratoriya tushunchasining mohiyati uning tarkibiy qismi bo'lgan virtual asbob yordamida (oddiy elektron asbob bilan ishlagandek) kompyuterda ishlash imkoniyatini beradigan, oddiy kompyuterga qo'shimcha qilingan apparatli va dasturli vositalar to'plamini ifodalashdan iboratdir.

Virtual laboratoriya - bu yakunlangan dasturiy mahsulot bo'lib, uning o'ziga xos xususiyati avtomatlashtirilgan hamda loyihalashtirilgan samaradorligini oshirishga yo'naltirilgan katta dasturli tizimlarni loyihalashtirishning zamonaviy konsepsiyalaridan foydalanish hisoblanadi. Metodologik jihatdan virtual laboratoriyalarni sun'iy intellekt tizimlarida qabul qilingan jarayon, deklarativ va gibrid tizimlari turlariga asoslangan bilim berish, tasavvur modellaridan kelib chiqib, guruhlash mumkin. [2; 42-49 –b.]

Virtual laboratoriya ochiq va masofaviy o'qitish g'oyasiga muvofiq bo'lib, ta'lim jarayonida mavjud bo'lgan moddiy-texnik ta'minot bilan bog'liq dolzarb muammolarning oz bo'lsada kamaytiradi.

Virtual laboratoriya bo'yicha ilmiy-metodik ishlarda asosan virtual asboblar va ularning laboratoriya mashg'ulotlarida qo'llanishini yoritish bilan cheklangan.

Bizning fikrimizcha, virtual o'quv laboratoriyasi faqatgina virtual asboblar emas, balki

virtual o'quv xonalari, texnik obyektlar loyihasi, matematik va imitatsiyaviy modellash tizimlari, amaliy dasturlarning o'quv va ishlab chiqarish paketlarini ham o'z ichiga oladi.

Virtual asbob va virtual laboratoriyaning muhim qismi – foydalanuvchining samarali grafik interfeysi (ya'ni foydalanuvchining kompyuter bilan o'zaro aloqalarining qulay interfaol rejimini ta'minlovchi), odatiy predmetli sohada ko'rgazmali grafik namunalar ko'rinishida grafik menyu tizimi bilan ta'minlangan dasturli asbob hisoblanadi. [5; 51-59 –b.]

Xulosa Oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" ta'limida interfaol dasturiy vositalardan samarali foydalanishni takomillashtirish jarayonida uning tashkiliy aspektlari, didaktik shart-sharoitlarini aniqlashtirishni taqozo etadi.Oliy ta'lim muassasalarida "Tibbiy biologiya. Umumiy genetika" fanini o'qitishda interfaol dasturiy vositalardan samarali foydalanishning birinchi bosqichi axborot texnologiyalaridan foydalanishning metodik jihatlari, fan sohasiga oid elektron nashrlar virtual laboratoriyalar va ular bilan ishlash ko'nikmalarini shakllantirish zarurati aniqlandi.

Foydalanilgan adabiyotlar:

1. Begimqulov U.Sh. Pedagogik ta'limda zamonaviy axborot texnologiyalarini joriy etishning ilmiy–nazariy asoslari. – T.: Fan, 2007. –B. 144.
2. Egamberdiyeva T.A., Yo'ldoshev S.V., Jo'raeva D. Zamonaviy pedagogik texnologiyalardan foydalanish va interfaol usullar / (O'qituvchilar uchun uslubiy tavsiyanoma) - F. 2013.
3. Suyunova G.U.,Usmonov B.Z. Biologiya fanini o'rgatishda axborot-kommunikatsiya texnologiyalari o'rni va vazifalari.// Academic research in educational sciences. 2021, № 3. – B. 669-678.
4. Sharipova f. S., Qong'irotova A. I. pedagogical psychological significance of teaching medical biology in higher medical educational institutions //european international journal of multidisciplinary research and management studies. – 2023. – т. 3. – №. 12. – с. 27-32.
5. Бабичев Н.В., Соколова Н.Ю. Новый учебно–методический комплект по биологии как интеграция различных педагогических технологий. Режим доцупа: щттп://е–дрофа.ру/абоутнавигатор/41. 30,11 2020 г.

UO'K: 616-089

SHOSHILINCH LAPAROTOMIYALARDA POSTOPERATIV DAVRDA NOOPIOID ANALGEZIYA

Sharipova V.X.[1], Yuldosheva SH.A.[1], Xurramova D.A.[2]
Respublika shoshilinch tibbiy yordam ilmiy markazi
Tibbiyot xodimlarini kasbiy malakasini oshirish markazi

Annotatsiya

Maqsad: Shoshilinch laparotomiya operatsiyalaridan keyin TAP (Transversus abdominis plane) blokada uchun turli adyvantlarni qo'llash orqali postoperativ noopioid analgeziyani ta'minlash. Tadqiqot materiali va metodlari. RSHTYoIMda 70 nafar jismoniy holati ASA bo'yicha I, II va III bo'lgan, kombinirlangan umumiy anesteziyada shoshilinch laparotomiya (XEK va gerniolaparotomiya) operatsiyalari o'tkazilgan bemorlar tanlanib, ularni tadqiqot (bupivakain+magniy sulfat) guruhi va nazorat (bupivakain va deksametazon) guruhlariga ajratildi. Operatsiyadan keyin Ultratovush navigatsiyasi bilan tadqiqot guruhida 0,25% 40 ml bupivakain+300 mg Magniy sulfat bilan, nazorat guruhida 0,25% 40 ml bupivakain+8 mg deksametazon bilan ikki tomonlama subkostal yoki lateral TAP blokada qilindi. Barcha bemorlarda og'riqni sub'ektiv baholovchi raqamli shkala (Numeric rating scale-NRS) yordamida tinch holatda, harakat vaqtida va yo'talganda blokadadan keyingi 30 minut, 2,6,12,18,24 soat oralig'ida og'riq hamda birinchi analgetikka bo'lgan ehtiyoj vaqti, operatsiyadan keyingi umumiy opioid sarfi, post-operativ ko'ngil aynishi va qusish darajasi baholandi.

Natijalar. Operatsiyadan keyingi birinchi 24 soat mobaynida analgetikka bo'lgan birinchi ehtiyoj davri tadqiqot guruhida 632, 67± 67.93 minutni, nazorat guruhida 51.21±35.34 minutni tashkil qildi va umumiy opioid sarfi tadqiqot guruhida o'rtacha 8,75 MME (milligram morfin ekvivanlet) ga, nazorat guruhida o'rtacha 35,79 MME teng bo'lgan. NRS bo'yicha og'riq intensivligi operatsiyadan keyingi birinchi 24 soatda tadqiqot guruhida nazorat guruhiga nisbatan sezilarli darajada past bo'lgan ($p<0,05$).

Xulosa: Shoshilinch laparotomiya operatsiyalarida TAP blokada sifati va davomiyligini oshirish hamda xavfsizligini ta'minlash uchun 0,25% bupovakain va magniy sulfat kombinatsiyasidan foydalanish bupivakain va deksametazon kombinatsiyasiga nisbatan postoperativ og'riq intensivligini pasayishiga, analgetikka bo'lgan ehtiyoj davrini uzaytirishga va operatsiyadan keyingi opioid sarfini kamaytirishga yordam beradi.

Kalit so'zlar: shoshilinch laparotomiya, noopioid analgeziya, TAP blokada, adyuvantlar

NON-OPIOID ANALGESIA IN THE POSTOPERATIVE PERIOD OF EMERGENCY LAPAROTOMIES

Sharipova V.X.[1], Yuldosheva SH.A.[1], Khurramova D.A.[2]
Republican Scientific Center for Emergency Medical Care
Center for the Development of Professional Qualifications of Medical Workers

Abstract

Objective: To ensure postoperative non-opioid analgesia after emergency laparotomies by using various adjuvants for TAP blockade. Materials and Methods: A study was conducted at the Republican Scientific Center for Emergency Medical Care, involving 70 patients with ASA physical status I, II, and III who underwent emergency laparotomy (resection of necrotic intestine and herniolaparotomy) under combined general anesthesia. The patients were divided into two groups: Study group – received TAP blockade with 0.25% bupivacaine (40 ml) and 300 mg magnesium sulfate. Control group – received TAP blockade with 0.25% bupivacaine (40 ml) and 8 mg dexamethasone. The blockade was performed bilaterally, either subcostal or lateral, under Ultrasound Guidance. Postoperative pain was assessed using the Numeric Rating Scale (NRS) at rest, during movement, and coughing at 30 minutes, 2, 6, 12, 18, and 24 hours after the blockade. Additionally, the following parameters were evaluated: Time until the first analgesic requirement, total postoperative opioid consumption, incidence of postoperative nausea and vomiting

Results: Within the first 24 hours postoperatively, the time to the first analgesic requirement was: 632.67 ± 67.93 minutes in the study group, 51.21 ± 35.34 minutes in the control group. Total postoperative opioid consumption: Study group – 8.75 MME (Morphine milligram equivalent) on average, control group – 35.79 MME on average. Pain intensity according to NRS in the first 24 hours postoperatively was significantly lower in the study group compared to the control group ($p < 0.05$).

Conclusion: To improve the quality, prolong the duration, and ensure the safety of TAP blockade in emergency laparotomies, using a combination of 0.25% bupivacaine and magnesium sulfate compared to bupivacaine and dexamethasone helps: Reduce postoperative pain intensity, extend the time until the first analgesic requirement, decrease total postoperative opioid consumption.

Keywords: emergency laparotomy, non-opioid analgesia, TAP blockade, adjuvants

НЕОПИОИДНАЯ АНАЛЬГЕЗИЯ В ПОСЛЕОПЕРАТЦИОННОМ ПЕРИОДЕ ПРИ ЭКСТРЕННЫХ ЛАПАРОТОМИЯХ

Шарипова В.Х.[1], Юлдошева Ш.А.[1], Хуррамова Д.А.[2]

Республиканский научный центр экстренной медицинской помощи

Центр развития профессиональной квалификации медицинских работников

Аннотация

Аннотация

Цель: Обеспечение послеоперационной неопиоидной анальгезии после экстренных лапаротомий с применением различных адъювантов для TAP (Transversus abdominis plane) блокады. Материалы и методы исследования: В Республиканском научном центре экстренной медицинской помощи было проведено исследование с участием 70 пациентов, физическое состояние которых соответствовало I, II и III классам по ASA. Всем пациентам были выполнены экстренные лапаротомии (резекция некротизированного кишечника и герниолапаротомия) под комбинированной общей анестезией. Пациенты были разделены на две группы: Исследовательская группа — получала TAP-блокаду с 0,25% бупивакаином (40 мл) и 300 мг сульфата магния, контрольная группа — получала TAP-блокаду с 0,25% бупивакаином (40 мл) и 8 мг дексаметазона. Блокада выполнялась двухсторонне, субкостально или латерально, под ультразвуковой навигацией. Послеоперационная боль оценивалась с помощью числовой рейтинговой шкалы (Numeric Rating Scale — NRS) в покое, при движении и кашле через 30 минут, 2, 6, 12, 18 и 24 часа после блокады. Также анализировались: время до первого применения анальгетика, общий послеоперационный расход опиоидов и частота послеоперационной тошноты и рвоты.

Результаты: Втечение первых 24 часов после операции время до первого применения анальгетика составило: В исследовательской группе – 632,67 ± 67,93 минуты, в контрольной группе – 51,21 ± 35,34 минуты. Общий послеоперационный расход опиоидов: в исследовательской группе – в среднем 8,75 MME (миилиграммовый эквивалент морфина), в контрольной группе – в среднем 35,79 MME. Интенсивность боли по NRS в первые 24 часа после операции была значительно ниже в исследовательской группе по сравнению с контрольной ($p < 0,05$).

Вывод: Для улучшения качества и продления действия TAP-блокады, а также повышения ее безопасности при экстренных лапаротомиях, использование комбинации 0,25% бупивакаина и сульфата магния по сравнению с комбинацией бупивакаина и дексаметазона способствует снижению интенсивности послеоперационной боли, увеличению времени до первого применения анальгетика и снижению общего послеоперационного расхода опиоидов.

Ключевые слова: экстренная лапаротомия, не опиоидная анальгезия, TAP-блокада, адъюванты

Kirish. Shoshilinch laparotomiyalarda operatsiyadan keyin bemorlarda uzoq davom etadigan, o'rta intensivlikdan yuqori intensivlikkacha bo'lgan og'riqlar kuzatiladi [3]. Adekvat analgeziyani ta'minlash bemorlarda xirurgik stressga javob reaksiyasini kamaytirib, mobilizatsiya davrini tezlashtiradi. Buning uchun multimodal analgeziya usullaridan foydalanish ERAS (Enhancedd recovery after surgery) dasturlarining muhim qismi sifatida samarali bo'lib, operatsiyadan keyin tizimli analgetiklar va opiodlarga ehtiyojni hamda umumiy opioid sarfini kamaytirishga yordam beradi [6]. Shu bilan birga shoshilinch laparotomiya operatsiyalari o'tkazilgan bemorlarda gipovolemiya va koagulapatiya holatlari ko'p uchragani uchun TAP blokada optimal regionar blokada usuli hisoblanadi [5]. Amerika Regionar Anesteziya Assotsiatsiatsiyasi tavsiyasiga ko'ra Transversus Abdominis Plane (TAP) blokada abdominal operatsiyalar uchun qulay va o'tkazilish texnikasi oddiy bo'lgan fassial yuza blokadalaridan biri

hisoblanadi [8]. TAP blokada Th6-L1 nervlarning oldingi shoxlariga ta'sir qilib, qorin old devori muskullari va pariyetal qorin parda analgeziyasini ta'minlaydi. Ultratovush navigatsiyasi bilan qorinning tashqi qiyshiq, ichki qiyshiq va ko'ndalang muskullari aniqlanib, ichki qiyshiq va ko'dalang muskul orasidagi fassiyaga 20-30 ml hajmdagi mahalliy anestetik yuboriladi [8]. Lekin mahalliy anestetiklar ta'sir davomiyligi cheklangan bo'lgani uchun uzoq davom etadigan og'riqlarni davolash uchun ularning xavfsizligi va ta'sir davomiyligini oshiradigan qo'shimcha dori vositalari (adyuvantlar) qo'llaniladi. Adyuvantlar kichik dozalarda anesteziya samaradorligiga sezilarli ta'sir ko'rsatmasada, boshqa dorilarga qo'shilganda, sinergetik ta'sir ko'rsatib, ularning ta'sirini kuchaytirib beradigan dori vositalari hisoblanadi. Keng qo'llaniladigan adyuvantlarga adrenalin, deksametazon, klonidin, deksmedetomidin, magniy sulfat kabi preparatlar kiradi [9]. Deksametozon adyuvant sifatida anezteziyada qo'llanilganda yallig'lanishga qarshi ta'siri tufayli postoperativ multimodal analgeziyaning tarkibiy qismi sifatida opioidlarga ehtiyojni kamaytiradi (opioid-sparing effect). Lokal anestetiklarga qo'shib blokada qilinganda yoki vena ichiga yuborilganda regionar blokadalar davomiyligini uzaytiradi [2].

Adyuvantlardan yana biri N-metil, D-aspartat (NMDA) retseptorlarining raqobatdosh bo'lmagan (no-competetive) antogonisti magniy sulfat hisoblanadi. NMDA retseptorlari organizmda keng tarqalgan bo'lib, og'riq modulyatsiyasi va bir qancha yallig'lanish jarayonlarida muhim rol o'ynaydi [7, 9, 11]. Lokal anestetikka adyuvant sifatida qo'llanganda, sinergetik ta'sir ko'rsatib, blokada davomiyligi va sifatini oshiradi. Lekin magniy sulfatning adyuvant sifatidagi ta'sir effekti va TAP blokada samaradorligiga ta'siri kam o'rganilgan. Ushbu tadqiqot ishidan maqsad shoshilinch laparotomiyalarda magniy sulfat va deksametazon adyuvantlarining TAP blokada samaradorligiga ta'sirini o'rganish orqali, postoperativ analgeziya optimallashtirishdan iborat.

Tadqiqot materiali va usullari. Tadqiqot uchun Respublika shoshilinch tibbiy yordam ilmiy markazida 2024 yil noyabr oyidan 2025 yil fevral oyigacha shoshilinch laparotomiya amaliyoti o'tkazilgan jismoniy holati ASA bo'yicha 1,2,3 bo'lgan 18 yoshdan 75 yoshgacha bo'lgan (o'rtacha yosh guruhida 57,5) operatsiyadan keyin TAP blokada o'tkazilgan 71 nafar bemorlarni tanlab olindi. Ulardan ayollar 36 nafar, erkaklar 35 nafarni tashkil qildi. Barcha bemorlarga anesteziya va postoperativ analgeziya haqida tushuntirilib, yozma ravishda rozilik olindi. Jismoniy holati ASA bo'yicha 4 va undan yuqori bo'lgan, operatsiyadan oldin opioid qabul qilgan, surunkali og'riq va opioidlarga qaramlik holatlari aniqlangan bemorlar tadqiqotga kiritilmadi. Barcha bemorlar tadqiqot guruhi (bupivakain+magniy sulfat) hamda nazorat guruhiga ajratiladi (bupivakin+deksametazon). Tadqiqot va nazorat guruhidagi bemorlarda jinsi, yoshi, jismoniy holati, operatsiya va anesteziya turida jiddiy tafovutlar bo'lmadi (1-jadval).

Umumiy kombinirlangan anesteziya barcha bemorlarda bir xil standart asosida olib borildi. Induksiya uchun propofol, fentanil, suksinilxolin preparatlaridan, ushlab turuvchi anesteziya uchun izofluran (1-1,2 MAC), fentanil va relaksatsiyani ta'minlash uchun rokuroniydan foydalanildi. Shu bilan birga multimodal analgeziya maqsadida barcha bemorlarga induksiyadan keyin ketoprofen100 mg, antiemik maqsadda profilaktika uchun 4 mg deksametazon, operatsiya so'ngida 10 mg metoklopromid qilindi.

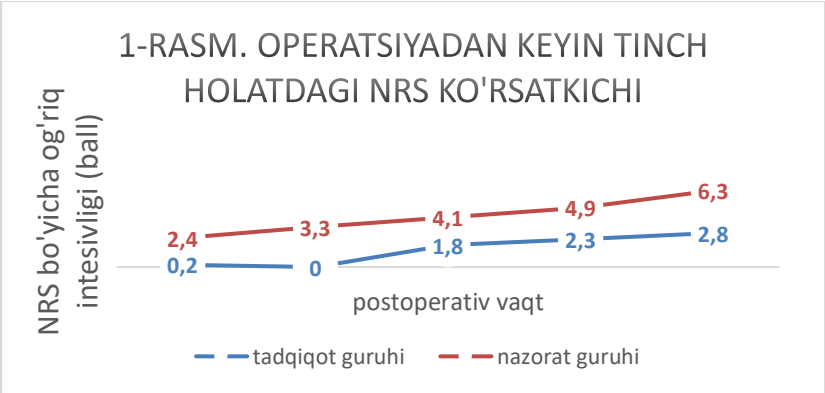
	Tadqiqot guruhi (n=31)	Nazorat guruhi (n=40)

O'rtacha yosh		57,5	57,8
Jinsi	Erkaklar	17 (24%)	19 (26,7%)
	Ayollar	14(19,7%)	21 (29,6%)
TVI (kg/m^2)		31,07	30,29
ASA	I	1 (1,4%)	3 (4,2%)
	II	18 (25,3%)	20 (28,17%)
	III	12 (16,9%)	17 (23,94%)
Operatsiya davomiyligi (minut)		96,613	92,375

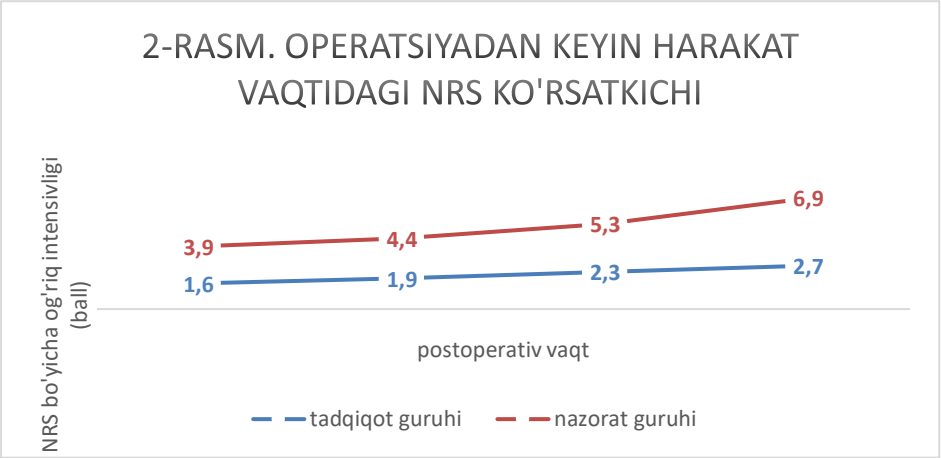
Operatsiyalar davomiyligi har ikkala guruh bemorlarda o'rtacha 92,1 minut, anesteziya davomiyligi o'rtacha 134,3 minutni tashkil qildi. Operatsiya tugatilgandan keyin Ultratovush navigatsiyasida 20 ml miqdordagi lokal anestetik va tegishli adyuvant bilan (nazorat guruhidagi bemorlar uchun 8 mg deksametazon, tadqiqot guruhidagi bemorlar uchun 300 mg magniy sulfat qo'shildi) ikki tomonlama laparotomiya kesmasiga muvofiq subkostal yoki lateral TAP blokada qilindi. Barcha bemorlarda boshlang'ich, blokadadan oldingi, uyg'onish palatasida va blokada o'tkazilgandan keyingi 2,6,12,18,24 soatlar oralig'ida markaziy va periferik gemodinamika ko'rsatkichlari (yurak urish soni, sAQB, dAQB, o'rt.AQB, yurak urish soni, umumiy periferik tomir qarshiligi, yurakning minutlik zarb hajmi), qondagi glukoza miqdori, Richmond bo'yicha sedatsiya darajasi hamda tinch holatda, harakatlanganda va yo'tal vaqtidagi raqamli shkala bo'yicha og'riq intensivligi teshirildi. Shu bilan birga bemorlarda operatsiyadan keyingi analgetikka bo'lgan birinchi ehtiyoj vaqti, umumiy opioid sarfi (MME-mg.morfin/ekvivalentda), postoperativ ko'ngil aynish va qusish kuzatilishi, ichak peristaltikasi hamda operatsiyadan keyingi mobilizatsiya boshlanish vaqti aniqlanib, olingan barcha natijalar qayd qilib borildi.

Natijalar. Bemorlarning demografik ko'rsatkichlari (yoshi, jinsi, tana vazni indeksi-TVI,) hamda tekshirish olib borilgan barcha vaqtlardagi markaziy va periferik gemodinamik ko'rsatkichlarida, qondagi glukoza miqdori, Richmond bo'yicha sedatsiya shkalasida klinik va statistik jihatdan farqlar kuzatilmadi.

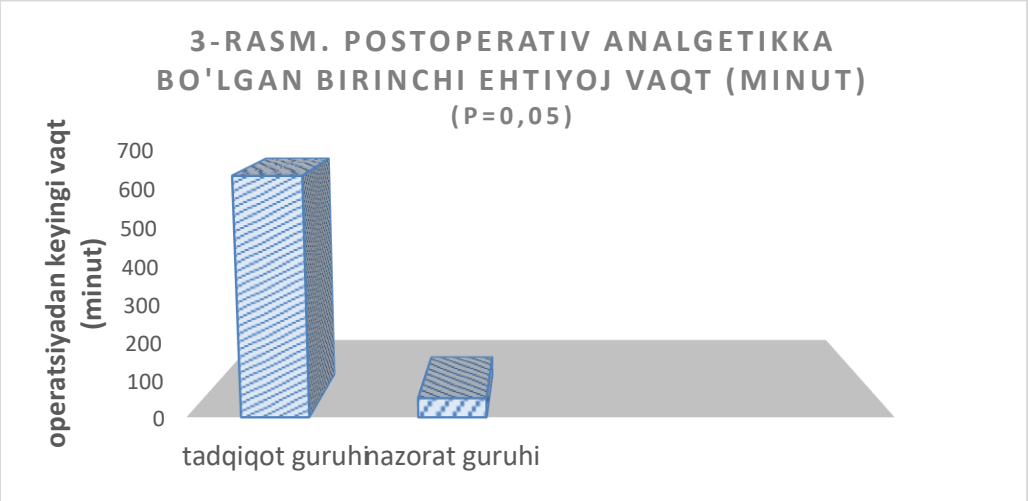
Raqamli shkala bo'yicha bemorlarning tinch holatdagi ko'rsatkichlari 2, 6,12,18,24 soat vaqt oralig'ida ikkala guruhda sezilarli farq qildi ($p<0,001$; 0,03; 0,038, 0,04; 0,015; mos ravishda, 1-rasm)



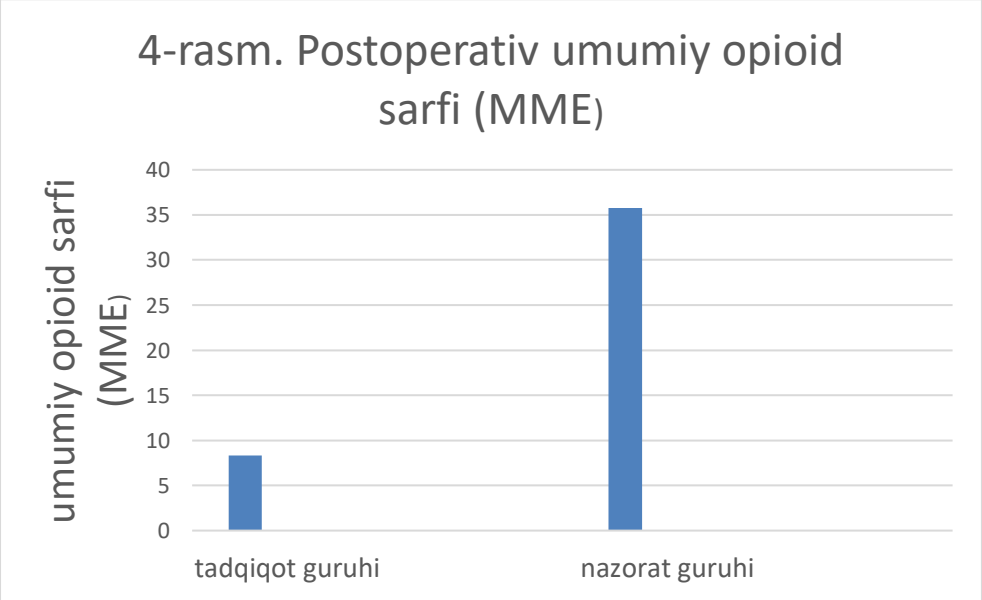
Harakat vaqtida NRS ko'rsatkichi tadqiqot guruhida nazorat guruhiga nisbatan past bo'lgan (hamma vaqtlarda $p<0,05$, 2-rasm):



Postoperativ analgetikka bo'lgan birinchi ehtiyoj davri tadqiqot guruhida o'rtacha 632,67 minutni, nazorat guruhida esa 51,21 minutni tashkil qildi (p<0,05, 3-rasm):



Umumiy opioid sarfi taqqoslanganda, tadqiqot guruhida 8,75 MME (mg morfin ekvivalent) ga, nazorat guruhida o'rtacha 35,79 MME teng bo'lgani aniqlandi (p<0,001, 4-rasm).



Barcha guruh bemorlar orasida 5 ta bemorda postoperativ ko'ngil aynish va qusish

kuzatildi. Shulardan 3 tasi nazorat guruhida 2 tasi tadqiqot guruhida. Qolgan bemorlarda blokada bilan bog'liq bo'lgan asoratlar kuzatilmadi.

Tadqiqot natijalariga ko'ra, shoshilinch laparotomiya operatsiyalari TAP-blokada samaradorligini oshirish orqali postoperativ davrda noopioid analgeziyaga erishish mumkin. Adyuvant sifatida magniy sulfatdan foydalanish postoperativ og'riq intensivligini kamayishiga, TAP blokada davomiyligini oshirishga, operatsiyadan keyingi birinchi analgetikka bo'lgan ehtiyoj muddatining uzayishi va umumiy opioidlar sarfining kamayishiga sabab bo'ladi. Shu bilan birga TAP blokada bilan bog'liq asoratlar xavfining kamligi bilan shoshilinch laparotomiya operatsiyalaridan keyingi barcha bemorlarga qo'llanilishi mumkin. Bemorlarda operatsiyadan keyin og'riq bo'lmagani uchun mobilizatsiya erta boshlanadi va trombembolik asoratlarni oldini olishga erishiladi. Postoperativ og'riq intensivligi va asoratlarning kamayishi, ichak peristaltikasi va mobilizatsiyaning erta boshlanishi bemorlarning gospitilizatsiya davri hamda davolash harajatlarining qisqarishiga sabab bo'ladi. Moawad H.E. et al. yuqori laparotomiya operatsiyalarida epidural anesteziya va magniy sulfat adyuvanti bilan o'tkazilgan subkostal TAP-blokada samaradorligini taqqoslaganda, ikkala guruh bemorlarda og'riq intensivligi jihatdan sezilarli farqlar kuzatilmagan, lekin epidural analgeziya o'tkazilgan bemorlarda sedatsiya, gipotenziya, bradikardiya, postoperativ ko'ngil aynish va qusish kabi asoratlar ko'p uchragan [10]. L.A.Nazirova hammualliflar bilan o'tkazgan tadiqot ishida TAP blokada operatsiyadan oldin qo'llanilganda intraoperativ opioidlar sarfini 40% ga kamaygan va bunga asosan mualliflar TAP blokadani operatsiyadan oldin va keyingi davrda qo'llash mumkin deb hulosa qilishgan [1, 4].

Hulosalar

1. TAP blokada uchun magniy sulfat adyuvantidan foydalanish xavfsiz bo'lib, bemorlarda markaziy va periferik gemodinamika ko'rsatkichlari, SpO_2 (saturatsiya), qonda glukoza miqdori, Richmond bo'yicha sedatsiyani baholash ko'rsatkichlariga ta'sir qilmaydi
2. Shoshilinch laparotomiyalarda TAP blokada uchun magniy sulfat adyuvantidan foydalanish deksametazonga nisbatan samarali bo'lib operatsiyadan keyingi analgetikka bo'lgan ehtiyojni va umumiy opioidlar sarfini kamaytiradi;
3. Magniy sulfat TAP blokada sifatini oshirib, bemorlarda postoperativ og'riq intensivligini kamaytiradi. Natijada bemorlarda mobilizatsiya va ichak peristaltikasi erta boshlanadi.

Foydalanilgan adabiyotlar:

1. Абдуллаева Х.Н. Пути оптимизатsiя периоперативной блокада поперечного пространства живота с ультразвуковой навигацией: Дис.д-ра философии (PhD) по мед.наукам:14.00.37. Респ.мед.центр хирургии.Ташкент.2021.
2. В.Х.Шарипова., А.А.Валиханов., Ш.А.Юлдошева..Лапароскопик операцияларда ва оператsiядан кейинги эрта даврда умумий ноопиоид анестезия. Shoshilinch tibbiyot axborotnomasi.2024;17(3):99-109.Doi:10.54185/TBEM/vol17_iss3/a11.
3. И.А.Ермаков., В.В.Валетова., А.В,Савушкин.. Сравнение продленной блокады поперечного пространство живота с системным обезболиванием при оператsiях закрытая двуствольной кишечной стомы из местного доступа.Russian Sklifosovsky journal of emergency medical care.2024;13(2):232-240.Doi:10.23934/2223-9022-2024-13-2-232-240.

4. Л.А.Назырова., Х.Н.Абдуллаева., З.Ж.Реймназарова.. Предопреационная и после-операционная межмышечная блокада передней брюшной стенки в абдоминальной хирургии.O'zbekiston tibbiyot jurnali.2021;1:43-47.
5. О.А.Махарин., М.Л.Скобло.. Опыт применения поперечной абдоминальной плоскостной блокады при грыжасечении у patsiента группы высокого риска. Вестник Интенсивной терапии имени А.И.Салтанова.2018;1:75-78.
6. Шарипова В.Х.. Превентивная аналгезия в комплексной защите хирургических больных при экстренных оперативных вмешательствах: автореф. дис. канд. мед. наук:14.00.37/ МЗ РУз,Ташк.мед.академия.-Т,2007.
7. Abo Elenain M.M.. Effect of Adding Magnesium Sulphate as An Adjuvant to Bupivacaine in Ultrasound Guided Transversus Abdominis Plane (TAP) Block for. The Egyptian Journal of Hospital Medicine.2022;89(2):7112-7119.
8. Dhondt L.A.. Efficacy of locol regional analgesic techniques after laparotomy for gynecologic cancer: a systematic review. International Journal of Gynecological Cancer.2024;08:ijgc-005404.Doi:10.1136/ijgc-2024-005404.
9. Kassem M.. Effect of Adding Magnesium Sulphate as An Adjuvant to Bupivacaine in U-G TAP Block for Postoperative Analgesia. International Journal of Medical Arts.2023;5(7):3427–3434. DOI:10.21608/ijma.2023.167742.1525.
10. Moawad, H. E. S., Makharita, M. Y., Elnaggar, A. M., & Eloraby, M. A.. (2022). Comparative Study between Subcostal TAP Block Analgesia and Epidural Analgesia in Upper Abdominal Surgeries. International Journal of Medical Arts, 4(3),2208-2216.
11. Soleimanpour H.. Management of pain using magnesium sulphate: a narrative review. Postgraduate Medicine.2022;134(3):260–266. DOI:10.1080/00325481.2022.2035092.

UO'K: 612.3+611/612+591.4-013.025

KOLEKTOMIYADAN SO'NG ME'DA MIKROFLORASINING O'ZGARISHI VA UNING KORREKSIYA QILISH

Shermatov R.M., Sodiqova Sh.R.
Central Asian Medical University xalqaro tibbiyot universiteti

Annotatsiya

Tadqiqot ob'ekti sifatida 108 ta yo'g'on ichagi to'liq olib tashlangan voyaga yetgan oq erkak naslsiz kalamushlar va shunga mos nazorat guruhi olindi. Ishning maqsadi yo'g'on ichak to'liq olib tashlanganidan so'ng me'da bo'shlig'ida sodir bo'ladigan mikrobiologik o'zgarishlarga baho berish va bifidumbakterin hamda laktobakterin bilan korreksiya qilish bo'yicha amaliy tavsiyalar ishlab chiqish.

Yo'g'on ichak to'liq olib tashlanganidan so'ng me'dada disbakterioz rivojlanishi aniqlandi, bu me'da shilliq qavatida sodir bo'ladigan moslashuv jarayonlariga salbiy ta'sir ko'rsatadi. Disbakteriozni bifidumbakterin va laktobakterinlar, ayniqsa, ularni birga qo'llagan holda korreksiya qilish, me'da mikrobiotsenoz holatini me'yoriga kelishiga yordam berishi va organizmda kechadigan moslashuv reaksiyalarini tezlashtirishi aniqlandi.

Kalit so'zlar: me'da, moslashuv jarayonlari, mikroflora, yo'g'on ichakni to'liq olib tashlash operasiyasi

CHANGE OF GASTRIC MICROFLORA AFTER COLECTOMY AND ITS CORRECTION

Shermatov R.M., Sadikova Sh.R.
Central Asian Medical University International Medical University

Abstract

The study subjects were 108 adult white male outbred rats with complete colonectomy and a matched control group. The aim of the study was to assess the microbiological changes that occur in the gastric cavity after complete colonectomy and to develop practical recommendations for their correction with bifidumbacterin and lactobacterin.

After complete colonectomy, dysbacteriosis was found to develop in the stomach, which negatively affects the adaptive processes occurring in the gastric mucosa. It was found that the correction of dysbacteriosis with bifidumbacterin and lactobacterin, especially when used together, helps to normalize the state of the gastric microbiocenosis and accelerates the adaptive reactions occurring in the body.

Keywords: stomach, adaptation processes, microflora, complete colonectomy

ИЗМЕНЕНИЕ МИКРОФЛОРЫ ЖЕЛУДКА ПОСЛЕ КОЛЭКТОМИИ И ЕЕ КОРРЕКЦИЯ

Шерматов Р.М., Садикова Ш.Р.
Central Asian Medical University Международный медицинский Университет

Аннотация

Объектом исследования были 108 взрослых белых беспородных крыс-самцов с полной колонэктомией и подобранная им контрольная группа. Целью исследования была оценка микробиологических изменений, возникающих в полости желудка после полной колонэктомии, и разработка практических рекомендаций по их коррекции бифидумбактерином и лактобактерином.

После полной колонэктомии в желудке выявлено развитие дисбактериоза, что отрицательно влияет на адаптационные процессы, происходящие в слизистой оболочке желудка. Установлено, что коррекция дисбактериоза бифидумбактерином и лактобактерином, особенно при совместном применении, способствует нормализации состояния микробиоценоза желудка и ускоряет адаптационные реакции,

происходящие в организме.

Ключевые слова: желудок, адаптационные процессы, микрофлора, полная колонэктомия

Hozirgi kunlarda jarrohlik amaliyotida yo'g'on ichakni qisman yoki to'liq olib tashlash operasiyasi yo'g'on ichakning xavfli o'smalari va poliplari, Grishprung kasalligi, og'ir nospesifik diffuz yarali kolit, yo'g'on ichak infarkti va boshqa qator kasalliklarida asosiy davolash usuli sifatida qo'llanilib kelinmoqda [1-5, 7].

Ilmiy adabiyotlarni o'rganish shuni ko'satadiki, yo'g'on ichak to'liq olib tashlangandan so'ng bemor organizmi ichki a'zolarida, ayniqsa me'dada sodir bo'ladigan moslashuv jarayonlarining xarakteri yetarli darajada o'rganilmaganligi, o'rganilgan tomonlari esa faqat klinik va fiziologik nuqtai nazardan bo'lganligini ko'rsatmoqda. Mavjud dalillar esa operasiyadan keyingi davrlarda bemor organizmida sodir bo'ladigan asoratlarni bartaraf qilish mexanizmlarini ishlab chiqishga yetarli bo'lmayotganligi xozirgi zamon morfologlari oldida turgan muhim muammolardan biri bo'lib qolmoqda. Ushbu muommo katta ilmiy va amaliy axamiyatga ega ekanligini inobatga olib, biz yo'g'on ichak to'liq olib tashlanganidan keyin u bilan birga taraqqiy etgan, qon bilan ta'minlanishi va innervasiyalanishi bir bo'lgan me'daning turli qismlarida sodir bo'ladigan morfofunksional o'zgarishlarning dinamik kechishini o'rganishni maqsad qildik.

Yo'g'on ichakni to'liq olib tashlash operasiyasi organizm ichki a'zolari va sistemalarida murakkab anatomo-gistologik va fiziologik o'zgarishlar va qayta tiklanishlar keltirib chiqaradi. Ushbu operasiyadan so'ng sodir bo'lgan yangi sharoitga, organizmning ayrim ichki a'zo va sistemalari tuzilishi xamda funksiyalarida asta sekin moslashuv jarayonlari amalga oshadi.

Yo'g'on ichak to'liq olib tashlanganidan so'ng, ma'da bo'shlig'ida sodir bo'ladigan va muhim amaliy ahamiyatga ega bo'lgan mikrobiologik o'zgarishlarning qonuniyatlarini o'rganilmaganligi patogenetik davolash uslublarini ishlab chiqishga imkon bermaydi. Ushbu operasiyadan so'ng yo'g'on ichak bilan funksional jixatidan bog'liq, kelib chiqishi, qon bilan ta'minlanishi va innervasiyalanishi bir bo'lgan, me'da bo'shlig'ida kechadigan disbakterioz xolatini o'rganish va uni korreksiya qilish mexanizmini ishlab chiqish, operasiyadan keyingi davrlarda me'dada kechadigan moslashuv jarayonlarining o'ziga xos qonuniyatlarini o'rganishga, bemorlarni patogenetik davolash va profilaktika hamda reabilitasiya chora-tadbirlarini ishlab chiqishga yordam beradi.

Tadqiqot maqsadi: Yo'g'on ichak to'liq olib tashlanganidan so'ng me'da bo'shlig'ida sodir bo'ladigan mikrobiologik o'zgarishlarga baho berish va bifidumbakterin hamda laktobakterin bilan korreksiya qilish bo'yicha amaliy tavsiyalar ishlab chiqish.

Material va tadqiqot uslublari. Tajribalar uchun 108 ta dastlabki tana vazni 150-220 gramm bo'lgan naslsiz oq erkak kalamushlar olinib, ular 3 guruhga bo'lindi:

I-guruhga olingan 66 ta yo'g'on ichagi to'liq olib tashlangan naslsiz oq kalamushlar me'dasi bo'shlig'idagi mikrobiologik o'zgarishlar o'rganildi.

II-guruhga olingan 33 ta yo'g'on ichagi to'liq olib tashlangan naslsiz oq kalamushlar me'dasi bo'shlig'idagi mikrobiologik o'zgarishlarni bakterial preparatlar ya'ni bifidumbakterin va laktobakterin hamda ularning birgalikda (kompleks) berilgan xolda korreksiya qilindi. Buning uchun 30 kun davomida kuniga 2 mahal 0,25 dozadan per-os berildi.

III-guruhga 9 ta yo'g'on ichagi to'liq olib tashlangandan so'ng me'dasi bo'shlig'idagi mikrobiologik o'zgarishlari sodir bo'lgan naslsiz oq kalamushlar II-guruhga qiyoslash uchun nazoratga olindi, ularga bakterial preparatlar o'rniga steril fiziologik eritma berildi.

Me'da bo'shlig'i mikrofloralari operasiyadan so'ngi 7, 15, 30, 60 va 90 kunlari R.V.Epshteyn-Litvak va boshq. usulida o'rganildi. 1 gramm moddadagi mikroblar miqdorini aniqlash uchun I.P.Ashmarin va A. Vorobevlarning statistik usulidan foydalanildi.

Pentium-IV kompyuterning BS – Statistica programmasi yordami bilan, hamda «Excel-Office» Microsoft- «Windows-98» programma yordamida ma'lumotlar statistik obrabotka qilindi.

Olingan raqamli ma'lumotlar Styudent kriteriyasi bo'yicha variasion statistika usulida Pentium IV - Windows Professional kompyuteri yordamida amalga oshirildi. Ishonchliligi R<0,05 qoniqtiruvchi farq deb hisoblandi.

Tadqiqot natijalari va ularning muhokamasi. Operasiyadan keyin 15-kuni me'da bo'shlig'idagi moddalar tarkibida bifidobakteriyalar va laktobakteriyalarni aniqlanishi kamayganligi saqlangan. Bunda 70% tajriba hayvonlarida Candida turiga mansub zamburug'lar, nisbiy-patogen stafilokokk va enterokokklar o'sganligi aniqlandi. Ushbu o'zgarishlar yo'g'on ichak to'liq olib tashlangandan keyin me'da bo'shlig'idagi moddalar tarkibida kun sayin nisbiy-patogen mikrofloralar miqdorining ortib borayotganligini ko'rsatmoqda.

Operasiyadan keyin 1 oy o'tib, barcha tajriba hayvonlari me'dasi bo'shlig'idagi moddalar tarkibida ichak tayoqchalari, bakteroidlar, Candida turiga mansub zamburug'lar, nisbiy-patogen stafilokokk va enterokokklar miqdorining keskin yuqoriligi ya'ni disbakterioz holati avj olganligini ko'rsatdi (1-jadval).

Shunday qilib, operasiyadan keyin 30-kuniga kelib me'da bo'shlig'idagi disbakterioz holati yuqori ko'rsatkichga ega bo'ladi. Ayrim tadqiqotchilar [8,12-16] ko'rsatadiki, me'da-ichak nayida sodir bo'lgan disbakterioz holati undagi so'rish va hazm jarayoniga salbiy ta'sir qiladi.

2-oyga kelib, me'da bo'shlig'idagi moddalar tarkibidagi disbiotik o'zgarishlar ijobiy tomonga o'zgarib, qayta tiklanish jarayonlariga xos bifidobakteriyalar va laktobakteriyalarning miqdorini oldingi kunlarga nisbatan ortganligini ko'rsatdi. Ushbu davrda bakteroidlar, Candida zamburug'lari, nisbiy-patogen stafilokokk va enterokokklar, proteyalar, ichak tayoqchalari miqdori esa nazorat guruhiga nisbatan yuqoriligi aniqlandi.

1-jadval

Kolektomiyadan keyin dinamikada me'da bo'shlig'idagi mikrofloralar tarkibi (M±m; lg/g)

Mikrofloralar turi	Nazorat guruhi n=9	OPERATSIYaDAN KEYINGI DAVRLAR				
		3 -kun n=12	15 -kun n=12	30 - kun n=9	60 - kun n=12	90 – kun n=12
Bifidobakteriyalar	4,3±0,2	-	-	1,8±0,1	2,2±0,1	3,0±0,1
Laktobakteriyalar	4,9±0,1	-	1,5±0,2	2,1±0,1	2,8±0,1	3,0±0,1
Ichak tayoqchalari (E. coli)	2,3±0,2	4,8±0,1*	5,6±0,1*	6,4±0,2*	5,2±0,1*	3,6±0,1*
Enterokokklar	3,2±0,1	5,3±0,1*	6,3±0,1*	6,8±0,1*	6,0±0,1*	5,2±0,1
Stafilokokklar	3,4±0,2	6,2±0,1*	6,9±0,1*	6,2±0,1*	4,0±0,1	4,7±0,1
Zambrug' Candida	3,2±0,1	5,9±0,1*	6,2±0,1*	5,2±0,1*	4,5±0,1*	4,0±0,1
Bakteroidlar	3,2±0,1	4,8±0,1*	5,6±0,1*	5,5±0,2*	4,5±0,1	3,3±0,1
Proteyalar	2,4±0,2	3,5±0,1*	4,4±0,1*	4,3±0,2*	4,8±0,1*	3,2±0,1*

Eslatma: * - 10^6 ta mikroorganizmlarning mutlaq soni
n - hayvonlar soni

Yo'g'on ichak to'liq olib tashlangandan keyin 3 oy o'tib, me'da bo'shlig'idagi moddalar tarkibidagi mikrobiologik o'zgarishlar o'ziga xos tiklanishga uchrab, obligat mikrofloralar (bifidobakteriya va laktobakteriyalar) miqdorining keskin yuqorilaganligi va fakultativ aerob

nisbiy-patogen mikrofloralar miqdori deyarli kamayganligi aniqlandi.

Shunday qilib, yuqorida kuzatilgan natijalardan kelib chiqgan holda xulosa qilish mumkinki, yo'g'on ichak to'liq olib tashlangandan keyin me'da bo'shlig'idagi moddalar tarkibidagi bakteriyalar turi, yo'g'on ichak bo'shlig'idagi mikroorganizmlarga deyarli o'xshaydi. Shuning uchun savol tug'ilishi tabiiy: me'da bo'shlig'ini yo'g'on ichakga xos mikroorganizmlar bilan qoplanishi yoki sodir bo'lgan disbakterioz holati organizmning kompensator-moslashuv jarayonlariga xos o'zgarishlarmi? yoki yo'q?. Bizning fikrimizcha yo'g'on ichak to'liq olib tashlangandan keyin me'da bo'shlig'idagi modda tarkibidagi mikrobiologik o'zgarishlar davriy bo'lib, organizmning ushbu operasiyaga xos moslashuv jarayonlarining mexanizmlaridan biri hisoblanadi.

Yo'g'on ichak to'liq olib tashlangandan keyin erta davrda (30 - kungacha) sodir bo'ladigan disbakterioz holati, hattoki kompensasiya bosqichida ham me'da bo'shlig'idagi modda mikrofloralari tarkibini me'yorlashtirish zarurligini ko'rsatadi.

Ushbu disbakterioz holatida, me'da bo'shlig'idagi modda mikrofloralari tarkibidagi muhim bifidobakteriya va laktobakteriyalar miqdorini keskin kamayib ketganligini hisobga olib, biz me'da-ichak nayini tabiiy mikrofloralari bo'lgan bifidobakteriya va laktobakteriyalarni me'yoriga keltirish uchun bakterial preparatlar (bifidumbakterin va laktobakterin) bilan korreksiya qilish maqsadga muvofiq deb bildik.

Bizning natijalar shuni ko'rsatadiki, operasiyadan keyin erta davrda (30-kunigacha) bifidumbakterinni alohida qo'llaganimizda me'da bo'shlig'idagi modda mikrofloralari tarkibida nisbiy-patogan mikrofloralar miqdorining kamayishi bilan me'da bo'shlig'ini tabiiy mikroflorasi bo'lgan bifidobakteriyalar yuqori miqdorda topilishi kuzatildi. Yaxshi natijalar operasiyadan keyingi 60-90 kunlari aniqlandi.

Eng yuqori ko'rsatkichlar me'da bo'shlig'iga bifidumbakterin va laktobakterinlarni birgalikda qo'shib yuborilganda kuzatildi (2-jadval). Ushbu preparatlarni birgalikda qo'llanilganda bifidobakteriyalar miqdori (4,2±0,31 lg/g.) va laktobakteriyalar esa (4,7±0,25 lg/g.) oshdi, preparatlar qabul qilmagan hayvonlarimizda bifidobakteriyalar (3,0±0,21 lg/g.) va laktobakteriyalar esa (3,0±0,19 lg/g.) ni tashkil etdi.

Shunday qilib, olib borilgan tajribalar shuni qo'rsatadiki, yo'g'on ichak to'liq olib tashlangandan keyin me'dada kechadigan kompensator-moslashuv jarayonlarining struktur-funksional asoslarini shakllanishi va rivojlanishida nafaqat davriylik balki, me'da shilliq pardasida sodir bo'ladigan morfologik o'zgarishlar bilan uning bo'shlig'idagi mikrofloralar hamda evakua-motor faoliyatlari o'rtasida uzviy bog'liqlik mavjudligi aniqlandi.

2-jadval

Kolektomiyadan keyin dinamikada me'da bo'shlig'idagi mikrofloralarni bifidumbakterin va laktotobakterin bilan birgalikda tuzatish (M±m; lg/g)

Mikrofloralar turi	Nazorat guruhi n=4	OPERATSIYaDAN KEYINGI DAVRLAR			
		15 -kun n=4	30 - kun n=4	60 - kun n=4	90 – kun n=4
Bifidobakteriyalar	4,3±0,2	3,2±0,1	3,4±0,2	3,9±0,2	4,2±0,2
Laktobakteriyalar	4,9±0,1	3,3±0,2	3,6±0,2	4,1±0,1	4,6±0,2
Ichak tayoqchalari (E. coli)	2,3±0,2	3,7±0,2	3,5±0,2	2,8±0,2	2,5±0,2
Enterokokklar	3,2±0,1	3,4±0,2	3,2±0,2	2,8±0,2	2,6±0,2
Stafilokokklar	3,4±0,2	3,6±0,2	2,3±0,2	2,9±0,1	2,8±0,2
Zambrug' Candida turi	3,2±0,1	3,3±0,2	-	-	-
Bakteroidlar	3,2±0,1*	3,4±0,2	3,1±0,1	2,6±0,2	2,5±0,2

Proteyalar	2,4±0,2	-	-	-	-

Eslatma: * - 10^6 ta mikroorganizmlarning mutlaq soni
n - hayvonlar soni

Birinchi navbatda, yo'g'on ichak to'liq olib tashlanganidan keyin me'dada kechadigan moslashuv jarayonlarida operasiyadan keyingi dastlabki kunlarda (5-15 kunlari) me'da bo'shlig'idagi moddalarni evakuasiyasini tezlashganligi alohida o'rin tutadi. Ushbu davrda me'da bo'shlig'idagi modda mikrofloralari tarkibida miqdoriy o'zgarishlar yuz beradi ya'ni nazorat guruhiga nisbatan nisbiy-patogen mikroorganizmlar (ichak tayoqchalari, enterokokklar, stafilokokklar va Kandida turiga mansub zamburug'lar) miqdori keskin ortadi.

Navbatdagi davr (operasiyadan keyin 1-2 oy o'tib) kompensator-moslashuv jarayonlariga xos me'da bo'shlig'idagi modda mikrofloralari tarkibida nisbiy-patogen mikroorganizmlar miqdorining nisbatan kamayishi sodir bo'ladi.

Ayniqsa ushbu davrda me'daning evakua-motor faoliyatining sekinlashishi, me'da bezlari mahsus hujayralarining nisbatan miqdorining kamligi bilan shilliq ishlovchi hujayralar hajmining yuqoriligi hisobiga me'da shilliq pardasining himoya faoliyatini pasayganligi natijasida, me'da bo'shlig'idagi mikroorganizmlar uning devoriga o'tib ya'ni qoplovchi hujayralar ichiga kirib joylashganligi kuzatildi.

Yo'g'on ichak to'liq olib tashlangandan so'ng 3 oy o'tib, me'da shilliq pardasi bez hujayralari umumiy tarkibida parietal va bosh hujayralarining hajmi keskin oshganligi kuzatildi. Bu operasiya natijasida hujayra va ularning organoidlarini buzilgan faoliyatlarini o'rnini bosuvchi xarakterga ega bo'lgan funksional zo'riqishlarni biroz kamayishiga olib keladi.

Bu davrni biz kompensator-moslashuv jarayonlarining morfofunksional asoslarini uyg'unlashuv davri deb nomladik. Ushbu davrda me'daning evakua-motor faoliyati keskin susayganligi, me'da bezlari hujayra tarkibida mahsus parietal va bosh hujayralarning umumiy miqdorining hamda faoliyatining yuqoriligi hisobiga me'da shirasining rN ni pasayishi va hazm kuchining ortishi, me'da bo'shlig'i va devoridagi mikrofloralar miqdorining keskin kamayishiga olib keldi.

Keyingi davrlarda (operasiyadan keyingi 6-oylargacha) yuqorida ketirilgan natijalar me'daning evakua-motor faoliyatining susayganligi, me'da bezlari hujayra tarkibida mahsus parietal va bosh hujayralarning umumiy miqdorining yuqoriligi, me'da bo'shlig'i va devoridagi mikrofloralar miqdorining kamayishi saqlanganligi aniqlandi. Ushbu davrni kompensator-moslashuv jarayonlarining morfofunksional asoslarini turg'unlashuv davri deb atadik.

Tajriba natijalari shuni ko'rsatadiki, me'da shilliq pardasida kechadigan kompensator-moslashuv jarayonlariga xos morfofunksional o'zgarishlar yo'g'on ichak to'liq olib tashlanishiga nisbatan javob reaksiyasi bo'lib, uning evakua-motor faoliyati hamda bo'shliqdagi mikrobiotsenozining o'zgarishlari bilan muvofiqlashadi.

Ma'lumki, me'daning struktur-funkisonal holati uning mikrobiologik holatiga bog'liq bo'lib, me'da bo'shlig'idagi moddalar tarkibidagi mikrobiologik o'zgarishlar unda alterasiya va yallig'lanishga xos o'zgarishlarni rivojlanishiga olib kelishi mumkin [6, 9, 14, 25].

Aniqlangan ma'lumotlarga ko'ra, me'yorda me'da bo'shlig'ida oz miqdorda kislotali muhitga chidamli ayrim turdagi bakterial floralar ya'ni bo'shliqdagi yoki P-floralar [13, 20-24]. Yo'g'on ichak to'liq olib tashlangandan keyin me'da-ichak nayi bo'shlig'ida nisbiy-patogen mikroorganizmlar miqdorining keskin ortishi, ichak disbakteriozi sodir bo'lishiga olib kelib, unda hazm jarayonining va so'rish faoliyatining buzilishiga sababchi bo'lishi mumkin [4, 10, 11].

Bizning tajribalarda aniqlandiki, nazorat guruhi hayvonlarining me'dasi bo'shlig'idagi

moddalar tarkibida obligat mikrofloralar (bifido-va laktobakteriyalar), fakultativ aerob mikrofloralardan ustunligini ko'rsatdi. Bu natijalar ayrim mualliflar tajriba xulosalarini ma'qullaydi [15, 18].

Yo'g'on ichak to'liq olib tashlangandan keyin me'da bo'shlig'ida unga begona bo'lgan mikroorganizmlar joylashgan. Ushbu aniqlangan o'zgarishlarning kuchayishi operasiyadan so'ng o'tgan davrlar bilan uzviy bog'liqligi kuzatildi. Bizning tajribalar shuni ko'rsatdiki, operasiyadan keyin 7- kuni me'da bo'shlig'idagi moddalar tarkibida mikroorganizmlarning asosiy guruhlari o'rtasidagi o'zaro o'zgarishlarda, obligat mikrofloralar miqdorini kamayishi yoki yo'qolishi bilan fakultativ aerob mikrofloralar miqdori keskin ortganligi aniqlandi. Asosiy obligat mikrofloralar vakillaridan sporasiz anaerob tayoqchalar (bifidobakteriyalar) va nordonsut aerob tayoqchalar (laktobakteriyalar) miqdorining keskin kamayganligi kuzatildi. Aniqlangan fakultativ mikrofloralar miqdorining keskin ortganligi asosan ichak tayoqchalari, proteya, nisbiy-patogen stafilokokk va enterokokklar hisobiga bo'lib, ularning o'rtacha miqdori nazorat guruhiga nisbatan deyarli yuqori ekanligini ko'rsatdi.

Ko'plab mualliflar [11,16] odam va murakkab hayvonlarning me'da-ichak nayi bo'shlig'ida asosiy obligat mikrofloralar vakillaridan sporasiz anaerob tayoqchalar (bifidobakteriyalar) va nordonsut aerob tayoqchalar (laktobakteriyalar) miqdorining keskin kamayishi yoki yo'qolishi, uning me'da-ichak nayi morfofunksional holatiga ta'sir etganligida ko'rinadi deb o'ylashadi [19-22].

Xulosa. Olingan natijalar va ularning taxlili quyidagi xulosalarni qilishga olib keldi:

Yo'g'on ichak to'liq olib tashlangandan so'ng me'da bo'shlig'idagi modda mikrofloralari tarkibida operasiyadan keyin o'tgan muddatlarga mos keladigan o'zgarishlar sodir bo'ladi:

- Operasiyadan keyingi ilk o'zgarishlar davrida (3-15 kunlar) me'da bo'shlig'idagi modda mikrofloralari tarkibida obligat floralar (bifidobakteriyalar va laktobakteriyalar) miqdori keskin kamayishi bilan nisbiy-patogen floralar (ichak tayoqchalari, stafilokokklar, enterokokklar, bakteroidlar va proteylar) miqdorining deyarli ko'payishi sodir bo'lib, me'da bo'shlig'idagi modda disbakteriozidan dalolat beradi;

- Operasiyadan keyin 2-3 oy o'tib, me'da bo'shlig'idagi modda mikrofloralari tarkibidagi obligat floralar (bifidobakteriyalar va laktobakteriyalar) miqdorida ko'payish tomonga o'zgarish bo'lib, aksincha nisbiy-patogen floralar miqdorining kamayishi yuz beradi. Ushbu o'zgarishlar organizmda jumladan me'dada yangi gomeostazni ta'minlovchi moslashuv mexanizmlarini ishga tushganligiga to'g'ri keladi.

Yo'g'on ichak to'liq olib tashlangandan so'ng me'da shilliq pardasida kechadigan kompensator-moslashuv jarayonlarining morfologik asoslari o'tgan muddatlarga mos keladigan, uning evakua-motor faoliyati va mikrobiologik o'zgarishlari bilan uyg'unlashadi

Operasiyadan keyin ilk davrlarda me'da bo'shlig'ida sodir bo'ladigan mikrobiologik o'zgarishlarni bakterial preparatlar ya'ni bifidumbakterin va laktobakterinlarni alohida hamda birgalikda qo'llagan xolda korreksiya qilish, me'da bo'shlig'idagi disbakterioz holatini bartaraf etib, bifidumbakterin va laktobakterinlarni birgalikda qo'llanilishi juda foydalidir.

Operasiyadan keyin ilk davrlarda me'da bo'shlig'ida sodir bo'ladigan mikrobiologik o'zgarishlarni bakterial preparatlar bilan korreksiya qilish organizmda kechadigan moslashuv jarayonlarini jadallashtirishga, umumiy ahvolini tez yaxshilanishiga, hazm jarayonini yaxshilinishiga va umumiy reaktivligi hamda immunitetini oshirishga yordam beradi.

Amaliy tavsiyalar. Olingan natijalar postkolektomik sindrom patogenezini chuqurroq tushunishga yordam beradi.

Disbakteriozni bifidumbakterin va laktobakterinlarni birgalikda qo'llagan holda korreksiya qilish yuqori effektivligi ko'rsatilgan, bu kolektomiya bilan operasiya bo'lgan bemorlarda operasiyadan keyingi asoratlarni oldini olish uchun ushbu preparatlarni tavsiya qilishni maslaxat beradi.

Hulosalar:

1. TAP blokada uchun magniy sulfat adyuvantidan foydalanish xavfsiz bo'lib, bemorlarda markaziy va periferik gemodinamika ko'rsatkichlari, SpO_2 (saturatsiya), qonda glukoza miqdori, Richmond bo'yicha sedatsiyani baholash ko'rsatkichlariga ta'sir qilmaydi
2. Shoshilinch laparotomiyalarda TAP blokada uchun magniy sulfat adyuvantidan foydalanish deksametazonga nisbatan samarali bo'lib operatsiyadan keyingi analgetikka bo'lgan ehtiyojni va umumiy opioidlar sarfini kamaytiradi;
3. Magniy sulfat TAP blokada sifatini oshirib, bemorlarda postoperativ og'riq intensivligini kamaytiradi. Natijada bemorlarda mobilizatsiya va ichak peristaltikasi erta boshlanadi.

Foydalanilgan adabiyotlar:

1. Averyanova Yu.V. Federalnыe klinicheskie rekomendatsii «Lechenie detey s sindromom korotkoy kishki» / Averyanova Yu.V., Vessel Lukas, Yerpulyova Yu.V., Nikolaev V.V., Stepanov A.E., Chubarova A.I., Щukin V.V., Xasanov R.R. // Rossiyskiy vestnik. – 2014. T.4. – №4. S. 92–108.
2. Shevnin P. A., Vinokurova N.V. TOTALNAYa I SUBTOTALNAYa KOLEKTOMIYa U DETEY. // V Mejdunarodnaya (75 Vserossiyskaya) nauchno-prakticheskaya konferensiya «Aktualnыe voprosы sovremennoy meditsinskoy nauki i zdravooxraneniya» 754. S.751-754.
3. Govoruxina O.A. Diagnostika i lechenie bolezni Girshprunga u detey na sovremennom etape / Novosti xirurgii. – 2017. T.25. – №5. – S. 510–517.
4. Navruzov S.N., Navruzov B.S., Ibragimov A.Yu., Pazыlova D.U. «Effektivnost primeneniya probiotikov v kompleksnom lechenii yazvennogo kolita. Koloproktologiya, 2018, №2 (64) (prilojenie) Materialы Vserossiyskoy nauchno-prakticheskoy konferensii s mejdunarodnыm uchastiem «Dostijeniya sovremennoy koloproktologii» C.51.
5. Kit O.I., Gevorkyan Yu.A., Soldatkina N.V., Kolesnikov Ye.N., Kolesnikov V.E., Bondarenko O.K., Xabjokov E.K. Rezultatы xirurgicheskogo lecheniya semeynogo adenomatoza tolstoy kishki. Koloproktologiya. 2022; t. 21, № 2, s. 47-56. https://doi.org/10.33878/2073-7556-2022-21-2-47-56.
6. Kit O.I., Vodolajskiy D.I., Gevorkyan Yu.A., Soldatkina N.V., i soavt. Nasledstvennыy kolorektalnыy rak: genetika i skrining. Rossiyskiy jurnal gastroenterologii, gepatologii, koloproktologii. 2018;28(3):18-25.
7. Kit O.I., Gevorkyan Yu.A., Soldatkina N.V., Xaragezov D.A., i soavt. Semeynыy adenomatoz tolstoy kishki: sovremennoe sostoyanie problemы. Terapevticheskiy arxiv. 2018;90(2):65-68.
8. Keisuke H, Yoko Y, Tomomichi K, Toshiaki T, et al. Hereditary gastrointestinal cancer. Surg Today. 2016;46:1115-22.
9. Yamadera M, Ueno H, Kobayashi H, Konishi T, et al. Current status of prophylactic surgical treatment for familial adenomatous polyposis in Japan. Surg Today. 2017 Jun;47(6):690-696. Epub 2016 Oct 21. DOI: 10.1007/s00595-016-1431-4 .

10. Dossa F, Morris A, Wilson A, Baxter N. Life After Surgery: Surgeon Assessments of Quality of Life Among Patients With Familial Adenomatous Polyposis. Dis Colon Rectum. 2018 Oct;61(10):1217-1222. PMID: 30192330. DOI: 10.1097/ DCR.0000000000001146.
11. Herzig D, Hardiman K, Weiser M, et al. The American Society of Colon and Rectal Surgeons Clinical Practice Guidelines for the Management of Inherited Polyposis Syndromes. Dis Colon Rectum. 2017;60:881-894.
12. Chubarova A.I. Opыt diagnostiki i lecheniya patsientov s totalnыm i subtotalnыm agangliozom kishechnika / Chubarova A.I., Kostomarova Ye.A., Mokrushina O.G., Shumixin V.S., Cherkasova S.V., Щapov N.F., Dmitrieva I.B., Selivanova Ye.V., Petrova L.V., Emirbekova S.K., Koshko O.V., Korchagina N.S. // Rossiyskiy vestnik. – 2016. T.6. – №2. S. 26–37.
13. Isaev G.B., Kerimova T.M. Kachestvo jizni patsientov, perenesshix subtotalnuyu kolektomiyu po povodu xronicheskogo kolostaza. Uralskiy meditsinskiy jurnal, GASTROENTEROLOGIYa. №01 (156) yanvar 2018 SBORNIK STATEY. S.86-89.
14. Yang Y, Ludvigsson JF, Forss A, Faucon AL, Faye AS, Olén O, Sjölander A, Carrero JJ. Risk of Kidney Failure in Patients With Inflammatory Bowel Disease Undergoing Colectomy: A Nationwide Cohort Study. Clin Gastroenterol Hepatol. 2024 May 20:S1542-3565(24)00484-1. doi: 10.1016/j.cgh.2024.05.010.
15. Shilpa Chugh Garcha. High Steroid Dose in Lupus Nephritis Improves Outcome but Increases Risk. Medscape. May 30, 2024.
16. Kitsenko Yu.E. XIRURGIChESKAYa REABILITATSIYa BOLNыX POSLE TOTALNOY KOLPROKTEKTOMII. Dissertatsiya na soiskanie uchenoy stepeni kandidata meditsinskix nauk. Moskva, 2018. 175 s.
17. Sameshima, S., et al., Ulcerative colitis associated with nephrotic syndrome after treatment with mesalazine developed into rectal carcinoma: a case study. World J Surg Oncol, 2016. 14(1): p. 192.
18. Killeen, S., J. Gunn, and J. Hartley, Surgical management of complicated and medically refractory inflammatory bowel disease during pregnancy. Colorectal Dis, 2016.
19. Althumairi, A.A., M.G. Lazarev, and S.L. Gearhart, Inflammatory bowel disease associated neoplasia: A surgeon's perspective. World J Gastroenterol, 2016. 22(3): p. 961-73.
20. Ishikawa, H., et al., Endoscopic management of familial adenomatous polyposis in patients refusing colectomy. Endoscopy, 2016. 48(1): p. 51-5.
21. Neumann, P.A. and E. Rijcken, Minimally invasive surgery for inflammatory bowel disease: Review of current developments and future perspectives. World J Gastrointest Pharmacol Ther, 2016. 7(2): p. 217-26.
22. Basu, S. and J. Poole, The Brief Illness Perception Questionnaire. Occup Med (Lond), 2016. 66(5): p. 419-20.
23. Chiu, Y.H., et al., Psychometric properties of the Perceived Stress Scale (PSS): measurement invariance between athletes and non-athletes and construct validity. PeerJ, 2016. 4: p. e2790.
24. Watanabe, T., et al., Japanese Society for Cancer of the Colon and Rectum (JSCCR) guidelines 2016 for the treatment of colorectal cancer. Int J Clin Oncol, 2017.

25. Xie M, Chen Y, Wei W, He X, et al. Does ileoanal pouch surgery increase the risk of desmoid in patients with familial adenomatous polyposis? Int J Colorectal Dis. 2020 Aug;35(8):1599-1605. Epub 2020 May 20. DOI: 10.1007/s00384-020-03578-y.

UDC: 616-089

MODERN VIEW ON VITAMIN D METABOLISM AND VITAMIN D RECEPTOR GENE POLYMORPHISM

Shodikulova G.Z., Sadikova Sh.N., Boyqobilov O.Sh.
Samarkand State Medical University

Abstract

This review article presents a modern concept of vitamin D metabolism, which is a seco-steroid prohormone. For many years, it was believed that the main action of vitamin D was to provide calcium-phosphorus homeostasis. Hormone-active metabolite of vitamin D – calcitriol 1, 25 (OH) D has a pleiotropic effect, which is realized through the vitamin D receptors (VDR), located in the target organs: bones, muscles, intestines, kidneys, heart, prostate, mammary glands, pancreas, immune system. The VDR gene has a high variability of polymorphic sequences. Of the more than 30 known single nucleotide sequences, the most studied are ApaI (rs7975232), BsmI (rs1544410), FokI (rs2228570), TaqI (rs731236) and Cdx2 (rs11568820). In recent years, the results of multicenter, cohort studies, which investigated the role of VDR polymorphism in the development of pathology of various human organs and systems. The prevalence of VDR alleles polymorphism has ethnic differences.

Keywords: vitamin D, metabolism, vitamin D receptor gene (VDR), VDR gene polymorphism, clinical manifestations

D VITAMINI METABOLIZMI VA VITAMIN D RETSEPTORLARI GEN POLIMORFIZMIGA ZAMONAVIY NAZAR

Shodikulova G.Z., Sadikova Sh.N., Boyqobilov O.Sh.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Ko'rib chiqish maqolasida sekosteroid progormoni bo'lgan D vitamini metabolizmining zamonaviy kontseptsiyasi keltirilgan. Ko'p yillar davomida D vitaminining asosiy ta'siri kaltsiy-fosfor gomeostazini ta'minlashga qaratilgan deb hisoblangan. D vitaminining gormonal faol metaboliti, kalsitriol 1,25 (OH) D pleiotrop ta'sirga ega bo'lib, maqsadli organlarda joylashgan D vitamini retseptorlari (VDR) orqali amalga oshiriladi: suyaklar, mushaklar, ichaklar, buyraklar, yurak, prostata bezi, sut bezlari, oshqozon osti bezi, immunitet tizimi. So'nggi yillarda VDR geni polimorfizmining rivojlanishdagi roli o'rganilgan ko'p markazli, kohort tadqiqotlari natijalari olindi. 30 dan ortiq ma'lum bir nukleotid ketma-ketligi ApaI (rs7975232), BsmI (rs1544410), FokI (rs2228570), TaqI (rs731236) и Cdx2 (rs11568820). insonning turli organlari va tizimlarining patologiyalari. VDR gen polimorfizmi allellarining tarqalishi etnik farqlarga ega.

Kalit so'zlar: D vitamini, metabolizm, vitamin D retseptorlari (VDR) geni, VDR gen polimorfizmi, klinik ko'rinishlari

СОВРЕМЕННЫЙ ВЗГЛЯД НА МЕТАБОЛИЗМ ВИТАМИНА D И ПОЛИМОРФИЗМ ГЕНОВ РЕЦЕПТОРА ВИТАМИНА D

Шодикулова Г.З., Садикова Ш.Н., Бойқобилов О.Ш.
Самаркандский государственный медицинский университет

Аннотация

В обзорной статье представлена современная концепция метаболизма витамина Д, который является секостероидным прогормоном. Многие годы считалось, что основное действие витамина Д направлено на обеспечение кальциево-фосфорного гомеостаза. Гормонально-активный метаболит витамина Д кальцитриол 1,25(OH) D оказывает плейотропный эффект, который реализуется через рецепторы витамина Д (VDR), расположенные в органах-мишенях: кости, мышцы, кишечник, почки, сердце, предстательная железа, молочные железы, поджелудочная железа, иммунная система. В последние годы получены результаты многоцентровых, когортных исследований, в которых изучена роль полиморфизма гена VDR в развитии Ген VDR имеет высокую вариабельность полиморфных последовательностей. Из более чем 30 известных однонуклеотидных по- следовательностей наиболее изученными являются ApaI (rs7975232), BsmI (rs1544410), FokI (rs2228570), TaqI (rs731236) и Cdx2 (rs11568820).патологии различных

органов и систем человека. Распространенность аллелей полиморфизма гена VDR имеет этнические различия.

Ключевые слова: витамин Д, метаболизм, ген рецептора витамина Д (VDR), полиморфизм гена VDR, клинические проявления

Introduction. The discovery of vitamin D, its role in maintaining calcium-phosphorus homeostasis and bone remodeling has been proven. Currently, vitamin D is classified as a seco-steroidal prohormone. Vitamin D deficiency is manifested by damage to the musculoskeletal system with the development of rickets, osteomalacia in adults and osteoporosis, but also fibromyalgic syndrome, myalgia, arthralgia etc. Recently, the influence of vitamin D deficiency on the immune system disorders, the development of autoimmune reactions, diabetes mellitus, infections and oncological diseases. [1-3].

The two main forms of vitamin D are vitamin D (ergocalciferol) and vitamin D (cholecalciferol). Vitamin D is formed in the skin under the action of ultraviolet B with a wavelength of 290-315 nm and comes from animal products, mainly fish fat, while vitamin D comes from plant foods. Vitamins D and D. According to their chemical formula, they have differences only in the structure of the side chain, but they do not affect metabolism, and both forms have prohormone functions [1, 4].

Vitamin D metabolism Vitamin D metabolism follows classical and alternative pathways. Vitamin D is synthesized from ergosterol under ultraviolet radiation in plants, yeast, and fungi and enters the body with these products. Vitamin D is synthesized in several stages. Initially, thermonestable previtamin D is formed from 7-dehydrocholesterol, which is provitamin D and a precursor of cholesterol, under UV radiation (UVB) in the epidermis of the skin.

At body temperature, it isomerizes on the membrane of epithelial cells skin conversion to stable vitamin D within 2-3 days [4]. Prolonged exposure to UV B leads to the conversion of previtamin D into biologically inactive lumisterol and tachysterol. Vitamin D synthesized in the skin also undergoes photoconversion and isomerization into numerous metabolites: suprasterol I, II and 5, 6 transvitamines D. These photometabolites prevent the accumulation of toxic doses of vitamin D in the skin. Vitamin D binds to vitamin D-binding protein (VDBP) and enters the liver, where vitamin D is metabolized by 25–hydroxylase (CYP2R1 and CYP27A1) to calcidiol (25(OH)D). The latter is the main circulating form in the blood serum. It is further metabolized by 25(OH)d1α–hydroxylase (CYP27B1), mainly in the proximal tubules of the kidneys to calcitriol (1α. 25-dihydroxyvitamin D; 1α. 25(OH)D), which is the most biologically active form of vitamin D. Calcitriol then enters the bloodstream, binding to VDBP, and enters target organs such as the small intestine, kidneys, and bones, where it regulates the absorption, mobilization, and reabsorption of calcium and phosphorus. Calcidiol and calcitriol levels are strictly controlled by 25(OH)D 24-hydroxylase (CYP24A1), which is an inactivating enzyme of vitamin D. It catalyzes the hydroxylation of C-24 and C-23 in calcidiol and calcitriol [2, 5-6]. 24-hydroxylase produces biologically inactive vitamin D metabolites, which are excreted by bile acids as calcitroic acid, while 23-hydroxylase produces 1,25-26. 23 lactones, which are catalyzed by CYP24A1 [2, 4, 6]. The importance of CYP24A-induced calcitriol inactivation has been proven in CYP24A1-knocked out mice, whose perinatal mortality. It was 50% due to impaired bone mineralization and hypercalcemia. It is interesting to note that this defect (symptoms) was not observed in twice-knocked-out mice for CYP24A1 and vitamin D receptors (vitamin D receptor; VDR) [2, 7]. In

target organs, calcitriol binds to the vitamin D receptor, which is the nuclear receptor of the family of ligand-activating transcription factors and induces both genomic and non-genomic regulation of various biological functions [5], the exact mechanism of which is currently being studied. The genomic pathway is realized by the binding of calcitriol to cytosolic VDR, which promotes phosphorylation of the latter, the formation of a heterodimer with a retinoid X receptor (retinoid-Xreceptor; RXR) with the further movement of this complex into the nucleus. The complex, consisting of calcitriol, the vitamin D receptor and the retinoid X receptor, binds to the vitamin D sensitive element (vitamin D response element; VDRE) in the promoter region of the target gene and mobilizes transcriptional coactivators or corepressors, which, in turn, regulate the expression of messenger RNA of target genes and perform various functions, including calcium-phosphorus metabolism: in the intestine, the synthesis of calcium–binding protein increases, in bones- osteocalcin, osteopontin, alkaline phosphatases [4].

In the non-genomic pathway, calcitriol binds to a vitamin D receptor located on the cell membrane called 1,25 D-membrane-associated rapidly responding steroid-related protein (1,25 D-MARRS). This interaction causes rapid changes in cellular signaling pathways, including calcium and the mitogen-activated protein kinase pathway, through the direct relationship of proteins with intracellular signaling moleculi, which leads to the implementation of various phenotypic functions: it accelerates the transport of extracellular calcium into the cytoplasm, releases calcium from intracellular depots, and stimulates the metabolism of phosphatidylinositol [2, 5, 6]. There is an activation of calcium and phosphorus transport from the small intestine to the bloodstream, as well as an increased resorptive effect of parathyroid hormone (PTH) on bone tissue through exposure to osteoclast precursors or through the release of cytokines by osteoblasts and bone marrow stromal cells [1, 4].

An alternative pathway of vitamin D metabolism occurs through an enzyme that cleaves the cytochrome P450 side chain – CYP11A1 [6], which produces hydroxymetabolites of vitamin D. One of them is 20(OH)D, which has antiproliferative, anti-inflammatory effects, and also promotes cell differentiation, as well as calcitriol. In addition, these metabolites enhance protective mechanisms against UV-induced skin DNA damage and oxidative stress, have antitumor properties on the cell line [4, 5]. 20(OH)D and 20, 23(OH)D metabolites also act as partial VDR agonists. The same metabolites can bind to α and γ-isoformamiretinoid-bound orphan receptor (RORα and RORγ), which belongs to a family of ligand-dependent transcription factors. ROR receptors play a key role in the regulation of many physiological processes, including immune and metabolic processes, and are also involved in many pathological mechanisms of carcinogenesis, the development of autoimmune diseases, and metabolic syndrome. In this case, 20(OH)D and 20, 23(OH)D, when interacting with ROR receptors, have an inhibitory effect on the transcription of the Bmall and G6Pase genes [5, 6].

Mechanisms of vitamin D regulation. The synthesis of calcitriol is regulated by the action of the inactivating enzyme CYP24A1 in the kidneys, which depends on fibroblast growth factor-23 (FGF-23) and calcitriol itself by the feedback type, as well as the activating enzyme CYP27B1 catalyzed by parathyroid hormone (PTH). FGF-23 is secreted by osteoblasts and osteocytes in response to increased phosphate and calcitriol levels [4, 6].

Also, estrogens, prolactin and somatotropic hormone (GH) stimulate the synthesis of calcitriol. During growth, pregnancy and lactation, the need for calcium increases, which leads to an increase in the activity of 1α-hydroxylase.

Vitamin D deficiency occurs as a result of insufficient synthesis of cholecalciferol in the

skin, lack of vitamin in food or impaired absorption in the small intestine, which is characterized by hypocalcemia with activation of PTH secretion and the development of secondary hyperparathyroidism, which leads to increased bone resorption and decreased calcium excretion by the kidneys. As a result, the concentration of calcium in the blood serum is recorded within the normal range. At the same time, in the early stages, hypophosphatemia is more typical, which is due to the action of PTH and consists in a decrease in tubular reabsorption of phosphate and an increase in its excretion in the urine.

Vitamin D receptor gene polymorphism and its clinical manifestation

Vitamin D deficiency increases the risk of fractures, and some sources have been associated with the development of cognitive impairment, dementia, cancer and autoimmune diseases, as well as stroke and neurodegenerative diseases [3].

Rare mutations in genes involved in the metabolism of vitamin D can lead to vitamin D functional deficiency, for example, mutations in genes encoding CYP27B1 and VDR, respectively, are responsible for the development of rickets types I and II [4]. As is known, vitamin D receptors are also found in the skin, mammary glands, pituitary gland, parathyroid and gonads, cells of the nervous system, skeletal muscles, pancreatic β cells, adipose tissue, lungs, monocytes and activated lymphocytes. The effects of vitamin D mediated through VDR on these cells are not yet fully understood. For example, the density of bone mineral matter may depend on the available set of alleles in the calcitriol receptor gene.The VDR gene is located on the short arm of chromosome 12 (12q13.1) and consists of 9 exons and 8 introns. It has a high variability of polymorphic sequences that occur in both coding and non-coding parts of the gene, and this leads to changes in its function due to activation of gene expression, less often protein structure. The method of detecting alleles is based on the polymorphism of the lengths of restriction fragments obtained after treatment with certain restrictases. Of the more than 30 known single nucleotide polymorphism (SNP) sequences, the most studied are ApaI (rs7975232), BsmI (rs1544410), FokI (rs2228570), TaqI (rs731236), and Cdx2 (rs11568820) [1, 8].

The polymorphism of the VDR ApaI gene is located in the 3'-regulatory region, in the 8th intron. It lacks a functional response, although some studies have shown that it can affect the stability of messenger RNA (mRNA). The BsmI variant is also located in the 3'-regulatory region and is associated with the risk of osteoporosis in postmenopausal women and response to antiresorptive therapy [9]. The VDR TaqI polymorphism gene is located on exon 9, it affects the stability of mRNA and the biological functions of vitamin D. These 3 SNPs are in non-equilibrium linkage with each other. FokI is located in the second exon of the VDR gene and affects transcriptional processes; replacement of T with C during translation of the ATG start-codon leads to the synthesis of 2 protein variants: long (f) and short (F) [3, 8]. Long protein has more pronounced transcriptional activity; f FokI allele is more common among Caucasians and Asians than among Africans [8]. According to the results of one meta-analysis, FokI polymorphism is associated with an increased risk of postmenopausal osteoporosis in the Asian population than among Europeans [9]. The Cdx2 variant is located in the 5-promoter region and reduces the transcriptional activity of the A allele in the gene by 70%.

A high risk of developing postmenopausal osteoporosis in residents of Belarus and Lithuania is observed: 1) in the presence of a homozygous C/C genotype in the ApaI gene, 2) more often detected in the G/G genotype of BsmI, 3) nonequilibrium linkage of the ApaI, BsmI, and TaqI genes with the C-G-C haplotype was significantly more often detected [9].

The effect of polymorphism of the 4 known SNP VDR genes on the risk of multiple

sclerosis (MS) is different [3]. A Dutch case-control study of 212 patients with MS revealed high levels of calcitriol and low serum calcidiol levels in carriers of the short (F) allele [10]. Similar results were obtained in a Sicilian study of 104 patients with MS [11]. According to some data, the presence of the f allele contributed to the milder MS with a low degree of disability (according to the EDSS scale (Expanded Disability Status Score) <6) [12]. BsmI polymorphism is associated with reduced bone mineral density and an increased risk of osteoporosis in MS patients with vitamin D deficiency [13]. The AA genotype BsmI has a protective effect in MS [14]. The results of studies and meta-analyses on the polymorphism of ApaI, TaqI, Cdx-2 on MS are contradictory [3, 15, 16].

A 2016 review by the UK Scientific Advisory Committee on Nutrition found that vitamin D supplementation on cancer risk has not been proven due to the small number of randomized controlled trials conducted [4]. Observational studies show an inverse correlation between serum 25(OH)D concentrations and the risk of colorectal cancer. There is no conclusive evidence of a relationship between serum 25(OH)D concentrations and the risk of cancer at sites other than skin cancer. The likelihood of skin cancer is higher in individuals with relatively high serum levels of 25(OH)D, which may be due to prolonged insolation.

The frequency of FF genotype FokI was significantly higher in 100 Caucasian patients in France suffering from rheumatoid arthritis (RA) compared to the control group [17]. The Bb genotype of BsmI is associated with a more favorable course of RA [18].

According to the meta-analysis [19] of associations, BsmI, TaqI, FokI, and ApaI of the VDR gene polymorphism in patients with RA and systemic lupus erythematosus (SLE), the following patterns were revealed: 1) FF genotype FokI was significantly more often detected in Caucasians suffering from RA (odds ratio (OR) = 1.502 (95% CI=1.158-1.949, P=0.002); 2) the prevalence of BB+Bb of the BsmI genotype was higher in SLE, especially in combination with kidney damage, among Asians (OR=3.584 (95% CI=1.407-9.130, P=0.007 and OR=3.652 (95% CI=1.347-9.902, P=0.011).

The results of a study of 105 patients with Sjogren's disease in Hungary did not show a difference in the polymorphism of the TaqI, BsmI, ApaI, and FokI of the VDR gene with a control group [20]. Kamal et al. [21] studied the ApaI and TaqI polymorphisms of the VDR gene in Behçet's disease and scleroderma in Egyptians and found a high incidence of Aa genotype ApaI in patients with Behçet's disease and a low prevalence of the tt genotype of TaqI. Carriers of the aT VDR haplotype had a higher development of Behcet's disease compared to the control group. There was no effect of these two SNPs on the risk of developing scleroderma, although the AA genotype ApaI was more common in the diffuse form of the disease. Cusato et al. The polymorphism of the VDR gene in cryoglobulinemia associated with viral hepatitis C was evaluated and found that, firstly, low viral load is associated with the following genotypes: AA BsmI (P=0.018), CCTaqI (P=0.009) and AA ApaI (P=0.004), and secondly, the T FokI allele correlates with mixed cryoglobulinemia [22]. The effects of vitamin D supplementation as well as plasma calcidiol levels on cardiovascular disease (risk of development/outcomes) are contradictory:1) 2 systematic reviews did not find an association with cardiovascular disease (CVD) risk, 2) one showed an increased risk of CVD when taking vitamin D with calcium due to the progression of atherosclerosis, 3) the results of prospective studies revealed an inverse correlation of serum 25(OH)D with CVD risk, 4) vitamin D supplementation had no effect on the course of hypertension (AH), according to meta-analyses including 46 studies, although an inverse association between calcidiol and hypertension was recorded in observational cohort

studies [4]. A group of Italian researchers did not find a correlation between the FokI and BsmI polymorphisms of the VDR gene and primary (essential) hypertension and plasma renin activity [23]. According to the results of Swapna N. et al. [24], the F allele and genotype of FF FokI determine a high risk of developing essential hypertension. Smoking was an additional risk factor. In the Russian population of patients with hypertension, the distribution of the FokI genotypes of the VDR receptor encoding the vitamin D receptor was studied and it was found that in patients with the FF and Ff genotypes of the FOKI VDR gene, the disease begins at an earlier age compared to patients with the FF genotype. Patients with these genotypes are characterized by an increase in blood pressure in the daytime, mainly SBP with higher values average daily SAD. The indicators of "pressure loading" are the index of the time of SBP in the daytime It is also higher in patients with these genotypes [25].

A meta-analysis of VDR gene polymorphism (FokI, ApaI, BsmI, TaqI) in type 1 diabetes mellitus (79 studies) and type 2 diabetes mellitus (44 studies) revealed the following: 1) there is a high risk of type 1 diabetes in the presence of the B allele BsmI and type 2 diabetes – the FokI allele, especially among East Asians; 2) the significance of the ApaI and TaqI polymorphism remains unclear in sugar diabeta [26].

Russian researchers studied the FokI polymorphism of the VDR gene and the level of blood calcidiol in the inhabitants of the Arctic region on the example of the Yamalo-Nenets Autonomial District. Calcidiol deficiency (<20 ng/ml) was detected in 38.2% of all examined. Analysis of the genotyping results revealed a statistically significant relationship between the C allele of the rs2228570 polymorphism of the VDR gene, vitamin D deficiency and ethnic groups of the population: 1) the occurrence of the C allele rs2228570 of the VDR gene was higher in the indigenous population than in the newcomer population, and amounted to 71.1%, while in the European part of Russia it was 57, 8 %; 2) in indigenous people who are carriers of the CC and CT genotypes, the level of vitamin D was significantly lower than in carriers of the TT genotype [2].

Used literature:

1. Agnello L. et al. Vitamin D receptor polymorphisms and 25-hydroxyvitamin D in a group of Sicilian multiple sclerosis patients // Neurological Sciences. – 2016. – Vol. 37. Pp. 2617. doi: 10.1007/s10072-015-2401-0
2. Aksenova EA, Silvanovich AP, Mihajlovskaja AV, Danilenko NG. Osobennosti raspredelenija chastot polimorfnyh allelej gena receptora vitamina D v populjacijah jetnicheskih belorusov [Peculiarities of VDR gene polymorphic allele frequencies in populations of native belarusians]. In: Kilchevskij AV, editor. Molekuljarnaja i prikladnaja genetika [Molecular and Applied Genetics] : sbornik nauchnyh trudov. Minsk: Institute of Genetics and Cytology of the National Academy of Sciences of Belarus;2016;21:71-80. (Russian).
3. Bikle DD. Vitamin D metabolism, mechanism of action, and clinical applications // Chemistry & Biology.– 2015. Vol. 21, № 3. – Pp.319-29. doi: 10.1016/j.chembiol.2013.12.016.
4. Bragazzi N.L., Watad A., Neumann S.G., Simon M., Brown S.B., Abu Much A., Harari A., Tiosano S., Amital H., Shoenfeld Y. Vitamin D and rheumatoid arthritis: An ongoing mystery. Curr. Opin. Rheumatol. 2017;29:378–388. doi: 10.1097/BOR.0000000000000397.

5. Baturin A.K. isoavt. Izuchenie svyazi geneticheskogo polimorfizma rs2228570 gena VDR c obespechennost'yu vitaminom D u zhitelej rossijskoj Arktiki // Voprosy pitaniya. Tom 86. – № 4. 2017. – S. 77-84.Čierny D. et al. Apal, BsmI and TaqI VDR gene polymorphisms in association with multiple sclerosis in Slovaks// Neurological Research. – 2016. – Vol.38. – Pp. 678-84. doi: 10.1080/01616412.2016.1200287
6. Bakhronovna K. F. THE SIGNIFICANCE OF CLINICAL AND LABORATORY CRITERIA IN THE EARLY DIAGNOSIS OF POSTHYPOXIC COMPLICATIONS IN NEWBORNS BORN WITH HYPOXIA //World of Scientific news in Science. – 2024. – T. 2. – №. 3. – C. 258-263.
7. Cottone S. et al. Vitamin D receptor gene polymorphisms and plasma renin activity in essential hypertensive individuals// Journal of Human Hypertension. – 2015. – Vol.29, № 8. – Pp. 483-7. doi: 10.1038/jhh.2014.113. Epub 2014 Dec 11. DOI: 10.1038/jhh.2014.113
8. Cusato J. et al. Vitamin D pathway gene polymorphisms as predictors of hepatitis C virus-related mixed cryoglobulinemia // Pharmacogenetics and Genomics. – 2016. – Vol.26, № 6. – Pp. 307-10. doi: 10.1097/ FPC.0000000000000223
9. Čierny D. et al. Apal, BsmI and TaqI VDR gene polymorphisms in association with multiple sclerosis in Slovaks// Neurological Research. – 2016. – Vol.38. – Pp. 678-84. doi: 10.1080/01616412.2016.1200287
10. Elkama A., Karahalil B. Role of gene polymorphisms in vitamin D metabolism and in multiple sclerosis // Arhivzahigijenuradaitoksikologiju. – 2018. –Vol. 69, № 1. Pp. 25-31. doi: 10.2478/aiht-2018-69-3065.
11. Gil Á., Plaza-Diaz J., Mesa MD. Vitamin D: Classic and Novel Actions // Annals of Nutrition and Metabolism. – 2018. – Vol.72, № 2. – Pp. 87-95. doi: 10.1159/000486536.
12. Jeon SM, Shin EA. Exploring vitamin D metabolism and function in cancer // Experimental & Molecular Medicine.– 2018. – Vol. 50, № 4(20). – Pp. 1-14. doi: 10.1038/s12276-018-0038-9.
13. Kamal A. et al. Association of VDR ApaI and TaqI Gene Polymorphisms with the Risk of Scleroderma and Behçet's Disease // Immunological Investigations. – 2016. – Vol. 45, № 6. – Pp. 531-42. doi:10.1080/08820139.2016.1180302.
14. Kamolidinovna T. Z., Zikriyaevna S. G. RISK FACTORS AND FEATURES OF CORONARY HEART DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – T. 7. – №. 6
15. Marozik PM. et al. Association of vitamin D receptor gene variation with osteoporosis risk in Belarusian and Lithuanian postmenopausal women // Frontiers in Endocrinology (Lausanne). – 2018. – Vol.5, № 9. –P. 305. doi: 10.3389/fendo.2018.00305.
16. Raczkiewicz A., Kisiel B., Kulig M., Tłustochowicz W. Vitamin D status and its association with quality of life, physical activity, and disease activity in rheumatoid arthritis patients. J. Clin. Rheumatol. 2015;21:126–130. doi: 10.1097/RHU.0000000000000233.
17. Rodríguez-Carrio J., Alperi-López M., Naves-Díaz M., Dusso A., López P., Ballina-García F.J., Cannata-Andía J.B., Suárez A. Vitamin D Receptor Polymorphism and DHCR7 Contribute to the Abnormal Interplay Between Vitamin D and Lipid Profile in Rheumatoid Arthritis. Sci. Rep. 2019;9:2546. doi: 10.1038/s41598-019-38756-8.

18. Ranganathan P. Genetics of bone loss in rheumatoid arthritis—role of vitamin D receptor polymorphisms. Rheumatology. 2019;48:342–346. doi: 10.1093/rheumatology/ken473.
19. Shih E.V., Milotova N.M. Rol' polimorfizma gena VDR, kodiruyushchego receptor vitamina D, v patogeneze arterial'noj gipertonii // Biomedicina. – 2018. – № 1. – S. 55-67
20. Tizaoui K. et al. Association between vitamin D receptor polymorphisms and multiple sclerosis: systematic review and meta-analysis of case-control studies// Cellular & Molecular Immunology. -2015. – Vol.12. – Pp.243-52. doi: 10.1038/cmi.2014.47
21. Vitamin D and health report. The Scientific Advisory Committee on Nutrition (SACN) recommendations on vitamin D. Public Health England. – 2016. P.289 Tairova Zarangis Kamolidinovna, Shodikulova Gulandom Zikriyaevna, Shonazarova Nodira Khudoyberdievna FREQUENCY OF CONCORDING DISEASES IN PATIENTS WITH RHEUMATOID ARTHRITIS // JCRR. 2022. No. 4.
22. Wang Q. et al. Quantitative assessment of the associations between four polymorphisms (FokI, ApaI, BsmI, TaqI) of vitamin D receptor gene and risk of diabetes mellitus // Molecular Biology Reports. – 2022. – Vol.39, № 10. – Pp. 9405-14. doi: 10.1007/s11033-012-1805-7
23. Wang X, Cheng W, Ma Y, Zhua J. Vitamin D receptor gene FokI but not TaqI, ApaI, BsmI polymorphism is associated with Hashimoto's thyroiditis: a meta-analysis. Scientific Reports. 2017;7:Art No 41540. doi:10.1038/ srep41540..
24. Zwerina K., Baum W., Axmann R., Heiland G.R., Distler J.H., Smolen J., Hayer S., Zwerina J., Schett G. Vitamin D receptor regulates TNF-mediated arthritis. Ann. Rheum. Dis. 2021;70:1122–1129. doi: 10.1136/ard.2010.142331.
25. Zilahi E. et al. Lack of association of vitamin D receptor gene polymorphisms/haplotypes in Sjögren's syndrome // Clinical Rheumatology. – 2015. – Vol.34, № 2. – Pp.247-53. doi: 10.1007/s10067-014-2639-6.

UO'K: 616-089

MAKROSOMIYADA FETOPLASENTAL KOMPLEKSNING FUNKTSIONAL HOLATI

Sobirova M.R., Xoliyorova M.S.

Annotatsiya

Ushbu maqolada makrosomiya holatida fetoplasental kompleksning funksional o'zgarishlari tahlil qilinadi. Tug'ilish vazni atrof-muhit, ijtimoiy va biologik omillarga sezgir ko'rsatkich bo'lib, makrosomiya rivojlanishining sabablari va natijalari batafsil o'rganiladi. Plasentaning homilaning o'sishiga ta'siri, uteroplasental qon aylanishining roli va platsenta disfunktsiyasi natijalari ilmiy manbalar asosida tahlil qilinadi. Tadqiqot natijalari makrosomiya holatlarining kelib chiqish omillari, diagnostikasi va oldini olish yo'nalishlarini tushunishga yordam beradi.

Kalit so`zlar: homila makrosomiyasi, intrauterin rivojlanish, fetoplatsental kompleks, katta chaqaloq, qon aylanish intensivligi, platsenta massasi, Villi stromasi

FUNCTIONAL STATUS OF THE FETOPLACENTAL COMPLEX IN MACROSOMIA

Sobirova M.R., Kholiyorova M.S.

Abstract

The study subjects were 108 adult white male outbred rats with complete colonectomy and a matched control group. The aim of the study was to assess the microbiological changes that occur in the gastric cavity after complete colonectomy and to develop practical recommendations for their correction with bifidumbacterin and lactobacterin.

After complete colonectomy, dysbacteriosis was found to develop in the stomach, which negatively affects the adaptive processes occurring in the gastric mucosa. It was found that the correction of dysbacteriosis with bifidumbacterin and lactobacterin, especially when used together, helps to normalize the state of the gastric microbiocenosis and accelerates the adaptive reactions occurring in the body.

Keywords: stomach, adaptation processes, microflora, complete colonectomy

ФУНКЦИОНАЛЬНАЯ СОСТОЯНИЯ ФЕТОПЛАЦЕНТАРНОГО КОМПЛЕКСА ПРИ МАКРОСОМИИ

Собирова М.Р., Холиерова М.С.

Аннотация

В данной статье анализируются функциональные изменения фетоплацентарного комплекса при макросомии. Масса тела при рождении является чувствительным показателем, зависящим от окружающей среды, социальных и биологических факторов, и подробно изучаются причины и последствия развития макросомии. Рассматривается влияние плаценты на рост плода, роль утероплацентарного кровообращения и последствия дисфункции плаценты на основе научных источников. Результаты исследования помогают понять факторы, способствующие макросомии, а также методы её диагностики и профилактики

Ключевые слова: макросомия плода, внутриутробное развитие, фетоплацентарный комплекс, крупный новорождённый, интенсивность кровообращения, масса плаценты, строма Вилли

Makrosomiya bilan tug'ilgan chaqalog'lar vaznini tahlil qilish aholi darajasida sodir bo'layotgan jarayonlarni tushunish uchun muhim vosita sifatida qaralishi mumkin. Ushbu ko'rsatkich oddiy va o'lchashda juda aniq, atrof-muhitdagi o'zgarishlarga sezgir va ushbu ko'rsatkichning qiymatlari to'g'risidagi ma'lumotlar zamonaviy tibbiy hisobotlar doirasida mavjud. Dunyoning ko'plab mamlakatlarida olib borilgan tadqiqotlar shuni ko'rsatdiki, tug'ilish vazni keng doiradagi ijtimoiy, biologik va texnogen omillarga sezgir bo'ladi [2]. Boshqa tomondan, bu tug'ruqdan keyingi ontogenez davomida tananing sog'lig'i, jismoniy rivojlanishi

va funktsional holatini tavsiflovchi ko'p sonli ko'rsatkichlar bilan bog'liq.

Tug'ilgan vaznning o'zi, boshqa har qanday morfofunksional ko'rsatkich kabi, genetik va atrof-muhit omillarining o'zaro ta'siri natijasi sifatida ko'rib chiqilishi kerak Ushbu kontseptsiyaga ko'ra, xomilalik rivojlanish naqshlari o'tmishdagi tabiiy tanlanish natijalarini aks ettiradi. Shu nuqtayi nazardan, homila rivojlanishini qandaydir moslashuv maqsadga erishishga urinish sifatida qarash mumkin. Biroq, rivojlanish jarayonida og'ishlar paydo bo'ladi, bu xomilalik vazn bu maqsadga erisha olmasligi yoki undan oshib ketishiga olib keladi. Shuni ta'kidlash kerakki, maqsad genetik jihatdan belgilanadi va og'ishlar atrof-muhit omillarining natijasidir.

Yuqoridagilar bilan bog'liq holda, turli davrlarda va turli mualliflarning ma'lumotlariga ko'ra, katta homilalar bilan tug'ilish chastotasi juda o'zgaruvchan. Shunday qilib, L.O. Chernyavskayaning tadqiqotlarida (2001) ma'lumotlariga ko'ra, 1998-yilda katta homila bilan tug'ilish ulushi 12,4 dan 8,8% gacha kamaydi, bu uning fikriga ko'ra, makrosomiya uchun turli xil xavf omillarining o'zgarishi, ham hududiy xususiyatlar, ham ijtimoiy-gigiyenik omillar, shuningdek, turmush darajasi va turmush tarzining o'zgarishi bilan bog'liq. A.L. Cherepnina (2006) ta'kidlashicha, 1980-yildan 1999-yilgacha bo'lgan davrda katta homila tug'ilish chastotasi taxminan bir xil bo'lgan va 7,3-8,8% oralig'ida o'zgargan va 2000-yildan boshlab asta-sekin 12% gacha o'sgan[2,5].

Bola vazni 4000 dan 5000 g gacha bo'lsa yirik, 5001 g va undan ortiq bo'lsa gigant hisoblanadi. Katta homilaga yangi tug'ilgan chaqaloqlar kirmaydi, ularning katta tana vazniga shish va/yoki immun bo'lmagan gidroplar, gemolitik kasallik, diabetik fetopatiya, shuningdek, katta o'smalar va rivojlanish nuqsonlari sabab bo'ladi.

Makrosomiya sabablarini izlash uzoq vaqt oldin boshlangan va bu masala bo'yicha turli xil fikrlar va taxminlar, ba'zan esa juda ziddiyatli. Ba'zi omillarga birlamchi ahamiyat beriladi, boshqalari ikkinchi darajali, boshqalarning ta'siri shubha ostiga olinadi. Bugungi kunga qadar adabiyotda ortiqcha vaznli homilaning rivojlanishining sabablari haqida aniq ma'lumot yo'q.

Intrauterin rivojlanishni ikkita asosiy bosqichga bo'lish mumkin: embrional va homila. Bunday bo'linishning asosiy mezoni - rivojlanayotgan organizmning ovqatlanishining tabiati. Intrauterin rivojlanishning embrion davri (homiladorlikning birinchi 8 xaftasi) embrionning embrion qopchasidan ustun ovqatlanishi bilan tavsiflanadi va 6-haftadan boshlab shakllanayotgan platsenta asta-sekin platsenta qon aylanishini o'rnatishni ta'minlaydi. Intrauterin rivojlanishning homila davri homiladorlikning 9-haftasidan bola tug'ilgunga qadar davom etadi va homilaning gemotrofik oziqlanishi bilan tavsiflanadi. Bu davrning asosiy hodisalari: organogenezning tugashi, intensiv o'sish, homila organlarining to'qimalarining differentsiatsiyasi va ularning funktsiyalarining o'rnatilishi.

Homiladorlikning oxirgi trimestri immunoglobulinlarning maksimal transplasental o'tkazilishi, sirt faol moddalarning intensiv sintezi va homila tana vaznining sezilarli darajada oshishi bilan tavsiflanadi[6]. Ma'lumki, homiladorlikning 8-haftasida homilaning og'irligi 10 gramm, tana uzunligi 2,5 sm; 12 xaftada - 14 g va 7,5 sm; 28 xaftada - mos ravishda 1000 g va 35 sm. Maksimal o'sish darajasi intrauterin rivojlanishning 3-6 oylari uchun xos bo'lib, homila tanasining uzunligi 10-11 sm ga oshganida, homiladorlikning 5-oyida eng yuqori darajaga yetadi. Homilaning tana vaznining maksimal o'sishi homiladorlikning oxirgi haftalarida (odatda homiladorlikning 32-haftasidan boshlab) sodir bo'ladi. Polyakova I.N.ning so'zlariga ko'ra., M.I. Boevoy (1997) ma'lumotlariga ko'ra, ona yoshi o'sishi bilan makrosomiya chastotasi tobora ortib boradi: 20 yoshgacha tug'adigan ayollar guruhida - 7,8%, 21-25 yoshda - 8,1%, 26-30 yoshda - 12,2%, 31-35 yoshda - 16,14% va 36,14% va undan yuqori. Ko'ra A.I. Krucha (1997), ayolning

yoshi makrosomiya genezisida muhim rol o'ynamaydi, chunki 20 yoshgacha bo'lgan normostenik konstitutsiyaviy tipdagi somatik jihatdan sog'lom primigravid ayollar orasida katta homila bilan tug'ilish chastotasi 21 yoshdan 25 yoshgacha bo'lgan davrda 13,5% ga yetgan. Haqiqatan ham katta homilani uning vazni ortishi bilan kechadigan turli kasalliklardan tekshirish zarurati makrosomiyaning oqilona akusherlik taktikasini, prognozini, oldini olish va davolashni aniqlash uchun juda muhimdir. Katta homilani tasvirlash uchun "giperbariya" va "homiladorlik yoshidagi katta chaqaloqlar" atamalari ham qo'llaniladi. E. Potter (1971) "makrosomiya" atamasini faqat ichki organlarning massasi ma'lum bir tana massasiga mos keladigan parametrlardan oshib ketgan bola tug'ilgan taqdirda ishlatgan. Hozirgi vaqtda "katta meva" va "makrosoma" toifalarining ma'nosidagi farqlar yo'qolgan. Ko'pgina adabiy manbalarda bu tushunchalar bir xil bo'lib, homila yoki yangi tug'ilgan chaqaloqning vazni 4000 g va undan ko'proq ekanligini anglatadi.[5]

Plasenta homilaning hayotiy funktsiyalarini ta'minlaydigan universal organdir: gaz almashinuvi, trofik, endokrin, ekskretor va himoya. Homiladorlik davrida platsentaning tuzilishi va funktsiyalari o'zgaradi, bu o'sayotgan homilaning ortib borayotgan ehtiyojlari bilan bog'liq va asosan uteroplasental qon aylanishining holati bilan belgilanadi. Platsentada sodir bo'lgan jarayonlar ona va homilaning tanasida ma'lum o'zgarishlar bilan birga keladi. Ulardan ba'zilari o'ziga xos xususiyatga ega, masalan, yo'ldoshning o'sishi va yetukligi, uteroplasental va fetoplasental tizimlar tomirlarining holati va ulardagi qon aylanishi, kompensatsion mexanizmlarning rivojlanishi.

Surunkali platsenta disfunktsiyasi homilador ayollarning taxminan uchdan birida perinatal patologiya xavfi yuqori bo'lgan ayollarda, shu jumladan makrosomiya bilan og'rigan ayollarda kuzatiladi. Kompensatsiyalangan platsenta yetishmovchiligini aniqlash ko'pincha sezilarli qiyinchiliklarni keltirib chiqaradi va bu patologiyani faqat tug'ruqdan keyin platsentadagi o'zgarishlar asosida tekshirish mumkin.

Homilaning yanada intensiv o'sishini ta'minlash uchun platsentaning faol faolligi, xususan, uteroplasental qon oqimining intensivligi talab qilinadi. Plasentalarni o'rganish shuni ko'rsatdiki, makrosomiyada barcha ko'rsatkichlar odatda o'rtacha kattalikdagi homila bo'lgan homiladorlikdan ko'ra kattaroqdir: platsenta massasi 15,8%, onaning sirt maydoni 22,5% va hajm 14,8% ga. Ammo shuni ta'kidlash kerakki, bunday aloqa barcha holatlarda kuzatilmaydi. Katta platsentalar ko'pincha kam vaznli bolalar tug'ilganda va aksincha, kichik platsentalar katta vaznli bolalar tug'ilganda kuzatiladi.

Shunday qilib, makrosomiya bilan, platsentaning massasi 14% hollarda 600 g dan kam, onaning sirt maydoni 400 sm dan kam - 27% va hajmi 600 sm dan kam - 10% da qayd etilgan. Shu bilan birga, o'rtacha vazn ko'rsatkichlariga ega bo'lgan bolalar tug'ilganda 4% hollarda 700 g va undan ortiq og'irlikdagi yo'ldoshlar, 4% da onaning sirt maydoni 500 sm2 dan ortiq, hajmi 1000 sm3 va undan ko'p - 22% . Shu sababli, turli xil platsenta parametrlari va homilaning kattaligi o'rtasidagi mavjud munosabatlarga qaramay, platsentaning kattaligi bilan makrosomiya genezini to'liq tushuntirish hali ham mumkin emas. Uteroplasental qon aylanishiga ta'sir qiluvchi ko'plab omillar orasida urug'lantirilgan tuxumning joylashishi va yo'ldoshning joylashishi alohida ahamiyatga ega. Bachadonning turli qismlari qon bilan turlicha ta'minlanadi, bu esa yo'ldoshni qon bilan ta'minlash uchun turli sharoitlarni yaratadi. Bu platsentaning bachadondagi joylashuvi homilaning, shu jumladan katta bolaning intrauterin rivojlanishiga ta'sir qilishi mumkinligi ehtimolini keltirib chiqaradi. Bachadonning orqa devorida joylashuvi bo'lgan yangi tug'ilgan chaqaloqning o'rtacha vazni to'liq muddatda taxminan 3800 g, old devorida - 3600 g,

bachadon tubi yoki "qovurg'alari" sohasida - 3400 g, bachadonning pastki segmenti sohasida - 3100 g. Yangi tug'ilgan chaqaloqlarning o'rtacha bo'yi platsentaning joylashishiga qarab mos ravishda 54, 53, 52,5 va 52 sm ni tashkil qiladi, bunda 4000 g va undan ortiq vaznli bolalarning tug'ilish chastotasi mos ravishda 38,7%, 20,4% va 9,4% ni tashkil qiladi. Bachadonning pastki segmentida joylashgan yo'ldoshli ayollarda katta homila bilan tug'ilish kuzatilmaydi. Taqdim etilgan ma'lumotlar platsenta bachadonning orqa devorida lokalizatsiya qilinganida, rivojlanayotgan intrauterin homilani maksimal darajada ta'minlash uchun sharoitlar yaratiladi degan fikrni tasdiqlaydi. Plasentaning bu joylashuvi bilan makrosomiya chastotasi ortadi, shuning uchun platsentaning lokalizatsiyasini aniqlash prognostik ahamiyatga ega bo'lishi mumkin .

Morfologik va mikroskopik tadqiqotlar katta homilada platsenta hujayralarining yuqori funktsional faolligini ko'rsatadi. Katta homilaning platsentalarini elektron mikroskopik tekshirishda sinsitium yuzasida ko'plab yirik villi aniqlanadi. Villi stromasida kollagen tolalar kamroq bo'ladi, fibroblastlar sitoplazmasida ko'p miqdorda mitoxondriyalar mavjud. To'liq muddatli homiladorlikda o'rta vaznli homilaning 33 platsentasida alohida villi nekrozi, ular orasida fibrinoidning sezilarli darajada cho'kishi va ko'pincha kaltsiyning cho'kishi kuzatildi. Aksincha, makrosomal platsentalarda bu o'zgarishlar zaif ifodalangan yoki umuman yo'q. Chorion kamolotining buzilishi to'qimalar darajasida kompensatsion reaktsiyalarning shakllanishiga to'sqinlik qiluvchi noqulay omil hisoblanadi. Sitotrofoblastga to'g'ri kelmaydigan patologik immaturiyada mayda terminal villi sonining kamayishi va qon tomir tarmog'i yomon rivojlangan yirik rezorbsion villi sonining ko'payishi bilan villus differentsiatsiyasining inhibisyonu mavjud . Ba'zida terminal villidagi kapillyarlarning soni ancha ko'p bo'ladi, ammo trofoblastda mos keladigan o'zgarishlarning yo'qligi sinsitiyokapillyar membranalarning shakllanishiga to'sqinlik qiladi. To'qimalar darajasida kompensatsion reaktsiyalarni amalga oshirish uchun shart-sharoitlarning yo'qligi platsenta disfunktsiyasining og'irligini kuchaytiradi, fetoplasental tizimning buzilishiga, homilaning kompensatsion-adaptiv reaktsiyalari darajasining pasayishiga va neonatal davrda moslashuvning buzilishiga olib keladi. Kompensatsiya mexanizmlarining kamayishi klinik jihatdan dekompensatsiyalangan shaklda yuzaga keladigan mutlaq etishmovchilikning rivojlanishi bilan metabolizmni tartibga solishda chuqur buzilishlarni aniqlaydi. Plasenta disfunktsiyasidagi dastlabki o'zgarishlar tartibga solish va metabolik mexanizmlarni faollashtirishdan iborat.

Plasenta disfunktsiyasining ushbu shakli uchun umumiy gistologik rasm homiladorlik davriga to'g'ri keladi. Homilador ayolning aylanma qon hajmi, periferik qon oqimi tezligi va homila rivojlanishi, shu jumladan katta. O'rtasida ma'lum bir o'zaro bog'liqlik mavjudligi aniqlandi. Aylanma qon hajmining oshishi bilan yangi tug'ilgan chaqaloqning vazni ortishi kuzatiladi. O'rtacha BCC 4000 ml bo'lsa, normal vaznli ayollarda bolalarning o'rtacha vazni 2800 g, 4200 ml - 3200 g, 4400 ml - 3700 g, 4800 ml BCC bilan - 4200 g.

Aylanma qon hajmining ko'payishi intrauterin homilaning rivojlanishi va shuning uchun makrosomiya genezisi uchun katta ahamiyatga ega bo'lsa ham, homilaning vazniga bevosita bog'liq emas. Katta homilali nisbatan sog'lom ayollarda periferik qon oqimining tezligi 3000-3800 g og'irlikdagi chaqaloqlarni tug'gan homilador ayollarga qaraganda 20% ga ko'pdir. Bachadon qon aylanishini reografik o'rganish shuni ko'rsatdiki, makrosomiyada bachadon qon oqimining ulushi o'rtacha 815 ml yoki 3000-3900 g og'irlikdagi homilali homiladorlikdagiga qaraganda 284 ml ko'proq. Nisbiy qiymatlarda bu ko'rsatkich umumiy gemodinamikada o'zgarishlar bo'lmaganda 16,4% va 9,4% ga to'g'ri keladi .

Taqdim etilgan funktsional va morfologik ma'lumotlar katta homilaning yo'ldoshida qon

aylanishining intensivligini ishonchli ko'rsatadi, bu platsentaning massasini ko'paytirish orqali emas, balki qon oqimining tezligini oshirish va kapillyarlarning soni va diametrining ko'payishi va gematoplasental to'siq qalinligining pasayishi tufayli qon tomir to'shagining hajmini oshirish orqali erishiladi. Ushbu mexanizmlar rivojlanayotgan homilaning yanada intensiv trofizmi uchun morfofunksional sharoit sifatida ko'rib chiqilishi kerak.

Foydalanilgan adabiyotlar:

1. Lebedeva M.A., Gagaev Ch.G. Qandli diabet bilan asoratlangan normal homiladorlikda homilaning kindik ichakchasidagi diametri Qiyin bemor.-2019.-Jil.17, No1-2.- B.25-27.
2. Medvedev M. V., Yudina B. V. Akusherlikda differensial ultratovush diagnostikasi. - M.: Vidar, 2007. - 465 b.
3. Mezinova N. N., Lokshin V. N., Mukhamedjanov E. K. Katta homilaning rivojlanishining xavf guruhlarida profilaktika tizimini takomillashtirish O'zbekiston akusher-ginekologlarining 3-kongressi materiallari. – Toshkent, 2013. – B. 99.
4. Ayollarda metabolik sindrom: bitta muammoning ikki tomoni N.M. Podzolkova va boshq. Akusherlik va ginekologiya. - 2013. - No 6. - B. 28-33.
5. Milovanov A. P., Shatilova I. G., Qodirov M. Plasental-uterin mintaqaning gistofizyologiyasi Rus tilining xabarnomasi. dots. akusher-ginekologlar. -2009.-№2.-P. 38-44.
6. Ordynsky V. F., Makarov O. V., Postnikova N. A. Ona-platsenta-homila tizimida arterial qon oqimining Dopler ultratovush tekshiruvi natijalariga ko'ra qandli diabet bilan kasallangan homilador ayollar homilasi holatini baholash Akusherlik va ginekologiya. - 2012. № 2-B. 29-35.

UO'K: 616.36-008.5-053.31.12.2-025

YANGI TUG'ILGAN CHAQALOQLAR SARIQLIGINI INTEGRAL USULDA OLIB BORISH

Sodiqova Sh.R., Axunbekova O.M.
Central Asian Medical University xalqaro tibbiyot universiteti

Annotatsiya

Maqolada yangi tug'ilgan chaqaloqlarda sariqliqning epidemiologiyasi, klinik kechishi, differentsial diagnostikasi masalalari yoritilgan. Giperbilirubinemiyaning fiziologik va patologik sabablari tasvirlangan, ularning o'z vaqtida tashxisi bolalarni boshqarish, profilaktikasi va davolashning to'g'ri taktikasini belgilaydi.

Kalit so'zlar: yangi tug'ilgan chaqaloqlar, giperbilirubinemiya, sariqlik

INTEGRATED INTRODUCTION TO NEWBORNE JAUNDICE

Sadikova Sh. R., Akhunbekova O.M.
Central Asian Medical University

Abstract

The article discusses the epidemiology, clinical course, and differential diagnosis of jaundice in newborns. The physiological and pathological causes of hyperbilirubinemia are described, and their timely diagnosis determines the correct tactics of management, prevention, and treatment of children.

Key words: neonates, hyperbilirubinemia, jaundice

ИНТЕГРИРОВАННОЙ ВВЕДЕНИЕ ЖЕЛТУХИ НОВОРОЖДЕННЫХ

Садикова Ш.Р., Ахунбекова О.М.
Central Asian Medical University

Аннотация

В статье рассматриваются вопросы эпидемиологии, клинического течения и дифференциальной диагностики желтухи новорожденных. Описаны физиологические и патологические причины гипербилирубинемии, своевременная диагностика которых определяет правильную тактику ведения, профилактики и лечения детей.

Ключевые слова: новорожденные, гипербилирубинемия, желтуха

Ilmiy adabiyot ma'lumotlariga ko'ra, erta neonatal moslashuv davrida sog'lom voyaga yetib tug'ilgan chaqaloqlarning 50-60 foizida va erta tug'ilgan chaqaloqlarning 70-90 foizida sariqlik aniqlanadi [1-5, 9, 11].

Yangi tug'ilgan chaqaloqlarda sariqlik eng keng tarqalgan alomat bo'lib, aksariyat hollarda neonatal davrda bilirubin almashinuvining xususiyatlarini aks ettiradi. Sog'lom yangi tug'ilgan chaqaloqlarda davolanishni talab qilmaydigan va giperbilirubinemiya tufayli yuzaga keladigan sariqlikning ikkita mumkin bo'lgan turi mavjud: fiziologik va emizish. Sog'lom yangi tug'ilgan chaqaloqdagi sariqlikning asosi bolaning rivojlanishiga ta'sir qilmaydigan bilirubin klirensining vaqtinchalik buzilishi (bilvosita bilirubinning konjugatsiyasi) hisoblanadi. Emizishdagi sariqlik 2-3 oygacha cho'zilgan kurs bilan tavsiflanadi, bolaning jismoniy va psixomotor rivojlanishiga ta'sir qilmaydi. Biroq, uzoq muddatli (14 kundan ortiq) sariqlik giperbilirubinemiyaning yanada jiddiy sabablarini istisno qilish uchun bilirubin darajasini va dinamikada uning fraktsiyalarini aniqlashni talab qiladi [1, 5, 8, 12].

Neonatal davrda sariqlik ham fiziologik, ham patologik sabablarga ko'ra yuzaga kelishi mumkin.

Fiziologik sariqlik tug'ilgandan 24-36 soat o'tgach paydo bo'ladi, 3-4 kun davomida

kuchayadi, shundan so'ng u asta-sekin pasayishni boshlaydi, hayotning 2-chi oxiri - 3-haftaning boshida butunlay yo'qoladi. Fiziologik sariqlikda teri to'q sariq rangga ega. Bunda sariqlik konjugatsiyalanmagan bilirubin (to'g'ridan-to'g'ri fraktsiyaning nisbiy ulushi 10% dan kam) tufayli yuzaga keladi va qon zardobidagi umumiy bilirubinning maksimal konsentratsiyasi erta tug'ilgan chaqaloqlarda 171 mkmol/l dan, to'liq tug'ilgan chaqaloqlarda 256 mkmol/l dan oshmaydi [6-8,10].

Tananing quyidagi fiziologik xususiyatlari sog'lom yangi tug'ilgan chaqaloqlarda qon zardobida bilirubin kontsentratsiyasini oshirish uchun zarur shartdir:

1. Bilirubinning 75% ga yaqini qondagi gemoglobindan hosil bo'ladi. Yangi tug'ilgan chaqaloqlarda bor sog'lom kattalar bilan solishtirganda, tana vaznining birligiga nisbatan ko'proq gemoglobin miqdori mavjud (nisbiy gipervolemiya va politsitemiya tufayli). Bundan tashqari, yangi tug'ilgan chaqaloqlarda nisbatan kamroq barqaror hujayra membranalari mavjud va buning natijasida qizil qon hujayralarining umri qisqaradi. Shu sababli, sog'lom yangi tug'ilgan chaqaloqning tanasi kuniga taxminan 6-10 mg/kg bilirubin ishlab chiqaradi, bu sog'lom kattalardagi bir xil ko'rsatkichdan (3-4 mg / kg / kun) 2-2,5 baravar yuqori.

2. Makrofaglar sistemasi hujayralarida hosil bo'lgan bilirubinning tabiiy izomeri lipidlarda yaxshi eriydi, lekin suvda yomon eriydi. Sog'lom kattalarda organizmda ishlab chiqarilgan barcha bilirubin albumin-bilirubin kompleksining bir qismi sifatida qonga tashiladi. Yangi tug'ilgan chaqaloqlarda, sog'lom kattalardan farqli o'laroq, qonda albumin bilan kimyoviy bog'lanish uchun bilirubin bilan raqobatlashadigan ko'p miqdordagi substratlar mavjud. Nisbiy gipoalbuminemiya bilan bir qatorda, bu bilirubinning qondan to'qimalarga kirib borishi va sariqlikning rivojlanishi uchun zaruriy shartdir.

3. Bilirubinning albumin bilan kompleksidan ajralib chiqishi jigarda sodir bo'ladi. Sinusoidal hujayra membranasi orqali faol transport orqali qondan bilirubin kirib boradi, gepatotsit sitoplazmasi, u erda Y- va Z-oqsillar bilan bog'lanadi va silliq endoplazmatik retikulumga o'tkaziladi. U erda uridin difosfat glyukuronil trans-fermenti ta'sirida terining yashil rangi, qon zardobida umumiy bilirubin kontsentratsiyasining oshishi, bilirubinning to'g'ridan-to'g'ri fraktsiyasi darajasining nisbiy oshishi sifatida hisobga olinishi kerak.

Giperbilirubinemiyaga tegishli feraza, bilirubinning glyukuron kislota molekulalari bilan konjugasiyasi sodir bo'ladi, natijada bilirubin monoglyukuronidi hosil bo'ladi. Ushbu shaklda bilirubin gepatotsitlarning kanalikulyar membranasi orqali o't kapillyarlariga o'tkaziladi. Yangi tug'ilgan chaqaloqlarda, sog'lom kattalarga qaraganda, bilirubinni tashish, konjugatsiya qilish va chiqarib yuborish uchun mas'ul bo'lgan barcha ferment tizimlarining faolligi keskin kamayadi. Xususan, tug'ilishda uridin difosfat glyukuronil transferaza faolligi kattalar darajasining 5% dan ko'p emas. Ferment tizimlarining "etilishi" butun neonatal davrda sodir bo'ladi. Biroq, hayotning birinchi oyining oxiriga kelib, bu fermentning faolligi kattalar darajasining 50-75% dan ko'p emas. Bularning barchasi, bilirubinning ko'payishi bilan birga, qon zardobida uning konjugatsiyalanmagan fraktsiyasining to'planishiga olib keladi.

4. Gepatotsitdan o’t kapillyariga o’tish jarayonida konjugatsiyalangan bilirubin molekulasiga glyukuron kislotaning ikkinchi molekulasi qo’shiladi, natijada suvda eruvchan bilirubin diglyukuronid hosil bo’ladi. Safro oqimi bilan bilirubin diglyukuronid o'n ikki barmoqli ichakning lümenine chiqariladi. Yangi tug'ilgan chaqaloqning safro fizik-kimyoviy xususiyatlari tufayli konjuge bilirubinning ichakka kirish tezligi sezilarli darajada sekinlashadi. Katta yoshlilarda bilirubin ichakdan qonga qayta singib keta olmaydi. Majburiy mikrofloraning ta'siri ostida bilirubinning keyingi transformatsiyasi sodir bo'ladi, natijada sterkobilin hosil bo'ladi, u tanadan

chiqariladi. Bolaning hayotining birinchi kunlarida bu jarayonlar sezilarli darajada buziladi. 25% gacha bilirubin diglyukuronid ichakda beta-glyukuronidaza fermenti ta'sirida parchalanadi, natijada bo'shatilgan bilirubin qonga qayta so'riladi.

5. Sariqlik mekonyumning kech (24 soatdan keyin) o'tishi, ro'za tutish yoki bolaning hipotermiyasi bilan ko'proq namoyon bo'ladi.

Fiziologik sariqlik bola uchun hech qanday oqibatlarni qoldirmaydi, u xavfsiz va davolanishni talab qilmaydi.

Fiziologik sariqlikning normal kursidan har qanday og'ishlar (erta yoki kechroq paydo bo'lishi, uzoq davom etishi, to'lqinga o'xshash kurs), rangparlikning ko'rinishi yoki 2007 Qon zardobidagi konjugatsiyalanmagan (bilvosita) bilirubinning nisbiy ulushi 80-90% dan ortiq neonatologiyada odatda "bilvosita giperbilirubinemiya" atamasi bilan belgilanadi, konjugatsiyalangan (to'g'ridan-to'g'ri) bilirubinning nisbiy ulushi 20% dan ortiq bo'lgan holatlar "direkt giperbilirubin" atamasi bilan belgilanadi. Bilvosita giperbilirubinemiya.

Bilvosita giperbilirubinemiya rivojlanishining uch xil mexanizmi mavjud: bilirubinning yuqori ishlab chiqarilishi, bilirubin konjugatsiyasining buzilishi va bilirubinning ichakda reabsorbtsiyasining kuchayishi.

Yangi tug'ilgan chaqaloqlarda bilirubinning yuqori ishlab chiqarilishining asosiy sababi gemolizning kuchayishi hisoblanadi. Gemolitik sariqlik qizil qon tanachalarining intensiv gemolizi natijasida jigar va taloqning kengayishi bilan tavsiflanadi, gemorragik sindrom rivojlanishi mumkin, ammo bu turdagi sariqlik bilan siydik va najasning rangi o'zgarishsiz qoladi. Gemolitik sariqlik bilan og'rigan bolalarda giperregenerativ anemiya mavjud (qonning klinik tekshiruvi eritrotsitlar sonining kamayishi va gemoglobin kontsentratsiyasini, retikulotsitlar sonining ko'payishini ko'rsatadi) va qon zardobida umumiy oqsil kontsentratsiyasi ko'pincha kamayadi.

Ko'pincha erta neonatal davrda gemolizning sababi ona va bolaning qonida eritrotsitlar antijeni bo'yicha mos kelmasligi hisoblanadi. Bunday holda, "yangi tug'ilgan chaqaloqning gemolitik kasalligi" atamasi qo'llaniladi. Ushbu holatdagi sariqlikning o'ziga xos xususiyati hayotning dastlabki 24 soatida paydo bo'lishidir. Gemoliz bilan bog'liq sariqlik bir qator tug'ma infektsiyalarning (sitomegalovirus, gerpes, qizilcha, toksoplazmoz, sifiliz, listerioz) o'tkir davrida ham paydo bo'lishi yoki neonatal sepsis rivojlanishining belgisi bo'lishi mumkin. Kamdan kam hollarda, oilaviy gemolitik anemiya (Minkovski-Chauffard mikrosferotsitar anemiya), eritrotsitlar fermenti (glyukoza-6-fosfat dehidrogenaza, piruvat kinaz, geksokinaza nuqsonlari) va gemoglobinopatiyalar (gemoglobinopatiyalar (gemotozning tuzilishi va sintezidagi nuqsonlar) aniqlanadi). onatal davr.

Bilirubinning yuqori ishlab chiqarilishining boshqa (gemolitik bo'lmagan) sabablari orasida og'ir neonatal politsitemiya mavjud. (venoz qonda gematokritning 70% dan ko'proq oshishi), yutilgan qon sindromi, massiv qon ketishlar (shu jumladan keng sefalohematomalar).

Bilirubin konjugatsiyasining buzilishi. Yangi tug'ilgan chaqaloqlarda bilirubin almashinuvining buzilishining ushbu mexanizmi ko'pincha qayd etiladi va "konjugatsiya sariqligi" atamasi bilan birlashtirilgan.

Konjugatsiyali sariqlik uchun kasallikning boshlanishi odatda bilirubinning bilvosita fraktsiyasi darajasining oshishi, gepato- va splenomegaliya, anemiya va retikulotsitozning yo'qligi, najas va siydikning normal rangi tufayli hayotning 24 soatdan ortiq yoshida boshlanadi.

Bilirubin konjugatsiyasining buzilishining asosiy sabablari quyidagilardan iborat:

1) glyukuronil transferaza uchun bilirubin bilan raqobatlashadigan dorilar (oksitotsin, oksatsillin, sefalosporinlar va boshqalar) bolaning qoniga (tug'ruq paytida onadan yoki ona suti

orqali yoki yangi tug'ilgan chaqaloqni bevosita davolash natijasida) kirishi;

2) erta tug'ilgan va etuk bo'lmagan yangi tug'ilgan chaqaloqlarda uridin difosfat glyukuronil transferaza fermentining kechiktirilgan "pishib etishi" (shu jumladan onada tug'ma hipotiroidizm va qandli diabet);

3) emizish paytida bolaning qoniga jigar glyukuronil transferazasini raqobatbardosh ravishda inhibe qiluvchi substratlarning kirib borishi (ona sutidan sariqlik);

4) uridin-difosfat-glyukuroniltransferaza fermenti sintezidagi irsiy nuqsonlar (Gilbert-Krigler sindromlari-Nayyar turlari 1, 2).

To'g'ridan-to'g'ri giperbilirubinemiya. Sariqlik intensivligining oshishi, uning yashil rangga bo'yalishi, jigar hajmining oshishi, axoliy axlat va qora siydikning paydo bo'lishi gepatobiliar tizimning ekskretor funktsiyasi - neonatal kolestazning buzilishidan dalolat beradi. Ushbu sindromning laboratoriya tasdig'i qon tarkibidagi bilirubinning to'g'ridan-to'g'ri ulushining umumiy darajadan 15-20% dan ortishi, xolesterin, beta-lipoproteinlar, safro kislotalari, shuningdek, gidroksidi fosfataza va gamma-glutamil transferaza fermentlari kontsentratsiyasining oshishi hisoblanadi. Neonatal davrda vaqtinchalik to'g'ridan-to'g'ri giperbilirubinemiya jigar va o't yo'llarining morfofunksional xususiyatlaridan kelib chiqishi mumkin, bu o't kislotasi sintezining yuqori darajasi va ularning jigar-ichak qon aylanishining etukligi bilan tavsiflanadi. Neonatal kolestaz jigar va o't yo'llari kasalliklarining ko'rinishlaridan biri bo'lishi mumkin, shuningdek, perinatal davrning o'ziga xos bo'lmagan patologik omillari kombinatsiyasining natijasi, ya'ni ekstrahepatik kelib chiqishi bor.

Neonatal kolestazning jigardan tashqari sabablari tarkibida gepatobiliar tizimning gipoksiyasi yoki ishemiyasi, oshqozon-ichak traktining gipoperfuziyasi, doimiy gipoglikemiya, metabolik atsidoz va konjestif kardiovaskulyar etishmovchilik rivojlanishi bilan kechadigan sharoitlar etakchi o'rinni egallaydi. Gepatobiliar tizimning ekskretor funktsiyasining buzilishi yangi tug'ilgan chaqaloqning gemolitik kasalligida safroning kolloid xususiyatlarining sezilarli o'zgarishi, uning yopishqoqligining oshishi, ba'zi hollarda bilirubinning gepatotsitlar va hujayralar mitoxondriyalari membranalariga bevosita toksik ta'siri tufayli bilirubin darajasining oshishi bilan bog'liq bo'lishi mumkin. Yallig'lanish vositachilarining murakkab kaskadini Kupffer hujayralari, shuningdek gepatotsitlar va sinusoidlarning endotelial hujayralari sintezi va chiqarilishini qo'zg'atadigan tizimli va mahalliylashtirilgan bakterial infektsiyalar muhim o'rinni egallaydi, bu safro hosil bo'lishi va chiqarilishiga bevosita ta'sir qiladi. Yangi tug'ilgan chaqaloq uchun reanimatsiya bo'limida o'tkaziladigan terapevtik tadbirlarga potentsial gepatotoksik dorilar va umumiy parenteral ovqatlanish kiradi, bu ham gepatobiliar tizimning funktsional holatini buzishga yordam beradi.

Ko'pincha erta tug'ilgan chaqaloqlarda xolestazning rivojlanishi jigar faoliyati va o't yo'llarining holatiga bir nechta patologik va yatrogen omillarning bir vaqtning o'zida ta'siri bilan kuzatiladi. Ekstrahepatik sabablarga ko'ra yuzaga keladigan neonatal kolestazning xarakterli xususiyati uning perinatal davrdagi patologik holatlarning og'irligi va davomiyligiga va yatrogen omillar ta'siriga bog'liqligidir. Bolaning umumiy ahvoli yaxshilanib, asosiy kasallik yo'qolganda, ko'p hollarda xolestaz orqaga qaytadi. Biroq, uning qoldiq ta'siri uzoq vaqt davom etishi mumkin - 6-8 oygacha. hayot. Yangi tug'ilgan chaqaloqlarda xolestaz tashxisi faqat gepatobiliar tizimning patologiyasi chiqarib tashlangan taqdirda to'g'ri keladi.

Gepatobiliar tizim kasalliklari gepatotsitlarning, shuningdek, intra- va ekstrahepatik o't yo'llarining ustun zararlanishi tufayli yuzaga kelishi mumkin.

Patologik jarayonda gepatotsitlarning birlamchi ishtirok etishining asosiy sabablari

jigarning toksik shikastlanishi va metabolik va endokrin kasalliklar kamroq uchraydi; Yuqumli, toksik va metabolik kelib chiqadigan gepatotsitlarning asosiy shikastlanishining asosiy ko'rinishlari:

sariqlikning erta boshlanishi va to'lqinsimonikterik sindromning tabiati;

jigar va taloqning kengayishi;

gemorragik sindromning erta ko'rinishi

doimiy axolik najas;

quyuq sariq siydik;

biokimyoviy xolestaz sindromi (ko'tarilgan 13, 18, 21-xromosomalar trisomiyasidagi boshqa rivojlanish nuqsonlari bilan birlashtirilishi mumkin.

Jigardan tashqari o't yo'llarining shikastlanishi ularning atreziyasining asosi bo'lib, umumiy o't yo'llarining kistalari, toshlari va o't tiqinlari bilan kamroq kuzatiladi. Oldini olish:

1. Enterohepatik qon aylanishida bilirubin darajasini pasaytirish.

2. Bilirubin hosil bo'lishini bostirish (sintetik metalloporfirinlar, ularda (qonda to'g'ridan-to'g'ri bilirubin, xolesterin, beta-lipoproteinlar, o't kislotalari, ishqoriy fosfataza va gamma-glutamil transferaza faolligi darajasining oshishi); alanin va aspartat faolligini oshirish

aminotransaminazlar, ularning nisbati > 1 bo'lsa;

jigarning sintetik funktsiyasini buzish (qonda albumin, fibrinogen, protrombin indeksi tarkibining pasayishi); o't pufagini ultraishonchli tadqiqot.

Asosan o't yo'llari shikastlanishining asosiy klinik ko'rinishlari:

yashil rang bilan terining sarg'ish rangi o'zgarishi

bu soya; jigarning kattalashishi va qattiqlashishi, kamroq tez-tez - taloq;

qorong'u siydik, rangsiz najas;

qonda to'g'ridan-to'g'ri bilirubinning yuqori darajasi, gamma-glutamil transferaza faolligi, xolesterin darajasi va xolestazning boshqa belgilari;

kechiktirilgan, faollikning o'rtacha ortishi alanin va aspartat aminotransferaza darajasi ularning nisbati <1; oddiy sintetik ko'rsatkichlar jigar funktsiyalari (albumin darajasi, fibrinogen, qondagi protrombin indeksi); umumiy ahvoli qoniqarli neonatal davr va hayotning birinchi oylarida.

Zarar darajasiga qarab, intra- va ekstrahepatik xolestazni ajratish odatiy holdir. Jigar ichidagi xolestazning o'ziga xos xususiyati najasning doimiy bo'lmaganligi va ultratovush tekshiruvi paytida o't pufagining vizual ko'rinishi bo'lsa, jigardan tashqari xolestazning tipik belgisi doimiy axolikatsiya va o't pufagining ekolokatsiya paytida vizualizatsiyasining yo'qligi hisoblanadi.

Jigar ichidagi xolestaz Adagil sindromida, intrahepatik o't yo'llari gipoplaziyasining sindromli bo'lmagan shakli, perinatal sklerozan xolangit va kist fibrozida kuzatiladi. Bundan tashqari, o't yo'llarining anomaliyalari 13, 18, 21-xromosomalarning trisomiyasidagi boshqa rivojlanish nuqsonlari bilan birlashtirilishi mumkin.

Jigardan tashqari o't yo'llarining shikastlanishi ularning atreziyasining asosi bo'lib, umumiy o't yo'llarining kistalari, toshlari va o't tiqinlari bilan kamroq kuzatiladi. Oldini olish:

1. Enterohepatik qon aylanishida bilirubin darajasini pasaytirish.

2. Bilirubin hosil bo'lishini bostirish (sintetik metalloporfirinlar, ularda markaziy temir boshqa metallar bilan almashtiriladi, gem oksigenazasini inhibe qilish orqali bilirubin hosil bo'lishini cheklaydi).

Davolash. Fototerapiya, oxirgi paytlarda chaqaloqlarda giperbilirubinemiyani davolash

standarti bo'lib qoldi. Samarali fototerapiya sarum bilirubin kontsentratsiyasini tezda pasaytiradi. Fototerapiya paytida bilirubinni olib tashlashni sekinlashtiradigan omil suvda eriydigan lumirubin hosil bo'lishidir. Lumirubin hosil bo'lish tezligi ikki omil bilan belgilanadi: spektr va nurlanishning umumiy dozasi. Shunday qilib, ko'k chiroq lampalari giperbilirubinemiya darajasini pasaytirish natijasiga erishishda samaraliroq bo'ladi. Radiatsiya dozasi yorug'lik kuchiga va chiroqdan chaqaloqqa bo'lgan masofaga bog'liq. Standart fototerapiya 6-12 mVt/sm2 nurlanishni ta'minlaydigan sakkizta oq nurli lyuminestsent lampalardan foydalanadi. Optik tolali qoplamalar kichik samarali sirt maydoniga ega, lekin ozgina issiqlik hosil qiladi va shuning uchun chaqaloqqa (25-50 sm) yaqinroq joylashtirilishi mumkin. Intensiv fototerapiya qon quyish zaruratini bartaraf qilishi mumkin. Masalan, fototerapiya (11–14 mVt/sm2) va qoniqarli formulalar yoki ona suti bilan oziqlantirish 513 mkmol/l yoki undan yuqori bilirubin kontsentratsiyasi bilan kasalxonaga yotqizilgan to‘rtta chaqaloqda 2–5 soat ichida sarum bilirubin kontsentratsiyasini 171 mkmol/l dan ko‘proqqa pasaytirdi. Biroq, bu chaqaloqlarning nevrologik holati o'rganilmagan, shuning uchun bu amaliyotning xavfsizligi haqida aniq hech narsa aytish mumkin emas. Hozirgi vaqtda ko'plab yangi tug'ilgan chaqaloqlar fototerapiya bilan optimal terapevtik diapazondan past dozalarda davolanadi, ammo bunday davolash xavfsizdir va uning samaradorligi nurlangan tana maydonini va yorug'lik nurlanishining intensivligini oshirish orqali yaxshilanishi mumkin.

Chaqaloqlarni fototerapiya bilan davolash uchun Yangi tug'ilgan chaqaloqlarning ko'zlari va o'g'il bolalarning jinsiy a'zolari himoyalangan bo'lsa, yorug'lik chiqaruvchining ostiga (iloji bo'lsa, kiyimsiz) qo'ying. Harorat va hidratsiya holati nazorat qilinadi. Agar suvsizlanishdan shubha qilingan bo'lsa, suyuqlik tomir ichiga yuboriladi. Boshqa hollarda, chaqaloq suyuqlikni faqat og'iz orqali oladi. Oilaviy tashriflar va ovqatlanish uchun fototerapiya bir-ikki soatga to'xtatilishi mumkin.

Fototerapiya vaqti chaqaloqning homiladorlik yoshi va sariqlikning sababi bilan belgilanadi. To'liq tug'ilgan chaqaloqlarda gemoliz bo'lmasa, Amerika Pediatriya Akademiyasi [2] ko'rsatmalariga muvofiq, chaqaloqning yoshiga qarab qon zardobidagi bilirubin kontsentratsiyasining ma'lum bir chegarasida davolanishi kerak:

1) tug'ilgandan keyin 25-48 soat ichida 257 mkmol/l; 2) tug'ilgandan keyin 49-72 soat ichida 308 mkmol/l;

3) 342 mkmol / L) tug'ilgandan keyin 72 soat yoki undan ko'proq.

Sarum bilirubin kontsentratsiyasi taxminan 68-86 mkmol/l ga kamayganida fototerapiya to'xtatilishi mumkin.

Almashinuv transfüzyonu og'ir neonatal sariqlikni davolashning birinchi muvaffaqiyatli usuli edi, ammo nashr etilgan ma'lumotlar qon almashinuvining ko'plab asoratlari, jumladan trombotsitopeniya, portal vena trombozi, nekrotizan enterokolit, elektrolitlar muvozanati va nekrotizan enterokolitni ko'rsatadi. Shunday qilib, intensiv fototerapiya samarasiz bo'lgan yoki qon zardobidagi bilirubin kontsentratsiyasining ko'tarilish tezligi 48 soat ichida konsentratsiya 428 mkmol / L ga etishi mumkinligini ko'rsatadigan gemolizli chaqaloqlarda qon almashinuvini ko'rib chiqish kerak. Fototerapiyadan foydalanishni optimallashtirish almashinuv transfüzyonuna bo'lgan ehtiyojni kamaytirishi mumkin. Farmakologik davolash usullari

Hozirgi kunda dunyoning aksariyat klinikalari neonatal sariqlikni davolash uchun dori vositalaridan foydalanishdan deyarli voz kechgan. Ma'lum bo'lishicha, ilgari qo'llanilgan ba'zi dorilar sariqlikni yoki asab tizimiga zarar etkazish xavfini oshiradi (askorbin kislotasi, albumin). Boshqalardan foydalanish foydasiz (xoleretik o'tlar, alloxol, B vitaminlari). Boshqalarning samaradorligi isbotlanmagan (smecta, faollashtirilgan uglerod). To'rtinchisi yangi tug'ilgan

chaqaloqlarda uzoq muddatli sinovdan o'tmagan (Carsil, Essentiale, Liv-52). Ba'zi shifoxonalar shunday deb ataladi "IV" - qisqa vaqt ichida yangi tug'ilgan chaqaloqning bosh venasiga katta hajmdagi suyuqlik kiritilganda. Juda suvli uk fiziologik emas va suyuqlikni tabiiy ravishda kiritishda hech qanday afzalliklarga ega emas. Bunday aralashuv xavfi har doim ham oqlanmaydi. Iloji bo'lsa, suyuqlikni og'iz orqali yuborish (oziqlantirish yoki qo'shimcha ichish bilan) afzalroqdir.

1960-yillarning o'rtalaridan boshlab. Fenobarbital bilirubinni bog'lash va chiqarish darajasini oshirish uchun ishlatilgan. Biroq, u darhol samarali ta'sir ko'rsatmaydi. Fenobarbital asab to'qimalarida bilirubinning oksidlovchi metabolizmini pasaytiradi, bu esa neyrotoksik ta'sir xavfini oshiradi.

Shunday qilib, patologik sariqlikning oldini olish uchun quyidagilar tavsiya etiladi:

aniqlash uchun to'liq tarix, xavf omillari to'g'risida ma'lumot; Sarum bilirubin testini o'tkazish, erta bosqichlarda qon quyqalari; gemostatikani istisno qilish uchun testlarni o'tkazish; yangi tug'ilgan chaqaloqlarda emizishni erta boshlash va suvsizlanishning oldini olish uchun ona suti yoki formulasi bilan tez-tez qo'shilishi.

Qon zardobidagi bilirubin kontsentratsiyasi potentsial neyrotoksik ta'sirning ko'rsatkichidir va chaqaloqning umumiy holatini hisobga olgan holda baholanishi kerak.

Natijalar. Chaqaloqlarda terisi sariqligi bilan 2024 yil davomi 182 murojat bo'lgan. Ulardan 107 chaqaloqga qonni biokimyoviy taxlili o'tkazilib, tez -tez uzoq emizish, quyosh nurlaridan to'g'ri foydalanish, vitamin D ichirish tavsiyalari berilib qayta taxlil qilinganda bilirubin miqdorini normalashuviga erishilgan.

Muhokama. 72 nafar chaqaloqda qonni biokimyoviy taxlilida bilirubinni umumiy miqdori 290 mkmol/l dan yuqori bo'lib, yuqoriligi brikmagan bilirubin hisobiga bo'lganligi sababli statsionar davo tavsiya etilgan. Asosiy davo fototerapiya va albatta oziqlanishi nazorat ostiga olindi. 3 nafar chaqaloqni sariqligi chaqaloqlar gemolitik kasalligi bilan bog'liq bo'lib, ular xam fototerapiya olishgan va qoniqarli xolatda uyiga javob berilgan.

Foydalanilgan adabiyotlar:

1. Горуайнова А.Н., Анцупова М.А., Захарова И.Н. Желтухи здорового новорожденного: причины, течение, прогноз. Медицинский совет №19, 2017. С.120-125.
2. Захарова И.Н., Горуайнова А.Н., Холодова И.Н., Майкова И.Д. и др. Дифференциальный диагноз желтух у детей раннего возраста. Медицинский совет №07, 2016. С. 56-65.
3. Alkharfy TM, Ba-Abbad R, Hadi A, Sobaih BH, AlFaleh KM. Total parenteral nutrition-associated cholestasis and risk factors in preterm infants. Saudi J Gastroenterol, 2014 Sep-Oct., 20 (5): 293–296.
4. Nelson Textbook of Pediatrics, 20th Edition. Edited by Kliegman RM, Stanton BF, St Geme JW, Schor NF. 2016. 3474 p.
5. Maruo Y, Yoriko Morioka Y, Fujito H et al. Bilirubin Uridine Diphosphate-Glucuronosyltransferase Variation Is a Genetic Basis of Breast Milk Jaundice. J Pediatr. 2014 July; 165(1): 36–41.e1. doi:10.1016/j.jpeds.2014.01.060.

6. Maruo Y, Morioka Y, Fujito H et al. Bilirubin Uridine Diphosphate-Glucuronosyltransferase Variation Is a Genetic Basis of Breast Milk Jaundice. J Pediatr, 2014 July, 165(1): 36–41.e1. doi:10.1016/j.jpeds.2014.01.060.
7. Memon N, Weinberger BI, Hegyi T and Aleksunes LM. Inherited Disorders of Bilirubin Clearance. Pediatr Res, 2016 March, 79(3): 378–386. doi:10.1038/pr.2015.247.
8. Muchowski KE. Evaluation and Treatment of Neonatal Hyperbilirubinemia. American Family Physician. 2014 Jun 1;89(11):873-8
9. Fujiwara R, Maruo Y, Chen S, Tukey RH. Role of extrahepatic UDP-glucuronosyltransferase 1A1: Advances in understanding breast milk-induced neonatal hyperbilirubinemia. Toxicol Appl Pharmacol, 2015 Nov 15, 289(1): 124-132.
10. Gartner LM. Breastfeeding and Jaundice. J Perinatol, 2001 Dec, 21(Suppl 1): S25-29, discussion S35-39.
11. Dani C, Pratesi S, Raimondi F et al. Italian guidelines for the management and treatment of neonatal cholestasis. Ital J Pediatr. 2015 Oct 1; 41: 69.
12. Guan YX, Chen Q, Wan SH et al. Effect of different time phases of radionuclide hepatobiliary scintigraphy on the differential diagnosis of congenital biliary atresia. Genet. Mol. Res. 14 (2): 3862-3868 (2015)

UO'K: [616.9+578.834]:616-092.6

O'TKIR RESPIRATOR DISTRESS SINDROMI: COVID-19 ASORATLARIGA YANGICHA YONDASHUVLAR

Sodiqova D.T.
Andijon davlat tibbiyot instituti

Annotatsiya

Ushbu maqolada COVID-19 koronavirus infeksiyasining etiologiyasi va patogenezini tushunishga zamonaviy yondashuvlar keltirilgan.

Patogenetik jarayonlarda asosiy rolni qon tomir membranalarining o'tkazuvchanligini oshirish o'ynaydi, bu virusning interstitsial o'pka to'qimalariga ta'siri tufayli ekssudativ reaktsiyalarni keltirib chiqaradi. Bu o'pka sirt faol moddasining yo'q qilinishiga, alveolalarning qulashiga, o'pkaning diffuziya qobiliyatining yomonlashishiga va o'tkir respirator distress sindromining rivojlanishiga olib keladi.

Ushbu infektsiya bilan limfotsitlarning o'pkaga faol emigratsiyasi va limfopeniya rivojlanishi kuzatiladi, bu esa o'z navbatida immunitetni zaiflashtiradi va bronxopulmoner tizimda opportunistik bakterial va zamburg' infektsiyalarining paydo bo'lishi uchun sharoit yaratadi.

Kalit so'zlar: o'tkir respirator distress sindrom, COVID-19, asorat

ACUTE RESPIRATORY DISTRESS SYNDROME: NEW APPROACHES TO TREATMENT OF COVID-19 COMPLICATIONS

Sadikova D.T.
Andijan State Medical Institute

Abstract

The article presents modern approaches to understanding the etiology and pathogenesis of coronavirus infection COVID-19.

The main role in pathogenetic processes is played by increased permeability of vascular membranes, which causes exudative reactions due to the effect of the virus on the interstitial tissue of the lungs. This leads to the destruction of pulmonary surfactant, collapse of the alveoli, deterioration of the diffusion capacity of the lungs and the development of acute respiratory distress syndrome.

With this infection, there is an active emigration of lymphocytes to the lungs and the development of lymphopenia, which in turn weakens the immune system and creates conditions for the emergence of opportunistic bacterial and fungal infections in the bronchopulmonary system.

Keywords: acute respiratory distress syndrome, COVID-19, complication

ОСТРЫЙ РЕСПИРАТОРНЫЙ ДИСТРЕСС-СИНДРОМ: НОВЫЕ ПОДХОДЫ ОСЛОЖНЕНИЙ COVID-19

Садыкова Д.Т.
Андижанский государственный медицинский институт

Аннотация

В статье представлены современные подходы к пониманию этиологии и патогенеза коронавирусной инфекции COVID-19.

Основную роль в патогенетических процессах играет повышение проницаемости сосудистых мембран, что обусловливает экссудативные реакции вследствие воздействия вируса на интерстициальную ткань легких. Это приводит к разрушению легочного сурфактанта, коллапсу альвеол, ухудшению диффузионной способности легких и развитию острого респираторного дистресс-синдрома.

При данной инфекции наблюдается активная эмиграция лимфоцитов в легкие и развитие лимфопении, что в свою очередь ослабляет иммунитет и создает условия для возникновения оппортунистических бактериальных и грибковых инфекций в бронхолегочной системе.

Ключевые слова: острый респираторный дистресс-синдром, COVID-19, осложнение

Tadqiqotning dolzarbligi. O'tkir respirator distress sindromi-(O'RDS) o'pka parenximasining o'tkir diffuz yallig'lanish zararlanishi bo'lib, u turli zarar yetkazuvchi omillarga xos bo'lmagan reaksiya sifatida rivojlanadi va o'pka to'qimasi strukturasining buzilishi va gazli o'pka to'qimalarining massasining pasayishi tufayli o'tkir nafas yetishmovchiligi (odn) shakllanishiga olib keladi.

COVID-19da O'RDSLARning namoyon bo'lishi ikki jarayonning, ya'ni virusli pnevmoniya va O'RDSLARning kombinatsiyasi sifatida qaralishi mumkin. SARS va MERS boshqa jiddiy koronavirus infeksiyalari bilan bir qatorda, COVID-19 ham global tahdid bo'lib qolmoqda, chunki bu viruslar oilasi immunitetga ega bo'lmagan populyatsiyalarni mutatsiyaga olib kelishi mumkin.

Hozirgi paytda, Jahon Sog'liqni saqlash tashkilotining rasmiy ma'lumotiga ko'ra, Xitoy xalq respublikasida koronavirusning yangi tipining epidemiyasi yuzaga kelgan[3].

Koronavirusli infeksiya (KVI)- o'tkir respirator kasallik bo'lib, u yuqori nafas yo'llarining yallig'lanishi va sust namoyon bo'ladigan umumiy zaharlanish belgilari bilan kechadigan kasallikdir. Koronavirus etiologiyali o'tkir respirator kasalliklar 5-10% holda uchraydi[2,5].

Koronavirus bo'yicha ekspertlar tavsiyasiga ko'ra, COVID-19'ning o'pkani qanchalik zararlagani kompyuter tomografiyasi orqali aniqlanadi. Tahlillar o'pka to'qimalarining buzilish darajasini aniq ko'rsatadi[4].

Italiyalik olimlar COVID-19'ni «tomirlar ichidagi tarqalgan koagulyatsiya (tromboz)» deb ta'kidlaydilar. Shuningdek, bu kasallikda qon quyuladi, quyulgan qon esa o'pkada kislorod bilan to'yina olmaydi, degan fikrni bildiradilar. COVID-19'da yuzaga keladigan qon reologiyasi buzilishi, intoksikatsiya tufayli yurak qon-tomir tizimi va boshqa organlarda tizimli o'zgarishlar kuzatilishini tekshiruvlar asosida tasdiqlaydilar[1].

COVID-19 bo'yicha ekspertlarning aniqlashicha, koronavirusdan sog'ayish davrida, kasallikning og'ir kechishidan so'ng fibroz o'zgarishlar o'pkada kuzatilib, o'pka faoliyatida nafas olish funksiyasi tiklanib, hansirash o'tib ketishi, jismoniy yuklamalarni bemor yaxshi ko'tara olishi kasallanish darajasiga bog'liq holda kechadi. Xastalik qay darajada tuzalganini faqat funksional tekshiruvlar, jumladan rentgen orqali aniq ko'rish mumkin[5].

Tadqiqot maqsadi: COVID-19 pandemiyasi sharoitida O'RDS diagnostikasi uchun klinik va laboratoriya mezonlarini patogenetik jihatdan asoslash va ishlab chiqish, turli xil nafas olishni qo'llab-quvvatlash imkoniyatlari yordamida O'RDS kompleks intensiv terapiyasining samaradorligi va sifatini oshirish.

Izlanish materiallari va usullari. Biz oldimizga qo'yilgan vazifani bajarish uchun COVID-19 ga chalingan va O'RDS shakllangan bemorlarning kasallik tarixi varaqalari va autopsiya protokolini retrospektiv ravishda o'rgandik.

Izlanish usuli – tibbiy hujjatlarni tahlil qilishning klinik va anamnestik usuli;

- COVID-19dan vafot etgan bemorlarning nafas olish organlarini o'rganishning anatomik usuli;

- gematoksilin va eozin bilan bo'yalgan bronxlar va o'pkalarni umumiy morfologik tekshirish;

- Van Gieson tomonidan biriktiruvchi to'qimani, mukopolisaxaridlarni chikish reaksiyasi bo'yicha, yelastik tolalarni Veygert bo'yicha, retikulyar tolalarni oyoq bo'yicha o'rganish uchun gistoximiyaviy usullarni amalga oshirish;

- G. G. Avtandilovning "nuqta hisoblash" usuli bilan o'pkaning tarkibiy qismlarini

morfometrik tadqiqotlar;

- olingan raqamli ma'lumotlarni statistik qayta ishlash.

Izlanish natijalari. Mamlakatimizning turli hududlarida 2020-2024 yillarda kattalar respirator distress sindromi bilan kasallanish darajasi pandemiya hisobiga 4,8 ta 0,9 – 7,5 ta 0,9 ta holatda 100,000 ta aholiga, 1000 ta bemorga esa yiliga anesteziologiya va klinik tibbiyot muassasalarining reanimatsiya bo'limlariga o'tkazilgan, ARDS chastotasi 22,7 ta 8,6% ga yetgan.

COVID-19 da o'pka va gaz almashinuvi o'zgarishlarining mexanik xususiyatlarining o'zgarish darajasi O'RDS og'irligiga bog'liq va o'pka kengayishining pasayishi (Clt), alveolyar-arterial kislorod gradienti (AAD02) va nafas olish indeksining (Pa02/Fi02) qiymatlari, shuningdek, o'pka ichidagi qon aylanishining (Qs/Qt) nisbati bilan aniqlanadi. O'RDSLARning asosiy klinik va instrumental belgilari quyidagi belgilardir: o'pka-torakal moslashuvining pasayishi (Clt less 0,9-0,6-0,4 ml / cmh20 / kg), barqaror gipoksemiya (Ra<50 mmhg. Fi02>0.6) da 20-30% dan ortiq QS/q qiymati oshishi va o'pkada diffuz parenximali infiltratlar va hokazolar

Asosiy kasallikdan qat'i nazar, O'RDSLARning shoshilinch tashxisi quyidagi mezonlar yordamida oqlanadi: 1) salbiy omillarining mavjudligi (sepsis, kombinatsiyalangan travma, shok, peritonit,-g–g – zotiljam, gestoz va boshqalar.), 2) CVDNING klinik ko'rinishi, 3) Pa02/Fi02 qiymatining 200 mmhg dan kam pasayishi. Ushbu sindrom bosqichlarining klinik tashxisi CPAP darajalariga qarab gaz almashinuvini (Sa02, Fi02, Aad02, Pa02/Fi02, 01) baholashga asoslangan/REER terapiyasi (<5 -> >10 cmn20), o'pka yekstensivligining yosh normasidan kamayish darajasi (5-9% ->10-15% -> 30-40% -> 45-60% -> 60% dan ortiq), rentgenologik o'zgarishlar (qon tomir naqshining oshishi -> kichik nuqtali soyalarning tarqalishi-"katta infiltratlar- > havo bronxografiyasi sindromi), trombohemorragik asoratlar va ko'p a'zoli yetishmovchilik sindromining klinik va laborator ko'rinishlari.

O'RDSLARni rivojlantirishda nafas olishni qo'llab-quvvatlashni yerta qo'llash quyidagi algoritm doirasida amalga oshirilishi kerak: CPAP (Bipap) -> CMV, prvc (Vt+F->pip (PPLAT, MAR)-> Peep (PEEPI) -i/Ye (PC-IRV)->Fi02), qoniqarli (Sa02>90%, Pa02>60 mmhg.) yoki fiziologik (Sa02>95%, Pa02>80 mmhg.) yetarli inotrop gemodinamik qo'llab-quvvatlash fonida muhim gemodinamik buzilishi holda ko'krak/ARDS bilan bemorlarning 86,4% da oksijenasyon. Yaxshilangan gaz almashinuvi bilan (Pa02>70 mmhg. Fi02< 0.4, Aad02<100 mmhg, QS/Qt<10%), o'pkaning mexanik xususiyatlarini tiklash va ushbu sindromning rentgenologik belgilarini regressiya qilish bilan simv, SIMV+PSV, ARDS (RDSV) va IMV/SIMV, SAVI -> CPAP protokollariga muvofiq ventilyatsiyani bekor qilish tavsiya etiladi.

Xulosa. Klinik vaziyatlarda, ko'krak bosqichlari yangi koronavirus pandemiyasi fonida O'RDS da gaz almashinuvi o'zgarishlar asosida tavsiflanadi, o'pka kengayish kamaytirish darajasi, o'pka rentgen nuri, trombogemorragik asoratlarni va bir necha organ yetishmovchiligi sindromi klinik va laboratoriya belgilari ko'rildi.

O'RDSli bemorlarni davolash samaradorligi intensiv terapiya hajmi, gaz almashinuvi buzilishining yuklamasi ortishi, o'pkaning mexanik xususiyatlarini, gemokoagulyatsiya tizimidagi o'zgarishlarni, asosiy va birgalikda patologiyaning klinik ko'rinishini va ularning dinamikasini hisobga olgan holda nafas olishni qo'llab-quvvatlash variantlarini tanlash bilan belgilanadi.

COVID-19 fonida O'RDSni erta tashxislash va intensiv terapiya fonida oqilona nafas olishni o'z vaqtida qo'llash ushbu asoratli bemorlarni davolash natijalarini yaxshilashi mumkin.

Foydalanilgan adabiyotlar:

1. Абатуров А.Е., Агафонова Е.А., Кривуша Е.Л., Никулина А.А. Патогенез COVID-19 // Здоровье ребенка. 2020. № 15(2). С. 133-144.
2. Баклаушев В.П., Кулемзин С.В., Горчаков А.А., Лесняк В.Н., Юсубалиева Г.М., Сотникова А.Г. COVID-19. Этиология, патогенез, диагностика и лечение // Клиническая практика. 2020. №11(1). С.7–20.
3. Контаров Н.А., Круглов И.В., Маркушин С.Г. Актуальные проблемы современной вирусологии: коллективная монография. Орехово-Зуево: Государственный гуманитарно-технологический университет, 2021. 204 с.
4. Цинзерлинг В.А., Вашукова М.А., Васильева М.В., Исаков А.Н., Луговская Н.А., Наркевич Т.А., Суханова Ю.В., Семенова Н.Ю., Гусев Д.А. Вопросы патоморфогенеза новой коронавирусной инфекции (COVID-19) // Журнал инфектологии. 2020. № 12(2). С. 5-11.
5. Wang K., Chen W., Zhang Z. CD147-spike protein is a novel route for SARS-CoV-2 infection to host cells // Signal Transduct Target Ther. 2020. no. 5(1). P. 283. Published 2020 Dec 4. DOI: 10.1038/s41392-020- 00426-x.

UO'K: 616.61-036.12-003.6 -073.43

JIGARNING SURUNKALI DIFFUZ KASALLIKLARIDA FIBROZ BOSQICHLARINI ANIQLASHDA 2D SWE ELASTOGRAFIYANI IMKONIYATLARI

Soipova G.G.
Tibbiyot xodimlarining kasbiy malakasini rivojlantirish markazi

Annotatsiya

Jigar fibrozining darajasini aniqlash uchun 120 nafar jigarning surunkali diffuz kasalliklari (JSDK) bo'lgan bemorlar o'rganildi. Ularga ikki o'lchamli siljish to'lqini elastografiyasi (2D SWE) qo'llanildi. Bemorlarning 55 nafari surunkali virusli gepatit C (SVGC) va 65 nafari jigarning noalkogol yog' kasalligi (JNYK) bilan og'rigan. Tadqiqot natijalari barcha bemorlar guruhida jigar biopsiyasining morfologik ma'lumotlari bilan taqqoslandi.Tadqiqotlar 2D SWE usulining SVGC uchun 90% va JNYK uchun 94% diagnostik aniqlikka ega ekanligini ko'rsatdi. Bu elastografiyani klinik gepatologiyada kengroq qo'llash imkonini beradi.

Kalit so'zlar: jigarning surunkali diffuz kasalliklari, 2D SWE rejimida elastografiya, surunkali virusli gepatit C

POSSIBILITIES OF 2D SWE ELASTOGRAPHY IN DETERMINING THE STAGES OF FIBROSIS IN CHRONIC DIFFUSE LIVER DISEASES

Soipova G.G.
Center for the Development of Professional Qualification of Medical Workers

Abstract

To determine the degree of liver fibrosis, 120 patients with chronic diffuse liver diseases (ChDLD) were examined. Two-dimensional displacement wave elastography (2D SWE) was applied to them. 55 patients suffered from chronic viral hepatitis C (CHCV) and 65 from non-alcoholic fatty liver disease (NAFLD). The results of the study were compared with the morphological data of liver biopsy in all groups of patients. The study showed that the 2D SWE method has a diagnostic accuracy of 90% for CVHC and 94% for NAFLD. This allows for wider application of elastography in clinical hepatology.

ВОЗМОЖНОСТИ 2D SWE ЭЛАСТОГРАФИИ В ОПРЕДЕЛЕНИИ СТАДИИ ФИБРОЗА ПРИ ХРОНИЧЕСКИХ ДИФФУЗНЫХ ЗАБОЛЕВАНИЯХ ПЕЧЕНИ

Соипова Г.Г.
Центр развития профессиональной квалификации
медицинских работников

Аннотация

Для определения степени фиброза печени были обследованы 120 больных с хроническими диффузными заболеваниями печени (ХДЗП). Для определения стадии фиброза печени у больных применяли двухмерную эластографию сдвиговой волны (2D SWE). 55 пациентов страдали хроническим вирусным гепатитом С (ХВГС) и 65 - неалкогольной жировой болезнью печени (НАЖБП). Результаты исследования были сопоставлены с морфологическими данными биопсии печени во всех группах больных. Исследования показали, что метод 2D SWE имеет диагностическую точность 90% при ХВГС и 94% при НАЖБП. Это дает возможность более широкого применения эластографии в клинической гепатологии.

Jigarning surunkali diffuz kasalliklari (JSDK) gepatologiyada jiddiy tibbiy-ijtimoiy muammo hisoblanadi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, dunyoda SDJK bilan qariyb 2 milliard kishi yashaydi va so'nggi 10 yilda o'lim darajasi ikki barobar oshgan. [1, 6]. Rivojlangan davlatlarda jigar fibrozining asosiy sabablariga alkogolli gepatit, JNYK va surunkali virusli gepatitlar kiradi. [3, 4]. Jigar fibrozini erta bosqichda aniqlash gepatosellyulyar karsinoma va sirrozni oldini olish uchun davolash imkonini beradi. Fibroz diagnostikasida jigar biopsiyasi "oltin standart" sifatida qolmoqda. Ammo ushbu invaziv protsedura qiyinchiliklar va asoratlar keltirib chiqarishi mumkinligi sababli, hozirda muqobil usul sifatida ultratovush elastografiyasi taklif qilinmoqda. Ushbu metod jigar parenximasining elastikligi va qattiqligini bevosita baholash imkonini beradi. [2]. Shu bilan birga, JSDK, xususan SVGC va JNYK holatlarida ikki o'lchamli siljish to'lqini elastografiyasining (2D SWE) diagnostik imkoniyatlari yetarlicha o'rganilmagan. [5].

Maqsad. Jigarning surunkali diffuz kasalliklari bo'lgan bemorlarda fibrozning turli bosqichlarini o'z vaqtida aniqlash uchun 2D SWE usulini qo'llash va umumiy diagnostik tizimga kiritish.

Materiallar va usullar. 2021–2023-yillar davomida 120 nafar SDJK bo'lgan bemor tekshirildi. Barcha bemorlar 2 guruhga ajratildi:

• 1-guruh: 55 nafar SVGS bemorlari;

• 2-guruh: 65 nafar JNYK bemorlari.

Tashxis morfologik tekshiruv asosida tasdiqlandi. Jigar biopsiyasi 2D SWE ultratovush elastografiasining imkoniyatlarini baholashda referent usul sifatida qo'llanildi.

Barcha bemorlarga klinik-laboratoriya tekshiruvlaridan keyin ultratovush tekshiruvi o'tkazildi:

1. Kulrang shkaladagi rejimida;
2. Doplerografiyada;
3. 2D SWE usuli bilan.

Tadqiqot ekspert sinfiga mansub ultratovush qurilmalari (Mindray Consona N9 va Toshiba Aplio 450) yordamida amalga oshirildi. Jigarning II, III, V, VI, VII va VIII segmentlari tekshirildi. Har bir qiziqish zonasi (Q-Box) uchun 2–6 sm chuqurlikda magistral tomirlarsiz hududlarda kamida 5 marta o'lchov o'tkazildi.

Natijalar kilopaskalda (kPa) yoki metr/son (m/s) ko'rsatkichlarda baholandi.

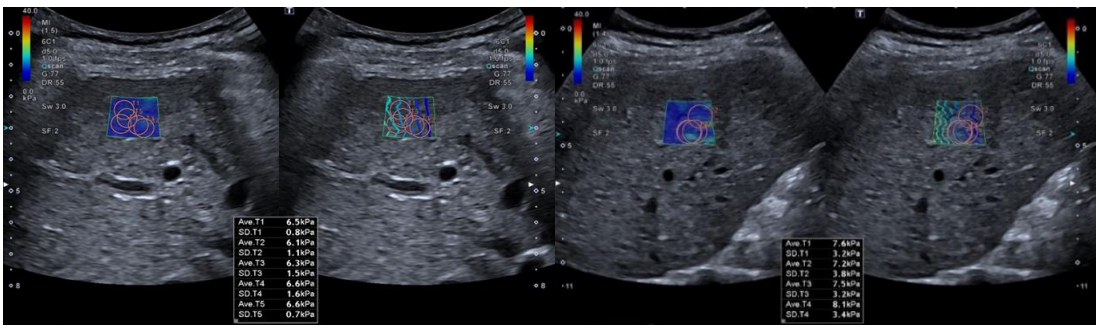
Natijalar. Birinchi guruhdagi bemorlarda tadqiqot natijalari shuni ko'rsatdiki:

• F1 (fibrozning birinchi bosqichi): 2D SWE 7,13 (7–7,26) kPa; to'lqin tezligi 1,3±0,2 m/s. (1-rasm)

• F2 (ikkinchi bosqich): 7,66 (7,5–7,83) kPa; tezlik 1,7±0,2 m/s. (2-rasm)

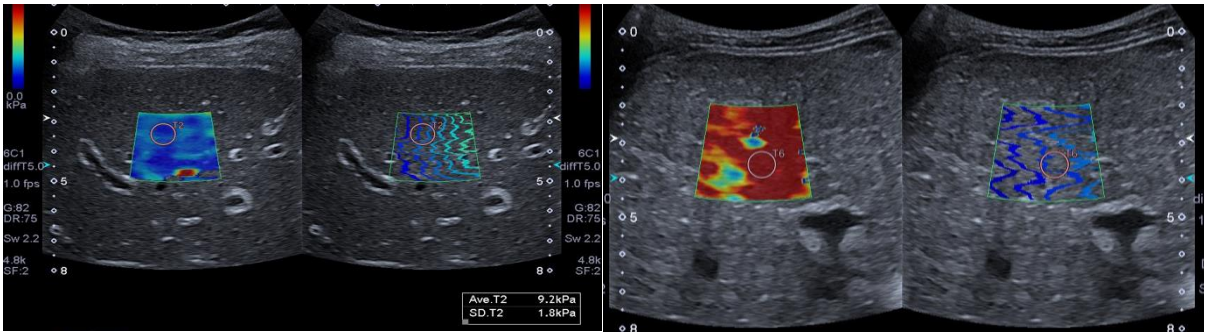
• F3 (uchinchi bosqich): 10,2 (9,94–10,47) kPa; tezlik 1,8±0,2 m/s. (3-rasm)

• F4 (to'rtinchi bosqich): 16,6 (15,02–18,2) kPa; tezlik 2,3±0,3 m/s. (4-rasm)



1-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 1-bosqich jigar fibrozi F1.

2-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 2-bosqich jigar fibrozi F2.



3-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 3-bosqich jigar fibrozi F3.

4-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 4-bosqich jigar fibrozi F4.

Birinchi gurux (JSDK) bemorlarining tekshiruv natijalari 1-jadvalda keltirilgan.

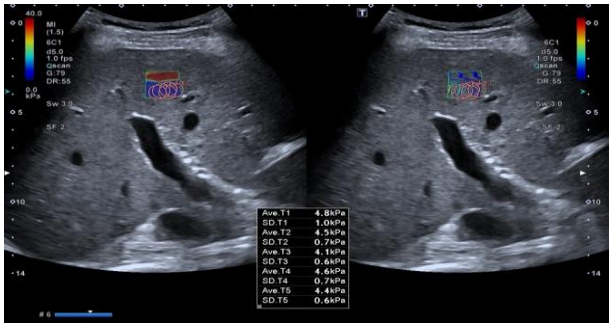
1-jadval

SVGC bilan kasallangan bemorlarning 2D SWE rejimidagi ultratovush va morfologik tekshiruvi ko'rsatkichlari (n=55)

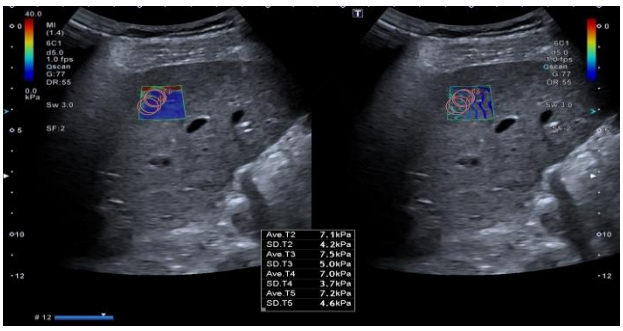
Morfologik tekshiruvi		2D SWE rejimidagi ultratovush elastografiya ko'rsatkichlari	
Fibrozning Metavir shkalasi bo'yicha bosqichlari	Morfologik tekshiruvida diagnoz tasdiqlangan bemorlar soni (n)	Jigar to'qimasini elastiklik koeffitsiyenti (kPa)	Ultratovush siljish to'lqinining tezligi (m/s)
F1	16	7,13±0,07	1,3±0,2
F2	18	7,66 ±0,08	1,7±0,2
F3	13	10,20±0,13	1,8±0,2
F4	8	16,61±0,75	2,3±0,3

Ikkinchi guruhdagi (AYJK) bemorlar uchun:

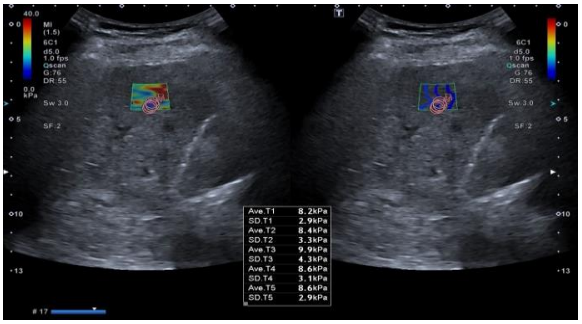
- Birinchi daraja: 4,7 (4,5–5,9) kPa; tezlik 0,82±0,2 m/s. (5-rasm)
- Ikkinchi daraja: 6,9 (6,3–7,9) kPa; tezlik 1,1±0,2 m/s. (6-rasm)
- Uchinchi daraja: 8,3 (8,1–13,5) kPa; tezlik 1,5±0,2 m/s. (7-rasm)



5-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 1-bosqich JNYK



6-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 2-bosqich JNYK



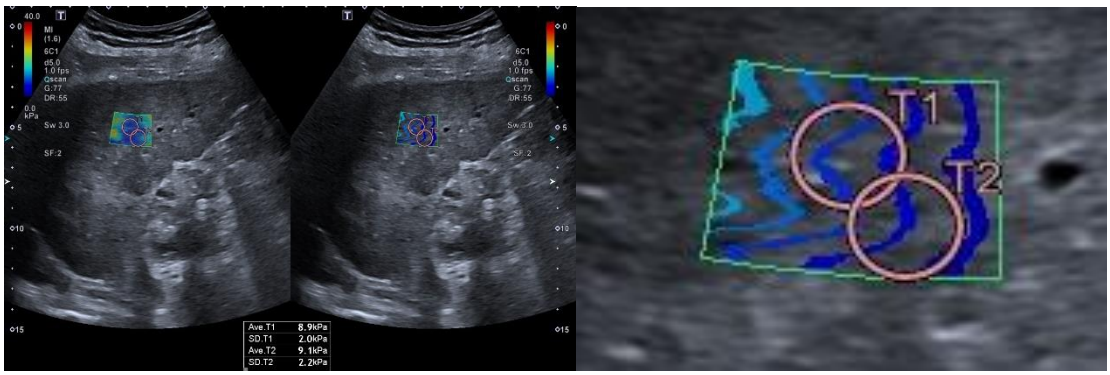
7-rasm jigar parenximasini 2D SWE rejimida ultratovush surati. 3-bosqich JNYK

2-jadval

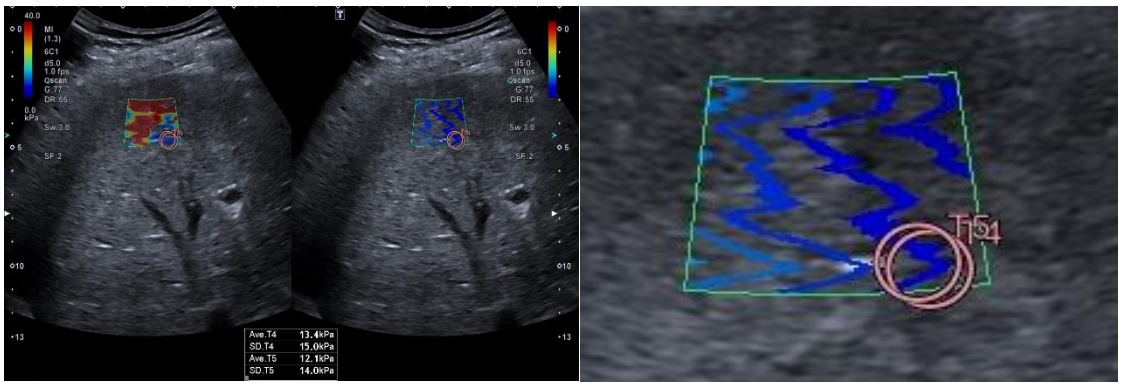
JNYK bilan kasallangan bemorlarning 2D SWE rejimidagi ultratovush va morfologik tekshiruvi ko'rsatkichlari (n=65)

Morfologik tekshiruvi		2D SWE rejimidagi ultratovush elastografiya ko'rsatkichlari	
Kasallik bosqichi	Morfologik tekshiruvida diagnoz tasdiqlangan bemorlar soni (n)	Jigar to'qimasini elastiklik koeffitsiyenti (kPa)	Ultratovush siljish to'lqinining tezligi (m/s)
1	25	4,7±0,06	0,82±0,2
2	32	6,9±0,07	1,1±0,2
3	8	8,3±0,11	1,5±0,2

Tekshirilgan bemorlarda 2D SWE "darchasi" rangining geterogenligi fibrozning F1, F2 bosqichi uchun xarakterli bo'lgan jigar parenximasidagi yallig'lanish va degenerativ o'zgarishlarning yaqqolligidan dalolat berdi; fibrozning keyingi rivojlanishida strukturaviy rangli tasvir zichligi/elastikligining 10,2-16,6 kPa dan ortiq oshish tendensiyasi bilan bir xil xarakterga ega bo'ldi. (8 va 9-rasmlar)



8-rasm. Jigar F3 fibrozi 3 bosqichidagi bemorda 2D SWE rejimida ultratovushli elastografiya, ajratilgan "oyna" tasvirini 3 baravar to'g'ridan-to'g'ri kattalashtirish



9-rasm. Jigar F4 fibrozi 4-bosqichidagi bemorda 2D SWE rejimidagi ultratovushli elastografiya, ajratilgan "oyna" tasvirini 3 baravar to'g'ridan-to'g'ri kattalashtirish.

Tadqiqot shuni ko'rsatdiki, fibrozning F3-F4 bosqichida jigar zichligi/elastikligining bir tekisda oshishi kuzatiladi, bu chuqurlik bo'ylab ultratovush energiyasining yutilishi bilan bog'liq. So'nggi yillarda paydo bo'lgan ultratovush to'lqinlarining yutilishini o'lchash usullari SVGC da fibrozning turli bosqichlarini aniqlashtiruvchi tashxis qo'yish imkoniyatlarini oshiradi. Birinchi guruhda elastometriya natijalari bo'yicha aniqlangan fibroz bosqichining jigar bioptatining morfologik tekshiruvi natijalari bilan mos kelishi tekshirilgan 55 bemordan 51 tasida kuzatildi. Ikkinchi guruhda esa 65 nafar bemordan 60 nafarida kuzatildi. Shunday qilib, usulning umumiy diagnostik aniqligi 90,4% ni tashkil etdi. Birinchi guruh natijalarining ROC tahlili shuni ko'rsatdiki, fibroz bosqichini aniqlashda siljish to'lqinli elastografiya usulining diagnostik samaradorligi (Metavir bo'yicha) F3 – 10,2 kPa (sezuvchanlik – 93%, o'ziga xoslik – 72%, AUROC – 0,885±0,040 va diagnostik aniqlik – 90%) uchun eng optimal bo'lib chiqdi. Ikkinchi guruh ROC-tahlili ma'lumotlari JNYKning ikkinchi bosqichidan boshlab 2D SWE sezuvchanligi, o'ziga xosligi va diagnostik aniqligi oshganligini ko'rsatdi (sezuvchanlik - 93%, o'ziga xoslik - 75% AUROC - 0,999±0,075 va diagnostik aniqlik - 94%).

Xulosalar. 2D SWE rejimida jigar multisegmentar ultratovushli elastometriyasining roli shundan iboratki, u noinvaziv, yuqori ma'lumotga ega va turli xil jigar diffuz kasalliklarida jigar parenximasining elastikligi/qattiqligini sifat va miqdoriy jihatdan tahlil qilish imkonini beradi. Ajratilgan "oyna" 2D SWE tasvirini 2 baravardan ortiq to'g'ridan to'g'ri kattalashtirish usulini taklif qilish o'zgarishlarni vizual baholash sifatini yaxshilashga yordam beradi. Ushbu usul jigarning o'rganilayotgan sohasidagi siljish to'lqinlarini yaxshiroq ko'rish va baholash imkonini beradi.

2D SWE ultratovush usuli turli xil jigar diffuz kasalliklarida elastometriyaning yangi statistik ishonchli mezonlarini olishga imkon beradi va tashxisni morfologik tekshirish uchun biopsiya o'tkazishning iloji bo'lmagan taqdirda jigarning diffuz va o'choqli kasalliklari tabiatini aniqlashga imkon beradi, bu esa o'z navbatida bemorlarning hayot sifatini yaxshilaydi va ushbu diagnostika bosqichining invazivlik darajasini pasaytiradi.

Foydalanilgan adabiyotlar:

1. Borsukov A.V., Morozova T.G., Mamoshin A.V., Alyanov A.L., Snimshchikova I.A., Abdulkarimova Kh.A. Multiparametric elastography of the liver: modern prospects in the algorithm for diagnosing diffuse liver diseases // Bulletin of new medical technologies, 2022, T. 26 No. 2, p. 69-81. (in Russ.)

2. Zhirkov I.I., Gordienko A.V., Pavlovich I.M., Yakovlev V.V., Serdyukov D.Yu. Elastography in the diagnosis of fibrosis in chronic diffuse liver diseases // Bulletin of the Russian Military Medical Academy, 2021, No. 4 (72), p. 192-195 (in Russ.)
3. Serkova M.Yu., Skvortsova T.E., Bakulin I.G. Diagnostic capabilities of the elastography and steatometry method in patients with chronic diffuse liver diseases // Medical Bulletin of the Ministry of Internal Affairs, 2023, No. 3, p. 50-55 (in Russ.)
4. Shirokova E.N., Pavlov Ch.S., Karaseva A.D. Elastography in the diagnosis of non-alcoholic fatty liver disease //Annals of the Russian Academy of Medical Sciences. M. 2021; 74(1) pp.5–13. (in Russ.)
5. Bavu E, Gennisson JL, Couade M, Bercoff J, Mallet V, Fink M, et al. Noninvasive in vivo liver fibrosis evaluation using supersonic shear imaging: a clinical study on 113 hepatitis C virus patients. Ultrasound Med Biol 2023, 37:1361-1373.
6. Fazel Y, Koenig AB, Sayiner M, et al. Epidemiology and natural history of non-alcoholic fatty liver disease // Metabolism. – 2022. - №65. – P. 1017–10

UDC: 616-089

TREATMENT AND PREVENTION OF NEGATIVE PERSONALITY DISORDERS IN SCHIZOPHRENIA

Soliev D.M., Mirzaev A.A., Makhmudova H.H.
Andijan State Medical Institute

Abstract

The theoretical aspects of the problem of negative disorders in the pathology of endogenous processes are an urgent scientific task. If the defect in progressive schizophrenia has been studied sufficiently, then the structure of deficiency disorders in diseases of the schizophrenic spectrum requires further study.

This paper presents an opinion on the features of the negative syndrome, its occurrence and rejection, which is considered the main symptom in schizophrenia.

Keywords: negative symptoms, schizophrenia, disorders, progressive form

SHIZOFRENIYADAGI KASALLIKLARNING SALBIY BUZILISHLARINI DAVOLASH VA OLDINI OLISH

Soliev D.M., Mirzaev A.A., Mahmudova X.X.
Андижон давлат тиббиёт институти

Annotatsiya

Endogen jarayonlar patologiyasida salbiy buzilishlar muammosining nazariy jihatlari dolzarb ilmiy vazifadir. Agar progressiv shizofreniyadagi nuqson etarlicha o'rganilgan bo'lsa, unda shizofreniya spektri kasalliklarida etishmovchilik buzilishlarining tuzilishi qo'shimcha o'rganishni talab qiladi.

Ushbu maqolada shizofreniyada asosiy simptomatologiya deb hisoblanadigan salbiy sindromning xususiyatlari, uning paydo bo'lishi va rad etilishi haqida fikr bildirilgan.

Kalit so'zlar: salbiy alomatlar, shizofreniya, buzilishlar, progressiv shakl

ЛЕЧЕНИЕ И ПРОФИЛАКТИКА НЕГАТИВНЫХ РАССТРОЙСТВ ЛИЧНОСТИ ПРИ ШИЗОФРЕНИИ

Солиев Д.М., Мирзаев А.А., Махмудова Хуршида Хамидулло кизи
Андижанский государственный медицинский институт

Аннотация

Теоретические аспекты проблемы негативных нарушений при патологии эндогенных процессов являются актуальной научной задачей. Если дефект при прогрессирующей шизофрении изучен в достаточной степени, то структура дефицитарных расстройств при заболеваниях шизофренического спектра требует дальнейшего изучения.

В данной работе представлено мнение об особенностях негативного синдрома, его возникновении и отвержении, который считается основной симптоматикой при шизофрении.

Ключевые слова: негативные симптомы, шизофрения, расстройства, прогредиентная форма

Relevance. Justification: theoretical aspects of the problem of negative disorders in endogenous-processual pathology are an urgent research task [1,3,4]. If the defect in progressive schizophrenia has been studied to a large extent, then the structure of deficit disorders in schizophrenia spectrum diseases requires further study [2,5].

Research objective. To conduct a conceptual analysis of negative disorders in schizophrenia and schizophrenia spectrum diseases.

Research results. The results of the study indicate that such distribution is not accidental,

but is subject to the dichotomy of the basic symptoms of "general syndromes". Although, in accordance with the psychometric assessment, the structure of each of the considered general syndromes includes both a volitional defect - abulia / abulia with the phenomenon of dependence, and an emotional defect, i.e. both components reflecting the dichotomous structure of the schizophrenic defect, the distribution of these patterns of negative disorders in the clinical space of general syndromes is uneven.

The general structure of deficit changes by the type of volitional defect, extrapolated to all the syndromes of the defensive pole representing it, is characterized by a gross decrease in psychophysical endurance (with overlapping volitional disorders with asthenic symptoms) and/or volitional regulation of mental activity (apathy-abulia according to SANS - 4.3±0.7 points; volitional disorders according to PANSS - 5.1±0.3 points; asthenia according to MFI-20 - 77±15.3 points), with an increase in passivity, subordination and indecision, the addition of features of asthenic autism and dependence on a narrow circle of significant others (decreased sociability according to PANSS - 3.5±0.5 points; absence of close friends according to SPQ-A - 5.6±0.4 points; relationships with colleagues and loved ones according to SANS - 3.2±0.2 points; excessive social anxiety according to SPQ-A — 6.2±1.3 points; passive social isolation according to PANSS — 5.2±0.4 points; interpersonal anxiety according to SCL-90-R — 1.5±0.3 points; $p \leq 0.01$).

Emotional disorders in this group are expressed to an insignificant degree and reflect the impoverishment of the general level of social activity (associated primarily with asthenic symptoms, sharply exacerbated reflexive mechanisms, as well as the tendency of patients to form sensitive ideas of relationship) and a narrowing of the range of emotional attachments to the boundaries of symbiotic relationships with relatives or spouses (anhedonia-asociality according to SANS — 3.0±0.2 points, flattened affect according to SPQ-A — 3.7±0.4 points).

The structure of deficit changes, which is common to all “general syndromes” of the expansive pole (with a picture of an emotional type of defect), differs on a statistically significant basis (in contrast to deficit disorders of the volitional type) by the preservation of the general psychophysical pressure, in which the phenomena of reduction of the energy potential are manifested not by a decrease in the level of mental energy, but by its distortion in the form of chaotic activity that has lost its purposefulness and volitional control.

This is especially obvious when comparing the characteristics of the labor status of patients with the indicators of the scales of apathoabulic changes (apathy-abulia according to SANS - 3.6 ± 0.3 points; volitional disorders according to PANSS - 2.7 ± 1.2 points; asthenia according to MFI-20 - 25 ± 11.2 points). The general negative disorders of the emotional type for the whole group are characterized by pronounced changes in emotionality itself (anhedonia-asociality according to SANS - 4.3 ± 0.2 points, flattened affect according to SPQ-A - 6.8 ± 0.4 points), manifested by its gross impoverishment with the formation of features of regressive syntony, loss of the ability to empathize and form deep emotional attachments, pathological exacerbation of the features of rationalism, egocentrism and pragmatism (lack of close friends according to SPQ-A - 8.3 ± 0.4 points; decreased sociability according to PANSS - 5.1 ± 1.2 points; relationships with colleagues and loved ones according to SANS - 4.5 ± 0.3 points; eccentric behavior according to SPQ-A - 5.7 ± 1.8 points; excessive social anxiety (SPQ-A) - 0.9±0.2 points; interpersonal anxiety according to SCL-90 — 0.2±0.5 points; hostility according to SCL-90 — 1.9±0.3 points).

It has been established that psychopathological manifestations of the defect in

schizophrenia spectrum disorders are represented by deficit symptom complexes of the psychopathic register (psychopathic-like disorders), are of a limited (circumscript) nature, have a monosyndromic structure, are detected already at the level of prodromal disorders and are associated with premorbid pathocharacterological dimensions.

Conclusion. Thus, psychopathic-like symptom complexes appearing in the space of "general syndromes" can be qualified as secondary in relation to basic deficit disorders.

Used literature:

1. Bukov Yu.A., Minina E.N. Comparative characteristics of the adaptive reserves of the respiratory system of 19-20 year old girls with different levels of physical performance // Scientific notes of the Tavrichesky National University named after V.I. Vernadsky. Series "Biology, Chemistry". - 2011. - Vol. 24 (63); No. 4. - P. 24-35.
2. Dvoretsky L.I., Zaspa E.A. Iron deficiency anemia in the practice of an obstetrician-gynecologist // Russian Medical Journal. - 2008. - No. 29. - P. 1898.
3. Serov V.N., Shapovalenko S.A., Flaks G.A. Diagnostics and treatment of iron deficiency conditions in women at different periods of life // Atmosphere. Cardiology. – 2008. – No. 2.- P. 17–20.
4. Heim C., Wagner D., Maloney E. et al. Early adverse experience and risk for chronic fatigue syndrome: results from a population-based study // Archives of general psychiatry. – 2006. – Vol. 63 (11). – P. 1258–1266.
5. Strai S.K., Bomford A., McArdle H.I. Iron transport across cell membranes: molecularuderstanding of duodenal and placental iron uptake. Best Practise& Research // Clin. Haem. – 2002. – Vol. 15; № 2. – P. 243–259.
6. Reveiz L.G., Gyte M.L., Cuervo L.G., Casasbuenas A. Treatments for iron-deficiency anaemia in pregnancy // Published Online: 5 Oct, 2011. – http: // link.springer.com / article /10.1007/ s 00484–014–0925–2.

UO'K: 616.089

SURUNKALI POLIPOZLI ETMOIDIT KECHISHINING XUSUSIYATLARI

Tojiboev A.A.
Andijon davlat tibbiyot instituti

Annotatsiya

G'alvirsimon bo'shliq yallig'lanish kasalliklari orasida polipoz etmoidit zamonaviy rinologiyaning eng dolzarb muammolaridan biridir. So'nggi yillarda g'alvirsimon bo'shliqning patologiyasi tarkibida ushbu kasallikning o'ziga xos og'irligi oshdi. Bu ekologik vaziyatning o'zgarishi, bakterial, virusli va kasbiy patogen omillar sonining ko'payishi bilan bog'liq.

Kalit so'zlar: polipozli etmoidit, immun tizimi, yallig'lanish kasalliklari

FEATURES OF LATE CHRONIC POLYPOUS ETHMOIDITIS

Tajiboev A.A.
Andijan State Medical Institute

Abstract

Among inflammatory diseases of the oral cavity, polypous ethmoiditis is one of the most pressing problems of modern rhinology. In recent years, the specific severity of this disease has increased in the structure of acetabulum pathology. This is due to changes in the environmental situation, an increase in the number of bacterial, viral and occupational pathogenic factors.

Key words: polypous ethmoiditis, immune system, inflammatory diseases

ОСОБЕННОСТИ ПОЗДНЕГО ХРОНИЧЕСКОГО ПОЛИПОЗНОГО ЭТМОИДИТА

Тажибоев А.А.
Андижанский государственный медицинский институт

Аннотация

Среди воспалительных заболеваний полости рта полипозный этмоидит-одна из самых актуальных проблем современной ринологии. В последние годы в структуре патологии вертлужной впадины возросла удельная тяжесть этого заболевания. Это связано с изменением экологической обстановки, увеличением количества бактериальных, вирусных и профессиональных патогенных факторов.

Ключевые слова: полипозный этмоидит, иммунная система, воспалительные заболевания

Dolzarbligi. Hozirgi bosqichda tibbiy mikrobiologiyada surunkali yallig'lanish kasalliklarida yuzaga keladigan jarayonlar qayta ko'rib chiqiladi. Bakterial biyofilmlarning shakllanishi – mikroorganizmlarning doimiy shakllarini shakllantirish, shu jumladan, yuqumli jarayonning rivojlanish mexanizmlarini o'rganish maxsus biologik hodisaning mavjudligini hisobga olmaydi [2, 6, 9, 11].

Biyofilmlarga qarshi antimikrobiyal peptidlar faoliyatini o'rganishga qaratilgan bir necha tadqiqotlar shuni ko'rsatdiki, biofilmning tuzilishiga kiritilgan mikrobial hujayralar laktoferrin kabi plankton hujayralariga qaraganda antibakterial preparatlarning ma'lum peptidlariga nisbatan kamroq sezgir. Surunkali rinosinusitning rivojlanishida rol o'ynashi haqida juda oz narsa ma'lum [5, 7, 8].

Ushbu masalalarni o'rganish otorinolaringologlar uchun juda muhimdir. Ushbu xususiyatlarni bilish asosida ishtirok etuvchi shifokor har bir alohida holatda individual yondashu-

vni topishi, etmoiditning rivojlanishining asosiy patogenetik yo'nalishlariga asoslangan eng munosib davolash usullarini tanlashi kerak [1, 4, 6, 8].

Tadqiqotning maqsadi. Surunkali bakterial va polipozli etmoiditning klinik xususiyatlarini o'rganish.

Tadqiqot materiallari va usullari. Polipozli etmoiditli 869 bemorda miya kompyuterini o'rganish natijalarini tahlil qilish asosida, ko'p hollarda (64,3%) panjara labirinti hujayralariga ta'sir ko'rsatdi.

Tadqiqot natijalari. Oldingi etmoidit eng keng tarqalgan (115 yoki 43%) bilan bizning ishda, suyak to'rtburchaklar, bir shakli, ikkinchi chastota (77 yoki 28,8%) edi - tashqi devorlar bilan nosimmetrik shakli, orbital bo'shlig'iga egilgan.

Orqa etmoidit bilan eng keng tarqalgan (20 yoki 52,6%) -to'rtburchak shakli. Orbitalar bo'shlig'iga o'ralgan tashqi devorlar bilan nosimmetrik shakl va konkav qog'oz plitalari bilan nosimmetrik shakl tez-tez (9 yoki 23,7%) kuzatildi. Etmoiditning" mozaik " shaklida eng tez-tez uchraydigan (70 yoki 36,9%) orbitalar bo'shlig'iga o'ralgan tashqi devorlar bilan nosimmetrik shakl edi. Izolyatsiya qilingan etmoidit bilan strukturaning barcha shakllari teng darajada tez-tez uchraydi (25 yoki 20%). Tadqiqot shuni ko'rsatdiki, qafas labirinti hujayralarining umumiy zararlanishi deyarli teng darajada keng tarqalgan to'rtburchaklar shakli (14 yoki 36%) va orbitalar bo'shlig'iga (16 yoki 41%) o'ralgan tashqi devorlar bilan nosimmetrik shakl.

Turli lokalizatsiyadagi etmoidit bilan panjara labirintining strukturasini tahlil qilishda quyidagi natijalar olingan: oldingi va orqa etmoidit bilan, birinchi darajali septumlar suyak strukturasida ustunlik qiladi va shu bilan katta hajmdagi va muntazam shakldagi hujayralarni hosil qiladi - 77,5% va 76,5%. Etmoiditning "mozaik" shaklida, jarayon odatda kichik hujayralarda Lokalize qilinadi va 2 va 3 tartibidagi septumlar grid labirinti tarkibida 77,8% tartibsizlik shaklidagi hujayralarni hosil qiladi.

Biz hujayralarning bunday xarakterli shakli (kichik, tartibsiz shakli) va yallig'lanish jarayonining shakllanishi tufayli "mozaik"bo'lishi mumkinligini taxmin qilamiz. Ya'ni. lattaga labirint hujayralarining tuzilishining o'ziga xos xususiyatlari to'g'ridan-to'g'ri yallig'lanish jarayonining tabiati va darajasiga bog'liq bo'lishi mumkin. Shunday qilib, etmoidit sinusitning eng keng tarqalgan shakli bo'lib, yallig'lanish jarayonida paranasal sinuslarning qolgan qismini o'z ichiga oladi. Etmoiditning rivojlanish ehtimoli panjara labirintining anatomik tuzilishiga bog'liq.

Xulosa. Tadqiqot davomida olingan ma'lumotlar diagnostika strategiyasini aniqlash va ushbu patologiyaga ega bemorlarni boshqarish usullarini tanlash uchun otorinolaringologning amaliyotida qo'llanilishi mumkin.

Ikki tomonlama etmoidit paydo bo'lganda, yallig'lanish jarayoni ko'pincha maxillarar sinusda uchraydi, so'ngra Kama shaklidagi va frontal sinuslarda chastotani kamaytirish maqsadida.

Katta hujayralar va septumlar 1 tartib oshiqni bilan panjara labirent tuzilishi bir to'rtburchaklar shaklida huzurida eng tez-tez "mozaik" etmoidit sodir septumlar 2 va 3 tartib bilan panjara suyak tarkibida kichik hujayralar ustunlik esa, old yoki orqa etmoidit rivojlantirish ehtimoli ko'proq bo'ladi.

Foydalanilgan adabiyotlar:

1. Иванов В.П., Мезенцева О.Ю., Воробьева А.А. Генетические аспекты этиопатогенеза хронического риносинусита // Российская ринология. - 2012. - №3.-с . 31-35 .

2. Мохсен Я.С., Беляев А.Н., Козлов С.А., Байтяков В.В. Патогенетическая коррекция эндотоксикоза при полипозном риносинусите // Международный журнал прикладных и фундаментальных исследований 2010.-№1.- С.11.
3. Оториноларингология : учеб. пособие / П. А. Тимошенко [и др.] ; под ред. П. А. Тимошенко. Минск : Вышэйшая школа, 2014. 432 с.
4. Пискунов И.О., Мезенцева О.Ю., Воробьева А.А. Клинические особенности этмоидита в зависимости от анатомического строения решетчатого лабиринта // Российская ринология. Мат. IX Конгресса Российского общества ринологов (27-29 июня 2012г.) - 2012. - №2. - с. 19.
5. Рязанцев С.В. Современные взгляды на терапию полипозных риносинуситов. Медицинский альманах.-2008.- №3.- С. 43-45.
6. Miszke A., Sanakowska E. Otolaryngol Pol 1995; 49: 3: 225-230.
7. Ohkawara Y., Lim K.G., Xing X., Nakano K., Dolovich J., Jordana M. J Clin Invest 1996; 97: 7: 1761-1766.
8. Pimental J.C. Acta Med Port 1995; 8: 6: 379-384.
9. Schultze-Werninghaus G. Pneumologie 1994; 48: 2: 99-102.
10. Shatkin J.S-., Delsupehe K.G., Thisted R.A., Corey J.P. Otolaringol Head Neck Surg 1994; 111: 5: 553-556.
11. Wardlaw A.J., Symon F.S., Walsh G.M. J Allergy Clin Immunol 1994; 94: 6: 1163-1171.

UO'K: 616.348-007.61-089.819

BOLALARDAGI GIRSHPRUNG KASALLIGINING DAVOLASHDAGI O'ZIGA XOS TARIXI (ADABIYOTLAR SHARXI)

Toshmatov X.Z.[1]., Oldashev M.M.[2]
Andijon davlat tibbiyot instituti
Andijon viloyat bolalar ko'p tarmoqli tibbiyot markazi

Annotatsiya

Girshsprung kasalligi bilan og'rigan yangi tug'ilgan chaqaloqlarga reanimatsiya va reabilitatsiya yordamini ko'rsatishning yaxshilanishi aganglionozli bemorlar orasida eng og'ir kontingentni tashkil etuvchi yo'g'on ichakning umumiy zararlanishi bilan og'rigan bemorlar sonining ko'payishiga olib keldi. Yagona diagnostika va davolash standartlari mavjud emas, bu esa ko'plab ilg'or holatlarga, asossiz va mantiqsiz jarrohlik aralashuvlarga va o'ta o`g`ir oqibatlarga olib keladi. Bugungi kunga qadar mamlakatimizda total aganglionozni (TA) jarrohlik yo'li bilan davolashning u yoki bu usulining maqsadga muvofiqligi isbotlanmagan va ularning uzoq muddatli natijalari kuzatilmagan.

Kalit so'zlar: Girshsprung kasalligi, aganglionoz, davolash, bolalar

CHARACTERISTIC HISTORY OF TREATMENT OF HIRSHSPRING'S DISEASE IN CHILDREN (LITERATURE REVIEW)

Toshmatov Kh.Z.[1]., Oldashev M.M.[2]
Andijan State Medical Institute
Andijan Regional Children's Multidisciplinary Medical Center

Abstract

Improvement of resuscitation and rehabilitation care for newborns with Hirschsprung's disease has led to an increase in the number of patients with total colon damage, who constitute the most severe contingent among patients with aganglionosis. There are no uniform diagnostic and treatment canons, which leads to a large number of advanced cases, unjustified and irrational surgical interventions and extremely unfavorable outcomes. Until now, in our country, the feasibility of this or that method of surgical treatment of total aganglionosis (TA) has not been substantiated and their long-term results have not been tracked.

Keywords: Hirschsprung's disease, aganglionosis, treatment, children

ХАРАКТЕРНАЯ ИСТОРИЯ ЛЕЧЕНИЯ БОЛЕЗНИ ГИРШПРИНГА У ДЕТЕЙ (ОБЗОР ЛИТЕРАТУРЫ)

Тошматов Х.З.[1], Олдашев М.М.[2]
Андижанский государственный медицинский институт
Андижанский областной детский многопрофильный медицинский центр

Аннотация

Улучшение оказания реанимационной и реабилитационной помощи новорожденным с болезнь Гиршпрунга, привело к росту количества больных с тотальным поражением толстой кишки, которые составляют наиболее тяжелый контингент среди больных с аганглиозом. Отсутствуют единые каноны диагностики и лечения, что приводит к большому количеству запущенных случаев, неоправданных и нерациональных хирургических вмешательств и крайне неблагоприятным исходам. До настоящего времени, в нашей стране не обоснована целесообразность того или иного метода хирургического лечения тотального аганглиоза (ТА) и не прослежены их отдаленные результаты.

Ключевые слова: болезнь Гиршпрунга, аганглиоз, лечение, дети

Dolzarbligi. Girshsprung kasalligi (GK) bolalarda qorin bo'shlig'i organlarining eng og'ir tug'ma nuqsonlaridan biri bo'lib qolmoqda, bu murakkab rekonstruktiv jarrohlik aralashuvlarni talab qiladi. Ushbu kasallikning asosiy klinik shakli o'zini doimiy ich qotishi sifatida namoyon qiladi, ammo hozirgi kunga qadar ikkinchisining keng tarqalganligi (o'rtacha 1 yoshgacha bo'lgan bolalarning taxminan 20% va 1 yoshdan oshgan bolalarning 25% gacha ich qotishidan), ichak aganglionozining turli shakllarini o'z vaqtida tashxislash va davolashning dolzarbligini aniqlaydi. Diagnostika usullarining rivojlanishi va birlamchi tibbiy yordam shifokorlarining "hushyorligi" oshishi tufayli so'nggi yillarda yo'g'on ichakning organik patologiyasini aniqlash sezilarli darajada oshdi. Birgina mamlakatimizda har yili 100 dan ortiq bolalar ushbu kasallik bilan bog'liq turli xil jarrohlik aralashuvlardan o'tadilar. Bolalar jarrohlari orasida Girshsprung kasalligi keng tarqalgan tan olinishiga qaramay, u asoratlar, relapslar va o'limning yuqori chastotasini keltirib chiqaradigan rivojlanish nuqsoni bo'lib qolmoqda (Amerika pediatriya assotsiatsiyasiga ko'ra 1%)[1, 2, 6].

Girshsprung kasalligi bilan og'rigan bolalarni davolashda katta tajribaga ega bo'lgan yirik ixtisoslashtirilgan shifoxonalarning ma'lumotlariga ko'ra, asoratlarning umumiy chastotasi 22,7% dan 38,5% gacha. Assortimenti keng bo'lishiga qaramay, mamlakatimizda jarrohlik asoratlari bilan og'rigan va rekonstruktiv aralashuvni talab qiladigan GK bilan kasallangan bemorlarni jamlaydigan bir nechta klinikalar mavjud. Bu Girshsprung kasalligi uchun jarrohlik aralashuvlar natijalari, uning mumkin bo'lgan asoratlari va ularni davolash taktikasi haqida umumiy ma'lumotlarning etishmasligi bilan bog'liq. Ko'p sonli adabiyot manbalarini ko'rib chiqqanimizdan so'ng, biz takroriy jarrohlik aralashuvlar zarurligi haqida hech qanday ma'lumot topa olmadik. Ko'pgina mualliflar buni takroriy operatsiyalar boshqa muassasalarda amalga oshirilishi bilan izohlashadi. Biroq, bemorlarning umumiy soni orasida yirik klinikalarda takroriy aralashuvlar chastotasi 26-29% ga etadi, bu ularga bo'lgan ehtiyojning nihoyatda yuqori ekanligini va birlamchi davolanishning etarli emasligini ko'rsatadi.

1948-yilda O.Swenson va A.N.Bill nafaqat Girshprung kasalligi patogenezini isbotladilar, balki uni davolash taktikasini ham taklif etdilar. Bu taktika kolostoma qo'yish va keyinchalik radikal jarrohlik amaliyotini o'tkazishdan iborat edi. Jarrohlik amaliyotining mohiyati anal rezeksiyani qorin-oraliq usuli bilan qorin bo'shlig'idan tashqari anastomoz qo'yish bilan amalga oshirishdan iborat edi. O.Swensonning o'zi ta'kidlaganidek, u operatsiya texnikasini H.W.Maunsell (1892) va R.F.Weir (1901) dan o'zlashtirgan. Operatsiyaning mohiyati shundan iboratki, yo'g'on ichakning toraygan qismini rezeksiya qilish qorin-oraliq usuli bilan qorin bo'shlig'idan tashqari anastomoz qo'yish orqali amalga oshiriladi. Ushbu usul dastlab hayvonlar ustida o'tkazilgan tajribada ishlab chiqildi, so'ngra Girshprung kasalligi bilan og'rigan bolada muvaffaqiyatli qo'llanildi [3, 7, 8, 38, 39].

Shuni ta'kidlash joizki, ichaklararo choksiz anastomoz qo'yish g'oyasi, ya'ni bir ichakning ikkinchisiga invaginatsiyasi natijasida ichak bo'shlig'i ichida asta-sekin shakllanuvchi usul, avvalroq mahalliy jarroh I.I.Grekov (1923) tomonidan sigmasimon ichakning buralishida uning nekrozini davolash uchun taklif qilingan.

1948-yilda O.Swenson va boshqalari yo'g'on ichakni bariy suspenziyasi bilan retrograd rentgenologik tekshirish usulini tavsiflab, ilmiy maqola chop etdilar. Bu usul toraygan aganglionar sohani, o'tish zonasini va suprastenotik kengayish hududini aniq tasvirlash imkonini berardi. Ushbu metodika hozirgi kunga qadar Girshprung kasalligini dastlabki tashxislashda standart usul sifatida qo'llanilmoqda [4, 5, 9, 40, 41].

Yangi tug'ilgan chaqaloqlarda Girshprung kasalligini kontrastli tekshirish usuli yetarli ma'lumot bermasligi sababli, 1955-1957-yillarda O.Swenson va hamkasblar to'g'ri ichak biop-

siyasini klinik amaliyotga joriy etishdi. Bu usul Girshprung kasalligini tashxislashning eng samarali va xavfsiz usuli sifatida tan olindi. Mualliflar irrigografiyadan oldin biopsiya o'tkazishni tavsiya etishdi. 1960-yilda G.Gherardi shilliq osti va mushaklararo chigallardagi gangliyalar soni (yoki ularning yo'qligi) bir xil ekanligini aniqladi. Shu ma'lumotlarga asoslanib, A.Bodian birinchi bo'lib Girshprung kasalligini aniqlash uchun to'g'ri ichak shilliq osti qavatining biopsiyasidan foydalandi. 1965-yilda R.Dobbims va A.N.Bill to'g'ri ichak shilliq qavati biopsiyasi uchun maxsus biopsiya qisqichlarini ishlab chiqishdi. Ular ganglionar hujayralarning yo'qligi yuqori darajadagi atsetilxolinesterazaning gistokimyoviy ko'rsatkichlari va gipertrofiyalangan nerv tolalari sonining ko'payishi bilan bog'liqligini isbotladilar. Ushbu usul hozirgi kunda ham Girshprung kasalligini tashxislashning "oltin standart"i hisoblanadi [10, 11, 13].

Bugungi kunda BGni morfologik tasdiqlash nafaqat majburiy, balki uni tashxislashning eng ishonchli usuli hisoblanadi. 1957-yildan boshlab O.Swenson taklifi asosida to'g'ri ichak biopsiyasi, hatto rentgenologik tekshiruv ichak agangliozini aniq ko'rsatmagan hollarda ham, GKni aniqlashning eng ishonchli usuli bo'lib kelmoqda. Auerbax chigalining gangliyalari yetishmasligi yoki yo'qligi Girshprung kasalligi tashxisini tasdiqlaydi. C.O.Muller va boshqalar eng keng tarqalgan tashxis usullarini taqqoslaganda, irrigografiya natijalari rektal shaklda 19 holatdan 8 tasida (42%), rektosigmoid shaklda 35 holatdan 20 tasida (57%) va GK ning cho'zilgan shaklida barcha hollarda (100%) patomorfologik ma'lumotlarga mos kelishini aniqladilar. Radiologik va morfologik belgilarning umumiy mos kelish darajasi 58,1% ni tashkil etdi. Shunday qilib, mualliflarning fikricha, agangliyoz o'tish zonasi chegaralarini aniqlash uchun irrigografiya yetarli emas, bu esa tashxisni operatsiyadan oldin morfologik jihatdan majburiy tasdiqlashni talab qiladi [12, 14, 15, 23, 24].

Morfologik diagnostika ichak biopsiyasining turli xillarini o'z ichiga oladi: to'g'ri ichakning to'liq qavatli biopsiyasi, shilliq osti qatlami bilan shilliq qavat biopsiyasi, yo'g'on ichakning serozmushak biopsiyasi, to'g'ri ichak shilliq qavatining qisqichli va aspiratsion biopsiyasi. Preparatlarni tekshirish maqsadida immunogistokimyoviy tahlil, atsetilxolinesteraza (AXE) darajasini aniqlash uchun gistokimyoviy tahlil va klassik morfologik tadqiqot usullaridan foydalaniladi.

To'qima AXE faolligi Yu.F.Isakov va boshqalar (1985) tomonidan tavsif etilgan mezonlarga ko'ra baholanadi. Girshprung kasalligini tashxislashda ganglioz hujayralarning butunlay yo'qligi sharoitida xolinergik tolalar zichligining ortishi muhim ahamiyatga ega [16, 17, 19, 21, 22].

50-yillarning oxirida Girshprung kasalligini (BG) tashxislashning funksional usullarini qo'llash bo'yicha ishlar boshlandi - anal teshigidagi bosimni o'lchash va anorektal refleksni aniqlashga asoslangan anorektal manometriya. Bular orasida anal kanalda bosimni o'lchash va anorektal refleksni aniqlashga asoslangan anorektal manometriya usuli ham bor edi. 1967-yilda L.Schnaufer va hamkasblar BGning asosiy manometrik mezoni ichki anal sfinkterning bo'shasha olmasligi ekanligini aniqladilar. Biroq, bu usulni qo'llash yosh bilan bog'liq anomaliyalarni oldini olish imkonini berdi, ya'ni muddatida tug'ilgan va yetilgan chaqaloqlarda anorektal refleks buzilmaganligini isbotladi.

O.Swenson tomonidan taklif etilgan sog'lom ichakni tushirish operatsiyasi (pull-through procedure) Girshprung kasalligini jarrohlik yo'li bilan davolashning asosiga aylandi. Bu operatsiya 95% hollarda o'lim bilan yakunlanadigan ushbu kasallik haqidagi tasavvurlarni butunlay o'zgartirib, uni jarrohlik usuli bilan davolanishi mumkin bo'lgan kasallikka aylantirdi. Keyinchalik taklif etilgan barcha operatsiya modifikatsiyalari faqat ichaklararo anastomozni qo'yishning o'ziga xos xususiyatlariga qaratilgan bo'lsa-da, usulning mohiyati hozirgi kungacha o'zgarishsiz qolmoqda [18, 20, 26, 27].

Ko'plab o'zgartirishlarga qaramay, Svenson-Xiatt-Pti operatsiyasi jiddiy kamchilikka ega edi - to'g'ri ichakning old devorini mobilizatsiya qilishning murakkabligi va yuqori shikastlanishi, bu ko'p jihatdan operatsiyadan keyingi siydik va najas tutolmaslikka sabab bo'lardi. Bu kamchilikni bartaraf etish maqsadida Yu.F.Isakov 1963-yilda kichik chanoq bo'shlig'ida to'g'ri ichakni faqat orqa va yon tomonlaridan mobilizatsiya qilishni taklif etdi. Uning modifikatsiyasida ichakning old devori siydik yo'llari va urug' chiqarish yo'llari darajasigacha mobilizatsiya qilindi. Shunday usulda qo'yilgan anastomoz qiyshiq shakl oldi, bu esa uning torayishi va chanoq a'zolari tomonidan funksional asoratlar xavfini sezilarli darajada kamaytirdi.

SSSRda yo'g'on ichakni Svenson usuli bo'yicha pastga tushirish operatsiyasini birinchi marta 1955-yilda S.Ya.Doletskiy amalga oshirgan. S.Ya.Doletskiy (1958) ma'lumotini e'lon qilganidan so'ng tez orada Yu.F.Isakov (1959), M.S.Rayevskiy (1959), D.A.Avidon (1960), I.L.Bregadze (1960), A.R.Shurinok (1960) va boshqalarning ishlari paydo bo'ldi. 1963-yilga kelib, mahalliy va xorijiy adabiyotlarda Girshprung kasalligi tufayli operatsiya qilingan bemorlarning umumiy kuzatuvlari soni 1276 taga yetdi.

SSSRda Grekov-Svenson-Xiyatt-Pti operatsiyasini qo'llashda eng katta tajribaga Yu.F.Isakov ega bo'lib, u birinchi bo'lib 1965-yilda chop etilgan "Bolalarda Megakolon" kitobida Girshprung kasalligiga chalingan 115 nafar bolani davolash tajribasini va yo'g'on ichakning fundamental patomorfologik tadqiqotini tasvirlab bergan. Ushbu asarda ichak devorining barcha asosiy elementlari, shu jumladan intramural nerv tizimidagi o'zgarishlar batafsil yoritilgan. Toraygan qismda nafaqat mushaklararo, balki shilliq osti chigallari tuzilishining buzilishi, shuningdek, toraygan qismning kengaygan qismga o'tish zonasida gangliylar yetishmasligi aniqlangan. Bundan tashqari, nerv apparatining zararlanishi bilan bir qatorda, ichakning mushak qavati, shilliq osti va shilliq qavatlarida ham o'zgarishlar mavjudligi qayd etilgan [23, 24, 25, 32, 33].

1956-yilda fransiyalik B.Duhamel O.Swenson operatsiyasini asos qilib, anal sfinkter sathidan yuqorida orqa kolorektal anastomozni qo'yishning mutlaqo yangi usulini taklif etdi. Bu usulda Koxer qisqichlari yordamida kechiktirilgan "yonma-yon" anastomoz yaratildi va u operatsiyadan 10-14 kun o'tgach shakllandi. Taklif etilgan usul to'qimalarning perirektal ajratilishida chanoq nerv tolalariga ehtiyotkorlik bilan munosabatda bo'lishga imkon berdi. Bunday usulda V. Duhamel to'g'ri ichak ajratilishini tishli chiziqdan 1 sm va undan kam masofada yakunlagan, bu esa ko'pincha turli darajadagi anal nazoratini yo'qotishga olib kelgan. SSSRda Dyuamel operatsiyasini 1961-yilda kiyevlik N.L. Kush amalga oshirdi, Girshprung kasalligida bu operatsiyaning muvaffaqiyatli o'tkazilgani haqidagi mahalliy adabiyotdagi birinchi xabar esa O.R.Blauga (1962) tegishli. N.L. Kush Dyuamel operatsiyasining klassik variantiga bir qator o'zgartirishlar kiritdi. Jumladan, u anal sfinkterni kengaytirishdan voz kechdi, qorin bo'shlig'i tomonidan to'g'ri ichakni kesish uchun birinchi bo'lib UKL-60 tikish apparatini qo'lladi, shuningdek kolorektal anastomozni tishli chiziqdan 1,5 sm gacha yuqorida qo'yishni taklif etdi. Dyuamelning asl usulida esa anastomoz darajasi teri-shilliq qavat o'tish joyi bilan deyarli bir xil bo'lgan.

Bizning mamlakatimizda Dyuamel operatsiyasi G.A. Bairov rahbarligidagi Leningrad bolalar jarrohlik maktabida keng qo'llanila boshlandi. G.A. Bairov nafaqat ushbu usulni amaliyotda keng qo'lladi, balki uni takomillashtirdi ham. G.A. Bairov va A.N. Ojgixin (1965) V. Duhamel operatsiyasida ichak anastomozini qisib turish uchun o'zlari yaratgan qattiq qisqichdan foydalanishni taklif etishdi. Bu usul operatsiyadan keyingi davrning kechishini ma'lum darajada yengillashtirdi va qurilmaning o'zi anastomozni normal shakllantirishda yanada ishonchliroq bo'ldi.

1955-yilda Italiyaning G. Gaslini nomidagi institutida Franko Soave birinchi marta Swenson operatsiyasining o'z modifikatsiyasini - yo'g'on ichakni endorektal tushirish usulini taklif etdi.

U bu usulni 1860-yilda R.Romualdi tomonidan to'g'ri ichak atreziyasining oqmali shakllarida tasvirlangan to'g'ri ichakni demukozatsiya qilish tamoyiliga asoslantirdi. F.Soave to'g'ri ichak devorini demukozatsiya qilishni qorin pardasi o'tish burmasidan 8 sm yuqoridan boshlab, tishsimon chiziqdan 1 sm masofada tugatardi. So'ngra u rektosigmasimon bo'limni to'g'ri ichak bo'shlig'iga ag'darib, transanal tushirishni amalga oshirardi, bunda 5-10 sm qismini anusdan tashqarida qoldirardi. Bu esa tushirilayotgan va to'g'ri ichaklar o'rtasida tabiiy bitishuv hosil bo'lishiga olib kelardi. Dastlabki operatsiyadan 15-20 kun o'tgach, ortiqcha ichak qismi koagulyatsiya yordamida kesib olinardi. Ushbu usul texnik jihatdan soddaligi va kichik chanoq tuzilmalariga minimal shikast yetkazishi bilan ajralib turardi. O'sha yili A.Boley F.Soave operatsiyasining asl texnikasiga o'zgartirish kiritib, tushirilgan ichakni darhol kesib olish va bir vaqtning o'zida ichaklar orasida anastomoz yaratishni taklif qildi [28, 29].

Germaniyalik jarroh A.M.Holschneider Girshprung kasalligini barcha jihatlari bo'yicha o'rganishda, shuningdek, taklif etilgan asosiy jarrohlik davolash usullarining samaradorligini taqqoslashda muhim rol o'ynagan. U tomonidan operatsiyadan keyingi asoratlar va Girshprung kasalligini jarrohlik yo'li bilan davolashning uzoq muddatli natijalari qiyosiy jihatdan batafsil o'rganildi. A.M.Holschneider va P.Puri tomonidan yozilgan " Girshprung kasalligi va unga bog'liq kasalliklar " monografiyasida Girshprung kasalligi bo'yicha eng keng qamrovli tadqiqot o'rin olgan.

Mamlakatimizda Bolalardagi Girshprung kasalligini davolashga S.D.Ternovskiy, Yu.F.Isakov, S.Ya.Doletskiy, E.A.Stepanov, A.I.Lenyushkin, A.N.Smirnov, V.Ye.Shitinin kabi mashhur jarrohlar katta hissa qo'shdilar. A.I.Lenyushkin F.Soave texnikasini takomillashtirdi, operatsiya oxirida yuqori ichakni "manjeta" usulida o'rashni taklif qildi, bu bilan to'qimalarning birikish zichligini yanada oshirdi. F.Soave rossiyalik olimning ishlarini sinchiklab o'rganib chiqqach, bu yangilikni yuqori baholadi va keyinchalik, shaxsiy uchrashuvda, bu usulni rasman "Soave-Lenyushkin operatsiyasi" deb nomlashni taklif etdi.

Laparoskopik jarrohlikning rivojlanishi bilan Girshprung kasalligini davolashda ham yangi bosqich boshlandi. 1995-yilda amerikalik jarroh K.Jorgeson Girshprung kasalligida yo'g'on ichakni endorektal tushirishning laparoskopik usulini tavsiflab berdi. Bu usul O.Swenson metodikasiga asoslangan edi. Klassik variantdan asosiy farqlar quyidagilardan iborat edi: yo'g'on ichakni qorin bo'shlig'i tomonidan harakatchan qilishda laparoskopik texnikadan foydalanish hamda serozmushak silindrini oraliq tomondan transperitoneal emas, balki transanal yo'l bilan demukozatsiya qilish [30, 31, 32].

Ushbu usulning asosiy afzalligi operatsiyadan so'ng bemorlarning tez tiklanishi, qorin bo'shlig'i asoratlari sonining kamayishi va kosmetik samara bo'ldi. Shu sababli, bir necha yildan keyin usul Girshprung kasalligini davolashda "oltin standart" maqomini qo'lga kiritdi. Keyinchalik jarrohlik usullarining barcha turlari - Duhamel va Swenson bo'yicha - o'zlashtirildi, biroq aynan Soave-Georgeson operatsiyasi hozirgi kunda bolalar jarrohlari orasida ommallik bo'yicha yetakchi o'rinni egallaydi.

Jarrohlik amaliyotiga tamomila yangi davolash usullarini (stomasiz, bir bosqichda) joriy etish bilan quyidagi savollarga javob topish muhim ahamiyat kasb etadi: kam invaziv aralashuvlarning uzoq muddatli natijalari an'anaviy usullar bilan taqqoslanadimi, asoratlarning chastotasi va og'irligi yuqoriroq emasmi? Chunki laparoskopik operatsiyalarning ochiq operatsiyalarga nisbatan ma'lum afzalliklari hozirda isbotlashni talab qilmaydi.

GK ni jarrohlik yo'li bilan davolash davri boshlangandan buyon asoratlar ko'lami deyarli o'zgarmasdan qolmoqda. GK ni jarrohlik yo'li bilan to'g'rilashning eng ko'p uchraydigan kechki

asoratlari quyidagilardir: qabziyat, axlatni ushlab tura olmaslik, enterokolit va anastomoz torayishlari.

2012-yilgacha adabiyotlarda Girshprung kasalligini jarrohlik yo'li bilan davolashning ochiq va laparoskopik usullarining qiyosiy natijalarini o'rganuvchi birorta ham tasodifiy tanlov asosidagi tadqiqot uchramagan. 2012-yilda J.H.Gosemann va hamkasblari adabiyotlarda e'lon qilingan shunday aralashuvlar natijalarini tahlil qilishdi. Ular laparoskopik operatsiyalardan keyin qabziyat va najas tutolmaslik holatlari ochiq operatsiyalarga nisbatan sezilarli darajada kamroq uchrashini aniqladilar. Biroq, enterokolit va anastomoz torayishi chastotasida farqlar kuzatilmadi.

Yo'g'on ichakni transanal tushirishda videotasvir yordamida va usiz o'tkazilish natijalari bo'yicha olingan ma'lumotlarga ko'ra, amaliyot davomiyligi an'anaviy aralashuvdan oshmaydi (o'rtacha 100 - 120 daqiqani tashkil qiladi), qon yo'qotish minimal (ko'pi bilan 15 - 50 ml), davolash davomiyligi o'rtacha 7 kunni tashkil qiladi, GAEK chastotasi - 1,4 dan 7,3% gacha, qabziyat - 2,8 - 3,4%, najasni ushlab tura olmaslik - 4,4%, perianal dermatit - 1,4%, takroriy aralashuvlarga ehtiyoj - 1,7 GAEK chastotasi 1,4 dan 7,3% gacha, qabziyat 2,8-3,4%, najas tutolmaslik 4,4%, perianal dermatit 11-27,7%, anastomoz yetishmovchiligi 1,4%, takroriy aralashuvlarga ehtiyoj 1,7%, umumiy asoratlar chastotasi 9,8-31% ni tashkil etadi. A'lo va yaxshi natijalar 85,4-95% holatlarda, qoniqarli natijalar 9,4% holatlarda, yomon natijalar esa 5,2% holatlarda kuzatilgan.

L.Yang va boshqalarining katta tajribasi (173 bemor) asosida (2012) ko'rsatilishicha, Jorjson operatsiyasidan so'ng bir qator operatsiyadan keyingi muammolar uzun seroz-mushak silindrining yaratilishi bilan bog'liq bo'lishi mumkin. Bu esa tushirilgan ichakning siqilishiga va enterokolit chastotasining oshishiga olib keladi. Ushbu asoratni bartaraf etish uchun mualliflar operatsiya texnikasini o'zgartirishni taklif qiladilar. Bu o'zgartirish seroz-mushakli silindrning orqa qismini V-shaklli kesib olishdan iborat.

O.M.Aworanti va hamkasblar 2012-yilda yo'g'on ichakning harakat buzilishlari darajasini baholash shkalasi (Bolalar siydik tutolmaslik/qabziyatni baholash tizimi - PICSS) asosida Girshprung kasalligini jarrohlik yo'li bilan davolashning uzoq muddatli funksional natijalarini o'rganish bo'yicha tadqiqot natijalarini e'lon qildilar [34, 36, 37, 39].

F. Stefan va boshqalar (2003) Soave usuli va transanal usul bilan operatsiya qilingan bolalar o'rtasida taqqoslash o'tkazishdi. To'liq bo'lmagan nazorat chastotasi 75% va 71% (p=1,00), qabziyat chastotasi esa 34% va 25% (p=0,74) ni tashkil etdi. Ushbu alomatlarning birgalikda uchrashi mos ravishda 14% va 10% hollarda kuzatildi. Bu ma'lumotlar shuni ko'rsatadiki, Soave operatsiyasi va transanal pasaytirish usulidan keyingi funksional natijalar deyarli bir xil [41].

Dunyoda ko'plab kasalliklarni davolash natijalarini va bolalarning hayot sifatini baholash uchun bolaning hayot sifatini baholash shkalasi (PEDSQL - PEDIATRIC SCORE QUALITY OF LIFE) keng qo'llanilmoqda. Bu shkala muayyan kasalliklarga xos bo'lgan juda ko'p mezonlar bo'yicha hayot sifatini baholash imkonini beradi. Jarrohlik davolash natijalarini baholashda ushbu shkaladan quyidagi modullarni qo'llash maqsadga muvofiq: Oilaga ta'sir moduli, Oila ma'lumotlari shakli, Oshqozon-ichak belgilari shkalasi, Umumiy farovonlik shkalasi, Tibbiy xizmatdan qoniqish moduli. Natijalar tahlili ball tizimi bo'yicha amalga oshiriladi: 0 ball - hech qachon bo'lmaydi, 1 ball - muammo deyarli uchramaydi, 2 ball - ba'zan bo'ladi, 3 ball - tez-tez bo'ladi, 4 ball - deyarli doim bo'ladi. Bu tizim bemor bolaning ota-onasi holatini jismoniy ahvoli, hissiy holati, ijtimoiy moslashuvi, kognitiv va kommunikativ faoliyati kabi jihatlar bo'yicha baholash imkonini beradi. Gastroenterologik belgilarni baholash shkalasi qorin og'rig'i, ich ketishi, qabziyat, ko'ngil aynishi, qusish, ichak/oshqozon noqulayligi, gaz chiqishi, ochlik hissi, qorin dam bo'lishi kabi holatlarni tahlil qiladi.

PICSS va PEDSQL dan foydalanish operatsiya samaradorligini eng xolisona baholash imkonini beradi, chunki obyektiv tadqiqot usullari natijalari har doim ham funksional buzilishlar darajasi va bemorlarning o'z ahvolidan qoniqish darajasi bilan bog'liq bo'lavermaydi.

Yo'g'on ichak harakatlanishining funksional buzilishlari, najas tutolmaslik holatlari va qabziyat bilan namoyon bo'luvchi, jarrohlik amaliyotidan so'ng dastlabki davrlarda bemorlarning aksariyatida kuzatiladi. Bu holat ichakning tushirilish usulidan qat'i nazar yuzaga keladi. Bunday funksional buzilishlar, hatto jarrohlik amaliyotida texnik xatolar bo'lmagan taqdirda ham, 6-12 oydan 2 yilgacha va undan uzoqroq vaqt davom etishi mumkin. Tushirilgan ichakning yangi ishlash sharoitlariga uzoq vaqt moslashuvining sabablari quyidagilardir: ichakni to'liq bo'shatish ko'nikmasining yo'qligi; jarroh tomonidan suprastenotik kengaygan ichakni tushirishga majbur bo'lgan hollarda, funksional jihatdan to'liq rivojlanmagan, ya'ni "moslashmagan" yo'g'on ichakning tushirilishi; dastlabki ruhiy-asab tizimi buzilishlari; yondosh, shu jumladan sindromal kasalliklarning mavjudligi; shuningdek, operatsiyadan keyingi davrda yetarli parvarish va reabilitatsiya dasturining yo'qligi.

Funksional qabziyat hamda najas va gazlarni ushlab tura olmaslikning oldini olish va davolashda asosiy o'rin reabilitatsiya tadbirlariga tegishlidir. X. Sun va boshqalar (2012) 24 nafar bemorda Soave operatsiyasidan keyingi uzoq muddatli harakat buzilishlarini, asosan, inkontinensiyani davolash natijalariga chanoq tubi mushaklarini mashq qildirish va biologik teskari aloqa terapiyasining samaradorligini o'rganishgan [39, 40, 42, 43]. Mualliflar najasni ushlab turolmaslik sababi sifatida ichki anal sfinkterning quyidagi sabablar tufayli shikastlanishini ko'rsatishadi: seroz-mushak silindrining ajralishi juda past darajada boshlanishi, to'g'ri ichakning haddan tashqari kuchli kengaytirilishi va operatsiya paytida anal kanalining ortiqcha tortilishi. Davolash kursi 1 yil davom etgan. Davolash samaradorligi anal kanaldagi tinch holatdagi bosim, kuchanishdagi bosim va to'g'ri ichak sezuvchanligini o'lchash orqali baholangan. Ushbu ko'rsatkichlarning barchasi davolanishdan so'ng yaxshilangan. Najas ushlab tura olmaslik holatlari faqat davolangan bolalarning 18,7 foizida saqlanib qolgan. Davolanmagan bemorlarda ko'rsatilgan vaqt oralig'idan keyin harakat buzilishlarining yaqqolligida o'zgarishlar kuzatilmagan. Davolanmagan bemorlarda ko'rsatilgan vaqt oralig'idan keyin motor buzilishlarning yaqqolligida o'zgarishlar kuzatilmadi.

R.Niramis va boshqalarning (2008) ma'lumotlariga ko'ra, 22 yil davomida operatsiya qilingan 178 nafar bemorning retrospektiv tahlili asosida, operatsiya texnikasidan qat'i nazar, jarrohlikdan keyingi 5, 10 va 15 yillik davrlarda hayot sifati baholangan. Mualliflar vaqt o'tishi bilan bemorlarning hayot sifati yaxshilanib borishini aniqlagan. Jumladan, 15 yildan so'ng a'lo natijalar ko'rsatkichi 88,9 foizni tashkil etgan. Bu vaqtga kelib, 178 bemordan hech biri najas tutolmaslik muammosidan aziyat chekmagan. Holbuki, 5 va 10 yildan keyin ushbu asoratning chastotasi mos ravishda 7,5% va 4% ni tashkil etgan.

Katta yoshdagi bolalarda o'tkazilgan operatsiyadan keyin 51 foizida yo'g'on ichakning harakat va bo'shatish funksiyasi turli darajada buzilishi, 37,5 foizida esa najas surtilishi kuzatiladi. Eng ko'p uchraydigan belgilar ich qotishi, ich ketishi va takrorlanuvchi kolitdir. Qoniqarli ijtimoiy moslashuv (ayniqsa maktabda) faqat 74 foiz hollarda erishilgan. O'smirlik davrida bolalarda najas tutolmaslik darajasi 32 foizgacha yetgan, bunda psixopatologik va psixoijtimoiy kabi boshqa ehtimoliy sabablar istisno qilingan. Najas tutolmaslik o'smirlarning ruhiy-ijtimoiy holatining sezilarli darajada yomonlashishiga olib kelgan. Najas tutolmaslik operatsiyadan keyingi eng ko'p uchraydigan muammolardan biri bo'lib, 30-80 foiz hollarda kuzatilishi mumkin. Uni davolash kompleks bo'lishi kerak: ich qotishini bartaraf etish, BOS-terapiya, davriy klizmalar va

kam hollarda P.Mirtofanoff (1980) operatsiyasi (muntazam antegrad klizmalar o'tkazish uchun appendikostoma qo'yish) qo'llaniladi.

Xulosa. Shunday qilib, eng yirik klinikalarda ham jarrohlik davolashning barcha natijalari doim yaxshi bo'lavermaydi. Bir qator tadqiqotchilarning ma'lumotlariga ko'ra, ba'zi bolalarda operatsiyadan keyin qorin dam bo'lishi, doimiy enterokolit va qattiq ich ketishi uzoq vaqt davom etadi. Aynan shu guruh bemorlarga uzoq muddatli reabilitatsiya choralari zarur bo'lib, ularga tozalovchi huqnalar, ich yumshatuvchi dorilar, parhez tavsiyalari, og'ir hollarda esa takroriy jarrohlik amaliyotlari kiradi. Bunday muammolar odatda voyaga yetganda bartaraf etilsa-da, bolalar maxsus nazoratga muhtoj bo'ladilar. Ba'zi olimlarning ta'kidlashicha, bu toifadagi bemorlarda xavfli o'sma kasalliklarining rivojlanish xavfi yuqori, ayniqsa yo'g'on ichakda joylashgan o'smalar xavfi kattaroq ekanligini ko'rsatadi.

Uzoq muddatli davolanish natijalarini o'rganish bemorlarni uzoq muddatli reabilitatsiya qilish dasturini asoslash va ishlab chiqish imkonini berdi, bu Girshsprung kasalligini bolalik davrida davolashning eng maqbul natijalariga erishish imkonini beradi. Video-yordamchi texnologiyadan foydalanish bemorlarning reabilitatsiya davrini qisqartirish imkonini beradi va kuzatuv davrida bemorlarning hayot sifatini ishonchli yaxshilashga va asoratlarning kamayishiga, xususan, rektal bujaga bo'lgan ehtiyojni kamaytirish yoki undan butunlay voz kechish imkonini beradi.

Foydalanilgan adabiyotlar:

1. Атакулов, Д.О. Патогенетические основы диагностики и лечения болезни Гиршпрунга у детей : автореф. дис. ... д-ра мед. наук : 14.00.27 / Д.О. Атакулов ; Росс.гос.мед.ун-т. –М., 1989. -46 л.
2. Баиров, Г.А. Непосредственные и отдаленные результаты оперативного лечения болезни Гиршпрунга у детей. В кН.:Вопросы хирургии и ортопедии пороков развития у детей / Г.А.Баиров, Т.А.Сози. –Рига:1965. -С.159-166.
3. Быков Н.И. Выбор оптимального варианта хирургического лечения болезни Гиршспрунга у детей / Н. И.Быков, Г. И.Чепурной, А. Н.Кивва // Детская хирургия. -2007. -№5. -С.10
4. Бирюков, О.М. Характер отдалённых осложнений после операций по поводу болезни Гиршпрунга у взрослых / О.М.Бирюков, С.И.Ачкасов // Актуальные проблемы колопроктологии: Материалы V Всерос.конф. - Ростов н/ Д, 2001.-С.188-189.
5. Быков, Н. И. Выбор оптимального варианта хирургического лечения болезни Гиршпрунга у детей : дис. ... канд. мед. наук. : 14.00.35 / Николай Иван Быков ; Рост.гос.мед.ун-т ; -Ростов н/Д., 2007. – 189 л.
6. Григович И.Н. Задний сагиттальный доступ при оперативном лечении врожденного аганглиоза толстой кишки у детей / И.Н.Григович, А.А. Иудин, Ю.Г. Пяттоев, А.В. Тимонина//Детская хирурги. -1998. -№4. -С.28
7. Давлятов, Р.М. Лечение детей с болезнью Гиршпрунга Давлятов : дис. канд.мед.наук : 14.00.37 / Рузибой Маматович Давлятов ; Тадж.гос.мед.ин-т им.Абуали ибн Сино ; -Душанбе,2009. – 244 л.

8. Доронин, Ф. В. Оптимизация хирургического лечения толстокишечного аганглиоза у детей : автореф. дис. ... канд. мед. наук. : 14.00.35 / Рост.гос.мед.ун-т ; -Рост.н/Д., 2006. – 214 л.
9. Доронин, Ф.В. Методы хирургического лечения и послеопераицонные осложнения при болезни Гиршпрнунга у детей / Ф.В.Доронин, В.П.Мартыненко, Н.И.Быков, //Актуальные вопросы хирургии детского возраста. –Ставрополь. -1995. -с.26-30.
10. Дронов, А.Ф. Видеоассистированные операции на толстой кишке / А.Ф. Дронов, А. Н.Смирнов, А. Г.Маннанов// Детская хирургия. -2008. - №4. - С.24-26.
11. Дронов, А.Ф. Непосредственные результаты видеоассистированных операций на кишечнике у детей / А. Ф. Дронов, А. Н. Смирнов, Д. В. Залихин //Детская хирургия. -2010. - №1. -С 20-23.
12. Исаков, Ю.Ф. Повторные операции на органах грудной и брюшной полостей / Ю.Ф.Исаков, Э.А.Степанов, Т.В.Красовская, Н.Д.Шумов. – М.:Медицина,1982. -215 с.
13. Кивва, А. Н. Диагностика и лечение болезни Гиршспрунга у детей / А. Н.Кивва, Г.И. Чепурной.-Ростов н/Д.: Союз интеллетктуал.возрождения,2001. -156с.
14. Кущ, Н.Л. Болезнь Фавалли-Гиршпрунга у детей / Н.Л.Кущ. - Киев: Здоров'я, 1976. -197 с.
15. Поддубный, И.В. Первый опыт лапароскопического эндоректального низведения толстой кишки при болезни Гиршпрунга у детей / И. В.Поддубный, А. А.Исаев, Э. И Алиева и соавт. // Детская хирургия. -2007. - №3. -С.7-12.
16. Подкаменев, В.В. Миниинвазивный доступ в лечении болезни Гиршспрунга у детей: первый опыт / В.В.Подкаменев, В.А.Новожилов, Н.В.Умань, В.Х. Латыпов // Детская хирургия. -2003. -№5. -С.23-27.
17. Смирнов, А.Н. Лапароскопические операции в колопроктологии детского возраста / А. Н Смирнов., Е. И Дорофеева., О. С Шмыров., Е. А. Огородникова // Детская хирургия. -2005. -№1. -С.4-10.
18. Степанова, Э. А. Лапароскопически-ассистированные операции на ободочной кишке у больных старших возрастных групп : автореф.дис. ...канд.мед.наук : 14.00.27 / Э.А.Степанова ; Росс.гос.мед.ун-т ; - М., 2008. -22 л.
19. Шумов, Н.Д. Алгоритм дифференциальной диагностики хронических запоров у детей / Н. Д.Шумов, А. В.Бородачев, А. Л.Ионов и соавт. // Детская хирургия. -2006. - №1. - С.9-13.
20. Шумов, Н.Д. Современная диагностика болезни Гиршпрунга у детей : автореф.дис. ... д-ра мед. наук : 14.00.35 / Н.Д.Шумов ; 2-й Моск.гос.мед.ин-т ; -М., 1988. – 46 л.
21. Aworanti, O. Are routine dilatations necessary post pull-through surgery for Hirschsprung disease? / O Aworanti, J Hung, D McDowell, I Martin, F Quinn
22. // Eur J Ped Surg. -2013. –Vol.23, №5. –P.383-8.
23. Aworanti, O.M. Comparative review of functional outcomes post surgery for Hirschsprung disease utilizing the pediatric incontinence and constipation scoring system/ O.M. Aworanti, D.T. Mcdowell, I.M. Martin et all.// Ped Surg Int/ -2012. –Vol.28, №11. –P.1071-8.

24. Georgeson, K.E. Primary laparoscopicassisted endorectal colon pull- through for Hirschsprung's disease: a new gold standard / K.E. Georgeson, R.D. Cohen, A. Hebra et all. // Ann Surg. -1999. -№229. -P:678–82, discussion 682–3.
25. Georgeson, K.E. Laparoscopic-assisted pull-through for Hirschsprung's disease / K.E. Georgeson // Semin Pediatr Surg. -2002. -№11. -P:205–10.
26. Gosemann, J.H. Open vs transanal pull-through for Hirschsprung disease /
27. J.H. Gosemann, F. Friedmacher, B. Ure, M. Lacher // Eur J Ped Surg. -2013. – Vol.23, №2. -P:94-102.
28. Holschneider, A.M. Hirshprung's diseases / A.M.Holschneider, P.Puri. - Shtutgart: Hypocrates,1982. -414p.
29. Huang, B. Outcomes and defecation after one-stage transanal endorectal pull-through procedure for Hirschsprung disease / B. Huang, W.M. Li, Z.Y. Feng, L.Y. Huang // Chinese J Gastr Surg. -2012. –Vol.15, №7. -P:715-8.
30. Levitt, M. Update on pediatric faecal incontinence / M.Levitt, A.Pena // Eur J Ped Surg. -2009. –Vol.19, №1. -P:1-9.
31. Levitt, M. Hirschsprung disease and fecal incontinence: diagnostic and management strategies / M.A. Levitt, C.A. Martin, M. Olesevich et all. // J Pediatr Surg. -2009. –Vol.44, №1. -P:271-7.
32. Muller, C.O. Does the radiographic transition zone correlate with the level of aganglionosis on the specimen in Hirschsprung disease? / C.O. Muller, C. Mignot, N. Belarbi et all. // Ped Surg Int. -2012. –Vol.28, №6. -P:597-601.
33. Niramis, R. Quality of life of patients with Hirschsprung's disease at 5-20 years post pull-through operations / R.Niramis, S.Watanatittan, M.Anuntkosol et all. // Eur J Pediatr Surg. -2008. -№18. -P:38–43.
34. Nurko, S.S. Complications after gastrointestinal surgery: A medical perspective. In: Pediatric Gastrointestinal Disease. Pathophysiology, Diagnosis, Management / W.A. Walker [et al.] -St Louis: Mosby, 2004. –P.:2111-2138.
35. Puri, P. Hirschsprung's disease: a search for etiology / P. Puri, K. Ohshiro, T. Wester // Semin Pediatr Surg. -1998. -№7. -P:140–7.
36. Puri, P. Intestinal neuronal dysplasia / P.Puri // Semin Pediatr Surg.-2003. -№12. -P:259–64.
37. Rintala, R. Sodium cromohydrate in the management of chronic or recurrent enterocolitis in patients with Hirschsprung disease / R.Rintala, H.Lindhal // J Ped Surg. -2001. –Vol.36, №7. -P:1032-5.
38. Rintala, R.J. Outcome of anorectal malformations and Hirschsprung's disease beyond childhood / R.J. Rintala, M.P. Pakarinen // Semin Pediatr Surg. - 2010. –Vol.19, №2. -P:160-7.
39. Rintala, R.J. Long term outcomes of Hirschsprung disease / R.J. Rintala, M.P. Pakarinen // Sem Ped Surg. -2012. –Vol.21, №4. -P:336-43.
40. Soave, F. Hirschsprung's disease: A new surgical technique / F.Soave // Arch Dis Child. -1963. -№39. -P:16-28.

41. Soawe, F. A new surgical technique for treatment of Hirschsprung's disease / F.Soawe // Surgery. — 1964. — Vol. 56. — P.:1007—14.
42. Sun, X. Long-term follow-up of Hirschsprung's disease patients treated by heart-shaped anastomosis operation / X.Sun, G. Wang, Y. Weng, M. Wei // Zhonghua Wai Ke Za Zhi. -2002. –Vol.40, №5. -P:344-6.
43. Sun, X.B. The effects of biofeedback training of pelvic floor muscles on fecal incontinence / X.B. Sun, L. Zhang, Y.H. Li et all. // J Pediatr Surg. -2009. – Vol.44, №12. -P:2384-7.
44. Yang, L. Transanal endorectal pull-through for Hirschsprung disease using long cuff dissection / L. Yang, S.T. Tang, G.Q. Cao // Ped Surg Int. -2012. – Vol.28, №5. -P:515-21.
45. Zakaria, O.M. Bowel function and faecal continence after Soave pull- through / O.M. Zakaria // Updates Surg. -2012. –Vol.64, №2. -P:113-8.

UO'K: 616.089

KARIESOGEN JARAYON FAOLILIGI III DARAJALI BO`LGAN BOLALARDA KARIESNI PROFILAKTIKASINI SAMARADORLIGI

Turayev A.B.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Maqolada 2022-2024-yillarda Samarqand viloyatida Samarqand davlat tibbiyot universiteti hamda Samarqand viloyati ixtisoslashtirilgan bolalar stamatologiya poliklinikasi hamkorligida olb borilagan tadqiqot ishlarining natijalari keltirilgan. Jami 916 nafar 1-3 sinf o'quvchilarida II darajali kariyes faolligi KPO + kp bo'yicha , ular yoshi va terapevtik va profilaktik ta'sirining tabiati bo'yicha ilmiy-amaliy izlanishlar olib borildi.

Kalit so'zlar: Karies, sut tishlar, kariyes faolligi, 0,2% natriy ftorid eritmasi

EFFECTIVENESS OF CAREES PREVENTION IN CHILDREN WITH CAREOSOGENIC PROCESS ACTIVITY OF THE III DEGREE

Turaev A.B.
Samarkand state medical university

Abstract

The article presents the results of research conducted in 2022-2024 in the Samarkand region in cooperation with Samarkand State Medical University and the Samarkand Regional Specialized Children's Dental Polyclinic. A total of 916 students in grades 1-3 were subjected to scientific and practical research on caries activity of the II degree according to KPO + kp, their age and the nature of therapeutic and prophylactic effects.

Keywords: Caries, milk teeth, caries activity, 0.2% sodium fluoride solution

ЭФФЕКТИВНОСТЬ ПРОФИЛАКТИКИ КАРИЕСА У ДЕТЕЙ С III СТЕПЕНЬЮ АКТИВНОСТИ КАРИЕСОГЕННОГО ПРОЦЕССА

Тураев А.Б.
Samarkand state medical university

Аннотация

The article presents the results of research conducted in 2022-2024 in the Samarkand region in cooperation with Samarkand State Medical University and the Samarkand Regional Specialized Children's Dental Polyclinic. A total of 916 students in grades 1-3 were subjected to scientific and practical research on caries activity of the II degree according to KPO + kp, their age and the nature of therapeutic and prophylactic effects.

Keywords: Caries, milk teeth, caries activity, 0.2% sodium fluoride solution

Muammoning dolzarbligi: Tish kariyesining tarqalishi va intensivligining yuqoriligi, ayniqsa bolalar populyatsiyasida, stomatologiyaning dolzarb muammosi bo'lib qolmoqda [2, 7, 15]. Uch yoshli bolalarda vaqtinchalik tishlar kariyesining tarqalishi 14 dan 85% gacha, intensivligi 1,3 dan 5,2 gacha o'zgarib turadi. 6 yoshda doimiy tishlar kariyesining tarqalishi 0,5 intensivlikda o'rtacha 50% ni tashkil qiladi [1,14,16]. Tishlarning ko'p sonli kariyes bilan zararlanishi ularning muddatidan oldin yo'qolishiga olib keladi, chaynash funksiyasini buzadi, bu esa doimiy tishlov shakllanish davrida tish-jag' tizimining rivojlanishiga salbiy ta'sir ko'rsatadi va yuz-jag' sohasi anomaliyalarining shakllanishiga olib keladi. Bundan tashqari, kariyes jarayonining yuqori intensivligi, uning asoratlari sonining ko'payishi yuz-jag' sohasi, ko'z, teri qoplamlari, buyrak, tayanch-harakat tizimi yallig'lanish kasalliklarining rivojlanishiga olib keladi va natijada ko'plab

umumiy kasalliklarga sabab bo'ladi [4,12,10].Hozirgi vaqtda kariyesning oldini olish bo'yicha ko'plab ishlar mavjud. Profilaktik chora-tadbirlarni joriy etish bo'yicha katta ijobiy tajriba to'plangan bo'lsa-da, JSST ma'lumotlariga ko'ra, stomatologik kasalliklar darajasi pasaymayapti. Profilaktika usullarini ishlab chiqishning dolzarbligi, shuningdek, davolash tadbirlari hajmini va natijada moddiy xarajatlarni kamaytirish bilan bog'liq, chunki profilaktika usullarining narxi allaqachon rivojlangan kasalliklarni davolash narxidan 20 baravar past [3, 5, 9]. Sut tishlarining kariesi erta bolalikdan boshlab paydo bo'ladi va barqaror o'sib boradi va buning natijasida og'ir asoratlar soni ortadi. Sut tishlarini erta yo'qotish ularning muddatidan oldin olib tashlanishi bo'lib, bu o'z navbatida to'g'ri chaynashning buzilishiga va maktabgacha yoshdagi bolalarda turli anomaliya va deformatsiyalar xavfiga olib keladi. Bolalarda kariyesning klinik rivojlanish xususiyatlarini uzoq muddatli o'rganish shuni ko'rsatadiki, kariyes faolligining uchinchi darajasini tavsiflovchi belgilar orasida tish to'qimalarining tashqi ta'sirlarga past chidamliligini aks ettiruvchi alomatlar ustunlik qiladi, masalan, o`choqli demineralizatsiya (32,9%) , ko'p miqdordagi ta'sirlangan tishlar (KPp=1 bolaga 11,7), intensivlikning yuqori o'sishi (0,9), pulpasiz va olib tashlangan tishlarning ko'pligi (tekshirilgan 1000 taga mos ravishda 50,47 va 70,6) va boshqalar[6, 8, 13]. Shu bilan birga, tish to'qimalarining qarshiligini oshiradigan dorilarning yuqori samaradorligini tasdiqlovchi ko'plab tadqiqotlarga qaramay , ushbu dorilarning patologik jarayonning rivojlanishi faolligi turli darajadagi bo'lgan bolalarda karies rivojlanishiga ta'sirini ko'rsatadigan ishlar yo'q.

Tadqiqot maqsadi: Ushbu tadqiqotning maqsadi patologik jarayon faolligi III darajali 7-9 yoshli bolalarda kariesda tish to'qimalarining qarshiligini oshiradigan dori vositalarining samaradorligini o'rganish edi.

Tadqiqot usuli va obyektlari: Kuzatishda 916 nafar 1-3 sinf o'quvchilari III darajali kariyes faolligi KPO + kp bo'yicha , ular yoshi va terapevtik va profilaktik ta'sirining tabiati bo'yicha 6 kichik guruhga bo'lingan (1-jadval).

1-jadval

Bolalar yoshi va terapevtik va profilaktik ta'sirining tabiati bo'yicha 6 kichik guruhga bo'lingan.

Guruhlar	Bolalar soni		
	Tadqiqot guruhi	Nazorat guruhi	Jami
1-guruh	266 (1-guruh osti)	108 (4-guruh osti)	374
2-guruh	218 (2-guruh osti)	106 (5-guruh osti)	324
3-guruh	122 (3-guruh osti)	96 (6-guruh osti)	218
Jami	**606**	**310**	**916**

Yil davomida barcha bolalar og'iz bo'shlig'ini uch marta ko'rikdan o'tkazdilar. Maktabdagi o'quv yili davomida tajriba guruhining 606 nafar o'quvchilari bolalar stomatologlarining nazorat ostida tishlarni tish cho'tkasi bilan yuvgandan keyin 2 daqiqa davomida 0,2% natriy ftorid erit-masi bilan (1 litr distillangan suv uchun 2 g natriy ftoridni o'z ichiga oladi) og'iz vannalari shaklida tishlarini davolash ishlari olib borildi. Jarayonlarning umumiy soni yiliga 1 dan 4 gacha amalga oshirildi.

2-jadval

Dekompensatsiyalangan kariyesi bor bolalarda doimiy tishlarga zarar etkazish intensivligining boshlang'ich darajasi

Guruhlar	KPO (M±m)		
	Tadqiqot guruhi	Nazorat guruhi	Jami

1-guruh	1.52±0.22 (1-guruh osti)	1.42±0.63 (4-guruh osti)	0.1
2-guruh	2.03±0.18 (2-guruh osti)	2.24±0.15 (5-guruh osti)	0.9
3-guruh	2.84±0.20 (3-guruh osti)	3.29±0.16 (6-guruh osti)	1.8

Tadqiqot va nazorat guruhlarida kariyes faolligi KPO + kp bo'yicha doimiy tishlardagi kariyes intensivligining ortishi bilan taqqoslangan holda baholandi. Tadqiqot va nazorat guruhidagi bolalarda doimiy tishlarning shikastlanish darajasida statistik jihatdan muhim farqlar yo'q edi. (2-jadval).Olingan natijalarni statistik qayta ishlash uchun Student usuli va dispersiyani tahlil qilishdan foydalanilgan.

Tadqiqot natijalari: O'tkazilgan tadqiqotlar natijalari shuni ko'rsatadiki, kariyesning dekompensatsiyalangan shakli bo'lgan 1-3-sinf o'quvchilarida og'iz vannalari uchun ftor o'z ichiga olgan eritmalardan foydalanish aniq, statistik jihatdan muhim profilaktik ta'sir ko'rsatadi.

Shu bilan birga, 1-sinf o'quvchilarida kariyesning kamayishi eng yuqori bo'ldi va 60,3% ni tashkil etdi; 2 va 3-sinf o'quvchilari orasida mos ravishda 50,5 va 52,9%. ANOVA tahlil ma'lumotlari yoshning natriy ftorid eritmalarining profilaktik samaradorligiga ta'sirini tasdiqladi (n^2 = 3%).

Yil davomida tishlarni natriy ftorid eritmasi bilan davolash chastotasi 1 dan 4 gacha bo'lganligini hisobga olib, biz ushbu muolajaning chastotaga qarab profilaktika samaradorligini o'rgandik (4-jadval).

4-jadval

Bolalarni yoshga va yil davomida o'tkaziladigan profilaktik muolajalar soniga qarab guruhlarga taqsimlash

Guruhlar	Profilaktik tadbirning qaytarilish chastoasi				
	1	2	3	4	Jami
1-guruh	44	80	98	44	266
2-guruh	23	54	85	56	218
3-guruh	17	35	45	25	122
Jami	**84**	**169**	**228**	**125**	**606**

Barcha guruhlardagi bolalarda doimiy tishlarning shikastlanish intensivligining dastlabki darajasi statistik jihatdan bir xil edi.

Tadqiqot natijalari profilaktika samaradorligi va muolajalar chastotasi o'rtasidagi bevosita bog'liqlikni ko'rsatadi (5-jadval).

Guruhlar	Karies intensivligi KPO (nazorat M ± m)	Profilaktik tadbirning qaytarilish chastoasi							
		1		2		3		4	
		KPO intensivligi (M ± m)	t	KPO intensivligi (M ± m)	t	KPO intensivligi (M ± m)	t	KPO intensivligi (M ± m)	t
1-guruh	0.78±0.10	0.37±0.10	2.90	0.39±0.06	3.34	0.32±0.06	3.94	0.12±0.06	5.66
2-guruh	0.95±0.12	0.79±0.27	0.54	0.41±0.21	3.18	0.26±0.08	3.34	0.18±0.06	5.74

3-guruh	1.02±0.14	0.77±0.38	0.62	0.71±0.28	0.99	0.35±0.16	3.15	0.40±0.18	2.71

5-jadval ma'lumotlarini tahlil qilish shuni ko'rsatadiki, 1-sinf o'quvchilarida natriy ftorid eritmasining tishlarning qattiq to'qimalariga bir marta ta'sir qilishdan keyin statistik ahamiyatga ega (t-2,90) profilaktik ta'sir kuzatilgan va muolajalar sonining ko'payishi bilan kuchaygan: to'rt marta davolashdan keyin 1 = 5,66 va bitta ta'sirdan keyin 1 = 2,9.

2-sinf o'quvchilarida aniq ta'sir faqat ikki marta profilaktika chora-tadbirlaridan so'ng qayd etildi, va 3-sinfda - uch martadan keyin va 2 va undan ko'proq profilaktika choralarini boshlagan bolalarda to'rt marta qo'llashdan keyin bu darajaga etmadi. Shunday qilib, 1-sinfda Dispersiyani tahlil qilish natijalari profilaktika choralari samaradorligi nafaqat ularning ko'pligiga (n=4%), balki bolaning yoshiga ham (n =3%) bog'liqligini tasdiqlaydi.

Bizning fikrimizcha, doimiy tishlardagi kariyes jarayonlarining boshlang'ich darajasiga qarab natriy ftorid eritmasining profilaktika samaradorligi to'g'risidagi ma'lumotlar alohida qiziqish uyg'otadi (6-jadval).

Jadvaldan ko'rinib turibdiki. bolalar boshlang'ich KPO ko'rsatkichi bo'yicha taqsimlandi. Har bir yosh guruhida 4 dan ortiq CP bo'lgan bolalar soni 4 dan 8 gacha bo'lgan. Shuning uchun, yuvish samaradorligini baholashda biz ushbu guruh bolalarini hisobga olmadik.

Jadvaldan quyidagicha xulosa qilish mumkin, yuvish samaradorligi KPO ning boshlang'ich darajasidan ta'sirlanadi. Shunday qilib, CP = 0 bo'lgan 1-sinf o'quvchilarida kariesning kamayishi 51,6% ni, CP = 1-2-51,3% ni, CP = 3-4 bo'lgan guruhda esa 90% ni tashkil etdi. 2-sinf o'quvchilari uchun (8 yosh) xuddi shunday muntazamlikni kuzatish mumkin.

2-sinf va undan ham ko'proq 3-sinf o'quvchilarida profilaktika choralari samaradorligining aniq pasayishi haqiqati, kariyesga eng sezgir tishlar sonining kamayishi, shuningdek, otilib chiqqan doimiy tishlar sonining kamayishi bilan izohlanadi. bu yosh.

1-sinfda birinchi doimiy molarlar ko'pincha kariyes bilan ta'sirlanadi va yuqori va pastki jag'larning markaziy tishlari, qoida tariqasida, buzilmagan .

Shuning uchun, boshlang'ich darajasi CP = 3 4 bo'lgan 7 yoshli bolalar guruhida biz maksimal profilaktik ta'sirga egamiz . Biroq, profilaktika ta'siri kattaroq amaliy ahamiyatga ega, 77,4 va 53,1% ga teng bo'lgan 2 va 3-sinf o'quvchilarida bir xil boshlang'ich zarar darajasi.

Xulosa. Tadqiqotlarimiz shuni ko'rsatadiki, kariyes faolligi III darajali bolalarda tishlarning qarshiligini oshirish uchun og'iz vannalari shaklida 0,2% natriy ftorid eritmasidan foydalanish samarali chora hisoblanadi. Texnikaning arzonligi va mavjudligini hisobga olgan holda, biz olingan ma'lumotlarning ahamiyati amaliy sog'liqni saqlash uchun muhim ekanligini tan olishimiz kerak.

Ma'lumotlarimiz tahliliga asoslanib, biz kariyes faolligining II darajasi bo'lgan barcha bolalarga stomatologga har tashrifda og'iz bo'shlig'i gigienasi bo'yicha mashg'ulotlar o'tkazishni, tishlarini nazorat ostida cho'tkalash, 0,2% natriy ftorid eritmasi bilan og'iz bo'shlig'i vannalarini o'tkazishni tavsiya qilamiz .

Foydalanilgan adabiyotlar:

1. Rustambekovna, Akhrorova Malika Shavkatovna Shaimatova Azizakhon. "Manifestation of the oral mucosa in covid-19." Scientific Journal Of Medical Science And Biology 2.2 (2023): 7-16.

2. Шайматова А. Р. Эффективность холисал-геля в лечении воспалительных заболеваний пародонта с использованием несъёмной ортодонтической конструкции //Стоматология-наука и практика, перспективы развития. – 2022. – С. 218-221.
3. Rakhiberdiev R. A., Shaymatova A. R. Local prevention of dental caries in younger schoolchildren //Стоматология-наука и практика, перспективы развития. – 2022. – С. 243-245.
4. Shavkatovna S. A. R. A. M. Effectiveness of caries prophylaxis in children with cariesogenic process activity level II //Scientific Journal Of Medical Science And Biology. – 2024. – Т. 2. – №. 2. – С. 126-132.
5. Rustambekovna G. S. A. S. A. Dental characteristics of the dental system in children connective tissue dysplasia //Journal of Modern Educational Achievements. – 2024. – Т. 2. – №. 1. – С. 101-112.
6. Rustambekovna S. A., Amrulloevich G. S. The state of the mouth in children and adolescents with differentiated connective tissue dysplasia //journal of biomedicine and practice. – 2023. – Т. 8. – №. 3.
7. Шайматова А. Р., Ахророва М. Ш. Дифференциальный анализ распространённости и интенсивности кариеса зубов у детей дошкольного возраста в разных регионах самаркандской области //Журнал стоматологии и краниофациальных исследований. – 2023. – Т. 4. – №. 1.
8. Шайматова А. Р. Статистика распространённости и интенсивности кариеса зубов у детей дошкольного возраста в разных регионах самаркандской области //Journal of Modern Educational Achievements. – 2024. – Т. 5. – №. 5. – С. 161-164.
9. Шаймтова А. Р. Профилактические аспекты фиссурный кариеса //Journal of Modern Educational Achievements. – 2024. – Т. 5. – №. 5. – С. 147-150.
10. Шайматова А. Р. Эффективность холисал-геля в лечении воспалительных заболеваний пародонта с использованием несъёмной ортодонтической конструкции //Стоматология-наука и практика, перспективы развития. – 2022. – С. 218-221.
11. Шайматова А. Р., Ахророва М. Ш. Дифференциальный анализ распространённости и интенсивности кариеса зубов у детей дошкольного возраста в разных регионах самаркандской области //Стоматология-наука и практика, перспективы развития. – 2022. – С. 221-223.
12. Ризаев Ж. А. и др. Changes in the mucous membranes of the oral cavity in patients depending on the clinical course of covid-19 //Журнал Стоматологии и краниофациальных исследований. – 2022. – Т. 3. – №. 1.
13. Alimjanovich R. J. et al. Clinical and immunological aspects of the relationship of the oral cavity and covid-19 //Thematics Journal of Education. – 2022. – Т. 7. – №. 2.
14. Alimdjanovich R. J., Saidolimovich K. A., Shavkatovna A. M. OPTIMIZATION OF THE REFLEXOTHERAPY METHOD FOR CORRECTION OF PSYCHOEMOTIONAL DISORDERS IN THE PATHOLOGY OF THE FACIAL AND JAW AREA //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 3.
15. Rustambekovna A. M. S. S. A. Manifestation of the oral mucosa in covid-19 //Scientific Journal Of Medical Science And Biology. – 2023. – Т. 2. – №. 2. – С. 7-16.

16. Rizaev Z. A., Abdunosirovich R. R., Sharipovna N. N. Ways to improve the organization of dental services for chemical industry workers //The American journal of medical sciences and pharmaceutical research. – 2020. – T. 2. – №. 12. – C. 35-39.
17. SunnatulloAmruloevich G., Rustambekovna S. A. Dental status and diagnosis of children and adolescents suffering from various forms of connective tissue dysplasia //Galaxy International Interdisciplinary Research Journal. – 2022. – T. 10. – №. 11. – C. 955-962.

UO'K: 616.089

SHIFOKORLAR OBRAZI VA KASALLIKLAR TASVIRINING BADIIY FUNKSIYALARI

Tusmatov Sh.R.
Markaziy Osiyo Tibbiyot Universiteti

Annotatsiya

Shifokorlar obrazi va kasalliklar tasviri badiiy asarlarning muhim elementlarini tashkil etadi. Ushbu mavzuda shifokorlarning obrazlari, ularning qiyofasi, xarakterlari, kasalliklar tasvirining simbolik va badiiy ahamiyati tahlil qilinadi. Badiiy adabiyotda shifokorlar nafaqat tibbiy yordam ko'rsatadigan shaxslar, balki insoniyatning turli muammolari va ichki tuyg'ularini ifodalovchi obrazlar sifatida ham ko'rsatiladi. Kasalliklar tasviri esa, ko'pincha insonning hayotidagi qiyinchiliklar va ruhiy holatlarni aks ettiradi. Ushbu ishda badiiy adabiyotning psixologik va sotsiologik aspektlari, shuningdek, shifokorlar obrazi orqali nafosat va qiyinchiliklarni anglash yo'llari o'rganiladi.

Kalit so'zlar: shifokorlar obrazi, kasalliklar tasviri, badiiy funksiyalar, adabiyat, psixologiya, sotsiologiya, insoniy muammolar, qiyinchiliklar

THE ARTISTIC FUNCTIONS OF THE IMAGE OF DOCTORS AND THE DEPICTION OF DISEASES

Tusmatov Sh.R.
Central Asian Medical University

Abstract

The image of doctors and the depiction of diseases are important elements of works of art. This topic analyzes the symbolic and artistic significance of the images of doctors, their appearance, characters, and the depiction of diseases. In fiction, doctors are shown not only as individuals who provide medical care, but also as images expressing various problems and inner feelings of humanity. The depiction of diseases often reflects the difficulties and mental states of a person's life. This work studies the psychological and sociological aspects of fiction, as well as ways to understand sophistication and difficulties through the image of doctors.

Keywords: *the image of doctors, the depiction of diseases, artistic functions, literature, psychology, sociology, human problems, difficulties*

ХУДОЖЕСТВЕННЫЕ ФУНКЦИИ ОБРАЗА ВРАЧА И ИЗОБРАЖЕНИЯ БОЛЕЗНЕЙ

Тусматов Ш.Р.
Центрально-Азиатский медицинский университет

Аннотация

Образы врачей и изображения болезней являются важными элементами произведений искусства. В данной теме анализируется символическое и художественное значение образов врачей, их внешности, характеров, изображений болезней. В художественной литературе врачи изображаются не только как люди, оказывающие медицинскую помощь, но и как персонажи, олицетворяющие различные человеческие проблемы и внутренние переживания. Образ болезни часто отражает трудности и душевные состояния человека. В этой работе исследуются психологические и социологические аспекты художественной литературы, а также способы понимания сложности и трудностей через образ врачей.

Ключевые слова: образ врачей, изображение болезней, художественные функции, литература, психология, социология, человеческие проблемы, трудности

Bugungi zamonaviy jamiyatda sog'liqni saqlash sohasidagi muammolar badiiy adabiyotning dolzarb mavzularidan biriga aylangan. Global pandemiyalar davrida tibbiyotga e'tibor ortgani, shifokorlar va tibbiy xodimlarning ahamiyati haqidagi adabiy asarlarning ko'paygani bunga yaqqol misoldir. Tibbiyot va sog'liqni saqlash masalalari faqat ilmiy yo'nalishda emas, balki badiiy talqinlar orqali ham jamiyatda keng muhokama qilinmoqda. Shu sababli, jahon va o'zbek adabiyotida tibbiyotga oid detallarni o'rganish nafaqat ilmiy, balki ijtimoiy jihatdan ham muhim ahamiyat kasb etadi.

Ushbu mavzuni chuqur o'rganish orqali inson va tibbiyot o'rtasidagi bog'liqlik, sog'liqning qadr-qimmati, shifokorlarning insonparvarlik missiyasi hamda bemorlarning ichki kechinmalari haqidagi tasavvurlarni boyitish mumkin. Shu tariqa, tibbiyot va adabiyot o'rtasidagi aloqalar har ikki sohaning ham ijtimoiy va madaniy rivojlanishidagi o'rnini anglashga xizmat qiladi.

Adabiyot va san'at inson ruhiyatini chuqur aks ettiradigan hamda jamiyatning ijtimoiy, madaniy va ma'naviy holatini ifodalovchi qudratli vositalardir. Shifokorlar obrazi va kasalliklar tasviri badiiy asarlar uchun hamisha muhim mavzu bo'lib kelgan. Ushbu maqolada ushbu tasvirlarning badiiy funksiyalari tahlil qilinadi.

Shifokorlar obrazi: Odamiylik va fidoyilik timsoli.

Shifokorlar obrazi adabiyotda nafaqat bir kasb vakili, balki insonparvarlik, o'z hayotini boshqalar uchun bag'ishlash kabi yuksak qadriyatlarning ifodasi sifatida gavdalanadi. Masalan, Lev Tolstoyning "Anna Karenina" romanidagi shifokor obrazi qahramonlarning dardini yengillatishda qahramonlik ko'rsatadi. Shu bilan birga, bu obraz inson tabiatining murakkabligini, uning kuchli va zaif tomonlarini ochib beradi.

Boshqa tomondan, shifokorlar adabiy asarlarda muloqot, mehr-shafqat va umid ramzi sifatida namoyon bo'ladi. Ular qahramonlarning ruhiy yoki jismoniy og'riqlarini yengillatish orqali voqealar rivojida muhim rol o'ynaydi.

Kasalliklar tasviri: Inson hayotining sinovlari va ramzi.

Kasallik badiiy adabiyotda faqatgina tibbiy holat emas, balki inson hayotining murakkabliklari, sinovlari va fojialarini ifodalaydi. Masalan, Alber Kamyuning "Vabo" romanida kasallik jamoaviy fojiya sifatida tasvirlanadi va insoniyatning boshdan kechirayotgan qiyinchiliklari ramziga aylanadi. Ushbu tasvir insonning jamiyatdagi o'rnini, axloqiy tamoyillarini va yashash ma'nosini qayta ko'rib chiqishga undaydi.

Kasalliklar ko'pincha qahramonlarning ichki dunyosini ochib berish vositasi sifatida ham xizmat qiladi. Frans Kafka asarlarida kasallik va tana o'zgarishlari insonning jamiyatdagi o'rnini anglash va o'zlikni qidirish bilan bog'liq muammolarni ko'rsatadi.

Shifokorlar va kasalliklar tasvirining badiiy funksiyalari

1. Ruhiy va jismoniy kurashni ifodalash

Shifokorlar va kasalliklar obrazi insonning hayot uchun kurashini tasvirlash uchun ishlatiladi. Bu kurash jismoniy dardni yengish bilan birga ichki ziddiyatlar va qarorlar bilan bog'liq bo'lishi mumkin.

2. Jamiyat muammolarini yoritish

Kasalliklar ko'pincha jamiyatdagi ijtimoiy, iqtisodiy va ma'naviy muammolarni ochib berish uchun ishlatiladi. Masalan, pandemiya davridagi tibbiy inqirozlar orqali jamiyatning birlashishi

yoki parokandaligi aks ettiriladi.

3. Falsafiy ma'no yuklash

Shifokorlar va kasalliklar orqali hayot va o'lim, insonning o'tkinchiligi va abadiylik mavzulari yoritiladi. Bu, ayniqsa, ekzistensialistik adabiyotda yaqqol namoyon bo'ladi.

4. Empatiya uyg'otish vositasi

Ushbu tasvirlar o'quvchini qahramonlar bilan hamdard bo'lishga chorlaydi. Shifokorlarning fidoyiligi yoki kasallikdan aziyat chekayotgan qahramonlarning azobi o'quvchida chuqur his-tuyg'ular uyg'otadi.

Shuningdek, kasallik tasvirlari orqali insonning zaifligi va unga bo'lgan mehr-muhabbatning kuchi yoritiladi. Bu jarayon orqali insoniylikning eng yuksak fazilatlari – hamdardlik, bag'rikenglik va o'zgalarga yordam qo'lini cho'zish kabi xususiyatlar ko'zga tashlanadi. Lev Tolstoyning "Anna Karenina" romanida Levindaning ichki o'zgarishlari va hayotga bo'lgan munosabatidagi keskin burilishlar uning kasallikni boshdan kechirishi orqali ochiladi.

Xulosa qilib aytganda, kasalliklar tasviri adabiyotda inson hayotining nozik qirralarini ochib beruvchi vosita bo'lib xizmat qiladi. Ular orqali yozuvchilar jamiyatdagi muammolarni, shaxsning ichki dunyosidagi murakkabliklarni va insoniyatning cheksiz imkoniyatlarini yoritadi. Kasallik tasvirlari nafaqat iztirobni, balki poklanish va ma'naviy yuksalishni ham ifoda etadi.

Shifokorlar obrazi va kasalliklar tasviri adabiyot va san'atda inson tabiatining murakkabligini yoritish, jamiyat muammolariga e'tibor qaratish va falsafiy savollarga javob izlash kabi ko'plab badiiy funksiyalarga ega. Ushbu mavzu faqat o'tmishda emas, balki zamonaviy asarlarda ham dolzarb bo'lib qolmoqda, chunki inson va uning salomatligi har doim ijodkorlarning diqqat markazida bo'ladi.

Foydalanilgan adabiyotlar:

1. Anna Karenina: roman. Lev Tolstoy / Rus tilidan Mirzakalon Ismoiliytarjimasi. Ikkinchi kitob. -Toshkent: Yangi asr avlodi, 2017. – 608 b
2. www.ziouz.com kutubxonasi, badiiy obraz tahlili.
3. Xalmatova B.T , Karimov M.SH , Oxunov A.O.- Tibbiyot kasbiga kirish
4. Verena Steiner-Hofbauer. – What is a good doctor ? /Wiener Medizinische Wochens 168,398-405(2018)
5. Qodirov A.A -Tibbiyot tarixi/2005-166b
6. Sustersic M., Gauchet A., Kernou A., Gibert C., Foote A., Vermorel C., Bosson J.-L. Tizimli ko'rib
7. chiqishga asoslangan o'tkir sharoitlar kontekstida shifokor va bemor muloqotini baholovchi shkala.
8. Russell A.L., Tibbiyotda samarali muloqotning o'rni Tennessi universiteti dissertatsiya loyihalarini
9. taqdirlaydi. [(2018-yil 22-yanvarda kirilgan)];2016
10. Swastika Chandra. Masoud Mohammad Nezdah. Birlamchi tibbiy yordamda shifokor va bemor muloqoti
11. Нарметова, Ю. К. (2022). Психосоматик беморларнинг психоэмоционал хусусиятлари

UO'K: 616.089

SHOX PARDAGA NISBATAN INTRAOKULYAR LINZANING JOYLASHUVIGA KO'Z ICHI TUZULMALARINING TA'SIRINI TAQQOSLASH

Ubaydullayev S.O., Karimova M.X., Timurov M.N.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiyasi
ilmiy-amaliy tibbiyot markazi

Annotatsiya

Dorzabligi. Hozirgi vaqtda vitreoretinal patologiya bo'yicha jarohlik o'tkazilgan bemorlar soni o'sib bormoqda. Ma'lumki, bunday ko'zlardagi katarakta jarohlik paytida intraokular linzalarini hisoblashda qiyinchiliklar paydo bo'lishi mumkin. Shu munosabat bilan, fakoemulsifikatsiya + intraokulyar linza jarohlikdan keyin qoldiq refraksiyani minimallashtirish jarrohning muhim vazifasidir. Buni ta'sir qiluvchi omillarni aniqlash orqali erishiladi, ulardan biri avitriya ko'zlardagi ko'z ichi linzalarining shox parda nisbatan siljishidir. Tadqiqot maqsadi. Vitreoretinal jarrohlikdan oldin va keyin optik biometriya ma'lumotlarga ko'ra, intraokulyar linzalarining (IOL) shox pardaga nisbatan joylashuvini baholash va solishtirish. Tadqiqot materiallari va usullari. Tadqiqotda 75 artifakiyalik bemor ishtirok etdi, ular turli xil ko'z tubi patologiyalar bo'yicha vitreoretinal jarrohlik amaliyotini o'tkazdilar. Klinik refraksiyaga bo'yicha ular 3 guruhga bo'lindi. O'lchovlar jarrohlikdan oldin va vitreoretinal jarrohlikdan so'ng optik biometriya yordamida amalga oshirildi va natijalar taqqoslandi. Natijalar va muhokama. IOL joylashuvini takomilashtirish tahlili shuni ko'rsatdiki, miopiya refraksiyalik ko'zlar bo'lgan guruhda linzalarning shox parda tomoniga siljishi 0,64±0,02 mm, emmetropiya refraksiyalik ko'zlar bo'lgan guruhda - 0,55±0,01 mm, va gipermetropik refraksiyalik ko'zlar bo'lgan guruhda - 0,24±0,01 mm tashkil qildi. ko'zning old-orqa o'lchami IOL siljishi darajasiga bevosita ta'sir qiladi: ko'z olmasi qanchalik katta bo'lsa, linzalarning siljishi shunchalik ko'proq bo'ladi va kichikroq ko'zlarda IOL siljishi minimal bo'ladi. Xulosa. Rejalashtirilgan natijaga imkon qadar yaqinroq sinishi natijasiga erishish uchun yuqoriro sinishi kuchiga ega bo'lgan IOLdan foydalanish afzalroqdir.

Kalit so'zlar: katarakta jarrohligi, IOL hisoblash, vitrektomiya, optic biometriya, oldi kamera chuqurligi, IOL joylashuvi

COMPARATIVE ASSESSMENT OF THE IMPACT OF THE INTRAOCULAR CONTENT ON THE POSITION OF THE INTRAOCULAR LENS RELATIVE TO THE CORNEA

Ubaydullaev S.O., Karimova M.Kh., Timurov M.N.
Republican Specialized Scientific and Practical
Medical Center for Eye Microsurgery

Abstract

Relevance. Currently, the number of patients operated on for vitreoretinal pathology is rapidly growing. As is known, difficulties in calculating the intraocular lens may arise during cataract surgery on such eyes. In this regard, minimizing residual refraction after phacoemulsification surgery with an intraocular lens is an important task for a surgeon. This is achieved by identifying factors that affect the achievement of accurate results, one of which is the shift of the intraocular lens in avitreal eyes. Objective of the study. to evaluate and compare the position of the intraocular lens (IOL) relative to the cornea according to optical biometry before and after vitreoretinal surgery. Materials and methods of the study The study included 75 patients with pseudophakia who underwent vitreoretinal surgery for various fundus pathologies. Depending on the clinical refraction, they were divided into 3 groups. Measurements were taken before and after surgery, then the results were compared. Results and discussion. In the group with myopic refraction, the lens shift toward the cornea was 0.64±0.02 mm, in the group with normal refraction — 0.55±0.01 mm, and in the group with hypermetropic refraction — 0.24±0.01 mm. that the value of the anteroposterior size of the eye directly affects the degree of IOL displacement: the larger the eyeball, the more pronounced the lens shift, and vice versa, with a smaller eye size, the IOL shift is minimal. Conclusion. To achieve a refractive result as close as possible to the planned one, it is preferable to use an IOL with a higher refractive power.

Key words: cataract surgery, IOL calculation, vitrectomy, optical biometry, anterior chamber depth, IOL position

СРАВНИТЕЛЬНАЯ ОЦЕНКА ВОЗДЕЙСТВИЯ ВНУТРИГЛАЗНОЙ СРЕДЫ НА ПОЛОЖЕНИЕ ИНТРАОКУЛЯРНОЙ ЛИНЗЫ ОТНОСИТЕЛЬНО РОГОВИЦЕ

Убайдуллаев С.О., Каримова М.Х., Тимуров М.Н.
Республиканский специализированный научно-практический
медицинский центр микрохирургии глаза

Аннотация

Актуальность. В настоящее время стремительно растет число пациентов, прооперированных по поводу витреоретинальной патологии. Как известно, при хирургии катаракты на таких глазах могут возникнуть трудности при расчетах интраокулярной линзы. В связи с этим минимизирование остаточной рефракции после операции факоэмульсификации с интраокулярной линзой является важной задачей хирурга. Это достигается путем выявления факторов влияющих на достижение точных результатов, одним из которых является сдвиг интраокулярной линзы на авитреальных глазах. Цель исследования. оценить и сравнить положение интраокулярной линзы (ИОЛ) относительно роговицы по данным оптической биометрии до и после витреоретинальной хирургии. Материалы и методы исследования В исследование включены 75 пациентов с артифакией, перенесших витреоретинальную операцию по поводу различных патологий глазного дна. В зависимости от клинической рефракции они были разделены на 3 группы. Измерения проводились до и после операции, затем производилось сравнение полученных результатов. Результаты и обсуждение. В группе с миопической рефракцией сдвиг линзы в сторону роговицы составил 0,64±0,02 мм, в группе с нормальной рефракцией — 0,55±0,01 мм, а в группе с гиперметропической рефракцией — 0,24±0,01 мм. что величина переднезаднего размера глаза напрямую влияет на степень смещения ИОЛ: чем больше глазное яблоко, тем более выражен сдвиг линзы, и наоборот, при меньшем размере глаза смещение ИОЛ минимально. Заключение. Для достижения рефракционного результата, максимально близкого к запланированному, предпочтительно использовать ИОЛ с более высокой рефракционной силой.

Ключевые слова: хирургия катаракты, расчет ИОЛ, витрэктомия, оптическая биометрия, глубина передней камеры, позиция ИОЛ

Dorzabligi. Texnologiyalarning zamonaviy rivojlanishi va vitreoretinal jarrohlarning tajribasi ortishi vitreoretinal jarrohlikning klinik va funktsional natijalarini sezilarli darajada yaxshilashga olib keldi. Bu o'z navbatida, bunday jarrohliklardan keyin yuqori ko'rish o'tkirligiga erishish imkoniyatini oshirdi.

Shu munosabat bilan, vitrektomiya bo'lgan bemorlarda kataraktani davolashda jarrohning asosiy vazifalaridan biri intraokulyar linzalari (IOL) implantatsiyasidan keyin refraksion xatolikni minimallashtirishdir.

Avitriya ko'zlari bo'lgan bemorlarda IOLni hisoblashda yakuniy klinik refraksiyani bashorat qilish dolzarb muammo bo'lib qolmoqda. To'g'ri natijalarga erishish uchun IOL joylashuviga ta'sir qiluvchi omillarni hisobga olish kerak. Bunday omillardan biri vitrektomiyadan keyin implantatsiya qilingan linzaning shox parda tomoniga siljishi, shunung uchun jarrohlikni rejalashtirishda ehtiyotkorlik bilan tahlil qilishni talab qiladi [2].

Tadqiqotlar shuni ko'rsatadiki, emmetropik ko'zlarda old kameraning o'rtacha chuqurligi 3,0 dan 3,5 mm gacha o'zgarib turadi [1-2].

Miyopiyalik bemorlarda bu ko'rsatkich odatda yuqori bo'ladi, bu cho'zilgan shaklga ega bo'lgan ko'z olmasining anatomik xususiyatlariga bog'liq. Bunday bemorlarda old kameraning

chuqurligi o'rtacha 3,5-4,0 mm ni tashkil qiladi [1-2].

Aksincha, gipermetropik bemorlarda oldingi kamera chuqurligi emmetropik va miyopik ko'zlarga nisbatan odatda sayozroq bo'ladi, o'rtacha 2,6-3,0 mm [1-2].

Klinik tadqiqotlar shuni ko'rsatadiki, standart ko'zlarda fakoemulsifikatsiya + inraokulyar linza implantatsiya (KFE + IOL) jarrohligidan keyin old kameraning chuqurligi o'rtacha 1,5 mm ga oshadi. Bu gavhar va sun'iy linzalar o'rtasidagi qalinlikdagi farq bilan bog'liq [3, 4].

Mualliflarning fikriga ko'ra, avitreal ko'zlarda, shishasimon tanasi saqlanib qolgan standart ko'zlarga nisbatan, implantatsiya qilingan IOL shox pardaga nisbatan o'rtacha 0,5 mm yaqinroq joylashadi [4, 5, 6].

Ushbu hodisani batafsil o'rganish uchun ilmiy tadqiqot o'tkazildi.

Tadqiqot maqsadi. Vitreoretinal jarrohlikdan oldin va keyin optik biometriya ma'lumotlarga ko'ra, intraokulyar linzalarining (IOL) shox pardaga nisbatan joylashuvini baholash va solishtirish.

Tadqiqot materiallari va usullari

Tadqiqotda 75 artifakiyalik bemor ishtirok etdi, ular turli xil ko’z tubi patologiyalar bo’yicha, shu jumladan gemoftalm, makular teshigi va epiretinal membrana, vitreoretinal jarrohlik amaliyotini o'tkazdilar.

Vitrektomiyadan keyin silikon moyli tamponadaga ehtiyojning yo'q bo’lgan bemorlar olindi, shuning uchun to’r pardasi ko’chgan bemorlar tadqiqotga kiritilmagan.

Barcha bemorlar klinik refraksiyaga qarab uch guruhga bo'lingan:

• I guruh - miopik refraksiya (25 ko'z),

• II guruh – emmetropik refraktsiya (25 ko'z),

• III guruh – gipermetropik refraksiya (25 ko'z).

Tadqiqot Topcon Aladdin HW3.0 optik kogerentlik biometri yordamida o'tkazildi.

O'lchovlar ikki bosqichda amalga oshirildi: birinchisi - jarrohlikdan oldin, ikkinchisi - vitreoretinal jarrohligidan keyin, ko'z bo'shlig'i suv-tuz eritmasi bilan to'ldirilgandan keyin yoki gaz tamponadasini ko'z ichi suyuqliga almashgandan keyin.

Natijalar va muhokama

Avvalo, barcha uch guruhda ko'z olmasining uzunligi o'rtacha ko’rsatkichlari aniqlandi. Birinchi guruhda (miopik refraktsiya) bu ko'rsatkich 26,14±0,201mm ni tashkil etdi, ikkinchi guruhda (emmetropik refraktsiya) - 23,51±0,07 mm, uchinchi guruhda (gipermetropik refraktsiya) - 22,02±0,11 mm tashkil etdi.

Bundan keyin, intraokulyar linzalarni (IOL) shox pardaning eng yuqori qismiga nisbatan masofasi tahlil qilindi. Miopiya refraksiyalik ko’zlar bo'lgan guruhda 3,89 ± 0,03 mm, ikkinchi emmetropiya refraksiyalik ko’zlar guruhda - 3,71 ± 0,02 mm, gipermetropiya refraksiyalik ko’zlar bo'lgan guruhda - 3,26±0,02 mm.

Barcha kerakli o'lchovlar o'tkazilgandan so'ng, barcha guruhlardagi bemorlarga vitreoretinal jarrohlik amaliyoti o'tkazildi. 39 ta holatda ko'z bo'shlig'i steril gaz bilan tamponada qilindi, qolgan 36 holatda esa fiziologik eritma ishlatilindi. Guruhlarning hech birida silikon moy ishlatilmadi.

Ko'z bo'shlig'iga yuborilgan steril gaz o'rtacha 10 kun ichida so'rildi va ko'z ichi suyuqligiga almashdi, shuning uchun takroriy tekshiruv jarrohlikdan 2 hafta o'tgach o'tkazildi.

Optik biometriya ma'lumotlarga ko'ra, IOLning shox pardaning eng yuqori qismiga nisbatan o'rtacha masofasi tashkil qildi:

• Birinchi guruhda 3,25±0,03 mm (miopiya),

• Ikkinchi guruhda 3,16±0,02 mm (emmetropiya),
• Uchinchi guruhda 3,02±0,02 mm (gipermetropiya).

IOL joylashuvini takomilashtirish tahlili shuni ko'rsatdiki, miopiya refraksiyalik ko'zlar bo'lgan guruhda linzalarning shox parda tomoniga siljishi 0,64±0,02 mm, emmetropiya refraksiyalik ko'zlar bo'lgan guruhda - 0,55±0,01 mm, va gipermetropik refraksiyalik ko'zlar bo'lgan guruhda - 0,24±0,01 mm tashkil qildi.

Optik biometriya yordamida o'tkazilgan o'lchovlar natijalari shuni ko'rsatdiki, old kameraning chuqurligi va shox pardaning eng yuqori qismiga nisbatan IOLning joylashuvi ko'z olmasining uzunligiga bog'liq. Miopiyalik ko'zlarda old kamera chuqurroq, gipermetropiyalik ko'zlarda esa sayozroq. Bu tamoyil ham fakik, ham artifakik ko'zlar uchun amal qiladi.

Vitrektomiya va shishasimon tana ko'z ichi suyuqligiga almashgandan so'ng, IOL oldinga siljiydi. Bu holat shishasimon tana o`rniga almashgan ko`z ichki suyuqligini ko`z ichki tuzilmalariga ko`rsatadigan bosimi o`zgarishi bilan bog`liq. Ushbu tadqiqot shuni ko'rsatadiki, ko'zning old-orqa o'lchami IOL siljishi darajasiga bevosita ta'sir qiladi: ko'z olmasi qanchalik katta bo'lsa, linzalarning siljishi shunchalik ko'proq bo'ladi va kichikroq ko'zlarda IOL siljishi minimal bo'ladi.

Olingan ma'lumotlar avitriya ko'zlik bemorlarda katarakta jarrohligini rejalashtirishda muhim klinik ahamiyatga ega. Implantatsiya qilingan IOL nur sindirish kuchinig to'g'ri hisoblash uchun linzalarning jarrohlikdan keyingi siljishini hisobga olish kerak. Bu ayniqsa muhimdir, chunki IOLning old tomonga siljishi yakuniy klinik refraksiya miyopik tomoniga siljishiga olib keladi: linzalar 0,5 mm ga siljishi yakuniy klinik refraksiya 1,5 diopriyaga o'zgarishiga olib keladi.

Xulosa. Avitriya ko'zlik bemorlarda katarakta jarrohligida inraokulyar linzalarini (IOL) hisoblashga individual yondashuv yakuniy klinik refraksiyani bashorat qilishda asosiy rol o'ynaydi. Hisoblashga ta'sir qiluvchi muhim omillardan biri bu IOLning shox pardaga nisbatan joylashuvi bo'lib, u bevosita ko'z olmasining uzunligiga bog'liq.

Shunday qilib, bunday bemorlarga implantatsiya qilingan IOLning optik kuchini tanlashda linzalarning mumkin bo'lgan oldinga siljishini hisobga olish kerak. Shuning uchun, rejalashtirilgan natijaga imkon qadar yaqinroq sinishi natijasiga erishish uchun yuqori sinishi kuchiga ega bo'lgan IOLdan foydalanish afzalroqdir.

Foydalanilgan adabiyotlar:

1. Rey A, Jurgens I, X Maseras, A Dyrda, P Pera, A Morilla. Visual outcome and complications of cataract extraction after pars plana vitrectomy. Clin Ophthalmol. 2018; 12: 989-994 doi: 10.2147/OPTH.S161223
2. Feng H, Adelman RA. Cataract information following vitreoretinal procedures. Clin Ophthalmol 2014; 8:1957-1965.
3. Panozzo G, Parolini B. Cataracts associated with posterior segment surgery. Opthalmol Clin N Am 2004; 17:557-568.
4. Cherfan GM, Michels RG, de Bustros S, Enger C, Glaser BM. Nuclear sclerotic cataract after vitrectomy for idiopathic epiretinal membranes causing macular pucker. Am J Ophthalmol 1991; 111:434-438.
5. Пантелеев ЕН, Бессарабов АН, Малышев ВВ. Миопический сдвиг клинической рефракции после факоэмульсификации катаракты с имплантацией ИОЛ в случае авитрии. Офтальмология. 2013;10(2):3537. doi.org/10.18008/1816-5095-2013-2-35-37

UO'K: 616.089

2-TUR QANDLI DIABET BILAN OG'RIGAN BEMORLARDA IGLARLIXI (SOLIQVA) DORI VOSITASINING GIPOGLIKEMIK SAMARADORLIGINI O'RGANISH

Urunbayeva D.A., Omonova Z.T.
Toshkent tibbiyot akademiyasi

Annotatsiya

Qandli diabet 2 tur (QD2) surunkali kasallik bo'lib, glikemiyani nazorat qilish uchun bosqichma-bosqich terapiyani kuchaytirishni talab qiladi. Yomon nazorat asoratlar xavfini oshiradi. Bazal insulin va GLP-1 retseptorlari antagonistlari kombinatsiyasi gipoglikemiya va tana vazni xavfini oshirmasdan glyukemik nazoratni yaxshilaydi.

Tadqiqotni maqsadi100 U/ml insulin glarginining 50 mkg/ml liksisenatid (iGlarLixi) bilan kombinatsiyasining samaradorligi va xavfsizligini inson insulinlari bilan solishtirish. Tadqiqotda 30 nafar QD2 bemor ishtirok etdi: 14 nafari iGlarLixi, 16 nafari bazal-bolus terapiyasini qabul qildi. Barcha ishtirokchilar metforminni qabul qildi. O'lchovlar: ro'za va ovqatdan keyin glikemiya, glyukozalangan gemoglobin (HbA1c), lipid spektri. Natijalar shuni ko'rsatiki birinchi guruhda ochlikdagi qon glyukoza darajasi sezilarli darajada pasaygan. HbA1c darajasi 12 oy ichida birinchi guruhda 7,20 ± 0,83% gacha tushgan, ikkinchi guruhda esa 7,69 ± 0,76% ga kamaygan. Gipoglikemiya birinchi guruhda 0,71%, ikkinchi guruhda esa 16,7% hollarda kuzatilgan. Lipid spektrida giperlipoproteinemiya aniqlangan, umumiy xolesterin darajasi 34% ga oshgan. Xulosa shuki Solikva glikemiya va lipid spektrini nazorat qilishda samarali va xavfsiz bo'lib, qandli diabet 2 tur va yurak qon tomir bemorlari uchun tavsiya etilishi mumkin.

Kalit so'zlar: 2-tur qandli diabet, GLP-1 analoglari, Soliqua SoloStar, iGlarLixi

STUDY OF THE HYPOGLYCEMIC EFFECTIVENESS OF THE DRUG IGLARLIXI «SOLIQUA» IN THE PATIENTS WITH TYPE 2 DIABETES MELLITUS

Urunbayeva D.A., Omonova Z.T.
Tashkent medical academy

Abstract

Type 2 diabetes mellitus (DM2) is a chronic condition that necessitates gradual therapy intensification for effective glycemic control. Poor management can persist for up to seven years, heightening the risk of complications and healthcare costs. Fixed-dose combinations of basal insulin and GLP-1 receptor antagonists offer improved glycemic control and convenience (one daily injection) without increasing hypoglycemia or weight gain risks.Purpose to compare the efficacy and safety of a fixed combination of insulin glargine 100 U/mL with lixisenatide 50 µg/mL (iGlarLixi) against human insulins (Actrapid and Insulatard) in basal-bolus therapy. The study involved 30 patients with DM2: 14 received iGlarLixi (group 1), and 16 received Actrapid and Insulatard (group 2). All participants were on metformin (1000-2500 mg/day). Key metrics included fasting and postprandial glycemia, glycated hemoglobin (HbA1c), and lipid profile. Group 1 showed significant reductions in fasting blood glucose (from 8.7±0.87 to 6.2±0.58) and postprandial glycemia (from 13.2±1.33 to 7.9±0.67). Average HbA1c levels after 6 months were 7.78 ± 0.80% ($p < 0.05$) and after 12 months, 7.20 ± 0.83% ($p < 0.001$). In group 2, HbA1c after 6 months was 8.23 ± 0.80%, and after 12 months, 7.69 ± 0.76% ($p < 0.05$). Hypoglycemia occurred in 0.71% of group 1 and 16.7% of group 2 patients, with no severe cases reported. Lipid analysis revealed hyperlipoproteinemia: total cholesterol increased by 34%, LDL by 37.5%, and triglycerides by 40.6%, while HDL decreased by 60.2%. Soliqua effectively achieves target glycemic levels and improves lipid profiles, demonstrating good safety and tolerability. It is recommended as a preferred hypoglycemic agent for patients with DM2 and cardiovascular conditions.

Key words: type 2 diabetes mellitus, GLP-1 analogues, Soliqua SoloStar, iGlarLixi

ИССЛЕДОВАНИЕ ГИПОГЛИКЕМИЧЕСКОЙ ЭФФЕКТИВНОСТИ ПРЕПАРАТА ИГЛАРЛИКСИ «СОЛИКВА» У БОЛЬНЫХ С САХАРНЫМ ДИАБЕТОМ 2ТИПА

Урунбаева Д.А., Омонова З.Т.
Ташкентская медицинская академия

Аннотация

Сахарный диабет 2 типа (СД 2) — хроническое заболевание, требующее постепенной интенсификации терапии для контроля гликемии. Неудовлетворительный контроль может сохраняться до семи лет, увеличивая риск осложнений и затраты на здравоохранение. Комбинированные препараты, такие как фиксированные комбинации базального инсулина и аГПП-1, обеспечивают улучшение гликемического контроля и удобство применения (одна инъекция в день) без увеличения риска гипогликемии и массы тела. Целью исследование было сравнение эффективности и безопасности фиксированной комбинации инсулина гларгина 100 ед/мл с ликсисенатидом 50 мкг/мл (иГларЛикси) в отличии от человеческого инсулина в базис-болюсной терапии, такими как актрапид и инсулатарда. В исследование были включены 30 пациентов с СД 2: 14 получали иГларЛикси (группа 1), 16 — комбинацию актрапида и инсулатарда (группа 2). Все участники принимали метформин. Оценивались гликемия натощак, постпрандиальная гликемия, гликированный гемоглобин (HbA1c), липидный спектр. Результаты показали, что в группе 1 наблюдалось значительное снижение гликемии натощак (от 8,7±0,87 до 6,2±0,58) и постпрандиальной гликемии (от 13,2±1,33 до 7,9±0,67). Средний уровень HbA1c через 6 месяцев составил 7,78 ± 0,80%, а через 12 месяцев — 7,20 ± 0,83% ($p < 0,001$). В группе 2 HbA1c через 6 месяцев составил 8,23 ± 0,80%, а через 12 месяцев — 7,69 ± 0,76% ($p < 0,05$). Гипогликемия наблюдалась у 0,71% пациентов группы 1 и у 16,7% группы 2. Липидный спектр показал гиперлипопротеинемию: общий холестерин увеличился на 34%, ЛПНП на 37,5%, триглицериды на 40,6%, ЛПВП снизился на 60,2%. Препарат Соликва эффективно достигает целевых уровней гликемии и HbA1c, обладает хорошей переносимостью и безопасностью. Рекомендуется для пациентов с СД 2 и сердечно-сосудистыми заболеваниями.

Ключевые слова: сахарный диабет 2 типа, аналоги ГПП-1, Соликва СолоСтар, иГларЛикси

Kirish. 2-tur qandli diabet (DM) surunkali progressiv kasallik bo'lib, giperglikemiyaning kuchayishi va glisemik nazoratga erishish va ushlab turish uchun terapiyani bosqichma-bosqich kuchaytirish zarurati bilan tavsiflanadi [1, 13].

Klinik amaliyot tadqiqotlari ma'lumotlar bazalarini tahlil qilishda ingliz olimlari 2-tur diabet bilan og'rigan bemorlarda yomon glisemik nazorat OAD yoki insulin terapiyasi kuchaygunga qadar o'rtacha etti yil davom etishini aniqladilar. Shu bilan birga, intensiv terapiyani kechiktirish 2-tur diabetning kech asoratlari rivojlanish xavfini va nazariyaga ko'ra, sog'liqni saqlash resurslari xarajatlarini oshirishi aniqlandi [5, 6].

Dastlabki OAD terapiyasini olgan bemorlar guruhida glyukemik nazorat ko'rsatkichlarining sezilarli darajada yaxshilanishi kutilmoqda, chunki Bemorlar zudlik bilan 2-tur diabet patogenezida turli bo'g'inlarga ta'sir qiluvchi va bir vaqtning o'zida FPG va PPG darajalariga ta'sir qiluvchi kombinatsiyalangan dori bilan bog'lanadi. T2DM uchun inyeksiya terapiyasini boshlashning zamonaviy yondashuvlari bir nechta variantni tanlashni o'z ichiga oladi. Buni BI, AGPP-1 yoki ularning doimiy o'zgaruvchan, bazal-bolus insulin terapiyasi yoki aralash insulin bilan boshlash mumkin [4, 11]. Inyeksiya terapiyasini boshlashning eng oddiy va eng ko'p qo'llaniladigan variantlari bazal insulin yoki GLP-1 agonistlarini qo'llashdir [5, 12] Shu bilan birga, keltirilgan klinik amaliyot ma'lumotlariga ko'ra, 2-tur diabet bilan og'rigan bemorlarning 25% dan kamrog'i HbA1c darajasiga ega.Yuqorida keltirilgan ma'lumotlar bazal insulin va GLP-1 agonistlarining

qattiq birikmalaridan foydalanishni qo'llab-quvvatlaydi.

Bunday kombinatsiyalarning afzalliklari foydalanish qulayligi (kuniga bir marta bitta in'ektsiya) va tanish (bazal insulin kabi) dozalash rejimini o'z ichiga oladi. Bundan tashqari, bunday terapiya faqat insulinni qo'llash bilan solishtirganda gipoglikemiya xavfi va tana vaznining ortishi bilan birga kelmaydi [2, 3, 10] Hozirgi vaqtda olimlar diabet bilan bog'liq asoratlar xavfini uzoq muddatli boshqarish bilan bog'liq holda 2-toifa diabetni davolash uchun kombinatsiyalangan dorilarning samaradorligi bilan qiziqishmoqda, chunki uzoq muddatli monoterapiya va dori xavfsizligini o'rganish kerak [7, 9].

Soliqua SoloStar® ning klinik sinovlarida asosiy yakuniy nuqtalar odatda:

1. HbA1c darajasini pasaytirish dinamikasi: Bu diabet bilan og'rigan bemorlarda glyukemik nazoratning asosiy ko'rsatkichidir. HbA1c ning kamayishi kasallikni davolashning samaraliroq ekanligini ko'rsatadi.

2. Tana vaznidagi o'zgarishlar: preparatning tana vazniga qanday ta'sir qilishini baholash kerak, ayniqsa, ba'zi antidiyabetik dorilar kilogramm ortishiga olib kelishi mumkin, bu ko'plab bemorlar uchun istalmagan.

3. Gipoglikemik epizodlar soni: Davolash xavfsizligi, shuningdek, gipoglikemik hodisalarni kuzatishni ham o'z ichiga oladi, chunki bu bemorning hayot sifatiga sezilarli ta'sir ko'rsatishi mumkin.

Ushbu parametrlar diabetni davolashning boshqa usullari bilan solishtirganda preparatning samaradorligi va xavfsizligini baholashga yordam beradi [8,14].

Maqsad. Insulin glargin 100 birlik / ml va liksisenatid va 50 mkg / ml liksisenatidning (iGlarLixi) qat'iy kombinatsiyasining samaradorligi va xavfsizligini bazal-bolus terapiyasi uchun inson insulinlari - aktrapid va insulatard bilan solishtirish.

Materiallar va usullar. Tadqiqotda 2-tur qandli diabet bilan og'rigan 30 nafar bemor ishtirok etdi, ulardan 14 nafari iGlarLixi "Soliqua" (1-guruh) preparatini, 16 nafar bemor esa Actrapid va Insulatard (2-guruh) kombinatsiyasini qabul qildi. Barcha bemorlarga kuniga 1000 mg dan 2500 mg gacha metformin berildi. 1-guruhdagi bemorlarning o'rtacha yoshi 53,4±9,8 yil, BMI 36,8±5,8 kg/m2; va ikkinchi guruh 52,6±9,3 yosh, BMI - 35,9±5,54 kg/m2. BMI≥35 kg/m2 bo'lgan bemorlarning ulushi mos ravishda 1-guruh 53,8% va 2-guruh 53%. Qandli diabetning o'rtacha davomiyligi ikkala guruhda ham 6,7±1,9 yilni tashkil etdi. Soliqua buyurilgan bemorlarda o'rtacha HbA1c darajasi 10,37±2,05% ni tashkil etdi. Actrapid va Insulatardga o'tgan bemorlarda o'rtacha boshlang'ich HbA1c darajasi 10,05 ± 1,97% ni tashkil etdi. Tadqiqotga qo'shilishdan oldin bemorlarning 55,0% dastlab og'iz orqali gipoglikemik vositalarni (OHA) olgan; 34,3% - bazal insulin (BI) bilan birgalikda OAS, 10,7% - boshqa terapiya (glyukagonga o'xshash peptid 1 retseptorlari agonistlari, bazal-bolus insulin terapiyasi, bazal insulin monoterapiyasi).

Barcha bemorlar umumiy klinik tekshiruvdan o'tkazildi. Ro'za va ovqatdan keyin glikemiya glyukoza oksidaza usuli yordamida o'rganildi. Glikatlangan gemoglobinni (HbA1c) o'rganish Respons-920 qurilmasida (Germaniya) biokimyoviy usul yordamida amalga oshirildi. Lipid almashinuvi indekslari Randox analizatorida (Buyuk Britaniya) Human (Germaniya) reaktivlar to'plamidan foydalangan holda fermentativ usul bilan aniqlandi. Olingan ma'lumotlar kompyuterda "Statistika-6" statistik dasturiy majmuasi yordamida qayta ishlandi.

Ikkala guruhdagi bemorlar yoshi va kasallikning davomiyligi bo'yicha bir-biridan farq qilmadi. Bemorlar qon bosimi ortishi, quruq og'iz, tashnalik, tez-tez siyish, yurak sohasidagi davriy og'riqlar, bosh og'rig'i va ortiqcha vazndan shikoyat qildilar.

Natijalar. Asosiy natijalar. Shunday qilib, uglevod almashinuvi ma'lumotlariga ko'ra, barcha bemorlarda ochlik va ovqatdan keyin glikemiya va HbA1c ko'payadi, bu 41,0, 43,2 va 43,5% ga oshadi, bu diabetning dekompensatsiyasini ko'rsatadi.

Jadval 1

Davolashdan oldin 2-toifa diabet bilan og'rigan bemorlarda qonning biokimyoviy ko'rsatkichlari

Ko'rsatkichlar	Nazorat n-10	Davolashdan oldin n-30
Ro'za glikemiyasi, Mmol/l	4,2±0,48	8,7±0,87*
Ovqatdan keyin glikemiya, mmol/l	5,8±0,67	13,2±1,33*
HbA1c, %	4,5±0,5	10,27±2,05*
OX, mg/dl	3,7±1,0	6,6±1,2*
LDL, mg/dl	1,85±0,04	3,85±0,09*
HDL, mg/dl	1,53±0,03	1,21±0,05
TG, mg/dl	1,11±0,03	3,93±0,09*
Aterogenlik Koeffitsienti	2,02+0,09	4,71±0,25**
ALT, U\l	18.8±3,7	24,8±4,0
AST, U\l	23.1±2.9	25,8±3,3

Eslatma: n—tekshirilgan bemorlar soni; *--ishonchlilik (P<0,05), **(P<0,01)

2-tur diabet bilan og'rigan bemorlarda lipid spektrini tahlil qilishda giperlipoproteinemiya kuzatildi - nazorat guruhiga nisbatan lipid almashinuvi ko'rsatkichlarining sezilarli darajada oshishi.

Bundan tashqari, TC ning qon tarkibi nazorat guruhiga qaraganda 34,0% (P<0,05) yuqori, LDL 37,5% ga, TG 40,6% ga (P<0,01) oshdi. HDL tarkibi nazorat guruhiga nisbatan asosiy guruhda 60,2% (P<0,05) past edi (1-jadval). 2-toifa diabet bilan og'rigan bemorlarda LDL, TG kabi aterogen lipoproteinlarning ko'payishi va antiaterogen fraktsiya - HDL darajasining pasayishining olingan natijalari adabiyotda tasvirlangan ma'lumotlarga to'g'ri keldi [12].

Yurak-qon tomir xavfi (CVR) toifasini baholash bemorni optimal boshqarishni ishlab chiqish va glikemiya va LDL-C ning maqbul darajasini saqlab qolishi mumkin bo'lgan adekvat terapiyani buyurish uchun juda muhimdir. Qandli diabet, prediabet va yurak-qon tomir kasalliklari (KVD) bo'yicha 2019 yilgi ESC/EASD konsensus ko'rsatmalariga ko'ra, diabet bilan og'rigan bemorlar CV asoratlarining yuqori va juda yuqori xavfi bo'lgan guruh sifatida ko'rib chiqilishi kerak: diabet bilan og'rigan va CV kasalligi yoki maqsadli organlarning shikastlanishi uchun kamida bitta xavf omili bo'lgan bemorlar juda yuqori xavf guruhi sifatida ko'rib chiqilishi kerak va boshqa barcha bemorlar yuqori xavf guruhi sifatida ko'rib chiqilishi kerak [9].

Terapiyaning xavfsizligi ro'yxatga olingan nojo'ya hodisalarning soni va turi, shuningdek, qon biokimyoviy ko'rsatkichlarida klinik jihatdan muhim o'zgarishlarni aniqlash asosida baholandi: jigar transaminazalari darajasining 3 baravar yoki undan ko'proq oshishi. Bir oy-uch oydan so'ng 27 nafar (90,0%) bemor qayta ko'rikdan o'tkazildi, qolgan 3 nafari (10,0%) turli shaxsiy sabablarga ko'ra qayta tekshiruvga kelmagan.

iGlarLixi ning o'rtacha dozasi 28,8±5,8 U / kun, aktrapid va insulatard bilan bazal-bolus terapiyasining o'rtacha dozasi 32,4 ± 5,4 U / kun edi. Tadqiqot natijalari shuni ko'rsatdiki, bi-

rinchi guruhda ochlik glisemiyasi darajasi sezilarli darajada pasaygan (8,7±0,87 dan 6,2±0,58 gacha), ikkinchi guruhda esa kamaygan (8,9±0,95 dan 7,4±0,67 gacha). Birinchi guruh, shuningdek, ikkinchi guruhga (13,25 ± 1,34 dan 9,2 ± 0,56 gacha) nisbatan postprandial glikemiyaning sezilarli darajada pasayishini ko'rsatdi (13,25 ± 1,34 dan 9,2 ± 0,56 gacha), terapiyadan keyin o'rtacha HbA1c darajasi 70,07 oydan keyin 70,8% ni tashkil etdi. - 7,20±0,83% (p<0,001). 2-guruhdagi bemorlarda 6 oydan keyin. terapiya 8,23±0,80%, 12 oydan keyin - 7,69±0,76% (p<0,05).

2-jadval

Dori vositalarining qiyosiy tavsifla

Parametr	1 guruh n-14	2guruh n-16
O'rtacha doza (U/kun)	28,8±5,8	32,4±5,4
ochlik glyukoza (mmol/l) 12 oy ichida	8,7±0,87 6,2±0,58	8,9±0,95 7,4±0,67
Ovqatdan keyin Glikemiya (mmol/l) 12 oy ichida	13,2±1,33 7,9±0,67	13,25±1,34 9,2±0,56
O'rtacha HbA1 (%) 12 oy ichida	10,37±2,05 7,20±0,83	10,05±1,97 7,69±0,76
Tana vazni (kg)	↓ 4,10±3,68	↑ 5,10±1,13
Simptomatik gipoglikemiya (%)	0,71	16,7

1-guruhda tana vaznining statistik jihatdan sezilarli kamayishi (109,61±21,64 kg) 6 oy davomida 1,89±4,13 kg ga va 12 oylik kuzatishda 4,10±3,68 kg ga qayd etildi (p<0,001). 2-guruhdagi bemorlar 6 oy davomida 3,61±4,13 kg vazn ortishi (102,61±21,64 kg) va 12 oylik kuzatuv davomida 5,10±1,13 kg (p<0,001) kuzatilgan (2-jadvalda eng ko'p uchraydigan nojo'ya reaktsiyalar diareya, diareya va diareya bilan davolash qilingan). mos ravishda 6,5%, 1,2% va 2,6%.

12 oylik terapiya davomida 1-guruhdagi 1 bemorda (0,71%) tasdiqlangan simptomatik gipoglikemiya (glisemiya ≤3,9 mmol/l) kuzatilgan. Jiddiy gipoglikemiya qayd etilmagan. 2-guruhdagi bemorlarda 5 (16,7%) bemorlarda tasdiqlangan simptomatik gipoglikemiya (glisemiya ≤3,9 mmol/l) qayd etilgan. Ushbu guruhda og'ir gipoglikemiya ham qayd etilmagan.

Qonning biokimyoviy ko'rsatkichlari - AST, ALT statistik jihatdan sezilarli darajada o'zgarmadi.

Shunday qilib, qat'iy dozali Soliqua preparati bilan davolashda qisqa vaqt ichida glikemiya va glyukozalangan gemoglobinning maqsadli darajasiga erishish qobiliyati, uning xavfsizligi va yaxshi bardoshliligi yurak-qon tomir kasalliklari bo'lgan 2-toifa diabet bilan og'rigan bemorlarda uni gipoglikemik dorilar orasida tanlagan dori vositalaridan biri sifatida tavsiya qilish imkonini beradi.

Xulosa:

1. 2-turqandli diabet bilan og'rigan bemorlarga og'iz orqali gipoglikemik dorilarni qabul qilish paytida yoki bazal insulin bilan birgalikda glikemiya va glyukozalangan gemoglobinning maqsadli darajasiga erisha olmagan bemorlarga insulin glargin 100 U/ml va 50 mkg liksisenatid kombinatsiyalangan preparatini qo'llash glitsemik nazoratni yaxshilashga yordam berdi. Bundan tashqari, 6 oylik terapiyadan so'ng o'rtacha HbA1c darajasi 7,78±0,80% (p<0,05), 12 oydan keyin - 7,20±0,83% (p<0,001). 2-guruhdagi bemorlarda 6 oydan keyin. terapiya 8,23±0,80%, 12 oydan

keyin - 7,69±0,76% (p<0,05).

2. Glargin 100 U/ml va liksisenatidning kombinatsiyasini o'z ichiga olgan Soliqua SoloStar ikki yoki uch marta og'iz orqali qabul qilingan gipoglikemik terapiya, ayniqsa bazal insulin bilan birgalikda, samarasiz bo'lgan va HbA1c darajasi maqsadli qiymatdan (xususan, 1,5% dan ortiq) yuqori bo'lgan bemorlarda foydalanish uchun tavsiya etiladi.

3. 2-tur qandli diabet bilan og'rigan bemorlarda iGlarLixi kombinatsiyalangan preparatini qo'llash tana vaznining 6 oy davomida 1,89±4,13 kg ga va 12 oylik kuzatuvda 4,10±3,68 kg ga kamayishiga yordam berdi (p<0,001). 2-guruhdagi bemorlarda tana vazni (102,61±21,64 kg) 6 oy davomida 3,61±4,13 kg ga va 12 oylik kuzatuvda 5,10±1,13 kg ga oshgan (p<0,001)

4. Shu bilan birga, gipoglikemiya xavfi past darajada saqlanib qoldi. 12 oylik terapiya davomida 1-guruhdagi 1 bemorda (0,71%) tasdiqlangan simptomatik gipoglikemiya (glisemiya ≤3,9 mmol/l) kuzatilgan. Jiddiy gipoglikemiya qayd etilmagan.

5. Soliqua SoloStar kombinatsiyalangan preparatining yaxshi tolerantligi uni og'iz orqali qabul qilingan gipoglikemik dorilarni qabul qilishda yoki bazal insulin bilan birgalikda glyukozalangan gemoglobinning maqsadli ko'rsatkichlariga erisha olmagan, CV xavfi bo'lgan 2-toifa qandli diabet bilan og'rigan bemorlarni davolashda tanlangan dorilardan biri sifatida tavsiya qilish imkonini beradi.

6. iGlarLixie gipoglikemiya xavfi past bo'lgan maqsadli glisemik darajalarga erishish uchun samarali strategiya bo'lib, uni ko'plab bemorlar uchun tanlagan dori qiladi. Uning uzoq muddatli xavfsizligini tasdiqlash uchun qo'shimcha tadqiqotlar talab qilinadi.

Foydalanilgan adabiyotlar:

1. Qandli diabet bilan og'rigan bemorlarga ixtisoslashtirilgan tibbiy yordam ko'rsatish algoritmlari. 9-son, qo'shing. / ed. I.I. Dedova, M.V. Shestakova, A.Yu. Mayorova. M.: UP Chop etish, 2019 yil 9-son. 38–46-betlar.
2. Antsiferov M.B., Koteshkova O.M., Demidov N.A. 2-toifa diabet bilan og'rigan bemorlarda insulin terapiyasini kuchaytirish uchun kombinatsiyalangan in'ektsiya terapiyasi // Samarali farmakoterapiya. 2020. 16-jild. № 12. 68–73-betlar.
3. "Ixtisoslashtirilgan algoritmlar qandli diabet bilan og'rigan bemorlarga tibbiy yordam ko'rsatish" (11-nashr, 2023 yil)
4. Demidov N.A. Bazal insulin analogi va glyukagonga o'xshash peptid 1 retseptorlari agonistlarining qat'iy kombinatsiyasi bilan in'ektsiya terapiyasini boshlash 2-toifa diabet terapiyasi maqsadlariga erishish uchun yangi imkoniyat sifatida // Samarali farmakoterapiya. 2021. 17-jild. No 5. 10–14-betlar. 5. Demidova T.Yu., Titova V.V. Insulin terapiyasi - qandli diabetda glikemiyani boshqarishga individual yondashuv. Terapevtik arxiv. 2020; 92 (12): 201–6. DOI: 10.26442/00403660.2020.12.200449
5. Dedov I.I., Shestakova M.V., Mayorov A.Yu., va boshqalar bemorlarga ixtisoslashtirilgan tibbiy yordam ko'rsatish diabetes mellitus (10-son) // Qandli diabet. —2021 yil - 24 (S1).
6. Zyryanov S.K., Dyakov I.N. Samaradorlikning iqtisodiy istiqbollari 2-tur diabet mellitusni qattiq kombinatsiya bilan samarali nazorat qilish bazal insulinning analogi va glyukagon retseptorlari agonisti shunga o'xshash peptid // Yuqori sifatli klinik amaliyot. - 2019. - No2. 7-8 bet

7. Kolbin A.S. , Kurylev A.A., Balykina Yu.E. va boshqalar samarali va xavfsiz insulin terapiyasini kuchaytirishni baholash 2-tur qandli diabetni nazorat qilish // Sifatli klinik amaliyot. - 2019. - No2. — B.25-35.
8. 2-tur diabetning erta kombinatsiyalangan terapiyasi Aleksandr Sergeevich Ametov, Ekaterina Vladimirovna Karpova 2011 yil 2-son 69-75-bet
9. Soliqua SoloStar® bilan terapiyani oldindan aralashtirib yuborilgan insulin bilan solishtirganda yaxshilangan qabul qilish: SoliMix tadqiqotida bemor tomonidan bildirilgan natijalar T.Yu. Demidova1, E.A. Yanovskaya 2022 1, 63-66
10. Aroda VR, Rosenstock J, Wysham C va boshqalar. LixiLan samaradorligi va xavfsizligi, Insulin glargin va liksisenatidning titrlanadigan qat'iy nisbatli kombinatsiyasi 2-tur diabet bazal insulin va metformin bilan etarli darajada nazorat qilinmaydi LixiLan-L randomize sinovi. Qandli diabetga g'amxo'rlik qilish. 2016;39(11):1972-1980 yillar
11. Abu Hasan H, Tohid H, Mohd Amin R va boshqalar. Birlamchi tibbiy yordam klinikasida 2-tur diabet bilan og'rigan bemorlarda insulinni qabul qilishga ta'sir qiluvchi omillar: sifatli tadqiqot. BMC Fam Practice 2013; 14: 164. DOI: 10.1186/1471-2296-14-164
12. Kahn A., Cefalu V.T. 2-toifa diabetda dastlabki kombinatsiyalangan terapiyani qo'llash bo'yicha klinik mulohazalar // Qandli diabetni davolash. 2016. jild. 39. Suppl. 2. P. S137–145.
13. Rosenstock J, Aronson R, Grunberger G va boshqalar. LixiLan-ning afzalliklari,insulin glargin va liksisenatidning titrlanadigan qat'iy nisbatli kombinatsiyasi, 2-tur diabetdagi insulin glargin va liksisenatid monokomponentlariga qarshi etarli darajada nazorat qilinmagan og'iz agentlari: LixiLan-O randomize sinovi.Qandli diabetga g'amxo'rlik qilish. 2016;39(11):2026-2035 yillar.

UO'K: 616.89 – 008.441.44

TUGALLANMAGAN SUITSIDLARNI QAYTA AMALGA OSHIRGAN SUITSIDENTLARNING SHAXS TIPOLOGIK XUSUSIYATLARI

Usmonova M.B., Kozimjonova I.F., Juraev N.N.
Andijon davlat tibbiyot instituti

Annotatsiya

O'z joniga qasd qilish insoniyatning eng dolzarb tibbiy va ijtimoiy muammolaridan biri bo'lib qolmoqda. Shu bilan birga, turli yillarda ishlab chiqilgan o'z joniga qasd qilish xatti-harakatlarining ko'plab konsepsiyalari va modellariga qaramay, uning sabablari, shakllanish mexanizmlari, klinik ko'rinishlari, ruhiy va badandagi sog'liq holati bilan aloqalari haqidagi g'oyalar ziddiyatli va bahsli bo'lib qolmoqda.

Kalit so'zlar: to'liq bo'lmagan o'z joniga qasd qilish, shaxsning o'zgarishi, o'z joniga qasd qilish harakati, oldini olish

TYPOLOGY OF THE PERSONALITY OF PATIENTS WITH INCOMPLETE SUICIDES AND ALGORITHM FOR PREVENTING REPEATED SUICIDAL ACTIONS

Usmonova M.B., Kozimzhonova I.F., Juraev N.N.
Andijan State Medical Institute

Abstract

Suicide continues to be one of the most pressing medical and social problems of mankind. At the same time, despite a significant number of concepts and models of suicidal behavior developed in different years, ideas about its causes, mechanisms of formation, clinical manifestations, connections with the state of mental and somatic health continue to remain controversial and controversial.

Key words: incomplete suicide, personality changes, suicidal actions, prevention

ТИПОЛОГИЯ ЛИЧНОСТИ ПАЦИЕНТОВ С НЕЗАВЕРШЕННЫМИ СУИЦИДАМИ И АЛГОРИТМ ПРОФИЛАКТИКИ ПОВТОРНЫХ СУИЦИДАЛЬНЫХ ДЕЙСТВИЙ

Усманова М.Б., Козимжонова И.Ф., Джураев Н.Н.
Андижанский государственный медицинский институт

Аннотация

Самоубийства продолжают оставаться одной из наиболее актуальных медико-социальных проблем человечества. Вместе с тем, несмотря на значительное число разработанных в разные годы концепций и моделей суицидального поведения, представления о его причинах, механизмах формирования, клинических проявлениях, связи с состоянием психического и соматического здоровья продолжают оставаться противоречивыми и дискуссионными.

Ключевые слова: незавершенный суицид, изменения личности, суицидальная дейтствия, профилактика

Dolzarbligi. Hozirgi kunda aksariyat davlatlar uchun o'z joniga qasd qilish ejng o'tkir tibbiy va ijtimoiy muammolardan biri bo'lib qolmoqda. Zamonaviy g'oyalarga ko'ra, suitsidal xatti - harakatlarning genezisi turli xil omillar-biologik, shaxsiy-psixologik, ijtimoiy-ekologik, etno-

madaniy, stressli, psixopatologik omillarni o'z ichiga oladi, bu bizga suitsidologiyani ko'p tarmoqli bilim sohasi deb hisoblash imkonini beradi [1].

Rivojlangan mamlakatlarda (AQSh, buyuk Britaniya, Germaniya va boshqalar), o'z joniga qasd qilish yurak-qon tomir va onkologik kasalliklardan keyin aholining o'lim sabablari orasida uchinchi o'rinni egallaydi. O'smirlar o'rtasida o'z joniga qasd qilish muammosi ham keskin, chunki 15-19 yoshdagi odamlar orasida o'z joniga qasd qilish qizlar orasida o'limning uchinchi, o'g'il bolalar orasida yesa to'rtinchi sababdir [3,5].

O'z joniga qasd qilishning oldini olishda profilaktika muhim rol o'ynashiga qaramay, o'z joniga qasd qilishga uringan shaxslarga bevosita tibbiy-psixologik yordam ko'rsatish muhim bo'lib qolmoqda.

Mutaxassislarning e'tiborini o'z joniga qasd qilishning ruhiy salomatligi bo'yicha tadqiqotlar jalb qiladi. Ba'zi mualliflarning fikriga ko'ra, o'z joniga qasd qiluvchilar orasida psixik buzilishlarning bo'lmagan shakllari ustunlik qiladi, ular suiqasd sodir etilgandan so'ng odatda psixiatriya shifoxonasiga yotqizilmaydi va o'z vaqtida psixiatrik yordamisiz qoladilar [6].

Ushbu muammoni uzoq muddatli o'rganish bizga o'z joniga qasd qilishning turli xil oldini olish modelini ishlab chiqishga imkon berdi. Uni yaratishda biz Jahon Sog'liqni saqlash tashkilotining uchta asosiy shaklini ajratib turadigan zamonaviy tibbiy profilaktika konsepsiyasiga asoslandik — universal, tanlangan va indikativdir. Suitsidal xulqning o'ziga xos xususiyatlarini hisobga olgan holda biz oldini olishning to'rt darajasini aniqladik: umumbashariy, tanlanma, krizga qarshi va indikativ.

Umumjahon profilaktika umumiy aholiga qaratilgan va tibbiy va ijtimoiy xususiyatga ega [2]. Uning maqsadi suitsidal xulq-atvorning birlamchi yuzaga kelishining oldini olish, uning rivojlanish xavfining asosiy "maqsadlari" ga ta'sir ko'rsatishdan iborat.

Selektiv oldini olish-suitsidal xavf guruhlariga mansub shaxslarni faol aniqlash va ularga suitsidal jarayonning yuzaga kelishi yoki keyingi rivojlanishining oldini olish uchun yetarli profilaktik yordam ko'rsatishga qaratilgan [6].

Inqirozga qarshi oldini olish suitsiddan oldingi va eng yaqin keyingi davrlarda amalga oshiriladi. Uning vazifalari: o'z joniga qasd qilishgacha bo'lgan davrda o'z joniga qasd qilish niyatlari (aslida o'z joniga qasd qilish harakatlari) ning amalga oshirilishining oldini olish, shuningdek, keyingi (suiqasddan keyingi birinchi hafta) o'z joniga qasd qilishdan keyingi davrda to'liqsiz o'z joniga qasd qilgan shaxslarda o'z joniga qasd qilish niyatlarini yengillashtirish. Oldini olishning bu shakli klinik ko'rinishlarning xarakteri va suitsidal jarayonning turini hisobga olgan holda tibbiy va psixoterapevtik ta'sirlar majmuasini o'z ichiga oladi [1].

Indikativ profilaktika o'z joniga qasd qilishdan keyingi davrda (urinishdan bir hafta o'tgach) boshlanadi va kamida bir yil davom yetadi. Uning maqsadi suitsidal xatti-harakatlarning qaytalanishi va takroriy suitsidal harakatlarning oldini olishdir. Indikativ oldini olishning asosiy vazifalariga quyidagilar kiradi: suitsidal shaxsning antiseptitsizm to'sig'ini mustahkamlash; uning bevosita mikrosotsial muhiti bilan psixokorrektivli ishlash, shuningdek suitsidal shaxsni ruhiy kasallikka chalingan holatda dinamik kuzatish va davolashdan iborat [2, 4].

Shunday qilib, bugungi kunda o'z joniga qasd qilishning oldini olish psixiatriya va suiqasdning eng kam rivojlangan muammolaridan biridir. O'z joniga qasd qilgan shaxslarda takroriy suitsidal harakatlarning oldini olish va oldini olishning samarali usullarini yaratish uchun o'z joniga qasd qilishning klinik, shaxsiy-psixologik va ijtimoiy determinantlarini, tipologiyasini va dinamikasini aniqlash zarur. Bularning barchasi ushbu tadqiqotning nazariy va amaliy ahamiyatini belgilaydi.

Tadqiqotning maqsadi. Ushbu tadqiqotning maqsadi ruhiy kasalliklar oqibatida o'z joniga qasd qilish xulq-atvorining shakllanishi va dinamikasini o'rganish, o'z joniga qasd qilishning xususiyatlarini tahlil qilish va qayta o'z joniga qasd qilishning oldini olish uchun samarali terapevtik va profilaktik va psixologik choralarni ishlab chiqishdan iborat.

Tadqiqot materiallari va usullari. 150-200 nafar 18-50 yoshli bemor o'rganiladi (100-150 asosiy guruh, 50 nazorat guruhi (sog'lom odamlar - ko'ngillilar, ishchilar, xodimlar, talabalar).

Qo'yilgan vazifalarni hal etish uchun RShTYoM Andijon filialining toksikologik, neyroreanimatsiya va kombustologiya bo'limlarida joniga qasd qilishdan keyin bo'lgan shaxslar, shuningdek sud-tibbiy ko'riklarining arxiv ma'lumotlari bo'yicha ko'zdan kechirildi.

Tadqiqot natijalari. Ruhiy kasalliklarga chalingan shaxslarda o'z joniga qasd qilish davrining xususiyatlarini o'rganish natijasida quyidagilar aniqlandi:

O'z joniga qasd qilish davri asosan hissiy jihatdan kuchli (90.2%) bo'lib, nevrotik va shaxsiyat kasalliklari, organik miya shikastlanishi bo'lgan bemorlarda keng tarqalgan. O'z joniga qasd qilishning affektiv ravishda kamaytirilgan varianti (9.8%) endogen ruhiy patologiya bilan o'z joniga qasd qilishda qayd etilgan.

Surunkali suitsidal davrning (58.4%>) o'tkir (38.5%) va subakut (3.1%) kechishi aniqlangan ustunlik suitsidal xulq-atvorning yetarli darajada oldini olishni ko'rsatadi, ayniqsa, 34.3% suitsidentlar QK dan oldingi yil davomida psixiatr yordamini so'ragan.

O'z joniga qasd qilishgacha bo'lgan davrda barcha o'z joniga qasd qiluvchilar qarama-qarshi hayotiy tajribalarga, unga ongli ravishda intilish va o'z joniga qasd qilishga qarshi omillar rolini yo'qotishgan.

SU guruhidan farqli o'laroq, bemorlar guruhida quyidagilar ustunlik qildi: yashashni istamaslik (40.6% va 10.5%>), hayotni saqlab qolish uchun choralar ko'rmaslik (47.8%) va 15.8%), noaniq etiologiyali (92.1% va 59.6%), o'limga qat'iy intilish (36.3%) va 19.3%"), o'z joniga qasd qilish g'oyalarini qamrab olish (53.6% va 19.3%), ularning hayotiga chek qo'yish istagi (53,6% va 15,8%).

Guruhda SU ko'pincha o'z joniga qasd hujjatlari natijalarini bashorat emas (11,2%, 47.8%) guruh GNS yilda), o'z joniga qasd fikrlari ustidan nazoratni saqlab (40,4%) va 72.5%), oldini olish va manipulyatsiyasi hukmron (ning 78.9% va 46.4%), SU holatlar bir omil idrok bor bo'ldi (15,9%, va 84,1%).

O'z joniga qasd qilish urinishlari xususiyatlarini o'rganish suitsidal harakat og'irligini, o'z joniga qasd qilish xavfi darajasini baholash, suitsidal xatti-harakatlar oqimining dinamikasini bashorat qilish imkonini beradi.

Tekshiruvga olinganlar orasida erkaklarga xos bo'lgan sababi noma'lum (39,1%) va ayollarga xos bo'lgan o'z-o'zidan zaharlanish (33,4%) ustunlik qildi. O'z-o'ziga osilish (19.9%), balandlikdan tushish (5.1%), o'z-o'ziga cho'kish (1.9%) kamroq tarqalgan.

O'z-o'zidan zaharlanish ko'proq 26-30 yilda (23.6%), o'z-o'zidan osish - 31-35 yilda (23.8% o), o'z-o'zidan shikastlanish 16-20 yilda (17.7%) va 21-25 yilda 25.7%), balandlikdan tushish - 56-60 (38.9%) va 16-20 yilda (27.8%), o'z-o'zidan cho'kish teng nisbatda ifodalanadi 16-20 va 56-60 yillarda.

Organik miya shikastlanishi va shaxsiyati buzilgan bemorlarda o'z-o'zidan shikastlanish (81.8 va 47.3%), affektiv va nevrotik buzilishlarda - o'z-o'zidan zaharlanish (mos ravishda 44.4 va 43.1%) ustunlik qildi. Shizofreniyada sp ning o'rganilgan usullarining butun spektri aniqlanib, o'z-o'zidan jarohatlar (25.0%) va o'z-o'zidan zaharlanish (21.7%) ustunlik qilgan.

O'z-o'zini shikastlanish GSP guruhida ustunlik qildi (47.3%). O'z-o'zidan zaharlanish

(24.6%) va o'z-o'zidan osilib qolish (21.1%) ikki barobar kam bo'lgan. SUlar guruhida o'z-o'zidan zaharlanish (43.3%) va o'z-o'zidan shikastlanish (30.0%), tez-tez kirib boruvchi va sanchiluvchi qurol xarakteridagi (9.7%) ustunlik qildi. O'z-o'zini osishda (18,7%) ko'pchilik bemorlarda reanimatsiya tadbirlari talab qilingan.

O'z joniga qasd 38,8% uzoq o'z joniga qasd akti amalga oshirish oldin o'z niyatlarini xabar. 40,1% hollarda suitsidal harakatlar GSP guruhidan 96,9% boshqa shaxslar ishtirokida amalga oshirilgan. SS guruhining 36.2% va GSP ning 12.3% niyatlarini iloji boricha yashirdi. Har bir guruhning o'z joniga qasd qilish niyatlari bevosita atrof-muhit tomonidan aniqlanganidan so'ng, o'z niyatlarini amalga oshirishda chekindi-GSP dan 61.4% va SS dan 56.5%.

Tritsiklik antidepressantlar yuqori o'z joniga qasd qilish xavfi ostida va SSRI guruhidan aniq anksiolitik ta'siriga (Fluvoksamin, paroksetin) yega dorilar afzal qilingan. Serotonergik harakatlar bilan atipik antipsikotiklerin (klozapin, olanzapin, paliperidon, melipraminlar) yaxshi terapevtik ta'sir ko'rsatdi.

Past suitsidal xavf bilan atipik antipsikotiklar, o'rtacha timoanaleptik ta'sirga yega selektiv antidepressantlar, dozani titrlashni talab qilmaydigan minimal miqdordagi salbiy dori-darmonlar, aniq sedativ va anksiyolitik ta'sirlarsiz buyurish afzaldir.

O'z joniga qasd qilishning 70% profilaktik psixofarmakoterapiyaga muhtoj (antidepressantlar va normotimiklar). Suitsidal xavfning yuqori darajasi bilan terapiyaning davomiyligi 6-8 oydan bir yilgacha yoki undan ortiq, suitsidal xavfning pastligi bilan yesa 3-4 haftadan 6-8 oygacha bo'lishi kerak.

O'z joniga qasd qilishda odatiy xatolar aniqlandi: bemorning ruhiy holatidagi o'zgarishlar, o'z joniga qasd qilishning noyob tekshiruvlari, o'z joniga qasd qilish xavfini noto'g'ri baholash, yetarli psixofarmakoterapiya, kiruvchi dori hodisalarini kam baholash (gipersedatsiya, akatisiya), o'z joniga qasd qilish tendensiyalarini saqlab qolishda bemorni qattiq nazorat qilishni yerta bekor qilish, himoya psixologik rejimning buzilishi.

Xulosa. Olingan ma'lumotlar anamnestik axborot majmuasini, ijtimoiy sharoitlarni, shaxsiy xususiyatlarni hisobga olishning muhimligini isbotladi, bu klinik xususiyatlar bilan birga ruhiy kasalliklarga chalingan shaxslarda o'z joniga qasd qilish xavfini aniqlashga imkon beradi.

Foydalanilgan adabiyotlar:

1. Абрамова Н.М. Исследование личности суицидентов с помощью Я-структурного теста Аммона // Вестник психотерапии. 2004. -№ 12(17).-С. 91-96.
2. Васильев В.В. Социально-демографические и клинические особенности женщин с психическими расстройствами и суицидальным поведением // Российский психиатрический журнал. 2009. - № 6. - С. 39-45.
3. Джолдыгулов Г. А. Структура и динамика депрессивного синдрома с поведенческими «масками» при эндогенных психических расстройствах в подростковом возрасте // Автореф. дис. . канд. мед. наук.-М., 2005.-25 с.
4. Корнетов Н. А. Организационные и образовательные подходы к выявлению депрессивных расстройств с превенцией суицидального поведения // Материалы XV съезда психиатров России. М.: ИД «Медпрактика-М», 2010. - С. 343.
5. Galfalvy H., Huang Y. Y., Oquendo M. A. et al. Increased risk of suicide attempt in mood disorders and TPH1 genotype // J. Affective Disorders. 2009. Vol. 115, № 3 - P. 331-338.

6. Zhang J., McKeown R. E., Hussey J. R. et al. Low HDL cholesterol is associated with suicide attempt among young healthy women: the Third National Health and Nutrition Examination Survey // J. Affective Disorders. 2005. - Vol. 89, № 1-3. - P. 25-33.

UO'K: 617.711-004.1:577.161.2-07-08

QURUQ KO'Z SINDROMINING ETIOPATOGENEZI, AYOLLARDA UCHRASHI (ADABIYOTLAR SHARXI)

Vahobova M.Sh., Karimova M.X., Abdullayeva S.I., Xamrayeva U.Sh.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiyasi
ilmiy-amaliy tibbiyot markazi

Annotatsiya

Bu maqolada quruq ko'z sindromi (QKS) ning epidemiologiyasi, etiopatogenezi, rivojlanishida ishtirok etuvchi faktorlarni, ayollar organizmida kechishi bayon etiladi. So'nggi yillarda bu kasallik ko'payib borayotgani sababli (uning global tarqalishi 50% ni tashkil qiladi va u yoshga qarab chiziqli ravishda oshadi, osiyoliklar orasida keng tarqalgan) unga tobora ko'proq e'tibor berilmoqda va QKS etiologiyasi, patogenezi va davolash usullari to'g'risida ko'plab ilmiy ishlar olib borilmoqda. Dunyo bo'yicha aholining taxminan 85%i quruq ko'z sindromidan aziyat chekadi. Olingan ma'lumotlar shuni ko'rsatadiki, 50 yoshdan oshgan odamlarda kasallikning tarqalishi sezilarli darajada ortadi,ayollar erkaklarga qaraganda ko'proq kasallikka duchor bo'lishadi. Quruq ko'z sindromi ko'pincha kompyuterda uzoq vaqt ishlash, kontakt linzalari taqish va ba'zi dorilarni qabul qilish bilan bog'liqligi QKSning eng asosiy sabablaridandir. O'zbekistonda quruq ko'z sindromining tarqalishi haqida aniq statistika mavjud emas. Biroq, shuni ta'kidlash kerakki, kasallik respublikamizda ham keng tarqalgan. Ayniqsa ayollar orasida,chunki ayollar organizmida hayoti davomida turli gormonal o'zgarishlar kuzatiladi. Mamlakatimizda QKS ko'p tarqalishiga iqlim sharoiti, shuningdek, aholining kompyuter texnologiyalari va kontakt linzalaridan foydalanishining ortishi sabab bo'lishi mumkin.

Kalit so'zlar: quruq ko'z sindromi, etiopatogenez, gormonal holat,vitamin D

ETIOPATHOGENESIS OF DRY EYE SYNDROME, OCCURRENCE IN WOMEN (LITERATURE REVIEW)

Vakhobova M.Sh., Karimova M.Kh., Abdullayeva S.I., Khamrayeva U.Sh.
Republican Specialized Scientific and Practical
Medical Center for Eye Microsurgery

Abstract

Relevance. Currently, the number of patients operated on for vitreoretinal pathology is rapidly growing. As is known, difficulties in calculating the intraocular lens may arise during cataract surgery on such eyes. In this regard, minimizing residual refraction after phacoemulsification surgery with an intraocular lens is an important task for a surgeon. This is achieved by identifying factors that affect the achievement of accurate results, one of which is the shift of the intraocular lens in avitreal eyes. Objective of the study. to evaluate and compare the position of the intraocular lens (IOL) relative to the cornea according to optical biometry before and after vitreoretinal surgery. Materials and methods of the study The study included 75 patients with pseudophakia who underwent vitreoretinal surgery for various fundus pathologies. Depending on the clinical refraction, they were divided into 3 groups. Measurements were taken before and after surgery, then the results were compared. Results and discussion. In the group with myopic refraction, the lens shift toward the cornea was 0.64±0.02 mm, in the group with normal refraction — 0.55±0.01 mm, and in the group with hypermetropic refraction — 0.24±0.01 mm. that the value of the anteroposterior size of the eye directly affects the degree of IOL displacement: the larger the eyeball, the more pronounced the lens shift, and vice versa, with a smaller eye size, the IOL shift is minimal. Conclusion. To achieve a refractive result as close as possible to the planned one, it is preferable to use an IOL with a higher refractive power.

Key words: cataract surgery, IOL calculation, vitrectomy, optical biometry, anterior chamber depth, IOL position

ЭТИОПАТОГЕНЕЗ СИНДРОМА СУХОГО ГЛАЗА, ВСТРЕЧАЕМОСТЬ У ЖЕНЩИН (ОБЗОР ЛИТЕРАТУРЫ)

Вахабова М.Ш., Каримова М.Х., Абдуллаева С.И., Хамраева У.Ш.
Республиканский специализированный научно-практический медицинский центр микрохирургии глаза

Аннотация

В этой статье рассказывается об эпидемиологии, этиопатогенезе, факторах, влияющих на развитие синдрома сухого глаза. В последние годы в связи с ростом заболеваемости (ее глобальное распространение составляет 50%, и она линейно увеличивается в зависимости от возраста, широко распространена среди азиатов) ей уделяется все больше внимания и проводится большая научная работа по этиологии, патогенезу и методам лечения ССГ. Около 85 процентов населения планеты страдает синдромом сухого глаза. Полученные данные показывают, что у людей старше 50 лет заболеваемость значительно возрастает, и женщины страдают от нее чаще, чем мужчины. Синдром сухого глаза часто связан с длительной работой на компьютере, ношением контактных линз и приемом некоторых лекарств. Точной статистики распространения синдрома сухого глаза в Узбекистане нет. Однако следует отметить, что заболевание распространено и в республике. Особенно среди женщин, потому что в женском организме в течение жизни наблюдаются различные гормональные изменения. Распространение ССГ в нашей стране может быть вызвано климатическими условиями, а также повышением доступности населением компьютерных технологий и контактных линз.

Ключевые слова: синдром сухого глаза, этиопатогенез, гормональное состояние, витамин D

Quruq ko’z sindromi (QKS) — ko'zning normal ishlashiga xalaqit beradigan, ko'zning qurishi, qichishishi va qizarishi bilan ifodalanadigan holat. Ushbu sindromning dolzarbligi jahon bo'ylab ortib bormoqda, ayniqsa, yoshlar va qariyalar orasida. Yoshlar orasida keng tarqalishiga sabab, zamonaviy gadjetlardan ko’p va tinimsiz foydalanish bo’lsa, qarilar organizmida modda almashinuvi, gormonal holatlarning o’zgarishi bilan bog’liqdir. QKS 85-90% hollarda asosan ikkilamchi kasallik yoki kasallikning asorati sifatida rivojlanadi [3-5]. Bu kasallika vitamin D dan yetishmovchiligi, turli gormonal o’zgarishlar (qalqonsimon bez va jinsiy gormonlari asosan), me'da ichak trakti (MIT) turli yallig’lanish va disbakterioz holatlari, ayollarda gormonal kontrasepsiyadan noto’g’ri foydalanish va jigar kasalliklari,sistemali kasalliklar asosiy sabab bo’lmoqda.Uning dolzarbliligining sabablari shuki, QKS keng tarqalgan va insonlar hayot sifatiga salbiy ta’sir ko’rsatadi, u odatda surunkali kechadi, vaqt o’tgani sari ko’zning oldingi qismida patologik o’zgarishlar rivojlanadi va nihoyat eng og’iri QKS davolanmasa shox pardoning og’ir erroziyali kasalliklarini rivojlanishiga sabab bo’ladi.

Epidemiologiyasi. Oxirgi statiska ma’lumotlarga qaraganda, jahon bo'ylab QKS aholining 5-30% da uchraydi. Boshqa ko’z kasalliklari bo’lmagan insonlar orasidagi statistik tahlillarga ko’ra, yoshi ulg'aygan odamlar orasida bu kasallikning tez-tez uchrashi kuzatiladi va 50 yoshdan katta bo'lgan odamlarning 20-30% bu kasallikka duchor bo’lyotkan ekan (2024). Turli jins vakillari orasidagi statistikaga ko’ra, ayollarda, ayniqsa menopauza davrida, QKS ko'proq uchramoqda. Buning sababini olimlar ayol organizmini gormonal o'zgarishlari bilan bog'liqligini ta’kidlashmoqda[1,2,3,4,5].Ko'zlarining qurishi insonlarning kasbiy faoliyatiga ham bog’liqdir. Masalan, kompyuter yoki telefon va shu kabi zamonaviy texnikalar bilan faoliyat yuritadigan shaxslar QKS bilan kasallanish xavf guruhiga kirishadi [1-5].Dunyo bo’ylab o’tkazilgan tadqiqotlar shuni ko'rsatdiki, QKS tashxisi qo'yilgan bemorlarning o'rtacha yoshi ayollar uchun 60 yosh va erkaklar uchun 66 yosh. QKS ni baholash uchun Allergan Inc kompaniyasining Outcomes Research Group tomonidan Ocular Surface Disease Index (OSDI) shkalasi ishlab chiqilgan. Bu shkala ko'z

kasalliklari, xususan quruq ko'z sindromini aniqlash va baholash uchun qo'llaniladigan savolnoma hisoblanadi. Ushbu shkala bemorning ko'z yuzasi kasalligi bilan bog'liq alomatlari va ularning kundalik hayotga ta'sirini baholashga yordam beradi.Ko'z yuzasi kasalliklari indeksi (OSDI) va quruq ko'z simptomlarini baholash (SANDE) quruq ko'z diagnostikasi uchun tasdiqlangan bir nechta so'rovnomalardan eng muhimlaridir. Ushbu anketalar yordamida o't-kazilgan baholash shuni ko'rsatdiki, og'ir alomatlar turli yoshdagi ayollar orasida ko'proq uchraydi[6]. Ushbu so'rovnomalar Qo'shma Shtatlar aholisi orasida QKS tarqalishini baholash uchun foydalanilgan va natijasi esa ayollar orasida 3,25 million, erkaklarda esa 1,68 millionni tashkil etgan. Tahlillar solishtirilganda , ayyollarda deyarli ikki baravar ko'p uchrashi aniqlangan (2024).

Etiopatogenez. Hozirgi jadal rivojlangan zamonda quruq ko'z sindromining ko'plab sab-ablari bor, masalan, inson qarigani sari barcha a'zolar funksiyasi sustlashadi, shu jumladan ko'z yoshi ishlab chiqarish ham. Ayollarda esa yosh o'tgan sari gormonal o'zgarishlar kuzatiladi va ayniqsa, menopauza davrida gormonlar yetishmovchiligi (estrogen,prolaktin) ko'z yoshi ishlab chiqarishni kamayishiga, ko'z yosh plyonkasi tarkibi buzilishiga sabab bo'ladi. QKS patogenezi-ning hozirgi kundagi zamonaviy kontseptsiyasida ikkita asosiy aniqlangan bo'lib, ular ko'z yoshi ishlab chiqarishni kamaytishi yoki ko'z yoshi bug'lanishining ko'payishi va aralash mexanizm tez-tez uchraydi [1, 8]. Shubhasiz, yosh va jinsiy omillar QKS patogenezining ikkala bo'g'iniga ta'sir qilishi mumkin. Hayot davomida ko'z yoshi ishlab chiqarishning pasayishi funksional ko'z yoshi birligining har qanday elementining disfunktsiyasi bilan bog'liq bo'lishi mumkin. Ko'z yuzasi va sekretor neyrotransmitterlardan sezgir stimulyatsiyaning pasayishi, ko'z yoshi bezidagi sekretor to'qima miqdorining pasayishi, lakrimal bezdagi yoshga bog'liq o'zgarishlar 40 yoshdan keyin, hatto QK sindromi belgilarisiz ham, yallig'lanishli hujayra infiltratsiyasi natijasida asinuslar va kanallarning asta-sekin torayishi boshlanadi [8, 9]. Yoshga bog'liq o'zgarishlar mutsin va lakrimal plyonka (LP) ning boshqa tarkibiy qismlarini ishlab chiqaradigan kon'yunktiva bezlariga ham ta'sir qiladi, ularda apoptoz genlarining ifodasi oshadi.Kon'yunktiva epiteliyasida gialin tolalari va goblet hujayralarining apoptozi kuzatiladi [8].Ko'z yoshi bug'lanishining ko'payishi, birinchi navbatda, LP lipid qatlamining yetishmasligi bilan bog'liq va ko'pincha meibomiya bezlarining (MB) tuzilishi va funksiyasining buzilishi bilan bog'liq. 2021-yil Hindistonda olib borilgan tadqiqotlar natijasiga ko'ra, meibomografiya va MB opyik kogerent tomografiya (OKT) tekshiru-vlarida 50 yoshdan keyin asinuslar soni kamayishi, ularning diametri kamayishi, bu refleks sekretsiyasining ko'payishi va asinuslar devoridagi o'zgarishlar kuzatilgan[10, 11]. 50 yoshdan oshgan odamlarda MB asinuslari sonining miqdoriy pasayishidan tashqari, meibomiya bezlarin-ing obstruktiv disfunktsiyasi (MBD) turi bo'yicha MB sekretsiyasining buzilishi, meibumning qutbli va neytral lipidlari tarkibidagi o'zgarishlari ham aniqlandi [12]. Olimlar izlanishlari natijasida gor-monlar tartibga solinishning buzilishi ko'z yuzasi to'qimalarining o'zgarishlarida muhim rol o'ynashi isbotlangan [1, 3, 10]. LP tarkibiy qismlarining sekretsiyasini tartibga solish jinsiy gormon-lar, glyukokortikoidlar, gipofiz gormonlari, insulin, insulinga o'xshash o'sish omili-1 va tiroid gor-monlarini o'z ichiga olgan keng gormonlar guruhi tomonidan amalga oshiriladi [3, 13]. Lakrimal bez va MB funksiyasini androgenik tartibga solish eng muhim va o'rganilgan hisoblanadi. An-drogenlar lakrimal bezning tuzilishi va funktsiyasiga, shu jumladan uning hujayra arxitekturasi, gen ekspressiyasi, oqsil sintezi, immunitet faolligi, suyuqlik va oqsil sekretsiyasiga sezilarli ta'sir ko'rsatadi, boshqa tomondan ular MB lipidlarining sintezi va sekretsiyasini rag'batlantiradi, kerat-inizatsiya bilan bog'liq genlarning ekspressiyasini ishlab chiqadi[13]. Qondagi androgen kontsen-tratsiyasining yoshga bog'liq pasayishi QKS ning barcha patogenetik shakllarining, ayollar va

erkaklarda teng ravishda paydo bo'lish chastotasining oshishi bilan bog'liq [14-16]. Ayollarda reproduktiv davrd kech boshlansa, umumiy va erkin testosteron va uning prekursorlarining aylanma darajasi pasayadi va tabiiy postmenopozal davrda androgen darajasining aniq o'zgarishi kuzatilmaydi. Ayollarda qonda testosteron kontsentratsiyasining pasayishi QK simptomlarining sub'ektiv og'irligi bilan bog'liqligi ko'rsatilgan [17]. Estrogen va progesteron ham lakrimal bez va MB anatomiyasi va fiziologiyasiga ta'sir qiladi. Bu gormonlarning quruq ko'zlarga ta'siri haqida hozirgi kunda, dunyo bo'ylab klinik tahlillar olib borilmoqda. Bir tomondan, estrogen gormonlarini almashtirish terapiyasining progesteron bilan birgalikda ham, progesteronsiz ham ijobiy ta'siri, shuningdek, ko'z yoshi sekretsiyasining ko'payishiga va LP barqarorligining oshishiga olib keladigan estrogenlarni mahalliy qo'llash kon'yunktivaga va ehtimol MBga ijobiy ta'sir ko'rsatdi [18-20]. N. N. Sadovnikova va boshqalarning tadqiqotida klimakterik sindrom va QKS ning to'g'ridan-to'g'ri aloqasi ko'rsatilgan va og'ir klimakteriyada MBD belgilari asosan qayd etilgan. Gormonlarni almashtirish terapiyasini ko'z yoshi o'rnini bosuvchi moddalar bilan birgalikda buyurish LP barqarorligini, ko'z yoshining asosiy ishlab chiqarilishini va MB sekretsiyasining sifatini sezilarli darajada oshirdi [20]. Boshqa tomondan, estrogenning yuqori darajasi lipid biosintezida, atsinar hujayralarningrivojida, migratsiyada va holokrin sekretsiyasida ishtirok etadigan genlarning regulyatsiyasini kamaytirish va lipidlar va yog ' kislotalari almashinuvida ishtirok etadigan genlarning regulyatsiyasini oshirish orqali ularning sekretsiyasini ishlab qilish orqali MB funktsiyalarini buzganligini ko'rsatadigan degan teoriyalar mavjud [1-20]. Endogen sarum estrogenlarining yuqori darajasi osmolyarlikning oshishi, ko'z yoshi sekretsiyasining pasayishi va LP barqarorligi buzilishi bilan bog'liq [3, 21, 22]. Qo'shma Shtatlar bo'ylab 25,665 postmenopozal ayollarning aholiga asoslangan katta tadqiqotida gormonlarni almashtirish terapiyasidan foydalanadigan ayollarda, ayniqsa faqat estrogen terapiyasida (bitta estrogen uchun~70% yuqori xavf va progesteron bilan birgalikda estrogen uchun ~30%) QKS xavfi yuqori ekanligi aniqlandi [23].Darhaqiqat, ayollarda QKS tarqalishi erkaklarnikiga qaraganda butun hayot sikli davomida yuqori bo'lib, har ikki jinsning yoshi bilan asta-sekin o'sib boradi [3, 12, 15, 16], Bu shubhasiz, qon zardobidagi androgen darajasining asta-sekin pasayishi bilan bog'liq bo'lib, bu vaqt o'tishi bilan sodir bo'ladi. Kuzatuv tadqiqotlari shuni ko'rsatadiki, aylanma estrogen darajasi menopauzadan oldin va keyin ayollarda turli xil ta'sir ko'rsatishi mumkin. Menopauzada tuxumdon estrogeni keskin pasayadi. Gormon terapiyasining QKS iga ta'siri dozaga, menopauza holatiga va har bir holatda tuxumdon funktsiyasiga bog'liq [23]. Yuqoridagilardan kelib chiqqan holda, testosteron va estrogenlarning yoshga bog'liq pasayishi ayollarda QKS tarqalishining asosiy sabablaridan biridir. Ilmiy izlanishlar natijasida biologik jihatdan tanadagi har bir hujayra jinsiy aloqaga ega bo'lib, u jinsiy gormonlar tomonidan endokrin tartibga solishi aniqlangan, shuningdek, gen ekspressiyasiga ta'sir qilishi mumkin bo'lgan jinsiy xromosomalar (X yoki Y) va jinsga bog'liq autosomal va epigenetik omillari ham[24]. Jinsiy genlar lakrimal bez, MB, kon'yunktiva, shox parda, old kamera, iris, siliyar tanasi, linzalar, vitreus va retinada borligi aniqlandi va bu sitoplazmatik retseptorlari orqali vositachilik qiladigan va to'qima morfologiyasi, gen ekspressiyasi, oqsil sintezi, epiteliya hujayralarining yangilanish dinamikasi, sintez hajmi va boshqalar orqali ta'sir qiluvchi jinsiy steroidlarning ta'siri bilan izohlanadi. Shu bilan birga, gipotalamus-gipofiz gormonlari, glyukokortikoidlar, insulin, insulinga o'xshash o'sish omili-1 va qalqonsimon bez gormonlari MB funksiyasiga sezilarli ta'sir ko'rsatadi [3].

QKS olib keluvchi yana katta sabablardan biri, yoshlar orasida hozirgi kunda refraksiya anomaliyalari ko'p uchramoqda va ular kosmetik jihatdan ko'zoynaklardan ko'ra kontatkt linzalarni afzal ko'rishmoqdalar. Kontakt linzalari esa noto'g'ri foydalanish natijasida ko'zlarni

quritadi va bu surunkali davom etgandan keyin QKS surunkali rivojlanib boradi. Shuningdek, ayollar tashqi ko'rinishiga ko'proq e'tibor berishadi va ular ko'pincha kontakt linzalar,kosmetik rang beruvchi linzalardan erkaklarga nisbatan ko'p foydalanishadi. Ko'zoynak va linzalardan halos bo'lish uchun esa lazerli refraktsion jarrohlik aralashuvlarni amalga oshiradilar, dekorativ kosmetika va turli xil kosmetik protseduralardan faol foydalanadilar. Bularning barchasi MB funksiyaning pasayishiga va o'limiga, lipid qatlamining buzilishiga olib keladi [25-27].

QKS boshqa kasallikning asorati va qo'llanilgan dori vositalarning nojo'ya ta'siri sifatida ham rivojlanishi mumkin. Shulardan, revmatoid artrit, Shegren sindromi va qalqonsimon bez kasalliklari quruq ko'z sindromiga olib kelishi mumkin. Shegren sindromi, depressiya, allergiya, ichak sindromi va boshqa bir qator kasalliklar bilan bog'liq bo'lgan otoimmun kasalliklarning ayollarda mavjudligi QKS rivojlanishida muhim ahamiyatga ega [3]. Bu kasallikar jinsiy xulq-atvor va idrokka ta'sir qiladi, bu miyani tashkil etishdagi jinsiy farqlar, kognitiv qobiliyatlar, og'riqni idrok etishni pasaytiradi [21,22]. So'rov natijalariga ko'ra, bemorlar (sistemali kassalikka chalingan) ko'rish sifatiga, shu jumladan o'qish, kompyuterda ishlash, qorong'ida mashina haydash va televizor tomosha qilishda sezilarli darajada buzilganligini ta'kidlashgan [6, 25].Yuqoridagi kasalliklarni davolash uchun qo'llanilgan ayrim dorilarning salbiy ta'siri natijasida QKS rivojlanadi. Ular jumlasiga, antidepressantlar, antigistaminlar va diuretiklar kabi dori vositalari kiradi. Ular o'zining asosiy ta'siridan tashqari,ko'z yosh bezi funksiyasini buzadi va QKS rivojlantiradi. Statistika ma'lumotlariga ko'ra, otoimmun kassaliklari bor bemorlarning 85% da QKS rivojlangan [25, 26]. Dunyoda texnikalar rivojlangani sari, atrof-muhit ifloslanib bormoqda. Bu esa o'z navbatida ko'zga ta'sir etmay qolmaydi, ya'ni ko'z olmasi tashqi muhit bilan bevosita kontaktda bo'lib turadigan a'zolardan biridir. Shu tufayli quruq havo, shamol va tutun kabi atrof-muhit omillari ham ekzogen faktor sifatida ko'zning qurishiga olib kelishi mumkin [1-33].

Xulosa qilib aytganda, quruq ko'z sindromi zamonaviy tibbiyotning muhim muammosi bo'lib, uning dolzarbligi kasallikning keng tarqalganligi, hayot sifatiga ta'siri, diagnostika va davolashdagi qiyinchiliklar, ijtimoiy-iqtisodiy ahamiyati va oldini olish imkoniyatlarining mavjudligi bilan belgilanadi. Ushbu muammoni hal etish uchun oftalmologlar, umumiy amaliyot shifokorlari va boshqa mutaxassislarning hamkorlikda ishlashi zarur.

Foydalanilgan adabiyotlar:

1. Каменских Т. Г., Калмыков Р. В. Современные подходы к диагностике и лечению синдрома «сухого глаза» //Ремедиум Приволжье. – 2015. – №. 4 (133). – С. 17-21.
2. Кодзоева Т. И., Дзаурова Б. Ш. Методы диагностики и лечения синдрома «сухо-го глаза» //Наука и инновации-современные концепции. – 2023. – С. 154-158.
3. Еричев В. П. и др. Длительная терапия противоглаукомными препаратами как фактор риска развития синдрома сухого глаза //Вестник офтальмологии. – 2019. – Т. 135. – №. 6. – С. 117-123.
4. Маскати К.Б., Кумар Ш., Чоби В., Катаквар Н., Шарма С. Синдром сухого глаза и связанные с ним факторы в Казахстане и Узбекистане. Российский офтальмо-логический журнал. – 2021. - №14(2). – С. 63-68.
5. Дроздова Е. А., Балан В. Е. Особенности синдрома" сухого глаза" и его коррек-ция у женщин старше 45 лет //РМЖ. Клиническая офтальмология. – 2021. – Т. 21. – №. 2. – С. 103-107

6. Павловский М. И., Вит В. В., Дрожжина Г. И. Цитологические особенности эпи-телия конъюнктивы при синдроме" сухого глаза" у пациентов с субклинической и манифестной формами гипотиреоза //Офтальмология. Восточная Европа. – 2018. – Т. 8. – №. 3. – С. 361-368.
7. Пунько И. М. Синдром сухого глаза при эндокринной офтальмопатии //Сборник материалов конференции студентов и молодых ученых, посвященной 100-летию со дня рождения АЗ Нечипоренко. – 2016. – С. 233-233.
8. Рыков С. А. и др. Роль синдрома сухого глаза при патологических состояниях органа зрения //Архів офтальмології України. – 2016. – №. 4,№ 2. – С. 70-78.
9. Созуракова Е. А. и др. Синдром сухого глаза: проблемы диагностики и лечения //Медицина в Кузбассе. – 2024. – Т. 23. – №. 2. – С. 21-28.
10. Татарникова Е. Б., Кривошеина О. И. Синдром «сухого глаза»: современные ас-пекты этиологии и патогенеза //РМЖ. Клиническая офтальмология. – 2020. – Т. 20. – №. 3. – С. 128-132.
11. Якушева Л. А. Факторы и причины развития синдрома «сухого глаза»(на при-мере ФСНКЦ ФМБА России) //In situ. – 2016. – №. 8. – С. 41-43.
12. Trubilin V. N., Polunina E. G., Kurenkov V. V. va boshqalar. periorbital mintaqadagi kosmetik protseduralarning ko'rish organiga ta'siri: sharh. Oftalmologiya. 2018;15(3):233–241. [Trubilin V.N., Polunina E.G., Kurenkov V.V. et al. Effect of Cosmetic Procedures in the Periorbital Area on the Organ of Vision: Overview. Ophthalmology in Russia. 2018;15(3):233–241 (in Russ.)]. DOI: 10.18008/1816-5095-2018-3-233-241.
13. Brjeskiy V. V. ambulatoriya amaliyotida bemorlarda ko'z yoshlarini almashtirish terapiyasini tanlash algoritmi. RMJ. Klinik oftalmologiya. 2018;18(1):13–19. [Brzheskij V.V. Algorithm for choosing tear replacement therapy in patients in outpatient practice. RMJ. Clinical Ophthalmology. 2018;18(1):13–19 (in Russ.)].
14. Daull P., Amrane M., Ismail D. et al. Cationic Emulsion-Based Artificial Tears as a Mimic of Functional Healthy Tear Film for Restoration of Ocular Surface Homeostasis in Dry Eye Disease. J Ocul Pharmacol Ther. 2020;36(6):355–365. DOI: 10.1089/jop.2020.0011.
15. Cwiklik L. Tear film lipid layer: A molecular level view. Biochim Biophys Acta. 2016;1858(10):2421–2430. DOI: 10.1016/j.bbamem.2016.02.020.
16. Gorsheneva E. B., Sutormina N. M. yumshoq kontakt linzalari foydalanuvchilarida meibomiya bezlarining obstruktiv disfunktsiyasida kationorm preparatining ko'z yoshi plyonkasiga ta'siri. Tibbiyot va jismoniy tarbiya: fan va amaliyot. 2020;21(5):39–45. [Gorsheneva E.B., Sutormina N.M. The effect of the drug Cationorm on lacrimal film in obstructive dysfunction of the meibomian glands in users of soft contact lenses. Medicine and Physical Education: Science and Practice. 2020;21(5):39–45 (in Russ.)].
17. Robert P.Y., Cochener B., Amrane M. et al. Efficacy and safety of a cationic emulsion in the treatment of moderate to severe dry eye disease: a randomized controlled study. Eur J Ophthalmol. 2016;26:546–555. DOI: 10.5301/ejo.5000830.
18. Georgiev G.A., Eftimov P., Yokoi N. Structure-function relationship of tear film lipid layer: A contemporary perspective. Exp Eye Res. 2017;163:17–28. DOI: 10.1016/j.exer.2017.03.013.

19. Garcia-Carrasco M, Jiménez-Herrera EA, Gálvez-Romero JL, de Lara LV, Mendoza-Pinto C, Etchegaray-Morales I, Munguía-Realpozo P, Ruíz-Argüelles A, Jose R, Vera-Recabarren M, Cervera R. Vitamin D and Sjögren syndrome. Autoimmun Rev. 2017 Jun;16(6):587-593. doi: 10.1016/j.autrev.2017.04.004. Epub 2017 Apr 12. PMID: 28411165.
20. Aksoy Aydemir G, Ilhan C, Pehlıvanoglu B, Aydemir E, Kiziltoprak H, Bolu S. Con-junctival Histopathological Changes in Children With Vitamin D Deficiency. Eye Contact Lens. 2022 Jul 1;48(7):289-294. doi: 10.1097/ICL.0000000000000903. Epub 2022 May 17. PMID: 35580362.
21. Athanassiou L, Kostoglou-Athanassiou I, Koutsilieris M, Shoenfeld Y. Vitamin D and Autoimmune Rheumatic Diseases. Biomolecules. 2023 Apr 21;13(4):709. doi: 10.3390/biom13040709. PMID: 37189455; PMCID: PMC10135889.
22. Bae SH, Shin YJ, Kim HK, Hyon JY, Wee WR, Park SG. Vitamin D Supplementation for Patients with Dry Eye Syndrome Refractory to Conventional Treatment. Sci Rep. 2016 Oct 4;6:33083. doi: 10.1038/srep33083. PMID: 27698364; PMCID: PMC5048427.
23. Bhatt RB, Patel NH, Shah AT, Ranpara KH. Study of correlation between vitamin D3 levels and dry eye. Indian J Ophthalmol. 2023 Apr;71(4):1478-1482. doi: 10.4103/IJO.IJO_2838_22. PMID: 37026286; PMCID: PMC10276696.
24. Chan HN, Zhang XJ, Ling XT, Bui CH, Wang YM, Ip P, Chu WK, Chen LJ, Tham CC, Yam JC, Pang CP. Vitamin D and Ocular Diseases: A Systematic Review. Int J Mol Sci. 2022 Apr 11;23(8):4226. doi: 10.3390/ijms23084226. PMID: 35457041; PMCID: PMC9032397.
25. Chen Z, Zhang C, Jiang J, Ouyang J, Zhang D, Chen T, Chu Y, Hu K. The efficacy of vitamin D supplementation in dry eye disease: A systematic review and meta-analysis. Cont Lens Anterior Eye. 2024 Oct;47(5):102169. doi: 10.1016/j.clae.2024.102169. Epub 2024 Jul 18. PMID: 39025755.
26. Dikci S, Akatlı AN, Yıldırım T. Conjunctival impression cytology and tear-film changes in cases with vitamin D deficiency. Int Ophthalmol. 2020 Jul;40(7):1687-1694. doi: 10.1007/s10792-020-01336-1. Epub 2020 Mar 23. PMID: 32207046. 1. Brjeskiy V. V., Yegorova G. B., Yegorov E. A. "quruq ko'z" sindromi va ko'z yuzasi kasalliklari: klinika, diagnostika, davolash. M.: Geotar-Media; 2016. [Brzheskii V.V., Egorova G.B., Egorov E.A. Dry eye syndrome and ocular surface diseases. M.: Geotar-Media; 2016 (in Russ.)].
27. Craig J.P., Nichols K.K., Akpek E.K. TFOS DEWS II Definition and Classification Report. The Ocular Surface. 2017;15:276–283. DOI: 10.1016/j.jtos.2017.05.008.
28. Sullivan D.A., Rocha E.M., Aragona P. et al. TFOS DEWS II Sex, Gender, and Hormones Report. The Ocular Surface 2017;15:284–333. DOI: 10.1016/j.jtos.2017.04.001.
29. Farrand K.F., Fridman M., Stillman I., Schaumberg D.A. Prevalence of Diagnosed Dry Eye Disease in the United States Among Adults Aged 18 Years and Older. Am J Ophthalmol. 2017;182:90–98. DOI: 10.1016/j.ajo.2017.06.033.
30. Dana R., Bradley J.L., Guerin A. et al. Estimated Prevalence and Incidence of Dry Eye Disease Based on Coding Analysis of a Large, All-age United States Health Care System. Am J Ophthalmol. 2019;202:47–54. DOI: 10.1016/j.ajo.2019.01.026.
31. Bron A.J., de Paiva C.S., Chauhan, S.K. et al. TFOS DEWS II pathophysiology report. Ocul Surf. 2017;15:438–510. DOI: 10.1016/j.jtos.2017.05.011.

32. Golebiowski B., Badarudin N., Eden J. et al. Does endogenous serum oestrogen play a role in Meibomian gland dysfunction in postmenopausal women with dry eye. Br J Ophthalmol. 2016;101:218–222. DOI: 10.1136/bjophthalmol-2016-308473.
33. Matossian C., McDonald M., Donaldson K.E. et al. Dry Eye Disease: Consideration for Women's Health. J Womens Health (Larchmt). 2019;28(4):502–514. DOI: 10.1089/jwh.2018.7041.

UDC: 616-004.6

bFGF-CHITOSAN "BRAIN GLUE" FACILITATES FUNCTIONAL RECOVERY IN ISCHEMIC STROKE

Vokhidova Z.T.
Samarkand State Medical University

Abstract

The ability of the mammalian brain to repair damaged neurons and regain function after an ischemic stroke is incredibly limited. A safe and useful neuronal replacement therapy is a biomaterial approach that involves gradually releasing several regeneration-promoting substances to stimulate endogenous neurogenesis. This research involves injecting a gel of chitosan and basic fibroblast growth factor (bFGF) into the stroke cavity. This strategy facilitates the development of a functional vascular network, the growth of vascular endothelial cells, and the eventual restoration of cerebral blood flow. Moreover, bFGF-Chitosan gel stimulates neural progenitor cells (NPCs) in the subventricular zone (SVZ), encourages their migration toward the stroke cavity, and helps them differentiate into mature neurons with a variety of cell types (including excitatory glutamatergic neurons and inhibitory gamma-aminobutyric acid neurons) and layer architectures (deep cortex and superficial cortex). Our results provide novel concepts and approaches for the clinical management of ischemic stroke by showing that bFGF-Chitosan "brain glue" filling the stroke cavity stimulates angiogenesis, endogenous neurogenesis, and synaptogenesis to restore function.

Keywords: bFGF-Chitosan gel, ischemic stroke, new-born neurons, angiogenesis synaptogenesis, neural circuit reconstruction

bFGF-CHITOSAN "MIYA ELIMI" ISHEMIK INSULTDA FUNKTSIONAL TIKLANISHNI OSONLASHTIRADI

Voxidova Z.T.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Sutemizuvchilar miyasining shikastlangan neyronlarni tiklash va ishemik insultdan keyin funksiyasini tiklash qobiliyati nihoyatda cheklangan. Xavfsiz va foydali neyronlarni almashtirish terapiyasi endogen neyrogenezni rag'batlantirish uchun bir nechta regeneratsiyani rag'batlantiruvchi moddalarni bosqichma-bosqich chiqarishni o'z ichiga olgan biomaterial yondashuvdir. Ushbu tadqiqot insult bo'shlig'iga xitosan jeli va asosiy fibroblast o'sish omilini (bFGF) yuborishni o'z ichiga oladi. Ushbu strategiya funktsional qon tomir tarmog'ining rivojlanishiga, qon tomir endotelial hujayralarining o'sishiga va oxir-oqibat miya qon oqimining tiklanishiga yordam beradi. Bundan tashqari, bFGF-Chitosan gel subventrikulyar zonada (SVZ) nerv progenitor hujayralarini (NPCs) rag'batlantiradi, ularning insult bo'shlig'iga ko'chishini rag'batlantiradi va ularni turli xil hujayralar (shu jumladan qo'zg'atuvchi glutamaterjik neyronlar va neyron kislotasi-inhibitor qatlamlari) bilan etuk neyronlarga ajratishga yordam beradi. korteks va yuzaki korteks). Natijalarimiz ishemik insultni klinik boshqarish uchun yangi tushunchalar va yondashuvlarni taqdim etadi va insult bo'shlig'ini to'ldiruvchi bFGF-Chitosan "miya elimi" funktsiyani tiklash uchun angiogenez, endogen neyrogenez va sinaptogenezni rag'batlantirishini ko'rsatadi.

Kalit so'zlar: bFGF-Chitosan gel, ishemik insult, yangi tug'ilgan neyronlar, angiogenez sinaptogenezi, nerv zanjirlarini qayta tiklash

bFGF-ХИТОЗАН «МОЗГОВОЙ КЛЕЙ» СПОСОБСТВУЕТ ВОССТАНОВЛЕНИЮ ФУНКЦИЙ ПРИ ИШЕМИЧЕСКОМ ИНСУЛЬТЕ

Вохидова З.Т.

Самаркандский государственный медицинский университет

Аннотация

The ability of the mammalian brain to repair damaged neurons and regain function after an ischemic stroke is incredibly limited. A safe and useful neuronal replacement therapy is a biomaterial approach that involves gradually releasing several regeneration-promoting substances to stimulate endogenous neurogenesis. This research involves injecting a gel of chitosan and basic fibroblast growth factor (bFGF) into the stroke cavity. This strategy facilitates the development of a functional vascular network, the growth of vascular endothelial cells, and the eventual restoration of cerebral blood flow. Moreover, bFGF-Chitosan gel stimulates neural progenitor cells (NPCs) in the subventricular zone (SVZ), encourages their migration toward the stroke cavity, and helps them differentiate into mature neurons with a variety of cell types (including excitatory glutamatergic neurons and inhibitory gamma-aminobutyric acid neurons) and layer architectures (deep cortex and superficial cortex). Our results provide novel concepts and approaches for the clinical management of ischemic stroke by showing that bFGF-Chitosan "brain glue" filling the stroke cavity stimulates angiogenesis, endogenous neurogenesis, and synaptogenesis to restore function.

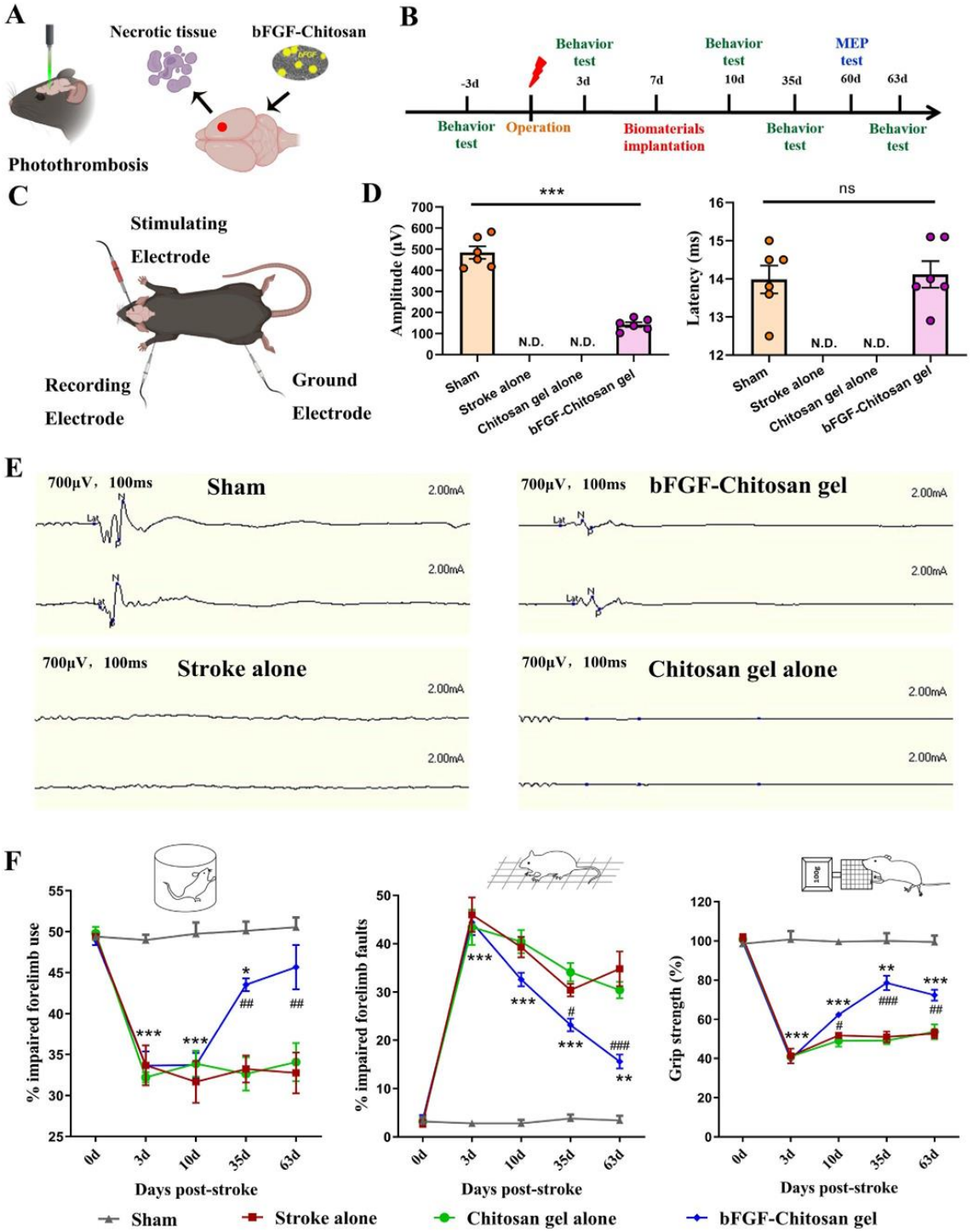
Keywords: bFGF-Chitosan gel, ischemic stroke, new-born neurons, angiogenesis synaptogenesis, neural circuit reconstruction

Introduction. Significant neuronal death from an ischemic stroke results in irreversible neurological dysfunctions [1]. Prior research has attempted to preserve remaining neurons, axons, and arteries by concentrating on the ischemic penumbra field surrounding the stroke cavity [2,3]. As antioxidative neuroprotectors for ischemic stroke treatment, ultrasmall iron-gallic acid coordination polymer nanodots (Fe-GA CPNs) were recently created under the guidance of PET/MR imaging [4]. Furthermore, it has been demonstrated that biomimetic nanoplatforms can scavenge excess reactive oxygen species in penumbra and prevent neuroinflammation [5]. It is still unclear how to replace the injured or dying neurons and vessels in the stroke cavity in order to cure ischemic stroke, despite the fact that these cutting-edge studies are focused on finding promising ways to reduce neuronal or vascular damage in the penumbra. Due to the stroke cavity's gradual reorganization into a chamber encased in fibrotic scar and lacking in extracellular matrix and vascular nutrition, it is in fact challenging to penetrate the cavity to promote functional restoration for fresh neurons. The stroke cavity, which offers physical support for cell infiltration and exogenous chemicals for the activation of angiogenesis and endogenous neurogenesis, is therefore a perfect transplant site that can embrace biomaterial infusion without compromising normal brain function.

By delivering acellular biomaterials into the stroke cavity, the biomaterial method stimulates endogenous neurogenesis and angiogenesis by gradually releasing several regeneration-promoting elements [10]. A multipurpose biopolymer, chitosan is mucoadhesive, biocompatible, and biodegradable. As a multipurpose scaffold, chitosan facilitates the angiogenesis and regeneration of various tissues by encouraging cell attachment. Furthermore, chitosan has appealing biological properties, including antibacterial, antioxidant, anti-inflammatory, and anti-cancer properties [13]. A variety of biomaterials based on chitosan have been used as delivery systems for neurotrophic factors, stem cells, genetic material, or bioactive molecules [5, 6]. It is well known that basic fibroblast growth factor (bFGF) stimulates neural progenitor cells' (NPCs') migration, proliferation, and angiogenesis [7, 8]. We were able to successfully load bFGF onto chitosan gel, allowing for up to nine weeks of regulated release of bFGF [9].

Materials and methods. The animals had unrestricted access to food and drink while living in sterile plastic cages, three to five per cage. They were housed in a temperature-controlled room (21–23 ∘C) with a 12-hour light/dark cycle and a relative humidity of 50%–60%.

Except in cases where group assignment was genotype-dependent, animals were assigned to groups at random. Chitosan gel alone (chitosan gel loaded without bFGF was injected into stroke cavity on day 7 after stroke), sham group (animals did not receive an ischemic stroke), stroke alone group (animals received an ischemic stroke but no gel transplantation), and bFGF-Chitosan gel group (chitosan gel loaded with bFGF was injected into stroke cavity on day 7 after stroke).



1. Following an ischemic stroke, bFGF-Chitosan gel aids in the recovery of sensorimotor function.

(A) Photothrombotic model and gel implantation schematic diagram. (B) Experimental protocol timeline for C57BL/6J mice functional test. Motor evoked potentials, or MEP. (C) MEP test schematic diagram. (D) Measurement of MEP latency and amplitude 60 days after stroke. ***P < 0.001, ns, independent-samples T test, n = 6 per group, no significant difference. (E) Each group's representative MEP signal. (F) bFGF-Chitosan gel facilitates sensorimotor function recovery. Comparison of the bFGF-Chitosan gel group with the sham group: *P < 0.05, **P < 0.01, ***P < 0.001. #P < 0.05, ##P < 0.01, ###P < 0.001, two-way ANOVA, n = 5 per group, bFGF-Chitosan gel group versus stroke alone group.

Results. The recovery of sensorimotor function following an ischemic stroke is facilitated by bFGF-Chitosan gel.By limiting focal infarction to the right forelimb representation of the sensorimotor cortex, photothrombosis created the cortical ischemia model [12]. By day seven after the stroke, the majority of the arteries and neurons [2] in the stroke cavity had broken down and created a stable stroke cavity. Contrary to the previous studies [6, 7], the microglia-mediated inflammatory response and the astrocyte-formed glia scar had not yet peaked, although the quantity of proliferating neuroblasts in the SVZ peaked. Consequently, the best intervention was determined to be on day seven following a stroke. On day 14 after the stroke, the implantation of bFGF-Chitosan gel markedly enhanced the expression of bFGF in the stroke cavity and dispersed bFGF within 300μm of the infarct.

On day 60 post-ischemic stroke, motor evoked potentials (MEPs) were recorded in order to evaluate the changes in motor conduction function from the motor cortex to the target muscle of the contralateral forelimb under various interventions.

According to earlier research, neurogenesis and angiogenesis are interdependent mechanisms that improve neurological functional recovery following an ischemic stroke [8]. BrdU was injected intraperitoneally for five days in a row following photothrombotic surgery and chitosan gel implantation, respectively, to examine the degree of tissue neovascularization under various procedures. In order to identify proliferating endothelial cells on day 63 post-stroke, we produced coronal brain slices and used BrdU/GluT1 (a marker for vascular endothelial cells) immunofluorescence labeling.

We evaluated blood flow in and around the stroke cavity on day 60 post-stroke using laser speckle imaging to determine whether neovascularization aids in blood flow restoration (Fig. 2E). Blood flow in the stroke cavity was reduced by the stroke to roughly 39% of the sham group. In the chitosan gel-only group, blood flow dropped to roughly 61% of the sham group. In contrast, mice who received implantation of bFGF-Chitosan gel showed a considerable increase in blood flow to around 85% of the sham group. Our results generally confirmed that bFGF-chitosan gel stimulated revascularization, angiogenesis, and the restoration of the cerebral blood flow supply within and surrounding the stroke cavity.

Conclusion. According to the current study, bFGF-Chitosan gel fills the stroke cavity like "brain glue" and helps rodents recover their sensorimotor function following a cortical ischemic stroke. With innovative tactics focusing on three areas, these benefit mechanisms might be achievable: In the stroke cavity, bFGF-Chitosan gel encourages angiogenesis, revascularization, and the restoration of cerebral blood flow. SVZ-derived NPCs are guided to migrate toward the stroke cavity and develop into mature neurons with a variety of phenotypes by bFGF-Chitosan gel, which also stimulates endogenous neurogenesis. bFGF-Chitosan gel rebuilds developing

brain networks and promotes synaptogenesis. Innovative concepts and approaches for the clinical management of ischemic stroke are made possible by our research.

Used literature:

1. Moretti, F. Ferrari, R.F. Villa, Neuroprotection for ischaemic stroke: current status and challenges, Pharmacol. Ther. 146 (2015) 23–34.
2. B.C.V. Campbell, D.A. De Silva, M.R. Macleod, et al., Ischaemic stroke, Nat. Rev. Dis. Prim. 5 (1) (2019) 70.
3. D.D. Ojeda-Herna´ndez, A.A. Canales-Aguirre, J. Matias-Guiu, et al., Potential of chitosan and its derivatives for biomedical applications in the central nervous system, Front. Bioeng. Biotechnol. 8 (2020) 389.
4. E.M. Purvis, J.C. O'donnell, H.I. Chen, et al., Tissue engineering and biomaterial strategies to elicit endogenous neuronal replacement in the brain, Front. Neurol. 11 (2020) 344
5. L. Tang, Y. Yin, H. Liu, et al., Blood-brain barrier-penetrating and lesion-targeting nanoplatforms inspired by the pathophysiological features for synergistic ischemic stroke therapy, Adv. Mater. 36 (21) (2024) e2312897.
6. Lindvall, Z. Kokaia, Neurogenesis following stroke affecting the adult brain, Cold Spring Harbor Perspect. Biol. 7 (11) (2015).
7. S. Gnavi, C. Barwig, T. Freier, et al., The use of chitosan-based scaffolds to enhance regeneration in the nervous system, Int. Rev. Neurobiol. 109 (2013) 1–62. (2022) 805–817.
8. Y. Jiang, Z. Liu, Y. Liao, et al., Ischemic stroke: from pathological mechanisms to neuroprotective strategies, Front. Neurol. 13 (2022) 1013083.
9. Y. Du, Y. Huo, Q. Yang, et al., Ultrasmall iron-gallic acid coordination polymer nanodots with antioxidative neuroprotection for PET/MR imaging-guided ischemia stroke therapy, Explorations 3 (1) (2023) 20220041.
10. Y. Zhou, Y. Su, S. Li, et al., Molecular landscapes of human hippocampal immature neurons across lifespan, Nature 607 (7919) (2022) 527–533.
11. Y. Kim, Z. Zharkinbekov, K. Raziyeva, et al., Chitosan-based biomaterials for tissue regeneration, Pharmaceutics 15 (3) (2023).
12. W. Wang, M. Wang, M. Yang, et al., Transcriptome dynamics of hippocampal neurogenesis in macaques across the lifespan and aged humans, Cell Res. 32 (8) (2022) 729–743.
13. Z.Z. Hao, J.R. Wei, D. Xiao, et al., Single-cell transcriptomics of adult macaque hippocampus reveals neural precursor cell populations, Nat. Neurosci..

UDC: 616.516 092

REGULATION OF THE EPIDERMAL BARRIER IN THE FORMATION OF ATOPIC DERMATITIS AND BRONCHIAL ASTHMA IN CHILDREN

Hamidov F.Sh.
Andijan State Medical Institute

Abstract

Atopic dermatitis (AD) is a chronic inflammatory skin disease characterized by xerosis, pruritus, and erythematous eruptions accompanied by increased transepidermal water loss (TEWL).

In the 1990s, researchers Elias and Taieb were among the first to suggest that a breakdown in the epidermal barrier may be the primary link in the pathogenesis of AD (Elias et al. 1999; Taieb 1999). At that time, most of the research was focused on the immune response in AD (Williams, 2000).

Key words: atopic dermatitis, bronchial asthma, childhood

BOLALARDA ATOPIK DERMATIT VA BRONXIAL ASTMA SHAKLLANISHIDA EPİDERMAL BARE'RNING TUZILISHINING BUZILISHI

Xamidov F.Sh.
Andijon davlat tibbiyot instituti

Annotatsiya

Atopik dermatit (AD) surunkali yallig'lanishli teri kasalligi bo'lib, kserozis, qichishish va eritematoz lezyonlar bilan birga transepidermal suv yo'qotilishi (TEWL) ko'payishi bilan tavsiflanadi.

1990-yillarda tadqiqotchilar Elias va Taib birinchilardan bo'lib epidermal to'siqning buzilishi AD patogenezida asosiy bo'g'in bo'lishi mumkinligini ta'kidladilar (Elias va boshq., 1999; Taieb, 1999). O'sha paytda ko'pchilik tadqiqotlar ADda immunitet reaktsiyasini o'rganishga qaratilgan edi (Williams, 2000).

Kalit so'zlar: atopik dermatit, bronxial astma, bolalik

НАРУШЕНИЯ РЕГУЛЯЦИИ ЭПИДЕРМАЛЬНОГО БАРЬЕРА В ФОРМИРОВАНИИ АТОПИЧЕСКОГО ДЕРМАТИТА И БРОНХИАЛЬНОЙ АСТМЫ У ДЕТЕЙ

Хамидов Ф.Ш.
Андижанский государственный медицинский институт

Аннотация

Атопический дерматит (АтД) является хроническим воспалительным кожным заболеванием, которое характеризуется ксерозом, зудом и эритематозными высыпаниями, сопровождающимися повышенной трансэпидермальной потерей воды (ТЭПВ).

В 1990-х исследователи Elias и Taieb были в числе первых, кто предположил, что нарушение эпидермального барьера может быть первичным звеном в патогенезе АтД (Elias и соавт., 1999; Taieb, 1999). В то время большая часть исследований была сфокусирована на изучении иммунного ответа при АтД (Williams, 2000).

Ключевые слова: атопический дерматит, бронхиальная астма, детской возраст

Relevance. In recent years, allergic diseases have increasingly come to be called a "global problem for humanity" due to their high prevalence in children and adults [4]. Among them, bronchial asthma (BA) occupies a special place - one of the most common chronic diseases of the respiratory system [2].

Thanks to the efforts of many specialists, certain successes have been achieved in the treatment and reduction of the frequency of exacerbations of BA, but the issues of primary

prevention of the disease continue to worry many minds [5].

In this regard, studies aimed at identifying risk factors for the development and causes of allergic diseases, including BA, are becoming relevant [1].

One of the high-risk factors for the development of BA in children is atopic dermatitis (AD), which is the first clinical manifestation of the "atopic march". Over the past three decades, there has been a steady increase in the incidence of AD [3].

Purpose of the study. To determine the role of epidermal barrier regulation disorders in the development of atopic dermatitis, bronchial asthma in children with atopic dermatitis and to establish prognostic markers reflecting the development of atopic dermatitis, as well as allergic lesions of the lower respiratory tract in children with cutaneous manifestations of atopy.

Materials and methods of the study. The dissertation research was carried out at the Department of Children's Diseases of the Andijan State Medical Institute. The study material was the data obtained from 2009 to 2013 as a result of observation of 457 children aged 6 to 17 years. The main group (total sample of patients) consisted of 257 patients diagnosed with AD (mean age 11.5 ± 3.3 years).

Research results. In childhood, atopic dermatitis is mainly represented by the following clinical variants: atopic dermatitis without bronchial asthma (32.7%) and atopic dermatitis with bronchial asthma (67.3%). These variants have clinical-anamnestic, immuno-allergological and phenotypic features.

The development of bronchial asthma in children with atopic dermatitis is facilitated by the persistent course of atopic dermatitis, as well as the expansion of the spectrum of sensitization at the age of 4 to 6 years, coinciding with the time of manifestation of allergic rhinitis. In children with atopic dermatitis and bronchial asthma, there is a direct correlation between the severity of atopic dermatitis and the severity of bronchial asthma.

Severe bronchial asthma in children with atopic dermatitis over 6 years of age is more common in girls, as well as in patients who have had perinatal encephalopathy in infancy, suffering from chronic adenoiditis, chronic gastroduodenitis, autonomic nervous system disorder, and having signs of connective tissue dysplasia. Children with combined allergopathology and a burdened family history of allergy for atopic dermatitis on the mother's side are characterized by persistent atopic dermatitis and the development of its severe forms. The developed prognostic models allow us to form risk groups for the development of atopic dermatitis and bronchial asthma in children with atopic dermatitis. Anamnestic, immuno-allergological and phenotypic signs of atopic dermatitis that determine the probability of predisposition to the development of bronchial asthma in children with atopic dermatitis have not been established, which confirms the heterogeneity of the formation of allergic lesions of the lower respiratory tract in children with cutaneous manifestations of atopy.

Conclusion. As a result of the study, risk and protection factors for the development of AD are presented. Clinical and anamnestic characteristics that contribute to the formation of AD, as well as bronchial asthma in children with AD are shown.

The presented results will allow pediatricians and allergists-immunologists to identify patients among children with AD who are at risk for developing bronchial asthma. Factors contributing to the formation of severe course of both AD and bronchial asthma in children with combined allergic lesions of the skin and lower respiratory tract are identified.

The results of the work contribute to the understanding of the genetic basis of epidermal barrier regulation disorders in children with AD, as well as bronchial asthma in respondents with

AD living in the territory of the Republic of Uzbekistan.

Used literature:

1. Бикташева А. Мухтарова, Э.Р. Гуменная, Р.Р. Мурзнна, Р.Ф. Гатиятуллин, Ш.З. Загидуллин, Э.И. Эткина, Э.К. Хуснутдннова // Медико-биологические аспекты мультифакториальной патолоши: матер. II Всерос. науч.-практич. конф. с междунар. участием. - Курск: КГМУ, 17-19 мая 2011. - С. 59-60.
2. Левашева С. В. Атопический дерматит у детей: от факторов риска к клинической манифестации заболевания / Левашева С. В. // Педиатрия Санкт-Петербурга: опыт, инновации, достижения: Материалы VII Российского Форума - СПб., 14-15 сенября 2015. - С.68-78.
3. Dinulos JG, Trickett A, Crudele C. New science and treatment paradigms for atopic dermatitis. Curr Opin Pediatr. 2018;30(1): 161-168.
4. Peroni DG, Piacentini GL, Bodini A, et al. Prevalence and risk factors for atopic dermatitis in preschool children. Br J Dermatol. 2008;158(3):539-543.
5. Walley AJ, Chavanas S, Moffatt MF, et al. Gene polymorphism in Netherton and common atopic disease. Nat Genet. 2001;29(2):175-178

UDC: 612.313(072)

THE IMPORTANCE OF STUDYING THE STATE OF ENZYMATIC HOMEOSTASIS IN KIDNEY FAILURE

Hamrakulov Sh.H.
Andijan State Medical Institute

Abstract

Fermenturia (enzymuria) is increasingly used to study the functional state of kidney tissue cells. The first reports of the presence of active enzymes in urine appeared more than 100 years ago, but interest in fermentology has arisen in the last two to three decades as a result of the accumulation of large clinical and experimental material. Currently, the activity of about 70 enzymes and isoenzymes, mainly of renal origin, has been detected in urine.

Key words: salivary gland, enzymatic homoestasis, impaired renal function, enzymatic homoestasis of blood

BUYRAK YETISHMOVCHILIGIDA FERMENTLAR GOMEOSTAZI HOLATINI O'RGANISHNING AHAMIYATI

Xamrakulov Sh.H.
Andijon davlat tibbiyot instituti

Annotatsiya

Buyrak yetishmovchiligida siydik bilan oqsilning ko'p ajralishi hisobiga qonda oqsilning umumiy miqdori pasayadi. O'rganilgan barcha biologik suyuqliklarda esa pepsinogen ortgan, o'tkir buyrak etishmovchiligida amilolitik surunkali buyrak etishmovchiligida lipolitik faollik o'zgargan, siydik tarkibida u pasayib, sulakda ortganligi aniqlangan.

Kalit so'zlar: so'lak bezi, fermentlar gomeostazi, buyrak etishmovchiligi, qonda fermentlar tarkibi

ВАЖНОСТЬ ИЗУЧЕНИЯ СОСТОЯНИЯ ГОМЕОСТАЗА ФЕРМЕНТОВ ПРИ ПОЧЕЧНОЙ НЕДОСТАТОЧНОСТИ

Хамракулов Ш.Х.
Андижанский государственный медицинский институт

Аннотация

Для исследования функционального состояния клеток почечной ткани все чаще используют ферментурию (энзимурию). Первые сообщения о присутствии в моче активных ферментов появились более 100 лет назад, однако интерес к ферментурии возник в последние два-три десятилетия в результате накопления большого клинического и экспериментального материала. В настоящее время в моче обнаружена активность около 70 ферментов и изоферментов, в основном почечного происхождения..

Ключевые слова: слюнная железа, ферментный гомоестаз, нару-шении деятельности почек, ферментный гомоестаз крови

Relevance. Recently, the functional state of the main digestive glands has been increasingly studied using probe-free methods. Some of them take into account the hydrolytic enzymes of serum and urine. The essence of such methods is that the main digestive glands, along with the exosecretion of the main amount of enzymes synthesized by them, some of them are secreted into the blood and lymph, from where these enzymes are excreted by renal and extrarenal pathways, in particular, by the salivary glands [1-3].

It is well known that hydrolases secreted by the digestive glands are excreted in the urine and sweat, and that their rectory secretions in the secretions of the digestive glands are consid-

ered as a mechanism for maintaining a relatively constant level of enzymes in the peripheral blood, as a mechanism for enzyme homeostasis.

The purpose of this work. It is also known that the kidneys are the main organ of the homeostasis of the internal environment of the body, therefore, the purpose of this work is to study the role of the kidneys in stating the level of hydrolytic enzymes in peripheral blood, as well as salivary glands in maintaining enzyme homeostasis in case of impaired renal function.

Research methods. Hydrolytic enzymes - amylase [4], lipase, total protein [5], pepsinogen [6] of blood, saliva and urine in patients with renal insufficiency have been studied. Patients aged 20-63 years with acute (10 people) and chronic (50 people) renal insufficiency (acute renal failure and CRF) were under observation. In the examined patients, blood was taken from a vein on an empty stomach and mixed saliva was collected without stimulation in centrifuge tubes for 5 minutes. Previously, the oral cavity was thoroughly rinsed with tap water and then distilled water. Urine was collected within an hour, after preliminary emptying of the bladder. The indicators of 10 healthy individuals served as a control.

The obtained results. The results of the study showed that the volume of urine and saliva in patients with renal insufficiency remains at the level of healthy individuals (27.4+168 ml/ hour; 2.6±0.11 ml/5 min), and the total blood protein content in all patients decreases (Table), apparently lost along with urine, since it increased significantly in urine.

The enzyme spectrum of blood, saliva, and urine in patients with renal insufficiency undergoes changes: the amylolytic activity of blood in acute renal failure significantly increases, while in chronic renal failure it does not change. The amylolytic activity of saliva increases, while the flow rate remains at the control level. A direct relationship has been established between the amylolytic activity of blood and saliva, the correlation coefficient between them is 0.72±0.23. This confirms our data [1-3] that saliva contains secreted S-amylase and R-amylase, which is secreted from the blood. Amylolytic activity and its flow rate in the urine increases with acute renal failure, while with chronic renal failure it remains at the control level. The correlation coefficient between the content of blood amylase and urine is low (r=045±0.35). Pancreatic amylase is mainly excreted in the urine: in patients with renal insufficiency, apparently due to intoxication, the pancreas increases the secretion of amylase into the blood. The content of pepsinogen in the blood increases 5-9 times, especially with acute renal failure. It is known that the main source of pepsinogen are the main cells of the gastric glands, which means that in case of kidney failure, the enzyme increases into the blood.

The reason for this may be an increase in the secretory activity of the gastric glands, as well as an increase in the permeability of cell membranes. The content of pepsinogen in saliva and its flow rate increases 1.5-2 and 4-5 times, respectively, with chronic renal failure and acute renal failure. A high correlation was found between the pepsinogen content of blood and saliva - 0.78±0.15. The content of pepsinogen and its flow rate in urine increases by 3-4 and 7-8 times, respectively. The correlation coefficient between the content of pepsinogen in blood and urine is 0.45± 0.23.

Patients with chronic kidney disease have multidirectional changes in the content and release of lipase in saliva and urine: lipolytic activity and its flow rate increase in saliva, and decrease in urine. The correlation coefficient between the lipase content in blood and saliva (0.48±0.25) is lower than that between blood and urine (0.55±0.36). Thus, the informative value of saliva and urine enzymes in renal failure is not the same. Pepsinogen has the greatest informative value: it simultaneously increases in blood, saliva and urine. A high correlation has al-

so been established between the content and excretion of this enzyme in saliva and urine and its level in the blood. Amylase and lipase are in the second place in terms of information content. Amylolytic activity changes mainly in acute renal failure, while lipolytic activity changes in chronic renal failure. Therefore, the first is more informative in acute renal failure, and the second is more informative in chronic renal failure.

Conclusions

1. In acute and chronic renal failure, the volume of salivation and hourly diuresis do not change.

2. With kidney failure, the level of total protein in the blood decreases, which is associated with an increase in its loss in the urine.

3. The enzyme spectrum of blood, saliva, and urine changes with kidney failure. The content and production of pepsinogen increases in all biological fluids; amylolytic activity increases with acute renal failure, lipolytic activity increases with chronic renal failure: it decreases in blood and urine, and increases in saliva.

Used literature:

1. Kodirov Sh.K., Butabaev M.T. Hydrolases of blood and saliva in case of inflammatory irritation. // Physiol. Lie. USSR. - 1991. - Vol.77, N3. - pp.86-89.
2. Korotko G.F. Enzymes of digestive glands in the blood. Tashkent: Medicine Publ., 1983. 211 p.
3. Korotko G.F., Kadirov S.K. The role of salivary glands in ensuring the relative constancy of blood hydrolytic activity. // Physiol. M.I.Sechenov Journal. 1994. Vol. 80, N8. pp. 108-117.
4. Ugolev A.M., Jesuitova N.M., Masevich Ts.G. Investigation of the digestive system in humans (review of modern methods). - Jl.: Nauka Publ., 1989. - 216 p.
5. Kolb V.G. Kamyshnikov B.C. Clinical biochemistry. - Minsk, 1986. - 210 p. 6. Hirschowitz B.J. Pepsinogen in the blood. //7:ab. a clin. Med. - 1985. - Vol. 46, N4. - P.568.

UDC: 616.248-058.86-003.9-08

COMPREHENSIVE ASSESSMENT OF THE FORMATION FACTORS OF ALLERGIC RHINITIS IN CHILDREN WITH BRONCHIAL ASTHMA

Hankeldieva H.K.
Andijan State Medical Institute

Abstract

Bronchial asthma (BA) and allergic rhinitis (AR) are comorbid diseases, which is associated with the histological, physiological and immunopathological similarities of the upper and lower respiratory tract, systemic mechanisms of the development of chronic allergic inflammation. Patients with AR are 3 times more likely to develop asthma than healthy individuals, and, as a rule, rhinitis precedes BA in 32-49% of patients.

Many patients with AR have bronchial hyperreactivity (HRH), which indicates that the presence of rhinitis is a risk factor for the development of AD.

Key words: allergic rhinitis, childhood, juronchial asthma

BRONXIAL ASTMA BILAN OG'RIGAN BOLALARDA ALLERGIK RINITNI SHAKLLANTIRISH OMILLARINI HAR TOMONLAMA BAHOLASH

Xankeldieva X.K.
Andijon davlat tibbiyot instituti

Annotatsiya

Bronxial astma (AD) va allergik rinit (ar) yuqori va pastki nafas yo'llarining gistologik, fiziologik va immunopatologik o'xshashligi, surunkali allergik yallig'lanish rivojlanishining tizimli mexanizmlari bilan bog'liq bo'lgan komorbid kasalliklardir. Ar bilan og'rigan bemorlarda astma bilan kasallanish ehtimoli sog'lom yuzlarga qaraganda 3 baravar ko'p va odatda rinit bemorlarning 32-49 foizida AD hosil bo'lishidan oldin sodir bo'ladi. Ko'pgina ar bemorlarida bronxial giperreaktivlik (GRB) mavjud bo'lib, bu rinitning mavjudligi AD uchun xavf omili ekanligini ko'rsatadi.

Kalit so'zlar: allergik rinit, bolalik, bronxial astma

КОМПЛЕКСНАЯ ОЦЕНКА ФАКТОРОВ ФОРМИРОВАНИЯ АЛЛЕРГИЧЕСКОГО РИНИТА У ДЕТЕЙ С БРОНХИАЛЬНОЙ АСТМОЙ

Ханкелдиева Х.К.
Андижанский государственный медицинский институт

Аннотация

Бронхиальная астма (БА) и аллергический ринит (АР) являются коморбидными заболеваниями, что связано с гистологическим, физиологическим и иммунопатологическим сходством верхних и нижних дыхательных путей, системными механизмами развития хронического аллергического воспаления. Пациенты, страдающие АР, имеют в 3 раза больше шансов заболеть астмой, чем здоровые лица, и, как правило, ринит предшествует формированию БА у 32-49% больных.

Многие пациенты с АР имеют гиперреактивность бронхов (ГРБ), что свидетельствует о том, что наличие ринита является фактором риска развития БА.

Ключевые слова: аллергический ринит, детской возраст, юронхиальная астма

Relevance. Literature data has established that there are many external factors that contribute to the development of bronchial asthma [4]. It is also known that patients with extrapulmonary allergies (rhinitis, dermatitis, urticaria, etc.) often have periodic respiratory symptoms that are harbingers of the development of asthma attacks in them. It is believed that allergic diseases (AD) of the skin and upper respiratory tract are signs of an increased risk of developing

bronchial hypersensitivity and developing bronchial asthma (BA). According to expert estimates; WHO, 10-20% of the population suffers from allergic rhinitis (AR); and its symptoms are detected even more often in epidemiological studies: they are noted by up to 40% of respondents [6]. Currently, there is a further increase in allergic diseases in children, among which AR predominates [3]. Long-term disruption of nasal breathing leads to hypoxia, primarily of the brain, which significantly reduces cognitive functions, affecting the learning ability of schoolchildren. AR can eventually transform into bronchial asthma (BA), which sometimes leads to disability.

The question of the causes of geographical differences in the prevalence of AR and the growing incidence throughout the world is natural.

Obviously, these reasons can only be explained by studying the causal factors of manifestation in different regions of the country with their subsequent comparison with each other [2].

All of the above determines great theoretical and practical interest in the problem of early diagnosis of BA in children with allergic rhinitis [1,5].

The relevance of this problem is due to the fact that bronchial asthma is the leading chronic disease in childhood. In recent years, there has been a tendency to increase the number of chronic respiratory diseases, both in children and adults, which leads to a deterioration in the quality of life and disability of patients. The overwhelming majority of works in domestic and foreign literature are devoted to asthma in adults, at the same time, it remains a pressing medical, social and economic problem in pediatrics [2].

Allergic diseases have a complex multifactorial nature and develop with the interaction of environmental factors and hereditary predisposition. An active search is underway throughout the world for genes responsible for the formation of predisposition to AD, which is associated both with the undoubted relevance of studying the risk factors for the development of AD, and with the emergence of new opportunities for genetic research. To date, analyses of the association of asthma and other AD with polymorphic variants of hundreds of genes have been performed [6]. The problem of timely detection of bronchial asthma at the outpatient stage of medical care is especially urgent, since it is the pediatricians of outpatient clinics who are the first to encounter problems with the respiratory system. Analysis of works devoted to the diagnosis of bronchial asthma in children with AR indicates that despite a large number of studies devoted to various aspects of bronchial asthma in children, issues of timely diagnosis of the disease, especially at the outpatient stage, remain incompletely resolved, which often determines the prognosis of the disease [5]. The planned work will allow us to propose cost-effective methods for managing this category of patients with the correct direction of expenses for treatment and improvement of preventive measures. This will improve the timely correct examination of children at risk, implement the proposed staged effective differentiated ways of managing patients with a specific form of the disease using proven methods of treatment and prevention.

Purpose of the study. Conduct a comprehensive assessment of the factors that contribute to the development of allergic rhinitis in children with bronchial asthma.

Material and methods of the study. Retrospective studies will be conducted in Tashkent and Andijan regions. The diagnosis will be established based on the classification of the main clinical forms of bronchopulmonary diseases in children, approved at a special meeting of the XVIII National Congress on Respiratory Diseases (2009). Clinical, functional and laboratory studies will be performed in children with bronchial asthma in combination with allergic rhinitis.

Study results. In the cohort of children examined with severe bronchial asthma, patients

of senior school age were encountered 1.4 times more often, with more than 50% of them noting the manifestation of the disease at the age of up to 3 years ($p < 0.01$). Patients with mild bronchial asthma, on the contrary, mainly belonged to the preschool age category, and their asthma developed at the age of over 3 years. Mothers of patients with severe bronchial asthma were 1.7 times more likely to have a threatened miscarriage ($p<0.01$), no statistically significant differences were found in the frequency of cesarean section, natal trauma and birth weight of the child. ARVI and bronchitis with an almost monthly frequency in the first 3 years of life were 1.3 times more likely to be registered in children with developed severe bronchial asthma ($p<0.01$). Unfavorable living conditions, living in a passive smoking area also dominated in the group of patients with more pronounced symptoms of bronchial asthma. Allergic rhinitis in 1/3 of children accompanied a mild variant of the disease, accounting for half of the comorbid allergopathology in severe bronchial asthma ($p<0.01$). It should be noted that the statistical significance of isolated risk factors does not reflect their combined effect on the course of bronchial asthma. The maximum prognostic ability may be possessed by a group of predictors, the mutual influence of which provides significant sensitivity and specificity of the prognosis of severe asthma development.

The most relevant risk factor for the development of the disease for the child population is considered to be passive smoking. Tobacco smoke worsens mucociliary clearance, increasing inflammation of the bronchial tree and exacerbation of the disease, significantly reduces the forced expiratory volume in 1 second (FEV1), and also leads to an increase in the level of total immunoglobulin E in the blood, the release of histamine from mast cells and the attraction of eosinophils to the lungs. According to W.J. Sheehan and W Phipatanakul (2015) [16], passive smoking can reduce sensitivity to inhaled corticosteroids, which is one of the mechanisms for the formation of steroid resistance. We have found that smoking of one parent in the family increases the chance of developing severe bronchial asthma by 3 times ($\chi2=7.684$; $p\chi2=0.005$), smoking of both parents - by 3.9 times ($\chi2=6.56$; $p\chi2=0.01$).

According to T.R. Stroykova (2018) [17], one of the dominant risk factors for severe course is female gender. The information obtained during the study confirms this. The female phenotype increases the likelihood of developing a severe course of the disease by 2 times ($\chi2=4.14$; $p\chi2=0.041$).

In addition, the equation includes the age of the child ($\chi2=29.46$; $p\chi2<0.0001$), which determines the severity of bronchial asthma as the patient grows older; age of disease onset, which has the inverse value of the standardized coefficient (to estimate the OR, the inverse indicator was calculated - 1/0.578 = 1.73), reducing the chance of developing severe bronchial asthma by 73% with an increase in the age of disease manifestation ($\chi2 = 42.50$; $p\chi 2 <0.0001$).

Conclusion. Thus, it can be stated that anamnestic predictors of severe bronchial asthma are a combination of several indicators.

The resulting equation can be used to predict severe bronchial asthma based on the analysis of a set of anamnestic data available in practical healthcare.

Used literature:

1. Gamzaeva A.U., Minkailov K-M.O., Minkailov E.K., Guseinov A.A. Bronchial asthma that developed against the background of allergic rhinitis (clinical and functional parameters of early diagnosis). Vestn. novykh med. tekhnologii. 2010; 17

2. Ovcharenko S.I., Chichkova N.V., Grekova E.B. Bronchial asthma in combination with allergic rhinosinusitis: evaluation of the effectiveness of erespal in combination therapy. Consilium Medicum. 2006; 8 (3): 53-8.
3. Romanyuk L.I. Allergic rhinitis as a comorbid condition of bronchial asthma. Asthma and allergy. 2013; 2: 62-4.
4. Bitter C, Suter-Zimmerman K, Surber C. Nasal drug delivery in humans. Curr Probl Dermatol 2011; 40: 20-35.
5. Compalati E, Ridolo E, Passalacqua G. The link between allergic rhinitis and asthma: the united airways disease. Expert Rev Clin Immunol 2010; 6 (3): 413-23.
6. Parakhonsky AP. Mediator's implementation nasal allergies [Electronic resource]. Int J Applied Fundamental Res 2013

UO'K: 617.7-002

REAKTIV ARTRITLI BEMORLARDA OFTALMOLOGIK BELGILARNI TASHXISLASH VA DAVOLASH TAMOYILLARI (ADABIYOT SHARHI)

Xodjaxanova D.K., Yusupov A.F., Karimova M.X. Djamalova Sh.A.
Respublika ixtisoslashtirilgan ko'z mikroxirurgiyasi
ilmiy-amaliy tibbiyot markazi

Annotatsiya

Reaktiv artrit (ReA) muammosining dolzarbligi patologiyaning, birinchi navbatda, yoshlar (20-40 yosh) orasida keng tarqalganligi va uning ko'payishiga aniq tendentsiya, shuningdek kasallikning shakllanish mexanizmlari bilan bog'liq. Ushbu adabiy sharx reaktiv artrit kasalligining va uning asoratlarini zamonaviy tashxislash usullari va davosini yoritishga bag'ishlanadi.

Kalit so'zlar: Reaktiv artrit, konyunktivit , uveit, interleykin

PRINCIPLES OF DIAGNOSIS AND TREATMENT OF OPHTHALMOLOGICAL SYMPTOMS IN PATIENTS WITH REACTIVE ARTHRITIS (LITERATURE REVIEW)

Xodjaxanova D.K., Yusupov A.F., Karimova M.X., Djamalova Sh.A.
Republican Specialized Scientific and Practical
Medical Center for Eye Microsurgery

Abstract

The relevance of the problem of reactive arthritis (ReA) is associated with the prevalence of the pathology, primarily among young people (20-40 years) and a clear tendency towards its increase, as well as the mechanisms of disease formation. This literature review discusses how to treat people with disabilities.

Key words: Key words: Reactive arthritis, conjunctivitis, uveitis, interleykin

ПРИНЦИПЫ ДИАГНОСТИКИ И ЛЕЧЕНИЯ ОФТАЛЬМОЛОГИЧЕСКИХ СИМПТОМОВ У БОЛЬНЫХ РЕАКТИВНЫМ АРТРИТОМ (ОБЗОР ЛИТЕРАТУРЫ)

Ходжаханова Д.К., Юсупов А.Ф., Каримова М.Х., Джамалова Ш.А.
Республиканский специализированный научно-практический
медицинский центр микрохирургии глаза

Аннотация

Актуальность проблемы реактивного артрита (РеА) связана с распространенностью патологии, прежде всего, среди лиц молодого возраста (20-40 лет) и четкой тенденцией к ее увеличению, а также механизмами формирования заболевания. В этом литературном обзоре говорится о том, как следует относиться к людям с ограниченными возможностями,

Ключевые слова: Ключевые слова: Реактивный артрит, конъюнктивит, увеит, интерлейкин

Dolzarbligi. Reaktiv artrit kasalligi - bu genitourinar organlarining shikastlanishi bilan kuzatilinadigan kasallik bo'lib, odatda erkaklarda gonokokk bo'lmagan (asosan xlamidiyali)

uretroprostatit, ayollarda servitsit va salpingit, ko'z va bo'g'imlarning yallig'lanishi, masalan, assimetrik artrit ko`rinishida namoyon bo`ladi. moyillik, asosan HLA-B27 antigeni mavjudligi moyillik faktori hisoblanadi. Davolanmagan bemorlarning taxminan 70 foizida xlamidiya genitourinar organlarda va (yoki) qon zardobida xlamidiyaga qarshi antigenlar topiladi; xlamidiya ko'z kon'yunktiva hujayralarida, teri va og'iz bo'shlig'ining shilliq pardalarida, ta'sirlangan bo'g'imlarning sinovial suyuqligida uchraydi [1].

Etiologiyasi: Nozologik shakl sifatida "reaktiv artrit" (ReA) atamasi birinchi marta 1969 yilda fin tadqiqotchilari P. Ahvonen, K. Sievers va K. Aho tomonidan taklif qilingan bo'lib, ular yersiniya enterokoliti bo'lgan bemorlarda artritni tavsiflaganlar. Zamonaviy tushunchalarga ko'ra, ReA 2 guruhga bo'linadi - urogenital (xlamidiya) va postenterokolitik (yersiniya, salmonella, kampilobakter va shigelloz). ReA chastotasi xlamidiyali va 1,5-4% (12% gacha) ichak infektsiyalari bilan kasallangan bemorlarda 1-3% ni tashkil qiladi. Kasallikning surunkali kechishi 15-50% hollarda kuzatiladi va ko'pincha bemorlarning uzoq muddatli nogironligiga sabab bo'ladi. Rivojlanishi streptokokk, ureaplazma, mikoplazma, virusli va boshqa infektsiyalar bilan bog'liq bo'lgan artrit hozirda "infektsiya bilan bog'liq artrit" deb tasniflanadi [2]

Etiologik xususiyatlarga qo'shimcha ravishda, ReA tasnifi kasallikning tabiatini ham hisobga oladi (o'tkir 2 oygacha, uzaygan - 1 yilgacha, surunkali - > 1 yil va takroriy - 6 oygacha davom etadigan remissiyalar bilan), faollik darajasi bo`yicha (past - I, o'rta funktsiya), II, past - I, o'rta funktsiya. qo'shma etishmovchilik (I - professional qobiliyat saqlanib qolgan, II - professional qobiliyat yo'qolgan, III - o'z-o'zini parvarish qilish qobiliyati yo'qolgan) [3].

Patogenez. ReA patogenezida immunitet mexanizmlari yetakchi ro`l o'ynaydi. Etiologik omil sifatida sitotoksik T-hujayra reaktsiyasining namoyon bo`lishi bilan boshlaydi, bu bo'g'imning sinovial membranasiga zarar yetkazadigan yallig'lanishga qarshi sitokinlarning shakllanishiga olib keladigan T-limfotsitlarning subpopulyatsiyalarining faollashishi va ko'payishidan iborat. Ko'p miqdorda hosil bo'lgan va bo'g'im to'qimalarida fiksatsiyalangan immun komplekslar, shuningdek, yallig'lanishga qarshi sitokinlarning (interleykin - IL1b, o'simta nekrozi faktor-a - TNFa va boshqalar), prostaglandin E2 ning ortiqcha ishlab chiqarilishiga olib keladi, bu esa bo'g'imlarda yallig'lanish jarayonining rivojlanishiga olib keladi. Yuqorida aytib o'tilganidek, ReA bilan og'rigan bemorlarning 70-80 foizida topilgan HLA-B27 gistologik moslashuv antigeniga kelsak, uning kasallikning rivojlanishidagi patologik rolini tushuntiruvchi bir nechta farazlar mavjud:

• HLA-B27 mikroblar uchun retseptor bo'lib, ularning organizmning turli to'qimalarida tarqalishiga yordam beradi; • HLA-B27 - pasayishning noyob belgisi

-makrofaglarning fagotsitik faolligi, bu organizmdagi mikroblarning uzoq muddatli saqlanishiga yordam beradi va immunitetning etarli emasligiga olib keladi;

-mikrobial mimikriya hosil bo'lishi (mikroorganizmning antijenik tuzilishi va HLA-B27 o'xshashligi), buning natijasida immunitet reaktsiyasi nafaqat mikroblarga, balki o'zining qo'shma to'qimalariga ham qarshi qaratilgan;

• HLA-B27 mikrobial yoki o'z-o'zidan kelib chiqqan individual oqsillarni bog'laydi va keyin ularni CD8+ T limfotsitlariga taqdim etadi [3].

ReA bilan kasallangan bemorlarning qon zardobida TNF-a va IL-1β miqdorining sezilarli darajada oshishi va sog'lom odamlar guruhiga nisbatan IL-4 va IL-lRa miqdorining pasayishi aniqlandi. ReA surunkali bo'lgan bemorlarda qon zardobida IL-6 darajasi kasallikning uzoq va takroriy bo'lgan bemorlarga qaraganda yuqori bo'lgan [2].

Diagnostika: Reaktiv artrit uchun diagnostika mezonlari bo'yicha kelishuv mavjud emas.

Vaziyat seronegativ spondiloartropatiya deb tasniflanadi, chunki bemorlarda revmatoid omil uchun testlar manfiy bo'lgan. Boshqa spondiloartropatlarga o'xshab (masalan, psoriatik artrit va ankilozan spondilit) reaktiv artrit aksiyel skelet artriti, enthetrik osmetrikit yoki artrit bilan tavsiflanadi. periferik bo'g'imlarning poliartriti va revmatoid omilning yo'qligi. Aniqroq qilib aytadigan bo'lsak, reaktiv artrit klassik tarzda kon'yunktivit, periferik artrit va uretrit yoki servitsit triadasi sifatida tan olinadi va ko'pincha: "Ko'rmaydi, peshob ajratolmaydi, daraxtga chiqolmaydi" degan maqol bilan eslanadi.

Asosiy mezonlar quyidagilar:

Artrit, quyidagi uchta xususiyatdan ikkitasiga javob beradi: assimetrik, mono- yoki oligoartrit va oyoq-qo'llarning pastki qismi shikastlanishi

Quyidagi belgilardan biriga javob beradigan oldingi simptomatik infektsiya: artrit boshlanishidan 3 kundan 6 haftagacha bo'lgan muddatda kamida 1 kun diareya sifatida aniqlanadigan enterit; yoki artrit boshlanishidan 3 kundan 6 haftagacha bo'lgan kamida 1 kun davomida dizuriya yoki oqindi sifatida tavsiflangan uretrit

Kichik mezonlar:

Musbat siydik analizi, bachadon bo'yni/uretral yoki axlatdagi qo'zg'atuvchi infektsiyaning mavjudligi

Ijobiy immunogistologiya yoki PZR bilan tasdiqlanadigan doimiy sinovial infektsiyaning mavjudligi [4].

Bo`g`imlarning shikastlanishi ko'pincha mono- va oligoartikulyar xarakterga ega, ammo poliartrit ham bo'lishi mumkin. Kasallik, aslida katta (tizza) yoki o'rta (to'piq) bo'g'imlarning kichik bo'g'imlarning (odatda oyoq bo'g'imlari - tarsus, metatarsus, interfalangeal va metatarsofalangeal) ishtiroki bilan boshlanadi; Interfalangeal va metatarsofalangeal bo'g'imlarning shikastlanishi natijasida periartikulyar shish paydo bo'lishi "soxta podagra" (agar birinchi barmoqning bo'g'imlari ta'sirlangan bo'lsa) yoki "kolbasa barmog'i" (agar ikkinchi-to'rtinchi barmoqlarning bo'g'imlari ta'sirlangan bo'lsa) deb ataladigan klinik ko`rinishlarga olib keladi.

Ko'zning shikastlanishi - ko'zdagi o`zgarishlarning o'ziga xos xususiyati shundaki, u bir necha haftalar, oylar va ko'pincha yillar oralig'ida sodir bo'lishi mumkin. Artikulyar sindromdan oldingi ko'zning shikastlanishi bo'lgan bir qator bemorlar dastlab oftalmologlar tomonidan davolanadi. UREA (urogenital reaktiv artrit) bilan ko'zning barcha turlari ta'riflangan: kon'yunktivit (eng keng tarqalgan), irit, xorioidit, keratit, uveit, shox pardaning yarasi, katarakta. Hatto to`r pardaning ko`chishi ham uchraydi. Konyunktivit kasallikdan oldin, artikulyar sindrom paytida va vaqti-vaqti bilan undan keyin paydo bo'lishi mumkin. Uveit ko'pincha UREA ning takroriy hujumlari paytida paydo bo'ladi, ularning mavjudligi odatda HLA B27 antigeni bilan bog'liq [5].

Davomiyligiga qarab artrit quyidagilarga bo'linadi:

o'tkir artrit - uch oygacha;

o`tkir osti artrit - uch oydan olti oygacha;

uzoq muddatli artrit - olti oydan bir yilgacha;

surunkali artrit - bir yildan ortiq.

Artritning takroriy shakli mavjud bo'lib, u to'lqinlarda yoki o'tkir bosqichga o'tadi, keyin remissiyaga davriga o`tadi va so`ngra yana takrorlanadi.

Kasallik asosan uretrit, tez o'tadigan kon'yunktivit, teri va shilliq pardalarning shikastlanishi bilan boshlanadi. Ushbu alomatlar boshlanganidan 1-4 hafta o'tgach, oyoqlarning

bo'g'imlarining artriti ham paydo bo'ladi, ko'pincha titroq bilan xarakterli isitma, oyoq barmoqlarining shishishi va oyoq terisining binafsha-ko'k rangga aylanishi bilan birga keladi. Boshqa alomatlar, shuningdek, kon'yunktivit tufayli iridotsiklit, yurak ritmi bilan bog'liq muammolar, toshbaqa kasalligiga o'xshash toshmalar va ba'zi hollarda shilliq pardalarning og'riqsiz eroziyasi bo'lishi mumkin. Reaktiv artrit ko'pincha 3-6 oy davom etadi va to'liq tiklanish bilan tugaydi. Yuqumli fokus genitouriya organlarida qolsa, relaps mumkin [6].

Davolash. Bemorlar shifoxonada davolanadi. Bo`g`imlardagi kuchli yallig'lanish davrida yotoq rejimi belgilanadi. Og'riq va bo'g'imlarning shishishi butunlay yo'qolguncha yumshoq jismoniy faoliyat tavsiya etiladi. ReA uchun dori terapiyasining asosiy tamoyillari va yo'nalishlari uning hosil bo'lish mexanizmidan kelib chiqadi va oshqozon-ichak trakti (GIT) va urogenital yo'llarda infektsiya o'choqlarini yo`q qilish, yallig'lanishga qarshi dorilarni qo'llash, zarur bo'lganda, asosiy antirevmatik va artrit sindromini yo'q qilish uchun antibiotik terapiyasini (ABT) tayinlashgacha davom etadi. Antibiotikni tanlash boshlang'ich kasallikning qo'zg'atuvchisi bilan bog`lanadi: xlamidial infektsiya uchun bular makrolidlar (azitromitsin, klaritromitsin, roksitromitsin), tetratsiklin seriyasining ABT preparatlari (doksisiklin, rondomitsin); ichak infektsiyasi uchun - xloramfenikol, gentamitsin, noma'lum etiologiya uchun - tetratsiklin antibiotiklari, ftorxinolonlar (lomefloksatsin, pefloksatsin, siprofloksatsin). Revmatologlar orasida ABTning davomiyligi bo'yicha umumiy kelishuvlar yo'q. Ba'zilar takroriy laboratoriya tekshiruvlari bilan qisqa kurslarni (7-10 kungacha) afzal ko'radi. Kurs tugaganidan keyin 3 hafta o'tgach va natija ijobiy bo'lsa, preparatni o'zgartirish bilan ABTning takroriy kursi o'tkaziladi. Boshqalar, qisqa kurslar ko'pincha samarasiz va davolanish kamida 28 kun davom etishi kerak deb hisoblashadi.[9]. ABTning o'zi ReA kursini yengillashtirmaydi, lekin u kasallikning asosiy sababini yo'q qilishi mumkin va shu munosabat bilan etiotropikdir. Uzoq muddatli va surunkali ReA ni davolashning istiqbolli yo'nalishlari immun tanqislik holatlarida interferon ishlab chiqarishni rag'batlantirishi mumkin bo'lgan ma'lum antivirus preparatlarni qo'llashni o'z ichiga oladi. Bunday dori Panavir; uning ReA kompleks terapiyasiga kiritilishi asosiy dorilarning yallig'lanishga qarshi ta'sirini kuchaytirishga yordam beradi va yallig'lanish jarayonining faolligini kamaytirishga imkon beradi. Mahalliy davolanishga - voltaren yoki gidrokortizon bilan teng nisbatda malham, krem, gel, dimeksid kompresslari shaklida yallig`lanishga qarshi preparatlardan foydalanish kiradi. Reabilitatsiya davrida fizioterapiya (loy vannalari, kerosin vannalari, magnit terapiya va boshqalar), sanatoriy-kurort davolash ko'rsatiladi [10].

Foydalanilgan adabiyotlar:

1. Болезнь Рейтера (история, этиология, эпидемиология, патогенез, клиника и течение, поражение кожи, глаз, опорно-двигательного аппарата и других органов). Клиническая лекция Федотов В. П. Запорожский государственный медицинский университет
2. Гапонова Татьяна Владимировна. Клинико-иммунологические взаимосвязи при реактивных артритах различной этиологии: дис. ... канд. мед. наук: 14.00.05 / Т.В. Гапонова; Санкт-Петербургская медицинская академия последипломного образования. - Санкт-Петербург, 2009.- 116 с.
3. Бадокин В. В. Диагностика и лечение реактивных артритов //Медицинский совет. – 2014. – №. 5. – С. 100-107.
4. Pennisi M, Perdue J, Roulston T, Nicholas J, Schmidt E, Rolfs J. An overview of reactive arthritis. JAAPA. 2019 Jul;32(7):25-28.

5. Хидирова Н. Х., Ахмедов Х. С., Абдумуродова Н. У. Эпидемиология и клиника реактивных артритов //Лучшие интеллектуальные исследования. – 2023. – Т. 11. – №. 3. – С. 154-161.
6. Корой П. В. Реактивный артрит //Вестник молодого ученого. – 2015. – Т. 11. – №. 4. – С. 46-50.
7. Рыстанбаева А. Н. и др. Клинико-эпидемиологические особенности поражения органа зрения при системных заболеваниях соединительной ткани //Медицина (Алматы). – 2020. – №. 1-2. – С. 67-74.
8. Руднева, Л. Ф. Междисциплинарный подход к диагностике и лечению ревматических заболеваний / Л. Ф. Руднева, М. Н. Пономарева // Материалы VIII терапевтического форума "Актуальные вопросы диагностики и лечения наиболее распространенных заболеваний внутренних органов" посвященного 70-летию Победы в Великой Отечественной войне, Тюмень, 28–30 октября 2015 года. – Тюмень: Айвекс, 2015. – С. 82-83.
9. А. Власенко, Е. Киреева Диагностика и лечение реактивного артрита ae-mail: alnvlasenko@yandex.ru Врач 12'2016
10. García-Kutzbach A, Chacón-Súchite J, García-Ferrer H, Iraheta I. Reactive arthritis: update 2018. Clin Rheumatol. 2018 Apr;37(4):869-874. doi: 10.1007/s10067-018-4022-5. Epub 2018 Feb 17. PMID: 29455267.

UO'K: 617.55/.342-002.44-08

OSHQOZON YARASINI JARROHLIK USULIDA DAVOLASH VA OLDINI OLISHGA ZAMONAVIY YONDASHUV

Xodjimatov G.M., Foziljonov O.Sh.
Andijon davlat tibbiyot instituti

Annotatsiya

Tadqiqotga surunkali oshqozon yarasi (SOYa) bilan og'rigan 485 bemorni tekshirish va konservativ davolash kiritilgan bo'lib, ular jinsi va yoshini hisobga olgan holda 50 kishidan iborat ikkita randomizatsiyalangan guruhga bo'lingan: birinchi guruh muvaffaqiyatli dori-darmonlarni davolashdan o'tgan bemorlardan iborat bo'lgan, ikkinchisi - uzoq muddatli davolanmaydigan yaralari bo'lgan holatlar.

Natijalarni har tomonlama baholash uchun endoskopik usullar qo'llanildi: 60 marta kattalashtirish bilan kattalashtiruvchi gastroduodenoskopiya va 0,5% metilen ko'k eritmasi yordamida xromoskopiya, shuningdek, oshqozon shilliq qavatidan (OShQ) bir nechta biopsiya olish va endoskopik ultratovush tekshiruvi (EUTT).

Tahlil davomida kasallikning noqulay kursini bashorat qilishga imkon beruvchi asosiy morfologik mezonlar aniqlandi. Alohida e'tibor oshqozon shilliq qavati va periulcerous zonasi holati, shu jumladan, bosqichi va atrofik gastrit darajasi, shuningdek, ichak metaplazi va displastik o'zgarishlar baholash uchun differentsial yondashuv qaratildi. Bu omillar OShQ bilan har bir bemor uchun individual prognoz va optimal davolash strategiyasini belgilaydi.

Kalit so'zlar: jarrohlik davolash, oshqozon yarasi, profilaktika

MODERN APPROACH TO SURGICAL TREATMENT AND PREVENTION OF GASTRIC ULCERS

Khodjimatov G.M., Foziljonov O.Sh.
Andijan State Medical Institute

Abstract

The study included examination and conservative treatment of 485 patients with chronic gastric ulcers (ChGU), divided into two randomized groups of 50 people, taking into account gender and age: the first group consisted of patients who successfully underwent drug treatment, the second - of cases with ulcers that do not heal for a long time.

For a comprehensive assessment of the results, endoscopic methods were used: magnification gastroduodenoscopy with 60-fold magnification and chromoscopy using 0.5% methylene blue solution, as well as taking multiple biopsies from the gastric mucosa (GM) and endoscopic ultrasound examination (EUS).

During the analysis, key morphological criteria were identified that allow predicting an unfavorable course of the disease. Particular attention was paid to the state of the GM and periulcerous zone, including the stage and degree of atrophic gastritis, as well as a differentiated approach to assessing intestinal metaplasia and dysplastic changes. These factors determine an individual prognosis and the optimal treatment strategy for each patient with CU.

Key words: surgical treatment, stomach, ulcer, prevention

СОВРЕМЕННЫЙ ПОДХОД К ХИРУРГИЧЕСКОМУ ЛЕЧЕНИЮ И ПРОФИЛАКТИКЕ ЯЗВ ЖЕЛУДКА

Ходжиматов Г.М., Фозилжонов О.Ш.
Андижанский государственный медицинский институт

Аннотация

Исследование включало осмотр и консервативное лечение 485 пациентов с хроническими язвами желудка (ХЯЖ), разделенных на две рандомизированные группы по 50 человека с учетом пола и возраста: первая группа состояла из больных, успешно прошедших медикаментозное лечение, вторая – из случаев с долго не заживающими язвами.

Для комплексной оценки результатов применялись эндоскопические методы: магнификационная

гастродуоденоскопия с 60-кратным увеличением и хромоскопия с использованием 0,5% раствора метиленовой сини, а также взятие множественных биоптатов из слизистой оболочки желудка (СОЖ) и эндоскопическое ультразвуковое исследование (ЭУЗИ).

В ходе анализа были выявлены ключевые морфологические критерии, позволяющие предсказывать неблагоприятное течение заболевания. Особое внимание уделялось состоянию СОЖ и периульцерозной зоны, включая стадию и степень атрофического гастрита, а также дифференцированный подход к оценке кишечной метаплазии и диспластических изменений. Эти факторы определяют индивидуальный прогноз и оптимальную стратегию лечения для каждого пациента с ХЯЖ.

Ключевые слова: хирургическое лечение, желудок, язва, профилактика

Dolzarblik. Zamonaviy jarrohlikning dolzarb muammolaridan biri oshqozon yarasi kasalligidir. Oshqozon yarasi kasalligi juda murakkab tibbiy ilmiy muammo bo'lib, u hali to'liq hal qilinmagan.

Peptik yara kasalligi eng keng tarqalgan ichki kasalliklardan biridir.

Oshqozon yarasi kasalligining tarqalishi muammosi hozirgi kunda eng ko'p muhokama qilinadigan muammolardan biridir. Ushbu maqolada turli yoshdagi bemorlarda turli epidemiologik va klinik komponentlarga qarab muammoning holati tahlili keltirilgan.

Tadqiqotning maqsadi. Tadqiqotning maqsadi uzoq umr ko'radigan populyatsiyalarda gastroduodenal yaralarning klinik va epidemiologik xususiyatlarini o'rganish va takomillashtirilgan innovatsion profilaktika texnologiyasini ishlab chiqishdan iborat.

Materiallar va tadqiqot usullari. Farg'ona vodiysi sharoitini to'liq aks ettiruvchi tadqiqot Andijon viloyatida o'tkaziladi. Jahon sog'liqni saqlash tashkiloti (JSST) tavsiyalaridan foydalangan holda bir vaqtning o'zida epidemiologik tadqiqot tashkil etiladi.

Tadqiqot ob'ekti sifatida 90 yoshdan oshgan, 500 nafardan ortiq erkak va ayol jalb etiladi, ular vakillik bilan tanlanadi: 1) o'tgan saylovlarda saylov ro'yxati natijalariga ko'ra yuz yilliklar tanlab olinadi va to'liq tekshiriladi 2) Andijon viloyatining barcha shahar va tumanlaridan kelgan barcha yuz yilliklar o'tkaziladi, ular bilan uyali aloqa orqali doimiy profilaktika ishlari olib boriladi; 3) tadqiqotning mohiyati har bir ishtirokchiga yetkaziladi, tayyorgarlik va test sinovlari o'tkaziladi, shundan so'ng test sinovlarining to'liq dasturi o'tkaziladi; 4) JSSTning "SteppBOZh" so'rovnomasi GDU uchun xavf omillarini aniqlash va ularni baholash uchun ishlatiladi. (ilova qilingan).

Tadqiqot natijalari. Tadqiqotimiz barcha tekshirilganlar (485 bemor) orasida HCJ ning noqulay kursi bo'lgan 64 kishini (13,2%) aniqladi. HCJ bilan og'rigan bemorlarni klinik baholash shuni ko'rsatdiki, ikkala guruhdagi kasallikning asosiy belgisi qorin og'rig'i edi. Bu haqda 1-klinik guruhdan 60 nafar (93,8%), 2-guruhdan 57 nafar (89,0%) shikoyatlar kelib tushgan.

Og'riq belgisining intensivligi mukovistsidozning kichik omentum va oshqozon osti bezi ichiga kirib borishi bilan ortdi (EUS ma'lumotlariga ko'ra 2-guruhdagi 8 bemorda). Oshqozon yonishi 25 (39,1%) va 41 (64%) bemorlarda - mos ravishda 1 va 2 klinik guruhlarda sodir bo'lgan ($p<0,05$). Dispepsiya belgilarining og'irligi (belching, ko'ngil aynishi, epigastriumdagi og'irlik, shishiradi) guruhlar bo'yicha taqqoslangan. Ikkala guruhdagi 10 (7,8%) bemorda hech qanday shikoyat yo'q edi. Shunday qilib, biz refrakter oshqozon yarasining klinik ko'rinishida sezilarli farqlarni topmadik.

Bemorlarda endoskopik ma'lumotlarni guruhlar bo'yicha tahlil qilish (1-jadval) 2-guruhda 55 (85,9%) odamda tananing oshqozon yarasi va oshqozonning kichik egrilik bo'ylab burchagi aniqlanganligini ko'rsatdi, ya'ni. 1-guruhga qaraganda sezilarli darajada tez-tez - 34 (53,1%) bemorlarda. 2-guruhda oshqozon yarasi katta hajmga ega - 71,9% hollarda va gigant - 14%; 1-

guruhda 27,4% bemorlarda yirik yaralar aniqlanmadi;

Xulosa. Shunday qilib, ACG fonida CUFni aniqlash oshqozon shilliq qavatini keng qamrovli endoskopik va morfologik o'rganishni talab qiladi, bu quyidagilarga imkon beradi: konservativ va jarrohlik davolash uchun bemorlarni tanlashda CUF va oshqozon saratonining birlamchi yarali shakli o'rtasida differentsial diagnostika o'tkazish; bir butun sifatida oshqozon shilliq qavatining boshlang'ich holatini baholash va ortib onkologik xavfi bilan bir guruh shakllantirish uchun preneoplastik o'zgarishlar (ichak metaplazi, displazi) aniqlash va keyinchalik davolash paytida oshqozon shilliq qavatining o'zgarishlar nazorat qilish.

Yarali kolit bilan og'rigan bemorlarni davolashni individuallashtirish oshqozon yarasi kasalligining morfologik belgilarini o'z vaqtida prognostik baholashga asoslangan bo'lishi kerak. Yuqori darajadagi displazi oshqozon saratonini o'z vaqtida aniqlash uchun oshqozon saratonini jarrohlik davolash uchun mutlaq ko'rsatkichdir.

Foydalanilgan adabiyotlar:

1. Аруин Л. И., Капуллер Л. Л., Исаков В. А. Морфологическая диагностика болезней желудка и кишечника. - М.: Медицина, 1998. - 483 с.
2. Аруин Л. И., Кононов А. В., Мозговой С. И. Новая классификация хронического гастрита // Актуальные вопросы патологической анатомии: Материалы III съезда Российского общества патологоанатомов. - Самара, 2009. - Т. 1. - С. 5-8.
3. Барановский А. Ю., Назаренко Л. И. Неблагоприятные варианты течения язвенной болезни. - СПб., 2006. -140 с.
4. Заводиленко К. В., Мозговой С. И., Кононов А. В. Параметры клеточного обновления в очагах кишечной метаплазии эпителия желудка при атрофии и эрозивно-язвенных дефектах // Клинико-эпидемиологические и этно-экологические проблемы заболеваний органов пищеварения. - Красноярск, 2006. - С. 128-133.
5. Соколова Г. Н., Потапова В. Б. Клинико-патогенетические аспекты язвенной болезни желудка. - М.: Анахарсис, 2009. - 328 с.

UO'K: 616.089

GEPATIT C LABORATORIYA TASHXISI: TESTLAR VA BOSQICHLAR

Xo`jaqulov D.A.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Viruslar qo`zg`atadigan gepatitlar er yuzidajuda keng tarqalgan.Ular bemorlarni uzoq muddatga ishga yaroqsiz qilib qo`yadi,ba`zan bemorlarning o`limiga yoki nogiron bo`lib qolishiga sabab bo`ladi.Virusli gepatitlar medisina fani va sog`liqni saqlash tashkilotlari oldidagi juda muhim muammo hisoblanadi. Bu kasalliklarni ba`zi jihatlari etarli o`rganilmagan, ularning davolash usullari va profilaktikasi talabga javob bermaydi.Gepatit C virusining yuqishi turli parenteral yo`llar orqali amalga oshadi. Gepatit C virusi ko`proq qon va qon maxsulotlarini quyish, hamda tibbiy muolajalar o`tkazilganda yuqib qoladi.Kasallikning yuqishida jinsiy yo`l ham katta ahamiyat kasb etadi.

Kalit so`zlar: Gepatit C virusi, NCV,IgG,HCV, IgM,PZR,genotip, ELISA,molekuyar genetic, serologic, biokimyoviy qon tahlili

LABORATORY DIAGNOSTICS OF HEPATITIS C: TESTS AND STAGES

Khudzhakulov D.A.
Samarkand state medical university

Abstract

Viral hepatitis is a very common disease worldwide. It can lead to long-term disability and sometimes death. Viral hepatitis is a serious public health problem in medicine and health care. is a very important problem faced by health care organizations. Some aspects of these diseases are not well understood, and their treatment and prevention methods do not meet the requirements. Hepatitis C virus is transmitted by various parenteral routes. Hepatitis C virus is most often transmitted through blood transfusion and its products, as well as through medical procedures. Sexual transmission also plays a significant role in the spread of the disease.

Keywords: Hepatitis C virus, NCV, IgG, HCV, IgM, PCR, genotype, ELISA, molecular genetic, serological, biochemical blood tests

ЛАБОРАТОРНАЯ ДИАГНОСТИКА ГЕПАТИТА С: ТЕСТЫ И ЭТАПЫ

Худжакулов Д.А.
Самаркандский государственный медицинский университет

Аннотация

Вирусный гепатит - очень распространенное заболевание во всем мире. Оно может привести к длительной инвалидности, а иногда и к смерти. Вирусный гепатит - это серьезная проблема общественного здравоохранения в медицине и здравоохранении. - очень важная проблема, с которой сталкиваются организации здравоохранения. Некоторые аспекты этих заболеваний изучены недостаточно, а методы их лечения и профилактики не отвечают требованиям. Передача вируса гепатита С происходит различными парентеральными путями. Вирус гепатита С чаще всего передается через переливание крови и ее продуктов, а также через медицинские процедуры. Половой путь передачи также играет значительную роль в распространении заболевания.

Ключевые слова: Вирус гепатита С, NCV, IgG, HCV, IgM, ПЦР, генотип, ИФА, молекулярно-генетический, серологический, биохимический анализ крови

Dolzarbligi. Hozirgi vaqtda virusli gepatit C ning 6 ta genotipi va 100 dan ortiq subtiplari mavjud. (1a,1b,2a,2b,3a). Kasallik 70-90 % holatda o`tkir yuqimli asimptomatik shaklda kechib, 60-80% holatda surunkali shakga aylanadi.

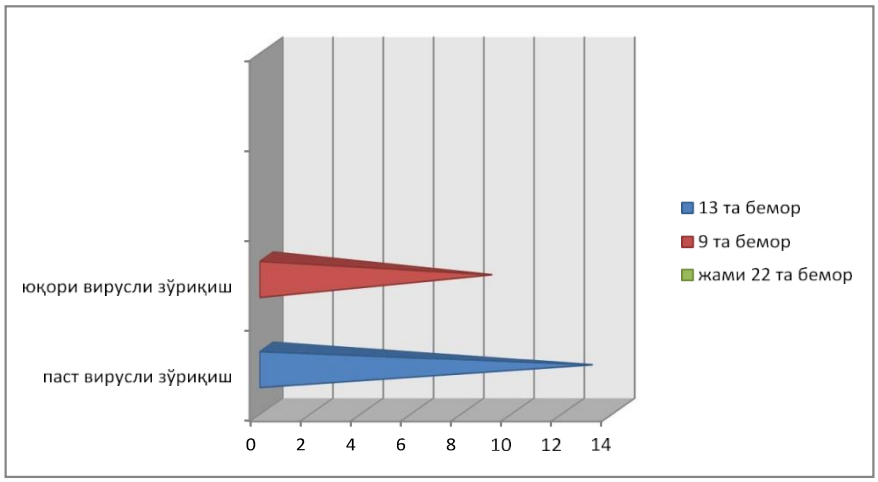
Kasallikning eng keng tarqalgan asoratlaridan gepatosellular karsinoma va jigar sirrozi hisoblanadi.Hozirgi vaqtda JSST taxminlariga ko`ra, dunyoda 58 million nafar odam surunkali

gepatit C bilan kasallangan, har yili 1,5 million yangi kasallanish holati aniqlanadi.Infeksiyani o`z vaqtida aniqlash, shuningdek kasallikning kechishini nazorat qilish laboratoroya diagnostikasining yuqori samarali usullari yordamida amalga oshiriladi.

Ilmiy maqsad: Yuqumli jarayonning shakli, kasallikning oqibatini aniqlash uchun laboratoriya diagnostikasining zamonaviy yuqori samarali usullarini aniqlash.

Tekshiruv materiallari va usullar: Samarqand viloyat, Payariq tuman markaziy poliklinikasida dispenser nazoratida turuvchi 22 bemor maxsus va nomaxsus usullar yordamida tekshirildi. Gepatit C ni ishonchli aniqlash uchun quyidagi maxsus tekshiruv usullari qo`llanildi.molekulyar genetic va serologic, nomaxsus usullardan- biokimyoviy qon tahlili, jigarning ultratovush tekshiruvi, umumiy qon tahlilidan ham foydalanildi. Molekulyar genetic usul polimeraza zanjir reaksiyasi (PZR) va genotiplashni o`z ichiga oladi. PZR bemorning qonida gepatit C virusi RNK ning o`ziga xos qismini aniqlaydi. Bu davolash paytida virusli zo`riqishni nazorat qilish uchun ishlatiladi. Genotiplash ma`lum bir antiviral davolash rejimini yaratish va tuzatish uchun zarur bo`lgan gepatit C genotipini aniqlash maqsadida amalga oshiriladi.Serologik diagnostika ferment immunoassay (ELISA) da juft zardobni o`rganish orqali gepatit C virusiga xos antitelolarni (anti NCV IgG, anti HCV IgM) ANIQLASHGA ASOSLANGAN. Muayyan antigenlarni aniqlash yuqimli jarayonning shaklini aniqlashga imkon beradi. Bemorning qonidagi antigenlar infeksiya yuqqandan so`ng 304 hafta o`tgach aniqlanadi.Muayyan bo`lmagan usullar uzoq vaqtdan beri ma`lum bo`lgan va ko`plab tadqiqotlar ularning ishichliligiga asoslangan.

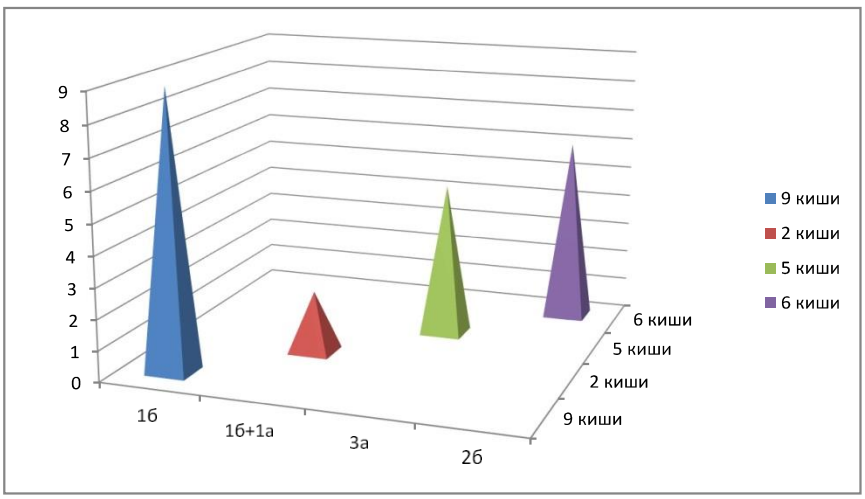
Tekshiruv natijalari: Gepatit C virusi keltirib chiqaradigan jigardagi patologik jarayonga shubha qilinganda bemorlarning sub`ektiv shikoyatlari asosida tibbiy yordamga murojat qilin-



gan.

Rasm-1.

Rasm-2.



O`tkazilgan sifatli PZR tekshiruvi natijasida 22 ta bemorda gepatit C virusini aniqladi. PZR ning miqdoriy ko`rsatgichi 13 bemorda past virusli zo`riqishni aniqladi (10,1-10,4 TB\ml) va 9 kishida yuqori (10,5-10,7 TB\ml). Gepatit C virusini (NCV) genotiplashda 1 b (9 kishi),1b+1a (2 kishi), 3a (5 kishi), 2 b (6 kishi) genotiplari aniqlangan. Ayni paytda aniqlanishicha 1b genotipi eng keng tarqalgan.

Seralogik diagnostika yuqumli jarayon shakllarini farqlashga imkon beradi. 11 kishida anti HCV IgG va anti HCV IgM aniqlanishi 5 bemorda (gepatit C ning o`tkir fazasi) yuqqan paytdan boshlab 14 oydan ko`p bo`lmagan vaqt o`tganligini ko`rsatadi; 6 kishida infeksiya yuqqandan boshlab bir necha yil o`tgan (surunkali gepatit C ning latent fazasi).Yadroga qarshi-IgG,anti –HC-IgG (11 kishi) dorilarni qabul qilishda surunkali gepatit C ning yashirin bosqichini yoki tiklanish bosqichini ko`rsatadi. Biokimyoviy qon tahlili 11 bemorda AlAt, AsAt ning 10 yoki undan ko`p marta ko`payishini aniqladi, bu surunkali gepatit C ning o`tkir bosqichi va kuchayishini ko`rsatadi, 11 bemorda engil o`sish- surunkali jarayon aniqlandi.

Xulosa. Tadqiqot davomida 22 bemor orasida surunkali jarayonga chalingan 11 kishi va surunkali kasallikning o`tkir va kuchayishi bilan 11 kishi aniqlandi. Maxsus laboratoriya diagnostikasi yuqumli jarayonning shaklini aniqlashda information va samarali bo`lib, etarli davolash rejimini yaratish va o`ziga xos virusga qarshi terapiyani nazorat qilish kerakligini ko`rsatadi.

Foydalanilgan adabiyotlar:

1. Абдихакимович, К. Д. (2024). ЛАБОРАТОРНАЯ ДИАГНОСТИКА ВИРУСА ГЕПАТИТА С. TADQIQOTLAR. UZ, 31(2), 53-56.
2. Abdumonnonov, M., Jumankulov, F., Suvonov, O., Saparov, K., Khudjamov, Z., Chiniyev, O., & Khudjakulov, D. (2024). Some scientific and practical research on using the experience of traditional medicine. In BIO Web of Conferences (Vol. 149, p. 01071). EDP Sciences.
3. Abdikhakimovich, K. D. (2023). ASSESSMENT OF THE QUALITY OF LIFE OF PATIENTS IN MODERN MEDICINE. Talqin va tadqiqotlar ilmiy-uslubiy jurnali, 1(17), 220-224.
4. Abdikhakimovich, K. D. (2023). ANTIMICROBIAL SUBSTANCES OF LACTIC BACTERIA AND PRACTICAL ASPECTS OF THEIR USE. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 33(1), 32-37.
5. Fazliddinovna, B. M., Olimovna, O. P., & Abduhakimovich, X. D. (2022). Innovative technologies in the training of future doctors. ACADEMICIA: An International Multidisciplinary Research Journal, 12(4), 594-597.
6. Шамсиддинова, М. Ш., & Жамалова, Ф. А. (2021). Реакция иммуноприлипания как показатель естественной резистентности организма. in volgamedscience (pp. 595-596).

UO'K: 616.089

ONKOLOGIK KASALLIKLARNI TASHXISLASHDAGI DOLZARB MUAMMOLAR

Xolmamatova L.X.
Mudofaa vazirligi markaziy harbiy klinik gospitali

Annotatsiya

Hozirgi kunda onkologik kasalliklarni erta aniqlash va erta tashxislash hamda davolash tibbiyotni eng dolzarb muammolaridan biridir. Statistik ma'lumotlarga ko'ra aholi o'rtasida onkologik kasalliklarning yangi holatlari har yili oshib borayotganligi qayt etilmoqda. Onkologik kasalliklar muammosining dolzarbligi ijtimoiy, iqtisodiy va epidemiologik ko'rsatkichlari bilan belgilanadi. Onkologik kasalliklarning asosiy sabablaridan hisoblangan o'sma oldi kasalliklari, dunyoning ko'pgina davlatlarida yosharib borishi qayd etilmoqda. O'sma oldi kasalliklarining kelib chiqish sabablari, rivojlantiruvchi omillar, erta aniqlash va tashxislash dolzarb hisoblanadi. So'nggi yillarda yosh ayollar o'rtasida ko'p uchrayotgan bachadon bo'yni xavfsiz va xavfli o'smalar,asosan rivojlanayotgan davlatlarning tibbiy va ijtimoiy muammolaridan bir bo'lib qolmoqda. Bu ma'lumotlarga ko'ra ayollar o'rtasida uchraydigan onkologik kasalliklar orasida sut bezi va bachadon tanasi xavfli o'smalaridan keyin uchinchi o'rinda bachadon bo'yni xavfli o'smasi turadi. Dunyoda kasalliklar orasida o'lim ko'rsatkichi bo'yicha onkologik kasalliklar barcha yoshdagi aholi o'rtasida yuqori o'rinni egallaydi. Onkologik kasalliklarni rivojlantiruvchi xavf omillari xilma-xildir. Olimlarni fikriga ko'ra ko'pincha genetik, reproduktiv, adaptiv va energiya gomeostazasidagi buzilishlar muhim xavf omili ekanligini ta'kidlamoqda.

Kalit so'zlar: bachadon bo'yni polipi, bachadon miomasi, bachadon bo'yni eroziyasi, bachadon ichi vositasi, bepushtlik, endometrioz, fibroadenoma, fibroz kistozli mastopatiya, tug'ruq, hayz sikli patologiyasi

CURRENT PROBLEMS IN THE DIAGNOSIS OF ONCOLOGICAL DISEASES

Kholmamatova L.Kh.
Central military clinical hospital of the ministry of defense

Abstract

Currently, early detection, early diagnosis and treatment of oncological diseases are one of the most urgent problems of medicine. According to statistical data, the number of new cases of oncological diseases among the population is increasing every year. The urgency of the problem of oncological diseases is determined by social, economic and epidemiological indicators. Precancerous diseases, which are considered one of the main causes of oncological diseases, are increasing in many countries of the world. The causes of the occurrence, development factors, early detection and diagnosis of precancerous diseases are relevant. In recent years, benign and malignant tumors of the cervix, which are increasingly common among young women, remain one of the medical and social problems of mainly developing countries. According to these data, among oncological diseases occurring among women, malignant tumors of the cervix are in third place after malignant tumors of the mammary gland and uterine body. Among diseases in the world, oncological diseases occupy a high place in terms of mortality among the population of all ages. The risk factors for developing oncological diseases are diverse. According to scientists, genetic, reproductive, adaptive, and energy homeostasis disorders are often considered to be important risk factors.

Keywords: cervical polyp, uterine fibroids, cervical erosion, intrauterine device, infertility, endometriosis, fibroadenoma, fibrocystic mastopathy, childbirth, menstrual cycle pathology

СОВРЕМЕННЫЕ ПРОБЛЕМЫ ДИАГНОСТИКИ ОНКОЛОГИЧЕСКИХ ЗАБОЛЕВАНИЙ

Холмаматова Л.Х.
Центральный военный клинический госпиталь министерства обороны

Аннотация

В настоящее время раннее выявление, ранняя диагностика и лечение онкологических заболеваний

являются одной из самых актуальных проблем медицины. Согласно статистическим данным, число новых случаев онкологических заболеваний среди населения ежегодно увеличивается. Актуальность проблемы онкологических заболеваний определяется социальными, экономическими и эпидемиологическими показателями. Предраковые заболевания, которые считаются одной из основных причин онкологических заболеваний, увеличиваются во многих странах мира. Актуальны причины возникновения, факторы развития, раннее выявление и диагностика предраковых заболеваний. В последние годы доброкачественные и злокачественные опухоли шейки матки, которые все чаще встречаются среди молодых женщин, остаются одной из медико-социальных проблем преимущественно развивающихся стран. Согласно этим данным, среди онкологических заболеваний, встречающихся среди женщин, злокачественные опухоли шейки матки находятся на третьем месте после злокачественных опухолей молочной железы и тела матки. Среди заболеваний в мире онкологические заболевания занимают высокое место по уровню смертности среди населения всех возрастов. Факторы риска развития онкологических заболеваний разнообразны. По мнению ученых, генетические, репродуктивные, адаптивные и нарушения энергетического гомеостаза часто считаются важными факторами риска.

Ключевые слова: полип шейки матки, миома матки, эрозия шейки матки, внутриматочная спираль, бесплодие, эндометриоз, фиброаденома, фиброзно-кистозная мастопатия, роды, патология менструального цикла

Mavzuning dolzarbligi: Zamonaviy tibbiyotda onkologik kasalliklari diagnostikada va davolashdagi ko'plab yutuqlarga qaramasdan, aholi o'rtasida uchraydigan onkologik kasalliklar dolzarb muammolaridan biri bo'lib qolmoqda. Statistik ma'lumotlarga ko'ra ayollar o'rtasida uchraydigan onkologik kasalliklar orasida sut bezi va bachadon tanasi xavfli o'smalaridan keyin uchinchi o'rinda bachadon bo'yni xavfli o'smasi turadi. [3] So'nggi yillarda yosh ayollar o'rtasida bachadon bo'yni xavfsiz va xavfli o'smalar uchrashi rivojlanayotgan davlatlarning tibbiy va ijtimoiy muammolaridan bir bo'lib qolmoqda. [7] Biroq onkologik kasalliklari bilan rivojlangan davlatlarda kasallanish va o'lim ko'rsatkichlari o'tkazilayotgan profilaktik chora-tadbirlari natijasida pasayganligi ko'zatilgan bo'lsa, lekin rivojlanmagan va rivojlanayotgan davlatlarda bu ko'rsatkichlar yuqoriligicha qolmoqda.

O'zbekiston Respublikasi Prezidentining 2024 yil 21-fevraldagi PF-37-son "O'zbekiston-2030" strategiyasini "Yoshlar va biznesni qo'llab-quvvatlash yili"da amalga oshirishga oid davlat dasturlari to'g'risida Farmoni bilan tasdiqlangan "2024-yilda mo'ljallangan yo'nalishlar kesimida amaliy tadbirlar rejasi" 18-maqsadi (Yuqumli bo'lmagan kasalliklar profilaktikasi samaradorligini oshirishda)gi Prezident qarorlari ishlab chiqildi. O'zbekiston Respublikasi Prezidentining qarorlari, tibbiyotning asosiy muammosidan biri onkologik kasalliklarni o'z vaqtida aniqlash, erta tashxislash va onkologik kasalliklarni oldini olish chora –tadbirlarni, chekka va olis xududlarda tibbiy xizmatni malakali xizmat ko'rsatish sifatini yaxshilashga qaratilgan[1,2].

Kasallikni kelib chiqishi bir qancha faktorlarga bog'liq: yosh, reproduktiv xolat, jinsiy funksiya, ijtimoiy vaziyatlar va boshqalar. Ayollar orasida bachadon bo'yni raki rivojlanishida asosiy omil bu odam papilloma virusi hisoblanadi. Hozirgi vaqtda odam papilloma virusi ko'payib bormoqda. [6,8] Oxirgi yillarda o'sma oldi kasalliklari bilan kasallanish ko'rsatkichlari yosharib bormoqda. Shuning uchun Yevropa davlatlari skrining tekshiruvlariga alohida e'tibor qaratmoqda. I.S.Sidorova va S.A.Levakovaning (2012 yil) ma'lumotlariga ko'ra, bachadon bo'yni rak kasalligi har yettita ayolning bittasida yallig'lanish, shikastlanish va bachadon bo'yni deformatsiyasi zamirida yuzaga kelgan. Onkologik kasalliklarni rivojlantiruvchi xavf omillari xilma-xildir. Ko'pincha olimlar genetik, reproduktiv, adaptiv va energiya gomeostazasidagi buzilishlar muhim xavf omili ekanligini ta'kidlaydilar[4,5].

Ishning maqsadi: Aholi o'rtasida xavfli va xavfsiz o'smalar uchun eng muhim xavf omillari va ularni muammolarini o'rganish.

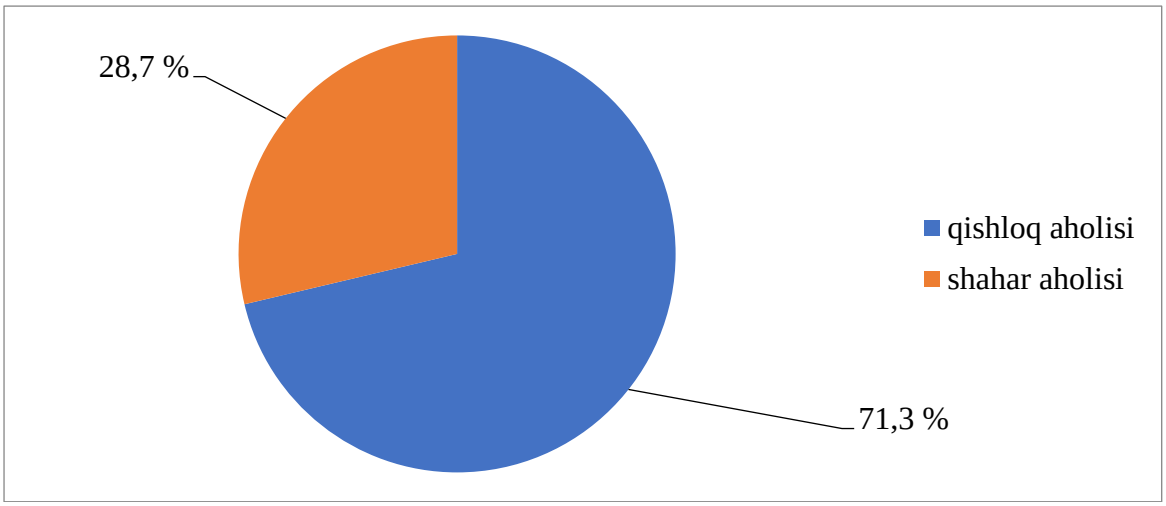
Materiallar va usullari: O'rganish materiallari bo'lib, 2024 yilda Markaziy harbiy klinik gospitali tomonidan avgust oydan noyabr oyigacha Toshkent viloyati aholisi orasida o'tkazilgan tibbiy ko'riklar va Markaziy harbiy klinik gospitali ambulator markaziga murojaat qilganlar orasida, o'sma oldi kasalliklari aniqlangan 101 nafar bemorlar kirib, ularda UTT tekshiruvi, mammografiya va qin surtmasini tekshirish usullari qo'llanilgan bemorlarni ambulator kartasidagi ma'lumotlarga asosan olib borildi. Tibbiy ko'rikdan o'tkazilgan aholi o'rtasida to'liq anamnez ma'lumotlari hamda instrumental tekshiruvlar, bizga onkologik kasalliklar rivojlanish xavfi bor bemorlarni aniqlab berdi.

Anamnez yig'ishda qo'yidagi belgilar e'tiborga olingan:

- bolalik davrida o'tkazilgan kasalliklar;
- zararli odatlari;
- yashash sharoiti;
- ayollarda hayz siklining patologik o'zgarishi;
- homiladorlik va tug'ruqlarni kechishi;
- abortlar soni;
- boshdan o'tkazgan somatik kasalliklari.

Anamnez bizga onkologik kasalliklar rivojlanish xavfi bor bemorlarni aniqlab berdi.

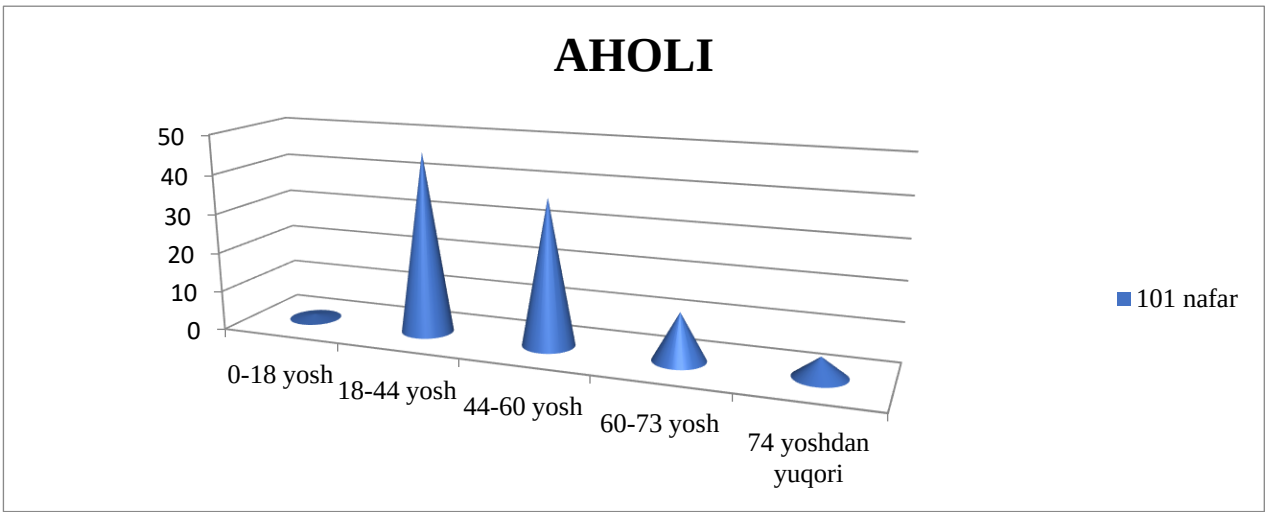
Tekshiruv natijalariga asosan, kuzatuv guruhidagi aholi jami 101 nafarni tashkil etadi. Kuzatuv guruhidagi aholining yoshi va yashash joyi bo'yicha tasnifi 1-rasmda keltirilgan.



1-rasm. Kuzatuv guruhidagilarni yashash sharoiti bo'yicha tahlili.

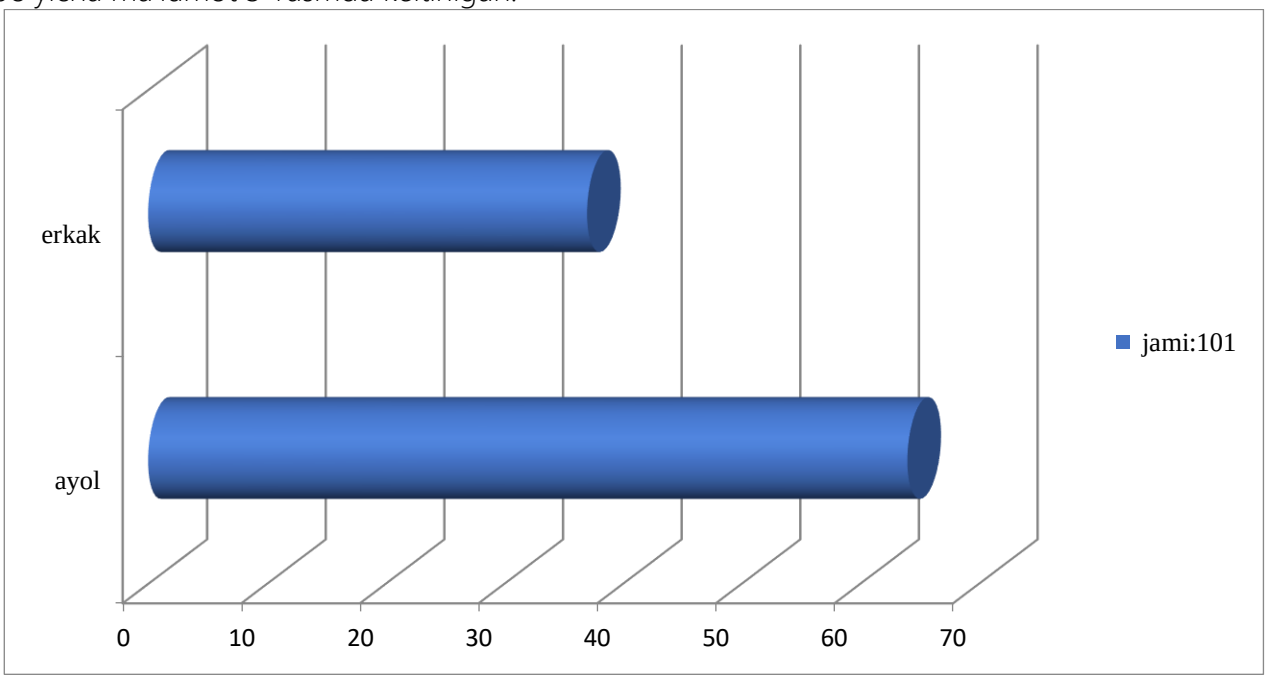
Kuzatuv guruhidagi bemorlarning 29 nafari shahar aholisi (28,7 %) ni va 72 nafari qishloq aholisi (71,3 %) ni tashkil etdi. Tahlil natijasiga ko'ra asosiy yashash sharoiti qishloq sharoitiga to'g'ri kelmoqda.

Kuzatuv o'tkazilgan aholining yoshi bo'yicha ham tahliliy tadqiqotlar olib borildi. Kuzatuv o'tkazilgan aholi o'rtasida yoshi bo'yicha tahlili 2-rasmda keltieilgan.



2-rasm. Kuzatuv o'tkazilgan aholi o'rtasida yoshi bo'yicha tahlili.

Tahlilimizdan ko'rinib turibdiki, kuzatuv guruhidagi aholi o'rtasida yosh jihatdan eng yuqori ko'rsatkichni 18 yoshdan 44 yoshgacha 46 nafar (45,6%)ni tashkil qildi, qolgan o'rinlarni 44 yoshdan 60 yoshgacha 37 nafar(36,6%)ni, 60 yoshdan 73 yoshgacha 12 nafar(11,9%)ni, 74 yoshdan oshganlar orasida 5 nafar(4,9%)ni tashkil qildi. Tekshiruv guruhidagi aholi o'rtasida jins bo'yicha ma'lumot 3-rasmda keltirilgan.



3-rasm. Kuzatuv guruhidagilarni jinsi bo'yicha tahlili

Jins bo'yicha tahlilimizdagi ma'lumotlardan ko'rinib turibdiki, kuzatuvdagilarni 64 nafari (63,4 %) ayollarda, 37 nafari (36,6 %) erkaklarni tashkil qildi. Bu o'z navbatida ayollar o'rtasida o'sma oldi kasalliklar keng tarqalganligini tahmin qilishimiz mumkin. Tekshiruv guruhdagi aholi o'rtasida somatik tavsifi 1-jadvalda keltirilgan.

1-jadval

Kuzatuv guruhdagi aholi o'rtasida somatik tavsifi

№	Asosiy kasalliklar	Bemorlar soni	Ulushi, %
1	Kamqonlik	19	18,8

2	Yurak qon-tomir kasalliklari	27	26,7
3	Endokrin kasalliklar	31	30,7
4	Nafas olish kasalliklari	13	12,9
5	Buyrak va siydik yo'llari kasalliklari	11	10,9

Kuzatuv guruhidagi aholi orasida ko'p uchraydigan patologiya, bu qalqonsimon bez kasalligi patologiyasiga 31 nafar (30,7%)ni tashkil qiladi. Keyingi o'rinlarni yurak qon tomir kasalliklari 27 nafar (26,7%)ni, kamqonlik 19 nafa (18,8%)ni, nafas olish kasalliklari 13 nafar (12,9%)ni, buyrak va siydik yo'llari kasalliklari 11 nafar (10,9%)ni tashkil qildi.

O'rganish natijasida aniqlandiki aholi o'rtasida yashash sharoiti bo'yicha asosan qishloq sharoitida yashovchilarga to'g'ri kelmoqda, bu o'z navbatida onkologik yordamni yanada takomillashtirishdan iborat. Bizni tahlilimizda aholi o'rtasida o'sma oldi kasalliklarini rivojlanishiga ko'pincha anamnezida ayollar orasida asosan bachadon ichidagi tadbirlar (abort, bachadon ichiga kontraseptiv vositalar kiritish, va h.k), jinsiy hayotning pala-partishligi, sovuq qotish, stresslar va asosiysi immun tizimi faoliyatining pasayishi natijasida ko'proq uchrashi aniqlandi.

So'nggi tadqiqot manbalariga ko'ra, to'g'ridan-to'g'ri yoki bilvosita, quyidagi omillar asosiy o'rin egallaydi:

1) Atrof-muhit va turmush tarzi;
2) Reproduktiv funksiyaning xususiyatlari.

Xulosa. Shuni ta'kidlash kerak, onkologik kasalliklarini erta aniqlash va tashxislashning eng samarali usullaridan bir to'liq yig'ilgan anamnez bilan birgalikda aholi o'rtasida tibbiy ko'riklarni muntazam va sifatli o'tkazishdir. Shu sababli tibbiy ko'riklarni tashkillashtirishda barcha mutaxassislardan tashkil topgan bo'lishi va to'liq tibbiy ko'riklardan o'tishiga e'tibor berish lozim. Tibbiy ko'riklarni muntazam tashkil qilish, yallig'lanish kasalliklarni o'z vaqtida davolash, o'sma oldi kasalliklarni erta aniqlash va profilaktika o'tkazish onkologik kasalliklarni oldini oladi.

Foydalanilgan adabiyotlar:

1. O'zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi "2022-2026 yillarga mo'ljallangan Yangi O'zbekistonning taraqqiyot strategiyasi to'g'risida"gi PF–60-son Farmoni.
2. O'zbekiston Respublikasi Prezidentining 2024 yil 21-fevraldagi "O'zbekiston-2030" strategiyasini "Yoshlar va biznesni qo'llab-quvvatlash yili"gi PF-37-son Farmoni.
3. Аксель Е.М. Статистика злокачественных новообразований женской половой сферы. Онкогинекология 2012;1:8-23.
4. Горобцова В.В., Ковалев А.А. Рак шейки матки: актуальность проблемы, принципы лечения.//Главный врач Юга России. 2016; 1(48):63-66.
5. Казакова А.Д., Баховадинова Ш.Б. К Вопросу о роли фибрознкистозной болезни в возникновении рака молочной железы. Известия Российской Военно-Медицинской Академии 2018: 37(1):264-266.
6. Леваков С.А., Кедрова А.Г., Кожурина Е.В., Челнокова Н.Н. Современные диагностические методы для раннего выявления заболеваний шейки матки// Российский вестник акушера-гинеколога.2012.№2Том 12.С.85-89

7. Левшин В.Ф., Завельская А.Я. Факторы риска и профилактика рака шейки матки.// Вопр, онкологии. 2017; 63(3): 506-16.
8. Сидорова И.С., Жолобова М.Н., Ведерникова Н.В., Ша Ша, Агеев М.Б. Состояние шейки матки при сочетанной патологии матки (миома матки, аденомиоз, гиперплазия эндометрия)// Российский вестник акушера-гинеколога.2012.№3Том 12.С.55-57.

UO'K: 616.346-089.87-007.1-084

ICHAKLARARO ANASTOMOZ YETISHMOVCHILIGI PROFILAKTIKASI VA UNDA ZAMONAVIY DIAGNOSTIK MEZONLARNI QO'LLASH

Xoshimov D.E., Tulyaganov D.B., Pulatov D.T., Abdulahatov M.H.
Respublika shoshilinch tibbiy yordam ilmiy markazi

Annotatsiya

Ichaklararo anastomoz choklarining yetishmovchiligi bir necha o'n yillardan buyon shoshilinch abdominal jarrohlikda dolzarb muammo va xavfli asoratlardan biri hisoblanadi. Anastomoz choklarining yetishmovchiligi operatsiyadan keyingi davrda bemorlarning tiklanish muddatini uzayishiga, kasallikni murakkab va og'ir kechishiga hamda bir qator iqtisodiy sarf-harajatlarni oshishiga olib keladi. Mazkur asorat fonida rivojlangan peritonit va/yoki abdominal sepsis sababli o'lim ko'rsatkichi hatto 68-70% ga yetadi va bu ko'rsatkich keyingi yillarda ham yuqori bo'lib qolmoqda. Ko'plab adabiyotlar tahliliga ko'ra, barcha relaparotomiya sabablarining o'rtacha 24,5 %ini aynan ichaklararo anastomoz choklari yetishmovchiligi tashkil etadi.

Ushbu asoratlarning sabablari tahlil qilingan ilmiy manbalar juda ko'p bo'lsada, xavf omillari va ularni oldini olish to'g'risida yagona fikr mavjud emas. Ichaklararo anastomoz yetishmovchiligi rivojlanish xavfi bir necha omillarga bog'liq, jumladan: bemorning yoshi, jinsi, umumiy ahvoli, surunkali kasalliklar va asoratlarning mavjudligi, kasallikning kechishi va o'tkazilgan operatsiya turi, shuningdek, ichaklararo anastomoz shakllantirish usuli va boshqalar. Bundan kelib chiqadiki, ichak anastomozlari shakllantirishda takomillashtirilgan usullarni qo'llash va choklar yetishmovchiligida sezgir bo'lgan erta diagnostik mezonlarni ishlab chiqish borasida ilmiy-tadqiqot ishlarini davom ettirish yuqorida keltirilgan asoratlarni ma'lum darajada kamayishiga hizmat qiladi.

Kalit so'zlar: choklar yetishmovchiligi, qondagi laktat, ichak rezeksiyasi, ichak tutilishi, anastomoz sohasi, "mural trunks", ichaklararo anastomoz shakllantirish

PREVENTION OF INTERINTESTINAL ANASTOMOSIS FAILURE AND APPLICATION OF MODERN DIAGNOSTIC CRITERIA

Khoshimov D.E., Tulyaganov D.B., Pulatov D.T., Abdulakhatov M.H.
Republican research Center of emergency medicine

Abstract

Failure of the sutures of the interintestinal anastomosis has been one of the most pressing problems and dangerous complications in emergency abdominal surgery for several decades. Failure of the anastomotic sutures leads to an extension of the recovery period for patients in the postoperative period, complicated and severe course of the disease, as well as an increase in a number of economic costs. Mortality from peritonitis and/or abdominal sepsis that developed against the background of this complication reaches even 68-70%, and this figure remains high in subsequent years. According to the analysis of numerous literary sources, on average 24.5% of all causes of relaparotomy are due to failure of the sutures of the interintestinal anastomosis. Despite the presence of many scientific sources analyzing the causes of these complications, there is no consensus on the risk factors and measures for their prevention. The risk of developing interintestinal anastomotic leakage depends on several factors, including: the patient's age, gender, general condition, presence of chronic diseases and complications, course of the disease and type of surgery performed, as well as the method of forming the interintestinal anastomosis, etc. Therefore, continued research on the use of improved methods for forming intestinal anastomoses and the development of early diagnostic criteria for suture leakage will contribute to a certain reduction in the above complications.

Key words: suture leakage, blood lactate, bowel resection, intestinal obstruction, anastomotic zones, "mural trunks", formation of interintestinal anastomosis

ПРОФИЛАКТИКА НЕСОСТОЯТЕЛЬНОСТИ МЕЖКИШЕЧНОГО АНАСТОМОЗА И ПРИМЕНЕНИЕ СОВРЕМЕННЫХ ДИАГНОСТИЧСКИХ КРИТЕРИЕВ

Хошимов Д.Э., Туляганов Д.Б., Пулатов Д.Т., Абдулахатов М.Х.
Республиканский научный центр экстренной медицинской помощи

Аннотация

Несостоятельность швов межкишечного анастомоза уже несколько десятилетий является одной из наиболее актуальных проблем и опасных осложнений в экстренной абдоминальной хирургии. Несостоятельность анастомозных швов приводит к удлинению сроков восстановления пациентов в послеоперационном периоде, осложненному и тяжелому течению заболевания, а также увеличению ряда экономических затрат. Летальность от перитонита и/или абдоминального сепсиса, развившегося на фоне данного осложнения, достигает даже 68-70%, и этот показатель остается высоким в последующие годы. Согласно анализу многочисленных литературных источников, в среднем 24,5% всех причин релапаротомии приходится именно на несостоятельность швов межкишечного анастомоза.

Несмотря на наличие множества научных источников, анализирующих причины этих осложнений, единого мнения о факторах риска и мерах их профилактики не существует. Риск развития несостоятельности межкишечного анастомоза зависит от нескольких факторов, включая: возраст пациента, пол, общее состояние, наличие хронических заболеваний и осложнений, течение заболевания и тип проведенной операции, а также способ формирования межкишечного анастомоза и другие. Следовательно, продолжение научно-исследовательских работ по применению усовершенствованных методов формирования кишечных анастомозов и разработке ранних диагностических критериев при несостоятельности швов будет способствовать определенному снижению вышеуказанных осложнений.

Ключевые слова: несостоятельность швов, лактат крови, резекция кишечника, кишечная непроходимость, зоны анастомоза, "mural trunks", формирование межкишечного анастомоза

Kirish. Ichaklararo anastomoz choklarining yetishmovchiligi (bundan so'ng matnda – IAChYe) ichak rezeksiyasidan keyin rivojlanadigan, operatsiyadan keyingi og'ir erta asoratlardan biri hisoblanadi. Bu asorat nafaqat shoshilinch va kechiktirib bo'lmaydigan, balki rejali jarrohlik amaliyotlaridan so'ng ham kuzatilishi mumkin. Mualliflar bergan ma'lumotlariga ko'ra, IAChYe chastotasi 2,3-19 % ni tashkil etadi [1, 2, 3, 4, 5, 6]. B. Phillips [1], F.E. Turrentine va boshqalar keltirgan [2] ma'lumotlariga ko'ra, IAChYe chastotasi shakllantirilgan entero-enteroanastomozlarda 1-3,8 %ni, entero-koloanastomozlarda 2-6,5 %ni, koloanastomozlarda 3-5,4 %, kolo-rektoanastomozlarda mos ravishda 7-13 %ni va entero-rektoastomozlaridan keyin 5-19 %ni tashkil etadi. Boshqa bir qator mualliflar keltirgan ma'lumotlarga asosan esa bu asoratning chastotasi umumiy 2,8-8,4 % bo'lib, shundan 75 %i rektoanastomozlar ulushiga to'g'ri keladi. Mazkur asoratda o'lim darajasi esa 1,7 %dan 16,4 %ga yetishi mumkin [7, 8].

IAChYe rivojlanish sabablari haqida ko'plab ma'lumotlar mavjud bo'lib, ularni shartli ravishda 2 guruhga ajratish mumkin: umumiy va mahalliy sabablar. Mahalliy sabablar qatorida anastomoz shakllantirilgan ichak yon devori sohalarining qon bilan ta'minlanishini (mural trunks) buzilishi, ichak bo'shlig'idagi yuqori bosim, anastomoz sohasining ichak va qorin bo'shlig'idagi turli virulent mikroflora bilan zararlanishi, to'qimalarni ajratish va tikishda ortiqcha shikastlanish, morfofunksional jihatidan turli xil to'qimalarni bir-biriga moslashtirish, shakllantirilgan chok chizig'ining taranglashuvi (mexanik ta'sirlanishi) yoki aksincha, uning haddan ziyod harakatchan (mobil) bo'lib qolishi, chok materiali va turini noto'g'ri tanlanishi, choklarning yetarli darajada zich bo'lmasligi va boshqalarni keltirib o'tish mumkin [20, 22]. Umumiy omillarga esa anastomoz sohasidagi regeneratsiya va mikrosirkulyatsiya jarayonlariga salbiy ta'sir etuvchi tizimli buzilishlar kiradi: kamqonlik, qonda oqsil miqdorining kamayishi, uremiya, mexanik sariqlik, qandli diabet,

surunkali nafas yetishmovchiligi, immunitet tizimi kasalliklari, uzoq vaqt davomida kortikosteroidlarni qo'llash, sitostatiklar bilan davolanish, nur terapiyasi va boshqalar [20].

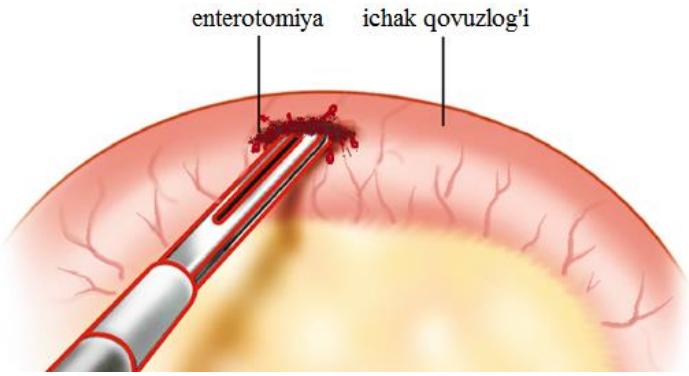
IAChYe rivojlanish xavfi tamaki chekuvchilarda, qandli diabet bilan og'rigan bemorlarda, qorin bo'shlig'ida asoratlangan patologiyalar sababli shoshilinch jarrohlik amaliyoti o'tkazilgan bemorlarda yuqori bo'ladi (M. Parthasarathy va boshqalar) [9]. Shuningdek, nosteroid yallig'lanishga qarshi dori vositalarining (NYaQV) salbiy ta'siri ham isbotlangan [10, 11, 12, 13, 14, 15]. J. Subendran va boshqalar [5] o'z izlanishlarida NYaQVni qo'llash natijasida ichaklararo anastomoz yetishmovchiligi 7,6 % dan 13,2 % gacha oshganini, G. Ataro anesteziya paytida "Neostiqmin" preparatini qo'llashdan so'ng mazkur asorat chastotasi 4 % dan 36 % gacha oshiganini qayd etishgan hamda buni mazkur preparatning qon tomirlarini toraytiruvchi xususiyati bilan bog'lashgan [3]. Ba'zan hatto texnik jihatdan to'g'ri shakllantirilgan ichaklararo anastomozlarda ham yetishmovchilik kuzatilishini B.D. Shogan va boshqalar ichak mikroflorasining ta'siri, jumladan, Enterococcus faecalis'ning kollagenni parchalash va matritsa metalloproteinazalarini faollashtirish qobiliyati bilan tushuntiradilar [16]. B.A. Shakhsheer va boshqalar esa morfin qo'llanilishi Enterococcus faecalis'ning o'sishiga yordam berishini va IAChYe chastotasi oshishini ta'kidlaydilar [17]. Ayrim eksperimental tadqiqotlarda polimer tarkibli polifosfat (ABA-PEG20k-Pi20) preparatining Enterococcus faecalis ajratib chiqaradigan kollagenazalarga nisbatan ingibirlovchi ta'siri va shu orqali IAChYe.ni oldini olish imkoniyati qayd etilgan [18,19].

IAChYe oldini olish maqsadida operatsiyadan oldingi va keyingi davrda turli xil profilaktika usullari qo'llaniladi [4]. Ushbu usullarini, jumladan, quyida taklif etiladigan jarrohlik usulini qo'llashdan asosiy maqsad anastomoz sohasining qon bilan ta'minlanishini yaxshilash va erta regeneratsiyaga erishishdir. orqali uning tiklanishini tezlashtirishdir. Bunda anastomoz hosil qilishda ichak devorini qon bilan ta'minlovchi qon tomirlarni (mural trunks) saqlab qolish va optimal anastomoz chizig'ini tanlash jarrohlarning asosiy vazifalari hisoblanadi [22].

Maqsad. Ichaklararo anastomoz yetishmovchiligi sabablari tahliliga ko'ra erta diagnostik mezonlar va takomillashtirilgan jarrohlik usulini qo'llash orqali davolash natijalarini yaxshilash.

Material va metodlar. 2020-yildan 2025-yilning dastlabki oyigacha bo'lgan davrda Respublika shoshilinch tibbiy yordam ilmiy markazida (RShTYoM) davolangan va ichaklararo anastomoz shakllantirish bilan yakunlangan turli etiologiyali o'tkir ichak tutilishi (82 ta holatda, 55 %), ichak perforatsiyasi (38 ta holatda, 25,5 %) va o'tkir mezenterial tromboz (29 ta holatda, 19,5 %) bilan og'rigan jami 149 nafar bemor ma'lumotlari klinik material sifatida olingan.

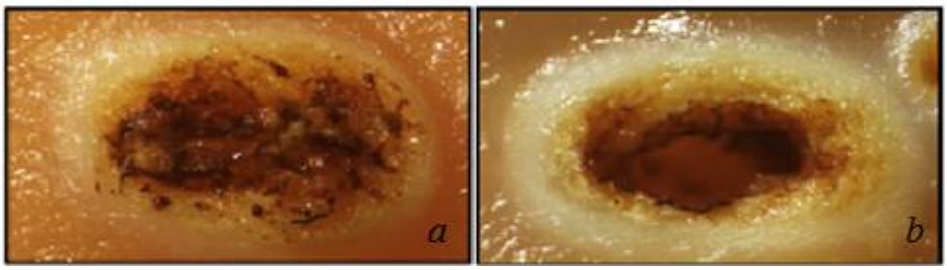
Tadqiqot metodining mohiyati. Ichak yon devorini kesishda (ya'ni enterotomiya) anastomoz yaratish uchun ichak devorining arteriya va venalari (mural trunks) ham kesiladi va ko'pincha qon ketishi kuzatiladi. Bunda qon ketishini to'xtatish maqsadida odatda koagulyatsiya qilinadi (1-rasm).



1-rasm. Elektrokoagulyator yordamida enterotomiya o'tkazish va "mural trunks"ning kesilishi.

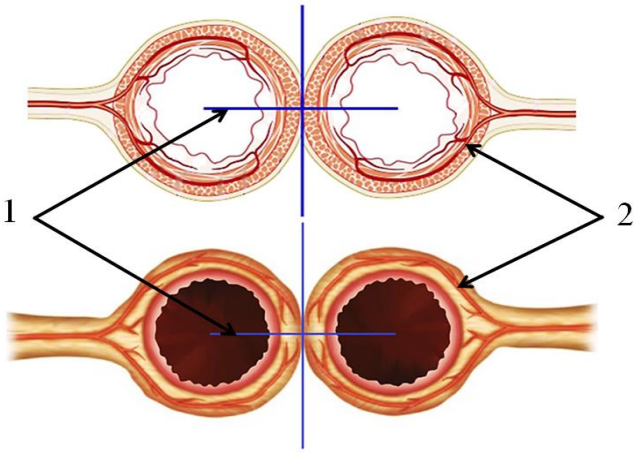
Biroq, elektrokoagulyatsiya natijasida (40-100°C yuqori haroratda) ichak yon devori qon tomirlarining zararlanishi va ichak anastomozi uchun tayyorlangan ichak devorida to'qimalarning erta yemirilishi ro'y beradi (2-rasm). Natijada, shakllantirilgan anastomoz sohasida qon aylanishining buzilishi xavfi paydo bo'ladi. Bu holat ichak anastomozi sohasidagi regeneratsiyaning pasayishi tufayli choklar yetishmovchiligi va peritonit rivojlanishiga sabab bo'lishi mumkin.

Ilmiy adabiyotlarda anastomoz sohasidagi qon aylanishining buzilishi choklar yetishmovchiligining asosiy sabablaridan biri sifatida ta'riflanadi.



2-rasm. Ichak devorida koagulyatsiya effektidan keyingi to'qima devitalizatsiyasi halqasi.

Shu bois, anastomoz hosil qilishda ichak devorini qon bilan ta'minlovchi qon tomirlarni (mural trunks) saqlab qolish va optimal anastomoz chizig'ini tanlash jarrohlarning asosiy vazifalari hisoblanadi. Takomillashtirilgan usulning (keyingi o'rinlarda – TU) vazifasi ham aynan ichak devori tomirlarini saqlagan holda ichaklararo anastomozlarni shakllantirish va bunda birinchi va ikkinchi qator choklarni "shaxmat" tartibida o'tkazish orqali yanada zich anastomozni ta'minlashdan iborat (3-rasm).



3-rasm. Ichak devorining avaskulyar (1) va qon tomirlarga boy (2) sohasi sxemasi.

Yuqorida qayd etilganidek, so'nggi 5 yilda RShTYoMning shoshilinch jarrohlik bo'limida davolangan va ichaklararo anastomoz shakllantirish bilan yakunlangan turli etiologiyali o'tkir ichak tutilishi (82 ta holatda, 55 %), ichak perforatsiyasi (38 ta holatda, 25,5 %) va o'tkir mezenterial tromboz (29 ta holatda, 19,5 %) bilan og'rigan jami 149 nafar bemorlarga biz taklif etgan TU qo'llanilib, uning samaradorligi tahlil qilindi va baholandi. Shuningdek, mazkur usulning afzalliklari va kamchiliklari, shuningdek, operatsiya vaqtidagi texnik qo'llash imkoniyatlari o'rganildi. Jarrohlik amaliyoti o'tkazilgan bemorlar (n=149) 2 guruhga bo'lindi: nazorat

guruhidagi 93 (62,4 %) bemorga ichak anastomozlari an'anaviy usulda shakllantirilgan, asosiy guruhdagi 56 (37,6 %) bemorga esa ichak devori tomirlarini saqlab qolgan holda taklif etilgan TU yordamida ichak anastomozlari shakllantirildi.

Qondagi laktat darajasini klinik ahamiyatini baholash. Ichak devorida ishemiya yuzaga kelsa u 2 soatdan keyin kritik darajaga, 3 soatdan keyin qaytmas holatga keladi. Dastlabki bosqichda ichak devorida nekrobiotik o'zgarishlar rivojlanadi, so'ng patologik jarayonda ishtirok etgan sohaning umumiy nekrozi, keyin esa uning teshilishi va natijada peritonit rivojlanishi kuzatiladi. 2024-yil davomida turli etiologiyali o'tkir ichak tutilishi va mezenterial qon tomirlar trombozi tashxisi bilan RShTYoIM shoshilinch jarrohlik bo'limida davolangan jami 67 nafar bemorlarda standartlarda keltirilgan tekshiruvlardan tashqari qondagi laktat miqdorini istiqbolli klinik tahlili o'tkazildi. Ularning 38 (56,7%) nafarini ayollar, 29 (43,3%) nafarini esa erkaklar tashkil etdi.

Natijalar va muhokama. Shoshilinch xirurgiyada yuqorida keltirilgan guruh bemorlarida ichak hayotiyligini baholashda qondagi laktat (yoki laktat degidrogenaza fermenti, LDH/LD shaklida) darajasini aniqlash va baholash ham yuqori samarali (qariyb 85%) ekani qayd etildi. Operatsiyadan bemorlarda qondagi laktat darajasi normal chegaradan yuqori bo'lishi (o'rtacha 2,7 (1,9-3,6) mmol/l) ichak hayotiyligi buzilishining muhim mezonlaridan biri ekani o'tkazilgan operatsiyalar davomida ham o'z tasdig'ini topmoqda. Konservativ davo o'tkazilgan va ichak tutilishi belgilari asoratsiz bartaraf etilgan bemorlarda qondagi laktat darajasi normal chegaraga yaqin bo'lgan (o'rtacha 1,6 (1,3-2,1) mmol/l).

Jami bemorlardan (n=149) nazorat guruhidagilarda – ichak anastomozlari an'anaviy usulda shakllantirilgan 93 (62,4 %) nafar bemorning 14 (15,1%) tasida anastomozning ichaklararo choklari yetishmovchiligi rivojlangani kuzatildi. Bu holat takroriy jarrohlik aralashuvlarini talab qildi, jumladan 9 holatda qayta ichak stomalari shakllantirildi. Jami 11 nafar bemor vafot etib, o'lim ko'rsatkichi deyarli 11,8% ni tashkil etdi.

Asosiy guruhdagi 56 (37,6 %) bemorlarga esa taklif etilgan takomillashtirilgan usulda ichak anastomozlari shakllantirilib, birmuncha ijobiy natijalarga erishildi. Ulardan 4 ta (7,1 %) holatda "uchini-yonga" usulida, qolgan 52 ta (92,9) holatda "yonma-yon" usulda anastomoz shakllantirildi. Erta ichak tutilishi (3 ta holatda) va ichak choklari yetishmovchiligi (3 ta bemorda, 5,4 %) sababli jami 6 (10,7 %) nafar bemorda takroriy operatsiyalar o'tkazildi. Jami 4 bemor vafot etib, o'lim ko'rsatkichi 7,1 % gacha kamaydi. Ya'ni, TUni qo'llash orqali takroriy operatsiyalar soni va o'lim ko'rsatkichi sezilarli darajada pasaydi.

Xulosa. Taqdim etilgan klinik holatlar shuni ko'rsatadiki, taklif qilingan usulni qo'llash natijasida ingichka va yo'g'on ichak anastomozi choklarining mustahkamligi oshadi hamda ichak anastomozining qon bilan ta'minlanishi yaxshilanishi tufayli bemorning asoratsiz davolanib chiqib ketish darajasi ortadi. Bundan tashqari, ichakda destruktiv o'zgarishlar kuzatilishi (yallig'lanish, ishemiya, nekroz, peritonit) fonida bajarilgan operatsiyalarda anastomoz sohasidagi choklar yetishmovchiligi va perforatsiya kabi asoratlar kamayadi va ichak to'qimalarining erta tiklanishiga erishiladi.

RShTYoIM shoshilinch jarrohlik amaliyotida takomillashtirilgan usuldan foydalanish natijalari tahlil qilinganda, ichak rezeksiyasidan so'ng anastomozni shakllantirishda ushbu usulning yuqori samaradorligini ta'kidlash lozim. Taklif etilayotgan foydali modeldan foydalanish har bir bemorga tushadigan xarajatlarni (tibbiyot muassasasi uchun iqtisodiy samara) ham, kasalxonada davolanish muddatini ham qisqartirish imkonini beradi. Shuningdek, rivojlangan erta asoratlar tufayli takroriy operatsiyalar soni va eng muhimi, bemorlarning o'lim va nogironlik

ko'rsatkichlari sezilarli darajada kamayadi.

Foydalanilgan adabiyotlar:

1. B. Phillips. Reducing gastrointestinal anastomotic leak rates: review of challenges and solutions. Open Access Journal of Surgery (OAJS). 2016;9:5-14.
2. F.E. Turrentine, C.E. Denlinger, V.B. Simpson, R.A. Garwood, S. Guerlain, A. Agrawal et all. Morbidity, mortality, cost, and survival estimates of gastrointestinal anastomotic leaks. Journal of the American College of Surgeons. 2015;220(2):195-206.
3. G. Ataro. Epidural block and neostigmine cause anastomosis leak. Open Access Journal of Surgery (OAJS). 2016;9:37-38.
4. M.A. Chaouch, T. Kellil, C. Jeddi, A. Saidani, F. Chebbi, K. Zouari. How to Prevent Anastomotic Leak in Colorectal Surgery? A Systematic Review. Annals of Coloproctology. 2020;36(4):213-22.
5. J. Subendran, N. Siddiqui, J.C. Victor, R.S. McLeod, A. Govindarajan. NSAID use and anastomotic leaks following elective colorectal surgery: a matched casecontrol study. Journal of Gastrointestinal Surgery. 2014;18(8):1391-97.
6. C. Placer, J.M. Enríquez-Navascués, G. Elorza, A. Timoteo, J.A. Mugica, N. Borda, Y. Saralegui, J.L. Elysegui. Preventing complications in colorectal anastomosis: results of a randomized controlled trial using bioabsorbable staple line reinforcement for circular stapler. Diseases of the Colon & Rectum. 2014;57(10):1195-201.
7. J.S. Park, J.W. Huh, Y.A. Park, Y.B. Cho, S.H. Yun, H.C. Kim, W.Y. Lee. Risk factors of anastomotic leakage and long-term survival after colorectal surgery. Medicine (Baltimore). 2016;95(8):e2890.
8. I.S. Bakker, I. Grossmann, D. Henneman, K. Havenga, T. Wiggers. Risk factors for anastomotic leakage and leak-related mortality after colonic cancer surgery in a nationwide audit. British Journal of Surgery | Oxford Academic. 2014;101(4):424-32.
9. M. Parthasarathy, M. Greensmith, D. Bowers, T. GrootWassink. Risk factors for anastomotic leakage after colorectal resection: a retrospective analysis of 17,518 patients. Colorectal Disease. 2017;19(3):288-98.
10. N.P. Lynch, E. Boyle, E.G. Kavanagh. Selective and nonselective nonsteroidal anti-inflammatory drugs and anastomotic leakage after colorectal surgery. JAMA Surgery. 2015;150(7):685.
11. T. Sammour, A.G. Hill. Should colorectal surgeons continue to use nonsteroidal anti-inflammatory drugs? ANZ Journal of Surgery. 2017;87(11):861-62.
12. T.G. Milne, R. Jaung, G. O'Grady, I.P. Bissett. Nonsteroidal anti-inflammatory drugs reduce the time to recovery of gut function after elective colorectal surgery: a systematic review and meta-analysis. Colorectal Disease. 2018;20(8):O190-O198.
13. D. Kverneng Hultberg, E. Angenete, M.L. Lydrup, J. Rutegerd, P. Matthiessen, M. Rutegerd. Nonsteroidal anti-inflammatory drugs and the risk of anastomotic leakage after anterior resection for rectal cancer. European Journal of Surgical Oncology. 2017;43(10):1908-14.

14. M. Rutegerd, S. Westermark, D. Kverneng Hultberg, M. Haapamaki, P. Matthiessen, J. Rutegerd. Non-steroidal anti-inflammatory drug use and risk of anastomotic leakage after anterior resection: a protocol-based study. Digestive Surgery. 2016;33(2):129-35.
15. K. Slim, J. Joris, H. Groupe Francophone de Réhabilitation Améliorée aprus Chirurgie (GRACE). Colonic anastomoses and non-steroidal anti-inflammatory drugs. Journal of Visceral Surgery. 2016;153(4):269-75.
16. B.D. Shogan, N. Belogortseva, P.M. Luong, A. Zaborin, S. Lax, C. Bethel, M. Ward et all. Collagen degradation and MMP9 activation by Enterococcus faecalis contribute to intestinal anastomotic leak. Science Translational Medicine. 2015;7(286):286ra68.
17. B.A. Shakhsheer, L.A. Versten, J.N. Luo, J.R. Defazio, R. Klabbers, S. Christley et all. Morphine promotes colonization of anastomotic tissues with collagenase - producing enterococcus faecalis and causes leak. Journal of Gastrointestinal Surgery. 2016;20(10):1744-51.
18. M. Wiegerinck, S.K. Hyoju, J. Mao, A. Zaborin, C. Adriaansens, E. Salzman et all. Novel de novo synthesized phosphate carrier compound ABA-PEG20k-Pi20 suppresses collagenase production in Enterococcus faecalis and prevents colonic anastomotic leak in an experimental model. British Journal of Surgery. 2018;105(10):1368-76.
19. S.K. Hyoju, R.E. Klabbers, M. Aaron, M.A. Krezalek, A. Zaborin, M. Wiegerinck et all. Oral polyphosphate suppresses bacterial collagenase production and prevents anastomotic leak due to serratia marcescens and pseudomonas aeruginosa. Annals of Surgery. 2018;267(6):1112-18.
20. E.K. Aghayev, Z.E. Ismayilova, T.E. Mamedov. Prevention of suture insufficiency in intestinal anastomoses. Novosti Khirurgii. 2022;30(1):86-94 (In Russian).
21. M.H. Abdulakhatov, D.E. Khoshimov, D.T Pulatov. Analysis of the possibilities of video laparoscopy in the surgical treatment of acute intestinal obstruction. American Journal of Medicine and Medical Sciences. 2024;14(10):2484-2489. http://doi:10.5923/j.ajmms.20241410.07
22. D.B. Tulyaganov, D.E. Khoshimov, D.T. Pulatov. Giant polyp and invagination of the small intestine – as a cause of acute small bowel obstruction. Bulletin of Emergency Medicine, 2023;16(2):47-50. http://doi:10.54185/TBEM/vol16_iss2/a7

UO'K: 616.089

AKUSHERLIK VA GINEKOLOGIYADA ZAMONAVIY DIAGNOSTIKA DAVOLASH VA OLDINI OLISH

Yuldasheva B.M., Bazarova G.R.
Alfraganus Universiteti

Annotatsiya

Ushbu maqolada akusherlik va ginekologiyada zamonaviy diagnostika usullari, davolash yondashuvlari va kasalliklarning oldini olish choralari yoritilgan. Diagnostikada ultratovush tekshiruvi (UTT), laborator tahlillar, genetik skrining va zamonaviy tasvirlash usullari muhim o'rin tutadi [1]Matn. Davolashda medikamentoz terapiya, jarrohlik amaliyotlari, reproduktiv texnologiyalar va reabilitatsiya usullari qo'llaniladi [2]. Kasalliklarning oldini olishda skrining dasturlari, vaksinalar va sog'lom turmush tarzini targ'ib qilishning ahamiyati katta [4]matn. Maqolada ilmiy tadqiqotlar va klinik amaliyotlardan misollar keltirilib, mavzuga oid eng so'nggi yangiliklar bayon etilgan.

Kalit so'zlari: Zamonaviy tibbiyotda diagnostika,Labarator va genetic tadqiqotlar, Akusherlik va gnikalogiya, Genetik bepushtlik

DIAGNOSTICS, TREATMENT, AND PREVENTION IN OBSTETRICS AND GYNECOLOGY

Yuldasheva B.M., Bazarova G.R.
Alfraganus University

Abstract

This article discusses modern diagnostic methods, treatment approaches, and disease prevention measures in obstetrics and gynecology. Ultrasound examination (US), laboratory tests, genetic screening, and advanced imaging techniques play a crucial role in diagnostics [1]. Treatment involves medical therapy, surgical procedures, reproductive technologies, and rehabilitation methods. In disease prevention, screening programs, vaccinations, and the promotion of a healthy lifestyle are of great importance. The article provides examples from scientific research and clinical practice, highlighting the latest developments in the field [3, 4].

Keywords: Modern medical diagnostics, Laboratory and genetic research, Obstetrics and gynecology, Genetics, Infertility

СОВРЕМЕННАЯ ДИАГНОСТИКА, ЛЕЧЕНИЕ И ПРОФИЛАКТИКА В АКУШЕРСТВЕ И ГИНЕКОЛОГИИ

Юлдашева Б.М., Базарова Г.Р.
Университет Альфраганус

Аннотация

В данной статье освещены современные методы диагностики, подходы к лечению и меры профилактики заболеваний в акушерстве и гинекологии. В диагностике важную роль играют ультразвуковое исследование (УЗИ), лабораторные анализы, генетический скрининг и современные методы визуализации [1]. В лечении применяются медикаментозная терапия, хирургические вмешательства, репродуктивные технологии и реабилитационные методы. В профилактике заболеваний значительное внимание уделяется скрининговым программам, вакцинации и пропаганде здорового образа жизни. В статье приведены примеры из научных исследований и клинической практики, а также освещены последние достижения в данной области [3,4].

Ключевые слова: Современная диагностика в медицине, Лабораторные и генетические исследования, Акушерство и гинекология, Генетика, Бесплодие

Kirish: Akusherlik va ginekologiya tibbiyotning ayollar reproduktiv salomatligi bilan bog'liq

muhim yo'nalishlaridan biridir. Zamonaviy tibbiyotda diagnostika, davolash va oldini olish choralari tobora takomillashib, ayollar hayot sifatini yaxshilashga xizmat qilmoqda [3]. Ushbu maqolada ushbu sohadagi ilg'or texnologiyalar va zamonaviy usullar tahlil qilinadi.

Diagnostika usullari: Ultratovush tekshiruvi (UTT) akusherlik va ginekologiyada asosiy diagnostika usuli hisoblanadi. Uning quyidagi turlari qo'llaniladi:

2D, 3D va 4D UTT – homilaning rivojlanishini tekshirish va anomaliyalarni aniqlashga yordam beradi [1].

Dopplerografiya – homila va yo'ldosh qon aylanishini baholash uchun ishlatiladi [2].

Laborator va genetik tadqiqotlar quyidagilarni o'z ichiga oladi:

Gormonal testlar – bepushtlik va hayz sikli buzilishlarini aniqlash uchun [3].

Genetik skrining – tug'ma kasalliklar xavfini baholashda samarali hisoblanadi [4].

Onkomarkerlar – ginekologik o'sma kasalliklarini erta bosqichda aniqlash imkonini beradi [5].

Endoskopik usullar orasida:

Gisteroskopiya – bachadon bo'shlig'ini tekshirish va muolaja qilish uchun ishlatiladi [2].

Laparoskopiya – kam jarohatli operativ diagnostika va davolash usuli [3].

Zamonaviy davolash usullari- Medikamentoz terapiya quyidagilarni o'z ichiga oladi.

Gormonal terapiya – ayollarning reproduktiv muammolarini bartaraf etish uchun qo'llaniladi. [2].

Antibiotikoterapiya – infektsion kasalliklarni davolashda muhim ahamiyatga ega hamda samarali davo usuli [4].

Jarrohlik amaliyotlari- Minimal invaziv jarrohlik – ginekologik kasalliklarni kam jarohatli usullar bilan davolashda samaralidir [3].

Laparoskopik jarrohlik – tuxumdon kistalari, bachadon miomalari va bepushtlik sabablarini bartaraf etishda qo'llaniladi [17].

Tadqiqotlar shuni ko'rsatadiki, tuxumdon kistalarini erta aniqlashda transvaginal ultratovush, Dopplerografiya va magnit-rezonans tomografiya (MRT) kabi zamonaviy usullar juda samarali hisoblanadi[1].

Ushbu olib borilgan tadqiqot doirasida tuxumdon kistalarini erta aniqlash va davolashda zamonaviy diagnostika va davolash usullarining samaradorligi baholandi. Tekshiruvga 18-45 yosh oralig'idagi 30 nafar bemor jalb qilindi. Bemorlar quyidagi diagnostik tekshiruvlardan o'tkazildi: [7,8]

Ultratovush tekshiruvi (2D, 3D, 4D UTT), Dopplerografiya, Transabdominal va transvaginal ultratovush tekshiruvi, Magnit-rezonans tomografiya (MRT), Laparoskopiya [20].

Bemorlar tarkibi va tashxislariga keladigon bo'lsak;

Funktsional tuxumdon kistalari: 10 ta bemor (33,3%)

Dermoid kistalar: 8 ta bemor (26,7%)

Endometrioid kistalar: 7 ta bemor (23,3%)

O'sma belgilari bo'lgan shubhali kistalar: 5 ta bemor (16,7%) kuzatilgan bo'lib ,

Davolash yondashuvi va natijalari quydagicha amalga oshirildi.

1. Konservativ (dori-darmon) davolash uchun 10 nafar bemor (33,3%) konservativ davoga jalb qilindi. [12]

Gormonal terapiya uchun esa , Funktsional tuxumdon kistalari aniqlangan bemorlarga qo'llanildi va samarali natijaga ega bo'lindi va qo'shimcha Antibiotikoterapiya , Yallig'lanish belgilari bo'lgan bemorlarga buyurildi. [18]

Natijalar:

7 nafar bemorda (70%) kistalar 3-6 oy ichida butunlay yo'qolgan.

3 nafar bemorda (30%) kista hajmi kamaygan, ammo to'liq so'rilmagan, shuning uchun jarrohlik tavsiya qilingan [1].

2. Minimal invaziv jarrohlik (laparoskopiya): [20]

15 nafar bemor (50%) ga laparoskopik usulda jarrohlik amaliyoti o'tkazildi.

Laparoskopik kistektomiya: Dermoid va endometrioid kistalar uchun qo'llanildi.

Tuxumdon rezeksiyasi: Qisman jarrohlik aralashuvi ham kuzatildi .

Natijalar: 13 nafar bemorda (86,7%) asoratlarsiz to'liq sog'ayish kuzatildi.

2 nafar bemorda (13,3%) endometrioid kista qayta rivojlangan va reabilitatsiya jarayoni davom ettirilgan. [2]

3. Radikal jarrohlik (o'sma shubhali holatlar) ida 5 nafar bemor (16,7%) da onkologik jarrohlik amaliyoti o'tkazildi. [19,20]

Tuxumdon amputatsiyasi: Kista malign (yomon) tabiatga ega deb baholangan holatlarda qo'llanildi.

Kimyoterapiya: 2 nafar bemorda tashxis tasdiqlangach, postoperativ kimyoterapiya o'tkazildi.

Natijalar: 4 nafar bemor (80%) tiklandi va 12 oylik kuzatuvlar olib borilib nazoratga olindi va kasallik qaytalanmadi.

1 nafar bemorda (20%) kasallik qaytalanib, qo'shimcha kimyoterapiya talab etildi. (World Health Organization [4].

Xulosa qilib aytadigon bo'lsak;

1. Funktsional kistalar uchun konservativ davolash samarali bo'lib, 70% bemor to'liq sog'aygan.

2. Dermoid va endometrioid kistalar uchun laparoskopik jarrohlik muvaffaqiyatli bo'lgan, 86,7% bemor asoratlarsiz sog'aygan.

3. O'sma shubhali kistalar uchun radikal jarrohlik va kimyoterapiya muolajalari kasallikni nazorat qilishda muhim rol o'ynagan.

Erta tashxis va zamonaviy davolash usullari bemorlarning sog'ayish imkoniyatini oshiradi va hayot sifatini yaxshilaydi.

Shu bilan bir qatorda Reproduktiv texnologiyalarni samaradorligini o'rganib chiqildi. Sun'iy urug'lantirish (IVF) – bepushtlik muammolarini hal qilish uchun samarali usullardan biridir [3]Ushbu texnologiya yordamida bepushtlikning turli shakllari aniqlanib davolanmoqda[4]

Kasalliklarning oldini olish-Profilaktik skrining va vaksinalar quyidagilarni o'z ichiga oladi:

Pap-smear testi – bachadon bo'yni saratonini erta aniqlashda asosiy usullardan biridir [5,11]

HPV vaksinasi – papillomavirus infeksiyasiga qarshi samarali profilaktika chorasidir [4]

Shuningdek, sog'lom turmush tarzini targ'ib qilish kasalliklarning oldini olishda muhim rol o'ynaydi [3]

Xulosa: Ushbu tadqiqotda akusherlik va ginekologiyada tuxumdon kistalarini erta aniqlash va samarali davolashda zamonaviy diagnostika va davolash usullarining muhimligi tahlil qilindi. 30 nafar bemorda olib borilgan klinik kuzatuvlar natijalari shuni ko'rsatdiki, turli diagnostika usullari va individual yondashuv asosida tanlangan davolash usullari yuqori samaradorlikka ega ekani , Erta tashxisning ahamiyati, Davolash usullarining samaradorligi, Bemorlarda reabilitatsiya va kuzatuv muhumligi o'rganib chiqildi.

Shuni ham aytib o'tish kerakki – Zamonaviy texnologiyalar yordamida tuxumdon kistalarini erta aniqlash mumkin bo'lib, bu kasallikning rivojlanish darajasini aniqlash va mos davolash rejasini tuzishga imkon beradi.

– Transvaginal ultratovush va Dopplerografiya kistalarning tabiati va qon ta'minotini aniqlashda muhim ahamiyatga ega.

Davolash usullarining samaradorligi- Funktsional kistalar uchun gormonal terapiya 70% hollarda kistaning to'liq so'rilishiga olib keldi [14].

– Laparoskopik kistektomiya (minimal invaziv jarrohlik) dermoid va endometrioid kistalarni davolashda 86,7% muvaffaqiyatga erishdi va bu usul an'anaviy ochiq jarrohlikka nisbatan kamroq asoratlar keltirib chiqardi.

– O'sma shubhali kistalar uchun radikal jarrohlik va kimyoterapiya 80% hollarda kasallikning qaytalanishining oldini oldi.

Bemorlarda reabilitatsiya va kuzatuv– Jarrohlik amaliyotidan so'ng bemorlarning aksariyati normal hayotga qaytgan va reproduktiv funksiyasi saqlanib qolgan [16].

– Kuzatuv natijalari shuni ko'rsatdiki, o'z vaqtida tashxis va kompleks davolash bemorlarning sog'lom hayot sifatini saqlab qolishga yordam beradi.

Takliflarga yuzlanadigon bo'lsam...

1. Erta diagnostikani kengaytirish:

– Ayollar orasida muntazam ginekologik ko'riklar va skrining dasturlarini joriy qilish.

– Risk guruhi (bepushtlik, hayz sikli buzilishi) dagi ayollarni UTT va genetik skrining orqali doimiy nazoratga olish.

2. Davolash yondashuvlarini individualizatsiya qilish:

– Funktsional tuxumdon kistalari uchun konservativ (gormonal) davolashni afzal ko'rish, zarurat tug'ilganda jarrohlik amaliyotlarini amalga oshirish.

– Minimal invaziv usullarni (laparoskopik va gisteroskopik amaliyotlar) keng joriy qilish, ayniqsa reproduktiv yoshdagi ayollarda bu usullarni birinchi navbatda qo'llash [12].

3. Innovatsion texnologiyalarni joriy qilish:

– Sun'iy intellekt asosida tahlil usullarini keng joriy qilish orqali tuxumdon kistalarini tasniflash va asoratlarni bashorat qilishni takomillashtirish.

– Genetik skrining va molekulyar-diagnostik usullarni qo'llashni rivojlantirish.

4. Tibbiy xodimlar malakasini oshirish:

– Ginekologlar va akusherlar uchun zamonaviy diagnostika va davolash texnologiyalari bo'yicha muntazam treninglar tashkil qilish.

– Tibbiy protokollarni zamonaviy ilmiy yutuqlarga asoslanib muntazam yangilab borish [13].

5. Bemorlarda xabardorlikni oshirish:

– Ayollarga tuxumdon kistalarining belgilari va muammolari haqida ochiq va aniq ma'lumot berish.

– Sog'lom turmush tarzi, to'g'ri ovqatlanish va muntazam ginekologik ko'riklarning ahamiyatini targ'ib qilib borish lozim deb bilaman. Har qanday to'g'ri tashxis va oldini olingan kasallikdan yaxshi natija yuzaga keladi. Erta tashxis, individual yondashuv va innovatsion texnologiyalarni joriy qilish orqali bu sohada yanada yuqori natijalarga erishish mumkin. Ayniqsa, erta tashxis qo'yish va individual davolash yondashuvlari bilan kasalliklarning oldini olish muhim ahamiyatga ega. Kelajakda sun'iy intellekt va genetik tadqiqotlar yordamida yanada aniq va tezkor tashxis usullarini ishlab chiqish zarur deb hisoblayman.

Foydalanilgan adabiyotlar:

1. Сидельникова В. М., Кулаков В. И. "Акушерство и гинекология". – Москва: Медицина, 2020. – 220 с.
2. Williams J. "Obstetrics and Gynecology". – New York: McGraw-Hill, 2019.
3. Исаков В. А., Хасанова Л. Ф. "Современные методы диагностики в акушерстве и гинекологии". – Санкт-Петербург, 2021. – 185 с.
4. World Health Organization (WHO). "Reproductive Health and Research". – Geneva: WHO, 2023. – 180 p.
5. Американская коллегия акушеров и гинекологов (ACOG). "Руководство по ведению беременности и родов". – Вашингтон, 2022. – 250 с
6. Шехтман М. М. "Клиническое акушерство". – Москва: ГЭОТАР-Медиа, 2018. – 320
7. Розен М. Г., Мартин Дж. Н. "Современные подходы в акушерстве и гинекологии". – Москва: Практика, 2020. – 290 с.
8. Журнал "International Journal of Gynecology & Obstetrics", 2021, Т. 152, № 3.
9. FIGO (International Federation of Gynecology and Obstetrics). "Guidelines for Ovarian Cyst Management". – London: FIGO, 2022. – 145 p.
10. Jahon sog'liqni saqlash tashkiloti (WHO). "Global Women's Health Report". – Geneva: WHO, 2022. – 200 p.
11. Berek J. S., Novak E. "Berek & Novak's Gynecology". – Philadelphia: Lippincott Williams & Wilkins, 2020. – 1,300 p.
12. Коллектив авторов. "Диагностика и лечение гинекологических заболеваний". – Санкт-Петербург: Наука, 2019. – 275 с.
13. American Society for Reproductive Medicine (ASRM). "Clinical Practice Guidelines for Infertility Treatment". – Washington, 2021.
14. Kistalarning diagnostikasi va davolashda yangi yondashuvlar. "Journal of Obstetrics and Gynecology Research", 2022, № 4, 135–148-betlar.
15. Зайцева О. Ю. "Современные методы диагностики в акушерстве". – Москва: Медицина, 2020. – 240 с.
16. Jahon sog'liqni saqlash tashkiloti (WHO). "Women's Reproductive Health Strategy 2021-2030". – Geneva: WHO, 2021. – 160 p
17. The American Journal of Obstetrics and Gynecology (AJOG), 2023, № 7, 220–235-betlar.
18. Seckin T. "Endometriosis: A Modern Approach". – New York: Springer, 2020. – 300 p.
19. Европейская ассоциация гинекологов (EAGO). "Клинические рекомендации по лечению кист яичников". – Брюссель, 2021. – 195 с.
20. Курбатов А. В. "Лапароскопия в акушерстве и гинекологии". – Москва: ГЭОТАР-Медиа, 2018. – 340 с.

UO'K: 616.089

ODAM ANATOMIYASI FANINI STEAM VA VIRTUAL OLAMDA ZAMO-NAVIY O'QITISHINING AHAMIYATI

Xusanov E.O'., Mubinjonov A.D.
Samarqand davlat tibbiyot universiteti

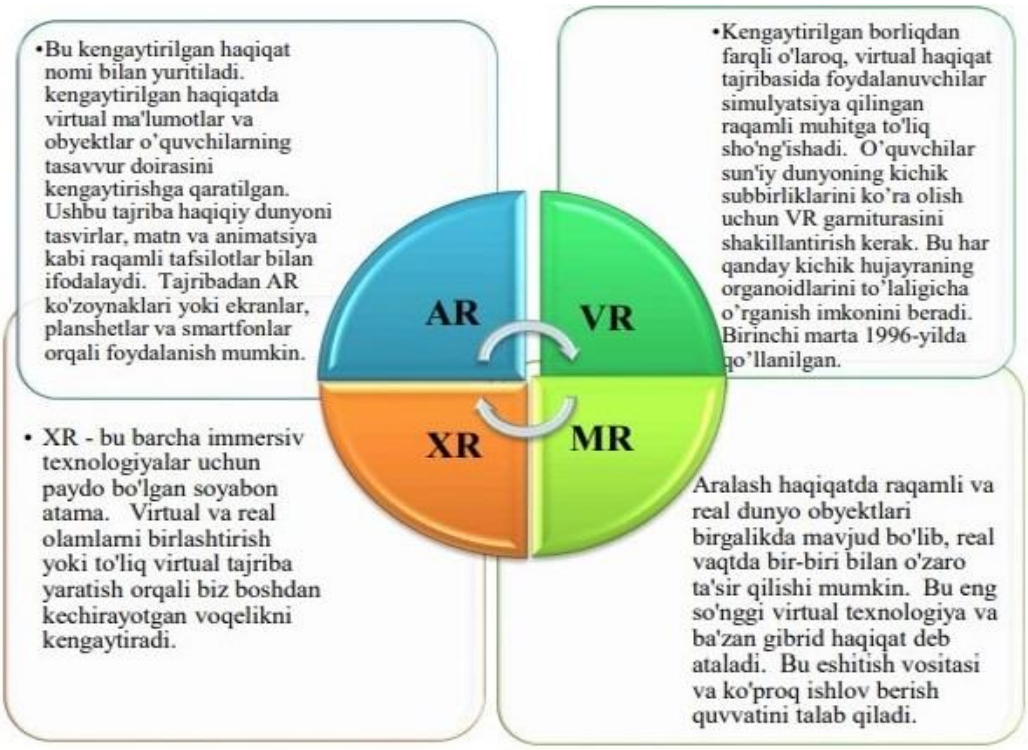
Annotatsiya

Bugungi kunda texnologiya rivojlanishi tabiiy fanlarining xususan, odam anatomiyasi va fiziologiya fanini STEAM yo'ndoshuv o'zgacha ahmiyat kasb qilmoqda. Odam anatomiya va fiziologiya fanini virtual olamda o'rgatish talabalar va maktab o'quvchilari yangi bilimlarni videolar roliklar yordami o'rganishda, chuningdek turli o'yinlar, animatsiyasion filmlar yordamidan bilimlar mustahkamlashga qaratilgan.

Kalit so'zlar: virtual, STEAM, odam anatomiyasi va fiziologiya, texnologiya, grafika, ta'lim, 3D dasturi, 3D texnologiyalari, virtual olam

Muammoning dolzarbligi. Hozirgi tez o'sayotgan dunyoda o'sib kelayotgan yosh avlodni ma'naviy-axloqiy va intelektual rivojlantirishni sifat jihatidan yangi darajaga ko'tarish, o'quv tarbiya jarayoniga ta'limning innovatsion shakllari va usullarini joriy etish zarurati uyg'onmoqda. Global doirada rivojlanib borayotgan yuqori texnologiyalar ta'lim tizimida virtual texnologiyalardan foydalanishda yangi imkoniyatlarini aniqlash va ularni amaliyotga tatbiq etishni talab etmoqda. O'z navbatida, virtual texnologiyalarning jadal taraqqiyoti – ularning o'qitish jarayonida keng foydalanishi uchun qulay shart-sharoitlarni yuzaga keltirmoqda. Odam anatomiyasi fanini o'qitishda virtual texnologiyalar bilim oluvchilarning dunyoni virtual vositalar asosida ko'rish, o'zlashtirish, idrok etish kompetensiyalarini rivojlantirish maqsadida talabalarning kasbiy faoliyatga metodik tayyorlash dolzarb muammolardan hisoblanadi. Mamlakatimiz ta'lim muassasalarining elektron o'quv-metodik resurslari bazasini raqamli tranformatsiya sharoitlariga moslashtirish, yuqori innovatsion yondashuvlar asosida rivojlantirish, pedagog kadrlar tayyorlash tizimini tubdan yangilash bo'yicha amalga oshirilgan tizimli yangiliklar doirasida o'quv jarayoniga zamonaviy raqamli texnologiyalarni qo'llash, ulardan foydalanish hamda dasturiy ta'minotini yaratish darajasining oshirishga xizmat qildi. Yaratilgan shart-sharoitlar biologiyani o'qitishda virtual ta'lim texnologiyasini takomillashtirish "Axborot texnologiyalari sohasida masofaviy, onlayn va virtual o'qitish texnologiyalarini joriy etish va rivojlantirish, onlayn kurslar uchun platformalar ishlab chiqish" orqali talim sifatini ta'minlash va kompetensiyaviy yondashuv asosida talabalarni metodik tayyorgarligini takomillashtirish zaruratini yuzaga keltirdi. O'zbekiston Respublikasining 2020-yil 23-sentabrdagi O'RQ-637-son "Ta'lim to'g'risida"gi Qonuni, O'zbekiston Respublikasi Prezidentining 2019-yil 8-oktabrdagi PF-5847-son "O'zbekiston Respublikasi Oliy ta'lim tizimini 2030 yilga- cha rivojlantirish konsepsiyasini tasdiqlash to'g'risida", 2020-yil 12-avgustdagi PQ-4805-son "Kimyo va biologiya yo'nalishlarida uzluksiz ta'lim sifatini va ilm-fan natijadorligini oshirish chora-tadbirlari to'g'risida"gi qarorlari, O'zbekiston Respublikasi Prezidentining 2020-yil 5-oktabrdagi PQ-6079-son"RaqamliO'zbekiston-2030"strategiyasinitasdiqlashvaunisamarali amalga oshirish chora-tadbirlari to'g'risida"gi qarori hamda mazkur faoliyatga tegishli boshqa me'yoriy-huquqiy hujjatlarda belgilangan vazifalarni amalga oshirishda ushbu dissertatsiya muayyan darajada xizmat qiladi.Tabiiy fanlarni o'qitish bo'yicha tadbiqiy ishlar amalga oshirildi. Bu yangiliklar asosida bugungi kun oqitivchisining asosiy maqsadi – har bir o'quvchi uchun muvaffaqiyat holatini yaratish. Shuni ta'kidlash kerakki, muvaffaqiyat holati – bu muvaffaqiyatni ta'minlaydigan shartlarning yig'indisi, bunday vaziyatning natijasi: yutuq quvonchini boshdan kechirish, ularning

imkoniyatlari va qobiliyatlari, o'zlariga va mavjud kuchli tomonlariga ishonish. Sinfda qulay psixologik muhitni yaratish va saqlash o'quvchining muvaffaqiyat holatini tajribasi o'rganish uchun motivatsiyani oshiradi, o'quv ishining yuqori ko'rsatkichlarini rag'batlantiradi, shaxsiy xususiyatlarni tuzatish istagini ta'minlaydi (tashvish, noaniqlik, o'z-o'zini hurmat qilish), ijodkorlikni, tashabbusni rivojlantirishdan iboratdir [2]. Odam anatomiyasi va fiziologiya fani orqali o'quvchilarda hayotiy ko'nikmalarni rivojlantirishda STEAM yondashuv ta'lim tizimida asosiy o'rinni egalladi. STEAM ta'limini joriy etishning me'yoriy–huquqiy asoslari O'zbekiston Respublikasi Prezidentining 2019-yil 29-apreldagi "O'zbekiston Respublikasi xalq ta'limi tizimini 2030-yilgacha rivojlantirish konsepsiyasini tasdiqlash to'g'risida"gi PF-5712-son farmoniga ko'ra, innovatsion ta'lim jarayoniga o'tish, zamonaviy kadrlarga bo'lgan ehtiyojni inobatga olish, AKT va ta'lim berishning yangi metodlarini joriy etish, dars jarayonini STEAM ta"lim texnologiyasi talablari asosida tashkil etish, STEAM (tabiiy fanlar, texnologiya, muhandislik, dizayn va matematika) fanlarini o'qitish bo'yicha o'quv kurslaridano'tgan pedagoglar 2023-yilda 10%, 2030-yilga kelib 50%ga yetishi, yangi kasbiy kompetensiyalarni o'zlashtirish uchun zarur bilimlar bazasini shakllantirish kabi vazifalar belgilangan [1].

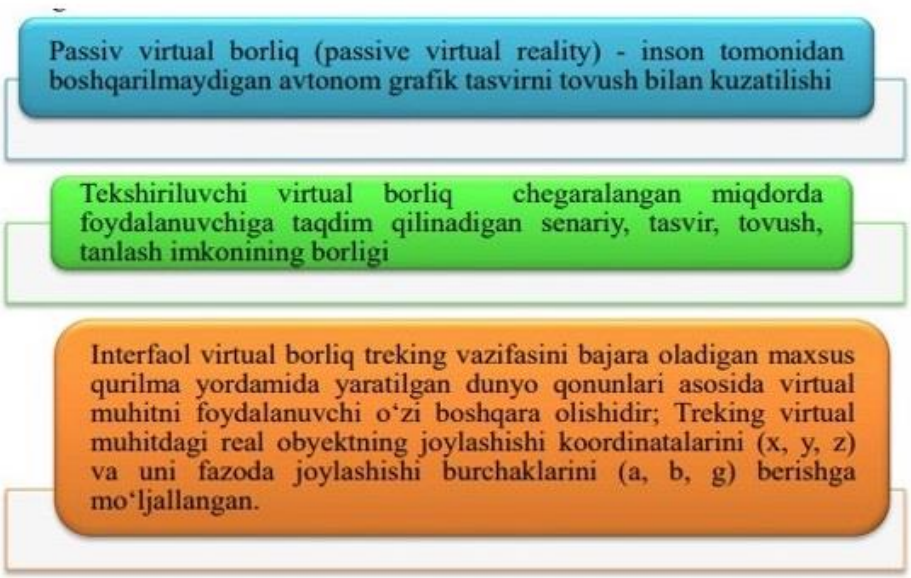


1-rasm. Virtual borliq turlari.

Adabiyotlat tahlili va muammoni o'rganganlik darajasi. Respublikamizda ax- borotkom-munikatsiya muhitida o'qitishni tashkil etishning didaktik imkoniyatlari, vir- tual texnologiya-larni ta'lim amaliyotiga joriy etish sohasida: A.Abduqodirov, R.Abdu- raxmanova, U.Begimkulov, R.Djurayev, U.Inoyatov, N.Muslimov, U.N.Taylaqov, B.Z. To'raev, Sh.Sharipovlar; biologiya o'qitish metodikasini rivojlantirish bo'yicha: M.Ibodova, A.Raximov, J.Tolipova, M.Umaralieva Sh.Xasanova, L.Qaraxonovalar; talabalarning kasbiy hamda metodik tayyorgarligini takomil-lashtirish masalalari M.Atakulova, N.Karimova, S.Salimova, M.Usmonovalar; virtual ta'lim texnologiyalarini rivojlantirish masalalari G.Ergasheva, U.Baxodirovalar tomonidan tadqiq etil-gan. Mustaqil davlatlar hamdo'stligi (MDH) mamlakatlari olimlaridan O.Vaganova, O.Zasepina, T.Kulikova, I.V.Robert, A.Yu. Uvarov, D.I.Shapiro kabilar tomonidan talabalarni kasbiy faoliyatga

tayyorlash, elektron ta'lim muhitida talabalar mustaqil ta'limini tashkil etish va boshqarish muammosining nazariy, amaliy va metodik jihatlari o'rganilgan. Xorijlik olimlardan T.Bednall, Y.Kehoe, B.Bolger, L.Deng, Yuen Allan, O.Petropoulou, S.Sethy, William Vallejo va boshqalar biologiya ta'limi jarayonida talabalar kasbiy tayyorgarligini virtual ta'lim vositalari asosida jadallashtirishning yangi usullarini ishlab chiqish bo'yicha qator ilmiy izlanishlar olib borishgan. Pedagogika oliy ta'lim muassasalarida talabalar metodik tayyorgarligini rivojlantirishning turli jihatlari bo'yicha ilmiy izlanishlar olib borilgan bo'lsada, virtual ta'lim texnologiyalari asosida takomillashtirish yo'nalishda pedagogik tadqiqot olib borish zarurati mavjud. Virtual ta'lim o'quv jarayonining mutlaqo yangi darajasi bo'lib, virtual texnologiya vositalari orqali tashqi omillarga chalg'imas- dan, faqat o'quv jarayoni bilan mashg'ul bo'lishni ta'minlaydi. Bunday ta'lim olish talabaga mavzuni tushunarli va ko'proq ma'lumotlarni xotirada saqlash imkonini beradi. O'quv jarayoni so'ngida har bir talaba o'qituvchi berganda ko'ra ko'proq ma'lumotlarni o'zlashtrishga erishadi va eng muhimi, talaba albatta o'rganishi kerak bo'lgan tajribani boshdan kechirish imkoniyatiga ega. Virtual borliq – inson real borliqda harakat qilayotgani illyuziyasini kompyuterda yaratish imkonini beruvchi interfaol texnologiya. Bunda obyektiv borliqni tabiiy sezgi organlari yordamida idrok etish o'rnini maxsus interfeys, kompyuter grafikasi va ovoz vositasida sun'iy yaratilgan kompyuter axboroti egallaydi. Virtual borliq amalda yo'q narsa, uni qo'l bilan tutish, uning ta'mi va hidini his qilish mumkin emas. Shunga qaramay, u mavjud va inson bu xayoliy olamga kirib, uni nafaqat kuzatadi va boshdan kechiradi, balki unga ta'sir ko'rsatish imkoniyatiga ham ega bo'ladi, ushbu olamda mustaqil harakat qiladi, uni o'zgartira oladi.

Odam anatomiyasi fanidan talabalarning virtual texnologiyalar asosida metodik tayyorgarligini takomillashtirishning tashkiliy aspektlari obyektiv borliqni tabiiy sezgi organlari yordamida idrok etish bilan birga, raqamli texnologi- yalar asosida virtual ta'lim imkoniyatlarini kengaytirish, maxsus interfeys, kompyuter grafikasi va ovoz vositasida sun'iy yaratilgan kompyuter axborotlari bilan boyitish hamda metodik jihatdan qo'llashga yo'naltirish bilan bog'liq. To'liq ilmiy dunyoqarashga ega bo'lish, ijodiy qobiliyatlarini rivojlantirish, kelajakda talabga javob beradigan mutaxassis sifatida shakllanish uchun talabalar kompyuterda 3D – modellashtirish asoslarini puxta egallashlari, olgan bilimlarini o'quv faoliyatida qo'llashlari zarur. 3D-modellashtirishni talabalarning kasbiy kompetensiyalarini rivojlantirishning bir qismi sifatida o'rganish o'qituvchining ijodiy vazifasi bo'lib, virtual ta'lim texnologiyalari asosida ta'lim jarayonini loyihalashtirish pedagogik texnologiyalar bilan integratsiyalash asosida samarali natija beradi hamda refleksiv kasbiy tayyorgarlik imkoniyatlarini faoliyatli yo'naltirishga olib keladi. Ayni vaqtda virtual ta'lim texnologiyalarining quyidagi turlari ta'lim amaliyotida qo'llanilmoqda (2-rasm).



2-rasm. Virtual ta'lim texnologiyalarining turlari

Qanday modellashtirish, yuzaga keladigan muammolarni hal qilish usullari va ularning kuchli tomonlarini baholash to'g'risida o'z taxminlarini taqdim etish imkoniyatiga ega. Bundan tashqari, guruh faoliyati muloqotda tajriba orttirishga, o'z nuqtai nazarini isbotlash qobiliyatiga ega bo'lishga imkon beradi, bu talabalarning kasbiy kompetensiyalarini shakllantirishda muhimdir. Mazkur tadqiqotda qo'yilgan vazifalarga binoan oliy ta'lim muassasalarida talabalar metodik tayyorgarligini takomillashtirishda VTT foydalanishning didaktik imkoniyatlari o'rganildi va tahlil qilindi hamda quyidagi ilmiy xulosalar qilish imkonini berdi: Olib borilgan ilmiy-pedagogik tadqiqot natijalari tahlili va yakunlariga asoslangan holda quyidagi xulosalar taqdim etildi:

Oliy ta'lim tizimiga raqamli ta'lim muhitda amalga oshiriladigan virtual texnologiyalarni, xorijiy ta'lim tajribalariga asoslangan zamonaviy o'qitish shakllarini joriy qilinishi o'quv jarayonida talabalar metodik tayyorgarligini ortishi va uni muntazam ravishda optimallashtirish zaruratini yuzaga chiqardi. Bu jarayonda talabalarning "Odam anatomiyasi va fiziologiyasi" fanini o'qitish jarayonida virtual texnologiyalardan foydalanish mazmuni, turlari, tashkiliy shakllari axborot va kommunikatsiya texnologiyalarining integratsiyasi asosida ta'lim jarayonini tashkillashtirishni talab etadi.

Xulosa. Talabalarni metodik faoliyatga tayyorlashda mashg'ulotlarni virtual ta'lim texnologiyalari asosida raqamli ta'lim muhitida integratsiyalash va optimallashtirish odam anatomiyasi va fiziologiyasidan talabalarning metodik faoliyatga tayyorlash modelini tashkiliy-pedagogik komponenti hisoblangan virtual borliq texnologiyalari asosida loyihalashning moslashuvchan, shakllantiruvchi va refleksiv bosqichlarini takomillashtirishga xizmat qiladi. Talabalarni kasbiy-metodik faoliyatga tayyorlashda virtual texnologiyalarning aksiologik, faoliyatli, kognitiv, monitoring-refleksiv funksiyalar orqali bajarilishi natijasida talabalarning ta'lim jarayoniga tayyorligi va tahsil olish davrida mustaqil fikrlashi, mustaqil ta'lim olishi, o'quv mashg'ulotlarining turli shakllarida pedagogik, axborot va kommunikatsiya 20 texnologiyalaridan foydalanishga oid metodik materiallar, raqamli ta'lim topshiriqlari resursi yordamida metodik ta'minotini mustahkamlashga hamda kasbiy-metodik tayyorgarligini orttirishga ko'maklashadi.

Foydalanilgan adabiyotlar:

1. Abdullayeva S., Maxmudova Z., Xujakulov S. Tibbiy ta'limda vr texnologiya //Евразийский журнал академических исследований. – 2022. – Т. 2. – №. 11. – С. 1140-1144.
2. Abduraxmanovna D. K. Ta'lim jarayonida innovatsion texnologiyalar //Conference Zone. – 2022. – С.127-130.
3. Bobajanov B. Tibbiy-biologik ta'limda IT-texnologiyalarini samarali qo 'llash istiqbollari //Innovations in Science and Technologies. – 2024. – Т. 1. – №. 3. – С. 164-167.
4. Muxammadova G. Q. Tibbiyot ta'lim muassasalari talabalarini kasbiy kompitensiyalarini rivojlantirishda ilg 'or texnologiyalar asosida labaratoriya instrumental usullardan foydalanishni takomillashtirish (gigiyena fanlarini oqitish misolida) //so 'ngi ilmiy tadqiqotlar nazariyasi. – 2024. – Т. 7. – №. 5. – С. 73-77.
5. Sidorov V., Tursunov I. Innovatsion rivojlanishning ustuvorligi: tahdidlar, xavflar va tavakkalchilik //Innovatsion texnologiyalar. – 2023. – Т. 50. – №. 02. – С. 130-137.
6. Yuldashevna A. O., Samandar B. Innovation and its effective use //Iqtisodiyot va zamonaviy texnologiya jurnali| Journal of economy and modern technology. – 2023. – Т. 2. – №. 8. – С. 1-4.
7. Zuhriddinovich B. K. Tibbiy ta'lim talabalarining analitik tafakkurini takomillashtirishga integrativ yondashuvlar //Journal of scientific research, modern views and innovations. – 2025. – Т. 1. – №. 3. – С. 190-192.
8. Коржавов Ш. О., Юсупов М. М. Частота Гипер И Гипотонических Состояний Студента Сельской Местности В Зависимости От Социально-Гигиенических Условий //Miasto Przyszłości. – 2024. – Т. 47. – С. 322-324.
9. Хусанов Э. У. и др. Влияние клеточных препаратов пуповинной крови на морфологию кожи //International scientific review of the problems of natural sciences and medicine. – 2019. – С. 383-395.

UDC: 616-022.363.7

DETERMINATION OF THE INCIDENCE RATE OF CHRONIC VIRAL HEPATITIS BASED ON ETIOLOGICAL FACTORS AMONG THE POPULATION OF JOMBOY DISTRICT, SAMARKAND REGION

Yarmukhamedova M.K., Kuchkarova Sh.A.
Samarkand State Medical University

Abstract

This study investigates the epidemiological characteristics and etiological factors of chronic viral hepatitis (CVH) in Jomboy District, Samarkand Region. A total of 174 patients diagnosed with CVH from 2019 to 2023 were analyzed. Laboratory tests included enzyme-linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR) methods. The results indicated that 124 patients were infected with CVH type B, while 50 patients had CVH type C. Among those with CVH type B, 73% were female, whereas 68% of CVH type C patients were also female. The findings revealed a higher prevalence of CVH among young individuals (18–44 years old) and showed an increased likelihood of liver cirrhosis development in CVH type C patients. These results highlight the necessity of developing effective preventive measures against the spread of viral hepatitis.

Key words: chronic viral hepatitis B, chronic viral hepatitis C, epidemiology, ELISA, PCR.

SAMARQAND VILOYATI JOMBOY TUMANI KESIMIDA SURUNKALI VIRUSLI GEPATITLAR ETIOLOGIK OMILI BO'YICHA AXOLI ORASIDA KASALLANISH DARAJASINI ANIQLASH

Yarmuxamedova M.K., Kuchkarova Sh.A.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Ushbu tadqiqotda Samarqand viloyati Jomboy tumanida surunkali virusli gepatitlarning (SVG) epidemiologik xususiyatlari va etiologik omillari o'rganildi. 2019–2023-yillar davomida Jomboy tumanida yashovchi va SVG tashxisi qo'yilgan 174 nafar bemorlar tahlil qilindi. Laborator tekshiruvlar immunoferment tahlil (IFA) va polimeraza zanjir reaksiyasi (PCR) usullarini o'z ichiga oldi. Natijalar shuni ko'rsatdiki, SVG B turi bilan kasallangan bemorlar soni 124 nafar, SVG C turi bilan kasallanganlar esa 50 nafarni tashkil etdi. SVG B turi bilan kasallanganlarning aksariyati (73%) ayollar bo'lsa, SVG C turi bilan kasallanganlar orasida ayollar ulushi 68% ni tashkil etdi. Tadqiqot natijalari yoshlar (18–44 yosh) orasida kasallanish darajasi yuqori ekanligini va gepatit C turi bilan kasallangan bemorlar orasida jigar sirrozi rivojlanish ehtimoli yuqoriligini ko'rsatdi. Ushbu natijalar virusli gepatitlarning tarqalishiga qarshi samarali profilaktik choralar ishlab chiqish zarurligini ta'kidlaydi.

Kalit so'zlar: surunkali virusli gepatit C, surunkali virusli gepatit C, epidemiologiya, IFA, PCR.

САМАРКАНДСКАЯ ОБЛАСТЬ, ДЖАМБАЙСКИЙ РАЙОН: ОПРЕДЕЛЕНИЕ УРОВНЯ ЗАБОЛЕВАЕМОСТИ ХРОНИЧЕСКИМИ ВИРУСНЫМИ ГЕПАТИТАМИ СРЕДИ НАСЕЛЕНИЯ С УЧЕТОМ ЭТИОЛОГИЧЕСКИХ ФАКТОРОВ

Ярмухамедова М.К., Кучкарова Ш.А.
Самаркандский государственный медицинский университет

Аннотация

В данном исследовании изучены эпидемиологические особенности и этиологические факторы хронических вирусных гепатитов (ХВГ) в Джамбайском районе Самаркандской области. В анализ были включены 174 пациента, которым был поставлен диагноз ХВГ в период с 2019 по 2023 годы. Лабораторные исследования включали метод иммуноферментного анализа (ИФА) и полимеразной цепной реакции (ПЦР). Результаты показали, что 124 пациента были инфицированы ХВГ типа Б, а 50 пациентов – ХВГ типа С. Среди пациентов с ХВГ типа Б женщины составили 73%, а среди пациентов с ХВГ типа С – 68%. Исследование вы-

явило высокую заболеваемость среди молодых людей (18–44 года) и показало повышенный риск развития цирроза печени у пациентов с ХВГ типа С. Полученные данные подчеркивают необходимость разработки эффективных профилактических мер по предотвращению распространения вирусных гепатитов.

Ключевые слова: хронический вирусный гепатит В, хронический вирусный гепатит С, эпидемиология, ИФА, ПЦР.

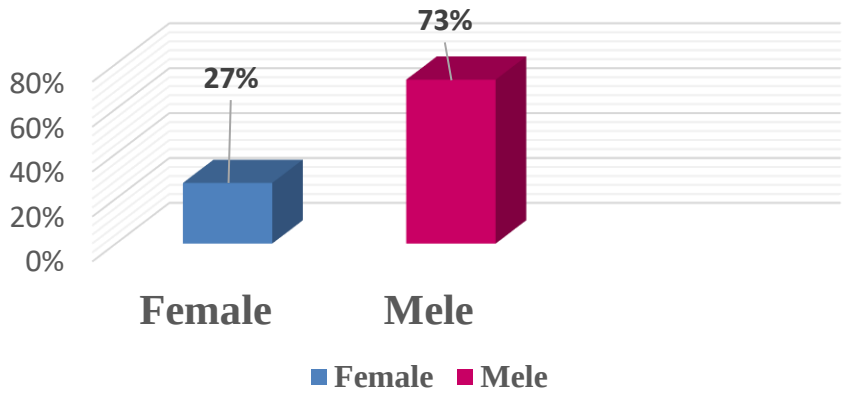
Relevance of the topic. According to the World Health Organization (WHO), hepatitis is an inflammation of the liver caused by various infectious viruses and non-infectious agents, posing a serious health risk. In some cases, this disease can even lead to death. There are five primary types of hepatitis viruses: A, B, C, D, and E [1, 2, 4, 5, 11]. These viruses differ in terms of disease progression, severity, geographical distribution, and preventive measures. In particular, types B and C cause chronic diseases in hundreds of millions of people worldwide. Consequently, severe complications such as liver cirrhosis and liver cancer develop, making these the most common causes of hepatitis-related deaths [3,4,5].Globally, approximately 354 million people are infected with hepatitis B or C viruses, and in most cases, they lack access to proper diagnosis or treatment. Some types of hepatitis can be prevented through vaccination. According to WHO studies, in low- and middle-income countries, nearly 4.5 million premature deaths could be prevented by 2030 through vaccination, improved diagnosis, access to medications, and preventive campaigns.The Global Hepatitis Strategy (2016–2030), approved by WHO member states, aims to reduce new hepatitis infections by 90% and decrease mortality from this disease by 65%.In the Republic of Uzbekistan, the exact number of hepatitis patients has not et been fully determined, primarily due to the slow development of clinical symptoms associated with hepatitis viruses. Therefore, addressing the issue of hepatitis has become a pressing concern for us [1, 2, 3, 6, 7, 8, 9, 10].

Research objective. To determine the incidence of chronic viral hepatitis among the population based on etiological factors, using Jomboy district of the Samarkand region as a case study.

Research methods and materials. Between 2019 and 2023, 174 patients diagnosed with chronic viral hepatitis (CVH), who were permanent residents of Jomboy district and sought outpatient care at the Hepatology Department of the Samarkand Regional Infectious Diseases Clinical Hospital, were monitored.The following laboratory tests were conducted: complete blood count, biochemical blood analysis, and detection of specific antigens and antibodies for hepatitis B, C, and D viruses using the enzyme-linked immunosorbent assay (ELISA) method. Additionally, the polymerase chain reaction (PCR) technique was employed to confirm the presence of the virus. To assess the degree of liver fibrosis, a non-invasive elastometry procedure was performed using a FibroScan device.Furthermore, a survey method was applied to gather information on the etiological factors of the disease by interviewing patients and their close relatives. The collected data were analyzed using comparative analysis methods.

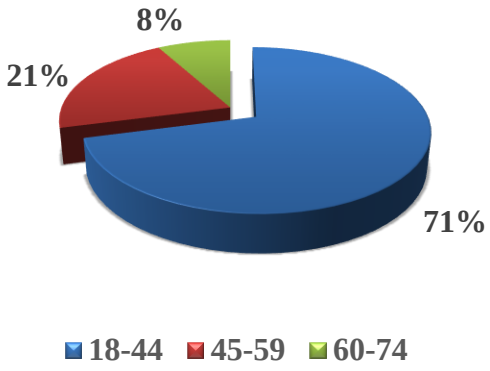
Research results. Currently, the incidence of chronic hepatitis is increasing ear by ear. Hepatitis B and C viruses are the primary etiological factors contributing to this trend. Analysis of patients from Jomboy district who sought care at the Hepatology Center of the Samarkand Regional Infectious Diseases Clinical Hospital revealed the following clinical symptoms: general weakness and fatigue (90%), pain and a feeling of heaviness under the right rib cage (40%).Objective examination findings indicated no signs of jaundice on the skin or mucous membranes of most patients; however, scleral jaundice was observed in 19% of cases. No other pathological changes were detected in other bodily systems.Laboratory and instrumental diag-

nostic results confirmed the widespread prevalence of chronic viral hepatitis among patients from Jomboy district. Based on etiological factors, 124 patients were diagnosed with chronic hepatitis B, while 50 patients were diagnosed with chronic hepatitis C.Gender distribution analysis among patients with chronic hepatitis B revealed that 27% were male and 73% were female (picture 1).



Picture 1. Gender Distribution Of 124 Patients Diagnosed With Chronic Viral Hepatitis B From Jomboy District.

According to the research findings, the age distribution of patients was determined as follows:71% of the patients were in the 18–44 age group, representing the majority of the total cases.21% of the patients were between 45–59 ears old.8% of the patients were in the 60–74 age group.These results provide insights into age-related epidemiological patterns and are essential for a deeper understanding of the demographic distribution of chronic viral hepatitis. This information can help inform targeted prevention and intervention strategies based on age groups (picture 2).

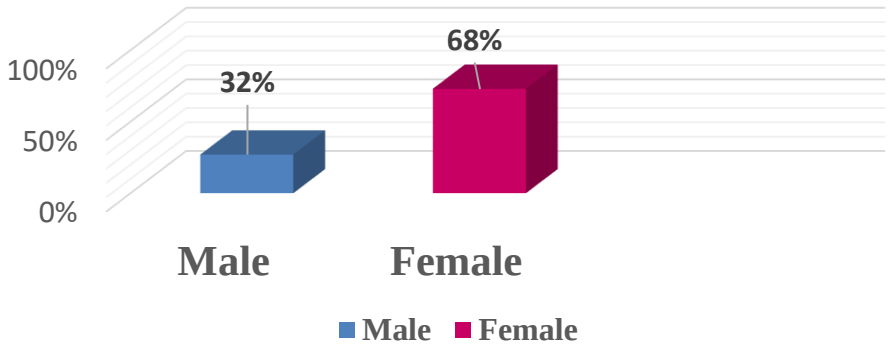


Picture 2. Age Distribution Of 124 Patients Diagnosed With Chronic Viral Hepatitis B From Jomboy District.

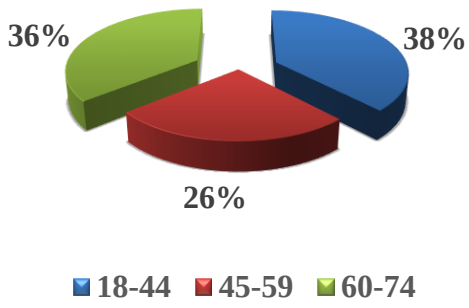
Among the 50 patients diagnosed with chronic viral hepatitis C (CVH C), the gender distribution was as follows: 16 patients (32%) were male, and 34 patients (68%) were female. This data serves as an important epidemiological basis for identifying the distribution characteristics of the disease across gender groups.

According to the research findings, the age distribution of patients diagnosed with chronic viral hepatitis C (CVH C) was as follows: 19 patients (38%) were between 18–44 ears old, 13 patients (26%) were between 45–59 ears old, and 18 patients (36%) were between 60–74 ears old. These indicators are of key importance for determining the disease's distribution patterns

across age groups and serve as a fundamental basis for epidemiological analysis (picture 4).



Picture 3. Gender Distribution Of 50 Patients Diagnosed With Chronic Viral Hepatitis C From Jomboy District.



Picture 4. Age Distribution of 50 Patients Diagnosed with Chronic Viral Hepatitis C from Jomboy District.

The results of the study conducted in Jomboy district of Samarkand region revealed a high prevalence of chronic viral hepatitis (types B and C) among patients. A comparative analysis showed that both chronic viral hepatitis B (CVH B) and chronic viral hepatitis C (CVH C) have significant rates of occurrence. Additionally, the likelihood of liver cirrhosis development was found to be considerably higher among patients with CVH C. These findings underscore the importance of preventive measures in addressing the regional spread of viral hepatitis and mitigating its severe consequences.Currently, the spread of chronic viral hepatitis is particularly high among young people, making this issue increasingly urgent. The study results highlight the need to enhance medical awareness of viral hepatitis and implement preventive measures for individuals aged 18–44, as this age group represents the most affected population. Therefore, effective interventions—such as preventive awareness campaigns, public health programs, and regular medical screenings—are essential for tackling this growing health concern.

Results. The recovery of sensorimotor function following an ischemic stroke is facilitated by bFGF-Chitosan gel.By limiting focal infarction to the right forelimb representation of the sensorimotor cortex, photothrombosis created the cortical ischemia model [12]. By day seven after the stroke, the majority of the arteries and neurons [2] in the stroke cavity had broken down and created a stable stroke cavity. Contrary to the previous studies [6, 7], the microglia-mediated inflammatory response and the astrocyte-formed glia scar had not yet peaked, although the quantity of proliferating neuroblasts in the SVZ peaked. Consequently, the best intervention was determined to be on day seven following a stroke. On day 14 after the stroke, the implantation of bFGF-Chitosan gel markedly enhanced the expression of bFGF in the stroke cavity and dispersed bFGF within 300μm of the infarct.

On day 60 post-ischemic stroke, motor evoked potentials (MEPs) were recorded in order

to evaluate the changes in motor conduction function from the motor cortex to the target muscle of the contralateral forelimb under various interventions.

According to earlier research, neurogenesis and angiogenesis are interdependent mechanisms that improve neurological functional recovery following an ischemic stroke [8]. BrdU was injected intraperitoneally for five days in a row following photothrombotic surgery and chitosan gel implantation, respectively, to examine the degree of tissue neovascularization under various procedures. In order to identify proliferating endothelial cells on day 63 post-stroke, we produced coronal brain slices and used BrdU/GluT1 (a marker for vascular endothelial cells) immunofluorescence labeling.

We evaluated blood flow in and around the stroke cavity on day 60 post-stroke using laser speckle imaging to determine whether neovascularization aids in blood flow restoration (Fig. 2E). Blood flow in the stroke cavity was reduced by the stroke to roughly 39% of the sham group. In the chitosan gel-only group, blood flow dropped to roughly 61% of the sham group. In contrast, mice who received implantation of bFGF-Chitosan gel showed a considerable increase in blood flow to around 85% of the sham group. Our results generally confirmed that bFGF-chitosan gel stimulated revascularization, angiogenesis, and the restoration of the cerebral blood flow supply within and surrounding the stroke cavity.

Conclusion. According to the current study, bFGF-Chitosan gel fills the stroke cavity like "brain glue" and helps rodents recover their sensorimotor function following a cortical ischemic stroke. With innovative tactics focusing on three areas, these benefit mechanisms might be achievable: In the stroke cavity, bFGF-Chitosan gel encourages angiogenesis, revascularization, and the restoration of cerebral blood flow. SVZ-derived NPCs are guided to migrate toward the stroke cavity and develop into mature neurons with a variety of phenotypes by bFGF-Chitosan gel, which also stimulates endogenous neurogenesis. bFGF-Chitosan gel rebuilds developing brain networks and promotes synaptogenesis. Innovative concepts and approaches for the clinical management of ischemic stroke are made possible by our research.

Used literature:

1. Moretti, F. Ferrari, R.F. Villa, Neuroprotection for ischaemic stroke: current status and challenges, Pharmacol. Ther. 146 (2015) 23–34.
2. B.C.V. Campbell, D.A. De Silva, M.R. Macleod, et al., Ischaemic stroke, Nat. Rev. Dis. Prim. 5 (1) (2019) 70.
3. D.D. Ojeda-Herna´ndez, A.A. Canales-Aguirre, J. Matias-Guiu, et al., Potential of chitosan and its derivatives for biomedical applications in the central nervous system, Front. Bioeng. Biotechnol. 8 (2020) 389.
4. E.M. Purvis, J.C. O'donnell, H.I. Chen, et al., Tissue engineering and biomaterial strategies to elicit endogenous neuronal replacement in the brain, Front. Neurol. 11 (2020) 344
5. L. Tang, Y. Yin, H. Liu, et al., Blood-brain barrier-penetrating and lesion-targeting nanoplatforms inspired by the pathophysiological features for synergistic ischemic stroke therapy, Adv. Mater. 36 (21) (2024) e2312897.
6. Lindvall, Z. Kokaia, Neurogenesis following stroke affecting the adult brain, Cold Spring Harbor Perspect. Biol. 7 (11) (2015).

7. S. Gnavi, C. Barwig, T. Freier, et al., The use of chitosan-based scaffolds to enhance regeneration in the nervous system, Int. Rev. Neurobiol. 109 (2013) 1–62. (2022) 805–817.
8. Y. Jiang, Z. Liu, Y. Liao, et al., Ischemic stroke: from pathological mechanisms to neuroprotective strategies, Front. Neurol. 13 (2022) 1013083.
9. Y. Du, Y. Huo, Q. Yang, et al., Ultrasmall iron-gallic acid coordination polymer nanodots with antioxidative neuroprotection for PET/MR imaging-guided ischemia stroke therapy, Explorations 3 (1) (2023) 20220041.
10. Y. Zhou, Y. Su, S. Li, et al., Molecular landscapes of human hippocampal immature neurons across lifespan, Nature 607 (7919) (2022) 527–533.
11. Y. Kim, Z. Zharkinbekov, K. Raziyeva, et al., Chitosan-based biomaterials for tissue regeneration, Pharmaceutics 15 (3) (2023).
12. W. Wang, M. Wang, M. Yang, et al., Transcriptome dynamics of hippocampal neurogenesis in macaques across the lifespan and aged humans, Cell Res. 32 (8) (2022) 729–743.
13. Z.Z. Hao, J.R. Wei, D. Xiao, et al., Single-cell transcriptomics of adult macaque hippocampus reveals neural precursor cell populations, Nat. Neurosci..

UO'K: 616.089

BOLALARDA O'TKIR GEPATIT SINDROMI RIVOJLANISHIDA KOKSAKI A-12 VIRUSINING AHAMIYATI

Yusupov M.I.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Quyida keltirilgan maqolada viruslarning shikastlanishida faqatgina maxsus gepatit viruslari emas, balki enteroviruslar oilasiga mansub Koksaki virusining ham jigarni zararlashi haqida ma'lumotlar keltirilgan. Tadqiqot uchun "virusli gepatit" tashxisi bilan yotqizilgan 2 yoshdan 14 yoshgacha bo'lgan 60 nafar bemor bolalar tanlab olingan. Bemorlarga tashxis klinik kuzatuvlar va laborator ma'lumotlar asosida qo'yilgan. Tadqiqotda 60 nafar virusli gepatit bilan kasallangan bemorlarning juft zardoblari o'rganildi, ulardan 28 nafari 2020-yil dekabr - 2022-yil yanvar oylarida, 32 nafari esa 2022-yil oktyabr - 2024-yil noyabr oylarida tekshirildi

Kalit so'zlar: virus, shtamm, antitela, complement, jigar, bolalar, sariqlik, og'riq, biokimyoviy qon tahlili

THE ROLE OF COXSACKIE A-12 VIRUSES IN THE DEVELOPMENT OF ACUTE HEPATITIS SYNDROME IN CHILDREN

Yusupov M.I.
Samarkand state medical university

Abstract

The article below presents data indicating that in viral lesions, not only specific hepatitis viruses but also Coxsackie viruses, belonging to the enterovirus family, can affect the liver. For the study, 60 sick children aged 2 to 14 years who were hospitalized with a diagnosis of "viral hepatitis" were selected. The diagnosis was based on clinical observations and laboratory data. The study examined paired serum samples from 60 patients with viral hepatitis, with 28 patients examined in December 2020 - January 2022 and 32 in October 2022 - November 2024.

Key words: virus, strain, antibody, complement, liver, children, jaundice, pain, biochemical blood test

О РОЛИ ВИРУСОВ КОКСАКИ А-12 В ЗАБОЛЕВАНИИ С СИНДРОМОМ ОСТРОГО ГЕПАТИТА У ДЕТЕЙ

Юсупов М.И.
Самаркандский государственный медицинский университет

Аннотация

В представленной ниже статье приводятся данные о том, что при вирусных поражениях не только специфические вирусы гепатита, но и вирусы Коксаки, относящиеся к семейству энтеровирусов, также могут поражать печень. Для исследования были отобраны 60 больных детей в возрасте от 2 до 14 лет, госпитализированных с диагнозом «вирусный гепатит». Диагноз был поставлен на основании клинических наблюдений и лабораторных данных. В исследовании были изучены парные сыворотки от 60 больных вирусным гепатитом, причем 28 больных были обследованы в декабре 2020 - январе 2022 г., а 32 в октябре 2022 г. - ноябре 2024 г.

Ключевые слова: вирус, штамм, антитела, комлемент, печень, дети, желтуха, боль, биохимический анализ крови

Dolzarbligi. So'nggi yillarda tadqiqotchilarning e'tibori turli xil enteroviruslarning jigar shikastlanishlarida tutgan o'rni va klinik jihatdan virusli gepatitga o'xshash holatlarni o'rganishga tobora ko'proq qaratilmoqda. Insonda gepatit kasalligini rivojlanishida virusli gepatit quzg'atuvchilaridan tashqari, boshqa turdagi viruslar, jumladan, adenoviruslar, Rubart kasalligini

keltirib chiqaruvchi virus, Koksaki va ECHO enteroviruslari, sitomegaloviruslar, sariq isitma va boshqalar sabab bo'lishi mumkin [1].

Enteroviruslarning yana bir o'ziga xos xususiyati shundaki, bir turga kiruvchi enteroviruslar klinik belgilari har xil bo'lgan kasalliklarni keltirib chiqarishi mumkin. Masalan, ECHO viruslari jigarni shikastlantirshdan tashqari [2], falajlik (mushaklarning yengil zararlanishidan tortib, to'liq zaiflik holatlarigacha), respirator infeksiyalar, meningitning serozli shakllarini rivojlantiradi[5,6] va aksincha, bir turdagi kasallik avj olganda, turli xil enterovirus shtammlarini ajratib olish mumkin. Masalan, 2004 yilda Novosibirsk shahrida serozli meningit avj olgan paytda ECHO30, ECHO31, ECHO69, ECHO70, Koksaki viruslari ajratib olingan [3]. Jigar viruslar bilan zararlanganda uning kattalashishi, sariqlik paydo bo'lishi, jigardagi funksional sinamalarining buzilishi jigarning patologik jarayonga jalb qilinganligidan dalolat beradi [4]. Ko'pgina hollarda, enterovirus infeksiyasida jigar tomonidan kichik o'zgarishlar kuzatiladi, ammo ba'zi hollarda ular kasallikning klinik ko'rinishida asosiy sindrom xususiyatiga ega bo'ladi [2].

Ilmiy maqsad: Samarqand shahridagi yuqumli kasalliklar shifoxonasiga "virusli gepatit" tashxisi bilan yotqizilgan 2 yoshdan 14 yoshgacha bo'lgan bolalarda A guruhiga mansub Koksaki viruslarini komplement bog'lovchi antitelalar yordamida miqdorini o'rganish.

Tekshiruv materiallari va usullar: Tadqiqotga 60 nafar bemor bolalar olingan bo'lib, barchasiga "virusli gepatit" tashxisi qo'yilgan. Tashxis klinik kuzatuvlar va laborator ma'lumotlar asosida qo'yilgan. Kasallikning subklinik shakli 1 nafar bemorda (1,7%), sariqsiz shakli 3 nafarida (5%), sariqli shakli 56 nafarida (93,3%) kuzatilgan. Kasallikning yengil shakli 4 kishida (6,8%), o'rta og'ir shakli 54 nafarida (91,5%), og'ir shakli 1 nafarida (1,7%) aniqlangan. Surunkali gepatit 1 nafar bemorda (1,7%) qayd etilgan.

Tadqiqot davomida barcha bemorlarda enteroviruslarni aniqlash uchun serologic shaklda tekshiruv o'tkazildi. Qon ikki marta, 12-14 kun oralig'ida olindi. Qon zardobi umumiy qabul qilingan usulda tekshirildi. Reaksiya +40C haroratda o'tkazildi. Komplement bog'lash reaksiyasida (KBR) A guruhidagi Koksaki viruslarining antigenlari bilan - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17 va 18 turlaridan 60 nafar virusli gepatit bilan kasallangan bemorlarning juft zardoblari o'rganildi, ulardan 28 nafari 2020-yil dekabr - 2022-yil yanvar oylarida, 32 nafari esa 2022-yil oktyabr - 2024-yil noyabr oylarida tekshirildi.

Tekshiruv natijalari: Tadqiqot natijasida 28 nafar bemorning juft qon zardoblariga nisbatan yuqorida ko'rsatilgan Koksaki viruslari antigenlariga nisbatan komplement bog'lovchi antitelalarning titrida hech qanday usish holati kuzatilmadi, faqatgina ba'zi virus turlariga nisbatan past titrlarda (1:8-1:16) aniqlandi. Komplement bog'lovchi antitelalarni aniqlash chastotasi (tekshirilganlarning umumiy soniga nisbatan foizlarda) Koksaki A 1 virusiga nisbatan 64,3%, A2-28,6%, A4-35,7%, A5-14,3%, A6-7,1%, A7-27,8%, A9-44,5%, A10-10,7%, A12-7,1%, A14-7,1% ni tashkil qilgan bo'lsa, A3, A8, A15, A16, A17, A18 - 3,6% ni tashkil qildi.

Virusli gepatit bilan kasallangan 30 nafar bemorning shu davrida bir marta olingan 30 ta zardobdan komplement bog'lovchi antitelalar xuddi shu titrlarda Koksaki A1 virusiga 36,7%, A2 - 10%, A4 - 20%, A5 - 6,7%, A7 - 10,7%, A9 - 46,7%, A10 - 10%, A8, A14, A15, A16, A17, A18 - 3,3% ni trashkil qildi. A3, A6, A12 Koksaki viruslariga nisbatan antitelalar aniqlanmadi.

Keltirilgan ma'lumotlardan ko'rinib turibdiki, ikkala guruhdagi bemorlarni tekshirish natijalari mos keladi. Shunday qilib, 2022-2024 yillar qish davrida Samarqand shahrining ko'plab bolalarida Koksaki A1, A2, A7 va A9 viruslariga antitelalar aniqlangan, bu esa ushbu turdagi enteroviruslarning aholi orasida keng tarqalganligidan dalolat beradi. Juft zardoblarda antitelalar titrida o'sish bo'lmaganligi ushbu turdagi viruslarning kasallikning asosiy sababi emasligini ko'r-

satadi. 2022-yil oktyabr - 2024-yil noyabr oylarida biz A guruhiga tegishli Koksaki viruslarining 7, 9, 10, 12, 14, 16, 17, 18- turlarining antigenlari bilan KBR yordamida 32 nafar virusli gepatitga chalingan bolalarning juft zardoblarini o'rgandik. Tadqiqotlar natijasida 7 nafar bemorda Koksaki A 12 virusiga komplement bog'lovchi antitelalarning diagnostik (4 barobar va undan ortiq) titri 1:18-1:16 dan 1:64-1:128 gacha ko'tarilishi aniqlandi. Ahamiyatli tomoni shundaki, Koksaki A12 virusiga antitelalar titrining ko'tarilishi aniqlangan barcha 7 nafar bemor bolalar 3-4 yoshni tashkil qildi. Barcha bemorlarda kasallikning klinik kechishi o'rta og'ir shaklda va dispeptik sindrom bilan birga kechgan. Qolgan 25 nafar bemorning zardobida ushbu turdagi virusga qarshi antitelalar aniqlanmadi.

A guruhidagi Koksaki virusining boshqa turlariga nisbatan komplement bog'lovchi antitelalarning miqdorini o'rganish shuni ko'rsatdiki, 5 nafar bemorda Koksaki A7 virusiga nisbatan 1:8-1:16, A9 virusiga nisbatan 5 nafar bemorda 1:8, A10 virusiga nisbatan 1 nafar bemorda 1:16, A14 virusiga nisbatan 4 nafar bemorda 1:8-1:16, A15 nafar bemorda 1 nafar bemorda 1:8, A16 virusiga nisbatan 5 nafar bemorda 1:8-1:16, A17 virusiga nisbatan 2 nafar bemorda 1:8-1:16 titrlar aniqlandi. Dinamikada tekshirilganda, antitelalar titrining ko'tarilishi kuzatilmadi. Tekshirilgan zardoblarda Koksaki A18 viruslariga qarshi antitelalar topilmadi.

Nazorat uchun 2023-yil oktyabr-noyabr oylarida Samarqand shahrida 2 oydan 14 yoshgacha bo'lgan 52 nafar sog'lom bola qon zardobi tekshirilganda Koksaki A12 virusiga qarshi komplement bog'lovchi antitelalar aniqlanmadi, faqat 1 nafar bolada antitelalarning past (1:8) titri qayd etildi.

Enterovirus infeksiyasining laborator diagnostikasi odatda retrospektiv bo'lganligi sababli, virusli gepatit bilan differensial diagnostikani ikkala kasallikning klinik ko'rinishidagi xususiyatlarini solishtirish orqali o'tkazish kerak. Shunday qilib, Koksaki A12 virusiga komplement bog'lovchi antitelalarning diagnostik titri ko'tarilishi kuzatilgan barcha bemorlarda o'tkir gepatitning klinik belgilari kuzatildi, bunda barcha hollarda teri va skleraning sarg'ayishi, jigarning kattalashishi, to'q rangli siydik, rangsiz najas qayd etildi. Sariqlikdan oldingi davrning variantidan qat'i nazar, og'riq sindromi ustunlik qildi. Barcha hollarda kasallikning o'tkir boshlanishi kuzatildi, bunda isitma KBR natijalari salbiy bo'lgan bemorlarga qaraganda uzoqroq davom etdi.

KBR natijalari ijobiy bo'lgan bemorlarda sariqlik davri asosan skleralar va terining subikterikligi, ba'zan faqat skleralarning subikterikligi bilan tavsiflandi. Ijobiy KBR bilan og'rigan bemorlarda sezilarli darajada tez-tez teri qichishi, ko'ngil aynishi kuzatildi, barcha hollarda siydik to'q rangda bo'ldi. Rangsiz najas ko'proq enterovirus infeksiyasi bilan kasallangan bemorlarda kuzatildi. Shunday qilib, bizning kuzatuvlarimiz shuni ko'rsatdiki, enterovirus infeksiyasiga shubha qilingan bemorlarda sariqlik davrida kamroq ifodalangan sariqlik va dispeptik belgilar bilan tavsiflanadi.

Jigarg funksional holatining buzilishida quyidagilar aniqlandi: qon zardobida umumiy bilirubin miqdori (1,8 dan 3,7 mg% gacha) bevosita bilirubun hisobiga (1,0 dan 2,2 mg%) oshdi, Aldolaza faolligi 8 dan 38 gacha, AST - 184 dan 320 gacha, ALT - 140 dan 310 gacha o'zgarishlarni qayd etdi.

Xulosa. Samarqand sharoitida jigarni zararlovchi viruslar qatoriga, Koksaki A12 enteroviruslarini ham kiritish mumkin. Ushbu infeksiya bilan zararlanganda jigarning shikastlanishi, uning kattalashishi, sariqlik va faoliyatining buzilishi kabi belgilar kuzatildi. Virusli gepatit va jigarning boshqa enterovirus turlari bilan zararlanishini farqlashda kasallikning o'tkir boshlanishi isitma va qorin og'rig'i bilan kechishini hisobga olish kerak. Olingan natijalar virusologik, serologik va biokimyoviy usullarni qo'llagan holda ushbu yo'nalishda kompleks tadqiqotlar o'tkazish istiqbolli

ekanligidan dalolat beradi va ularni yanada kengaytirishni talab qiladi.

Foydalanilgan adabiyotlar:

1. Анохин, В. А., Сабитова, А. М., Кравченко, И. Э., & Мартынова, Т. М. (2014). Энтеровирусные инфекции: современные особенности. Практическая медицина, (9 (85)), 52-59.
2. Домашенко, О. Н., & Гридасов, В. А. (2018). Энтеровирусная инфекция: новая классификация вирусов, клинические формы, перспективы исследования. Университетская клиника, (2 (27)), 75-81.
3. Нурмухамедова, А. А., & Утаралина, А. Р. (2021). АНАЛИЗ МНОГОЛЕТНЕЙ ДИНАМИКИ ЗАБОЛЕВАЕМОСТИ ЭНТЕРОВИРУСНОЙ ИНФЕКЦИЕЙ В Г. ОРСКЕ ЗА 2013-2019 ГГ. In МОЛОДОЙ УЧЁНЫЙ (pp. 293-296).
4. Черепанова, Д. В., & Блинова, Е. И. ЭНТЕРОВИРУСЫ, ВЫЗЫВАЮЩИЕ ГЕПАТИТЫ У ЛЮДЕЙ. технический университет, 2012, 142.
5. Bopegamage, S. (2012). ENTEROVIRUS INFECTIONS IN NEONATES AND CHILDREN. РЕДАКЦІЙНА КОЛЕГІЯ, 2, 1e6.
6. Usacheva, E. V., Ryabokon, E. V., Kamyshny, A. M., Zadiraka, D. A., Pakholchuk, T. M., & Firulina, O. M. (2017). Энтеровирусные инфекции: современные клинико-эпидемиологические особенности. Zaporozhye medical journal, (2).

UDC: 617-089.844:616.352-007.271:613.95

LASER THERAPY FOR HEMORRHOIDS

Zokhidova S.H.
Samarkand State Medical University

Abstract

Laser therapy is an innovative method of treating hemorrhoids that combines high efficiency and minimal trauma. The article discusses the basic principles of laser treatment of hemorrhoids, its indications and advantages compared to traditional surgical methods.

Key words: laser therapy, hemorrhoids, minimally invasive treatment, recovery, surgery, bleeding, inflammation

BAVOSILNI LAZER BILAN DAVOLASH

Zohidova S.H.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Lazer terapiyasi gemorroyni davolashning innovatsion usuli bo'lib, yuqori samaradorlik va minimal travmani birlashtiradi. Maqolada gemorroyni lazer bilan davolashning asosiy tamoyillari, uning ko'rsatkichlari va an'anaviy jarrohlik usullariga nisbatan afzalliklari ko'rib chiqiladi.

Kalit so'zlar: lazer terapiyasi, gemorroy, minimal invaziv davolash, tiklanish, jarrohlik, qon ketish, yallig'lanish

ЛАЗЕРНОЕ ЛЕЧЕНИЕ ГЕМОРРОЯ

Зохидова С.Х.
Самаркандский государственный медицинский университет

Аннотация

Лазерная терапия — инновационный метод лечения геморроя, сочетающий высокую эффективность и минимальную травматичность. В статье рассматриваются основные принципы лазерного лечения геморроя, его показания и преимущества по сравнению с традиционными хирургическими методами.

Ключевые слова: лазеротерапия, геморрой, малоинвазивное лечение, восстановление, операция, кровотечение

Introduction. The relevance of the problem of hemorrhoids Hemorrhoids are one of the most common diseases in proctology, affecting about 40-50% of the adult population. This disease is characterized by inflammation, enlargement and expansion of veins in the anal canal. Hemorrhoids can cause pain, bleeding, itching and discomfort, which significantly reduces the patient's quality of life. There are various ways to treat hemorrhoids, from conservative therapy to surgery. However, despite the variety of methods, many patients experience relapses of the disease or unpleasant side effects after traditional surgeries. In recent years, laser therapy has become an effective and safe method of treating hemorrhoids, allowing you to minimize these risks.

Materials and Methods. Overview of Traditional Treatments. Traditional treatments for hemorrhoids include conservative methods (such as medications, dietary and lifestyle changes) and more invasive methods such as banding, sclerotherapy and surgical removal of hemorrhoids. These methods, although effective, can be painful, require a long recovery and sometimes lead to complications such as infections or relapses.

Objectives and goals of the article. The purpose of this article is to review laser therapy as an effective method of treating hemorrhoids, study its advantages, methods, indications and contraindications, and compare laser treatment with traditional surgical methods lead to com-

plications such as infections or relapses.

Types and symptoms of hemorrhoids, their diagnosis and prevention: Hemorrhoids are a disease in which the veins in the anus and rectum become enlarged and inflamed. This may be due to a disruption in venous outflow, resulting in the formation of hemorrhoidal nodes (veins that expand and become swollen). These nodes can be both internal and external.

Types of hemorrhoids:

Internal hemorrhoids are nodes located inside the rectum, which may not be visible, but cause pain, bleeding and discomfort. External hemorrhoids are nodes located around the anus that may be visible and cause pain, itching and bleeding.

Mixed hemorrhoids are a combination of internal and external hemorrhoids.

Results and discussion. Causes and risk factors: Poor diet: Lack of fiber in the diet, which leads to constipation, is one of the main causes of hemorrhoids. Sedentary lifestyle: Sitting or standing for long periods of time increases pressure on the veins in the anal area. Pregnancy: During pregnancy, the enlarged uterus can put pressure on the veins, which can contribute to the development of hemorrhoids. Frequent, hard bowel movements: Constipation or chronic diarrhea can increase pressure on the anal area, which increases the risk of hemorrhoids. Heredity: People whose family members suffer from hemorrhoids are more likely to develop the disease. Age: With age, the elasticity of the blood vessels weakens, which can contribute to the development of the disease.

The main symptoms of hemorrhoids may vary depending on the stage of the disease: Pain and discomfort in the anus, especially when sitting or after defecation. Bleeding: Most often, it occurs during defecation and can be either minor or more profuse. Itching and burning around the anus. Exiting nodes: In the later stages of the disease, external nodes may appear, which can be painful, especially if they are pinched. A feeling of incomplete bowel movement. If the symptoms of hemorrhoids are ignored, the disease can progress, leading to more serious consequences, such as thrombosis of hemorrhoids and severe bleeding.

To make a diagnosis, as a rule, a visit to a proctologist is sufficient, who will conduct an examination and, if necessary, prescribe additional tests:

1. Rectal examination - to detect external nodes.
2. Anoscopy - the use of a special device to examine the inside of the rectum intestines.
3. Rectomanoscopy is a deeper examination of the rectum using an endoscope.
4. Colonoscopy - if other intestinal diseases are suspected.

Prevention of hemorrhoids includes the following measures: Eating a healthy diet with a high fiber content. Maintaining a normal weight to reduce pressure on the veins. Regular exercise to improve blood circulation in the pelvic area. Avoiding prolonged sitting or standing. Correcting stool: avoid constipation and, if possible,

Avoid prolonged straining during defecation.

Basics of Laser Therapy for Hemorrhoids: Laser therapy is a treatment method that uses laser light to affect tissue. The laser beam has a high intensity and energy concentration, which allows it to precisely affect the affected tissue, minimizing damage to healthy structures. In proctology, laser is used to treat hemorrhoids by reducing hemorrhoids, coagulating tissue and improving blood circulation.

The laser beam acts on the hemorrhoidal nodes, causing them to shrink and “seal” the blood vessels. This is achieved through thermal action, which leads to coagulation (folding) of

the tissue and stopping bleeding. The laser also promotes tissue healing, accelerates regeneration and reduces inflammation.

Types of laser methods and comparison of methods by efficiency and applicability:

Ø Laser coagulation is a process in which a laser beam causes thermal coagulation (coagulation) of hemorrhoidal tissue. This method effectively reduces the size of the nodes and stops their blood supply.

Ø Laser ablation (removal of nodes) is a method in which a laser beam evaporates the tissue of hemorrhoidal nodes. This helps not only to remove the node, but also speeds up the healing process, reducing the risk of relapse.

Ø Laser vaporization is a method in which a laser is used to evaporate the fluid in the tissues of the node, which leads to its reduction or complete removal. This is especially effective for large and complex nodes. Laser ablation and vaporization are effective for treating larger and more complex nodes, while coagulation is used in the early stages of the disease. All three methods have similar advantages - minimal trauma and rapid rehabilitation.

Indications and contraindications for laser treatment, advantages of laser therapy: Laser therapy is used to treat hemorrhoids at different stages of the disease. The main indications include: Internal hemorrhoids of 1-2 degrees. External hemorrhoids with small nodes. Hemorrhoids accompanied by thrombosis. Relapses of the disease after conservative treatment. Laser treatment may be contraindicated in: Acute inflammatory diseases in the rectum. Oncological diseases. Blood clotting disorders.

Thrombophlebitis and other diseases of the vascular system.

The laser beam affects only the affected tissues without damaging healthy ones. The procedures are performed using local anesthesia and minimize pain. Patients can return to everyday life within a few days after the procedure. Due to the precise impact and minimal trauma, the risk of postoperative complications and relapses is minimized.

The process of laser treatment, postoperative period and rehabilitation: Before the procedure, the patient undergoes a comprehensive examination to exclude contraindications and assess the condition of the disease. The procedure includes local anesthesia, after which the laser beam is directed to the affected nodes. The procedure takes from 15 to 40 minutes, depending on the complexity of the case. Local anesthesia is used to ensure patient comfort, which helps to avoid pain during the procedure. The procedure is performed on an outpatient basis and requires minimal recovery time, allowing the patient to return home on the same day.

Following the procedure, it is recommended to follow a high-fiber diet, avoid constipation and increased physical activity. After laser treatment, patients may experience mild redness, swelling, or discomfort that usually goes away within a few days. To prevent recurrence, it is important to follow your doctor's recommendations, maintain an active lifestyle, and eat a healthy diet. Side effects and possible complications: After the procedure, there may be mild pain, minor swelling and redness, which will go away on their own. In rare cases, infections or thrombosis may occur, but this can be prevented by strictly following the recommendations for postoperative care.

Comparison of laser therapy with traditional methods: Laser therapy has clear advantages in terms of minimal trauma, quick recovery and lower risk of complications compared to traditional methods such as hemorrhoidectomy. However, laser may not be effective for very large nodes or in advanced stages of the disease.

Prospects: Modern research in laser technology promises further improvements in hem-

orrhoid treatment methods, increasing their effectiveness and safety. Possibilities of combining laser therapy with other treatment methods and the development of new laser devices that will allow the treatment of more complex cases.

Conclusion. Laser therapy is an effective, safe and minimally invasive method of treating hemorrhoids, which ensures rapid recovery and minimizes the risk of complications.

Used literature:

1. I.V. Popov, A.S. Kuanyshbekov, D.A. Popov. DOI 10.53065/kaznmu.2021.63.83z https://cyberleninka.ru/article/n/vnedrenie-metodiki-lhp-lazernoe-udalenie-gemorrhoidalnyh-uzlov
2. 2. D. V. Vyshegorodtsev, I. S. Bogormistrov, A. M. Battalova, I. A. Mukhin: Use of laser in surgical treatment of hemorrhoids. https://doi.org/10.33878/2073-7556-2021-20-4-92-101
3. 3.Frolov S.A., Vyshegorodtsev D.V., Kuzminov A.M., Trubacheva Yu.L., Korolik V.Yu., Bogormistrov I.S., Mukhin I.A., Ryndin A.N., Anarbaeva A.A. Ilaser Submucous Destruction in the Treatment of Hemorrhoids. Russian Journal of Gastroenterology, Hepatology, Coloproctology. 2023;33(2):70-78. https://doi.org/10.22416/1382-4376-2023-33-2-70-78
4. 4. С. В. Шахрай, М. Ю. Гаин, В. Л. Денисенко Лазерная субмукозная деструкция в лечении геморроя . Лазерная субмукозная деструкция в лечении геморроя. https://doi.org/10.22416/1382-4376-2023-33-2-70-78

UO'K: 616.089

METABOLIK SINDROMLI BEMORLARGA STOMATOLOGIK YORDAM KO'RSATISHNI KLINIK VA BIOKIMYOVIY ASOSLASH

Abduvakilov J.U., Zubaydullayeva M.A.
Samarqand davlat tibbiyot universiteti

Annotatsiya

Metabolik sindrom bilan og'rigan bemorlarda og'iz bo'shlig'i holatini o'rganish natijasida og'iz to'qimalari kasalliklarining keng tarqalganligi va buning oqibatida stomatologik yordamga bo'lgan sezilarli ehtiyoj aniqlandi [1]. So'nggi o'n yilliklarda stomatologik patologiyaning patogenezi va patogen bakteriyalarning roli haqida ko'plab yangi ma'lumotlar olindi. Bu esa tashxislash va davolashning yangi usullarini yaratilishiga olib keldi. Ushbu ma'lumotlar tizimli omillar va kasallikning og'irligi o'rtasida bog'liqlik mavjudligini ko'rsatmoqda.

Kalit so'zlar: klinik-biokimyoviy asoslash, stomatologik yordam, metabolik sindromli bemorlar, parodont kasalligi, og'iz bo'shlig'i to'qimalari kasalliklarining yuqori tarqalishi

CLINICAL AND BIOCHEMICAL RATIONALE FOR THE PROVISION OF DENTAL CARE TO PATIENTS WITH METABOLIC SYNDROME

Abduvakilov J.U., Zubaydullayeva M.A.
Samarkand state medical university

Abstract

The results of studying the condition of the oral cavity in patients with metabolic syndrome revealed the widespread prevalence of oral tissue diseases and, consequently, a significant need for dental care [1]. In recent decades, numerous new data have been obtained on the pathogenesis of dental pathology and the role of pathogenic bacteria. This led to the creation of new diagnostic and treatment methods. These data indicate a correlation between systemic factors and the severity of the disease.

Keywords: clinical and biochemical justification, dental care, patients with metabolic syndrome, periodontal diseases, high prevalence of oral tissue diseases

КЛИНИКО-БИОХИМИЧЕСКОЕ ОБОСНОВАНИЕ ОКАЗАНИЯ СТОМАТОЛОГИЧЕСКОЙ ПОМОЩИ ПАЦИЕНТАМ С МЕТАБОЛИЧЕСКИМ СИНДРОМОМ

Абдувакилов Дж.У., Зубайдуллаева М.А.
Самаркандский государственный медицинский университет

Аннотация

В представленной ниже статье приводятся данные о том, что при вирусных поражениях не только специфические вирусы гепатита, но и вирусы Коксаки, относящиеся к семейству энтеровирусов, также могут поражать печень. Для исследования были отобраны 60 больных детей в возрасте от 2 до 14 лет, госпитализированных с диагнозом «вирусный гепатит». Диагноз был поставлен на основании клинических наблюдений и лабораторных данных. В исследовании были изучены парные сыворотки от 60 больных вирусным гепатитом, причем 28 больных были обследованы в декабре 2020 - январе 2022 г., а 32 в октябре 2022 г. - ноябре 2024 г.

Ключевые слова: вирус, штамм, антитела, комлемент, печень, дети, желтуха, боль, биохимический анализ крови

Kirish. Muammoning dolzarbligi bugungi kunda stomatologik bemorlarning 30 foizida somatik patologiya kuzatilishi bilan belgilanadi. Zamonaviy stomatologiyaning dolzarb

muammolaridan biri metabolik sindromga xos bo'lgan tizimli buzilishlarning og'iz bo'shlig'i a'zolari va to'qimalariga ta'siridir [2, 3]. Jahon Sog'liqni Saqlash Tashkiloti ma'lumotlariga ko'ra, 33-44 yoshdagi aholi orasida parodont kasalliklarining tarqalishi taxminan 65-98 foizni tashkil etadi. Turli yoshdagi odamlarda parodont holatini o'rganish natijasida 24 yoshdan 44 yoshgacha bo'lgan aholining atigi 4-5 foizida klinik barqarorlik aniqlangan [3, 4].

Tadqiqotning maqsadi. Metabolik kasalliklar bilan og'rigan bemorlarda stomatologik kasalliklarning tarqalishini o'rganish va stomatologik yordamga bo'lgan ehtiyojni aniqlash hamda klinik va biokimyoviy tadqiqotlar asosida terapevtik va profilaktik chora-tadbirlarni taklif qilishdan iborat.

Tadqiqot materiallari va usullari.

Ushbu tadqiqot ishini bajarish uchun qo'llanilgan material va usullar. Asosiy hududiy stomatologiya poliklinikasiga murojaat qilgan 25 yoshdan 60 yoshgacha bo'lgan 120 nafar bemor tekshiriladi, shulardan 20 nafari amaliy sog'lom kishilardan iborat nazorat guruhini tashkil etadi. Asosiy guruhdagi barcha bemorlar davolanish turiga qarab quyidagi guruhlarga bo'linadi:

Tadqiqotda quyidagi usullar qo'llaniladi:

a) klinik va stomatologik usullar

b) klinik va funksional usullar

v) biokimyoviy usullar

g) statistik usullar.

Ushbu maqsadga erishish uchun quyidagi vazifalar belgilanadi:

1. Metabolik sindromli bemorlarning kompleks stomatologik tekshiruvi o'tkazilib, ularga stomatologik yordam ko'rsatish algoritmi ishlab chiqiladi;

2. Metabolik sindromli bemorlarda lipid, uglevod va oqsil almashinuvi buzilishlarining aralash so'lak ajralish tezligi va tarkibiga ta'siri baholanadi.

3. Metabolik sindrom fonida stomatologik bemorlarda gemostaz tizimi holati, qon lipidlari spektri va uglevod almashinuvi ko'rsatkichlariga klinik-laboratoriya bahosi beriladi;

4. Metabolik kasalliklar komponentlarining og'iz bo'shlig'i to'qimalari holati va bemorlardagi aralash so'lak ko'rsatkichlariga ta'siri o'rganiladi.

5. Metabolik kasalliklar bilan og'rigan bemorlarga stomatologik yordam ko'rsatish bo'yicha dalillarga asoslangan tavsiyalar taklif etiladi va amalda sinovdan o'tkaziladi.

MS asosida deyarli shubhasiz insulin qarshiligi yotganligi sababli, davolash ham birinchi navbatda uni bartaraf etishga qaratilishi kerak. Davolashning asosida ham insulin qarshiligini tuzatish, ham giperinsulinemiyani maksimal darajada pasaytirish, bemor tomonidan tegishli turmush tarzini tashkil etish chora-tadbirlari bo'lishi lozim. Ular orasida birinchi o'rinda muntazam ravishda, haftasiga kamida to'rt marta, 40 daqiqadan kam bo'lmagan davomiylikda bajariladigan dozalangan jismoniy yuklama turishi kerak. Bu esa hujayra retseptorlari, ayniqsa mushak hujayralarining insulinga sezgirligini oshirishga yordam beradi [5, 6].

Natijalar va ularni muhokama qilish. Kompleks stomatologik tekshiruv natijasida metabolik kasalliklarga chalingan bemorlarda stomatologik kasalliklarning paydo bo'lish chastotasi ko'rsatiladi. Og'iz bo'shlig'i to'qimalaridagi mavjud patologik o'zgarishlar bemorlar tomonidan ularning holatini yetarlicha baholamaslik va stomatologik davolanishga bo'lgan ehtiyoj fonida rivojlanadi [7, 8].

Tekshiruvdan so'ng bemorlarga stomatologiya klinikasida davolanish taklif qilindi. Ushbu bemorlarning klinikada paydo bo'lishi muayyan qiyinchiliklarni keltirib chiqardi:

* kam motivatsiya

* ijtimoiy ta'minotning past darajasi (moddiy yetishmovchilik)
* uzoq masofalarga harakatlanishning murakkabligi
* hamrohlik qiladigan kishiga ehtiyoj.

Barcha bemorlar tor mutaxassislar bilan kelishilgan holda tekshiruvdan o'tdilar.

Tadqiqot natijalari bemorlar uchun davolash va profilaktika chora-tadbirlarining eng maqbul majmuasini tanlash orqali tish kasalliklarini davolash va oldini olish samaradorligini oshirish imkonini beradi [9,10]. Ish natijalari klinik amaliyotda tish kasalliklarini davolash va oldini olish hamda ularning profilaktikasi va davolash usullarini ishlab chiqishda qo'llaniladi. Ishning asosiy qoidalari ilmiy-amaliy anjumanlar, kongresslar va syezdlarda ma'ruza qilinadi va muhokama etiladi. Materiallar nashr etiladi, ushbu ishning asosiy materiallari magistrlar va klinik ordinatorlar uchun ma'ruzalar kursida foydalaniladi.

Xulosalar. Shunday qilib, profilaktika dasturini belgilovchi bir qator tamoyillar va o'zaro bog'liq holatlarni aniqlagandan so'ng, muayyan dasturni tanlashni hatto bir xil turdagi bolalar stomatologiya muassasalari uchun ham standartlashtirish mumkin emasligini tushunish mumkin. Tish pulpasining reaktivligi sezilarli darajada pasaygan, ko'plab dentikllar va petrifikatsiyalar mavjud bo'lib, bu endodontik davolash natijasini murakkablashtiradi. Surunkali buyrak yetishmovchiligining so'nggi bosqichidagi bemorlarda yumshoq to'qimalarning shikastlanishi uremiya, kamqonlik va kalsiy-fosfor almashinuvining buzilishi fonida rivojlanadigan yallig'lanishning yaqqol belgilarisiz shish va distrofik o'zgarishlar bilan tavsiflanadi. Gemodializ o'tkazish so'lak ajralish tezligini oshiradi, so'lakning ferment va ion tarkibi faoliyatini yaxshilaydi. Saqich chaynash, suv va mikrogidrinning suvli eritmasi bilan og'izni chayish chanqoqlik hissini kamaytiradi. Kislotali eritma bilan og'izni chayish, so'lak ajralishini faolroq rag'batlantirishiga qaramay, so'lakda kalsiy miqdorining oshishiga olib keladi. Bir oy davomida murakkab tish pastalarini qo'llash ambulator gemodializ bilan davolanayotgan surunkali buyrak yetishmovchiligining so'nggi bosqichidagi bemorlarda og'iz bo'shlig'i gigiyenasi va parodont to'qimalari holatining yaxshilanishiga olib keladi.

Foydalanilgan adabiyotlar:

1. Абдувакилов Ж. У., Зубайдуллаева М. А. Стоматологические аспекты симптомов метаболического синдрома //Scientific Journal Of Medical Science And Biology. – 2024. – Т. 2. – №. 2. – С. 113-118.
2. Абдувакилов Ж.У., Ризаев Ж. А. Особенности течения воспалительных заболеваний пародонта при метаболическом синдроме //Вісник проблем біології і медицини. – 2018. – Т. 1. – №. 2 (144). – С. 353-355.
3. Абдувакилов Ж., Ризаев Ж. Биохимические маркеры соединительной ткани у больных хроническим воспалительным пародонтитом на фоне метаболического синдрома //Stomatologiya. – 2018. – Т. 1. – №. 1 (70). – С. 11-14.
4. Олейник О. И., Вусатая Е. В., Попова В. С. Комплексный подход к лечению ранних форм воспалительных заболеваний пародонта // Молодой ученый. – 2015. – № 5(85). – С. 75–78.
5. Романенко И.Г., Крючков Д.Ю. Генерализованный пародонтит и метаболический синдром. Единство патогенетических механизмов развития //Крымский терапевтический журнал.-2011.-№1.-С.60-66.

6. Старикова И. В. Биохимические и иммунологические показатели крови у больных хроническим генерализованным пародонтитом на фоне метаболического синдрома / И. В. Старикова, А. Н. Попова, С. В. Крайнов, Е. М. Чаплиева // Фундаментальные исследования. — 2014. — № 10. — С. 973—977.
7. Сычева Ю.А., Горбачева И.А., Орехова Л.Ю., Григорьева Л. Роль нарушения региональной микроциркуляции и метаболических нарушений в патогенезе гипертонической болезни и воспалительных заболеваний пародонта//Пародонтология.-2014.-№2.-С.32-43.
8. Abduvakilov J. U. et al. ASSESSMENT OF WHETHER PATIENTS WITH METABOLIC SYNDROME NEED ORTHOPEDIC DENTAL CARE //Journal of Modern Educational Achievements. – 2023. – Т. 10. – №. 1. – С. 89-95.
9. Abduvakilov J. U. et al. The state of dental status of patients with metabolic syndrome //Journal of Modern Educational Achievements. – 2023. – Т. 10. – №. 1. – С. 96-103.
10. Abduvakilov J. U. et al. METABOLIC SYNDROME IN DENTAL PRACTICE //Journal of Modern Educational Achievements. – 2023. – Т. 10. – №. 1. – С. 77-88.

Mundarija

STAGES OF ATHEROSCLEROTIC FOCUS DEVELOPMENT AND TYPES OF UNSTABLE PLAQUES – PATHOPHYSIOLOGICAL AND HISTOLOGICAL CHARACTERISTICS Muydinov J. I.	4-7
MODERN CONCEPTS OF THE MECHANISMS OF ATHEROSCLEROSIS DEVELOPMENT Muydinov J.I.	8-11
ATOPIK DERMATITLI BOLALARNING STOMATOLOGIK KO'RSATKICHINI ANIQLASH Murtazayev S.S., Eshqulova Sh.B.	12-14
YAQIN QARINDOSHLAR ORASIDAGI NIKOHLARDAN TUG'ILGAN BOLALARDA RUHIY BUZILISHLARNI O'RGANISHDA ZAMONAVIY USULLARNI QO'LLASH Mo'minov R.Q., Mirzaev A.A., Isakov M.U.	15-18
ANALYSIS OF THE EFFECTIVENESS OF COMBINATION THERAPY FOR INFECTIONS CAUSED BY PSEUDOMONAS AERUGINOSA Mirzakarimova D.B.	19-23
THE ADVANTAGES OF STUDYING MENTAL DISORDERS IN CHILDREN BORN FROM MARRIAGES BETWEEN CLOSE RELATIVES Mirzaev A.A, Muminov R.K., Dalimova S.A.	24-26
SHIZOFRENIYADA NEGATIV BUZILISHLARNI DAVOLASH VA OLDINI OLISHGA ZAMONAVIY YONDASHUV Maxmudova X.H., Islomov Sh. X., Dolimova M. A.	27-30
A RETROSPECTIVE ANALYSIS OF CONGENITAL HEART DEFECTS IN TASHKENT'S PEDIATRIC POPULATION Saloni S.M., Tulyaganova D.S., Akramhujaeva A.B.	31-38
VASOPRESSOR AND INOTROPE USE IN CARDIOGENIC SHOCK: WHY AND WHEN? Mamasodiqov A.A., Rakhmatova F.U.	39-44
BOLALARDA STAFILOKOKK ENTRAKOLITINING RIVOJLANISH XUSUSIYATLARI. Mamarasulova N.I., Jurayev B.S.	45-47
EKSPERIMENTAL GIPERXOLESTERINEMIYA SHAROITIDA LADIGINOZIDNING JIGAR MORFOMETRIK KO'RSATKICHLARIGA TA'SIRI Maxmudova B.Sh.	48-54
USE OF MOBILE APPLICATIONS IN CHILDREN'S OPHTHALMOLOGY (Literature review) Makhkamova D.K.	55-57
TUG'MA YURAK NUQSONI BILAN KASALLANGAN BOLALARNING ANTROPOMETRİK KO'RSATMALARNI BAHOLASH Babadjanova F.R., Qodirova A.M.	58-61

BACHADON BO'YNI INTRAEPITELIAL NEOPLAZIYASIDA KOLPOSKOPIYANING KLINIK AHAMIYATI Axmedova M.O.	62-67
PROBLEMS OF PREMATURE BIRTH IN MODERN OBSTETRICS Mamadjanova Sh.K.	68-70
SULFOPARIN PREPARATINING EMBRIOTOKSIK VA TERATOGEN TA'SIRINI ANIQLASH Kutliqova G.M., Sodikova D.T	71-76
RAQAMLI QURILMALAR VA INTERNETDAN FOYDALANISHNING MAKTAB YOSHIDAGI BOLALARGA TA'SIRINI GIGIYENIK BAHOLASH A.J. Kurbanbayeva, I.A. Usmanov, A.R. Nosirova	77-83
MEASUREMENT OF THE EFFECT OF THE ENAMEL MICRO-POLISHING FOR TOOTH WHITENING IN KOREAN PATIENTS Kim Seung-Chan, Kim InGeol, Iriskulova E.U., Salimov O.R., Akbarov A.N., Khabilov N.L.	84-91
BOLALARDA VIRUSLI VA BAKTERİAL RESPIRATOR INFEKTSIYALARNING BIOKIMYOVIY KO'RSATKICHLARI. Xujaqulov D.A., Saparboev E, Sattorova A.	92-95
TREATMENT OF SURGICAL PATHOLOGIES OF ABDOMINAL ORGANS Khodjimatov G.M., Foziljonov O.Sh.	96-99
THE RESULTS OF APPLYING ENDOVIDEOSURGICAL TECHNOLOGIES IN THORACOABDOMINAL INJURIES. G.M.Khodjimatov, S.M.Yaxyoyev	100-105
STUDYING THE IMMUNOLOGICAL ASPECTS OF THE ORIGIN OF NEPHROLOGICAL COMPLICATIONS IN POST-COVID SYNDROME. Khaytboev J.A., Rakhmanova S.S.	106-109
NEW OPPORTUNITIES IN THE TREATMENT OF NEUROMUSCULAR DISEASES. Kasymova S. A., Kayumova N.K., Yoqubov D.Y., Madaminov B.R.	110-114
REGMATOGEN TO'R PARDA KO'CHISHINI JARROHLIK YO'LI BILAN DAVOLASHDAN SO'NG QAYTA KO'CHISHINING TAKRORLANISHI VA SABABLARINI TAHLILI Karimova M.H., Xusanbaev X.Sh., Xikmatullayev B.X.	115-119
TREATMENT OF CHRONIC RECURRENT APTHOUS STOMATITIS Kakhramonova I.I., Rakhmanov O.R.	120-122
MECHANISMS OF HIV-1 SUPPRESSION MEDIATED BY INTERFERON-STIMULATED MX2, IFNM1, AND ADAR1 GENES Kadirov Zh.F.	123-126
DESCRIPTION OF HISTOLOGICAL AND MORPHOLOGICAL CHANGES IN THE GALLBLADDER WALL IN CHOLECYSTITIS. Jumaeva M.M.	127-132

ALKALOIDLARNING ZAMONAVIY FARMAKOLOGIYADAGI AHAMIYATI VA SANOAT FARMATSIYADA ULARDAN SAMARALI FOYDALANISH Jo'raev Z.A.	133-139
TUGALLANMAGAN SUITSIDDAN KEYINGI BEMORLAR ShAXSINING PSIXOPATOLOGIK XUSUSIYaTLARI Jo'rayev N.N., Mirzayev A.A., Kozimjonov H.F.	140-145
GLAUKOMA DAVOSIDA QURUQ KO'Z SINDROMI PATOGENEZ, RISK OMILLARI VA ZAMONAVIY PROFILAKTIKA USULLARI Jaxongirov I.J., Sabirov O.O.	146-148
MUDDATDAN OLDINGI TUG`RUQ HAVFI BŐLGAN HOMILADOR AYOLLARDA FETOPLATSENTAR YETISHMOVCHILIKNI PROGNOZLASH VA OLDINI OLISH Jalilova D.M., Shavazi N. N.	149-157
GENITAL YALLIG'LANISH KASALLIKLARIDAGI MIKROFLORA Ismoilova D.Sh., Jamalova F. A.	158-161
BEMORLARNING HAYOT SIFATINI XISOBGA OLGAN HOLDA KO'Z JAROHATLARINI DAVOLASH USULLARI. Ismoilov S.X.	162-164
AGE-RELATED IMMUNOARCHITECTONICS OF THE SPLEEN Kodirov A.N., Akhmedov Sh.S., Abdunabieva Kh.M., Umarova M.Z.	165-167
APPLICATION OF MODERN DIAGNOSTIC METHODS FOR PELVIC INFLAMMATORY DISEASES Ismailova Z.U.	168-170
EVALUATION OF THE EFFECTIVENESS OF THE PREVENTION AND TREATMENT OF PERIODONTITIS AND THE ORGANIZATION OF DENTAL MEASURES FOR WORKERS OF METAL PROCESSING ENTERPRISES Islamova N.B.	171-175
CLINICAL AND MORPHOLOGICAL CHANGES IN ORAL ORGANS AND TISSUES IN WOMEN AFTER MENOPAUSE AND THEIR ANALYSIS Islamova N.B.	176-180
CHOOSING A TREATMENT METHOD FOR NONSPECIFIC ULCERATIVE COLITIS IN PREGNANT WOMEN Ikramova F.D.	181-183
THE ROLE OF ADIPOKINES IN THE DEVELOPMENT OF ENDOTHELIAL DYSFUNCTION IN CHILDREN WITH OBESITY Ibragimova E.F.	184-189
GLOMERULOPATIYALI BEMORLARDA KASALLIKNI LABORATOR BELGILARINI BAHOLASHDA BA'ZI NOINVAZIV BIOMARKERLARNI AHAMIYATI Gapparova G.N.	190-195

CLINICAL AND DIAGNOSTIC ASPECTS AND TACTICS OF TREATMENT OF URETEROCELE IN CHILDREN Gafurov A.A., Turakulov Z. SH., Bozorov SH.T.	196-202
GIPERKINEZ DAVOLAShDA BOTULOTERAPIYA O'RNI Abdukadirova D.T., Abdukadirov U.T.	203-211
YOPIQ BURCHLI GLAUKOMANING O'RGANISHDA GENETIK OMILLARNING O'RNI G'ulomidinov B.B.	212-214
PERIMENOPAUZADA ENDOMETRIYNING O'ZGARISHLARI: GIPERPLAZIYA VA UNING OQIBATLARI Eshonova K.G.	215-220
MIYA FALAJIGA CHALINGAN BOLALARDA TIZZANING BUKILUVCHI KONTRAKTURASINI ERTA ANIQLASH VA ASORATLARINI BARTARAF QILISH USULLARI Eshmatov M.M.	221-224
NOINFEKSION KASALLIKLARNING PROFILAKTIKASI Djumaniyazova Z.F., Abidov F.O.	225-229
ERTA TUG'ILGAN CHAQALOQLARDAGI NEKROTIK ENTEROKOLITLARNING KLINIK- ANAMNESTIK TAHLILI Chartakov D.K., Madyarova M.A.	230-234
ERTA TUG'ILGAN CHAQALOQLARDAGI NEKROTIK ENTEROKOLIT (adabiyotlar sharxi) Chartakov D.K.	235-241
POSTKOVID SINDROMDA YURAKDAGI KLINIK – MORFOLOGIK O'ZGARIShLAR Bustanov Sh.Y.	242-247
YURAK ISHYEMIK KASALLIGINI TARQALISH SABABLARINI ANIQLASH VA BARTARAF QILISH Boyqo'ziyeva M.B.	248-251
STAFILOKOKK INFEKSIYALARINING ZAMONAVIY DIAGNOSTIK USULLARI Boltayev K. S., Pirimqulov J., Safarov O. S.	252-255
KUYDIRGI KASALLIGI: ETIOLOGIYA, KLINIK KO'RINISHLARI, DAVOLASH VA PROFILAKTIKASI Boltayev K. S, Toshquvvatova M. Z.	256-258
SUTEMIZUVCHILAR ORGANLARIDA Ni,Co,Mn,VA Zn MIKROELEMENTLARNING TAQSIMLANISHI: (Samarqand viloyati misolida) Boboqandova M.F. Muratova Z.T.	259-263
OFTALMOLOGIYADA XORIOKAPILLYARLAR PERFUZIYASINI ANIQLASHDA IMAGEJ ILOVASIDAN FOYDALANISH Bobojonov D.S., Yusupov A.F., Karimova M.X.	264-267

MIOPIYA BILAN KASALLANGAN BOLALARDA KO'Z OLDINGI SEGMENTI MORFOMETRIK PARAMETRLARINING QIYOSIY XARAKTERISTIKASI Bekmurodova O.K.	268-272
ERTA YOSHLI BOLALARDA EOZINOFILLI OSHQOZON-ICHAK KASALLIKLARI. Akramova X.A., Bayjanova G.J.	273-279
O'ZBEKISTONDA ATOPIK BRONXIAL ASTMA BILAN KASALLANGAN BOLALARDA ALLERGIK KON'YUNKTIVIT KECHISHINING XUSUSIYATLARI Baxritdinova F.A., Nazirova S.X., Narzikulova K.I., Mirraximova S.Sh.	280-284
UVEITLARNING KLINIK KECHISHIGA MNT TURI VA TONUSINING TA'SIRI Azizova Sh.A., Pirnazarov M.Y.	285-290
YaQIN QARINDOShLAR ORASIDAGI NIKOXDAN TUG'ILGAN BOLALAR ORASIDA TALVASALI BUZILIShLARNI OLDINI OLISh Azimova G. A., Mo'minov R.Q, Karimov A.X.	292-294
ASTUY OZIQ-OVQAT QO'SHILMASI TARKIBIDAGI FENOL BIRIKMALARI ANIQLASH Asqarov I.R., To'ychiev G'.O'.	295-299
PREVENTION, DIAGNOSIS AND TREATMENT OF ABDOMINAL DISEASES IN THE CONTEXT OF THE COVID-19 PANDEMIC Nabiev R.R.	300-302
IDENTIFICATION OF RISK FACTORS FOR ITS DEVELOPMENT DURING PREGNANCY, IN THE EARLY STAGES OF UTERINE FIBROIDS Narzulloeva N.S., Mubinova N.A.	303-306
REPRODUKTIV YOSHDAGI AYOLLARDA ENDOMETRIOZ PATOLOGIYALARINING KECHISHI Nazirova Z.M.	307-309
DETERMINATION OF THE INCIDENT LEVEL OF CHRONIC VIRAL HEPATITIS AMONG THE POPULATION OF OQDARYO DISTRICT (SAMARKAND REGION) Ne'matov H.A.	310-313
GEMORRAGIK VASKULITNI KLINIK KECHISHIDA PROFILAKTIK CHORA TADBIRLARNING OPTIMALLASHTIRISH Nishanbayeva N.Y., Saidxonova A.M., Yunusova L.D.	314-317
POSTREANIMATSION DAVRDA KALAMUSHLAR REPRODUKTIV TIZIMINING BUZILISHI. Nurimov P.B., Muxtorova S. N.	318-320
INTAKT KALAMUSHLARDA GIPOTALAMUS-GIPOFIZAR-NEYROSEKRETOR TIZIMINING SUPRAOPTIK YADROSIDAGI NEYROSEKRETOR HUJAYRALARNING FUNKTSIONAL HOLATI Nurimov P.B.	321-324
	325-329

BOLALARDA FRONTAL TISHLARNING ZICHLASHUVINI DAVOLASH USULLARINI TAQQOSLASH VA PROFILAKTIK CHORA TADBIRLAR Omonova M.X., Hamidova A.R., Narzullayeva M.Sh., Mashrabjonova B.Q., Sattarov J. A.	
ICHKI BO'YINTIRIQ VENA KLAPAN YETISHMOVCHILIGINING ASORATLARINI SONOGRAFIYADA BAHOLASH Ozodova N.M.	330-336
YAQIN QARINDOSHLAR ORASIDAGI NIKOHLARDAN TUG'ILGAN BOLALARDA PAROKSIZMAL BUZILISHLARNI TASHXISLASH VA DAVOLASH USULLARI Pulatova R.R., Mo'minov R.Q., Isakov M.U.	337-339
ALGORITHM FOR PREVENTION OF DENTAL IMPLANTATION COMPLICATIONS IN PATIENTS WITH HYPERTENSION DISEASE Pulatova B.J.	340-346
PAXIXORIOIDAL NEOVASKULOPATIYADA BIRLASHTIRILGAN TERAPIYA KLINIK VA FUNKSIONAL NATIJALARI. Rahimova D.A. Yusupov A.F., Karimova M.X., Xodjaeva Z.A.	347-350
IMPORTANCE OF MICROFLORA AND ANTIBIOTICS IN AKNE STUDY SENSITIVITY Rustamov M.K.	351-357
"ONA-BOLA" TIZIMIDA MIKRONUTRIENT TANQISLIGINI ANIQLASH ALGORITMI. Rustamova X.X., Oblokulova N.T.	358-362
BOSHLANG'ICH MAKTAB YOSHIDAGI BOLALARDA LIMFOMA BILAN KASALLANISHNING ONKOEPIDEMIOLOGIK HOLATINI O'RGANISH. Alimova G.M., Mamarasulova D.Z., Abdumuxtarova M.Z., Atadjanova Sh.X., Arzibekova U.A.	363-370
CYTOKINE DYSFUNCTION IN THE PATHOGENESIS OF CHRONIC CEREBRAL ISCHEMIA Abdurahmanov M.M., Olimov J.N., Narzulloeva N.S	371-376
APPLICATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN INCREASING THE SENSITIVITY OF ULTRASOUND DIAGNOSTIC DEVICES Abdullayev I.N., Nasimov R.H., Jiyanbayev O.E.	377-381
KARDIOLOGIYADA SI TEXNOLOGIYALARINING QO'LLANILISHI BO'YICHA ZAMONAVIY YONDASHUVLAR Abdullayev I.N.,Nasimov R.H., Jiyanbayev O.E.	382-387
DISTONIYA - ZAMONAVIY DAVOLASh TAKTIKASI Abdukadirova D.T.	388-396
PERIODONTITIS AND COMMON DISEASES – MUTUAL INFLUENCE, DIAGNOSIS AND TREATMENT. Sadriev N.N., Akhmadov I.N.	397-405

STUDYING VISUAL CHANGES ON PREGNANCY , PREECLAMPSIA AND POSTPARTUM PERIOD BY USING INNOVATION TECHNOLOGY Ruzimova N.E., Karimova M.X.	406-409
MODERN PERSPECTIVE ON MENOPAUSAL METABOLIC SYNDROME. Ruzmatova A.Sh.	410-416
SEMIZLIKNING YURAK FAOLIYATIGA TA'SIRI VA UNI ZAMONAVIY JARROHLIK USULLARI ORQALI DAVOLASH NATIJALARI TAHILI. Abduraximova L.A., Eshmurodova D.B., Yoqubov F.G'.	417-425
CHANOQ-SON BO'G'IMI ENDOPROTEZLASH AMALIYOTIDAN KEYINGI OG'RIQNI BOSHQARISHDA MULTIMODAL ANALGEZIYANING SAMARADORLIGINI BAHOLASH Ramazanova Z.F., Muralimova R.S., Xolxo'jayev Sh.Y.	426-431
SAMARQAND VILOYATI AHOLISIDA O'TKIR ICHAK INFEKSIYALARI: EPIDEMIOLOGIK VAZIYAT VA ETIOLOGIK OMILLARI. Raximova M.M., Mamatova Z.	432-435
SAMARQAND VILOYATI KICHIK MAKTAB YOSHIDAGI BOLALARNING SOMATOMETRIK KO'RSATKICHLARNI GIGIYENIK BAHOLASH Raximova D.J.	436-441
IMPROVING CONSERVATIVE TREATMENTS FOR LUMBAR SPINE INJURIES Rakhmonov Sh.Sh.	442-446
ARTROSKOPIK MENISKEKTOMIYADAN KEYINGI OSTEOARTROZ REABILITATSIYA USULLARINI TAKOMILLASHTIRISH Raxmonov Sh.Sh.	447-451
METABOLIK SINDROM BILAN OG'RIGAN BEMORLARNING STOMATOLOGIK HOLATI Abduvakilov J.U., Zubaydullayeva M.A.	452-460
OPTIMIZATION OF TREATMENT WITH MEDICINAL PLANTS OF PATIENTS WITH SEVERE FORMS ULCERATIVE COLITIS Askarov I.R., Kodirov Kh.N.	461-465
TREATMENT OF ULCERATIVE COLITIS WITH MEDICINAL PLANTS AND TO STUDY ABOUT PATIENTS' QUALITY OF LIFE Askarov I.R., Kodirov Kh.N.	466-472
COMPARATIVE CHARACTERISTICS OF THE HEREDITARY BURDEN OF FAMILIAL FORMS OF OLIGOPHRENIA Dalimova S.A., Rakhimov A.A., Madaminov O.A.	473-475
YUQORI SIYDIK YO'LLARIDA KATTA TOSHLARI BO'LGAN BEMORLARNI MINIMAL INVAZIV DAVOLASH USULLARI SAMARADORLIKNING QIYOSIY TASNIFI Egamberdiyev M. B.	476-479

ERTA YOSH BOLALARDA ANTIARITMIK DORILARNI QO'LLASH XUSUSIYATLARI Qodirov M.A., Djalilov D.A.	480-484
BOLALARNING OVQATLANISHIDA MIKRONUTRIYENT, VITAMIN VA MINERALLARDAN KOMPLEKSLI FOYDALANISH Saidova F.S.	485-490
CLINICAL CASE OF TREATMENT TACTICS FOR A PREGNANT WOMAN WITH ACUTE MYELOGENOUS LEUKEMIA Saliev K.K., Saliev D.K., Saliev A.K., Salieva M.O., Salieva M.A.	491-495
SURUNKALI GLOMERULONEFRIT KASALLIGINING PROFILAKTIKASIGA ZAMONAVIY QARASHLAR Sapayeva Z.A.	496-504
FOBIK BUZILISHLAR BILAN KUZATILGAN NEVROZGA CHALINGAN BEMORLARDA PSIXOTERAPIYA Sarboeva N.K., Saliev M.M., Ubaydullaeva R.R.	505-509
AGE HISTOPHYSIOLOGY OF THE WHITE SPLEEN PULP IN EARLY POSTNATAL ONTOGENESIS Sattibayev I.I.	510-512
VAKSINOPROFILAKTIKA VA INSON SALOMATLIGI Shamansurova E.A., Mannapova M.A.	513-518
BOLALARDA NAFAS YO'LLARI YOT JISMIDA DIAGNOSTIKA VA DAVOLASHDA ZAMONAVIY YONDASHUV Shamsiyev J.A., Atakulov J.A., Ruziyev J.A., Isoqov A.M., Jumanov Sh.G.	519-523
BOLALARDA QOVUQ-SIYDIK NAYI REFLYUKSINI TASHXISLASH VA DAVOLASH Shamsiyev J.A., Yusupov Sh.A., Daniyarov E.S., Suvonqulov U.T., Safarov S.Sh.	524-530
DIAGNOSIS AND TREATMENT OF VESICOURETERAL REFLUX IN CHILDREN Shamsiyev A.M., Shamsiyev Zh.A., Ruziev Zh.A., Mutalibov I.A., Isakov A.M.	531-535
BOLALARDA ICHAK INVAGINATSIYASINI TASHXISLASH VA DAVOLASHGA ZAMONAVIY QARASHLAR Shamsiyev A.M., Shamsiyev J.A., Ataqulov J.O., Tagayev I.U., Maxmudov Z.M.	536-541
BOLALARDA JIGAR EXINOOKKOZIDA VIDEOLAPAROSKOPIK EXINOKOKKEKTOMIYA Shamsiyev J.A., Tagayev I.U., Ruziyev J.A., Shamsiyev Sh.J., O'lmasov X.R.	542-545
ST ELEVATSIYALI MIOKARD INFARKTI BO'LGAN BEMORLARDA TROMBOLITIK TERAPIYA VA BIRLAMCHI TERI ORQALI KORONAR ARALASHUVINING KASALXONA ICHI ASORATLARIGA TA'SIRINI BAHOLASH Shamsiev K.Yu.	546-553
TIBBIYOT OLIY TA'LIM MUASSASALARIDA "TIBBIY BIOLOGIYA. UMUMIY GENETIKA" FANINI O'QITISHDA VERTUAL LABORATORIYA DASTURIY TUZILMALARDAN FOYDALANISHNING AFZALLIKLARI Sharipova F.S.	554-559
	560-566

SHOSHILINCH LAPAROTOMIYALARDA POSTOPERATIV DAVRDA NOOPIOID ANALGEZIYA
Sharipova V.X., Yuldosheva SH.A., Xurramova D.A.

KOLEKTOMIYADAN SO'NG ME'DA MIKROFLORASINING O'ZGARISHI VA UNING KORREKSIYA QILISH 567-575
Shermatov R.M., Sodiqova Sh.R.

MODERN VIEW ON VITAMIN D METABOLISM AND VITAMIN D RECEPTOR GENE POLYMORPHISM 576-583
Shodikulova G.Z., Sadikova Sh.N., Boyqobilov O.Sh.

MAKROSOMIYADA FETOPLASENTAL KOMPLEKSNING FUNKTSIONAL HOLATI 584-588
Sobirova M.R., Xoliyorova M.S.

YANGI TUG'ILGAN CHAQALOQLAR SARIQLIGINI INTEGRAL USULDA OLIB BORISH 589-596
Sodiqova Sh.R., Axunbekova O.M.

O'TKIR RESPIRATOR DISTRESS SINDROMI: COVID-19 ASORATLARIGA YANGICHA YONDASHUVLAR 597-600
Sodiqova D.T.

JIGARNING SURUNKALI DIFFUZ KASALLIKLARIDA FIBROZ BOSQICHLARINI ANIQLASHDA 2D SWE ELASTOGRAFIYANI IMKONIYATLARI 601-606
Soipova G.G.

TREATMENT AND PREVENTION OF NEGATIVE PERSONALITY DISORDERS IN SCHIZOPHRENIA 607-609
Soliev D.M., Mirzaev A.A., Makhmudova H.H.

SURUNKALI POLIPOZLI ETMOIDIT KECHISHINING XUSUSIYATLARI 610-612
Tojiboev A.A.

BOLALARDAGI GIRSHPRUNG KASALLIGINING DAVOLASHDAGI O'ZIGA XOS TARIXI (ADABIYOTLAR SHARXI) 613-623
Toshmatov X.Z., Oldashev M.M.

KARIESOGEN JARAYON FAOLILIGI III DARAJALI BO`LGAN BOLALARDA KARIESNI PROFILAKTIKASINI SAMARADORLIGI 624-629
Turayev A.B.

SHIFOKORLAR OBRAZI VA KASALLIKLAR TASVIRINING BADIIY FUNKSIYALARI 630-632
Tusmatov Sh.R.

SHOX PARDAGA NISBATAN INTRAOKULYAR LINZANING JOYLASHUVIGA KO'Z ICHI TUZULMALARINING TA'SIRINI TAQQOSLASH 633-636
Ubaydullayev S.O., Karimova M.X., Timurov M.N.

2-TUR QANDLI DIABET BILAN OG'RIGAN BEMORLARDA IGLARLIXI (SOLIQVA) DORI VOSITASINING GIPOGLIKEMIK SAMARADORLIGINI O'RGANISH 637-643
Urunbayeva D.A., Omonova Z.T.

TUGALLANMAGAN SUITSIDLARNI QAYTA AMALGA OSHIRGAN SUITSIDENTLARNING SHAXS TIPOLOGIK XUSUSIYATLARI Usmonova M.B., Kozimjonova I.F., Juraev N.N.	644-648
QURUQ KO'Z SINDROMINING ETIOPATOGENEZI, AYOLLARDA UCHRASHI (ADABIYOTLAR SHARXI) Vahobova M.Sh., Karimova M.X., Abdullayeva S.I., Xamrayeva U.Sh.	649-656
bFGF-CHITOSAN "BRAIN GLUE" FACILITATES FUNCTIONAL RECOVERY IN ISCHEMIC STROKE Vokhidova Z.T.	657-661
REGULATION OF THE EPIDERMAL BARRIER IN THE FORMATION OF ATOPIC DERMATITIS AND BRONCHIAL ASTHMA IN CHILDREN Hamidov F.Sh.	662-664
THE IMPORTANCE OF STUDYING THE STATE OF ENZYMATIC HOMEOSTASIS IN KIDNEY FAILURE Hamrakulov Sh.H.	665-667
COMPREHENSIVE ASSESSMENT OF THE FORMATION FACTORS OF ALLERGIC RHINITIS IN CHILDREN WITH BRONCHIAL ASTHMA Hankeldieva H.K.	668-671
REAKTIV ARTRITLI BEMORLARDA OFTALMOLOGIK BELGILARNI TASHXISLASH VA DAVOLASH TAMOYILLARI (ADABIYOT SHARHI) Xodjaxanova D.K., Yusupov A.F., Karimova M.X. Djamalova Sh.A.	672-676
OSHQOZON YARASINI JARROHLIK USULIDA DAVOLASH VA OLDINI OLISHGA ZAMONAVIY YONDASHUV Xodjimatov G.M., Foziljonov O.Sh.	677-679
GEPATIT C LABORATORIYA TASHXISI: TESTLAR VA BOSQICHLAR Xo`jaqulov D.A.	680-682
ONKOLOGIK KASALLIKLARNI TASHXISLASHDAGI DOLZARB MUAMMOLAR Xolmamatova L.X.	683-688
ICHAKLARARO ANASTOMOZ YETISHMOVCHILIGI PROFILAKTIKASI VA UNDA ZAMONAVIY DIAGNOSTIK MEZONLARNI QO'LLASH Xoshimov D.E., Tulyaganov D.B., Pulatov D.T., Abdulahatov M.H.	689-695
AKUSHERLIK VA GINEKOLOGIYADA ZAMONAVIY DIAGNOSTIKA DAVOLASH VA OLDINI OLISH Yuldasheva B.M., Bazarova G.R.	696-700
ODAM ANATOMIYASI FANINI STEAM VA VIRTUAL OLAMDA ZAMONAVIY O'QITISHINING AHAMIYATI Xusanov E.O'., Mubinjonov A.D.	701-705

DETERMINATION OF THE INCIDENCE RATE OF CHRONIC VIRAL HEPATITIS BASED ON ETIOLOGICAL FACTORS AMONG THE POPULATION OF JOMBOY DISTRICT, SAMARKAND REGION
Yarmukhamedova M.K., Kuchkarova Sh.A. 706-711

BOLALARDA O'TKIR GEPATIT SINDROMI RIVOJLANISHIDA KOKSAKI A-12 VIRUSINING AHAMIYATI
Yusupov M.I. 712-715

LASER THERAPY FOR HEMORRHOIDS
Zokhidova S.H. 716-719

METABOLIK SINDROMLI BEMORLARGA STOMATOLOGIK YORDAM KO'RSATISHNI KLINIK VA BIOKIMYOVIY ASOSLASH
Abduvakilov J.U., Zubaydullayeva M.A. 720-723