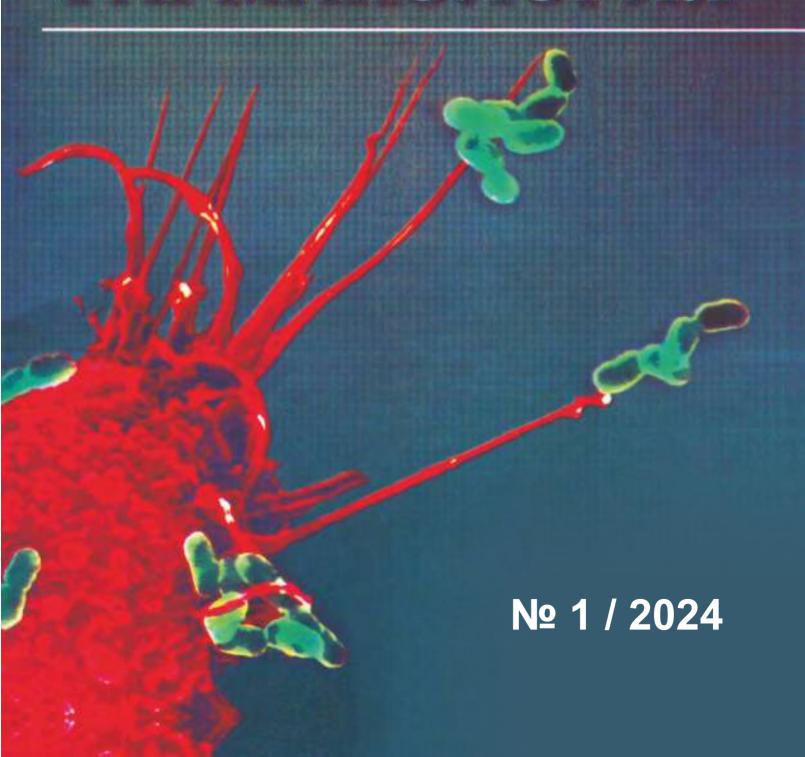
# ИНФЕКЦИЯ, ИММУНИТЕТ и ФАРМАКОЛОГИЯ



# инфекция, ИММУНИТЕТ и ФАРМАКОЛОГИЯ

# Научно-практический журнал 1/2024 Журнал основан в 1999 г.

### Редакционная коллегия:

Главный редактор — профессор Тулаганов А. А.

- Атабеков Нурмат Сатиниязович -д.м.н., проф., Санитарно-эпидемиологической службы спокойствия и общественного здравоохранения РУз.
- 2. Ражабов Гулом Хурсанович к.м.н., зав. лаб. института вакцин и сывороток РУз.
- 3. Абдихакимов Абдулла Нусратиллаевич д.м.н., проф., директор Таш. обл. филиала научно-практ. спец. центра онкологии и радиологии РУз.
- 4. Аллаева Мунира Журакуловна д.м.н., проф., зав. каф. фармакологии ТТА.
- Аминов Салохиддин Джураевич д.м.н., проф. зав.каф. фармакологии, физиологии ТашПМИ.
- 6. Богдасарова Эльмира Сергеевна д.м.н., проф., ТашФармИ.
- 7. Таджиев Ботир Мирхашимович д.м.н., проф., директор РСНПМЦЭМИПЗ.
- 8. Туляганов Рустам Турсунович д.б.н., проф., каф. фармакологии и клинической фармации ТФИ.
- Маматкулов Ибрагим Хамидович (зам.глав.редактора)., - д.м.н., проф., директор НИИХиФ РУз.
- 10. Сабиров Джахонгир Рузиевич – д.м.н., доцент, заместитель директора детск. нац. мед. центра по науке, образованию и международным связям.
- 11. Нарзуллаев Нуриддин Умарович -БухГМИ.
- 12. Аминжон Каримов д.м.н., проф., каф. органического синтеза ТашФармИ.

- 13. Максудова Лайло Масхутовна д.м.н., доцент, каф. офтальмол. центра развития проф. квалиф. мед. раб.
- 14. Таджиев Мирхотам Мирхашимович д.м.н., доцент каф. неврологии, детск. неврологии, мед. генетики ТашПМИ.
- 15. Облокулов Абдурашид Рахимович д.м.н., проф., зав. каф. инф. болезней и детских инф. болезней БухГМИ.
- 16. Мавлянов Искандар Рахимович д.м.н., проф., консультант директора Республиканского научнопрактического Центра Спортивной медицины.
- 17. Ибадова Гулнара Алиевна д.м.н., проф., каф. инф., дет. инф. и паразит. заб. центра развития проф. квалиф. мед. раб.
- 18. Косимов Илхомжон Асомович (зам.глав.редактора), д.м.н., проф., каф. инф. болезней и детск. инф. заб., фтизиатрии и пульмонологии ТашПМИ.
- 19. Кахоров Болта Абдугафарович к.б.н., доц., зав.каф. физиологии человека и животных Национального университета РУз.
- 20. Зияева Шахида Тулаевна (ответственный секретарь). к.м.н., доц. каф. фармакология, физиология ТашПМИ.

#### Зарубежные члены редколегии:

21. Кравченко Ирина Эдуардовна – д.м.н., проф., каф.едры инф. болезней ФГБОУ ВО «Казанский ГМУ» МЗ РФ.

### Редакционный совет:

акад. Арипова Т.У., (Ташкент)

акад. РАН, Кукес В.Г. (Москва)

акад. Тулегенова А.У. (Астана)

акад. Раменская Г.В. (Москва)

акад. Иноятова Ф.И. (Ташкент)

проф. Мадреимов А.М. (Нукус),

(Москва),

проф. Гариб Ф.Ю.

проф. Сайфутдинов Р.Г. (Казань),

проф. Нуралиев Н.А. (Бухара)

проф. Туйчиев Л.Н., (Ташкент)

проф. ОблокуловА.Р. (Бухара)

ТАШКЕНТ-2024

# СОДЕРЖАНИЕ

1.	ABDUKHALIMOVA S.A., KURMAEVA D.N., NURIDDINOV SH.J., ALYAVI
	B.A., NURMATOVA S.B., DALIMOVA D.A. YURAK-QON TOMIR
	KASALLIKLARIGA MOYILLIK KELTIRUVCHI MOLEKULYAR - GENETIK
	MARKERLAR VA METABOLITLAR5
2.	АБДУЛЛАЕВ Ш.Р. РАЦИОНАЛЬНЫЕ ПОДХОДЫ К ДИАГНОСТИКЕ И
	ЛЕЧЕНИЯ ОФТАЛЬМОРОЗАЦЕА14
3.	АБДУХАЛИЛОВА Н.С., АБДУСАЛОМОВА К.К. ERUCA SATIVA L.
	ЎСИМЛИГИ ХАМДА УНДАН ОЛИНГАН ҚУРУҚ ЭКСТРАКТНИНГ ҚИЁСИЙ
	МИНЕРАЛ ТАХЛИЛИ 20
4.	АЛЕЙНИК В.А., МУХИТДИНОВА К.О., БАБИЧ С.М., НЕГМАТШАЕВА
	Х.Н., ЮЛДАШЕВА А.С., ДЖУРАЕВ Б.М. ВЛИЯНИЕ КОНТРИКАЛА И
	КЛЕКСАНА НА ИЗМЕНЕНИЕ ИММУНОЛОГИЧЕСКИХ ПОКАЗАТЕЛЕЙ У
	ЖЕНЩИН НА РАННИХ СРОКАХ БЕРЕМЕННОСТИ ПРИ ОТСУТСТВИИ
	ГЕНИТАЛЬНЫХ ИНФЕКЦИЙ25
5.	АМИРСАИДОВА Д.А., БЕКМУРОДОВА Г.А., ЭЛОВА Н.А.,
	МИРАЛИМОВА Ш.М. ОБРАЗОВАНИЕ БИОПЛЕНКИ ИЗОЛЯТАМИ РОДА
	CANDIDA, ВЫДЕЛЕННЫХ ОТ БОЛЬНЫХ ОСТРЫМ
	ТОНЗИЛЛИТОМ
6.	АСАДОВА Г.А. ЭПИДЕМИОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА КОРЕВОЙ
	ИНФЕКЦИИ У ДЕТЕЙ В СТРАНАХ СРЕДНЕЙ АЗИИ41
7.	
	НЕИНВАЗИВНОЙ ДИАГНОСТИКИ ФИБРОЗА ПЕЧЕНИ У БОЛЬНЫХ С
	ХРОНИЧЕСКИХ ГЕПАТИТОМ
8.	ГАФФОРОВ С., ПУЛАТОВА Р. КЛИНИКО-ФУНКЦИОНАЛЬНОЕ
	СОСТОЯНИЕ СЛИЗИСТОЙ ОБОЛОЧКИ ПОЛОСТИ РТА И
	МОРФОЛОГИЧЕСКАЯ ОЦЕНКА КАЧЕСТВА СЪЁМНЫХ ПРОТЕЗОВ
	ИЗГОТОВЛЕННЫХ ДЛЯ ЗАМЕЩЕНИЯ ДЕФЕКТОВ ЗУБНЫХ РЯДОВ, ВИЧ-
	ИНФИЦИРОВАННЫХ ПАЦИЕНТОВ
9.	ДАМИНОВА М.Н., АБДУЛЛАЕВА О.И., ХАЛИКОВА Ш.А., АГЗАМОВА
	Т.А., УМАРОВ Т.У., АЛИМОВ М.М. АНАЛИЗ ЭФФЕКТИВНОСТИ
	СТАНОВЛЕНИЯ ИММУНИТЕТА У ДЕТЕЙ ВАКЦИНИРОВАННЫХ ПРОТИВ
	ВГВ В ЗАВИСИМОСТИ ОТ КРАТНОСТИ ПРОВЕДЕННОЙ
	ВАКЦИНАЦИИ61
10.	. <b>ЗАКИРОВА Д.Р., БОЛТАЕВ К.Ж.</b> ЎПКАНИНГ СУРУНКАЛИ ОБСТРУКТИВ
	КАСАЛЛИГИ ЎПКА ГИПЕРТЕНЗИЯСИ БИЛАН КЕЧГАНДА
	ПАТОГЕНЕТИК ДАВОЛАШ САМАРАДОРЛИГИНИ БАХОЛАШ66
11.	. <b>ZIYODULLA Z.T., AGZAMOVA M.N., JAFAROV X.M.</b> OKTREOTIDNI
	AMALIYOTDA QOʻLLASH
12.	IKROMOV S.A., MUSTAFAKULOV M.A., SAATOV T.S., RAXIMOV R.N.
	EKSPEREMENTAL ALSGEYMER MODELI HAYVONLAR QONI VA
	TO`QIMASIDA LAKTATDEGIDROGENAZA FERMENTLARINING
	FAOLLIGINI O'RGANISH83
13.	. ИСАНОВА Д.Т., АЛИЕВА Р.А., АХМЕДОВА Д.К., ТОШМАТОВА Г.А.,
	ХАКИМОВА И.У. ТУҒИШ ЁШИДАГИ АЁЛЛАР СИЙДИК ЙЎЛЛАРИ
	ИНФЕКЦИЯЛАРИ ҚЎЗҒАТУВЧИЛАРИНИНГ МИКРОБИОЛОГИК
	ТАВСИФИ
14.	. <b>IKHTIYAROVA G.A., ROZIKOVA D.K.</b> THE ROLE OF GUT MICROBIOTA IN
	THE OCCURANCE OF REPRODUCTIVE LOSES (LITERATURE REVIEW)95

30.	. FAIZU	JLLAI	EVA	Z.R.,	KAS	SIMO	VA	N.X.,	TUF	RDIBEK	KOV	G.M.
	MICRO	OBIOL	LOGICA	AL CHA	RACT	ERIST	TICS (	OF WO	UNDS 1	N PAT	IENTS	WITH
	DIABE	ETES V	WITH P	URULE	ENT IN	FECTI	ON					197
31.	. ХОШІ	имоі	В Н.Н.,	НАСИ	POB K	к.Э.,К	<b>YBAH</b>	дико	ВА Ю.	P., PAX	ИМОН	3 P. H.
	ЭФОР	БИН,	ПС-6,	ПС-7	BA	ПС-8	ПОЛ	ИФЕНО	ОЛАРИ	НИ А.	льцге	ЙМЕР
	КАСА	ЛЛИГ	ΊΙДΑ	ГЕМ	OCTA	.3	ГИЗИ	МИ	BA	TPON	ивоци	ІТЛАР
	АГРЕГ	ТАЦИ	ЯСИГА	БЛОК.	ловчі	И ТАЪ	СИРИ	ІНИ ЎР	ГАНИІ	Ш		201
32.	. ШАКІ	иров	<b>A</b> ]	Д.Н.,	ХАБ	ибул	ІЛАЕ	BA	Ш.М.	ОΠ	РЕДЕЛ	ЕНИЕ
	АНТИ	МИКЕ	ОБНО	Й АКТИ	<b>ИВНО</b>	СТИ С	УХИХ	к лист	ЪЕВ М	АЛИНІ	Ы	212
33.	. ЮЛД	АШЕ	В Ж.А.	, AXMI	ЕДОВА	А Н.Ш	І. СУР	УНКА.	ли виі	РУСЛИ	ГЕПА	ТИТ С
				РЛАРД								
	НОИН	ВАЗИ	В УСУ	ЛЛАРИ	ІНИ Қ	ЎЛЛА]	Ш					219
34.	. ЮСУ	ПОВА	<b>А</b> И.М	., ИСЛ	[AMO]	ва ж	<b>.и.</b> , 1	НАРБУ	TAEB	<b>4</b> Д.А.,	, АРИІ	ПОВА
				А Д.М								
				АНТИОІ								
				ПЬНЫМ								
	СУММ	<b>ИЫ</b> АЈ	ІКАЛО	идов 1	И <b>3</b> CR.	AMBE	КОТ	SCHYA	.NA			225

# <sup>1</sup>Shakhmurova Gulnara Abdullaevna

<sup>1</sup>Institute of Chemistry of Plant Substances named after Academician S.Yu. Yunusov of the Academy of Sciences of the Republic of Uzbekistan <sup>2</sup>Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology of the Ministry of Health of the Republic of Uzbekistan shga2065@yandex.ru

**Key words**: phytoecdysteroids, ecdysterone, turkesterone, mutagenicity, chromosomal aberrations.

The work investigated the potential mutagenic activity of phytoecdysteroids: ecdysterone and turkesterone, isolated from Ajuga turkestanica on mammals (mice, rats) in vivo experiments. It was found that when administered intragastrically, the studied substances do not induce chromosomal aberrations in animal bone marrow cells.

# INTESTINAL DYSBIOSIS IN WOMEN IN EARLY PREGNANCY MICROBIOLOGICAL CHARACTERISTICS OF WOUNDS IN PATIENTS WITH DIABETES WITH PURULENT INFECTION

Faizullaeva Zamira Raxmatovna, Kasimova Nasiba Xamidullayevna, Turdibekov Gulomjon Muxiddin ogli

Tashkent Medical Academy fz1392fz@gmail.com

**Keywords**: diabetics, purulent-inflammatory diseases, insulin, antibiotic therapy, autoimmune changes, metabolic-vascular disease.

According to WHO, there are currently more than 177 million diabetics in the world, and by 2025 their number will reach 300 million. According to WHO, by 1980, more than 30 million patients with diabetes mellitus were registered around the globe, and the proportion of purulent-inflammatory diseases in surgical pathology, which accounts for 70% of such patients [2]. The most frequently detected are abscesses, phlegmons, carbuncles, boils, and suppuration of postoperative wounds.

**Justification**. When a combined pathology occurs, there are not two independently developing processes, but an interconnected, mutually aggravating new form of the disease: according to modern concepts, a "mutual aggravation" syndrome occurs.

With a lack of insulin in patients with diabetes, disorganization of carbohydrate metabolism occurs, which is manifested by hyperglycemia, glycosuria, and a decrease in glycogen content in tissues and, above all, in the liver. Due to liver dysfunction, water-salt and protein metabolism subsequently change. Disorders of protein metabolism manifest themselves in a decrease in its synthesis and an increase in its breakdown. As a result, the formation of glucose from amino acids increases. In the body of patients, an accumulation of ketone bodies and acetone occurs against the background of an almost complete loss of the ability to synthesize fats, which leads to ketoacidosis.

As a result of pronounced disturbances in metabolic processes, microcirculation, hypoxia, as well as autoimmune changes, diabetes can be considered a metabolic-vascular disease. [3].

It has been established that during acute purulent infection there is a decrease in the amount of insulin in the body and an increase in hyperglycemia due to a violation of both endogenous and exogenous insulin, on the one hand, and its binding to serum proteins, on the other hand. Any purulent focus can cause decompensation of diabetes, so for diabetic patients it is necessary to increase the daily dose of insulin. All this requires special treatment tactics, consisting of immediate wide opening of purulent foci, correction of disturbed metabolic processes and, first of all, carbohydrate metabolism with the use of insulin, prescription of broad-spectrum antibiotics, as well as detoxification and immunocorrective therapy.

The oxidative effect of ozone on organic compounds in the aquatic environment can occur in three ways.

1. Direct oxidation with loss of an oxygen atom. 2. The addition of an ozone molecule to the substance being oxidized. 3. Catalytic effect, enhancing the oxidative role of oxygen. All three mechanisms have a bactericidal effect on aerobic and anaerobic microflora.

**Purpose of the study**. Characterize the microbial picture of a purulent focus and the phagocytic activity of neutrophils during treatment with antibiotics in combination with local treatment with ozonated saline solution.

**Materials and methods**. 55 patients (23 men and 22 women) with purulent infections of various nature aged from 29 to 70 years were examined. All patients underwent bacteriological examination 4-5 times, on the 1st, 3rd, 5th and 7th days of treatment. In 29 patients, the phagocytic activity of peripheral blood neutrophils was studied at the same time.

For bacteriological examination, patients were provided with exudate and pieces of tissue from necrotic areas of the wound. Quantitative determination of microflora was carried out according to the method of J. C. Gould (1965) and U. M. Feldman et al. (1991). The virulence of staphylococci was studied according to five criteria (hemolytic properties, plasma coagulation, lecithinase formation, pigment formation, mannitol cleavage) of the Christie-Chapman method as modified by Smorodinzhev (1987).

The phagocytic activity of neutrophils was determined according to the method of I.Yu. Serebrisky and M.M. Antonova (1990). Test microorganisms - Staphylococcus aureus 209P, phagocytic number (PN) and phagocytic index (PI) were determined. We studied the effect of ozone therapy on the microflora of purulent wounds in patients with diabetes mellitus. Ozonated saline solution, being a strong antiseptic, the activity of which is much higher than that of traditionally used drugs, quickly reduces the number of microbes in the wound. The use of gaseous ozone is even more pronounced, and their combined use leads most quickly to wound sterility. The use of ozone therapy makes it possible to eliminate the purulent-necrotic process much faster and achieve a

clear tendency towards wound healing. Treatment of patients included treatment of wounds with ozonated saline solution and antibiotic therapy taking into account the sensitivity of microorganisms. The control group consisted of 15 patients with purulent infection, treated with conventional methods.

**Results and discussion.** During bacteriological examination of material from patients with purulent infections, the growth of facultative anaerobic microorganisms was noted in 85% of cases; in 49.5% of cases, gram-positive bacteria were isolated, in 30.3% of cases - gram-negative ones. Fungi of the genus Candida were cultured in 5.2% of patients. Escherichia coli, representatives of the genus Proteus and Citobacter predominated among gramnegative bacteria.

Staphylococcus aureus and Staphylococcus epidermidis predominated among gram-positive bacteria, and virulent strains predominated, reaching 77% of the total number of isolated cultures. A quantitative bacteriological study carried out before local treatment revealed high tissue dissemination within the purulent focus (109 - 1010 CFU). After treating the lesion twice with fresh ozonized physiological solution, on the 3rd day there was a decrease in bacterial contamination, and on the 5th day - clearance of pyogenic microorganisms.

In the control group, which received only antibacterial therapy, bacterial contamination decreased by 40-50% on the 5th day, and complete reorganization was observed on the 7th day. In patients in whom the microflora of the purulent focus was represented by monocultures, complete tissue cleansing was observed on the 6-7th day, whereas with the association of various types of gram-positive and gram-negative bacteria, the cleansing proceeded more slowly and was completed on the 10th day. In the control group the degree bacterial contamination of tissues at all stages of the study was significantly higher (1012-1016 CFU, P <0.05).

It should be noted that in 50% of patients in this group there was a combined contamination of tissues with both gram-positive and gram-negative bacteria, and the persistence of bacteria in these cases lasted for a longer time - 10 days or more. Thus, on the 10th day, clearance of microorganisms was observed only in 20.7% of patients. A study of the phagocytic activity of neutrophils showed that with repeated treatment of wounds with ozonized saline solution, PN significantly decreased before treatment (normal -4.7 $\pm$ 0.3, before treatment -2.7 $\pm$ 0.2, P <0.001), increased after course of treatment to normal values up to -4.6  $\pm$ 0.2, P <0.001.

In the control group, such dynamics were not observed and, despite a significant increase in the PN value, the values of this indicator were still significantly different from normal values (before treatment  $2.8\pm0.2$ , after treatment -  $3.5\pm0.1$ , P< 0.01). The latter value was significantly different from normal PN values (P<0.05). The positive dynamics of IF were of a similar nature in patients of the main group: with a norm of  $67.3\pm6.9$ , this indicator before treatment was  $50.4\pm5.7$ , and after treatment  $61.5\pm7.5$ , i.e. significantly differed from the norm (P<0.05) before treatment, this indicator reached the

normal value P<0.05. In the control group there was a tendency to increase this indicator, but it did not reach normal values: before treatment 50.4±5.7, after treatment -53.2±3.5, P<0.05. Thus, effective complex therapy, by removing the microbial load and thereby reducing the toxic effect on the body, helps to normalize the phagocytic activity of neutrophils.

**Conclusion.** 1. The microflora isolated from a purulent-necrotic lesion in patients with diabetes mellitus differs from that in people who do not suffer from this disease. The large role of gram-negative microflora as pathogens is characteristic (bacteria of the genus Proteus and Klebsiella are the most common).

2. The use of ozonized saline solution in the treatment of surgical patients with purulent-inflammatory processes is an effective method, which in a short time leads to complete cleansing of the purulent focus from bacteria and a reduction in wound healing time. 3. Local application of ozonated saline solution has a stimulating effect on the phagocytic activity of peripheral blood neutrophils.

# LITERATURE

- 1. Astakhov I. N. Treatment of patients with diabetes mellitus with necrotic lesions of the foot. // Surgery. 2001. N 12. P. 39-41.
- 2. Asfandiyarova N. S., Kolcheva N. G., Shatrova I. V. Immunological methods for diagnosing diabetes mellitus // Clinical laboratory service-2000. –No. 9. pp. 40-41.
- 3. Balabolkin M. I. Diabetology. M.: Medicine, 2000. 672 p.
- 4.Collin H. L., Niskanen L. Uusitupa M. at ol Oral Symtoms and Signs in Olderly Patients With Type 2 Diabetes Mellitus. A Focus on Diabetic Neuropathy // Oral. Surg. Oral. Med. Oral. Pathol. Oral. Radiol. Endod. (Toyry J., Collin P., Koivisto A. M., Viinamaki H., Meurman J. N). 2000. №90 (3). P. 299 305.
- 5. Voevodin D. A., Rozanova G. N., Stenina M. A. with coauthors. The role of immunological reactions in the adaptive process in children with type I Diabetes, phylogenetic concepts of antistress adaptation // Immunology. -2003. №2. P. 103-106.
- 6. Lohvitskiy S. V., Ismailov J. K., Morozov E. S. Surgery of purulent wounds of the foot. // Surgery. -2001. -№3.

## **РЕЗЮМЕ**

# МИКРОБИОЛОГИЧЕСКАЯ ХАРАКТЕРИСТИКА РАНЫ У БОЛЬНЫХ САХАРНОГО ДИАБЕТА С ГНОЙНОЙ ИНФЕКЦИЕЙ Файзуллаева Замира Рахматовна, Касимова Насиба Хамидуллаевна,

**Турдибеков Гуломжон Мухиддинович** *Ташкентская медицинская академия* 

fz1392fz@gmail.com

**Ключевые слова:** сахарный диабет, гнойно-воспалительные заболевания, инсулин, антибактериальная терапия, аутоиммунные изменения, метаболически-сосудистые заболевания.