

ISSN: 2181-4007

www.tnmu.uz

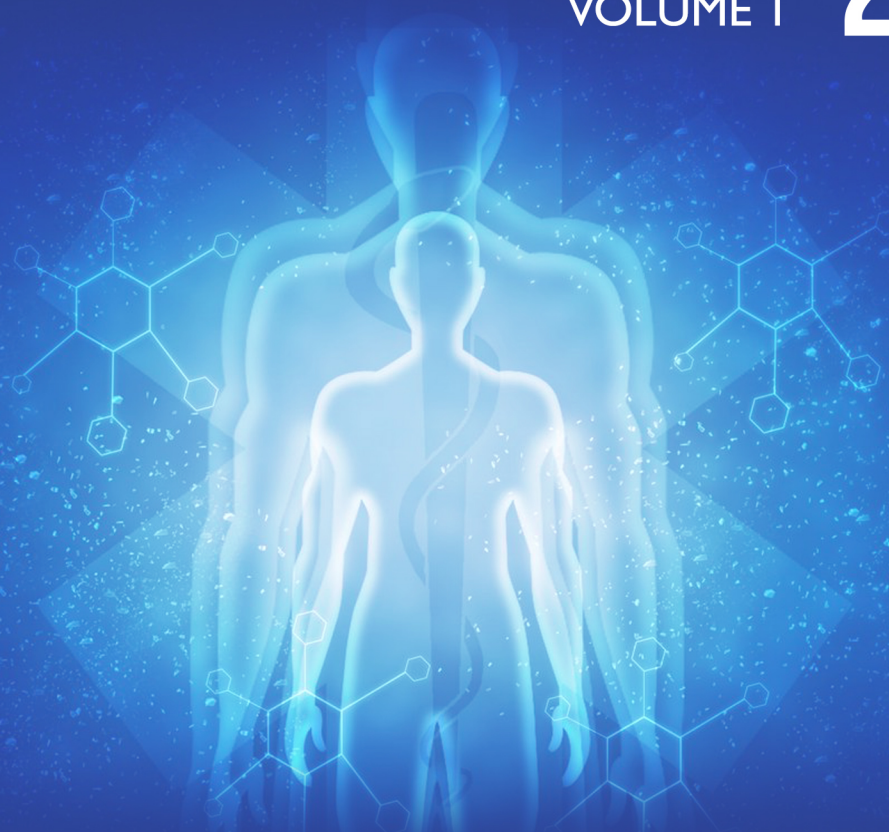
# THE JOURNAL

OF HUMANITIES & NATURAL SCIENCES

GUMANITAR VA TABIIY FANLAR JURNALI

ISSUE 14  
VOLUME I

2024



Informing scientific practices around the world through research and development



TIBBIYOT  
NASHRIYOTI  
MATBAA UYI

**Gumanitar va  
tabiiy fanlar  
jurnali**



**Journal of  
humanities &  
natural sciences**

## **ЖУРНАЛ ГУМАНИТАРНЫХ И ЕСТЕСТВЕННЫХ НАУК**

**ISSN: 2181-4007 (print)**

**№ 14 (09), 2024. Vol. 1**

Jurnal O'zbekiston Respublikasi Prezidenti Administratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan ro'yxatdan o'tkazilgan (guvohnoma № 040226).

Jurnal O'zbekiston Respublikasi Oliy attestatsiya komissiyasi tomonidan 2023 yil 5 maydan tibbiyot fanlari bo'yicha dissertatsiyalar asosiy ilmiy natijalarini chop etish tavsiya etilgan ilmiy nashrlar ro'yxatiga kiritilgan (OAK Rayosatining 337-son qarorga asosan).

Журнал зарегистрирован Агентством информации и массовых коммуникаций при Администрации Президента Республики Узбекистан (свидетельство № 040226).

Журнал включен в перечень научных изданий, рекомендованных к публикации основных научных результатов диссертаций по медицинским наукам с 5 мая 2023 года Высшей аттестационной комиссией Республики Узбекистан (Согласно решению № 337 Президиума ВАК).

---

TIBBIYOT NASHRIYOTI MATBAA UYI  
O'zbekiston Respublikasi. Toshkent shaxri. Olmazor tumani. Farobiy ko'chasi – 2. 100109  
Tel.: (+998-91) 164-24-40, (+998-71) 214-90-164,  
vebsayt: www.tmmu.uz, e-mail: asmehrid@gmail.com

## TAHRIRIYAT JAMOASI

**BOSH MUHARRIR:**

D.Sc., professor  
Gaybullayev Asilbek Asadovich

**TAHRIRIYAT RAISI:**

D.Sc., professor  
Madazimov Madamin Muminovich

**BOSH MUHARRIR O'RINBOSARI**

D.Sc., professor  
Teshayev Oktyabr Ruxillaevich

**MA'SUL KOTIB**

Aslonova Zebiniso Anvarovna, Ph.D, dotsent  
Xegay Lyubov Nikolaevna, t.f.n., dotsent

## TAHRIRIYAT HAY'ATI A'ZOLARI

D.Sc., professor Pavalkis Dainius (Litva)	t.f.f.d., dotsent Iskandarov Sherzod Abdig'anievich (O'zbekiston)
D.Sc., professor Megalhayz Tereza (Portugaliya)	t.f.n., dotsent Kadomseva Larisa Viktorovna (O'zbekiston)
D.Sc., professor Syed Naqi Abbas (Hindiston)	Ph.D., dotsent Karimdjanova Guzal Akmal'djanovna (O'zbekiston)
D.Sc., professor Ayji Mano (Yaponiya)	Ph.D., professor Akramova Nozima Akramovna (O'zbekiston)
D.Sc., professor Boymurodov Shuhrat Abdujalilovich (O'zbekiston)	Ph.D., professor Gaybullayev Elbek Azizbekovich (O'zbekiston)
D.Sc., professor Shukurov Farxad Ishkulovich (O'zbekiston)	Ph.D., dotsent Iriskulova Elmira Uraimkulovna (O'zbekiston)
D.Sc., professor Ergashev Ulug'bek Yusufjonovich (O'zbekiston)	Ph.D., dotsent Abdullayeva Shakhlo Kurbanburiyevna (O'zbekiston)
D.Sc., professor Ruziev Sherzod Ibodullaevich (O'zbekiston)	f-m.f.n., dotsent Bazarbaev Muratali Irisalievich (O'zbekiston)
D.Sc., professor Nazarov Azadbek Axmedovich (O'zbekiston)	f.f.n., dotsent Oltiev Temir Jonimboevich (O'zbekiston)
D.Sc., professor Muftaydinov Kiyomidin Xamdamovich (O'zbekiston)	Ph.D., dotsent Abdukadirova Ikbol Kamal'djanovna (O'zbekiston)
D.Sc., professor Nikonova Lyudmila Ivanovna (Rossiya)	Ph.D., dotsent Xalillaev Adilbek Kurambaevich
D.Sc., dotsent Zufarov Aziz Alimjanovich (O'zbekiston)	Ph.D. Nuraliev Farid Nekkadamovich
D.Sc., dotsent Salaxiddinov Kamoliddin Zuxriddinovich (O'zbekiston)	t.f.n. Muftaydinova Shaxnoza Kiyomiddinovna (O'zbekiston)
D.Sc., dotsent Baxronova Dilrabo Keldiyorovna (O'zbekiston)	Ph.D. Turamuratova Iroda Ilxombaevna (O'zbekiston)
D.Sc., dotsent Usmanova Durdona Djurabaevna (O'zbekiston)	Ph.D. Ismailova Jadida Axmedjanovna (O'zbekiston)
D.Sc., dotsent Omonova Umida Tulkinovna (O'zbekiston)	Ph.D. Abidov Xasanxodja Alisherovich (O'zbekiston)
D.Sc., dotsent Daminova Kamola Maratovna (O'zbekiston)	Ph.D. Jo'raev Abdunazar Xatamnazarovich (O'zbekiston)
D.Sc., dotsent Velázkez Virna Vilchis (Meksika)	Ph.D. Babaraximova Sayyora Boriyevna (O'zbekiston)
D.Sc., dotsent José Ramón González García (Meksika)	Ph.D. Akromov Ulug'bek Sharobiddinovich (O'zbekiston)
D.Sc. Mahkamova Dilbar Kamal'djanovna	Ph.D. Uzbekov Timur Sakenovich (O'zbekiston)
t.f.n., dotsent Daminova Malika Nasirovna (O'zbekiston)	Ph.D. Ismailova Mahfuza Ubaydullaevna (O'zbekiston)

## МУНДАРИЖА – ОГЛАВЛЕНИЕ – CONTENTS

**МЕДИЦИНА И ЗДРАВООХРАНЕНИЕ**

<b>Abdullayeva N.E.</b> / Me'da saratoni skriningi .....	5
<b>Rabimova Z.Sh.</b> / Modern analysis of norespiratory lung function and molecular mechanisms of lung injury in metabolic syndrome .....	8
<b>Abdullayev U.M.</b> / The current state of the issue of the problem urogenital chlamydia .....	13
<b>Umarkhodzhaev F.R.</b> / Jarrohlik yo'li bilan davolash uchun ko'rsatmalar, skoliozlik umurtqa deformasiyalarning tasnifi .....	16
<b>Qurbaniyazova M.Z., Shonazarova O.B.</b> / Bachadonida chandig'i bor ayollarda predgravidar tayyorgarlikni takomillashtirish .....	19
<b>Bazarbayev M.I., Ermetov E.Ya., Maxsudov V.G., Bozarov U.A.</b> / Tibbiy tadqiqodlarda statistik usullarni qo'llash .....	23
<b>Наримова Г.Д., Алимова А.М., Иссаева С.С.</b> / Роль инсулиноподобного фактора роста-1 и гормона роста при раке молочной железы .....	26
<b>Хамидуллаева Г.А.</b> / Метаболические нарушения у пациентов с гипертонической болезнью: анализ и перспективы .....	34
<b>Каримова Ф.Р.</b> / Сурункали аллергия дерматитларни даволашда фоз ёғи таркибли табиий малҳамдан фойдаланишнинг самарадорлигини баҳолаш .....	39
<b>Абдуллаев Р.А.</b> / Дифференцированное хирургическое лечения пациентов с невралгией тройничного нерва и оценка качества жизни .....	43
<b>Эрназаров О.Г.</b> / Критерии диагностики и оценка качества жизни в дифференцированном лечении пациентов с невралгией тройничного нерва .....	50
<b>Султонов А.А.</b> / Дифференцированное хирургическое лечение пациентов с грыжами поясничного отдела позвоночника и оценка качества жизни .....	57
<b>Ниезова Д.Ш.</b> / Клинические особенности холестатического синдрома у детей .....	64
<b>Duschanova Z.A.</b> / Surunkali endometrit va uning ayol reproduktiv tizimiga ta'siri .....	68
<b>Нуралиев Н.А., Жабборова О.И.</b> / Турли кўринишдаги нурланишларнинг организмга таъсир даражасини аниқлаш бўйича экспериментал моделлар яратиш асослари .....	73
<b>Ismailova D.O., Musakhodjaeva D.A., Magzumova N.M.</b> / Immune system parameters in women with genital endometriosis .....	80
<b>Saidova I.Kh.</b> / Distance psychological help: readiness of specialists and quality of services in the era of online counseling .....	84
<b>Нуралиев Н.А., Игамова О.К.</b> / Тимэктомия ўтказилган тажриба ҳайвонлари гуморал иммунитетини ва цитокин статусининг таъсири .....	91
<b>Камилова Ш.Р., Наврузова Ш.И.</b> / Оценка риска ремоделирования сердца у больных с ишемической болезнью сердца .....	98
<b>Ибраимова Н.П.</b> / Доброкачественные заболевания женских половых органов в период перименопаузы .....	105
<b>Нарзуллаев Ш.Ш., Рахманов К.Э., Давлатов С.С.</b> / Клинико – морфологическое обоснование хирургического лечения узловых образований щитовидной железы .....	108
<b>Нурова Ш.Н.</b> / Возникновение хронического диффузного пародонтита за счет остеопороза у женщин с раком молочной железы фертильного возраста .....	113

## THE CURRENT STATE OF THE ISSUE OF THE PROBLEM UROGENITAL CHLAMYDIA

**Abdullayev Ulug'bek Meylik og'li** – senior lecturer  
**Okhunjonova Kamola Khoshimjon kizi** – student  
Tashkent Medical Academy (Tashkent, Uzbekistan)

**Abstract.** Bacterial urethritis today are the cause of a number of pathological conditions, namely: infertility, ectopic pregnancy, neonatal pathology. According to the World Health Organization (WHO), up to 90 million people worldwide contract urogenital chlamydia (UGH) every year. Urogenital chlamydia infection is widespread among young people. The peak incidence of UGH occurs at the age of 15–25 years. [4,6,10]. Currently, there is a worldwide trend towards an increase in the incidence of chlamydia, especially among young women who have just entered the period of sexual activity. In the absence of adequate treatment for urogenital chlamydia, 40% of women develop pelvic inflammatory diseases, and one in four of them has infertility. [1,2,9].

**Key words:** Chlamydia, urethritis, urogenital infections.

## СОВРЕМЕННОЕ СОСТОЯНИЕ ВОПРОСА О ПРОБЛЕМЕ УРОГЕНИТАЛЬНОГО ХЛАМИДИОЗА

**Абдуллаев Улугбек Мейлик угли** – старший преподаватель  
**Охунджонова Камолы Хошимджон кизи** – студент  
Ташкентская Медицинская Академия (Ташкент, Узбекистан)

**Аннотация.** Бактериальные уретриты на сегодняшний день являются причиной целого ряда патологических состояний, а именно: бесплодия, внематочной беременности, патологии новорожденных. По данным Всемирной организации здравоохранения (ВОЗ), ежегодно урогенитальным хламидиозом (УГХ) заражаются до 90 миллионов человек во всем мире. Урогенитальный хламидиоз широко распространен среди молодежи. Пик заболеваемости угревой сыпью приходится на возраст 15–25 лет. [4,6,10]. В настоящее время во всем мире наблюдается тенденция к росту заболеваемости хламидиозом, особенно среди молодых женщин, которые только вступили в период половой жизни. При отсутствии адекватного лечения урогенитального хламидиоза у 40% женщин развиваются воспалительные заболевания органов малого таза, и каждая четвертая из них страдает бесплодием. [1,2,9].

**Ключевые слова:** хламидиоз, уретрит, урогенитальные инфекции.

## UROGENITAL XLAMIDIYA MUAMMOSI MASALASINING HOZIRGI HOLATI

**Abdullayev Ulug'bek Meylik og'li** – katta o'qituvchi  
**Oxunjonova Kamola Xoshimjon qizi** – talaba  
Toshkent Tibbiyot Akademiyasi (Toshkent, O'zbekiston)

**Annotatsiya.** Bakterial uretrit bugungi kunda bir qator patologik holatlarning sababi, ya'ni bepustlik, tashqi homiladorlik, yangi tug'ilgan chaqaloqlarning patologiyasi. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, har yili dunyo bo'ylab 90 milliongacha odam urogenital xlamidiya (UGC) bilan kasallanadi. Urogenital xlamidiya yoshlar orasida keng tarqalgan. Akne bilan kasallanishning eng yuqori darajasi 15–25 yoshda. [4,6,10]. Hozirgi kunda butun dunyoda xlamidiya bilan kasallanish tendentsiyasi kuzatilmoqda, ayniqsa jinsiy hayotga endigina kirgan yosh ayollar orasida. Urogenital xlamidiya uchun etarli davolanish bo'lmasa, ayollarning 40 foizida tos a'zolarining yallig'lanish kasalliklari rivojlanadi va ularning har to'rtidan biri bepustlikdan aziyat chekadi. [1,2,9].

**Kalit so'zlar:** xlamidiya, uretrit, urogenital infeksiyalar.

Urogenital chlamydia is the most common sexually transmitted infection and remains relevant due to an increase in the incidence of reproductive age and frequent chronization of infection. The possibility of developing persistent chlamydia infection is also important. Its causes may be: treatment with drugs that are inactive against chlamydia, subtherapeutic doses of antibiotics, as well as low concentrations of gamma interferon and its inducers. Every

year, more than 250 million new cases of genital infections are registered in the world, in which the first place is in terms of incidence and caused by complications include chlamydia. [2,3,7]. According to the World Health Organization (WHO), up to 90 million people get sick every year in the world urogenital chlamydia (UGH). Urogenital chlamydia infection is widespread among young people. The peak incidence of UGH occurs at the age of 15–25 years. Cur-

rently, there is a worldwide trend towards an increase in the incidence of chlamydia, especially among young women who have just entered the period of sexual activity. In the absence of adequate treatment for urogenital chlamydia, 40% of women develop pelvic inflammatory diseases, and one in four of them has infertility. According to WHO, chlamydia is isolated: up to 80% in patients with non-gonorrheal and post-gonorrheal urethritis; up to 50–70% in women with chronic inflammatory diseases of the genitals. Urogenital chlamydia is a sexually transmitted infectious disease caused by chlamydia. [5,12] Chlamidia trachomatis is a gram-negative microorganism, capable of causing a variety of diseases affecting a number of organs, including genitourinary. Infecting the epithelium of the mucous membranes, chlamydia cause their inflammation. These diseases tend to be chronic with the development of numerous complications. Low-symptomatic and asymptomatic forms are also possible, which present great difficulties in diagnosis. Among the entire spectrum of diseases associated with Chlamidia trachomatis, sexually transmitted infections (STIs) have acquired special importance, since they affect people during the period of greatest sexual activity, leading to serious and sometimes irreversible consequences such as infertility, ectopic pregnancy, neonatal pathology. Clinical manifestations are different, since in the urogenital tract Chlamydia trachomatis can be associated with any pathogenic and conditionally pathogenic microorganisms. The causative agent of chlamydia can persist in the body for decades or a lifetime, preserving its pathogenic properties. The persistence of the pathogen leads to the development of pathological changes in the genitourinary system. In addition, Chlamydia trachomatis is a cofactor in the transmission of HIV infection. [12,13,14]. Chlamydia is the cause of more than 20 clinical syndromes and pathological conditions in humans. The etiological agent in 25–59% men with non-gonococcal urethritis are *C. trachomatis*. Post-gonorrheal urethritis has a chlamydial etiology in 70–76% of cases. Chlamydia trachomatis can be associated with vaginal trichomonas, gonococcus, as well as with other pathogenic microorganisms. In 42–52% of cases of chlamydial urethritis in men, *U. urealyticum* is isolated, and in 50–69% of cases – with chlamydial cervicitis. *C. trachomatis* is detected in 19.5% of women with bacterial vaginosis. Concomitant urogenital chlamydia infection is detected in 26% of syphilis patients. In 28–40% of cases, chlamydia is found in patients with trichomoniasis, in 20–71% – in patients with gonorrhea. Chlamydial urethritis is often complicated by an ascending inflammatory process, being the cause of 21–46% of chronic prostatitis. [10,15,18].

At the ultrastructural level, the possibility of chlamydia attaching to the head, neck and proximal part of the waist of spermatozoa was shown. These studies explain the role of spermatozoa as carriers of

chlamydia infection in the uterus, fallopian tubes and abdominal cavity. The literature describes the contact and vertical mechanisms of transmission of the causative agent of chlamydia. The contact mechanism is realized sexually in genital–genital, genital–anal and oral–genital contacts, and non-sexually – household infection in girls. The vertical mechanism is realized during antenatal infection – through the placenta and intranatally – in childbirth. Risk factors for urogenital chlamydia include: young age of women, due to physiological ectopia of the cervix, endocervicitis, low socio-economic status, a large number of sexual partners, taking oral contraceptives, especially with a high content of estrogens, other STIs. In pregnant women, risk factors are: age less than 20 years, pregnancy outside of marriage, other STIs, mucopurulent cervicitis, pyuria in the absence of bacteriuria, late attendance at a women's consultation, non-gonococcal urethritis of the sexual partner. Urogenital chlamydia in women has a primary chronic course, multiple lesions, including the urethra, cervical canal, organs of small Pelvic and pharmacology. No. 6 (7), 2014 68 pelvis. [6,19]. There is a pronounced discrepancy between severe destructive changes in the internal genitalia and moderate symptoms. Pregnant women have chlamydia they are localized in the cervical canal, endometrium, tubes, often infect the decidua membranes, cause chorionamnionitis. This disease often leads to postpartum complications – uterine subinvolution, prolonged fever, endometritis. Ascending chlamydial infection most often spreads canalicularly, i.e. through the cervical canal, the uterine cavity, fallopian tubes to the peritoneum and abdominal organs; lymphogenously; hematogenously, as indicated by extragenital lesions; through intrauterine devices and intrauterine interventions. Trichomonas and spermatozoa may be involved in the spread of chlamydia. The term "ascending chlamydial infection" refers to damage to the mucous membrane of the uterus, tubes, ovaries, parotid ligaments, peritoneum, liver capsule. [2,4,6]. Chlamydial salpingitis is the most common manifestation of this infection. First of all, the mucous membrane of the tubes is affected: the integrity of the epithelium is violated, the rigidity of the tubes appears, their correct peristalsis is disrupted. In men, chlamydia infection is often subclinical, usually observed as a low-symptom inflammation the urethra, which lasts for several months. In an acute process, the clinical picture differs little from a gonococcal lesion. The clinical manifestations of the chronic process depend on the degree of involvement of the genitourinary system in the inflammatory process. So, along with urethritis, symptoms of prostatitis, vesiculitis, orchepididymitis, funiculitis can be observed. The final diagnosis of chlamydia infection is made after the detection of the pathogen. It is important that the frequency of detection of chlamydia depends on the correctness

the collection of the material, its delivery to the laboratory, the frequency of examination, the clinical form and the prescription of the infection [4,18]. Treatment of chronic urogenital chlamydia should be timely and adequate. The drugs of choice for the treatment of this disease are traditionally doxycycline and josamycin – they are equally effective in the treatment of urogenital chlamydia, however, under the influence of josamycin, the activity of T-lymphocytes producing gamma interferon increases, and, accordingly, the level of this cytokine in the blood increases, which may prevent the development of persistent infection. In many cases, therapy it can be small or ineffective, i.e. it does not lead to the elimination of the pathogen. This is due to several factors: there is an increase in the number of microorganisms resistant to antibacterial drugs; pathological changes in both cellular and humoral immunity, induced by chlamydia, are also observed. Therefore, in the treatment of chronic urogenital chlamydia, the use of immunomodulatory agents is so important, both having an effect on the neutrophil-phagocytic and T-cell links of immunity, and contributing to the induction of endogenous interferon (IFN). [3,11].

**Conclusion:** thus, the frequency of detection of chlamydia depends on the correctness of taking the material, its delivery to the laboratory, the frequency of examination, the clinical form and the prescription of the infection. Treatment of chronic urogenital chlamydia should be timely and adequate.

#### REFERENCES

1. Andrashko, Yu.V. Pulse therapy – a rational approach to the treatment of chronic urogenital chlamydia /Yu.V. Andrashko, O.M. Galagurich, S.V. Pushkarenko // Ukr. journal. dermatol. venerol. cosmetology. – 2007. – No.1. – pp. 77-80.
2. Batkaev, E.A. Modern problems of venereology /E.A. Batkaev, D.V. Ryumin // Russian Journal of Skin and Venereal Diseases. – 2009. – No.2. – pp.45-52.
3. Glazkova L.K. Practical aspects of persistent chlamydia infection // Venereologist. – 2005. – No.2. – pp. 4-12.
4. Glazkova L.K. Urogenital chlamydia. A modern view of the problem // Medical science and practice. – 2004. – No.4. – pp. 20-22.
5. Dovletkhanova E.R. The possibility of using immunomodulators in the complex treatment of IBS // Medical Council. – 2012. – No. 12. – pp. 84-87. 6. Egorova, E.S. Economic aspects of treatment of urogenital chlamydia / E.S. Egorova, L.B. Okonenko // Bulletin of the Peoples' Friendship University of Russia. Series: Medicine. – 2010. – No. 4. – pp. 379-382.
7. Immunology of the infectious process / Edited by V.I. Pokrovsky et al. – M., 1994. – 306s.
8. Clinical and immunological justification of interferon therapy in chronic bacterial prostatitis / A.A. Kamalov [et al.] // Urology. – 2010. – No. 1. – pp. 34-38.
9. Complex therapy of chronic urogenital chlamydia with using the inducer of endogenous interferons tilorone (Lavomax) / G.M. Bondarenko [et al.] // Dermatology and venereology. – 2010. – № 4 (50). – Pp. 47-55.
10. Mavrov, G.I. Optimization of treatment of patients with chronic urogenital chlamydia/ G.I. Mavrov, L.V. Ivashchenko // Dermatology and venereology. – 2012. – № 4 (58). – Pp. 81-89.
11. Mavrov, G.I. Features of the use of azithromycin ("Sumamed") in the treatment of chronic urogenital chlamydia / G.I. Mavrov, G.P. Chinov, Yu.V. Shcherbakova // Ukrainian Journal. dermatol. venerol. cosmetol. – 2010. – №1 (36). – Pp. 97-100.
12. Mavrov G.I. Chlamydia infections: biology of pathogens, pathogenesis. Clinic, diagnosis, treatment, prevention: monograph. – Kiev, 2005. – 524c.
13. Mavrov I.I. Fundamentals of diagnosis and treatment in dermatology and venereology: a manual for doctors, interns and students. – Kharkov: Fact, 2007. – 792 p.
14. Malova, I.O. Urogenital chlamydia in women of reproductive age: a rational approach to therapy / I.O. Malova, I.A. Sidorova, N.N. Shelomentseva // Siberian Medical Journal (Irkutsk). – 2013. – Vol. 117, No. 2. – pp. 46-50.
15. Molochkov, V.A. Modern approaches to the treatment of urogenital chlamydia/ V.A. Molochkov, V.I. Kisina, E.V. Shirshova // Doctor. – 2006. – No.2. – C.11-15.
16. Nesterov I.M. The effectiveness of 5% cycloferon liniment in the treatment of vaginal infections and dysbiosis // Difficult patient. – 2009. – Vol.7, No.8-9. – pp. 17-20.
17. Basic statistical indicators of morbidity of the entire population by regions of Russia [Electronic resource]. – Access mode: <http://www.mednet.ru/ru/statistika/zabolevaemostnaseleniya.html>.
18. Prilepskaya, V.N. Chlamydia infection in gynecology / V.N. Prilepskaya, N.I. Kondrikov, L.A. Ustyuzhanina // Obstetrics and gynecology. – 1998. – No.4. – pp.11-14.
19. Radar Encyclopedia of medicines / Edited by G. L. Vyshkovsky. – M.: LIBROFARM, 2011. – 1368 p.
20. Svistunov A.A. On the effectiveness of immunotherapy for complicated urogenital chlamydia // Russian Journal of Skin. and veins. diseases. – 2005. – No.2. – pp. 42-49

*Журнал включен в перечень рецензируемых научных изданий,  
рекомендованных Высшей аттестационной комиссией Республики Узбекистан  
для публикации основных научных результатов диссертаций  
по естественным и гуманитарным наукам*

**Gumanitar va tabiiy fanlar jurnali**  
**Журнал гуманитарных и естественных наук**  
**Journal of humanities & natural sciences**

**Выпуск 14 (№ 09) 2024 Vol. 1**

*Бош мухаррир **О.Козлова**  
Бадий мухаррир **Ж.Хамдамов**  
Компютерда сахифаловчи **С.Султанова***

---

NASH.lits. AA № 8798  
«TIBBIYOT NASHRIYOTI MATBAA UYI» МЧЖ  
Toshkent shahri, Olmazor tumani, Shifokorlar, 21



Издание зарегистрировано в редакционно-информационном  
управлении города Ташкента.  
(Свидетельство № 040226)

*Все права защищены.  
Перепечатка материала возможно только с разрешения редакции.  
Мнение редакционной коллегии может не совпадать с мнением автора.  
Ответственность за достоверность результатов и содержание рекламных  
материалов несут авторы и рекламодатели.*

---

Объем – 5,2 а.л. Тираж – 99. Формат 60x84. 1/16. Заказ № 2295–2023.  
Отпечатано «TIBBIYOTNASHRIYOTIMATBAAUYI» МЧЖ  
100109. Ул. Шифокорлар 21, тел: (998 71) 214–90–64, e-mail: rio-tma@mail.ru  
№ СВИДЕТЕЛЬСТВА: 7716