

БИМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

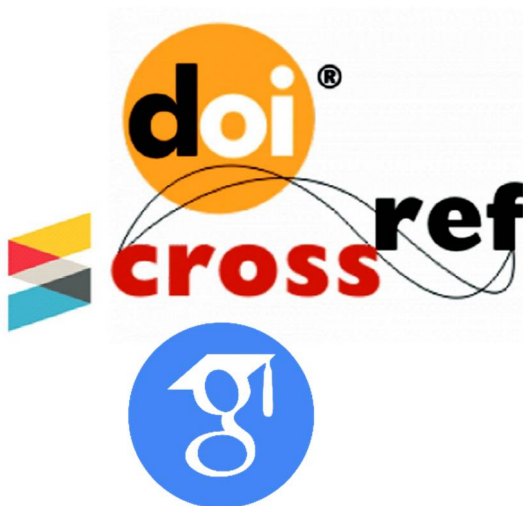
18 ЖИЛД, 1 СОН

ЖУРНАЛ БИМЕДИЦИНЫ И ПРАКТИКИ

ТОМ 18, НОМЕР 1

JOURNAL OF BIOMEDICINE AND PRACTICE

VOLUME 18, ISSUE 1



Бош муҳаррир:

Ризаев Жасур Алимжанович
тиббиёт фанлари доктори, профессор,
Самарқанд давлат тиббиёт университети ректори
ORCID ID: 0000-0001-5468-9403

Бош муҳаррир ўринбосари:

Зиядуллаев Шухрат Худайбердиевич
тиббиёт фанлари доктори, Самарқанд давлат тиббиёт
университети Илмий ишлар ва инновациялар бўйича
проректори, **ORCID ID:** 0000-0002-9309-3933

Масъул котиб:

Самиева Гулноза Уткуровна
тиббиёт фанлари доктори, доцент,
Самарқанд давлат тиббиёт университети
ORCID ID: 0000-0002-6142-7054

Нашр учун масъул:

Шаханова Шахноза Шавкатовна
PhD, Самарқанд давлат тиббиёт университети,
онкология кафедраси доценти
ORCID ID: 0000-0003-0888-9150

ТАХРИРИЯТ КЕНГАШИ:

Арипова Тамара Уктамовна

Иммунология ва инсон геномикаси институти директори –
тиббиёт фанлари доктори, профессор, Ўзбекистон
Республикаси Фанлар академияси академиги

Jin Young Choi

Сеул миллий университети Стоматология мактаби оғиз ва
юз-жағ жарроҳлиги департаменти профессори, Жанубий
Кореянинг юз-жағ ва эстетик жарроҳлик ассоциацияси
президент

Абдуллаева Наргиза Нурмаметовна

тиббиёт фанлари доктори, профессор, Самарқанд
давлат тиббиёт университети проректори, 1-клиникаси бош
врачи. **ORCID ID:** 0000-0002-7529-4248

Орипов Фирдавс Суръатович

тиббиёт фанлари доктори, доцент, Самарқанд давлат
тиббиёт университети Гистология, цитология ва
эмбриология кафедраси мудири
ORCID ID: 0000-0002-0615-0144

Мавлянов Фарход Шавкатович

тиббиёт фандар доктори, Самарқанд давлат тиббиёт
университети болалар жарроҳлиги кафедраси доценти
ORCID ID: 0000-0003-2650-4445

Магзумова Наргиза Махкамовна

тиббиёт фанлари доктори, Тошкент тиббиёт
академияси Оилавий тиббиётда акушерлик ва гинекология
кафедраси профессори **ORCID ID:** 0000-0002-9313-4918

Очилов Улугбек Усмонович

PhD, доцент, СамДТУ Дипломдан кейинги таълим
факултети Психиатрия курси мудири. СамДТУ Илмий
кенгаши котиби. <https://orcid.org/0000-0003-3553-8727>

Шавази Наргиз Нуралиева

DSc. Доцент, СамДМУ 3-сон акушерлик ва гинекология
кафедраси мудири <https://orcid.org/0000-0001-7859-9955>

Юлдашев Равшан Захидович

Тоҷикистон Давлат тиббиёт университети Онкология
ва нур таъхиси кафедраси мудири, Тиббиёт фанлари
доктори, Профессор. Душанбе, Тоҷикистон.
<https://orcid.org/0009-0002-7165-5373>

Сандов Сандамир Абборович

тиббиёт фанлари доктори,
Тошкент фармацевтика институти
ORCID ID: 0000-0002-6616-5428

Бабаджанов Ойбек Абдужаббарович

тиббиёт фанлари доктори, Тошкент педиатрия
тиббиёт институти, Тери-таносил, болалар
тери-таносил касалликлари ва ОИТС
ORCID ID: 0000-0002-3022-916X

Теребаев Билим Алдамуратович

тиббиёт фанлари доктори, доцент, Тошкент
педиатрия тиббиёт институти Факультет болалар
хирургия кафедраси. **ORCID ID:** 0000-0002-5409-4327

Юлдашев Ботир Ахматович

тиббиёт фанлари номзоди,
Самарқанд давлат тиббиёт университети
№2-сон Педиатрия, неонатология ва болалар
касалликлари пропедевтикаси кафедраси доценти.
ORCID ID: 0000-0003-2442-1523

Ибрагимова Малика Худайбергеновна

тиббиёт фанлари доктори, профессор
Тошкент давлат стоматология институти
ORCID ID: 0000-0002-9235-1742

Рахимов Нодир Махамматкулович

тиббиёт фанлари доктори, Самарқанд давлат
тиббиёт университети, онкология кафедраси доценти
ORCID ID: 0000-0001-5272-5503

Даминов Феруз Асадуллаевич

Самарқанд давлат тиббиёт университети,
2-сон Даволаш факултети декани,
тиббиёт фанлари доктори, доцент.
Самарқанд, Ўзбекистон.

Миржураев Элбек Миршавкатович

тиббиёт фанлари доктори, профессор
ЎзССВ Тиббий ходимларни касбий малакасини
ривожлантириши марказининг Нейрореабилитация
кафедраси мудири, Тошкент, Ўзбекистон

Саҳифаловчи: Хуршид Мирзахмедов

Контакт редакций журналов. www.tadqiqot.uz

ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Editorial staff of the journals of www.tadqiqot.uz

Tadqiqot LLC The city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Phone: (+998-94) 404-0000

Главный редактор:

Ризаев Жасур Алимджанович
доктор медицинских наук, профессор, Ректор
Самаркандского государственного медицинского
университета, **ORCID ID:** 0000-0001-5468-9403

Заместитель главного редактора:

Зиядуллаев Шухрат Худайбердиевич
доктор медицинских наук, проректор по научной
работе и инновациям Самаркандского государственного
медицинского университета, **ORCID ID:** 0000-0002-9309-

Ответственный секретарь:

Самиева Гульноза Уткуровна
доктор медицинских наук, доцент Самаркандского
государственного медицинского университета.
ORCID ID: 0000-0002-6142-7054

Ответственный за публикацию:

Шаханова Шахноза Шавкатовна
PhD, доцент кафедры онкологии Самаркандского
государственного медицинского университета
ORCID ID: 0000-0003-0888-9150

РЕДАКЦИОННЫЙ КОЛЛЕГИЯ:

Арипова Тамара Уктамовна
директор Института иммунологии и геномики человека
доктор медицинских наук, профессор, академик АН РУз

Jin Young Choi
профессор департамента оральной и челюстно-лицевой
хирургии школы стоматологии Стоматологического
госпиталя Сеульского национального университета,
Президент Корейского общества челюстно-лицевой и
эстетической хирургии

Абдуллаева Наргиза Нурмастановна
доктор медицинских наук, профессор, проректор
Самаркандского государственного медицинского
университета, **ORCID ID:** 0000-0002-7529-4248

Орипов Фирдавс Суръатович
доктор медицинских наук, доцент, заведующий кафедрой
Гистологии, цитологии и эмбриологии Самаркандского
государственного медицинского университета
ORCID ID: 0000-0002-0615-0144

Мавлянов Фарход Шавкатович
доктор медицинских наук, доцент кафедры Детской
хирургии Самаркандского государственного медицинского
университета, **ORCID ID:** 0000-0003-2650-4445

Магзумова Наргиза Махкамовна
Доктор медицинских наук, профессор кафедры
акушерства и гинекологии Семейной медицины
Ташкентской медицинской академии
ORCID ID: 0000-0002-9313-4918

Очилов Улугбек Усманович
PhD, доцент, заведующий курсом психиатрии
факультета постдипломного образования СамГМУ.
Секретарь Ученого совета СамГМУ.
<https://orcid.org/0000-0003-3553-8727>

Шавази Наргиз Нуралиевна
DSc. доцент, заведующая кафедрой
акушерства и гинекологии N 3 СамГМУ.
<https://orcid.org/0000-0001-7859-9955>

Юлдашев Равшан Захидович
Заведующий кафедрой Онкологии и лучевой
диагностики Таджикского медицинского университета,
д.м.н., профессор. Душанбе, Таджикистан
<https://orcid.org/0009-0002-7165-5373>

Саидов Сандамир Абборович
доктор медицинских наук, Ташкентский
фармацевтический институт
ORCID ID: 0000-0002-6616-5428

Бабаджанов Ойбек Абдужаббарович
доктор медицинских наук, Ташкентский педиатрический
медицинский институт, кафедра Дерматовенерология, детская
дерматовенерология и СПИД, **ORCID ID:** 0000-0002-3022-916X

Теребаев Билим Алдамуратович
доктор медицинских наук, доцент кафедры Факультетской
детской хирургии Ташкентского педиатрического
медицинского института.
ORCID ID: 0000-0002-5409-4327

Юлдашев Ботир Ахматович
кандидат медицинских наук, доцент кафедры Педиатрии,
неонатологии и протекции детских болезней №2
Самаркандского государственного медицинского университета
ORCID ID: 0000-0003-2442-1523

Ибрагимов Малика Худайбергеновна
доктор медицинских наук, профессор
Ташкентского государственного
стоматологического института
ORCID ID: 0000-0002-9235-1742

Рахимов Нодир Махамматкулович
доктор медицинских наук, доцент кафедры
онкологии Самаркандского государственного
медицинского университета
ORCID ID: 0000-0001-5272-5503

Даминов Феруз Асадуллаевич
Декан лечебного факультета №2 Самаркандского
государственного медицинского университета, доктор
медицинских наук, доцент. Самарканд, Узбекистан.

Мирджурев Эльбек Миршавкатович
Заведующий кафедрой Нейрореабилитации Центра развития
профессиональной квалификации медицинских работников МЗ
РУз, д.м.н., профессор Ташкент, Узбекистан

Верстка: Хуршид Мирзахмедов

Контакт редакций журналов. www.tadqiqot.uz
ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Editorial staff of the journals of www.tadqiqot.uz
Tadqiqot LLC The city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Phone: (+998-94) 404-0000

Chief Editor:

Rizaev Jasur Alimjanovich
MD, DSc, Professor of Dental Medicine,
Rector of the Samarkand State Medical University
ORCID ID: 0000-0001-5468-9403

Deputy Chief Editor:

Ziyadullaev Shukhrat Khudayberdievich
Doctor of Medical Sciences, Vice-Rector for scientific work
and Innovation, Samarkand State Medical University
ORCID ID: 0000-0002-9309-3933

Responsible secretary:

Samieva Gulnoza Utkurovna
doctor of Medical Sciences, Associate Professor,
Samarkand State Medical University
ORCID ID: 0000-0002-6142-7054

Responsible for publication:

Shakhanova Shakhnoza Shaykatovna
PhD, Docent Department of Oncology
Samarkand State medical university
ORCID ID: 0000-0003-0888-9150

EDITORIAL BOARD:

Aripova Tamara Uktamovna

*Director of the Institute of Immunology and Human Genomics -
Doctor of Medical Sciences, Professor, Academician of the
Academy of Sciences of the Republic of Uzbekistan*

Jin Young Choi

*Professor Department of Oral and Maxillofacial
Surgery School of Dentistry Dental Hospital
Seoul National University, President of the
Korean Society of Maxillofacial Aesthetic Surgery*

Abdullaeva Nargiza Nurmatovna

*Doctor of Medical Sciences, Professor, Vice-Rector
Samarkand State Medical University, Chief Physician of
the 1st Clinic ORCID ID: 0000-0002-7529-4248*

Oripov Firdavs Suratovich

*Doctor of Medical Sciences, Associate Professor,
Head of the Department of Histology, Cytology and
Embryology of Samarkand State Medical University.
ORCID ID: 0000-0002-0615-0144*

Mavlyanov Farkhod Shavkatovich

*Doctor of Medicine, Associate Professor of Pediatric
Surgery, Samarkand State Medical University
ORCID ID: 0000-0003-2650-4445*

Magzumova Nargiza Makhamovna

*Doctor of Medical Sciences, Professor, Department
of Obstetrics and Gynecology, Family Medicine, Tashkent
Medical Academy. ORCID ID: 0000-0002-9313-4918*

Ochilov Ulugbek Usmanovich

*PhD, Docent, Head of the Psychiatry Course at the Faculty of
Postgraduate Education of SamSMU. Secretary of the Academic
Council of SamSMU. <https://orcid.org/0000-0003-3553-8727>*

Shavazi Nargiz Nuraliyeva

*DSc, Associate Professor, Head of the Department of Obstetrics
and Gynecology N 3 of Samarkand State Medical University.
<https://orcid.org/0000-0001-7859-9955>*

Yuldashev Ravshan Zakhidovich

*Head of the Department of Oncology and Radiation Diagnostics
at Tajik State Medical University, Doctor of Medical Sciences,
Professor. Dushanbe, Tajikistan <https://orcid.org/0009-0002-7165-5373>*

Saidov Saidamir

*Doctor of Medical Sciences,
Tashkent Pharmaceutical Institute,
ORCID ID: 0000-0002-6616-5428*

Babadjanov Oybek Abdujabbarovich

*Doctor of sciences in medicine, Tashkent Pediatric
Medical Institute, Department of Dermatovenereology,
pediatric dermatovenereology and AIDS
ORCID ID: 0000-0002-3022-916X*

Terebaev Bilim Aldamuratovich

*Doctor of Medical Sciences, Associate Professor,
Tashkent Pediatric Medical Institute,
Faculty of Children Department of Surgery.
ORCID ID: 0000-0002-5409-4327.*

Yuldashev Botir Akhmatovich

*Candidate of Medical Sciences, Associate Professor of
Pediatrics, Neonatology and Propaedeutics of Pediatrics,
Samarkand State Medical University No. 2.
ORCID ID: 0000-0003-2442-1523*

Ibragimova Malika Xudayberganovna

*Doctor of Medical Sciences, Professor,
Tashkent State Dental Institute
ORCID ID: 0000-0002-9235-1742*

Rahimov Nodir Maxammatkulovich

*DSc, Associate Professor of Oncology,
Samarkand State Medical University
ORCID ID: 0000-0001-5272-5503*

Daminov Feruz Asadullaevich

*Dean of the Faculty of Medicine No. 2, Samarkand State
Medical University, Doctor of Medical Sciences, Associate
Professor. Samarkand, Uzbekistan.*

Mirjuraev Elbek Mirshavkatovich

*Head of the Department of Neurorehabilitation Center
for the development of professional qualification of
medical workers, Doctor of Medical Sciences,
Professor. Tashkent, Uzbekistan
<https://orcid.org/0009-0008-2111-4388>*

Page Maker: Khurshid Mirzakhmedov

Контакт редакций журналов. www.tadqiqot.uz

ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Editorial staff of the journals of www.tadqiqot.uz

Tadqiqot LLC The city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Phone: (+998-94) 404-0000

ANESTHESIOLOGY, RESUSCITATION, INTENSIVE CARE

1. **Matlubov Mansur Muratovich, Muminov Abdukhalim Abduvakilovich**
ASSESSMENT OF THE DEGREE OF PRESERVATION OF CORONARY RESERVES IN PREGNANT WOMEN WITH MITRAL STENOSIS.....11
2. **Khudoyberdieva Gulrukh Sobirovna, Matlubov Mansur Muratovich, Kasparova Gayane Arturovna**
COMPARATIVE ANALYSIS OF THE CONDITION OF WOMEN DURING CESAREAN SECTION UNDER SPINAL ANESTHESIA AND MEDICAL SEDATION.....16
3. **Khudoyberdieva Gulrukh Sobirovna, Matlubov Mansur Muratovich**
SEDATION AND PSYCHO-EMOTIONAL STATUS OF WOMEN IN REGIONAL ANESTHESIA FOR CAESAREAN SECTION. CURRENT STATE OF THE PROBLEM.....24
4. **Sharipov Isroil Latipovich**
HEMODYNAMIC GRADATIONS DURING COMBINED USAGE OF EXTRACORPORAL DETOXIFICATION METHODS IN CHILDREN WITH RENAL FAILURE.....31
5. **Pardaev Shukur Kuylievich, Sharipov Isroil Latipovich**
APPLICATION OF CENTRAL NEURAXIAL ANESTHESIA IN THE SURGICAL TREATMENT OF LUMBAR-SACRAL DISC HERNIATIONS.....38
6. **Yusupov Jasur Tolibovich, Matlubov Mansur Muratovich**
ENHANCING INTENSIVE CARE FOR PATIENTS FOLLOWING CORONARY ARTERY BYPASS GRAFTING (LITERATURE REVIEW).....44

OBSTETRICS AND GYNECOLOGY

7. **Ahmedova Aziza Tayirovna, Rasulova Feruza Golibovna**
ASSESSMENT OF PERINATAL COMPLICATIONS RISK USING REMOTE CARDIOTOCOGRAPHY MONITORING.....52
8. **Agababyan Larisa Rubenovna, Usmankulova Habiba Mizrobjonovna**
NEW TREATMENT OPPORTUNITIES FOR POLYCYSTIC OVARY SYNDROME.....59
9. **Nasirova Zebiniso Azizovna**
APPROACHES TO THE DIAGNOSIS AND TREATMENT OF ANEMIA IN HEAVY MENSTRUAL BLEEDING.....66
10. **Zakirova Nodira Islomovna, Yuldasheva Farangiz Ismatilloevna**
CORRECTION AND TACTICS OF PREGNANCY ADMINISTRATION IN CASE OF VIOLATIONS OF THE VAGINAL ECOSYSTEM.....76

INFECTIOUS DISEASES

11. **Orzikulov Azam Orzikulovich, Haydarov Akbar Haydarovich**
ANTIVIRAL THERAPY IN VIRAL HEPATITIS “C” DISEASE EFFICIENCY (A CASE FROM PRACTICE).....80
12. **Oslanov Absamat Abdurakhimovich, Soibnazarov Orzukul Ernazarovich**
COMPARATIVE STUDY OF THE CONTRIBUTION OF THE VIRAL LOAD TO THE DEVELOPMENT OF LIVER FIBROSIS IN CHRONIC HEPATITIS «B» (ON THE EXAMPLE OF THE SAMARKAND REGION).....86
13. **Kadirov Zhonibek Fayzullayevich, Rizaev Jasur Alimdjanovich, Ziyadullaev Shukhrat Khudayberdiyevich**
MOLECULAR MECHANISMS OF IMMUNOLOGICAL ACTIVATION IN HIV INFECTION.....92

ENDOCRINOLOGY

14. **Egamova Malika Tursunovna, Rasulov Jamshedjon Shavkatovich**
EFFICACY OF FOLK REMEDIES IN PATIENTS WITH DIABETES MELLITUS AT RISK OF STROKE.....106
15. **Egamova Malika Tursunovna, Ergashev Asadullo Ubaydullo o'g'li**
THE IMPORTANCE OF BLOOD RHEOLOGY IN DIABETES IN THE ORIGIN OF ISCHEMIC STROKE AND THE EFFECT OF HIRUDOTHERAPY ON BLOOD RHEOLOGY.....111
16. **Fozilova Umida Kamalovna, Khabibova Nazira Nasulloevna.**
THE ROLE OF GLYCEMIC CONTROL IN PREVENTING DENTAL COMPLICATIONS IN PATIENTS WITH TYPE 2 DIABETES(REVIEW ARTICLE).....116
17. **Saidova Shakhnoza Aripovna, Yakubov Abdusalol Vahobovich, Pulatova Durdona Baxadirovna**
THE EFFECT OF GLP-1 RECEPTOR AGONISM ON DIVERSE ASPECTS OF THE CARDIOVASCULAR SYSTEM IN PATIENTS WITH TYPE 2 DIABETES AND OBESITY.....122

MORPHOLOGY

18. **Boboev Askar Ibodullaevich, Oripov Firdavs Suratovich, Boboev Ibodullo Boboevich**
MORPHOLOGICAL CHANGES IN THE GALLBLADDER WALL IN EXPERIMENTAL CALCULOUS CHOLECYSTITIS IN LABORATORY ANIMALS.....128
19. **M.A. Abdullayeva, O.O. Zaripova.**
DETERMINATION OF THE ACCUMULATION LEVEL OF ARTIFICIAL FOOD COLORANTS E 171 AND E 173 IN THE BRAIN.....135
20. **Mamataliyev Abdumalik Rasulovich**
ANATOMICAL AND TOPOGRAPHICAL STRUCTURE OF THE EXTRAHEPATIC BILE DUCT IN EXPERIMENTAL ANIMALS.....140
21. **Ismailov Jasur Mardonovich**
ABOUT BRONCHIECTASIS AS A TYPE OF CHRONIC NONSPECIFIC LUNG DISEASE.....144
22. **Ismailov Jasur Mardonovich, Norjigitov Azamat Musokulovich**
MORPHOLOGY AND MORPHOMETRIC INDICATORS OF BRONCHI AND LUNG TISSUES IN CHILDREN WITH BRONCHIECTASIS.....150
23. **Juraev Kamoliddin Danabaevich, Islamov Shavkat Erjigitovich**
MORPHOLOGICAL CHANGES IN THE THYMUS IN NEWBORNS IN THE LATE NEONATAL PERIOD.....158
24. **Rakhimova Gulnoz Shamsievna, Teshayev Shuxrat Jumayevich.**
ASSESSMENT OF MORPHOLOGICAL CHANGES IN THE TESTES ON THE FIRST DAY AFTER ACUTE TRAUMATIC BRAIN INJURY.....168

NEUROLOGY AND NEUROSURGERY

25. **Ruzmetova Saodat Umarjonovna**
FEATURES OF THE DEVELOPMENT OF EARLY POSTNATAL HEALTH IN CHILDREN WHO HAVE SUFFERED PERINATAL CNS DAMAGE.....173
26. **Khakimova Sakhiba Ziyadullaevna, Gaffarova Parvina Abdurafikovna, Abruev Khudoerkhon Oybekovich**
CLINICAL FEATURES OF PARKINSON'S DISEASE IN THYROID HOMEOSTASIS DISRUPTION.....178

27.	Adambaev Zufar Ibragimovich, Kilichev Ibodullo Abdullayevich, Samiyev Asliddin Sayitovich, Khudoyberganov Nurmamat Yusupovich, Pazilova Aida Sultanovna CORRECTION OF COGNITIVE IMPAIRMENTS IN CHRONIC CEREBRAL ISCHEMIA IN OUTPATIENT SETTINGS.....	185
28.	Khakimova Sohiba Ziyadulloevna, Nurboeva Iroda Samariddin Qizi PARKINSON'S DISEASE.....	192
29.	Khamdamova Bakhora Komiljonovna, Kodirov Umid Arzikulovich, Muhammadiyeva Dilafruz Po'lot qizi INNOVATIVE METHODS OF THERAPY FOR NEUROVASCULAR DISORDERS IN LUMBAR SPINE DORSOPATHIES.....	202
30.	Gaffarova Parvina Abdurafikovna, Khakimova Sakhiba Ziyadulloevna DANCE MOVEMENT REHABILITATION TO REDUCE COMPLICATIONS IN PATIENTS WITH EARLY-ONSET PARKINSON'S DISEASE.....	209
31.	Kodirov Umid Arzikulovich, Khakimova Sohiba Ziyadulloevna, Zoxidjonova Shahnoza Zoxidjonovna FEATURES OF PSYCHOPATHOLOGICAL AND AUTONOMIC DISORDERS IN PATIENTS WITH CHRONIC PAIN SYNDROME WITH RADICULOPATHIES.....	216
32.	Ergasheva Munisa Yakubovna. IMPROVING MEASURES FOR REHABILITATION OF CHILDREN WITH DISABILITIES DUE TO NERVOUS SYSTEM DISEASES.....	222
33.	Raimova Malika Mukhamedjanovna, Yodgarova Umida Gaybulloevna IMPROVING THE QUALITY OF LIFE OF PATIENTS BY STUDYING THE RELATIONSHIP BETWEEN RESTLESS LEGS SYNDROME AND HYPOTHYROIDISM.....	229

UROLOGY

34.	Allazov Iskandar Salax Ugli, Allazov Salax Allazovich, Ablyatifov Aziz Baxtiyarovich OUTPATIENT UROLOGICAL-POLICLINICAL CARE IN THE REPUBLIC OF UZBEKISTAN.....	235
35.	Allazov Salakh Allazovich, Allazov Iskandar Salakh Ogli, Ergashev Arslonbek Shuxratjon Ogli MEDICAL-SOCIAL AND ORGANIZATIONAL-PSYCHOLOGICAL ASPECTS OF UROLOGICAL DISEASES. LITERATURE REVIEW.....	242
36.	Allazov Salakh Allazovich, Batirov Bekhzod Amindjanovich. DISTRIBUTION OF UROLOGICAL DISEASES AND METHODS FOR THEIR DETECTION PHARMACOLOGY AND TRADITIONAL MEDICINE.....	247
37.	Mirrakhimova Maktuba Habibullaevna, Nishanbaeva Nilufar Yunusjanovna FILAGGRIN DEFECT IN ATOPIC DERMATITIS AND MODERN METHODS OF CORRECTION.....	256
38.	Egamova Malika Tursunovna, Rasulov Jamshedjon Shavkatovich. HIRUDOTHERAPY, THE EFFECT OF VARIOUS TREATMENT METHODS.....	262

PEDIATRICS AND PEDIATRIC SURGERY

39.	Abdullaev Zafar Bobirovich, Agzamkhodjaev Saidanvar Talatovich ANTENATAL DIAGNOSTICS OF BLADDER EXTROPHY: CONTEMPORARY POSSIBILITIES AND PROSPECTS.....	267
40.	Rakhimova Durdona Zhurakulovna HYGIENIC ASSESSMENT OF ACTUAL NUTRITION OF PRIMARY SCHOOL CHILDREN.....	274

41. **Ganiev Abdurashid Ganievich, Sanakulov Abdulatif Burkhanovich**
ASSESSMENT OF THE IMPACT OF ATOPIC DERMATITIS ON THE QUALITY OF
LIFE OF THE FAMILY OF A SICK CHILD.....284
42. **Naimushina Elena Serafimovna, Kilina Alla Vladimirovna, Chervinskih Tatyana Anatolyevna**
GENDER-SPECIFIC CLINICAL MANIFESTATIONS OF OBESITY IN
ADOLESCENTS.....293
43. **Nuritdinova Gavhar Taipovna, Inakova Barno Bahodirovna, Abduvahobova Gulmira, Arzibekova Umida Abdukodirovna.**
DELAYED NEUROPSYCHOLOGICAL DEVELOPMENT IN NEWBORNS WITH
MODERATE AND SEVERE ASPHYXIA.....299
44. **Ollabergenov Odilbek, Baratov Feruz**
MINIMALLY INVASIVE INTERVENTIONS IN ACUTE PLEURAL EMPYEMA IN
CHILDREN.....305

ONCOLOGY

45. **Ulmasov Firdavs Gayratovich, Esankulova Bustonoy Sobirovna.**
THE ROLE OF VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) IN OVARIAN
CANCER WITH PERITONEAL CARCINOMATOSIS IN STAGES III AND IV.....311
46. **Kahharov Alisher, Khodjayeva Nozima**
THE IMPACT OF FERTILITY PRESERVATION PROGRAMS ON THE QUALITY OF
LIFE OF WOMEN WITH ONCOLOGICAL DISEASES.....318
47. **Zaripova Parvina Ilkhomovna, Yorov Lutfillo Shukurulloevich, Kutlumurotov Otabek Bekjanovich, Juraev Mirjalol Dehkonovich**
ABOUT THE PROBLEM OF BREAST CANCER RECURRENCE CAUSES.....323

DENTISTRY AND MAXILLOFACIAL SURGERY

48. **Rizaev Jasur Alimjanovich, Gaibullaev Elbek Azizbekovich, Akramova Nozima Akramovna, Pustovetova Maria Genadievna**
ANALYSIS OF CYTOKINE PROFILE IN GINGIVAL CREVICULAR FLUID OF
PATIENTS WITH AGGRESSIVE PERIODONTITIS: PATHOGENETIC AND
DIAGNOSTIC ASPECTS.....333
49. **Daminova Nargiza Ravshanovna, Makhkamova Oqila Abdushukurovna, Sadikova Dilfuza Ravshanbekovna, Inogamov Sherzod Muhamatisakovich**
EVALUATION OF THE IMMUNOLOGICAL AND RESPIRATORY STATUS OF
PATIENTS WITH BRONCHIAL ASTHMA WITH COMORBID PATHOLOGY OF THE
ORAL CAVITY.....338
50. **Axmedov Xurshid Kamalovich**
ASSESSMENT OF STRUCTURAL AND FUNCTIONAL CHANGES IN PERIODONTAL
TISSUES DURING PROSTHETICS WITH METAL-CERAMIC AND ZIRCONIUM
DENTURES.....344
51. **Olimova Dildora Vohid qizi**
DENTAL DISEASES IN PATIENTS WITH END-STAGE CHRONIC KIDNEY DISEASE
(A STUDY OF PATIENTS RECEIVING AND NOT RECEIVING HEMODIALYSIS).352
52. **Zoyirov Tulkin Elnazarovich, Mardonova Dildora Kasimovna**
IMPROVEMENT OF TREATMENT METHODS FOR HYPERTROPHIC GINGIVITIS IN
PATIENTS WITH EPILEPSY.....358

53. **Khotamova Madina Anvarovna, Odiljonova Mukhimaoy Savlatovna**
EVALUATION OF THE EFFECTIVENESS OF THE PREVENTION AND TREATMENT OF PERIODONTITIS AND THE ORGANIZATION OF DENTAL MEASURES FOR WORKERS OF METAL PROCESSING ENTERPRISES.....366
54. **Umarova Makhfuza Usmanovna**
THE IMPACT OF CHRONIC USE OF NICOTINE-CONTAINING PRODUCTS ON THE PROGRESSION OF INFLAMMATORY-DYSTROPHIC DISEASES OF THE ORAL CAVITY: CLINICAL AND BIOCHEMICAL ANALYSIS.....370
55. **Zoyirov Tulkin Elnazarovich, Allazarov Kuvondik Azadovich**
IMPROVING THE COMPLEX TREATMENT OF CHRONIC RECURRENT APHTHOUS STOMATITIS IN PATIENTS WITH CHRONIC GASTRODUODENITIS.....377
56. **Allazarov Kuvondik Azadovich, Zoyirov Tulkin Elnazarovich.**
USE AND EFFECTIVENESS OF OZONE IN THE COMPLEX TREATMENT OF CHRONIC RECURRENT APHTHOUS STOMATITIS IN PATIENTS WITH CHRONIC GASTRODUODENITIS385
57. **Mardonova Dildora Kasimovna, Zoyirov Tulkin Elnazarovich**
OPTIMIZATION OF METHODS FOR EXAMINING PERIODONT TISSUE DISEASES IN PATIENTS WITH EPILEPSY393
58. **Akhmedov Ilhom Ibrohimovich, Kamalova Feruza Raxmatullaeva.**
CHANGES IN MICROFLORA NON-SPECIFIC FACTORS PROTECTION OF THE ORAL CAVITY IN CHILDREN WITH INFLAMMATORY DISEASES OF MAXILLOFACIAL.....401
59. **Yuldashev Forrukh Farkhod Ugli, Kuryazov Akbar Kuranboevich, Khabibova Nazira Nasulloevna.**
EPIDEMIOLOGICAL FEATURES AND APPROACHES TO THE PREVENTION AND TREATMENT OF DENTAL DISEASES IN DEAF-MUTE CHILDREN (REVIEW ARTICLE).....406
60. **Navruzova Ugilxon Orzijon Qizi, Xabibova Nazira Nasulloevna.**
THE ROLE OF IMMUNE STATUS IN THE PATHOGENESIS OF RECURRENT APHTHOUS STOMATITIS.....414
61. **Tojiyev Feruz Ibodulla ugli, Beysenbayev Nurbek Kunanbay ugli, Ismoilkhojaeva Komila G'ani qizi.**
RECONSTRUCTION OF MANDIBULAR DEFECTS IN CHILDREN WITH INDIVIDUALLY MANUFACTURED TITANIUM IMPLANTS AFTER REMOVAL OF BENIGN TUMORS.....419

FORENSIC MEDICAL EXAMINATION

62. **Giyasov Zaynitdin Asamutdinovich, Gulyamov Dilshod Erkinovich**
FORENSIC ASSESSMENT OF INJURIES TO MAJOR JOINTS IN ROAD TRAFFIC ACCIDENTS.....425

THERAPY AND INTERNAL MEDICINE

63. **Tashkenbayeva Eleonora Negmatovna, Esankulov Mukhammad Olimovich**
SIGNIFICANCE OF UROMODULIN IN THE DEVELOPMENT AND PROGRESSION OF CHRONIC KIDNEY DISEASE.....431

TRAUMATOLOGY AND ORTHOPEDICS

64. **Abrolov Hakimjon Kobiljonovich, Xolmurotov Akmal Abdumalikovich, Irisov Ortikali Tulaevich, Berdiev Kobiljon Bahromovich, Rakhimberganov Khusanboy Davlatnazarovich**
NEW TECHNOLOGIES IN DIAGNOSIS AND SURGICAL TREATMENT OF ASCENDING AORTIC ANEURYSM.....437

65. **Ashirov Mavlon Umirzakovitch.**
BIOMECHANICAL INSIGHTS INTO MDCO FOR FLATFOOT CORRECTION.....445
66. **Khodjanov Iskandar Yunusovich, Ubaydullaev Sherozbek Farkhodovich**
IMPROVING THE METHODS OF DIAGNOSIS AND TREATMENT OF VALGUS
DEFORMATION OF THE ELBOW JOINT.....459
67. **Mamasoliev Bakhodir Mamausupovich**
FEATURES OF THROMBOEMBOLIC COMPLICATIONS PREVENTION DURING
SURGICAL TREATMENT OF KNEE JOINT DISEASES IN PATIENTS WITH CHRONIC
LOWER LIMB VENOUS DISEASE.....468
68. **Melibayev Salimjon Tashtanovich, Karshiboyev Abduvakhob Jamboyevich, Nomazov
Olim Ergash Og'Li, Jurayev Ilhom G'ulomovich**
VERTEBRAL COMPRESSION FRACTURES: CAUSES, DIAGNOSIS, AND MODERN
TREATMENT STRATEGIES.....475
69. **Karshiboyev Abduvakhob Jamboyevich, Melibayev Salimjon Tashtanovich, Nomazov
Olim Ergash Og'Li, Jalilov Khusan Mukhitdinovich.**
HIP FRACTURE, DIAGNOSIS, SURGICAL TREATMENT, REHABILITATION,
THROMBOEMBOLIC PROPHYLAXIS, BISPHOSPHONATES, FALL
PREVENTION.....489
70. **Kholkhudjayev Farrukh Ikramovich**
RESULTS OF MINIMALLY INVASIVE SURGICAL TREATMENT OF ROTATOR
CUFF INJURIES OF THE SHOULDER JOINT.....502
71. **Tilyakov Xasan Azizovich, Temurov Alisher Akmaljon O'g'li, Xursanov Muxriddin
Xusniddin O'g'li, Yusupov Sohijjon Saitxon O'g'li, Tolmasov Mirjalol Mirzohid O'g'li.**
RESULTS OF THE APPLICATION OF ADVANCED OSTEOSYNTHESIS IN
DIAPHYSEAL FRACTURES OF THE HUMERUS.....508

RADIATION IMAGING

72. **Ikramova Zulfiya Tulkinovna, Rozikhodjaeva Gulnora Ahmedovna, Soipova Guzal
Gulomidinovna**
ASSESSMENT OF TOTAL CEREBRAL BLOOD FLOW IN PATIENTS WITH CAROTIC
ATHEROSCLEROSIS.....515

SURGERY

73. **Akhmedov Adkham Ibadullaevich, Fayazov Abdulaziz Djalilovich**
PREVENTION AND TREATMENT OF MOTOR-EVACUATION DYSFUNCTION OF
THE GASTROINTESTINAL TRACT IN SEVERELY BURNED PATIENTS.....523
74. **Sayinaev Farrukh Karamatovich, Rakhmanov Kosim Erdanovich**
LAPAROSCOPIC AND OPEN HERNIOPLASTY FOR VENTRAL HERNIAS:
SURGICAL OUTCOMES AND COMPLICATIONS ASSESSMENT.....532
75. **Daminov Feruz Asatullaevich, Shomurodov Khabibullo Abdumalik Ugli, Rakhmonov
Kosim Erdanovich.**
OPTIMIZATION OF SURGICAL TACTICS IN ACUTE DESTRUCTIVE
CHOLECYSTITIS: THE ROLE OF LAPAROSCOPIC CHOLECYSTECTOMY AND RISK
FACTOR ANALYSIS.....539
76. **Khayitov Laziz Milionerovich, Khakimov Erkin Abdikhalilovich, Zuvaytov Shoxrux
G'ayrat o'g'li, Abrorov Shahbozjon Nematzoda**
THE ROLE ENDOBRONCHIAL COMPLEX THERAPY AT PATIENTS WITH THE
INHALATION TRAUMA.....544

OPHTHALMOLOGY

77. **Fayzieva Dilorom Buritoshevna, Akhmedova Dilafruz Baxadirovna, Mirzaev
Dilshodbek Akhmedovich.**
VISUAL DISORDERS AND THEIR IMPACT ON PERIPHERAL VISION AND EYE
MOVEMENT COORDINATION.....549

БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ | JOURNAL OF BIOMEDICINE AND PRACTICE

УДК: 618.11–006.2–031.14–008.06

AGABABYAN Larisa Rubenovna

DSc, professor

USMANKULOVA Khabiba Mizrobjonovna

Samarkand State Medical University

NEW TREATMENT OPPORTUNITIES FOR POLYCYSTIC OVARY SYNDROME

For citation: Agababyan Larisa Rubenovna, Usmankulova Habiba Mizrobjonovna. New treatment opportunities for polycystic ovary syndrome // Journal of Biomedicine and Practice. 2025, vol. 10, issue 1, pp.59-65

<http://dx.doi.org/10.5281/zenodo.15007803>

ANNOTATION

Polycystic ovary syndrome (PCOS) is a heterogeneous complex disorder characterized by oligo-anovulation, hyperandrogenism and/or hyperandrogenemia, and polycystic ovarian morphological changes. Interest in PCOS encompasses several specific aspects, including reproductive, cosmetic, and medical aspects

Key words: polycystic ovary syndrome, etiology, treatment, myoinositol, ovulation induction, drills, oral combined contraceptives, life style changes.

АГАБАБЯН Лариса Рубеновна

Д.м.н., профессор

УСМАНКУЛОВА Хабиба Мизробжонова

Самаркандский государственный медицинский университет

НОВЫЕ ВОЗМОЖНОСТИ ЛЕЧЕНИЯ СИНДРОМА ПОЛИКИСТОЗНЫХ ЯИЧНИКОВ

АННОТАЦИЯ

Синдром поликистозных яичников (СПКЯ) представляет собой гетерогенное комплексное нарушение, характеризующееся олиго-ановуляцией, гиперандрогенизмом и/или гиперандрогемией, а также поликистозными морфологическими изменениями яичников. Интерес к СПКЯ охватывает несколько специфических аспектов, включая репродуктивные, косметические и медицинские

Ключевые слова: СПЯ, этиология, лечение, миоинозитол, индукция овуляции, слюнотечение, комбинированные оральные контрацептивы, модификация образа жизни.

AGABABYAN Larisa Rubenovna

t.f.d., professor

USMANKULOVA Khabiba Mizrobjonovna

Samarqand davlat tibbiyot universiteti

TUXUMDON POLIKISTOZ SINDROMINI DAVOLASHNING YANGI IMKONIYATLARI**ANNOTATSIYA**

Tuxumdon polikistoz sindromi (PCOS) oligo-anovulyatsiya, giperandrogenizm va/yoki gipreandrogenemiya, shuningdek, tuxumdonlardagi polikistik morfologik o'zgarishlar bilan tavsiflangan geterogen murakkab kasallikdir. TPS ga bo'lgan qiziqish reproduktiv, kosmetik va tibbiy jihatlarni o'z ichiga olgan bir qancha o'ziga xos jihatlarni qamrab oladi

Kalit so'zlar: Tuxumdon polikistoz sindromi, patogenezi, davolash, mio-inositol, ovulyatsiya induksiyasi, drilling, turmush tarzini o'zgartirish.

Tuxumdon polikistoz sindromi reproduktiv yoshdagi ayollarda eng keng tarqalgan endokrin kasallik bo'lib, reproduktiv va metabolik kasalliklar bilan tavsiflanadi. Psixologik muammolar, gipotalamus-gipofiz tizimining disfunktsiyasi, tuxumdon disfunktsiyasi, mitoxondriyal disfunktsiya, semizlik va D vitamini etishmovchiligi TPS bo'lgan ayollarda bepushtlikning etiologiyasi sifatida ko'rib chiqiladi. Ko'rib chiqish kasallikning patogenezi va uni davolashga yondashuvlar, shu jumladan ratsional ovqatlanish, kombinatsiyalangan gormonal kontratseptivlar bo'yicha so'nggi tadqiqotlarni ko'rib chiqilgan, klomifen sitrat bilan ovulyatsiyani induksiya qilish va yordamchi reproduktiv texnologiyalar tuxumdon polikistoz sindromini davolashda umumiy qabul qilingan yondashuvlar sifatida belgilangan. [1].

Tuxumdon polikistoz sindromi patogenezi haqida yangilik

Tuxumdon polikistoz sindromi (PCOS) murakkab endokrin kasallik bo'lib, u nafaqat reproduktiv, balki metabolik kasalliklar bilan ham namoyon bo'ladi. Ushbu kasallik reproduktiv yoshdagi ayollarning katta qismiga ta'sir qiladi va ularning salomatligi uchun jiddiy oqibatlariga olib kelishi mumkin. Tuxumdon polikistoz sindromining asosiy ko'rinishlariga tartibsiz hayz ko'rish, bepushtlik, shuningdek, tana va yuzda ortiqcha soch o'sishi (girsutizm), akne va seboreik dermatit kabi giperandrogeniya belgilari kiradi.

Tuxumdon polikistoz sindromi patogenezi tug'ilishga ta'sir qiluvchi bir nechta asosiy omillarni aniqlaydi. Depressiya va tashvish kabi bemorlarning psixologik muammolari kasallikning namoyon bo'lishini kuchaytirishi va davolanishni qiyinlashtirishi mumkin. Gipotalamus-gipofiz disfunktsiyasi ham muhim rol o'ynaydi, bu esa hayz davrining normal tartibga solinishiga olib keladi. Bundan tashqari, tuxumdonlar va mitoxondriyalarning disfunktsiyasi tuxumlarning sifatini va urug'lantirish qobiliyatini buzishi mumkin.

Tuxumdon polikistoz sindromining xarakterli belgilaridan biri bu sindromning ko'plab fenotipik xususiyatlarini aniqlaydigan ortiqcha androgenlardir. 2020 yilda bir qator tadqiqotlar natijalari e'lon qilindi, ular metabolizmdagi o'zgarishlar tuxumdon polikistoz sindromi biologik mexanizmlarining asosini tashkil etishini ko'rsatdi. Ushbu kashfiyot metabolik gomeostaz va reproduktiv funktsiya o'rtasidagi murakkab o'zaro ta'sirlarni tushunishni sezilarli darajada kengaytirdi. Masalan, M. Dapas va boshqalarning ishi. reproduktiv va metabolik xususiyatlarda farq qiluvchi genetik jihatdan turli xil tuxumdon polikistoz sindromi subtiplari mavjudligini ko'rsatdi.

Yy tadqiqoti. Joo va boshqalar. TPSda semirish bilan bog'liq umumiy biologik yo'llarni aniqladi, bu sindromning patogenezida metabolik kasalliklarning muhimligini ta'kidlaydi. O'z navbatida, MJ ishi. Cox va boshqalar. sichqonlarda o'tkazilgan eksperimental modelda miya va yog' to'qimalari androgen bilan bog'liq reproduktiv disfunktsiyaning rivojlanishida asosiy rol o'ynashi ko'rsatilgan. Ushbu kashfiyot muhim klinik ta'sirga ega bo'lishi mumkin, chunki u endokrin va metabolik jihatlarni hisobga olgan holda TPSni davolashga kompleks yondashuv zarurligini ta'kidlaydi. Bundan tashqari, qo'ylarda TPS modeli bo'yicha o'tkazilgan tadqiqot intranazal insulinni yuborish adaptiv termogenezni yaxshilashi mumkinligini ko'rsatdi, bu metabolik kasalliklarni tuzatish uchun yangi terapevtik yondashuvlar mavjudligini ko'rsatdi. Ushbu tadqiqotlar tuxumdon polikistoz sindromi uchun yanada samarali davolash usullarini ishlab chiqish uchun yangi ufqlarni ochadi va bu sohada keyingi tadqiqotlar muhimligini ta'kidlaydi.

Tuxumdon polikistoz sindromi ko'p qirrali kasallik bo'lib, uning patogenezini chuqur tushunishni va har bir bemorga individual yondashuvni talab qiladi. Jobira va boshqalar [8] ichak

mikrobiotasidagi zararli o'zgarishlar qandli diabet bilan og'rigan, semirib ketgan o'smirlarda ham mavjudligini aniqladilar. J. Guo [9] ning meta-tahlili, shuningdek, oshqozon-ichak mikrobiomasi va semirish, QD2 va PCOS kabi metabolik kasalliklar o'rtasidagi bog'liqlikni aniqladi. Biroq, ichak mikrobiotasi va tuxumdon polikiztozi sindromining individual ko'rinishlari o'rtasidagi bog'liqlik isbotlanmagan: TPS bilan og'rigan bemorlarda eng ko'p uchraydigan mikrobioma o'zgarishlari quyidagi mikrobiota bilan bog'liq: Bacteroides, Coprococcus, Bacteroides, Prevotella, Lactobacillus spp, Parabacteroides, Escherichia spp/Shigella spp va Fasciculi bacterium prausnitzii. Mikrobiomadagi o'zgarishlar TPSning oqibati yoki sababi ekanligini aniqlash uchun yuqori darajadagi dalillar talab qilinadi: Z. Liang va boshqalar tomonidan o'tkazilgan ovqatlanish tahlili [10] tuxumdon polikiztozi sindromi bilan klechatka va D vitamini iste'moli sezilarli darajada kamayganligini ko'rsatdi. Parabacteroides distasonis, Bacteroides fragilis va Escherichia coli, bu qon zardobidagi luteinlashtiruvchi gormon (LH) darajasi bilan ijobiy bog'liq edi. va LH va follikulani stimullovchi gormon nisbati (LH va follikullarni stimullovchi gormon (FSH) nisbati ijobiy bog'liq edi. Bochqach qilib aytganda, TPS bilan og'rigan ayollarda ichak disbiyozi, ehtimol, neyroendokrin o'zgarishlar bilan bog'liq; RV. Paris va boshqalar [11] eksperimental sichqoncha modelida nutrientlarning oziq-ovqat balansidagi o'zgarishlar metabolik ko'rsatkichlariga ta'sir qilmasdan reproduktiv imkoniyatlarini yaxshilashini ko'rsatib berdi; M. Besenek va boshqalar [12] giperandrogenemiya (qonda androgenlarning oshishi) nafaqat biokimyoviy ko'rsatkichlarga, balki bemorlarning ruhiy-psixologik holatiga ham ta'sir qilishi mumkinligini aytib o'tgan; L Tian va boshqalar [13] tuxumdon polikiztozi sindromi bilan og'rigan bemorlarda androgenga sezuvchan retseptorlari genida mutatsiyalarni (o'zgarishlarini) ko'rsatib berdi. Polikistik tuxumdon sindromi reproduktiv yoshdagi ayollarda keng o'rganilgan. Biroq, ko'proq tadqiqotlar shuni ko'rsatadiki, TPS ayollar salomatligining ko'p jihatlariga umrbod ta'sir ko'rsatishi mumkin: u menopauzaning qanday boshlanishi va kechishiga, shuningdek, menopauzadan oldin va keyin yurak-qon tomir tizimiga ta'sir qilishi mumkin. Shu jumladan, tuxumdon polikistozi sindromi ayolning ginekologik va boshqa onkologik o'smalarni paydo bo'lishi xavfini oshirishi mumkin; Tuxumdon polikiztozi sindromining xususiyatlari, ya'ni semirishning mavjudligi, testosteronning oshishi va jinsiy steroidlarni bog'laydigan globulin past darajasi yurak-qon tomir kasalliklari rivojlanishiga ta'sir qilishi mumkinligi ko'rsatilgan [15]. Bundan tashqari, hozirgi vaqtda tuxumdon polikiztozi sindromi bilan og'rigan ayollarda homiladorlikning ikkinchi trimestrining boshida testosterone gormoni ko'tarilib, preeklampsianing xavfini oshiradi [13]. Genetik moyillik va perinatal xavf omillarining mavjudligi ba'zi ayollarda TPS rivojlanish xavfini oshirishi haqida dalillar mavjud. Bu shuni anglatadiki, tuxumdon polikiztozi sindromi rivojlanish xavfi bilan bog'liq atrof-muhit omillari homila va chaqaloqqa bevosita yoki bilvosita onaning tanasi orqali ta'sir qiladi [14]. TPS poligen va multifaktorial sindrom buzilishi ekanligi isbotlangan; Tuxumdon polikiztozi sindromi bilan bog'liq ko'plab genlar to'g'ridan-to'g'ri yoki bilvosita unumdorlikka ta'sir qiladi TPS holatlarining 70% genetik omillar aniqlangan [1,4]; Tuxumdon polikiztozi sindromiga moyil bo'lgan genlarning roli FBN3, DENND1A, LHCGR, THADA, C9orf3, FSHR, HMGA2, INSR, RAB5B, SUMO 1P1, TOX3, YAP1ni o'z ichiga oladi. P450 sitoxrom P450 CYP11A1, CYP17A1 va CYP19A1 estrogenlari almashinuvi genlaridagi polimorfizmlar va Kreutzfeld-Jakob kasalligining rivojlanishi o'rtasidagi bog'liqlik aniqlanmagan [2]. TPS ning sabab-ta'sir munosabatlari va rivojlanish mexanizmlarini baholash uchun foydali eksperimental modellarni ishlab chiqish uchun nomzod genlar, atrof-muhit va TPS chastotasi o'rtasidagi munosabatlarni aniqlashga qaratilgan fanlararo strategiya taklif qilindi [1,7]. So'nggi yillarda ushbu sindromning diagnostik mezonlarini aniqlash uchun ko'plab ma'lumotlar paydo bo'ldi. Gormonal jihatlar va insulin qarshiligi va semirish kabi metabolik kasalliklarga qo'shimcha ravishda, kutilganidan ertaroq glyukoza bardoshliligi rivojlanishiga moyillik, potentsial terapevtik strategiyalarni ishlab chiqish uchun ushbu jihatlarini diagnostika mezonlariga kiritish kerakligi ko'rib chiqiladi. Bundan tashqari, oilada va ayol va erkak qarindoshlarida PCOS ning oilaviy tarixi sindromning stigmatasini ko'rsatishi mumkin, bu genetik fonni ko'rsatadi [1]

Tuxumdon polikiztozi sindromi diagnostikasida yangiliklar

Hozirgi vaqtda tuxumdon polikiztozi sindromi diagnostikasi giperandrogenemiyaning klinik va laboratoriya belgilarini aniqlash, ultrasonografiya (LSI) yordamida hayz ko'rish va reproduktiv funktsiyani va tuxumdon morfologiyasini baholashga asoslangan [2]. 2018 yildan boshlab, ESHRE tavsiyalariga ko'ra, tuxumdon polikiztozi sindromining diagnostik mezonlari luteal tana, kistalar yoki dominant follikulalarning mavjudligi hisoblanadi. Bunday bo'lmasa, follikullar soni >20 va/yoki tuxumdonlar hajmi ≥ 10 sm³. har bir tuxumdonda 8 MGts chastotada transvaginal ultratovush yordamida aniqlanadi. Ushbu TPS diagnostikasi usulining sezgirligi va o'ziga xosligi mos ravishda 70,9% va 75,7% ni tashkil etdi [2,3]. Tuxumdon polikiztozi sindromini davolash maqsadlari androgenga bog'liq dermatoz belgilarini yo'qotishni o'z ichiga oladi. Ko'plab tadqiqot ma'lumotlariga ko'ra, Teede va boshqalar [2,5], ovulyatsiya induksiyasi reproduktiv rejalari bo'lmagan bemorlarni uzoq muddatli boshqarish uchun birinchi darajali terapiya sifatida ishlatilishi kerak. Ovulyatsiya induksiyasi homiladorlikni rejalashtirayotgan tuxumdon polikiztozi sindromi bilan og'rigan bemorlarda bepustlikni davolashning samarali usuli hisoblanadi [1,2]. Mustaqil ovulyatsiya uchun inositolni qabul qilish va yordamchi reproduktiv texnologiyalar kabi boshqa davolash usullaridan foydalanish mumkin [2,5]. Boshqa tadqiqot tavsiyalariga muvofiq girsutizmni davolash past dozali o'rin bosuvchi gormonal terapiya (shu jumladan antiandrogen ta'sirga ega neytral gestagenlar yoki gestagenlar), antiandrogenlar kuniga 50-100 mg dozada spironolakton kiritilgan [2,6]. Zamonaviy terapiyalarning hech biri tuxumdon polikiztozi sindromini to'liq davolay olmasligi sababli, davolashning asosiy strategiyasi umrbod terapiya bo'lib qolmoqda, garchi kasallik belgilariga muqobil ta'sir qilish usullarini izlash davom etmoqda [2,5]. O'simlik terapiyasining salohiyati o'rganildi [2,6,9], masalan turli vitamin qo'shimchalar [2,3,4]. Tuxumdonlarning laparoskopik drillingdan keyin tuxumdon polikiztozi sindromi bilan og'rigan bemorlarda Vitex agnus castus dan foydalanishning ijobiy tajribasi nashr etildi. Ushbu preparatni qabul qilish operatsiyadan keyingi davrda prolaktin darajasining oshishiga to'sqinlik qilishi va homiladorlik darajasini oshirishi mumkin [2,7]. Xuan lipid metabolizmini, jinsiy gormonlar sekretsiyasini va yallig'lanish reaksiyasini kamaytirishga yordam berdi, shuningdek, OATP2B1 va OATP3A1 ifodasini oshirdi [2,8]. Y. Xu va boshqalar [2,9] eksperimental modellarda adiponektin vositachiligidagi mexanizmlarni modulyatsiya qilish orqali FTZ retsepti (Xitoy tibbiyoti) Kreutzfeld-Jakob kasalligi rivojlanishining oldini olish qobiliyatini namoyish etganligini aniqladilar. Bir tadqiqotda [3] doljin qo'shilishi TPS bo'lgan ayollarda insulin qarshiligini (HOMA-IR) sezilarli darajada kamaytirdi. Boshqacha qilib aytganda, doljinni iste'mol qilish insulin qarshiligi uchun xavfsiz va foydali tavsiya hisoblanadi [3]. Hozirgi vaqtda TPS bilan og'rigan ayollarda koenzim Q10 ning lipid profiliga va yallig'lanish biomarkerlariga ta'sirini baholovchi tadqiqotlar o'z ifodasini topgan [3,4]. Koenzim Q10, yog'da eriydigan tabiiy vitamin, oksidlanish va qaytarilish davrlaridan o'tadi, samarali antioksidant bo'lib, tuxumdonlarni oksidlovchi stressdan himoya qilishi mumkin. Simvastatin va metformin bilan kombinatsiyalangan terapiya bo'yicha tadqiqot nashr etildi. Ushbu kombinatsiya TPSni davolashda metformindan ko'ra samaraliroq ekanligi ko'rsatildi, bu umumiy testosteron, LH/FSH va xolesterin nisbatining sezilarli darajada pasayishi aniqlangan [3,5]. Klinik homiladorlik va ovulyatsiya darajasi klomifen sitrat va metformin kombinatsiyasini olgan bemorlarda faqat klomifen sitrat olganlarga qaraganda yuqori bo'lgan, ammo kombinatsiyalangan davolash tirik tug'ilganlar sonini oshiradimi yoki yo'qmi noma'lum. Ushbu meta-tahlil D-xironositol (DCI) samaradorligini o'rganuvchi ikkita tadqiqotni o'z ichiga oladi, ammo mualliflar tahlil qilingan ayollar soni mavjud ma'lumotlarga asoslanib xulosa chiqarish uchun juda oz degan xulosaga kelishdi [3,7]. Tahlil TPS bilan kasallangan 1472 bepust ayolni o'z ichiga oldi. TPS bilan kasallangan 1472 bepust ayolni o'z ichiga olgan 13 ta tadqiqotning meta-tahlili ham inositolning klinik homiladorlik va tirik tug'ilish chastotasini oshirishda samaradorligini ko'rsatmadi [3,8]. TPS bilan og'rigan bemorlarda inositolning samaradorligi to'g'risida ishonchli ma'lumotlar hali olinmagan. Biroq, so'nggi bir necha yil ichida adabiyotda inositolning ikkala shaklining samaradorligi to'g'risida ma'lumotlar to'plangan [40-50]. Miyoinositol (MI) va DSI insulinning ikkilamchi vositachilari bo'lib, FSH ishlab chiqarishda ishtirok etadi va ovulyatsiya jarayonini tartibga soladi. MI/dci ning to'qimalarga xos nisbati aromataza orqali insulin tomonidan modulyatsiya qilinadi va insulinga sezgir to'qimalarda DCIda MI epimerizatsiyasini kamaytirish orqali insulin qarshiligida o'zgaradi. So'nggi yillarda inositol (MI va DCI) TPSni

davolashda samarali va xavfsiz alternativ ekanligi ko'rsatildi, chunki DCI asosan tuxumdondan tashqarida insulin faolligini rag'batlantiradi, Inozitol TPSda samarali ekanligini ko'rsatdi, metabolizm va gormonlar darajasini yaxshiladi va o'z-o'zidan ovulyatsiyani tikladi [4].

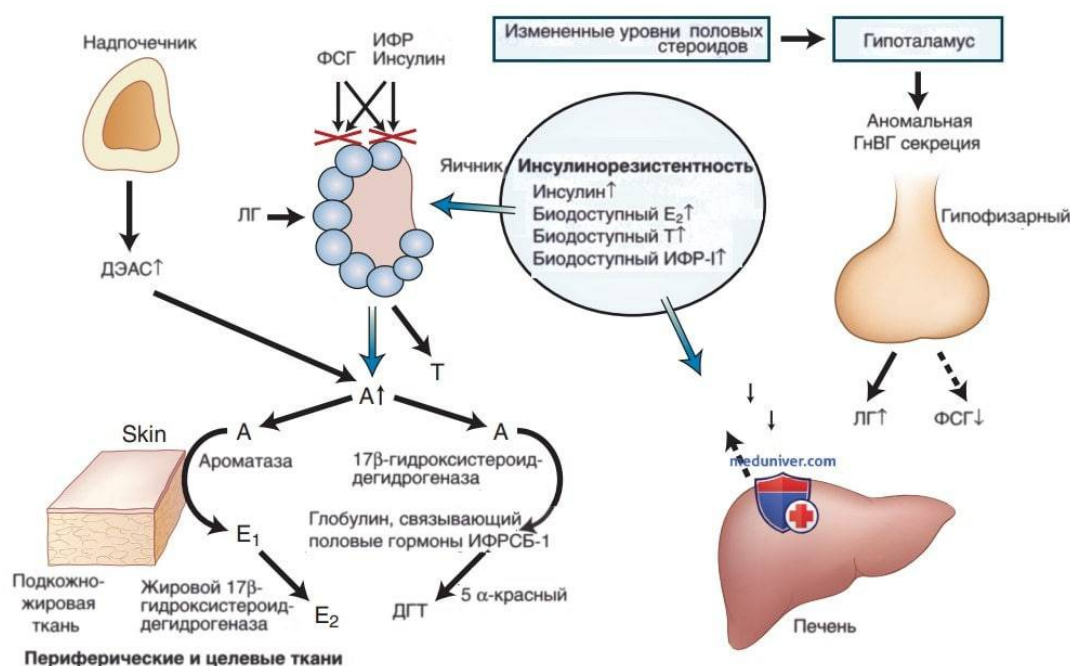
Insulinrezistentlik - bu insulinning maqsadli hujayralar tomonidan glyukoza so'rilishini rag'batlantirish qobiliyatining pasayishi bilan tavsiflangan patologik holat bo'lib, bu qon zardobidagi insulin kontsentratsiyasining oshishiga va insulin sintezining kompensator o'sishiga olib keladi [4, 5]. [5-7]. Turli manbalarga ko'ra, TPS bilan og'rikan bemorlarning 30-90 foizida LH darajasi oshadi va 65-75 foizida akne, girsutizm va alopesiya kabi giperandrogenizm belgilari rivojlanadi [8,9]. Shu bilan birga, boshqa organlar va to'qimalardan tuxumdondan insulinga normal sezgirlikni saqlaydi, bu «tuxumdondan paradoksi» [10] deb ataladi. [6, 10]. Shunday qilib, tizimli IR va GI bilan tuxumdondan ortiqcha insulinga ta'sir qiladi, bu oosit granuloza hujayralarining FSHga sezgirlikni pasaytiradi va LH darajasining oshishi bilan follikullar shakllanishini bostiradi [11, 12]. Bundan tashqari, insulin darajasining oshishi follikulada LH retseptorlari ifodasini tezlashtirmaydi va granuloza hujayralarining erta terminal differentsiatsiyasiga va oositlarning kamolotining turg'unligiga olib kelishi mumkin [13].



Insulin to'g'ridan-to'g'ri steroidogenezga ta'sir qilishi, xususan, androgen sintezini qo'zg'atishi va gonadotropinlar sekretsiyasini o'zgartirmasdan jinsiy gormonlarni bog'laydigan globulin darajasini kamaytirishi ko'rsatilgan. Gonadotropinlar, follikul retseptorlari apparati va giperandrogenemiya sekretsiyasining buzilishi insulin qarshiligi tufayli anovulyatsiya, oligomenoreya yoki amenoreya va bepustlikka olib keladi [11-13]. Biroq, fan rivojlanishining ushbu bosqichida IR diagnostikasi unchalik aniq emas.

Uni baholashning yagona to'g'ridan-to'g'ri usuli - bu giperinsulinemik anemiya bilan klemp testi bo'lib, uni bajarish qiyin va klinik amaliyotda qo'llanilmaydi. Eng keng tarqalgan bilvosita usullar glyukoza bardoshlik testi va HOMA indeksidir. Adabiyotlarga ko'ra, IR TPS bilan og'rikan ayollarning taxminan 50-70 foizida mavjud va semirish mavjud bo'lganda, IR tarqalishi 95% gacha oshadi. Biroq, mavjud diagnostika usullarining to'liq emasligi sababli IR ning haqiqiy tarqalishi yuqori bo'lishi mumkin [14-15]. Clamp tadqiqotiga ko'ra, TPS bilan og'rikan bemorlarda insulin sezgirligi sog'lom ayollarga nisbatan 27% ga past bo'lgan va tana massasi indeksi (BMI) [16] bilan sezilarli bog'liqlik aniqlanmagan, bu bemorlarning 86,6% gacha ta'sir qilishi mumkin [14, 15]. Insulin qarshiligi lipid almashinuvi va uglevod almashinuvining buzilishi bilan chambarchas bog'liq bo'lib, bu ayniqsa ko'pincha visseral yog 'massasining oshishiga olib keladi. Shunday qilib, TPS bilan og'rikan bemorlarning 30-70% ortiqcha vazn va semirishga ega [13, 15] va 40 yoshgacha bo'lgan har

ikkinchi bemorda metabolik sindrom (MS) yoki 2-toifa qandli diabet (QD2) [1] rivojlanishi mumkin. Mualliflar ortiqcha yog' to'qimalari hatto normal tana massasi indeksida (BMI) mavjud bo'lganda, yashirin semirishning yuqori tarqalishini ta'kidladilar. Tadqiqotga ko'ra, TMI 23 kg/m² yoki undan ko'p bo'lgan odamlar yashirin semirish xavfi ostida [2]. Shunisi e'tiborga loyiqki, bu metabolik faol va nosog'lom visseral yog' to'qimalarining massasi va ulushini sezilarli darajada oshiradi. Visseral yog' to'qimalari va ko'p skleroz o'rtasidagi bog'liqlik yaxshi ma'lum, chunki visseral yog' to'qimalari lipid va endokrin metabolizmning buzilishiga, yallig'lanish vositachilarining sekretiysiga va tizimli yallig'lanishga olib keladi [2].



Ma'lumki, glyukoza almashinuvining buzilishi va semirish oksidlovchi stress, yallig'lanish, jigarda erkin yog' kislotalari (SFA) va triglitseridlar (TG) to'planishi va oxir-oqibat alkogolsiz yog'li jigar kasalligi (NAFLD) jigar hujayralari tomonidan yog' to'qimalarining to'planishi holati rivojlanishi bilan chambarchas bog'liq. NAFLD bilan yog' to'qimalarida lipoliz kuchayadi va jigarda yog' kislotalarining b-oksidlanishi kamayadi, bu esa gipertrigliseridemiya, giperqlikemiya olib keladi.

Xulosa qilib shuni ta'kidlash kerakki, TPSda IR ning asl sababi noaniq bo'lib qolmoqda; IR endogendir, ammo semirish mavjudligida rivojlanadi deb ishoniladi [8]. Kasallikning patogenezinining murakkabligini hisobga olgan holda, simptomatik davolash, ayniqsa kombinatsiyalangan oral kontratsepsiyasi, ovulyatsiyani rag'batlantirish terapiyasi va yordamchi reproduktiv texnologiyalar dasturi (YRT) klinik ko'rsatmalarga muvofiq davolashning birinchi qatori bo'lib qolmoqda [2,3]. Patogenetik davolash usullarini ishlab chiqish tadqiqotning ustuvor yo'nalishi bo'lib qolmoqda; IR ning muhim rolini hisobga olgan holda, bemorlarini boshqarish protokollari insulin sensitizerlarini, xususan, tsiklni tartibga solishda samaradorligi atigi 27-53% bo'lgan eng ko'p o'rganilgan vakil metforminni ham o'z ichiga oladi [2,8]. F. Fruzzetti va boshqalar [4,5] TPS va oligomenoreya bilan og'rigan 57 ayolda a-lipoik kislota va MI (kuniga 2000 mg + 800 mg) bilan kombinatsiyalangan davolash samaradorligini baholadilar. Tadqiqot TPS va oligomenoreya bilan og'rigan 57 ayolda o'tkazildi. Umuman olganda, kombinatsiya TPS bilan og'rigan ayollar uchun uzoq muddatli davolanish sifatida foydali bo'lib, hayz ko'rish va insulin darajasini normallashtirdi olib keldi; Merviel va boshqalar [4] tuxumdon stimulyatsiyasidan uch oy oldin kuniga 4 g MI (kuniga ikki marta 2 g) qabul qilish tuxumdonlar faoliyatini normallashtirgani va tuxum va embrion sifatini yaxshilagani haqida xabar berdi. Bundan tashqari, MI TPS uchun xavfsiz va tejamkor davolash usuli bo'lib, standart dozalarda nojo'ya ta'sirlar kuzatilmagan. Shunday qilib, adabiyotlarni ko'rib chiqish TPS

patogenezi bo'yicha qarashlarning o'zgarishini, ushbu kasallikni davolashda yangi yo'nalishlarning paydo bo'lishini va dalillar bazasining o'sib borayotganini ko'rsatadi. Inositol hayz ko'rish va reproduktiv funktsiyani normallashtirishga yordam beradi, ehtimol uglevod va lipid metabolizmiga ta'sir qiladi, tuxum va embrionlarning sifatini yaxshilaydi.

REFERENCES| СНОСКИ | IQTIBOSLAR:

1. Али Р. М. и др. Генетические ассоциации между полиморфными локусов генов ферментов антиоксидантной защиты GPX4 (rs713041), GSTP1 (rs1695) и PON1 (rs662) и синдромом поликистозных яичников у российских женщин //Медицинская генетика. – 2024. – Т. 23. – №. 3. – С. 21-30.;
2. Dumesic DA, Abbott DH, Chazenbalk GD. An Evolutionary Model for the Ancient Origins of Polycystic Ovary Syndrome. *J Clin Med*. 2023 Sep 22;12(19):6120. doi: 10.3390/jcm12196120. PMID: 37834765; PMCID: PMC10573644
3. Гасиева Д. М. и др. Синдром поликистозных яичников: новые и перспективные варианты лечения //Problems of Endocrinology. – 2024. – Т. 70. – №. 4. – С. 103
4. Joham A.E., Norman R.J., Stener-Victorin E. et al. Polycystic ovary syndrome. *Lancet Diabetes Endocrinol*. 2022;10(9):668–680. DOI: 10.1016/S2213-8587(22)00163-2.
5. Unluhizarci K., Karaca Z., Kelestimur F. Role of insulin and insulin resistance in androgen excess disorders. *World J Diabetes*. 2021;12(5):616–629. DOI: 10.4239/wjd.v12.i5.616.
6. Moghetti P., Tosi F. Insulin resistance and PCOS: chicken or egg? *J Endocrinol Invest*. 2021;44(2):233–244. DOI: 10.1007/s40618-020-01351-0.
7. Kamenov Z., Gateva A. Inositols in PCOS. *Molecules*. 2020;25(23):5566. DOI: 10.3390/molecules25235566.
8. Siddiqui S. et al. A brief insight into the etiology, genetics, and immunology of polycystic ovarian syndrome (PCOS) //Journal of assisted reproduction and genetics. – 2022. – Т. 39. – №. 11. – С. 2439-2473.;
9. Рахимов Н. М. и др. ЭФФЕКТИВНОСТЬ ЛЕЧЕНИЯ АСЦИТА ОБУСЛОВЛЕННЫЙ РЕЦИДИВОМ ПЛАТИНОРЕФРАКТЕРНОГО РАКА ЯИЧНИКА С ИСПОЛЬЗОВАНИЕМ МЕТРОНОМНОЙ ХИМИОТЕРАПИИ //ЖУРНАЛ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ И УРО-НЕФРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2024. – Т. 5. – №. 1.
10. Abdurakhmonov Jurabek , Rahimov Nodir , Shakhanova Shakhnoza . Modern view on ascite in ovarian cancer. *Journal of Biomedicine and Practice* . 2022, vol . 7, issue 4, pp . 130-139
11. Alimjanovich JR, Agababayan LR, Kamalov AI Prevention and Treatment of Postpartum Hemorrhage //CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021. – Т. 2. – №. 4. – S. 204-209.
12. Rizaev Jasur , Rakhimov Nodir , Kodyrov Khamidullo , Shakhanova Shakhnoza . Study of prostate cancer death by regions of the republic of Uzbekistan.*Journal of Biomedicine and Practice*. 2022, vol . 7, issue 5, pp.202-210
13. Carlomagno G., Unfer V., Roseff S. The D-chiro-inositol paradox in the ovary. *Fertil Steril*. 2011;95(8):2515–2516. DOI: 10.1016/j.fertnstert.2011.05.027.
14. De Leo V., Musacchio M.C., Cappelli V. et al. Genetic, hormonal and metabolic aspects of PCOS: an update. *Reprod Biol Endocrinol*. 2016;14(1):38. DOI: 10.1186/s12958-016-0173-x.
15. Behboudi-Gandevani S., Ramezani Tehrani F., Rostami Dovom M. et al. Insulin resistance in obesity and polycystic ovary syndrome: systematic review and meta-analysis of observational studies. *Gynecol Endocrinol*. 2016;32(5):343–353. DOI: 10.3109/09513590.2015.1117069.
16. Guarano A., Capozzi A., Cristodoro M. et al. Alpha Lipoic Acid Efficacy in PCOS Treatment: What Is the Truth? *Nutrients*. 2023;15(14):3209. DOI: 10.3390/nu15143209.

БИМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

10 ЖИЛД, 1 СОН

ЖУРНАЛ БИМЕДИЦИНЫ И ПРАКТИКИ

ТОМ 10, НОМЕР 1

JOURNAL OF BIOMEDICINE AND PRACTICE

VOLUME 10, ISSUE 1

Контакт редакций журналов. www.tadqiqot.uz
ООО Tadqiqot город Ташкент,
улица Амира Темура пр.1, дом-2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Тел: (+998-94) 404-0000

Editorial staff of the journals of www.tadqiqot.uz
Tadqiqot LLC The city of Tashkent,
Amir Temur Street pr.1, House 2.
Web: <http://www.tadqiqot.uz/>; E-mail: info@tadqiqot.uz
Phone: (+998-94) 404-0000