

БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ
JOURNAL OF BIOMEDICINE AND PRACTICE

ДАВРИЙЛИГИ: 2016-2025

ЖИЛД 10
СОН 6

2025



ЧОП
ЭТИЛГАН САНА:
06.11.2025

Тадқиқот ва ишланмалар орқали бутун дунё бўйлаб илмий амалиётларни хабардор қилиш

БИМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

10 ЖИЛД, 6 СОН

ЖУРНАЛ БИМЕДИЦИНЫ И ПРАКТИКИ

ТОМ 10, НОМЕР 6

JOURNAL OF BIOMEDICINE AND PRACTICE

VOLUME 10, ISSUE 6



Бош муҳаррир:

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

Масъул котиб:

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

Бош муҳаррир ўринбосари:

Зиядуллаев Шухрат Худайбердиевич
тиббиёт фанлари доктори, Ўзбекистон Республикаси
Фанлар академиясининг Иммунология ва инсон
геномикаси институти директор ўринбосари,
ORCID ID: 0000-0002-9309-3933

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 Нурмастановна

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

Орипов Фирдавс Суръатович

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

Очилов Улугбек Усмонович

DSc, 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 давлат тиббиёт
университети, Тери-таносил, болалар тери-таносил
касаликлари ва ОИТС кафедраси доценти
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 доктори,
Самарқанд давлат тиббиёт университети
№2-сон Педиатрия, неонатология ва болалар
касаликлари пропедевтикаси кафедраси доценти.
ORCID ID: 0000-0003-2442-1523

Ибрагимова Малика Худайбергеновна

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

Рахимов Нодир Махамматкулович

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

Даминов Феруз Асадуллаевич

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

Миржураев Элбек Миршавкатович

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

Тагаев Шеркабул Бойкабулович

тиббиёт фанлари доктори, хирургия кафедраси
доценти Тошкент давлат тиббиёт университети.
ORCID: 0009-0004-7661-9253.

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, Заместитель директора
Института иммунологии и геномики человека
Академии наук Республики Узбекистан,
ORCID ID: 0000-0002-9309-3933

Ответственный секретарь:

Самиева Гульноза Уткуровна
доктор медицинских наук, профессор 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 Нурмаатовна
доктор медицинских наук, профессор, проректор
Самаркандского государственного медицинского
университета, ORCID ID: 0000-0002-7529-4248

Орипов Фирдавс Суръатович
доктор медицинских наук, профессор, 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
Ташкентский государственный медицинский университет
ORCID ID: 0000-0002-9313-4918

Очилов Улугбек Усманович
DSc, 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>

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

Бабаджанов Ойбек Абдужаббарович
доктор медицинских наук, Ташкентский государственный
медицинский университет, доцент кафедры
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
доктор медицинских наук, доцент кафедры Педиатрии,
неонатологии и перинатологии детских болезней №2
Самаркандского государственного медицинского университета
ORCID ID: 0000-0003-2442-1523

Ибрагимова Малика Худайбергатовна
доктор медицинских наук, профессор
Ташкентский государственный
медицинский университет
ORCID ID: 0000-0002-9235-1742

Рахимов Нодир Махамматкулович
доктор медицинских наук, профессор 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.

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

Тагаев Шеркабул Бойкабулович
доктор медицинских наук, доцент кафедры хирургии,
Ташкентский государственный медицинский университет.
ORCID: 0009-0004-7661-9253.

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, Deputy Director of the Institute
of Immunology and Human Genomics of the Academy of
Sciences of the Republic of Uzbekistan
ORCID ID: 0000-0002-9309-3933

Responsible secretary:

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

Responsible for publication:

Shakhanova Shakhnoza Shavkatovna
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 Nurmamatovna

*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, 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 State
Medical University. ORCID ID: 0000-0002-9313-4918*

Ochilov Ulugbek Usmanovich

*DSc, 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 Nuraliyena

*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 State
Medical University, Docent the Department of
Dermatovenerology, pediatric dermatovenerology
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

*Doctor 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 Medical University
ORCID ID: 0000-0002-9235-1742*

Rahimov Nodir Maxammatkulovich

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

Tagaev Sher Kabul Baykabulovich

*Doctor of Medical Sciences, Associate Professor
of Surgery Department, Tashkent State Medical University
ORCID: 0009-0004-7661-9253.*

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

OBSTETRICS AND GYNECOLOGY

1. **Khudoyarova Dildora Rakhimovna, Yusupov Orzumurod Shomurodovich**
PROMISING METHODS FOR DIAGNOSING VARICOSE VEINS DURING PREGNANCY.....11
2. **Zufarova Shaxnoza Alimdjanovna, Azimova Komila Islomovna, Djumanov Baxtiyor Abdurazakovich**
WAYS TO REDUCE THE NEGATIVE CONSEQUENCES FOR THE MOTHER AND NEWBORN IN WOMEN WITH HEPATITIS B DURING PREGNANCY.....25
3. **Arzieva Gulnora Borievna**
THERMAL INJURY DURING PREGNANCY: RISK FACTORS AND ADDITIONAL CONSIDERATIONS.....36

HEALTH CARE ORGANIZATION AND PUBLIC HEALTH

4. **Rizaev Jasur Alimdjanovich, Gadaev Abdugaffor Gadaevich, Makhmanov Lutfullo Saydullaevich**
STATE OF HEMODYALYSIS SERVICE IN THE SAMARKAND REGION AND ANALYSIS OF SURVIVAL AND MORTALITY IN PATIENTS UNDERGOING HEMODYALYSIS.....41
5. **Aminov Zafar Zairovich**
IMPACT OF THE CREDIT-MODULAR TRAINING SYSTEM ON THE PERFORMANCE EFFECTIVENESS OF GENERAL PRACTITIONERS.....51
6. **Aminov Zafar Zairovich**
COMPREHENSIVE EVALUATION OF THE IMPLEMENTATION OF A MODULAR CREDIT SYSTEM IN CLINICAL DISCIPLINES OF A MEDICAL UNIVERSITY: ACADEMIC, DIGITAL, AND SUBJECTIVE INDICATORS.....58

NEUROLOGY, PSYCHIATRY

7. **Khakimova Sohiba Ziyadulloevna, Gaffarova Parvina Abdurafikovna**
ANALYSIS OF THE RELATIONSHIP BETWEEN ENDOCRINE AND MICROBIOTA FACTORS AND THE SEVERITY OF PARKINSON'S DISEASE.....66
8. **Sobirov Abdug'affor Abdug'aniyevich, Ergashev Asadullo Ubaydullo o'g'li**
EFFECTIVENESS OF MIRROR THERAPY IN EARLY REHABILITATION AFTER STROKE: CLINICAL OBSERVATION.....73
9. **Shokhimardonov Shokhijakhon Shokhimardonovich, Tuychibaeva Nodira Miratalievna**
IMPROVING DIAGNOSTICS AND TARGETED THERAPY METHODS FOR EPILEPTIC ENCEPHALOPATHY WITH CONTINUOUS SPIKE-WAVE ACTIVITY DURING SLEEP.....78
10. **Mirjuraev Elbek Mirshavkatovich, Adambaev Zufar Ibragimovich, Mamatkhanova Charos Bahodirovna**
PERSONALIZED ALGORITHMS FOR TREATING DEGENERATIVE SPINAL CANAL STENOSIS: FROM CONSERVATIVE THERAPY TO SURGICAL DECOMPRESSION...87
11. **Ruzmetova Saodat Umarjonovna**
CONTEMPORARY DIAGNOSIS, TREATMENT AND REHABILITATION OF SOMATIC DISORDERS RESULTING FROM PERINATAL CENTRAL NERVOUS SYSTEM DAMAGE.....96

MORPHOLOGY

12. **Makhmudov Alisher Akhmedovich**
FRACTAL MORPHOMETRY OF SCAR TISSUE AS A METHOD FOR OBJECTIVE
ASSESSMENT OF SKIN REGENERATION.....101

NARCOLOGY

13. **Kenjayeva Nargiza Kuvatovna, Rizayev Jasur Alimdzhonovich, Umirov Safar Ergashevich**
GENDER CHARACTERISTICS OF PATIENTS WITH DRUG ADDICTION.....106
14. **Kenjayeva Nargiza Kuvatovna, Rizayev Jasur Alimdzhonovich, Umirov Safar Ergashevich**
SOME APPROACHES TO IMPROVING THE EFFECTIVENESS OF TREATMENT FOR
DRUG ADDICTION PATIENTS.....115

RADIOLOGICAL DIAGNOSIS

15. **Nishanova Yulduz Khatamovna, Ortiqboyeva Diyora Inomovna**
MRI DIAGNOSIS OF BONE TUMORS: CONCEPTUAL APPROACH TO IMPROVE
DIAGNOSTIC ACCURACY.....123
16. **Nishanova Yulduz Khatamovna, Ilkhamov Dilshod Farkhadovich, Usmonov Bekzodkhuja Toshpulatovich, Yorkinov Akbar Sharofiddinovich, Toirova Dilafruz Ravshanovna**
THE ROLE OF INTEGRATIVE MRI IN DIAGNOSING PATHOLOGICAL PROCESSES IN
THE BRAIN PARENCHYMA.....127
17. **Yusupalieva Gulnora Akmalovna, Akhmedov Elyor Allayarovich**
MODERN IMAGING CRITERIA FOR NEPHROBLASTOMA IN CHILDREN: A
COMPREHENSIVE RADIOLOGICAL APPROACH.....133
18. **Yusupalieva Gulnora Akmalovna, Akhralov Sherzod Farkhadovich**
MULTIPARAMETRIC ULTRASOUND EXAMINATION OF SKIN IN CHILDREN:
TECHNOLOGY DEVELOPMENT AND AGE-RELATED NORMATIVE VALUES
ASSESSMENT.....140
19. **Yusupalieva Gulnora Akmalovna, Bekimbetov Kudrat Nazarovich**
APPLICATION OF COMPREHENSIVE ULTRASOUND GUIDANCE IN REGIONAL
ANESTHESIA: OPTIMIZATION OF BRACHIAL PLEXUS BLOCK.....146
20. **Yusupalieva Gulnora Akmalovna, Manashova Adiba Rustamovna**
COMPREHENSIVE ULTRASOUND DIAGNOSTICS IN DETECTING ADHESIVE
INTESTINAL OBSTRUCTION IN CHILDREN: RESEARCH EXPERIENCE AND
OUTCOMES.....151
21. **Yusupalieva Gulnora Akmalovna, Abzalova Munisa Yakupdjonovna**
COMPREHENSIVE ULTRASOUND DIAGNOSTICS IN THE ASSESSMENT OF NON-
ALCOHOLIC FATTY LIVER DISEASE IN CHILDREN: MODERN APPROACHES AND
CLINICAL SIGNIFICANCE.....157

INTERNAL MEDICINE

22. **Daminov Botir, Abduvakhitova Asal**
DYNAMICS OF ECHOCARDIOGRAPHIC PARAMETERS OF PULMONARY
HYPERTENSION DURING BOSENTAN THERAPY IN PATIENTS UNDERGOING
PROGRAM HEMODIALYSIS.....164

DENTISTRY AND MAXILLOFACIAL SURGERY

23. **Rizaev Jasur Alimjanovich, Khudoykulov Shahzod Shavkatovich**
IMPROVEMENT OF MEDICATION SEDATION IN PEDIATRIC DENTAL TREATMENT FOR CHILDREN WITH AUTISM SPECTRUM DISORDER.....171
24. **Yuldoshev Sanjarbek Jura o'g'li, Sanaqulov Jamshed Obloberdievich**
CLINICAL AND EPIDEMIOLOGICAL ASSESSMENT OF THE PREVENTION OF PERIODONTAL DISEASES CAUSED BY DRINKING WATER SUPPLY FROM UNDERGROUND RESERVOIRS.....177
25. **Rasulov Shokhjakhon Kambarovich, Khabibova Nazira Nasullaevna**
CURRENT APPROACHES TO PREVENTING ALLERGIC REACTIONS TO LOCAL ANESTHETICS IN DENTISTRY: EVIDENCE-BASED STRATEGIES, RISK ASSESSMENT AND CLINICAL ALGORITHMS.....181
26. **Aslamov Akbar Akobirovich, Inogamov Sherzod Mukhamatisakovich**
FEATURES OF THE CONDITION OF THE ORGANS AND TISSUES OF THE ORAL CAVITY IN WOMEN AFTER MENOPAUSE: CLINICAL AND MORPHOLOGICAL STUDY.....186
27. **Turayev Ismoil Allayor ugli, Akhmedov Alisher Astanovich**
DEVELOPMENT AND IMPLEMENTATION OF COMPREHENSIVE TREATMENT AND REHABILITATION APPROACHES FOR PAIN DYSFUNCTION OF THE TEMPOROMANDIBULAR JOINT IN PATIENTS WITH JAW FRACTURES.....191
28. **Farkhatov Sunnatillokhan Furkhatovich, Islamova Nilufar Bustanovna**
DEVELOPMENT AND SCIENTIFIC SUBSTANTIATION OF THE ORGANIZATION OF DENTAL CARE FOR PERSONNEL WORKING WITH EPOXY RESINS.....197
29. **Ranakulov Akbar Ikromjon ugli, Islamova Nilufar Bustanovna**
PROSTHETIC TREATMENT OF PATIENTS WITH COMPLETE TOOTH LOSS USING REMOVABLE DENTURES SUPPORTED BY DENTAL IMPLANTS.....203
30. **Olimov Ramazon Olim ugli, Islamova Nilufar Bustanovna**
DIFFERENTIATED STRATEGIES FOR MANAGING INFLAMMATORY PERIODONTAL AND ORAL MUCOSAL DISEASES IN PATIENTS WITH CHRONIC VIRAL INFECTION.....210
31. **Kholbekov Shakhboz Ubaydulla ugli, Inogamov Sherzod Muxamatisakovich**
COMPARATIVE ASSESSMENT OF DENTAL AND BONE APPARATUS DURING RAPID EXPANSION OF THE UPPER JAW IN CHILDREN.....220
32. **Chakkanov Fakhritdin Khusanovich**
STUDYING PARODONTAL TISSUE REMODELING MARKERS AND DEVELOPING DIRECTIONS FOR THEIR CORRECTION IN CHRONIC GENERALIZED PARODONTITIS.....227
33. **Asatbaev Jaloliddin Asliddin ugli, Islamova Nilufar Bustanovna**
CHANGES IN GENERAL AND LOCAL INDICATORS IN THE PATHOGENESIS OF PERIODONTITIS: CLINICAL AND BIOCHEMICAL ANALYSIS.....234
34. **Ismailov Akhrorzhon Anvarzhon ogli, Sadriyev Nizom Najmiddinovich**
IMPROVING METHODS FOR THE PREVENTION AND TREATMENT OF PERIODONTITIS IN PATIENTS WITH CHRONIC VIRAL HEPATITIS.....240

OTORHINOLARYNGOLOGY

35. **Gasymov Ayaz Veli oglu, Panahiyon Vafa Mustafa oglu, Abilova Farida Arif kyzy, Xatamov Jakhongir Abruevich**
OUR EXPERIENCE IN THE TREATMENT OF RHINOGENIC INTRACRANIAL COMPLICATIONS.....246

36. **Nasretudinova Makhzuna, Xayitov Alisher**
MINIMALLY INVASIVE SURGERY TO REMOVE MAXILLARY SINUS CYSTS.....253

ONCOLOGY

37. **Mamedov Umid Sunnatovich, Gaysina Elena Aleksandrovna, Rakhimov Nodir Makhammatkulovich**
EFFICACY OF MULTIMODAL THERAPY IN DELAYING PRECACHEXIA PROGRESSION IN PATIENTS WITH REPRODUCTIVE ORGAN CANCERS.....259
38. **Khujabaev Safarboy Tukhtabaevich, Urozov Numon Sadullaevich**
THE ROLE OF A DIFFERENTIATED APPROACH IN IMPROVING THE EFFECTIVENESS OF MINIMALLY INVASIVE DRAINAGE IN TUMOR-INDUCED BILIARY OBSTRUCTION.....267
39. **Ten Vladimir Denisovich, Alimov Ijod Rustamovich, Umarov Rustam Dilshodovich**
OUR EXPERIENCE OF PERCUTANEOUS BIOPSY IN METASTATIC LESIONS OF THE LUMBAR SPINE.....277

OFTALMOLOGY

40. **Abdullaeva Nuriya Djalgasovna**
TRACE ELEMENT STATUS AS A PREDICTOR OF MYOPIA IN SCHOOL-AGE CHILDREN IN REGIONS WITH HIGH POLLUTION LEVELS.....281
41. **Bilalov Bakhodir Erkinovich, Nishanov Daniyar Anarbaevich, Bilalov Erkin Nazimovich, Oripov Okilkhon Ilyasovich, Sultanov Ozod Abdulla ugli**
IMMUNOHISTOCHEMICAL CHARACTERIZATION OF REPARATIVE REGENERATION USING HYDROGEL BASED ON THE SODIUM SALT OF CARBOXYMETHYLCELLULOSE IN EXPERIMENTAL ANTIGLAUCOMATOUS SURGERY.....286

PEDIATRICS

42. **Mamatkulov Ikhtiyor Basimovich, Muzaffar Burkhonovich Khaydarov, Beknazarov Amir Bazarbaevich**
PROGNOSTICATION OF EARLY OUTCOMES OF MULTIPLE ORGAN DYSFUNCTION.....297
43. **Bayakhmedov Fatkhulla Fayzievich**
OSTEODYSTROPHY IN CHILDREN WITH RENAL FORM OF PRIMARY HYPERPARATHYROIDISM.....301
44. **Choliyev Matyoqub Sulaymanovich, Tilavov O'ktam Khamrayevich, Khatamoy, Khusniddin Narzullayevich, Kholmetov Shukhrat Shamkhatovich**
PURULENT-SEPTIC DISEASES IN NEWBORNS: CAUSES, DIAGNOSTICS AND PRINCIPLES OF TREATMENT.....307
45. **Abdullayeva Durdona Rustamovna**
DIGITAL EYE STRAIN SYNDROME IN CHILDREN UNDER INCREASING DIGITAL LOAD (A LITERATURE REVIEW).....316
46. **Rasulova Nadira Alisherovna, Rasulov Alisher Sobirovich**
STRATEGIES FOR PROVIDING VITAMIN D BASED ON BLOOD BIOCHEMICAL INDICATORS IN RACHITIS.....325

SURGERY

47. **Fayziev Yakupdjan Nishanovich**
MODERN ASPECTS OF DIAGNOSIS AND TREATMENT OF LACTATIONAL
MASTITIS.....330
48. **Murtazaev Zafar Israfulovich, Baysariyev Shovkat Usmonovich**
MODERN APPROACHES TO THE DIAGNOSIS AND TREATMENT OF LIVER
ECHINOCOCCOSIS.....337
49. **Murtazaev Zafar Israfulovich, Baysariyev Shovkat Usmonovich**
POSSIBILITIES OF ENDOVISUAL TECHNOLOGIES IN LUNG SURGERY
ECHINOCOCCOSIS.....350
50. **Khursanov Yoqubjon Erkin Ugli, Jabbarov Sherzod Rakhimberdiyevich**
SELECTION OF SURGICAL STRATEGY FOR COMPLICATIONS OF ULCERATIVE
COLITIS.....358
51. **Avazov Abdurakhim Abdurakhmanovich, Shakirov Bobur Magrupovich**
COMPREHENSIVE APPROACH TO SURGICAL TREATMENT OF DEEP BURNS:
COMPARATIVE ANALYSIS OF TACTICS IN THE AREA OF THE HAND AND LOWER
EXTREMITIES.....365
52. **Murtazaev Zafar Israfulovich, Baysariyev Shovkat Usmonovich**
DIFFERENTIAL DIAGNOSTICS OF CAVITABLE PULMONARY FORMATIONS.....369
53. **Abdullayev Sayfulla Abdullayevich**
SURGICAL INFECTIONS AND MODERN VIEWS.....380
54. **Jabbarov Sherzod Rakhimberdiyevich, Khursanov Yoqubjon Erkin Ugli**
SURGICAL TREATMENT OF ULCERATIVE COLITIS (LITERATURE REVIEW).....385
55. **Arziev Ismoil Aliyevich, Rustamov Sardor Ulugbek ugli**
SCIENTIFIC AND CLINICAL RATIONALE FOR THE USE OF MINIMALLY INVASIVE
INTERVENTIONS IN PATIENTS WITH ACUTE CHOLECYSTITIS WITH INCREASED
SURGICAL AND ANESTHETIC RISK.....394
56. **Arziev Ismoil Alievich**
EFFECTIVENESS OF SURGICAL INTERVENTION IN STRICTURES OF THE MAIN
GASTROINTESTINAL TRACT DEVELOPED AS A RESULT OF TRAUMATIC
INJURY.....404
57. **Mirakhmedov Gayrat Mirakhmedovich, Rizaev Jasur Alimdjanovich**
CLINICAL EFFECTIVENESS OF A STRUCTURED POSTOPERATIVE
REHABILITATION ALGORITHM IN OBESE PATIENTS AFTER LAPAROSCOPIC
SURGERY.....414

PEDIATRIC SURGERY

58. **Agzamhodjaev Saidanvar Talatovich, Ergashev Kobiljon Tuxtasinovich, Rakhmatullaev Akmal Abadbekovich, Abdullaev Zafar Boburovich, Khidoyatov Kamron Zayniddinovich, Soliev Askar Tursunovich, Eshankulov, Sarvar Gulamovich, Tilovov Bunyod Nematovich**
MANAGEMENT OF RECURRENT VESICOURETERAL REFLUX AFTER URETERAL
REIMPLANTATION IN CHILDREN: A COMPREHENSIVE LITERATURE REVIEW.....423
59. **KARIMOV Jurabek Sunatulloevich, NADJIMUTDINOVA Nazima Shamsutdinovna, INOYATOVA Flora Ilyasovna**
AUDITORY CORRECTION FOR SENSORYNEURAL HEARING LOSS IN CHILDREN
OF PRE-SCHOOL AND SCHOOL AGE.....431
60. **МУРАДОВА Малика Саидахроровна, РАИМОВА Малика Мухамеджановна**
СУРУНКАЛИ БУЙРАК КАСАЛЛИКЛАРИДА ПОЛИНЕЙРОПАТИЯЛАРНИНГ
КЛИНИК ВА НЕЙРОФИЗИОЛОГИК ХУСУСИЯТЛАРИ.....437



УДК 616.311-08

TURAYEV Ismoil Allayor ugli

Clinic resident of the Department of Orthopedic Dentistry
Samarkand State Medical University
Samarkand, Uzbekistan.

AKHMEDOV Alisher Astanovich

DSc, Associate Professor, Department of Orthopedic Stomatology
Samarkand State Medical University
Samarkand, Uzbekistan.

DEVELOPMENT AND IMPLEMENTATION OF COMPREHENSIVE TREATMENT AND REHABILITATION APPROACHES FOR PAIN DYSFUNCTION OF THE CROP IN PATIENTS WITH JAW FRACTURES

For citation: Turayev Ismoil Allayor ugli, Akhmedov Alisher Astanovich. Development and implementation of comprehensive treatment and rehabilitation approaches for pain dysfunction of the temporomandibular joint in patients with jaw fractures // Journal of Biomedicine and Practice. 2025, vol. 10, issue 6.

 <http://dx.doi.org/10.5281/zenodo.18070892>

ANNOTATION

The work presents a study aimed at improving the effectiveness of treatment for temporomandibular joint pain disorder (TMJ) in patients with mandibular fractures. The relevance of the topic is due to the high prevalence of injuries to the maxillofacial region and the significant percentage of post-traumatic functional disorders of the maxillofacial region, leading to pain syndrome, limitation of mandibular movement, and a decrease in the quality of life of patients.

Keywords: pain syndrome, temporomandibular joint, CNS dysfunction, mandibular fractures, post-traumatic disorders, rehabilitation.

ТУРАЕВ Исмоил Аллаёр угли

Резидент клиники ортопедического стоматологического отделения
Самаркандский государственный медицинский университет
Самарканд, Узбекистан.

АХМЕДОВ Алишер Астанович

DSc, доцент кафедры ортопедической стоматологии
Самаркандский государственный медицинский университет
Самарканд, Узбекистан.

РАЗРАБОТКА И ВНЕДРЕНИЕ КОМПЛЕКСНЫХ ЛЕЧЕБНО-РЕАБИЛИТАЦИОННЫХ ПОДХОДОВ ПРИ БОЛЕВОЙ ДИСФУНКЦИИ ВНЧС У БОЛЬНЫХ С ПЕРЕЛОМАМИ НИЖНЕЙ ЧЕЛЮСТИ

АННОТАЦИЯ

В работе представлено исследование, направленное на повышение эффективности лечения болевой дисфункции височно-нижнечелюстного сустава (ВНЧС) у пациентов с переломами нижней челюсти. Актуальность темы обусловлена высокой распространённостью травм челюстно-лицевой области и значительным процентом формирования посттравматических функциональных нарушений ВНЧС, приводящих к болевому синдрому, ограничению движений нижней челюсти и снижению качества жизни пациентов.

Ключевые слова: болевой синдром, височно-нижнечелюстной сустав, дисфункция ВНЧС, переломы нижней челюсти, посттравматические нарушения, реабилитация.

TURAYEV Ismoil Allayor o'g'li

Ortopedik stomatologiya bo'limi klinik ordinatura rezidenti
Samarqand davlat tibbiyot universiteti
Samarqand, O'zbekiston.

AXMEDOV Alisher Astanovich

DSc, ortopedik stomatologiya kafedrasi dotsenti
Samarqand davlat tibbiyot universiteti
Samarqand, O'zbekiston.

**PASTKI JAG' SINISHI BO'LGAN BEMORLARDA CHPJB OG'RIQ DISFUNKSIYASIDA
KOMPLEKS DAVOLASH-REABILITATSIYA YONDASHUVLARINI ISHLAB CHIQUISH
VA JORIY ETISH**

ANNOTATSIYA

Ishda pastki jag' sinishi bo'lgan bemorlarda chakka-pastki jag' bo'g'imi (CHPJB) og'riq disfunktsiyasini davolash samaradorligini oshirishga qaratilgan tadqiqot taqdim etilgan. Mavzuning dolzarbligi yuz-jag' sohasi jarohatlarining yuqori tarqalganligi va og'riq sindromiga, pastki jag' harakatlarining cheklanishiga va bemorlarning hayot sifatining pasayishiga olib keladigan CHPJBning posttravmatik funksional buzilishlari shakllanishining sezilarli foizi bilan bog'liq.

Kalit so'zlar: og'riq sindromi, chakka-pastki jag' bo'g'imi, CHPJB disfunktsiyasi, pastki jag' sinishlari, jarohatdan keyingi buzilishlar, reabilitatsiya.

Relevance of the work. The pathology of the temporomandibular joint (TMJ) is still insufficiently studied and a frequently encountered problem in modern dentistry. Medical literature presents various figures on the prevalence of WCFS diseases among the working-age population from 20% to 80%. Among mandibular injuries, fractures of the maxillary process of the mandible (MONCH) occupy a special place, which are often combined with trauma to the temporomandibular joint (TMJ). Numerous publications on temporomandibular joint pain dysfunction are dedicated to the etiology, pathogenesis, morphology, clinical presentation, diagnosis, and treatment of this multifactorial disease. In isolated studies, the long-term consequences of mandibular fractures have been reflected as a possible cause of temporomandibular joint pain disorder.

Globally, in recent years, fractures of the mandible account for 13 to 37% of injuries to the temporomandibular joint, while fractures of the temporomandibular joint account for 24 to 32% of cases, and despite modern diagnostic methods, fractures of the maxillary process and temporomandibular joint in 17% of cases are not recognized in a timely manner, which often leads to complications such as arthrosis, ankylosis, occlusion disorders, and impaired mandibular function (Gutwald R., Schramm A., 2012). In this regard, the number of patients with temporomandibular joint pain disorder syndrome (TMDS) has increased among the adult population of developed countries: from 21.1% to 99%. (Ronkin K.Z., 2019). These functional disorders lead to neuromuscular system overstrain, which in turn can lead to disharmony in the stomatognathic system (Tikhonov V.E. et al., 2021).

In our country, despite certain achievements, the problem of treating injuries to the condyloid process of the maxillofacial region remains one of the most complex in maxillofacial traumatology to this day. In the problem of surgical treatment of the mandible, an important place is given to the development of new technologies that are characterized by low invasiveness, high physiological and cosmetic properties, to which, first of all, endosurgical methods should be attributed. All this determines the need to develop new, more effective methods that ensure an interdisciplinary approach to diagnosis and treatment, which is necessary for achieving a stable result. Our research is devoted to the solution of this issue.

Fractures of the mandible occupy one of the leading places among injuries of the maxillofacial region and are often accompanied by damage to the structures of the temporomandibular joint (TMJ). Even with successful surgical treatment of fractures, there remains a high risk of joint pain dysfunction forming, manifested by persistent pain syndrome, occlusion disorders, limited mouth opening amplitude, and decreased chewing efficiency. Post-traumatic disorders of the CNS significantly worsen the quality of life of patients, slow the recovery period, and can lead to chronic myofascial pain syndromes.

Modern treatment protocols for mandibular fractures do not adequately address the early prevention and correction of post-traumatic CNS disorders. However, data on the comparative effectiveness of such programs in patients with mandibular fractures remain limited, which requires targeted clinical studies.

Thus, the development and implementation of a comprehensive therapeutic and rehabilitation approach to the treatment of pain disorders in patients with mandibular fractures is a pressing task of modern dentistry and maxillofacial surgery, which has important clinical and social significance.

The purpose of the study is to develop and implement a comprehensive therapeutic and rehabilitation approach, including modern diagnostic methods, therapeutic and physiotherapeutic measures aimed at reducing pain, restoring joint function, and preventing the formation of chronic CHFD.

Materials and methods of research. The study included ___ patients who received treatment for mandibular fractures and had signs of temporomandibular joint pain disorder. Patients were divided into two groups: the main, in which the developed complex of therapeutic and rehabilitation measures was applied, and the control, receiving standard treatment according to current clinical recommendations.

Inclusion criteria: presence of a clinically and radiologically confirmed fracture of the lower jaw; development of painful dysfunction of the temporomandibular system; age from 18 to 60 years; absence of severe concomitant somatic pathology.

Exclusion criteria: multiple combined injuries, pronounced psycho-emotional disorders, acute inflammatory processes of the CNS, refusal to participate in the study.

Diagnostic methods:

- clinical examination (assessment of pain on a visual-analog scale, measurement of the mouth opening amplitude, determination of occlusion disorders);
 - Palpation of the chewing muscles and assessment of muscle tone;
 - Orthopantomography and CLCT for analyzing the condition of joint structures;
 - Functional diagnostics of the temporomandibular system (registration of mandibular movements, analysis of the mouth opening trajectory);
 - Electromyography of the masticatory muscles to assess functional activity.
- The treatment and rehabilitation program implemented in the main group included:
- surgical stabilization of the mandibular fracture using standard methods;
 - Early functional joint load with dosed exercises;
 - muscle relaxation techniques and therapeutic gymnastics;
 - physiotherapeutic methods (ultrasound, laser therapy, magnetotherapy - according to indications);
 - use of individual occlusion buses or caps in case of occlusion disorders;



Figure 1 Photographs of the patient's face when measuring the size of the mouth opening.

Research results. The most frequent cause of patient appeals was pain and difficulty opening the mouth, which was recorded in 89.71% of the main group and 80.22% of the control group. External examination of both groups revealed collateral edema of the soft tissues of the affected area in 90.4% of patients in the main group and 90.1% in the control group. The symptom of musculoskeletal dysfunction of the CNS was detected in 97.3% of observations in both groups. In the examined patients, defects of the lateral surfaces of the dental rows and signs of TMJ dysfunction prevailed. All patients in the studied groups experienced unpleasant sensations when palpating the PCOS area, in 3.13% - pain sensations, however, 97.50% of patients experienced pain when palpating the PCOS area, 90.63% of patients experienced pain when palpating the chewing muscles.

When the chin was pressed, the manifestation of pain in the fracture area was noted. On the fracture side, 87.3% of patients experienced a sharp limitation in the volume of joint head movements, up to their complete absence. When assessing the movement of the mandibular joint heads, their asynchronous movement and noise phenomena (noise, crackling, crepitation, etc.) were noted. In 87.5% of patients, there was a limitation in the volume of lower jaw movements in different planes, a deviation from the midline greater than 2 mm when opening the mouth.

Table 2 shows the relationship between the position of the condyle segment fractures according to CT research data.

Table 2
Comparison of the position of the articular segment according to radiological examination data

Research data	Patient number	Patient number	In the pit				Normal
			Before	Before upper+lower	upper+lower	Low er	
Dislocation	18	18					
Movement	10	5			3		2
Lateral shift	11		1		4	6	
Contralateral	21	1		1		11	8

Note: % of the total number of fractures or contralateral joints, $p < 0.01$ (statistically significant for the segmental position according to CT data and the type of fracture of the chi-square criterion)

Using a CT scan of the patient's skull with subsequent reconstruction of its three-dimensional image in the Radi Ant program, an assessment of the anatomical and topographical characteristics of the structures of the mandibular branch and their location relative to the fracture line was conducted.

To determine the linear parameters of the anatomical and topographic structures of the mandible, we selected the following parameters:

1. Distance from the most lateral point of the molar head (Co) to the middle of the mandibular notch, mm (Fig. 3A).

2. Distance from the most lateral point of the molar head (Co) to the lower point of the mandibular angle Go, mm (Figure 3B)
3. Distance from the middle of the mandibular notch to the posterior point of the base of the head of the maxillary process AC, mm (Fig. 3C).



Figure 3 B - Schematic distance from the lateral point of the molar head (Co) to the lower point of the mandibular angle Go, mm.

Surgical intervention was performed under strict indications, depending on the established diagnosis, under endotracheal anesthesia. Surgical treatment consisted of MO replantation with osteotomy of the mandibular branch and metal-osteosynthesis (MOS) with various fixatives. In 7 observations, bilateral replantation was performed with subcondylar osteotomy and metalloosteosynthesis in the region of the condyle processes. As a result of the conducted research, recommendations were developed for improving the treatment of temporomandibular joint pain disorders in high fractures of the maxillary process of the mandible.

The obtained data allowed us to conclude that the chewing time in the main group during the early and long-term period of the study was significantly lower than in the control group, which made it possible to prove the effectiveness of using endoscopic technologies for intraoral osteosynthesis in fractures of the articular process, as well as faster and more effective restoration of chewing muscle groups in the shortest postoperative period. In patients of the main group, the length of stay in the hospital was 17.4 ± 3.8 days, and the period of temporary disability was 26.5 ± 3.9 days. In patients of the control group, an increase in the period of inpatient treatment and loss of work capacity was recorded, which amounted to 24.6 ± 2.8 and 32.3 ± 4.8 days, respectively, while in the control group, the duration of inpatient observation was 41.31%, and the period of loss of work capacity was 21.92% less than in the main group.

Thus, the results of the conducted studies indicate that the clinical and functional indicators of the temporomandibular joint condition, reduction in rehabilitation duration, its qualitative indicators, reduction in pain sensations, and improvement in the quality of life of patients performed using endoscopic technologies due to reduced trauma and rapid restoration of chewing muscles. The obtained data confirm that the proposed and tested method is an effective treatment method, and ultrasound and EMG studies are informative and should be used by dentists and maxillofacial surgeons at all stages of treating patients with mandibular injuries with high fractures of the maxillary process.

Conclusions. Features of the clinical course of musculoskeletal disorders in patients with high fractures of the maxillary process of the mandible are characterized by the initial progression of pain syndrome, impaired occlusion, which depended on the duration of the injury, the presence of pre-traumatic chronic diseases of the temporomandibular joint, as well as the location of the fracture and the proximity of the fracture line to the joint.

When determining morphometric indicators, taking into account the anatomical and topographical characteristics of the temporomandibular joint in patients with mandibular articular fractures, the average values from the lateral point of the articular head (Co) to the lower point of the

mandibular angle Go and the distance from the most lateral point of the articular head (Co) to the mandibular lingual (lingula) are statistically significant.

Emotional and personal disorders in patients with temporomandibular joint pain disorder syndrome in connective tissue dysplasia are obligatory and have their own characteristics: a high level of reactive and personal anxiety, a high level of depression, and reduced quality of life indicators. The developed recommendations for improving the treatment of temporomandibular joint pain disorders have pathogenetic orientation and are more effective compared to generally accepted traditional treatment methods.

REFERENCES| ЧОККИ | IQTIBOSLAR:

1. Asrorovna, X. N., Baxriddinovich, T. A., Bustanovna, I. N., Valijon O'g'li, D. S., & Qizi, T. K. F. (2021). Clinical Application Of Dental Photography By A Dentist. The American Journal of Medical Sciences and Pharmaceutical Research, 3(09), 10-13.
2. Bustanovna, I. N. (2024). Hygienic Assessment of The Condition of The Oral Mucosa After Orthopedic Treatment. International Journal of Scientific Trends, 3(3), 56-61.
3. Bustanovna, I. N. (2024). Complications Arising in the Oral Cavity after Polychemotherapy in Patients with Hemablastoses. International Journal of Scientific Trends, 3(3), 62-66.
4. Bustanovna, P. I. N. (2024). Further Research the Features of the Use of Metal-Ceramic Structures in Anomalies of Development and Position of Teeth. International Journal of Scientific Trends, 3(3), 67-71.
5. Ghasemi Darestani, N., Gilmanova, A. I., Al-Gazally, M. E., Zekiy, A. O., Ansari, M. J., Zabibah, R. S., ... & Akhavan-Sigari, R. (2023). Mesenchymal stem cell-released oncolytic virus: an innovative strategy for cancer treatment. Cell Communication and Signaling, 21(1), 43.
6. Islamova N. B., Sh N. N. STUDY OF CHANGES IN PERIODONTAL DISEASES IN POSTMENOPAUSAL WOMEN //Conferences. – 2023. – C. 15-17.
7. Islamova, N. B. (2022). CHANGES IN PERIODONTAL TISSUES IN THE POSTMENOPAUSAL PERIOD. In Стоматология-наука и практика, перспективы развития (pp. 240-241).
8. Pallathadka, H., Khaleel, A. Q., Zwamel, A. H., Malathi, H., Sharma, S., Rizaev, J. A., ... & Jawad, M. A. (2024). Multi-Drug Resistance and Breast Cancer Progression via Toll-Like Receptors (TLRs) Signaling. Cell Biochemistry and Biophysics, 1-16.
9. Fakhridin, C. H. A. K. K. A. N. O. V., Shokhrub, S. A. M. A. D. O. V., & Nilufar, I. S. L. A. M. O. V. A. (2022). ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI. JOURNAL OF BIOMEDICINE AND PRACTICE, 7(1).
10. Rizaev, J. A., Nazarova, N. S., & Vohidov, E. R. (2024). HOMILADOR AYOLLARDA PARODONT KASALLIKLARI RIVOJLANISHINING PATOGENETIK JIHATLARI. Журнал гуманитарных и естественных наук, (11 [2]), 104-107.
11. RIZAEV, J., & KUBAEV, A. (2020). Preoperative mistakes in the surgical treatment of upper retro micrognathia. International Journal of Pharmaceutical Research (09752366), 12(1).
12. Kizi, J. O. A., & Bustanovna, I. N. (2024). FAMILIARIZATION WITH THE HYGIENIC ASSESSMENT OF THE CONDITION OF THE ORAL MUCOSA IN ORTHOPEDIC TREATMENT. European International Journal of Multidisciplinary Research and Management Studies, 4(05), 89-96.
13. Ugli, A. A. A., & Bustanovna, I. N. (2024). STUDY OF THE CONDITION OF PARODONT IN PERIODONTITIS IN FETAL WOMEN. European International Journal of Multidisciplinary Research and Management Studies, 4(05), 149-156.

БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ

JOURNAL OF BIOMEDICINE AND PRACTICE

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