

БИМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

8 ЖИЛД, 4 СОН

ЖУРНАЛ БИМЕДИЦИНЫ И ПРАКТИКИ

ТОМ 8, НОМЕР 4

JOURNAL OF BIOMEDICINE AND PRACTICE

VOLUME 8, ISSUE 4



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 Утқуровна
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
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 жаррохлиги департаменти профессори, Жанубий
Кореянинг юз-жағ ва эстетик жаррохлик ассоциацияси
президенти*

Абдуллаева Наргиза Нурмаатовна

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

Худоярова Дилдора Рахимовна

*тиббиёт фанлари доктори, доцент, Самарқанд давлат
тиббиёт университети №1-сон Акушерлик ва гинекология
кафедраси мудири
ORCID ID: 0000-0001-5770-2255*

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 фанлари доктори, Самарқанд давлат тиббиёт
университети болалар жаррохлиги кафедраси доценти
ORCID ID: 0000-0003-2650-4445*

Акбаров Миршавкат Мирлоимович

*тиббиёт фанлари доктори, В.Ваҳидов номидаги
Республика ихтисослаштирилган жаррохлик маркази*

Саидов Садамир Аброрович

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

Бабалжанов 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 номзоди, 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
касаликлари пропедевтикаси кафедраси доценти.
ORCID ID: 0000-0003-2442-1523*

Ибрагимова Малика Худайбергандовна

*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*

Саҳифаловчи: Хуршид Мирзахмедов

Контакт редакций журналлов. 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 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

Худоярова Дилдора Рахимовна

доктор медицинских наук, доцент, заведующая кафедрой
Акушерства и гинекологии №1 Самаркандского
государственного медицинского университета
ORCID ID: 0000-0001-5770-2255

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

Акбаров Миршавкат Миролимович

доктор медицинских наук,
Республиканский специализированный центр
хирургии имени академика В.Вахидова

Саидов Саидмир Аброрович

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

кандидат 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

Ибрагимова 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

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 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*

Khudoyarova Dildora Rakhimovna

*Doctor of Medical Sciences, Associate Professor,
Head of the Department of Obstetrics and Gynecology,
Samarkand State Medical University No.1
ORCID ID: 0000-0001-5770-2255*

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*

Akbarov Mirshavkat Mirolimovich

*Doctor of Medical Sciences,
Republican Specialized Center of Surgery
named after academician V.Vakhidov*

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 Dermatovenerology,
pediatric dermatovenerology and AIDS
ORCID ID: 0000-0002-3022-916X*

Terebaev Bilim Aldamuratovich

*Candidate 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 Xudayberganova

*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*

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

МУНДАРИЖА | СОДЕРЖАНИЕ | CONTENT

OBSTETRICS AND GYNECOLOGY

1. **An V. Andrey, Sharipova Kh. Feruza**
THE CLINICAL COURSE OF FOCAL MYOCARDITIS IN PREGNANT.....10
2. **Kamalova I. Malika, Askarova K. Fatima**
UTERINE MUCOSAL MORPHOLOGY OF INTRAUTERINE CONTRACEPTIVE USE
(LITERATURE REVIEW).....15
3. **Nasimova R. Nigina**
THE ROLE OF ESTROGENIC DEFICIENCY IN THE DEVELOPMENT AND
PROGRESSION OF GENITAL PROLAPSE.....20

HEMATOLOGY

4. **Kayumov A. Abdurakhman, Ibragimova M. Gulchehra, Achilova U. Ozoda**
IMMUNE THROMBOCYTOPENIA A MODERN VIEW OF DIAGNOSIS AND
TREATMENT: LITERATURE REVIEW.....26

PEDIATRIC SURGERY

5. **Kamolov J. Sardor, Mavlyanov Sh. Farxod, Yangiyev A. Baxtiyor**
BIOIMPEDANCE PARAMETERS IN PATIENTS WITH EMERGENCY ABDOMINAL
PATHOLOGY.....35
6. **Tuxtayev M. Firdavs, Mavlyanov Sh. Farxod, Mavlyanov X. Shavkat**
RESULTS OF BIOIMPEDANCE ANALYSIS IN CHILDREN WITH EMERGENCY
PATHOLOGY OF THE URINARY SYSTEM.....41
7. **Mavlyanov Sh. Farhod, Ulmasov G. Firdaus, Allazov N. Feruz, Mavlyanov Kh. Shavkat,
Tursunov E. Sanjar.**
SURGICAL TREATMENT OF A TUMOR OF THE ABDOMINAL CAVITY ISSUING
FROM THE WALL OF THE STOMACH IN A CHILD: A CLINICAL CASE.....46

RADIOLOGY

8. **Xalikulov Sh. Elbek, Sharopov Sh. Sadullo.**
NEUROSONOGRAPHY AS A METHOD OF INTRAOPERATIVE NAVIGATION IN THE
TREATMENT OF MULTILEVEL HYDROCEPHALIA.....52
9. **Usarov Sh. Mukhriddin**
OPTIMIZATION AND IMPORTANCE OF ULTRASOUND DIAGNOSTIC METHODS IN
THE CHOICE OF TACTICS FOR THE TREATMENT OF PATIENTS WITH CERVICAL
OSTEOCHONDROSIS.....56

OTORHINOLARYNGOLOGY

10. **Nasretdinova T. Makhzuna, Xayitov A. Alisher, Dustboboyev S. Dilshod**
MODERN ASPECTS IN THE DEVELOPMENT OF EXUDATIVE OTITIS MEDIA.....62
11. **Nasretdinova T. Makhzuna, Normirova N. Nargiza, Shadiev E. Anvar**
AUDITORY ADAPTATION IN PATIENTS WITH PERIPHERAL AND CENTRAL
HEARING IMPAIRMENT.....70

MORPHOLOGY

12. **Urinov M. Alisher, Otajonov O. Ilhom, Akhmedova B. Dilafruz**
STUDY OF CHANGES IN SOME BIOCHEMICAL INDICATORS OF BLOOD IN
SIMULATION OF EXPERIMENTAL LIVER DAMAGE.....76

13. **Nuraliev A. Nekqadam, Murotov F. Nurshod.**
THE RESULTS OF DETERMINING THE DEGREE OF INFLUENCE OF THE GENETICALLY MODIFIED SHADE ON THE REGULATORY MICROFLORA OF THE COLON OF LABORATORY ANIMALS.....81
14. **Khamidova M. Farida, Zhovlieva B. Mavlyuda**
MORPHOLOGICAL AND FUNCTIONAL FEATURES OF THE STRUCTURE OF THE BRONCHI IN EXPERIMENTAL CHRONIC OBSTRUCTIVE PULMONARY DISEASES.....91
15. **Sabirova Sh. Dilnoza, Oripov S. Firdavs**
MORPHOLOGICAL FEATURES OF THE ADRENAL CORT OF RAT OFFSPRING IN ONTOGENESIS UNDER THE CONDITIONS OF INTRAUTERINE EXPOSURE TO PESTICIDES THROUGH THE MOTHER'S ORGANISM (REVIEW ARTICLE).....100
16. **Boboev I. Askar, Oripov S. Firdavs**
MORPHOLOGY NEAR THE BALL-BLADYING PARENCHYMA OF THE RABBIT LIVER WITH EXPERIMENTAL CALCULOSIS CHOLECYSTITIS.....108
17. **Kurbonov R. Khurshed, Oripov S. Firdavs, Deev V. Roman**
EFFECT OF OCTACALCIUM PHOSPHATE AND ITS COMBINED FORMS ON BONE REGENERATION.....114

NEUROLOGY

18. **Kamalova I. Malika, Khaidarov K. Nodirjon, Teshayev Zh. Shukhrat.**
CLINICAL FEATURES OF SOME RISK FACTORS FOR STROKE IN WOMEN.....122
19. **Sheryigitova I. Nigina, Muzaffarova Sh. Nargiza, Khakimova Z. Sohiba.**
COGNITIVE AND ASTHENIC DISORDERS AFTER COVID-19.....129

ONCOLOGY

20. **Kuliev A. Aziz, Tursunov M. Odil, Ulmasov G. Firdavs, Urazov S. Numon, Toshov T. Alizhon**
FEATURES OF DEVELOPMENT OF MECHANICAL JAUNDICE IN GASTRIC CANCER AND METHODS OF ITS ELIMINATION.....136
21. **Polatova Sh. Jamilya, Tagaev A. Jasur**
GLOBAL STATUS OF THE PROBLEMS OF DIFFERENTIAL DIAGNOSIS OF MELANOMA AMONG PATIENTS WITH MELANOCYTIC LESIONS AND NEOPLASMS.....143
22. **Rakhimov M. Nodir, Abdurakhmonov A. Jurabek, Shakhanova Sh. Shakhnoza, Sulimova G.Olga**
PATOGENESIS OF PERITONEAL ASCITES IN RECURRENT OVARIAN CANCER.....152
23. **Djuraev D. Mirjalol, Shamuradov I. Ilxom**
THE ROLE OF ENDOSCOPIC STENTING IN ESOPHAGEAL CANCER COMPLICATED BY FISTULA.....159
24. **Alimkhodzhayeva T. Lola, Norbekova Kh. Munira, Zievidinova S. Soniya, Mirzayeva A. Matlyuba, Khusanova J. Makhinabonu**
CLINICAL SIGNIFICANCE OF TUMOR-INFILTRATING LYMPHOCYTES IN BREAST CANCER.....166
25. **Alimkhodzhayeva T. Lola, Norbekova Kh. Munira, Zievidinova S. Soniya, Mirzayeva A. Matlyuba, Khusanova J. Makhinabonu**
THE BASIC APPROACHES TO STUDYING THE LYMPHATIC SYSTEM IN BREAST CANCER(LITERATURE REVIEW).....177
26. **Rakhimov M. Nodir, Tulanov T. Begzod, Shakhanova Sh. Shakhnoza, Aslsnova M. Lobar**
PATHOGENETIC ASPECTS OF CANCER ANOREXIA.....192

OPHTHALMOLOGY

27. **Kadirova M. Aziza, Khasanova A. Dildora.**
CASE FROM PRACTICE: CONGENITAL ANOMALY OF OPTIC DISC EXCAVATION. «MORNING GLORY» SYNDROME.....202
28. **Allayarov T. Azimbek, Rizayev A. Jasur, Yusupov A. Amin, Xakimova Sh. Mavluda.**
THE STATE OF OPHTHALMOLOGICAL CARE AND ITS IMPROVEMENT IN PATIENTS WITH DIABETIC RETINOPATHY (LITERATURE REVIEW).....210

PEDIATRICS

29. **Tairova B. Sakina**
PREVALENCE OF ALLERGIC DISEASES AMONG CHILDREN WITH CONGENITAL HEART DEFECTS.....215
30. **Tairova B. Sakina, Mukhamadiyeva A. Lola**
IMMUNOLOGICAL ASPECTS IN YOUNG CHILDREN WITH CONGENITAL HEART DEFECTS.....220
31. **Tairova B. Sakina**
CONGENITAL HEART DEFECTS: AN IMMUNOLOGICAL PERSPECTIVE (LITERATURE REVIEW).....226
32. **Fayziyeva R. Ugilbibi, Normamato V. Kh. Dilmurod. Mamadiyeva N. Zarifa**
CHARACTERISTICS OF BRONCHOBSTRUCTIVE SYNDROME IN CHILDREN.....231

PSYCHIATRY

33. **Kenjaeva K. Nargiza, Rizaev A. Jasur, Umirov E. Safar, Baymirov L. Sanjar.**
CLINICAL DYNAMICS OF DEPENDENCE TO PSYCHOACTIVE SUBSTANCES AND ITS DETERMINANTS.....237
34. **Baymirov L. Sanjar, Ochilov U. Ulugbek, Turayev T. Bobir**
CLINICAL FEATURES OF THE ABUSE OF VARIOUS DRUGS IN PATIENTS WITH ALCOHOLISM.....247

REHABILITATION AND SPORTS MEDICINE

35. **Mavlyanova F. Zilola, Kim A. Olga, Xudoykulova V. Farida, Raxmatullina R. Luiza, Bulyakova A. Gulnaz, Akhmadeeva Leila.**
POSSIBILITIES OF PERSONALIZED REHABILITATION AFTER A STROKE USING TELETECHNOLOGIES AND PREDICTION OF OUTCOMES BASED ON CLINICAL AND NEURORADIOLOGICAL STUDIES.....252
36. **Kamilova T. Roza, Mavlyanova F. Zilola, Basharova M. Laylo, Isakova I. Lola, Burxanova L. Gulnoza.**
COMPARATIVE ASSESSMENT OF ACTUAL FOOD CONSUMPTION BY CHILDREN OF PRESCHOOL EDUCATIONAL ORGANIZATIONS WITH DIFFERENT DIETARY INTAKE.....261

STOMATOLOGY AND MAXILLOFACIAL SURGERY

37. **Latipova B. Sitora**
INVESTIGATION OF THE CLINICAL EFFICACY OF ORAL MUCOSA TREATMENT AFTER CHEMOTHERAPY: LITERATURE REVIEW.....270
38. **Abdullaev Sh. Dilmurod**
ANALYSIS OF THE RESULTS OBTAINED AND SOME FEATURES OF CYTOKINE PROFILE IN MIXED SALIVA OF PATIENTS WITH GASTROINTESTINAL TRACT DISEASE.....279

39. **Rizaev A. Jasur, Akhmedov A. Alisher**
IMPROVING DENTAL CARE IN UZBEKISTAN USING A CONCEPTUAL APPROACH TO IMPROVE ITS QUALITY.....287
40. **Sharopov G. Sanzhar, Tojiev I. Feruz, Azimov I. Mukhammadjon, Inoyatov Sh. Amrillo, Ismoilkhodjaeva G. Komila**
CLINICAL AND RADIOLOGICAL MANIFESTATIONS OF SECONDARY MAXILLARY DEFORMITIES IN PATIENTS WITH UNI- AND BILATERAL CLEFT LIP AND PALATE AFTER PRIMARY LIP AND PALATE SURGERIES.....294

THERAPY

41. **Ermatov J. Nizom, Nasirdinov Z. Mavlonjon, Ishmetov P. Sherzod, Oltiev Sh. Amrillo, Kasimova E. Kizilgul.**
EVALUATION OF THE EFFECTIVENESS OF THE DAILY DIET OF SCHOOLCHILDREN SUFFERING FROM IRON DEFICIENCY ANEMIA FROM ENRICHED LOCAL PROTEIN-CONTAINING PRODUCTS.....301
42. **Ermatov J. Nizom, Abdulkhakov U. Ikhtiyor, Shukurov N. Anvar, Nasirdinov Z. Mavlon, Kasimova E. Kizilgul**
HYGIENIC FEATURES OF DIABETES PREVENTION.....308
43. **Tashkenbayeva N. Eleonora, Esankulov O. Mukhammad**
SIGNIFICANCE OF UROMODULIN IN THE DEVELOPMENT AND PROGRESSION OF CHRONIC KIDNEY DISEASE.....318
44. **Tairov R. Doston, Berdiev H. Doniyor**
STRUCTURAL CHANGES IN THE CARDIOVASCULAR SYSTEM IN PATIENTS WITH GOUT.....331
45. **Rizaev A. Jasur, Qilichev A. Anvar, Olimjonova J. Farangiz**
RISK FACTORS FOR CARDIOVASCULAR DISEASE AFTER CORONARY ARTERY BYPASS GRAFTING IN PATIENTS WITH ISCHEMIC HEART DISEASE.....339
46. **Isirgapova N. Sarvinoz, Sultonov N. Nodir**
IMPACT OF HORMONAL CHANGES ON THE QUALITY OF LIFE IN PATIENTS WITH CHRONIC KIDNEY DISEASE 5TH STAGE.....349
47. **Yakubov V. Abduljalol, Pulaniva I. Nargiza, Saidova A. Shakhnoza, Musayeva J. Lola**
PROSPECTIVE DIRECTIONS FOR THE TREATMENT OF CHRONIC HEART FAILURE.....360
48. **Xaydarova D. Dilrabo, Tashkenbaeva N. Eleonora**
CLINICAL CHARACTERISTICS OF THE COURSE AND CRITERIA FOR DIAGNOSTICS OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN PATIENTS WITH COVID-19 PNEUMONIA.....366

PHARMACOLOGY

49. **Boboyev M. Behzod**
CLINICAL EVALUATION OF THE CHRONIC TOXICITY OF THE NEW DRUG «TIOSIN», CONSISTING WITH A COMPLEX COMBINATION OF THE MICROELEMENT ZINC AND LIPOIC ACID.....376
50. **Allazov A. Salakh. Iskandarov N. Yusuf**
LOCAL HEMOSTATIC IN UROLOGICAL BLEEDING.....383

SURGERY

51. **Shodmonov A. Akbar, Kurbaniyazov B. Zafar, Askarov A. Pulat**
EVALUATION OF THE RESULTS OF THE TREATMENT OF NON-SPECIFIC ULCERATIVE COLITIS WITH THE APPLICATION OF PLASMAPHERESIS.....390
52. **Rizayev A. Jasur, Kurbaniyazov B. Zafar, Saidov B. Zohir, Abduraxmanov Sh. Diyor.**
ANTEGRADE ANGIOSCLEROTHERAPY OF THE LEFT TESTICULAR VEIN.....397

| | | |
|-----|---|-----|
| 53. | Nazarov N. Zokir SURGICAL TREATMENT OF COMPLICATED FORMS OF CHOLELITHIASIS IN ELDERLY AND SENILE PATIENTS (LITERATURE REVIEW)..... | 407 |
| 54. | Shamratov Z. Shokir, Akhmedov M. Yusuf, Yusupov S. Anvar, Saidov A. Maksud MYOCARDIAL PROTECTION METHODS IN CARDIAC SURGERY PRACTICE (REVIEW ARTICLE)..... | 417 |
| 55. | Ruziboev A. Sanjar, Yunusova F. Guzal, Yunusov T. Oybek EFFICIENCY OF APPLICATION OF DOMESTIC HEMOSTATIC IMPLANT "HEMOBEN" IN SEVERELY BURNED PATIENTS..... | 424 |
| 56. | Abdullaev A. Sayfulla, Xujabaev T. Safarboy, Dusiyarov M. Muhammad TACTICS OF TREATMENT OF ACUTE COMMERCIAL INTESTINAL OBSTRUCTION..... | 431 |
| 57. | Sherbekov A. Ulugbek, Xaydarova O. Laylo, Abdurakhmanov Sh. Diyor CLINICAL FEATURES OF HERNIOPLASTY AND ABDOMINOPLASTY WITH COMPLICATED ABDOMINOPTOSIS IN VENTAL HERNIAS..... | 440 |
| 58. | Sherbekov A. Ulugbek, Xaydarova O. Laylo SURGICAL TREATMENT OF VENTAL HERNIAS IN PATIENTS WITH MORBID OBESITY AND ABDOMINOPTOSIS..... | 446 |
| 59. | Umedov A. Xushvaqt OUR EXPERIENCE IN CONSERVATIVE TREATMENT OF SPLEEN INJURY IN CLOSED ABDOMINAL TRAUMA..... | 451 |
| 60. | Umedov A. Xushvaqt POSSIBILITIES OF VIDEOLAPAROSCOPIC DIAGNOSIS AND TREATMENT OF ISOLATED AND COMBINED LIVER DAMAGE..... | 456 |
| 61. | Sattarov S. Inayat, Matmurotov J. Kuvondik, Yakubov Y. Ilyosbek, Rakhimov D. Dadakhon. WAYS TO IMPROVE REVASCULARIZATION RESULTS IN PATIENTS WITH DIABETIC FOOT SYNDROME..... | 461 |

ORIGINAL ARTICLES


| | | |
|-----|---|-----|
| 62. | Giyasov A. Zaynitdin, Khaydarov R. Khasanali, Siddikov U. Bokijon ANALYSIS OF COMMISSION FORENSIC MEDICAL EXAMINATIONS RELATED TO THE ACTIVITIES OF OBSTETRICIAN-GYNECOLOGISTS..... | 468 |
| 63. | DAMINOV Feruz Asatullaevich ASPECTS OF SURGICAL TREATMENT OF DEEP BURN IN ELDERLY AND SENILE AGE..... | 475 |
| 64. | SAMIEV Asliddin Sayitovich, KHAMIDULLAEVA Mohinur Maksatullo qizi COMPLEX REHABILITATION MEASURES IN PATIENTS SUFFERING WITH RADICULOPATHIES OF THE VERTEBROGENOUS LUMBAR AREA..... | 481 |

БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ
ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ | JOURNAL OF BIOMEDICINE AND PRACTICE

ALLAYAROV Azimbek Tolibovich
RIZAYEV Jasur Alimjanovich
Doctor of Medical Sciences, Professor
YUSUPOV Amin Abduazizovich
Doctor of Medical Sciences, Professor
XAKIMOVA Mavluda Shavkatjonovna
Samarkand State Medical University

THE STATE OF OPHTHALMOLOGICAL CARE AND ITS IMPROVEMENT IN PATIENTS WITH DIABETIC RETINOPATHY (LITERATURE REVIEW)

For citation: Allayarov T. Azimbek, Rizayev A. Jasur, Yusupov A. Amin, Xakimova Sh. Mavluda. THE STATE OF OPHTHALMOLOGICAL CARE AND ITS IMPROVEMENT IN PATIENTS WITH DIABETIC RETINOPATHY (LITERATURE REVIEW)// Journal of Biomedicine and Practice. 2023, vol. 8, issue 4, pp.210-214

 <http://dx.doi.org/10.5281/zenodo.8316884>

ANNOTATION

In recent years, a significant increase in the incidence of diabetes mellitus (DM) has been observed in all countries. The World Health Organization (WHO) considers diabetes mellitus as an epidemic of a specific non-communicable disease.

Diabetic retinopathy is a complication of diabetes mellitus that leads to damage to the retinal vessels and the development of microaneurysms, as well as the proliferation of newly formed vessels in the fundus. The problem of early diagnosis and treatment of diabetic retinopathy continues to be one of the urgent problems of modern ophthalmology, this is due to the late appeal of patients with diabetic retinopathy.

Key words: Diabetes mellitus, diabetic retinopathy, fundus.

ALLAYAROV Azimbek Tolibovich
RIZAYEV Jasur Alimjanovich
Tibbiyot fanlari doktori, Professor
YUSUPOV Amin Abduazizovich
Tibbiyot fanlari doktori, Professor
XAKIMOVA Mavluda Shavkatjonovna
Samarqand Davlat Tibbiyot Universiteti

OFTALMOLOGIK YORDAM XOLATI VA UNI DIABETIK RETINOPATIYA BILAN KASALLANGAN BEMORLARDA TAKOMILLASHTIRISH (ADABIYOT SHARHI)

ANNOTATSIYA

So'nggi yillarda barcha mamlakatlarda qandli diabet bilan kasallanishning sezilarli o'sishi kuzatilmoqda. Jahon sog'liqni saqlash tashkiloti qandli diabetni o'ziga xos yuqumli bo'lmagan kasallikning epidemiyasi deb hisoblaydi. Diabetik retinopatiya - asoratlari retinal tomirlarning shikastlanishiga va mikroanevrizmalarning rivojlanishiga, shuningdek ko'z tubida yangi hosil bo'lgan tomirlarning ko'payishiga olib keladi. Diabetik retinopatiyani erta tashxislash va davolash muammosi zamonaviy oftalmologiyaning dolzarb muammolaridan biri bo'lib qolmoqda, bu diabetik retinopatiya bilan og'rikan bemorlarning kech murojaat qilishi bilan bog'liq.

Kalit so'zlar: qandli diabet, diabetik retinopatiya, ko'z tubi.

Аллаяров Азимбек Толибович

Ризаев Жасур Адимджанович

Доктор медицинских наук, профессор

Юсупов Амин Абдуазизович

Доктор медицинских наук, профессор

Хакимова Мавлуда Шавкатжоновна

Самаркандский Государственный Медицинский Университет

**СОСТОЯНИЕ ОФТАЛЬМОЛОГИЧЕСКОЙ ПОМОЩИ И ЕЕ
СОВЕРШЕНСТВОВАНИЕ У БОЛЬНЫХ С ДИАБЕТИЧЕСКОЙ РЕТИНОПАТИЕЙ
(ОБЗОР ЛИТЕРАТУРЫ)**

АННОТАЦИЯ

Аннотация: В последние годы во всех странах наблюдается значительный рост заболеваемости сахарным диабетом (СД). Всемирная организация здравоохранения (ВОЗ) рассматривает сахарный диабет как эпидемию специфического неинфекционного заболевания.

Диабетическая ретинопатия - это осложнение сахарного диабета, которое приводит к поражению сосудов сетчатки и развитию микроаневризм, а также пролиферации новообразованных сосудов на глазном дне. Проблема ранней диагностики и лечения диабетической ретинопатии продолжает оставаться одной из актуальных проблем современной офтальмологии, это обусловлено поздней обращаемостью пациентов с диабетической ретинопатией.

Ключевые слова: Сахарный диабет, диабетическая ретинопатия, глазное дно.

Dolzarblici. Qandli diabet jamoat salomatligida eng yirik global muammolaridan biri bo'lib, bir qator epidemiologik tadqiqotlarda qayd etilganidek, jamoat salomatligi va ijtimoiy-iqtisodiy rivojlanishga og'ir global vazifa qo'yadi, garchi ba'zi mamlakatlarda diabetning tarqalishi pasayishni boshlagan bo'lsa-da, so'nggi o'n yilliklarda boshqa rivojlangan va rivojlanayotgan mamlakatlarda qandli diabetning tarqalishi ko'paymoqda. Xalqaro diabet federatsiyasining (IDF) xisobotiga ko'ra 2017 yilda butun dunyo bo'ylab 451 million kattalar qandli diabet bilan yashayotgan bo'lsa, bugungi kunda agar samarali profilaktika choralari kurilmasa, ularning soni 693 millionga ko'payishi extimoli bor. Bolalar va o'smirlar orasida 1-tur va 2-tur qandli diabetning tarqalishi ham oshdi va 20 yoshgacha bo'lgan bolalar va o'smirlarda 1-tur diabet bilan kasallanganlar soni bir milliondan oshadi. [7]

2015 yilda N. Sh. Ibragimova va N.M.Normatovalar tomonidan Jahon qandli diabet jamg'armasining (WDF) "O'zbekistonda qandli diabet bilan og'rikan bemorlarda ko'rlikning oldini olish" loyihasi doirasida Farg'ona, Buxoro viloyatlari va Qoraqalpog'iston Avtonom Respublikasida qandli diabet bilan kasallangan bemorlar o'rtasida DR bo'yicha skrining o'tkazildi. 3 ta hududda 18-67 yoshdagi (kasallik davomiyligi 5-15 yil) 2-tur qandli diabetga chalingan 1587 nafar bemorlar tekshirilgan. Bemorlarda: glikemiya darajasi, HbA1c, xolesterin miqdori aniqlandi, shuningdek oftalmologning tekshiruv quyidagilarni o'z ichiga oladi: ko'rish utkirligini aniqlash, ko'z ichi bosimini o'lchash. Natijalar: 1587 bemorni tekshirish natijalari tahlili shuni ko'rsatdiki, 2-tur qandli

diabet bilan kasallangan odamlarda DR bilan asoratlanish 56,9% ni tashkil etdi, shundan DR I darajasi - 32,8%, II darajasi - 18,6%, III darajali DR -5,5% va bemorlarning 43 foizida esa DR aniqlanmagan. Birinchi navbatda kasallikning davomiyligi 10-15 yil bo'lgan bemorlarning 52 foizi oftalmolog tomonidan tekshirilgan. Kasallikning davomiyligi 10 yil bo'lgan 2-tur qandli diabet bilan og'rigan bemorlarda DR tarqalishi 45% ni tashkil etgan va kasallik 15 yil va undan ko'p davom etganda bu ko'rsatkich 68% ni tashkil etgan. Uglevod almashinuvi kompensatsiyali bo'lgan odamlar orasida I, II va III darajali DR tarqalishi mos ravishda 11,3%, 3,4% va 2,0% ni tashkil etgan ($p<0,001$). Dekompensatsiyalangan bemorlarning 80% da I, II va III darajali DRning tarqalishi mos ravishda 36,9%, 15,8% va 8,8% ni tashkil etgan. O'zbekistonda 2-tur qandli diabet bilan og'rigan bemorlarda DR chastotasi 56,9% ni tashkil etgan bo'lsa, DR I - 32,8%, DR II - 18,6%, DR III - 5,5%. 2-tur diabet bilan og'rigan bemorlarda DR ning rivojlanishi kasallikning davomiyligiga, uglevod almashinuvining kompensatsiya darajasiga, giperxolesterinemiya va dislipidemiyaga bog'liq. [8].

Bu shuni anglatadiki, bugungi kunda oftalmologiyaning global muammolaridan biri diabetik retinopatiyaning oldini olish va erta aniqlashni takomillashtirishdir. Adabiyotlarda bu muammoga bir qancha yondashuvlar mavjud [1,2].

Turli tadqiqotlar shuni ko'rsatdiki, diabetik retinopatiya (DR) va insult, yurak ishemik kasalligi va surunkali buyrak kasalligi kabi boshqa kasalliklar o'rtasida bog'liqlik mavjud. Buning sababi shundaki, qandli diabet ko'plab organlarning funksiyasiga ta'sir qilishi mumkin bo'lgan tizimli kasallikdir.

DR ning oldini olish va erta aniqlashning asosiy usullaridan biri qandli diabet bilan og'rigan bemorlarni muntazam tekshirish hisoblanadi. Buning uchun turli xil tadqiqot usullaridan foydalanish mumkin, shu jumladan funduskopiya, optik kogerent tomografiya (OCT), retinal angiografiya va boshqalar.

Keyingi yillarda fan-texnika taraqqiyoti DR diagnostikasi va davolashning yangi usullarini yaratishga olib keldi. Misol uchun, ba'zi tadqiqotlar shuni ko'rsatdiki, mashinani o'rganish algoritmlari va sun'iy intellektdan foydalanish DR tashxisining aniqligini oshirishi va kasallikni ertaroq aniqlashga yordam berishi mumkin.

Yondashuvlardan biri skrining usullarini qo'llashdir. Erta skrining qandli diabet bilan og'rigan bemorlarda retinopatiyani jiddiy muammoga aylanishidan oldin aniqlashi mumkin. Tadqiqotlar shuni ko'rsatdiki, erta skrining qandli diabet bilan kasallangan bemorlarda diabetik retinopatiya bilan asoratlanishni sezilarli darajada kamaytirishi mumkin [3].

Diabetik retinopatiya skriningi butunlay ko'rishni yo'qotmaslik uchun ko'zni o'z vaqtida to'liq oftalmologik tekshirish va davolashni talab qiladigan holatlarni aniqlash uchun zarur. So'nggi bir necha yil ichida yaxshi samarali xarajat nisbati bilan bir nechta xavf omillarini hisobga olgan holda aloxida skrining masofalari(intervallari) taklif qilindi. Biroq, ko'pgina mamlakatlarda umummilliy skrining dasturlari uchun resurslar kam. Bundan tashqari, yangi dalillar shuni ko'rsatadiki, retinal tasvirlar yurak-qon tomir kasalliklari yoki kognitiv buzilish xavfi bo'lgan shaxslarni aniqlashda foydali bo'lishi mumkin, bu kurish xavfini oshiradigan boshqa kasalliklar profilaktikasida diabetik retinopatiya skriningi rolini oshirishi mumkin [10].

Britaniya Diabet Assotsiatsiyasi diabetik retinopatiya uchun har qanday skrining dasturi kamida 80% sezgirlik va 95% o'ziga xoslikka ega bo'lishi kerakligini taklif qildi. Ko'z to'rt pardasi tasvirini tahlil qilishda sezilarli yutuqlarga erishilgan bo'lsa-da, aniqlik jihatidan hamma narsadan ustunroq bo'lgan yaxshiroq algoritmlarni izlab topish urinlidir. Bundan tashqari, tavsiya etiladigan usul minimal darajada salbiy natijalar berishi va oftalmologlarga ko'z tubi tasvirlaridagi shikastlanishlarga e'tibor qaratishga yordam berishi kerak. Olimlar adabiyotlarda DRni oddiy kompyuter skriningida oftalmologga yordam beradigan bir nechta algoritmlar mavjud degan xulosaga kelishdi. Usul tez, tejamkor va aniq bo'lsa, eng yaxshisi hisoblanadi. Bu cheklovlarning barchasi davr talabidir. Tadqiqotchilar uchun eng yaxshi algoritmlarni va samarali o'tkazish qobiliyatini aniqlash juda qiyin. Yosh tadqiqotchilar chuqur o'rganish kabi yangi yo'nalishlarga ega, ammo minimal mashg'ulot vaqtida, aniq shikastlanishlarni o'rganish, eng yaxshi xususiyatlarni izlash va eng yuqori aniqlik ko'rsatkichlariga erishish uchun mustahkam tasniflagichlar mavjud [9].

Shuningdek, zamonaviy tibbiyot muassasasida diabetik retinopatiyaning oldini olish va barvaqt aniqlashni takomillashtirishda diagnostika va davolashning zamonaviy usullaridan foydalanish muhim ahamiyatga ega. [5].

Ushbu usullardan biri optik kogerent tomografiya (OKT) bo'lib, u ko'zning to'r pardasidagi o'zgarishlarni va diabetik retinopatiyaning dastlabki bosqichlarida ularning og'irligini aniqlash imkonini beradi. OKTdan foydalanish tufayli davolanishni samarali nazorat qilish va asoratlar rivojlanishining oldini olish mumkin [6].

Shuningdek shamollashga qarshi va angiogenez ta'sir kuchini susaytiradigan preparatlarini introokulyar in'eksiya qilish, lazer koagulatsiya va vitrektomiya kabi zamonaviy davolash usullaridan foydalanish ham muhimdir. Ulardan foydalanish diabetik retinopatiyaning rivojlanishini samarali ravishda to'xtatishi va bemorlarda ko'rish qobiliyatini saqlab qolishi mumkin.

Ikkinchi yondashuv - davolashning zamonaviy usullaridan foydalanish. Retinopatiyani jarrohlik yo'li bilan davolash, shu jumladan lazer terapiyasi ko'z tubidagi tomir o'zgarishlarining rivojlanishini to'xtatishi mumkin. Bruksning tadqiqoti shuni ko'rsatdiki, lazer terapiyasi past darajali retinopatiyada samarali bo'lishi mumkin [4].

Biroq, diagnostika va davolash usullarini takomillashtirish bilan bir qatorda, qandli diabet bilan og'rigan bemorlar o'rtasida ma'rifiy va profilaktika ishlarini olib borish ham muhim ahamiyatga ega. Shifokorlar qandli diabetli bemorlarda ko'z tubi holatini diqqat bilan kuzatib borishlari va muntazam ravishda profilaktik tekshiruvlarni o'tkazishlari kerak. Bemorlar shifokorlarning tavsiyalariga amal qilishlari va qondagi glyukoza miqdorini nazorat qilishlari, shuningdek, uzlarining sog'lig'ini kuzatishlari va ko'rishdagi o'zgarishlarga hushyor bo'lishlari kerak.

Qandli diabet(QD) bilan og'rigan bemorlarning yoshi xavf omili sifatida qaralishi mumkin. Ma'lumki, DR bolalikda juda kam uchraydi. Biroq, balog'at yoshining boshlanishi bilan mikrovaskulyar asoratlar, jumladan, diabetik retinopatiyaning tez rivojlanishi kuzatiladi. Buning sababi shundaki, bu davrda kuchli gormonal qayta qurish sodir bo'ladi, bu juda ko'p miqdordagi kontrainsulyar omillar - gipofiz bezining tropik gormonlari, jinsiy steroidlar, o'sish omillari ishlab chiqarish bilan birga keladi. Bu holatda rivojlanayotgan QD dekompensatsiyasi tana vaznining tez ortishi va natijada insulinga bo'lgan ehtiyojning oshishi bilan izohlanishi mumkin. Jinsiy balog'atga etish davri DR ning rivojlanishi nuqtai nazaridan eng xavfli hisoblanadi [5].

Shuni esda tutish kerakki, diabetik retinopatiyani aniqlash va davolashning aniq tizimini tashkil etish ko'rlik xavfini kamaytirishga olib kelishi kerak, bu boshqa narsalar qatorida sezilarli iqtisodiy samarada namoyon bo'ladi. Diabetik retinopatiya bilan og'rigan bitta bemorni davolash (lazer) uchun yillik xarajatlar davlat ijtimoiy xarajatlaridan (pensiyalardan) deyarli 12 baravar kam ekanligini aytish kifoya.

Shunday qilib, retinopatiyani lazer usullari bilan davolashning arzon tizimini tashkil etish davlat tomonidan to'lanadigan nogironlik nafaqalarini to'lash uchun moddiy xarajatlarni, shuningdek, ishtirok eta olmaslik sababli bevosita yo'qotishlarni hisobga olgan holda iqtisodiy jihatdan foydali bo'ladi. diabetik retinopatiya tufayli ko'rish qobiliyati past va ko'r bo'lgan mehnatga layoqatli yoshdagi ko'p sonli odamlarni ishlab chiqarishda. Albatta, moddiy jihatdan inson azobidan ma'naviy yo'qotishlarni hisobga olish mumkin emas [1].

Ammo shuni ta'kidlash kerakki, qandli diabetning asoratlarining oldini olish uchun turli xil potentsial to'siqlar mavjud. Shunday qilib, JSST ma'lumotlariga ko'ra, diabetik retinopatiya tufayli ko'rlikning yuqori samarali oldini olish uchun asosiy to'siqlar quyidagilardir:

- diabetik bemorlarda diabetik retinopatiya va uning oqibatlari haqida ma'lumot yo'qligi;
- birlamchi tibbiy yordam shifokorlari orasida ko'rish uchun xavfli diabetik retinopatiyaning namoyon bo'lishi haqida tushunchaning yo'qligi, chunki u ko'pincha asemptomatikdir;
- lazer koagulyatsiyasi yordamida davolash samaradorligi to'g'risida tushuncha yo'qligi ;
- birlamchi tibbiy yordam shifokorlarida zarur oftalmoskopik malakalarning yo'qligi;
- diabetik retinopatiyani davolash uchun lazer qurilmalarining etishmasligi;
- diabetik retinopatiyani davolashga ixtisoslashgan tajribali oftalmologlarning etishmasligi.

Xulosa. Shunday qilib, adabiyotlarni tahlil qilish diabetik retinopatiyani erta tashxislash va to'g'ri muvozanatli davolashni tashkil etishni takomillashtirish masalalari bugungi kunda oftalmologiyaning dolzarb muammolaridan biri bo'lib qolmoqda.

REFERENCES / СНОСКИ / ИҚТИБОСЛАР:

1. Khakimova M.Sh., Allayarov A.T., Yusupov A.A. (2023). Optimization of the Ophthalmic Service in Diabetic Retinopathy. *Central Asian Journal of Medical and Natural Science*, 4 (1), 308-312.
2. Хакимова, М. Ш. Оптимизация офтальмологической службы при диабетической ретинопатии (обзор литературы) / М. Ш. Хакимова, А. Т. Аллаяров // Научное обозрение: актуальные вопросы теории и практики : сборник статей IV Международной научно-практической конференции, Пенза, 23 февраля 2023 года. – Пенза: Наука и Просвещение (ИП Гуляев Г.Ю.), 2023. – С. 229-233. – EDN DHMLUB
3. Harris et al. The United Kingdom Prospective Diabetes Study, 30: Diabetic retinopathy at diagnosis of non-insulin-dependent diabetes mellitus and associated risk factors. *Arch Ophthalmol*. 1998;116(3):297-303
4. Brooks et al. Treatment for diabetic retinopathy: current concepts and new insights. *Curr Opin Ophthalmol*. 2003;14(6):329-335
5. Khakimova, M. Sh. Optimization of methods of treatment of accommodation spasm in children / M. Sh. Khakimova, A. T. Allayarov // НАУЧНЫЕ ИССЛЕДОВАНИЯ 2022 : сборник статей IV Международной научно-практической конференции, Пенза, 23 декабря 2022 года. – Пенза: Наука и Просвещение (ИП Гуляев Г.Ю.), 2022. – Р. 309-311. – EDN TLVQLD.
6. Allayarov, A. The hypotensive effect and tolerability Taflopress in patients with open-angle glaucoma / A. Allayarov // Теория и практика современной науки. – 2020. – No. 4(58). – Р. 218-220. – EDN LTHKIL.
7. Patterson CC, et al. Trends and cyclical variation in the incidence of childhood type 1 diabetes in 26 European centres in the 25 year period 1989–2013: a multicentre prospective registration study. // *Diabetologia*. 2019;62:408–417.
8. Ибрагимова Н. Ш., Норматова Н. М. Частота встречаемости диабетической ретинопатии у больных СД 2 типа в Узбекистане // Сахарный диабет в XXI веке-время объединения усилий. – 2015. – С. 92-92.
9. Biyani R. S., Patre V. M. Algorithms for red lesion detection in Diabetic Retinopathy: A review // *Biomedicine & Pharmacotherapy*. 2018. Vol. 107, № 4. P. 681-688.
10. Vujosevic S, Aldington SJ, Silva P, Hernández C, Scanlon P, Peto T, Simó R. Screening for diabetic retinopathy: new perspectives and challenges. // *Lancet Diabetes Endocrinol*. 2020 Apr;8(4):337-347.
11. Ризаев Ж., Туйчибаева Д. ПОКАЗАТЕЛИ ЗАБОЛЕВАЕМОСТИ ГЛАУКОМОЙ СРЕДИ ВЗРОСЛОГО НАСЕЛЕНИЯ РЕСПУБЛИКИ УЗБЕКИСТАН // *Stomatologiya*. – 2021. – Т. 1. – №. 1 (82). – С. 102-107.
12. Туйчибаева, Д., Ризаев, Ж., & Янгиева, Н. (2022). Совершенствования системы диспансеризации пациентов с первичной глаукомой путём внедрения электронной программы. *Медицина и инновации*, 1(3), 11–19. <https://doi.org/10.34920/min.2021-3.001>

БИМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ

8 ЖИЛД, 4 СОН

ЖУРНАЛ БИМЕДИЦИНЫ И ПРАКТИКИ

ТОМ 8, НОМЕР 4

JOURNAL OF BIOMEDICINE AND PRACTICE

VOLUME 8, ISSUE 4

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