

Morphology of the Heart from the Internal Organs of Patients with Tuberculosis

Kuryazov Akbar Quranbaevich

Head of the "Stomatology" department of the Urganch branch of the Tashkent Medical Academy, associate professor

Palvanov Mavlonbek Ma'murovich

Chief physician of the Khorezm branch of the Republican scientific and practical medical center of phthisia and pulmonology

Radjapov Adilbek Anvarbekovich

Chief physician of the Bureau of Pathological Anatomy of Khorezm region

Karimov Rasulbek Khasanovich

Assistant professor of the "Pathomorphology" department of the Urganch branch of the Tashkent Medical Academy

Relevance of the topic: According to the World Health Organization, approximately 2.1 billion people on earth are infected with tuberculosis. In 10% of them, tuberculosis may occur during their lifetime, in which AIDS is of great importance. The world's mass media say that the fight against tuberculosis is of global importance. It should also be said that the disease knows no borders. Due to the development of communication between the population of countries, migration, and poverty, there is no way to stop the influx of tuberculosis patients among healthy people into developed countries.

Tuberculosis is an airborne infection that most often affects the lungs, but can also "attack" other organs: bones, skin, intestines, and the heart. The cause of the disease is Mycobacterium tuberculosis bacteria. They cause inflammation in certain areas, resulting in the formation of nodules and foci of necrosis (ie, dead tissue) in the tissues. Because of them, the organs cannot work normally, and the body reacts with general intoxication.

If immunity or drugs do not stop the disease in time, the person may die. According to the World Health Organization, tuberculosis is one of the ten leading causes of death worldwide.

The main source of infection is sick people. However, there is also a possibility of the disease being transmitted from animals.

The more sick people around, the higher the risk of infection. It is not out of the question to encounter such patients in public places in big cities.

The majority of patients have a closed form of the disease, that is, the bacteria gnaw the body, but are not released into the environment.

The open form of tuberculosis is very dangerous for others (and for the patients themselves), so it is necessary to treat it in a hospital. Prolonged contact with people suffering from the open form of tuberculosis is a big risk.

In the past, a person infected with tuberculosis died regardless of their financial status and age. Today, this disease is not as scary as it was in the past. Despite all the advances in medicine, it can be overlooked, it is difficult to lose, and it is impossible to forget.

R. Koch discovered tuberculin in 1890. He extracted tuberculin by boiling the patient's sputum several times. R. Koch, for the first time, gave information about the possibility of using tuberculin for

preventive purposes. The obtained tuberculin was first tested by R. Koch on himself and on animals. It should be mentioned that after tuberculin injected into his body, R. Koch's body temperature increased to 38-39°C, his condition worsened, but after 3-4 days his condition improved. It can be said that this discovery of R. Koch laid the foundation for tuberculosis diagnosis, which is widely used today. Later, after the discovery of anti-tuberculosis drugs, tuberculin has been used in some cases as a pathogenetic treatment.

Among the works devoted to the pathological anatomy of tuberculosis, it is possible to point out multinucleated giant cells, which were first identified by T. Langhans (1868). In 1912, Czech pathologist A. Gon's "Gon's foci" and "Abrikosov's foci" discovered by A.I. Abrikosov in 1904 can be pointed out. Diagnostics. The auscultation method proposed by Laennec in 1819 was of great importance in the diagnosis of tuberculosis. The painting method proposed by F. Tsil and F. Nielsen in 1882-1884 has not lost its importance.

Finally, Xnulari, discovered by V. Roentgen, became of historical importance in the diagnosis of tuberculosis. R. Koch was the first to observe the changes observed when re-injecting tuberculin into the human body (Koch's phenomenon). On this basis, he suggested injecting tuberculin under the skin for the purpose of diagnosing tuberculosis. In 1907, the Australian pediatrician and immunologist K. Pirke suggested injecting tuberculin into the skin and introduced the concept of "allergy". In 1910, S. Mantoux and F. Mendel proposed injecting tuberculin into the skin. Currently, this method is widely used with the concept of "Mantu test". Tuberculosis vaccine.

R.Koch's students A. Calmette and K. Guerin proposed a vaccine to inoculate people against tuberculosis. This vaccine is called 18 Bacillus Calmette-Guerin (VSG or BTsJ). The BTsJ vaccine was first used in 1921. Experiments and observations have shown that vaccination is safe for the human body, and it has many positive aspects, that is, severe, destructive types of tuberculosis are less common among vaccinated children, and death is reduced. In the former union, in 1928, it was proposed to vaccinate newborns in tuberculosis outbreaks. Since 1935, vaccination began to be carried out not only in villages, but also in cities. Since 1950, all newborns have been vaccinated. Vaccination is mainly oral, and since 1962, vaccination has been administered by intradermal injection.

The purpose of the work: as the purpose of the work, it was aimed to determine the morphological changes, morphometric and histochemical characteristics of the heart from the internal organs of patients who died with various forms of tuberculosis at the Khorezm Branch of the Republican Scientific and Practical Medical Center of Phthisia and Pulmonology.

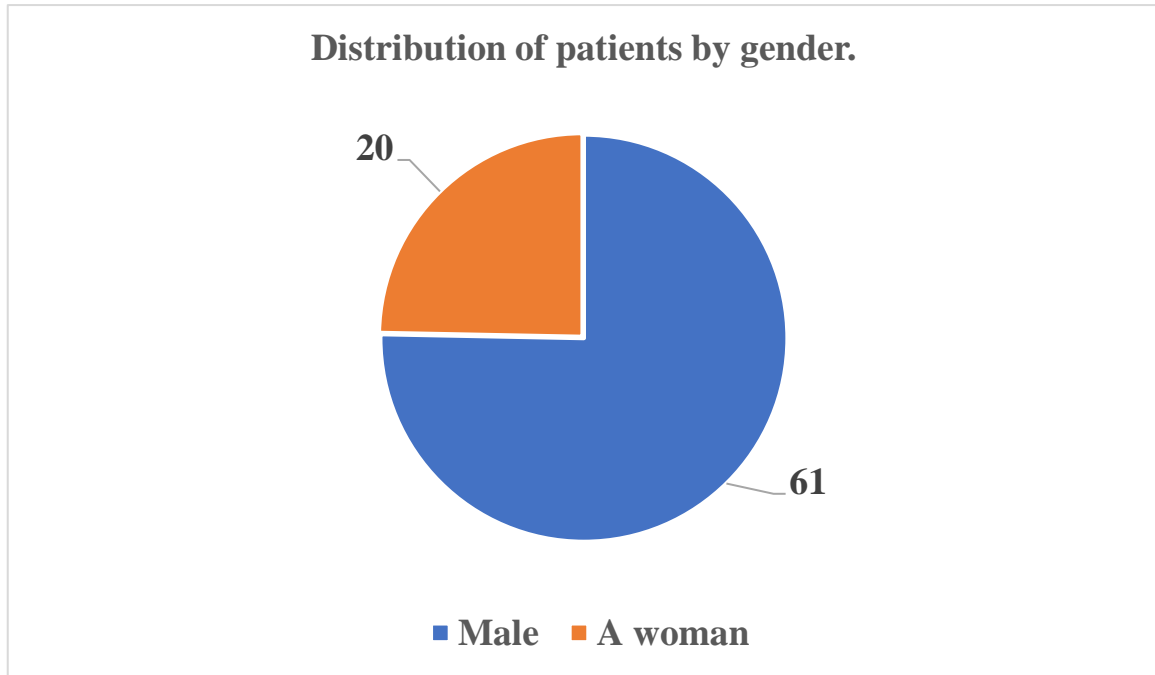
The obtained results: as a result of scientific research, the corpses of patients suffering from various forms of tuberculosis were examined at the Bureau of Pathological Anatomy of Khorezm Region, and after 5 years they were examined in an autopsy. histochemical and morphometric indicators, clinical-morphological aspects of heart tissue in different areas were studied.

As a material, in 5 years, the materials of the heart tissue obtained at the autopsy of a total of 81 cases as a result of the death of patients suffering from various forms of tuberculosis at the Republican Scientific and Practical Medical Center of Phthisia and Pulmonology. Among them, 61 female and 20 male materials were taken. Prepared fragments are studied morphologically.

The obtained morphological results were analyzed using hematoxylin eosin, Van Gison, ShIK and Shiff methods from histochemical methods, tissue structural structures and blood vessels through morphometric tests.

During the study, 81 patients were examined by gender, 61 were female and 20 were male.

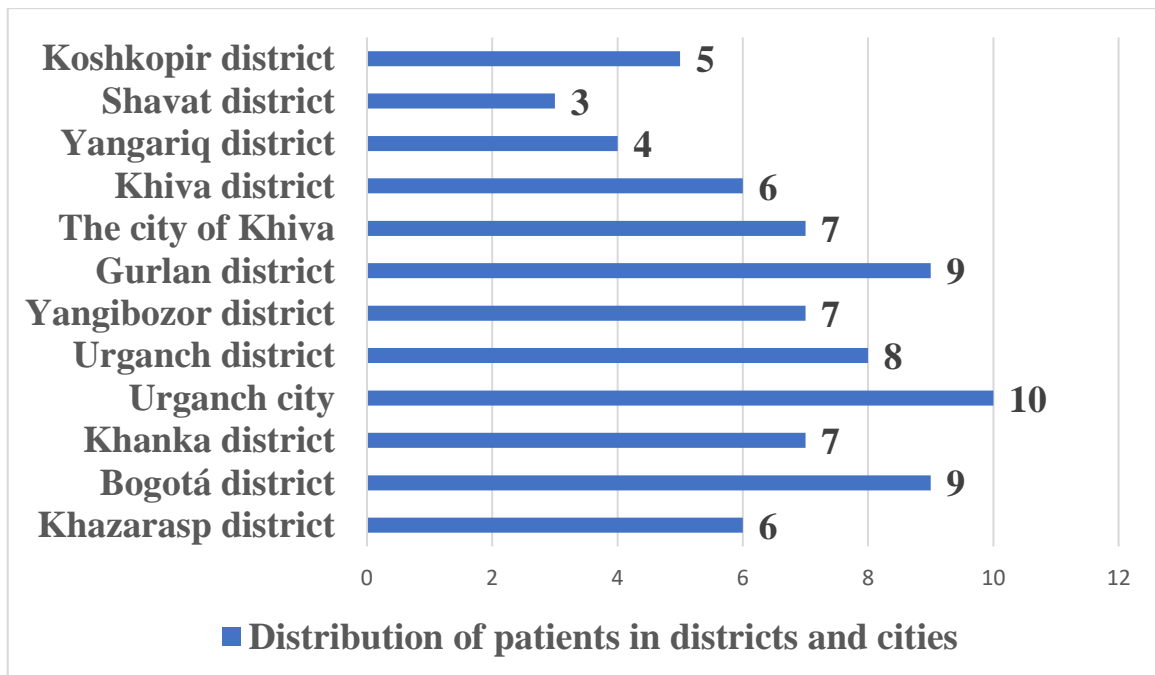
Table 1. Distribution of patients by gender.



When looking at the distribution of patients with various forms of tuberculosis by gender, 61 (75.3%) were men, 20 (24.6%) were women. This, in turn, shows that the incidence of the disease is higher in men than in women.

The residential addresses of patients who died of heart disease as a complication of various forms of tuberculosis were studied, and as a result, a high rate was found in the city of Urganch of the Khorezm region.

Table 2. Distribution of patients in district and city sections.



As can be seen in Table 2, the disease had a high rate in the city of Urganch in the Vashakhar section of the district, i.e. 10 (8.1%).

When the corpses of patients who died of various forms of tuberculosis at the Khorezm Branch of the Republican Physiatrics and Pulmonology Scientific and Practical Medical Center were examined at

the Khorezm Regional Bureau of Pathological Anatomy, it was found that pathological changes were mainly in the heart, i.e. hypertrophy of the wall of the left ventricle of the heart, tuberculosis bacilli in the heart tissue. was found to exist.

Conclusions: in conclusion, it can be said that when the corpses of patients who died from various forms of tuberculosis in Khorezm region were examined by autopsy, it was found that there were morphological changes in their internal organs, that is, in the heart, as a result of which most patients died as a result of acute heart failure as a complication of the disease.

In Urganch city, which was divided into district and city sections during the study, it was 10 (8.1%), in terms of gender, 61 (75.3%) men and 20 (24.6%) women.

References:

1. Artikova D. O., Ruzmetova D. T. XORAZM VILOYATIDA HOMILADOR AYOLLARDA SIYDIK YO 'LLARI INFEKSIYASINI KECHISHI VA UNGA OLIB KELUVCHI OMILLAR //INTERNATIONAL JOURNAL OF SCIENCE AND EDUCATION. – 2022. – Т. 1. – №. 1. – С. 3-4.
2. Bekchanov A. J. et al. Causes of death in infants born to women affected by Covid-19 disease //American Journal of Pediatric Medicine and Health Sciences (2993-2149). – 2023. – Т. 1. – №. 5. – С. 34-38.
3. Khasanovich K. R., Tulibaevna R. D., Ziyaevich T. H. DISTRIBUTION OF PERINATAL DISEASE IN NEWBORN CHILDREN IN KHORZAM PROVINCE BY CITY AND DISTRICT AND CAUSES OF DEATH //World Bulletin of Public Health. – 2021. – Т. 5. – С. 82-85.
4. Каримов Р., Авезов М. Оценка перинатальных случаев смерти, уровня и состояния заболеваний уха, горла и носа //Журнал вестник врача. – 2021. – Т. 1. – №. 1. – С. 60-63.
5. Karimov R. X., Tursunov X. Z., Ruzmetova D. T. Modern approaches to perinatal disease in diabetes in pregnant women //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – Т. 11. – №. 12. – С. 173-179.
6. Karimov R. X., & Musaev U. M. (2023). ANALYSIS OF RESEARCH AND COMMISSION FORENSIC EXPERTISES CONDUCTED ON LIVING PERSONS. *American Journal of Pediatric Medicine and Health Sciences (2993-2149)*, 1(5), 61–63. Retrieved from <http://grnjournal.us/index.php/AJPMHS/article/view/423>
7. Каримов Р. Х., Мусаев У. М., Рузметова Д. Т. ЯТРОГЕНИЯ НА ПРИМЕРАХ ИЗ ПРАКТИКИ (По данным лет обзор) //International conference on multidisciplinary science. – 2023. – Т. 1. – №. 1. – С. 10-12.
8. Каримов, Р. Х., Мусаев, У. М., Рузметова, Д. Т., & Султанов, Б. Б. (2023, October). ЯТРОГЕНИЯ В НЕОНАТОЛОГИИ (ПО ДАННЫМ ЛЕТ. ОБЗОР). In *International conference on multidisciplinary science* (Vol. 1, No. 3, pp. 76-78).
9. Каримов Р. Х. и др. ВРАЧЕБНЫЕ ОШИБКИ В ПРАКТИКЕ АКУШЕРОВ-ГИНЕКОЛОГОВ //Past and Future of Medicine: International Scientific and Practical Conference. – 2023. – Т. 2. – С. 114-117.
10. Kh K. R. et al. PATHOMORPHOLOGICAL CHARACTERISTICS OF RESPIRATORY AIRCRAFT CHANGES IN INFANTS BORN FROM MOTHERS WITH COVID-19 //JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH. – 2023. – Т. 2. – №. 8. – С. 21-28.
11. Матякубова С., Рузметова Д. Особенности клинического течения при преждевременном излитии околоплодных вод и принципы ведения беременных //Журнал проблемы биологии и медицины. – 2019. – №. 1 (107). – С. 175-177.

12. Матякубова С., Рузметова Д. Фоновые факторы, влияющие на течение беременности и её исход при преждевременных разрывах плодных оболочек //Журнал проблемы биологии и медицины. – 2018. – №. 4 (104). – С. 203-205.
13. Ruzmetova D. T., Matyakubova S. A. CLINICAL PRACTICAL ASSESSMENT APPLICATION OF POLYMERASE CHAIN REACTION AS A TEST FOR ASSESSING MICROBIOSINOSIS IN PREGNANT WOMEN //Central Asian Journal of Pediatrics. – 2021. – Т. 2021. – №. 1. – С. 37-49.
14. Ruzmetova D. T., Matyakubova S. A. OCCURRENCE OF UTERINE MYOMA IN WOMEN OF REPRODUCTIVE AGE IN KHOREZM REGION //Open Access Repository. – 2023. – Т. 4. – №. 3. – С. 489-492.
15. SA M., DT R. RISK FACTORS OF DEVELOPMENT OF PRETERM PREMATURE RUPTURE OF FETAL MEMBRANES IN PREGNANT WOMEN //European Science Review. – 2018. – Т. 1.
16. Sabirjanovich Y. B. et al. ETHERIOLOGICAL FACTORS OF DEATH IN PNEUMONIAS FOUND IN NEWBORNS //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2023. – Т. 3. – №. 8. – С. 1-4.
17. Юлдашев, Б. С., Каримов, Р. Х., & Бекчанов, А. Ж. (2023, July). COVID- ўтказган оналардан туғилган чақалоқларда пневмония касаллигининг асоратлари. In *Past and Future of Medicine: International Scientific and Practical Conference* (Vol. 2, pp. 10-12).
18. Юлдашев, Б. С., Каримов, Р. Х., & Джуманиязова, Н. С. (2024). COVID- ЎТКАЗГАН ЧАҚАЛОҚЛАРДА ЛИМФА ТУГУНЛАРИНИНГ МОРФОЛОГИК ХУСУСИЯТЛАРИ (ХОРАЗМ ВИЛОЯТИ ПАТОЛОГИК АНАТОМИЯ ЭКСПЕРТИЗА БЮРОСИ, ХОРАЗМ ВИЛОЯТ ПЕРИНАТАЛ МАРКАЗИ). *Молодые ученые*, 2(3), 15-16.
19. Tulibayevna R. D. Characteristics of Urogenital Tract Microbiota During Pregnancy //Research Journal of Trauma and Disability Studies. – 2022. – Т. 1. – №. 10. – С. 249-254.
20. Юлдашев, Б. С., Каримов, Р. Х., & Джуманиязова, Н. С. (2024). ПАНДЕМИЯ ДАВРИДА ПНЕВМОНИЯ КАСАЛЛИГИ БИЛАН КАСАЛЛАНГАН ЧАҚАЛОҚЛАРДА ЛИМФА ТУГУНЛАРИНИНГ МОРФОЛОГИК ХУСУСИЯТЛАРИ ЎЛИМ САБАБЛАРИ. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(1), 197-201.
21. Юлдашев Б. С., Каримов Р. Х., Бекчанов А. Ж. COVID-19 ЎТКАЗГАН ЧАҚАЛОҚЛАРДА ПНЕВМОНИЯНИНГ МОРФОЛОГИК ХУСУСИЯТИ //International Scientific and Practical Conference of Students and Young Scientists" Sustainable Development: Problems, Analysis, Prospects"(Poland). – 2023. – С. 26-28.
22. Yuldashev B. S. et al. Causes of Pneumonia In Infants Born of Mothers Infected With Covid-19 //International Journal of Integrative and Modern Medicine. – 2023. – Т. 1. – №. 1. – С. 9-16.
23. Yuldashev, B. S., Kuruyazov, A. Q., Khodzhimuratov, O., & Karimov, R. X. (2023). OCCURRENCE OF CLINICAL PALATE AND LIP DEFECT WITH FACIAL ANOMALIES IN KHORAZM REGION. *International Bulletin of Medical Sciences and Clinical Research*, 3(11), 80-85.
24. Kuryazov Akbar Quranbaevich, Karimov Rasulbek Khasanovich, Ruzmetova Dilfuza Tulibaevna, & Bobojanov Yoldoshboy Bakhtiyor o'g'li. (2024). PREVENTION OF PERIODONTITIS DISEASE IN MIDDLE-AGED WOMEN. INTERNATIONAL CONFERENCE ON MEDICINE, SCIENCE, AND EDUCATION, 1(1), 271–274. <https://doi.org/10.5281/zenodo.10599587>
25. Yuldashev, B. S., Kuruyazov, A. Q., Khodzhimuratov, O., & Karimov, R. X. (2023). A CASE OF LIP DEFECT WITH FACIAL ANOMALIES IN KHORAZM REGION. *American Journal of Pediatric Medicine and Health Sciences* (2993-2149), 1(9), 547-552.

26. Sabirjanevich, Y. B., Khasanovich, K. R., Tulibaevna, R. D., & Safarboevich, R. S. (2024). RATE OF GLAUCOMA IN PENSION AGE CITIZENS (2023 in the example of the city of Urganch). *International Journal of Alternative and Contemporary Therapy*, 2(1), 4-7.
27. Sabirjanevich, Y. B., Khasanovich, K. R., & Safarboevich, R. S. (2024). RELATIONSHIP OF OTHER TYPES OF DISEASES WITH EYE DISEASES. *МЕДИЦИНА, ПЕДАГОГИКА И ТЕХНОЛОГИЯ: ТЕОРИЯ И ПРАКТИКА*, 2(1), 29-35.
28. Юлдашев, Б. С., Исмаилов, О., Каримов, Р. Х., & Исмаилов, О. (2023). Хомила ва янги туғилган чақалоклар мурдасининг суд тиббий экспертизаси (Текшируви). *Ўқув қўлланма: Т.: “О ‘ZKITOBSAVDONASHRIYOTI” NMIU*, 96.
29. Сатликов, Р. К., Юлдашев, Б. С., Закиров, Ш. Ю., Каримов, Р. Х., & ИЗУЧЕНИЯ, М. (2022). ИНФЕКЦИЯХ МОЧЕВЫХ ПУТЕЙ. *Монография:-Т.: “О ‘ZKITOBSAVDONASHRIYOTI” NMIU*, 84.
30. Турсунов, Х. З., Каримов, Р. Х., Сапаев, Д. Ш., & Сапаев, М. Ф. (2022). Буйрак ва буйрак усти беши касаллиги, уни даволаш усуллари ҳамда асоратлари (адабиётлар шархи).
31. Qurbanbaevich, K. A., Khasanovich, K. R., & Tulibaevna, R. D. (2024, February). CARIES DISEASE IN YOUNG CHILDREN. In *International conference on multidisciplinary science* (Vol. 2, No. 2, pp. 35-37).
32. Юлдашев, Б. С., Ходжаниязов, А. А., Каримов, Р. Х., & Жуманиязова, Н. С. (2024). ЧАСТОТА МЕТАСТАЗИРУЮЩЕГО РАКА МОЛОЧНОЙ ЖЕЛЕЗЫ В ЗАВИСИМОСТИ ОТ ВОЗРАСТА. *Yangi O'zbekistonda Tabiiy va Ijtimoiy-gumanitar fanlar respublika ilmiy amaliy konferensiyasi*, 2(2), 141-143.
33. Sabirjanevich, Y. B., Khasanovich, K. R., Tulibaevna, R. D., Safarboevich, R. S., & Azamatovich, K. A. (2024). DYNAMICS OF ANTHROPOMETRIC INDICATORS IN THE DEVELOPMENT OF ONE-YEAR-OLD CHILDREN. *American Journal of Pediatric Medicine and Health Sciences* (2993-2149), 2(2), 560-563.
34. Sobirjanevich, Y. B., Alievich, M. A., & Xasanovich, K. R. (2024). Этиология Гепатоцеллюлярной Карциномы: Особое Внимание Жировой Болезни Печени. *Research Journal of Trauma and Disability Studies*, 3(3), 26-36.
35. Рузматов, П. Ю., Матмуротов, К. Ж., Бабаджанов, А. Р., Каримов, Р. Х., & Рузметов, Б. А. (2024). ОСОБЕННОСТИ ВЫПОЛНЕНИЯ РЕКОНСТРУКТИВНЫХ ВМЕШАТЕЛЬСТВ У БОЛЬНЫХ СИНДРОМОМ ДИАБЕТИЧЕСКОЙ СТОПЫ. *Journal of Universal Science Research*, 2(3), 96-112.
36. Sabirzhanevich, Y. B., Khasanovich, K. R., Tulibaevna, R. D., Zhumabaevich, K. U., Farkhadovich, A. A., Azamatovich, K. A., ... & Alisherovich, K. D. (2024). PREGNANCY PLANNING FOR WOMEN WITH TYPE 2 DIABETES IN NUKUS CITY (2022-2023). *Multidisciplinary Journal of Science and Technology*, 4(3), 233-241.
37. Abdullayev, O. (2024). XORAZM VILOYATIDA GEPATIT S KASALLIGINING TARQALISHI. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(3), 189-196.
38. Sabirzhanevich, Y. B., Jumabaevich, K. U., Khasanovich, K. R., Tulibievna, R. D., Azamatovich, K. A., & Dilshadovich, J. D. (2024). PATHOLOGICAL OCCURRENCE AND COMPLICATIONS OF THE DIABETIC TOPIC SYNDROME IN PATIENTS WITH TYPE 2 DIABETES DISEASE WHO APPLY TO THE OUTPATIENT. *Research Journal of Trauma and Disability Studies*, 3(3), 219-227.
39. Matyakubova, S. A., & Ruzmetova, D. T. (2018). Risk factors of development of preterm premature rupture of fetal membranes in pregnant women. *European science review*, (9-10-2), 96-97.

40. Sabirzhanevich, Y. B., Jumabaevich, K. U., Khasanovich, K. R., Tulibievna, R. D., & Raimberganovna, M. F. (2024, March). STATISTICAL ANALYSIS OF PATIENTS WITH DIABETES 2 DISEASE (in the example of the city of Nukus in 2023). In *International conference on multidisciplinary science* (Vol. 2, No. 3, pp. 162-165).
41. Юлдашев, Б. С., Каримов, Р. Х., Мадаминов, Ф. А., & Мадаминов, А. С. (2024). СНИЖЕНИЕ ЧАСТОТЫ РАЗВИТИЯ НОЗОКОМИАЛЬНОЙ ИНФЕКЦИИ МОЧЕВОГО ТРАКТА ПРИ СОЧЕТАНИИ АНТИБИОТИКОВ С ИММУНОМОДУЛЯТОРАМИ. *Theoretical aspects in the formation of pedagogical sciences*, 3(12), 107-109.
42. Karimov Rasulbek Khasanovich, Rakhimbaev Makhmud Davlatbaevich, & Radjapov Adilbek Anvarbekovich. (2024). MORPHOLOGY AND HISTOCHEMICAL CHARACTERISTICS OF BRAIN TISSUE IN ACUTE INTOXICATION PSYCHOSIS. *INTERNATIONAL CONFERENCE ON MEDICINE, SCIENCE, AND EDUCATION*, 1(7), 49–54.
Retrieved from <https://universalconference.us/universalconference/index.php/icmse/article/view/2282>
43. Karimov Rasulbek Khasanovich, Musaeva Iroda Mansurbekovna, & Radjapov Adilbek Anvarbekovich. (2024). MORPHOLOGICAL CHARACTERISTICS OF TWELVE FINGER ULCER DISEASE. *INTERNATIONAL CONFERENCE OF NATURAL AND SOCIAL-HUMANITARIAN SCIENCES*, 1(6), 26–31. Retrieved from <https://universalconference.us/universalconference/index.php/ICNSHS/article/view/2297>
44. Karimov , R., Musaeva I., & Radjapov , A. (2024). MORPHOLOGICAL CHARACTERISTICS AND FREQUENCY OF DUDE ULCER DISEASE IN RETIREMENT PATIENTS WITH METABOLIC SYNDROME. *FAN, TA'LIM, TEXNOLOGIYA VA ISHLAB CHIQRISH INTEGRATSIYASI ASOSIDA RIVOJLANISH ISTIQBOLLARI*, 1(2), 14–20. Retrieved from <https://universalpublishings.com/index.php/fan/article/view/6894>
45. Karimov Rasulbek Khasanovich, Rakhimbaev Makhmud Davlatbaevich, & Radjapov Adilbek Anvarbekovich. (2024). MORPHOLOGY OF BRAIN TISSUE IN INTOXICATION PSYCHOSIS. *INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE*, 1(8), 34–40. Retrieved from <https://universalconference.us/universalconference/index.php/icms/article/view/2301>
46. Kuryazov , A., Palvanov , M., Radjapov , A., & Karimov , R. (2024). MORPHOLOGY OF THE HEART IN PATIENTS WITH TUBERCULOSIS. *INTERNATIONAL SCIENTIFIC INNOVATION RESEARCH CONFERENCE*, 1(6), 3–8. Retrieved from <https://universalconference.us/universalconference/index.php/isirc/article/view/2324>
47. Quryazov , A., Palvanov , M., Radjapov , A., & Karimov , R. (2024). MORPHOLOGY OF THE HEART IN DIFFERENT FORMS OF TUBERCULOSIS. *International Conference on Multidisciplinary Science*, 2(8), 26–30. Retrieved from <https://mjstjournal.com/index.php/icms/article/view/1818>