



¹Sadiev Erali Samievich, ²Sanoyev Bakhtiyor Abdurasulovich

¹BukhSMI, ²Bukhara branch of RSTEIAM. Uzbekistan.

✓ *Resume*

Sudden cardiac death is a condition that turns into unconscious death, manifests itself within 1 hour with acute symptoms, and is accompanied by cardiac pathology. The fact that diseases of the circulatory system are associated with dysfunction of the cardiovascular system in the aggregate is one of the pathologies proven by clinical and pathological studies. Recently, the pathology of coronary heart disease has attracted the attention of our medical staff with frequent cases of "sudden cardiac death" and has caused many controversial situations. For this, a histopathological examination of the tissue of the cardiac myocardium is carried out using materials obtained during the autopsy of the corpses of patients who died from various diseases. The aim of the study is to supplement data on cardiac pathologies.

Key words: autopsy, histology, myocardium, disease, examination.

**СУД ТИББИЙ АУТОПСИЯ АМАЛИЁТИДА ЮРАК ПАТОЛОГИЯЛАРИ: ТЎСАТДАН
КАРДИАЛ ЎЛИМ**

¹Садиев Ерали Самиевич., ²Саноев Бахтиёр Абдурашулович

¹Бухоро ДавТИ, ²РСТЭИАМ Бухоро филиали. Ўзбекистон.

✓ *Резюме*

Тўсатдан кардиал ўлим – бу, нозўраки ўлим турига кириб, ўткир симптомлари билан 1 соат ичида намоён бўладиган ва юрак патологиялари билан қўшилиб келадиган ҳолат бўлиб ҳисобланади. Қон айланиш тизими касалликларидан юрак ва қон томирлар фаолиятининг бузилиши билан боғлиқ бўлиши, бирга қўшилиб келиши клиник ва патологоанатомик текширувларда ўз исботини топган патологиялардан бири ҳисобланади. Сўнгги вақтларга келиб, юрак ишемик касалликларига қирувчи патология “тўсатдан кардиал ўлим” тез-тез учраб туриши билан тиббиёт ходимларимизни эътиборини тортиб келмоқда ва кўпгина дискуссияларни келтириб чиқармоқда. Шу мақсадда турли касалликлардан ўлган беморларда ўтказилган аутопсия жараёнидан олинган материалларда келган юрак миокард тўқималари патогистологик ўрганиб чиқилди. Ишдан мақсад юрак патологиялари бўйича маълумотларни тўлдириш ҳисобланди.

Калит сўзлар: аутопсия, гистология, миокард, касаллик, экспертиза.

**ПАТОЛОГИИ СЕРДЦА В СУДЕБНОЙ МЕДИЦИНСКОЙ ПРАКТИКЕ:
ВНЕЗАПНАЯ СЕРДЕЧНАЯ СМЕРТЬ**

Саъдиев Эрали Самиевич, Саноев Бахтиёр Абдурашулович

БухГосМИ, Бухарский филиал РСТЭИАМ. Узбекистан.

✓ *Резюме*

Внезапная сердечная смерть - это состояние, которое переходит в бессознательную смерть и проявляется в течение 1 часа острыми симптомами и сопровождается сердечной патологией. То, что заболевания системы кровообращения связаны с нарушением функции сердечно-сосудистой системы в совокупности, является одной из патологий, доказанных клиническими и патологическими исследованиями. В последнее время патология ишемической болезни сердца привлекает внимание нашего медперсонала частыми случаями «внезапной сердечной смерти» и вызвала множество противоречивых ситуаций. Для этого проводят патогистологическое исследование ткани сердечного миокарда по материалам, полученным в процессе вскрытия трупов больных, умерших от различных заболеваний. Цель исследования - дополнить данные о сердечных патологиях.

Ключевые слова: вскрытие, гистология, миокард, заболевание, обследование.

Relevance

Sudden cardiac death (SCD) remains one of the leading causes of death in patients with heart failure and accounts for almost 50% of sudden deaths in the patient population. The frequency and causes of sudden death vary depending on the type of heart disease and the severity of the heart failure. Heart failure with preserved systolic function covers a large heterogeneous group of patients with congenital and acquired heart disease, hypertrophic and restrictive cardiomyopathies, and also includes the concept of endomyocardial fibrosis. Low left ventricular fraction, left ventricular dilatation, and high serum natriuretic peptide levels are the main prognosis of sudden cardiac death. Factors that predispose to general death or death due to insufficient cardiac contractile function are not associated with an increased risk of sudden death. Changing tactics in the treatment of CHF also makes it difficult to develop a simple prediction algorithm. Beta-blockers, for example, have a greater effect on myocardial remodeling than exercise tolerance, so the role of these independent predictors may vary in patients depending on the availability of this group of drugs in the therapy regimen. There are many medications available to reduce the risk of sudden cardiac death in patients with heart failure. The main achievement of the last 20 years is the inhibition of chronic hyperactivity of neurohormones by drugs, thereby slowing the development of changes in target organs and preventing the development of heart failure, stopping electrical changes and thus preventing the development of arrhythmias. Currently, implanted cardioverter defibrillators are the most effective protection against sudden arrhythmic death in patients with heart failure, leading to a decrease in overall mortality in this group of patients. The functional class of heart failure, as well as the etiology of the disease, are key points in the decision to implant a cardioverter-defibrillator. Numerous randomized trials have shown that implantation of a cardioverter defibrillator is in all respects superior to conventional antiarrhythmic therapy in reducing not only sudden cardiac death but also mortality from all other causes.

The technology of the methods is being actively developed and improved, which increases the effectiveness of treatment and reduces the number of complications, as well as the risk of sudden cardiac death. Undoubtedly, the field of research dedicated to the prevention of sudden cardiac death remains the most relevant in modern cardiology. Clinical research is underway to optimize methods and answer the remaining questions. To date, "sudden cardiac death" is one of the medical social problems and one of the most difficult tasks for clinicians, pathologists, forensic experts. and, in some cases, death from complications of cardiac pathology at a time when no macroscopic sign was found in the heart, and its evidence leads to major discussion situations. Pathologies of the heart and complications of the underlying disease, knowing the heart disease as an additional disease, pathologists and forensic experts can make a post-autopsy diagnosis of heart pathology as a primary, secondary, background disease, receive practical advice on the correct completion of the death certificate.

Goals and objectives

The aim of the study is to identify the most common cardiac pathologies in the Bukhara region and, based on pathohistological findings, to develop which pathologies are more common, their consequences and preventive measures.) and macroscopic and microscopic analysis in the pathohistology department of the Bukhara regional forensic medical examination bureau. A total of 46 dead patients underwent heart tissue examination.

Materials and methods

Based on macroscopic and microscopic studies of cardiac tissue during the study, a total of 46 cardiac tissue pathohistologically examined. For general morphology, 2 pieces from each heart, ie 1.5x1.5 cm from the upper and middle part, were cut and solidified in 10% neutralized formalin. After washing for 2-4 hours in running water, it was dehydrated in increased concentrations of alcohols and xylene, then paraffin was poured and the blocks were prepared. Incisions of 5–8 µm were made from paraffin blocks and stained with hematoxylin and eosin. The examination revealed the following pathologies:

Acute heart failure characteristic of alcoholic cardiopathy was observed in 19 cases, cardiomyopathy in 11 cases, and coronary atherosclerosis in 16 cases.

Research results

The results of pathohistological examinations of the heart showed that in most cases, the pathology of acute heart failure (19 cases) characteristic of alcoholic cardiopathy was observed in the heart.

Acute heart failure characteristic of alcoholic cardiopathy (19 cases) - in some cases, ethanol may not be detected in the blood of a dead patient, but based on this result, it is also incorrect to say that the patient does not have alcoholic cardiopathy. In such cases, the catamnesis of the deceased patient plays an important role.

In second place was the pathology of coronary atherosclerosis (16 cases). Coronary atherosclerosis (16 cases) is a chronic disease of the arteries of the elastic and musculoskeletal type, the accumulation of cholesterol and lipoproteins in the vascular wall as a result of disruption of the metabolism of fats and proteins in the body. In third place was the pathology of cardiomyopathy (11 cases).

Cardiomyopathy (11 cases) is a primary myocardial lesion of unknown etiology that is a disorder of heart function unrelated to the coronary arteries, valve apparatus, pericardium, systemic disease, or pulmonary hypertension.

When making a post-autopsy diagnosis, pathologists and forensic experts have the opportunity to cite renal pathology as the main, additional, background disease, to receive practical advice on the correct completion of the death certificate.

The underlying disease is a nosological unit that causes death by itself or through complications.

Background disease is a disease that is important in the emergence and development of the underlying disease, although it does not depend on the etiology of the underlying disease.

Concomitant (additional) disease is a nosological unit that is not etiologically and pathogenetically related to the underlying disease and its complications, does not affect its course and does not lead to death.

Conclusion

- These data open up the real prospect of a significant reduction in deaths due to renal pathologies and provide undoubtedly useful information not only for pathologists, but also for all specialists involved in the diagnosis, prevention and treatment of kidney disease.
- This information can help to improve the performance of medical institutions at any level.

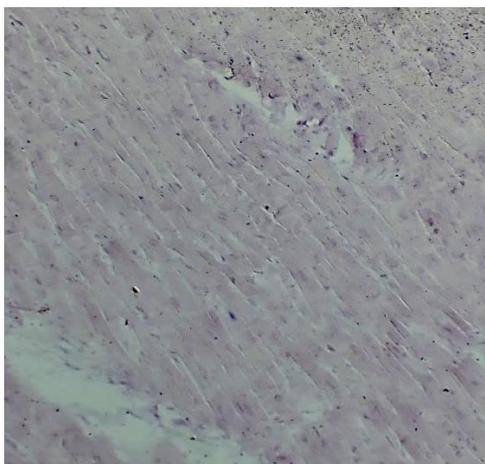


Figure 1. Loss of nuclei in some cardiomyocytes, weak neutrophil infiltration, onset of cardiomyocyte fragmentation.

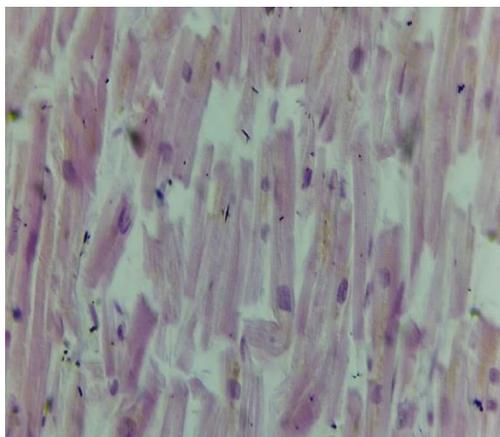


Figure 2. Fragmentation of a series of cardiomyocytes. Lipid drops.

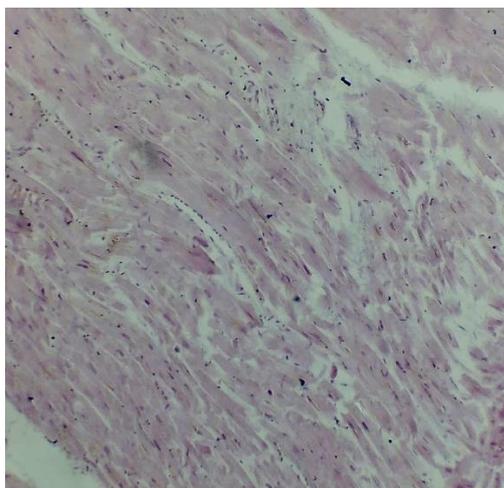


Figure 3. Weak neutrophil infiltration between cardiomyocytes, signs of fragmentation along some cardiomyocytes.

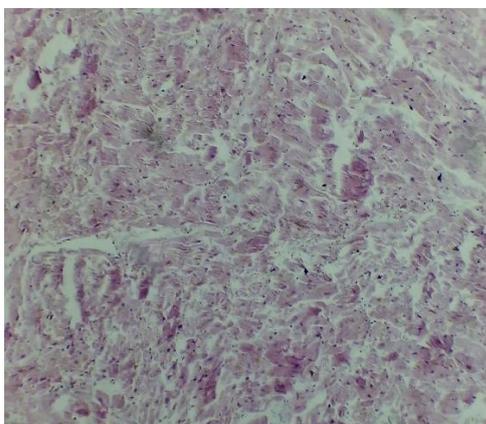


Figure 4. Swelling in the interval of cardiomyocytes, the presence of fragmentation, with weak neutrophil infiltration.

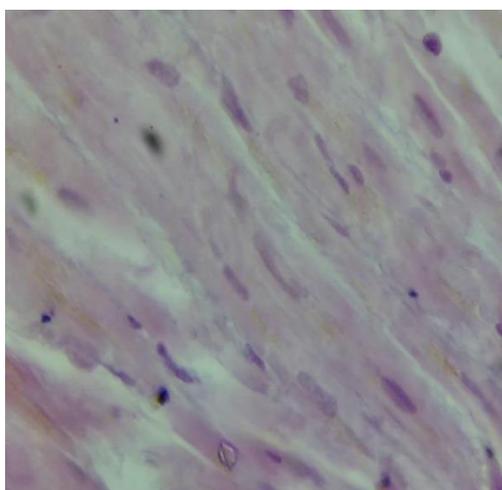


Figure 5. Symptoms of lipofuscinosis in cardiomyocytes, hypertrophy of cardiomyocytes.

LIST OF REFERENCES:

1. Sadiev Erali Samiyevich, Namozov FarruxJumayevich Endoscopic interventions and ozone therapy in the complex treatment of patients with mechanical jaundice and cholangitis with choledocholithiasis. Research Jet Journal of Analysis and Inventions.2021. 9(2),22-27
2. Sadiev Erali Samiyevich Path morphology of the cardiac tract in accidental mortality of infants. Web of scientist: international scientific research journal. Volume 2, Issue 10, Oct., 2021.64-70
3. Sadiev Erali Samievich, Jurayeva Gulbaxor Bakhshilloeyvna broncho-pulmonary complications after heart surgery with congenital defects. International journal for innovative engineering and management research. Vol 10 Issue01, Jan2021.320-323

4. Sanoev B. A., Israilov R. I. and Djuraeva G. B. Quantitative indicators and methods for modeling structural units in placental insufficiency. *World Journal of Pharmaceutical Research*. 9 (12), 37-47
5. Sanoev B.A. Morphological and Morphometric Characteristics of The Placenta In Normal Pregnancy. *Scientific Community: Interdisciplinary Research*, 492-498
6. Sanoev Baxtiyor Abdurasulovich. «Development of a modern education system and creative ideas for it, republican scientific-practical online conference on "suggestions and solutions»»6,94-96
7. Саноев Б.А., Ниёзова Г.Ш., Хикматова Н.И. Макро – и микроскопические проявления лейомиоматки. *Новый день в медицине*, 526-528
8. Sanoyev Bakhtiyor Abdurasulovich, Olimova Aziza Zokirovna. Pathology of Precancerous Conditions of the Ovaries in Women of Reproductive Age. Volume: 01 Issue: 06 | 2021.
9. Тураев, У. Р., Тураева, Г. Р., & Олимова, А. З. (2015). Особенности микрогемоциркуляции крови в почках при экспериментальной острой кишечной непроходимости. *Наука молодых – Eruditio Juvenium*, (3).
10. Тураев, У. Р., Хожиев, Д. Я., Тураева, Г. Р., Олимова, А. З., & Суюнова, М. Х. Экспериментальная острая кишечная непроходимость: изменения в микроциркуляции почек. Памяти Петра Петровича Хоменка доцента кафедры анатомии человека с курсом оперативной хирургии и топографической анатомии Гом ГМУ, 99.
11. Zokirovna O.A., (2021, July). Comparative characteristics of the morphological parameters of the liver at different periods of traumatic brain injury. In *Euro-Asia Conferences* (pp. 139-142).
12. Абдуллаева М.А., Содыков И.Ш., Шодыева Ш.Ш., Олимова А.З. (2013). Факторы риска острого инфаркта миокарда у больных молодого и среднего возраста. *Биология ватиббӣётмуаммолари*, (4.1), 3.
13. Olimova Aziza Zokirovna. Частота Встречаемости Миомы Матки У Женщин В Репродуктивном Возрасте. //journal of advanced research and stability (JARS). Volume: 01 Issue: 06 | 2021. 551-556 p
14. Olimova Aziza Zokirovna, Sanoyev Bakhtiyor Abdurasulovich. Ovarian diseases in age of reproductive women: dermoid cyst. Volume: 01 Issue: 06 | 2021. 154-161 p
15. Olimova Aziza Zokirovna. Репродуктив Ёшдаги эркакларда бепуштлик сабаблари: Бухоро тумани эпидемиологияси. *SCIENTIFIC PROGRESS*. 2021 й 499-502p
16. Olimova Aziza Zokirovna Macro- and microscopic structure of the liver of three monthly white rats. *Academic research in educational sciences /2021 й*. 309-312 p

Entered 20.02.2022