

**CORONARY HEART DISEASE AND OSTEOPOROSIS IN POSTMENOPAUSAL WOMEN**

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Abstract

Osteoporosis is a disease affecting connective tissues. The spine is most often affected, as well as the bones of the arms and legs. Bones in osteoporosis lose their strength, which leads to the risk of frequent pathological fractures. The development of osteoporosis is due to the amount of accumulated bone tissue and the degree of subsequent decrease in bone mass. However, these reasons are determined by a number of other factors. This disease is so urgent that the World Health Organization has named osteoporosis the fourth cause of morbidity and mortality from chronic non-communicable diseases.

The purpose of the study. To study the main clinical features of the manifestation of a combination of coronary heart disease and OP in postmenopausal women.

Materials and methods. 110 menopausal women with concomitant diseases (CHD and OP) and 20 practically healthy women were examined as controls. The degree of manifestation of menopausal syndrome was calculated by the Kupperman menopausal index according to the modification of E.V. Uvarova.

Research results and their discussion. At the first stage of the study, all women were divided into groups depending on the menopause period.

Conclusions: 1. When identifying the main clinical manifestations of coronary heart disease and osteoporosis in women, an epidanamnesis is a very important point, which makes it possible to determine the severity of the menopausal syndrome.

2. In menopausal women, the main clinical manifestations of menopausal syndrome, coronary heart disease and osteoporosis directly correlate with the period of menopause development, severity and degree of its severity.

Keywords: coronary heart disease, osteoporosis, menopausal syndrome.

Introduction

Osteoporosis (OP) and coronary heart disease (CHD) In postmenopausal women, they are common diseases that initially manifest themselves as asymptomatic or low-symptomatic course and development, and later as complications with a high risk of premature death.

The main cause of the development of coronary heart disease and OP in the postmenopausal period is a deficiency of estrogen production in the woman's body during this period, although there is no complete understanding of the pathogenetic mechanisms of the development of these diseases today, therefore the identification of risk factors (FR) of these diseases is the task of preventive medicine. The combination of these diseases in menopausal women is of particular importance. Moreover, these changes are detected in women at different ages.



Serious changes from the cardiovascular system (CVS) and bone tissue occur in the body of menopausal women.

Coronary heart disease is manifested by the development of angina pectoris, myocardial infarction, and sudden death.

During this period, changes occur on the part of blood parameters: the development of atherogenic dysproteinemia, on the part of systemic and intracardiac hemodynamics.

The development of OP leads to a decrease in bone mass, a change in the normal architectonics of bone and premature osteoporotic fractures.

In women with osteoporotic fractures, there is an increase in the frequency of aortic calcification, which correlates with a decrease in bone mineral density (BMD).

A relationship was found between a decrease in BMD and an increase in the calcium content in the coronary arteries.

In addition to estrogen deficiency and the main signs of coronary heart disease and CHD, there are a number of cardiovascular predictors that exacerbate the development of both OP and CHD: nutritional characteristics, body weight (MT), sedentary lifestyle, smoking, alcohol abuse. The competition of these factors for the development of a particular disease becomes more obvious in postmenopausal women. Therefore, timely detection of FR and exposure to them can contribute to the prevention of both OP and cardiovascular diseases (CVD), or slowing down the further progression of these diseases by the same pharmacological and non-pharmacological methods.

The purpose of the study. To study the main clinical features of the manifestation of a combination of ACS and OP in postmenopausal women.

MATERIALS AND METHODS OF RESEARCH

110 menopausal women with concomitant diseases (CHD and OP) and 20 practically healthy women were examined as controls.

The degree of manifestation of menopausal syndrome was calculated by the Kupperman menopausal index according to the modification of E.V. Uvarova.

THE RESULTS AND THEIR DISCUSSION

At the first stage of the study, all women were divided into groups depending on the menopause period. During the study, all the symptoms that occurred in women of each group were studied.

We found out which group of disorders these or other manifestations of the syndrome belong to. Group I included neurovegetative disorders: high blood pressure, headache, palpitations, chills, chills, dry skin, fever, sleep disorders, sympatho-adrenal crisis. Group II includes metabolic and endocrinological disorders: obesity, hypotrophy of the genitals, disorders of the thyroid gland, adrenal glands, joint and muscle pain. Group III includes psychoemotional disorders: memory impairment, decreased ability to work, irritability, tearfulness, mood deterioration. Each symptom was assessed by severity from 0 to 3 points, after which the severity of the clinical symptom was noted. Thus, it was found that 48 women (43.3%) had mild menopausal syndrome, 42 women (38.18%) suffered from moderate menopausal manifestations (pathological menopause) and 20 women ((18.18%) had severe menopausal syndrome. All the symptoms of CS were combined in various combinations, determining the clinical picture and the variety of severity of the disease. According to the severity of the moderate and severe degree, the symptoms manifested themselves as pathological and were the most common for CS. Depending on the nature of the course of the



menopausal period, patients with coronary heart disease and OP were divided into two groups: the main group – 50 women – with a pathological course of menopause and the control group (20 patients) – with the physiological course of menopause. No manifestations of CS have been registered in all practically healthy women. Cardio-pain syndrome in women suffering from coronary heart disease in combination with OP was found in 41%. In the studied groups, the pain in the heart area was of an angina pectoris nature and was confirmed by instrumental methods (ECG, VEM and exercise tolerance for 6 minutes of walking).

The diagnosis of coronary heart disease was established according to generally accepted criteria based on anamnesis, menopausal chart and the results of additional studies (ECG, exercise tolerance, heart rate variability, lipidogram).

In patients of the main group, such manifestations of coronary heart disease as angina pectoris occurred voltage I-III FC, cardiosclerosis. Patients with acute coronary syndrome and severe heart failure, cardiac arrhythmia were not included in the study. The severity of chronic heart failure was determined according to the classification of N.D. Strazhesco and V.H. Vasilenko (1935) and according to the classification of the New York Heart Association with the definition of four functional classes (FC), using a 6-minute walk.

The studies did not include women with severe concomitant pathology and disorders of the functions of vital organs, in which the development of OP is characterized: with oncological diseases, diseases of the endocrine system, rheumatological diseases, diseases of the digestive system, kidneys, blood system, chronic obstructive pulmonary diseases.

CONCLUSIONS

1. When identifying the main clinical manifestations of coronary heart disease and osteoporosis in women, an epidanamnesis is a very important point, which makes it possible to determine the severity of the menopausal syndrome.
2. In menopausal women, the main clinical manifestations of menopausal syndrome, coronary heart disease and osteoporosis directly correlate with the period of menopause development, severity and degree of its severity.

References

1. Khaydarov, S. N., Khusainova, M. A., Uzokov, J. B., & Makhmudova, K. D. (2023). Heart failure and the risk of hypoglycemia. *Science and Education*, 4(5), 222-231.
2. Khusainova, M. A., Khaydarov, S. N., Makhmudova, K. D., & Ortikova, S. X. (2023). Features of prevention of chronic kidney diseases and chronic heart failure. *Science and Education*, 4(5), 242-250.
3. Khusainova, M. A., Khaydarov, S. N., Makhmudova, K. D., & Nayimov, A. S. (2023). Prevalence of bronchiolitis in patients with Rheumatoid arthritis. *Science and Education*, 4(5), 232-241.
4. Yarmatov, S., Khusainova, M., & Djabbarova, N. (2023). STUDY OF QUALITY OF LIFE INDICATORS IN PATIENTS WITH CORONARY HEART DISEASE USING THE SF-36 QUESTIONNAIRE. *БЮЛЛЕТЕНЬ СТУДЕНТОВ НОВОГО УЗБЕКИСТАНА*, 1(7), 58-64.
5. Alisherovna, K. M., & Xudoyberdiyevich, G. X. Features of Heart Damage in Patients with Viral Cirrhosis of the Liver. *International Journal of Innovations in Engineering Research and Technology*, 8(04), 53-57.



6. Khabibovna, Y. S., & Alisherovna, K. M. (2024). STRESS TESTING IN PATIENTS WITH CORONARY HEART DISEASE. *Journal of new century innovations*, 45(3), 28-33.
7. Alisherovna, K. M., Nizamitdinovich, K. S., Rustamovich, T. D., & Haqnazarovich, K. S. (2022). Mental Status and Quality of Life in Patients With Sinus Node Weakness Syndrome and Chronic Coronary Heart Failure of Ischemic Etiology. *Texas Journal of Medical Science*, 15, 78-82.
8. Djamshedovna, K. D., & Alisherovna, K. M. (2024). CHANGES IN SOME SYSTEM INDICATORS IN PREGNANT WOMEN WITH GESTOSIS. *Spectrum Journal of Innovation, Reforms and Development*, 25, 111-115.
9. Alisherovna, K. M., Akramovna, I. K., & Yorkinovna, E. N. (2024). CLINICAL AND MORPHOLOGICAL CRITERIA OF COLITIS IN PATIENTS WITH CHRONIC ISCHEMIC DISEASE OF THE DIGESTIVE SYSTEM. *Ta'lim innovatsiyasi va integratsiyasi*, 18(6), 6-13.
10. Khabibovna, Y. S., Alisherovna, K. M., Nizamitdinovich, K. S., Tashtemirovna, E. M. M., Abdukadirovna, A. S., & Jasurovna, J. S. (2023). DEPRESSION, ANXIETY AND QUALITY OF LIFE IN PATIENTS WITH ATRIAL FIBRILLATION. *Journal of new century innovations*, 39(1), 185-189.
11. Alisherovna, K. M., Akramovna, I. K., & Kairatovna, R. A. (2024). THE EFFECTIVENESS OF TREATMENT OF PATIENTS WITH OSTEOARTHRITIS WITH CARDIOVASCULAR DISORDERS IN METABOLIC SYNDROME. *Ta'lim innovatsiyasi va integratsiyasi*, 18(5), 223-230.
12. Alisherovna, K. M., Akramovna, I. K., & Baxtiyorovna, O. K. (2024). THE COURSE OF CHRONIC ISCHEMIC PANCREATITIS IN PATIENTS WITH CORONARY HEART DISEASE. *Ta'lim innovatsiyasi va integratsiyasi*, 18(5), 231-239.
13. Alisherovna, K. M., & Djamshedovna, K. D. (2024). AFTER COVID-19 QUALITY OF LIFE. *Spectrum Journal of Innovation, Reforms and Development*, 25, 103-110.
14. Alisherovna, K. M., Djamshedovna, K. D., Totlibayevich, Y. S., & Boymamatovna, E. F. (2022). The Effectiveness of the Original Drug Trimetazidine MV in Patients with Stable Ischemic Heart Disease and Persistent Angina Attacks Against the Background of the Use of Trimetazidine Generics. *Miasto Przyszłości*, 30, 235-238.
15. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., Nizamitdinovich, K. S., & Abdukadirovna, A. S. (2023). ANTITHROMBOTIC THERAPY IN CARDIOLOGICAL PATIENTS. *Journal of new century innovations*, 39(1), 169-171.
16. Alisherovna, K. M., Erkinovna, K. Z., Davranovna, M. K., & Pulotovna, Z. D. (2022). Positive Effect of Sorbitol in Patients with Chronic Renal Insufficiency. *Miasto Przyszłości*, 30, 214-217.
17. Alisherovna, K. M., Akmalovna, K. N., & Mamasoliyevna, D. N. (2022). Kidney dysfunction in chronic heart failure. *Texas Journal of Medical Science*, 13, 104-109.
18. Nizamitdinovich, K. S., Khabibovna, Y. S., Alisherovna, K. M., & Tashtemirovna, E. M. M. (2023). Spinal Injury for Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 426-432.
19. Erkinovna, K. Z., Alisherovna, K. M., Bakhtiyorovich, U. J., & Djamshedovna, K. D. (2023). METABOLIC SYNDROME IN RHEUMATOID ARTHRITIS. *Journal of new century innovations*, 38(2), 203-211.



20. Khabibovna, Y. S., Alisherovna, K. M., Erkinovna, K. Z., & Djamshedovna, K. D. (2023). Gender Characteristics of the Course of Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 438-442.
21. Baxtiyorovich, U. J., Alisherovna, K. M., & Mamasoliyevna, D. N. (2023). Features of cognitive impairment in patients with chronic kidney disease at predialysis stages. *World Bulletin of Public Health*, 22, 49-54.
22. Alisherovna, K. M., Toshtemirovna, E. M. M., Djamshedovna, K. D., & Maxammadiyevich, K. S. (2022). Endothelial Dysfunction in Patients with Chronic Heart Failure. *Miasto Przyszłości*, 30, 218-220.
23. Alisherovna, K. M., Ismatullayevich, M. A., & Nuriddinovna, E. N. (2024). FEATURES OF HEART FAILURE IN PATIENTS WITH CORONARY HEART DISEASE AND THYROTOXICOSIS. *Ta'lim innovatsiyasi va integratsiyasi*, 19(4), 52-61.
24. Tashtemirovna, E. M. M., Khabibovna, Y. S., Alisherovna, K. M., & Erkinovna, K. Z. (2023). Angiopathy in Rheumatoid Arthritis. *Miasto Przyszłości*, 40, 418-425.
25. Alisherovna, K. M., Habibulloyevna, I. M., & Voxidovna, R. F. (2024). STRUCTURAL AND FUNCTIONAL FEATURES OF THE LEFT VENTRICLE IN PATIENTS WITH HEART FAILURE IN ISCHEMIC HEART DISEASE AND THYROTOXICOSIS. *Ta'lim innovatsiyasi va integratsiyasi*, 19(4), 71-81.
26. Alisherovna, K. M., Erkinovna, S. D., Duskobilovich, B. S., & Samandarovna, T. H. (2024). ARTERIAL HYPERTENSION IN THYROTOXICOSIS AND REMODELING OF THE LEFT VENTRICLE OF THE HEART. *Ta'lim innovatsiyasi va integratsiyasi*, 19(4), 114-121.
27. Alisherovna, K. M., Mansurovna, M. D., Erkinovna, N. D., Farxodovna, X. R., Toxirovna, M. M., Tolibovna, R. D., & Yorkinovna, E. N. (2024). ARTERIAL HYPERTENSION AND THYROID STATUS IN PATIENTS OF DIFFERENT AGES. *Ta'lim innovatsiyasi va integratsiyasi*, 19(4), 122-129.
28. Alisherovna, K. M., Erkinovna, S. D., Yazdonkulovna, X. M., & Zafarovna, C. M. M. (2024). ATRIAL FIBRILLATION IN THYROTOXICOSIS—DETERMINANTS OF DEVELOPMENT AND CONSERVATION. *Ta'lim innovatsiyasi va integratsiyasi*, 19(4), 103-113.
29. Alisherovna, K. M., & Yusupovich, N. F. (2021). FEATURES OF THE CIRCADIAN RHYTHM BLOOD PRESSURE IN PATIENTS HEART FAILURE AND IMPAIRED RENAL FUNCTION. *EDITOR COORDINATOR*, 423.
30. Mamasoliyevna, D. N., Akmalovna, K. N., & Alisherovna, K. M. (2022). Quality of Life Depending on Gender. *The Peerian Journal*, 11, 71-77.
31. Alisherovna, K. M., Erkinovna, K. Z., Jamshedovna, K. D., & Toshtemirovna, E. M. M. (2022). Study of quality of life indicators in patients with coronary heart disease using the sf-36 questionnaire.
32. Mamasoliyevna, D. N., Alisherovna, K. M., & Totlibayevich, Y. S. (2023). Diabetes Mellitus and Non-Alcoholic Fatty Liver Disease: the Facets of Conjugacy. *Miasto Przyszłości*, 35, 166-173.
33. Akramovna, I. K., & Alisherovna, K. M. (2024). CAUSES OF ARRHYTHMIA DURING PREGNANCY. *Journal of new century innovations*, 45(3), 34-41.



34. Erkinovna, K. Z., Alisherovna, K. M., Davranovna, M. K., & Nizamitdinovich, K. S. (2022). Correction of Cytokine Imbalance in the Treatment of Stable Angina Pectoris. *The Peerian Journal*, 11, 64-70.
35. Erkinovna, K. Z., Khabibovna, Y. S., & Abrorovna, V. N. (2023). MONITORING OF QUALITY OF LIFE IN PATIENTS WITH ARTERIAL HYPERTENSION OF OLDER AGE GROUPS. *Academia Science Repository*, 4(5), 276-285.
36. Erkinovna, K. Z., Davranovna, M. K., Toshtemirovna, E. M. M., & Xudoyberdiyevich, G. X. (2022). Correction of complications in chronic heart failure depending on the functional state of the kidneys.
37. Alisherovna, K. M., Erkinovna, K. Z., Jamshedovna, K. D., & Toshtemirovna, E. M. M. (2022). Study of quality of life indicators in patients with coronary heart disease using the sf-36 questionnaire.
38. Nizamitdinovich, K. S., Alisherovna, K. M., Erkinovna, K. Z., & Davranovna, M. K. (2022). Heart Lesions in Rheumatological Diseases. *Texas Journal of Medical Science*, 13, 91-94.
39. Davranovna, M. K., Alisherovna, K. M., Erkinovna, K. Z., & Nizamitdinovich, K. S. (2022). Assessment of the quality of life of patients with coronary heart disease. *The Peerian Journal*, 11, 44-50.