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PSYCHOSOMATIC SYMPTOMS IN PATIENTS WITH LIMITED SCLERODERMA

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ABSTRACT: The purpose of the study. To study the features of psychosomatic pathology in patients with limited scleroderma.

Materials and methods. A questionnaire on the severity of psychopathological symptoms was used SCL-90-R to determine the assessment of patterns of psychological signs in 95 patients suffering from limited scleroderma. The control group consisted of 30 respondents without skin pathology.

Results. In patients with limited scleroderma, higher indicators were found for the general index of symptom severity (GSI), the index of present symptomatic distress (PTSD), the total number of affirmative responses of the questionnaire (PST). In the group of patients with limited scleroderma, higher levels of distress were determined on the scales of somatization, obsessive-compulsive disorders, depression, and anxiety.

Conclusion. Patients with limited scleroderma have a wider range of psychosomatic symptoms. The predominant characteristics of psychosomatic changes are somatization, obsessive-compulsive disorders, depression, and anxiety.

Keywords: Questionnaire on the severity of psychopathological symptoms SCL-90-R, level distress, somatization, depression, anxiety.

INTRODUCTION

In the practice of a dermatovenerologist , the proportion of diseases with a chronic recurrent course with insufficiently studied etiopathogenesis is especially high. Despite the fact that the vast majority of dermatological diseases do not pose an immediate threat to life, the chronic, torpid and incurable nature of many dermatoses is a kind of stress stimulus. Skin diseases have a negative impact on the quality of life of patients, maladapt them socially, and lead to the formation of varying degrees of psychopathological symptoms. Patients with skin diseases are concerned about cosmetic defects, fear of disease progression and damage to internal organs, they worry about the possibility of inheritance of dermatosis or its contagiousness. All this leads to a deterioration in the patient's quality of life, his somatization. The most common affective disorders accompanying the course of skin diseases are anxiety, phobic (more often — sociophobic), depressive experiences. They are based on somatic manifestations that have an actual and constantly frustrating character (skin deformation, itching, burning, feeling contractions, peeling, changes in skin color and structure). Depression in dermatological disorders is also often associated with ideas of physical disability, inferiority, fear of lifelong deformity or deformity, concerns about the prognosis and outcome of the disease, associated with a sense of hopelessness, hopelessness, inferiority, pessimistic assessment of the future. The experiences and behavior of patients with a dermatological profile are characterized by increased shyness associated with fears

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negative attitude of others, worries about the loss of attractiveness, avoidant or dependent behavior, the desire to hide the existing flaws of the skin. There is a lot of data on the deterioration of the quality of life of patients with chronic dermatoses, such as psoriasis, acne, allergodermatoses, vitiligo. A number of authors note that limited scleroderma, which is accompanied by inflammatory and atrophic changes in the skin and is characterized by a chronic course, it can also seriously affect the quality of life of patients, causing cosmetic and sometimes functional problems. At the same time, in the literature sources available to us, we did not find data on the features of psychosomatic disorders in patients with limited scleroderma, the level of its severity, and the prevailing symptoms. The aim of the study was to study the features of psychosomatic pathology in patients with limited scleroderma.

MATERIALS AND METHODS OF RESEARCH

For the survey of respondents, a validated questionnaire on the severity of psychopathological symptoms SCL-90-R (symptom checklist 90-revised) was used, designed to assess patterns of psychological signs in psychiatric patients and healthy individuals. The main group consisted of 95 patients (91 women and 4 men) suffering from limited scleroderma, the control group consisted of 30 people (28 women and 2 men) without skin diseases. The average age of patients in the main group was 55.89 ± 12.93 years, in the control group — 56.26 ± 8.88 years (p=0.88).In patients of both The groups had concomitant diseases such as hypertension, atherosclerotic cardiosclerosis, nodular goiter, autoimmune thyroiditis, cholelithiasis, type 2 diabetes mellitus. The scale of the SCL-90-R questionnaire contains 90 items, each of which is evaluated on a five-point scale (from 0 to 4), and allows you to assess the symptoms of both psychiatric patients and healthy individuals. Responses are calculated and interpreted according to 9 main scales of symptomatic disorders: somatization (SOM), obsessive-compulsive disorders (OS), interpersonal sensitivity (INT), depression (DEP), anxiety (ANX), hostility (HOS), phobic anxiety (PHOB), paranoid tendencies (PAR), psychoticism

(PSY). The severity of the symptom complex assessed by each of the scales was supplemented by the calculation of generalized indices of the second order: generalized index of symptom severity (GSI), index of present symptomatic distress (PTSD), total number of affirmative responses (PST). The criteria for inclusion in the study group were the presence of limited scleroderma in patients, the patient's voluntary consent to participate in the conducted research. The criteria for exclusion from the group were childhood age, pregnancy, the presence of concomitant pathology in the form of oncological diseases, systemic connective tissue diseases, the presence of signs of dementia and clearly psychotic conditions, the patient's refusal to participate in the study. The statistical analysis was carried out using the StatSoft "Statistica" application software package, 10.0 (USA). The assessment of the normality of the distribution of features was carried out using the Shapiro—Wilk criterion. Under normal The data were presented in the form of the arithmetic mean and the standard deviation of the arithmetic mean (M ± SD).

THE RESULTS AND THEIR DISCUSSION

To identify the level of distress in patients with limited scleroderma, we selected the SCL-90-R questionnaire from the currently available methods for assessing psychopathology, since it allows us to determine not only the general level of symptoms, but also to identify

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its nature. The general index of symptom severity (GSI) in patients suffering from limited scleroderma, which is an indicator of the current state and depth of the disorder and characterizes the intensity of the distress experienced, was at the level of 0.54 (0,41; 0,79). Its indicators in patients of the control group were 0.44 (0.14; 0.61) p = 0.001. The index of present symptomatic distress (PSDI), which is a measure of the intensity of psychopathological disorder, was higher in the group of patients with limited scleroderma compared with the control group and amounted, respectively 1.32 (1.17: 1.53) and 1.17. It is also noted that this index can be used as an indicator of the type of response to interaction, i.e. it can show whether the subject enhances or downplays his feelings when responding. The total number of affirmative responses (PST) in the patients of the study group was within 37 (27.50; 50.00), in the control group — 31 (13.75; 36.75), p < 0.001. This reflects the great breadth of symptoms in patients suffering from limited scleroderma. Thus, for all three generalized indices (the general index of symptom severity (GSI), the index of present symptomatic distress (PSDI), the total number of affirmative responses (PST)) in patients with scleroderma, higher indicators were determined, statistically significantly different from those of the control group. This may indicate that these patients are experiencing more severe distress with a wider range of symptoms. To clarify the nature of the manifestations of distress, we evaluated the severity of psychosomatic symptoms on separate scales provided by this technique. To assess the level of experience of psychopathological disorders (somatization, obsessive-compulsive disorders, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid tendencies, psychoticism) we used the following scale of interpretation of the results: the result of 0.1–0.4 was taken as a very low level of violations; the low level was 0.5–1.4; the result of 1.5–2.4 was estimated as an average level; 2.5–3.4 — an elevated level; 3.5–4.0 — a high level. The majority of respondents in both the main and control groups had indicators on all scales corresponding to very low and low levels of distress and were at the level of 0-1.4. At the same time the highest indicators were determined on the "somatization" scale in both the main and control groups and amounted to 1.17 (0.75; 1.54) and 0.5 (0.33;1.00), respectively, p < 0.001. According to the somatization scale, the average level of symptom experience was determined in 26 patients (27.37%) with scleroderma and in 3 (10.00%) from the control group. From our point of view, higher indicators on the "somatization" scale in patients with limited scleroderma can be explained by the fact that they are worried about the possible involvement of internal organs in the pathological process, the possibility of their developing systemic sclerosis and serious complications. When working with these patients , it is noteworthy that many people study information about the disease that is available to a wide range. They try to detect signs of consistency in themselves, check with the doctor the likelihood of their developing systemic sclerosis. Such patients may be fixed on symptoms from the cardiovascular, respiratory, digestive and other systems. The components of the disorder may include headaches, general muscle discomfort. All these symptoms and the signs can indicate both the presence of psychosomatic disorders and be a manifestation of real somatic diseases. The indicator "obsessive-compulsive disorders"(thoughts, impulses and actions perceived as constant and irresistible forces, but alien) in the prevailing majority of respondents, both the main and control groups were at a very low and low level of experiencing symptoms. At the same time, the patients of the main group have an average value on this scale exceeded the value in the control group. The presence of obsessive-compulsive disorders in patients with a dermatological profile has been described by otherauthors. This, as a rule, was associated with subjective sensations, which are not uncommon in skin diseases and lead to the appearance of neurotic combs. It should be noted

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that in patients with limited scleroderma, we did not notice obsessive-compulsive disorders accompanied by self-injury of the skin. According to the "depression" scale, the respondents of both groups had indicators of very low and low levels of distress. Only at 5 patients with limited scleroderma and 1 respondent in the control group had an average level of distress on this scale. At the same time, a statistically higher level of suffering was revealed in the patients of the study group compared with the control group, $p = 0.016$. According to literature data, depression is one of the most common syndromes of affective pathology and is observed in a third of patients at a skin and venereological dispensary. A number of authors note that trophic and pigmented skin changes occur due to the accumulation of free radicals and can, among other things, be a reflection of depression. Also, patients with limited scleroderma showed a higher level of anxiety compared to the control group, while the values of this indicator were at a very low and low level in all respondents. The signs of anxiety include nervousness, tension, tremors, panic attacks, and a feeling of horror. An increase in the level of anxiety and depression in patients with skin pathology, including with limited scleroderma, can be explained the formation of secondary experiences associated with the fact that skin diseases are noticeable to others, prone to relapses, which affects the emotional state of patients. Patients also worry about the possibility of disease progression, complications, and involvement of internal organs. In our opinion and according to a number of authors, the formation of secondary experiences contributes to the chronization of the disease. According to the scales "interpersonal sensitivity", "hostility", "phobic anxiety", "paranoid tendencies", "psychoticism", the level of distress in the overwhelming the majority of respondents in both groups were at a very low or low level and did not differ statistically.

CONCLUSIONS

The highest indicator of the level of psychosomatic symptoms in patients suffering from limited scleroderma was determined on the "somatization" scale and statistically significantly differed from that in the control group. The level of distress on the scales of obsessive-compulsive disorders, depression, and anxiety in patients with limited scleroderma exceeded those in the control group. Patients suffering from limited scleroderma had higher scores on all three generalized indices (general index of symptom severity (GSI), index of present symptomatic distress (PTSD), the total number of affirmative responses (PST)), which may indicate more pronounced distress and a wider range of psychosomatic symptoms in this group of patients.

LITERATURE

1. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., & Baxtiyorovich, U. J. (2023). THE EFFECTIVENESS OF THYROSTATICS IN THE TREATMENT OF. *Journal of new century innovations*, *29*(1), 79-88.
2. 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.
3. Khabibovna, Y. S., Alisherovna, K. M., Nizamitdinovich, K. S., & Totlibayevich, Y. S. (2023). Features of heart failure in patients with thyrotoxicosis. *Journal of new century innovations*, *29*(1), 89-97.

ISSN: 2692-5206
AMERICAN ACADEMIC PUBLISHER
INTERNATIONAL JOURNAL OF MEDICAL SCIENCES

4. Khabibovna, Y. S., Alisherovna, K. M., Totlibayevich, Y. S., & Davranovna, M. K. (2023). PAINLESS CARDIAC ISCHEMIA AND RHEUMATOID ARTHRIT. *Journal of new century innovations*, *29*(1), 98-105.
5. Alisherovna, K. M., Khabibovna, Y. S., Nizamitdinovich, K. S., & Bakhtiyorovich, U. J. (2023). CYSTATIN and KIDNEY FUNCTION. *Journal of new century innovations*, *38*(2), 220-225.
6. 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.
7. Khabibovna, Y. S., Alisherovna, K. M., Tashtemirovna, E. M. M., Totlibayevich, Y. S., Nizamitdinovich, K. S., & Baxtiyorovich, U. J. (2023). DIAGNOSTIC VALUE OF CYSTATIN C IN PATIENTS WITH HYPERTENSION AND OBESITY. *World Bulletin of Public Health*, *22*, 55-59.
8. Nizamitdinovich, K. S., Khabibovna, Y. S., Alisherovna, K. M., & Tashtemirovna, E. M. M. (2023). Spinal Injury for Rheumatoid Arthritis. *Miasto Przyszłości*, *40*, 426-432.
9. 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.
10. 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.
11. Khabibovna, Y. S., & Alisherovna, K. M. (2024). STRESS TESTING IN PATIENTS WITH CORONARY HEART DISEASE. *Journal of new century innovations*, *45*(3), 28-33.
12. Khabibovna, Y. S., & Xudoyberdiyevich, G. X. (2024). THE POSSIBILITIES OF COENZYME Q10 AS PART OF THE COMPLEX THERAPY OF PATIENTS WITH CHRONIC HEART FAILURE. *Spectrum Journal of Innovation, Reforms and Development*, *25*, 116-123.
13. Yarmukhamedova, S. K., Alisherovna, K. M., Tashtemirovna, E. M. M., & Nizamitdinovich, K. S. (2023). The Effectiveness of Trimetazidine in Arrhythmias. *Miasto Przyszłości*, *33*, 215-221.
14. Yarmukhamedova, S. K., & Gafforov, X. X. (2024). Indicators of daily blood pressure monitoring in patients with osteoarthritis with cardiovascular disorders in case of metabolic syndrome. *Science and Education*, *5*(4), 50-55.
15. Ярмухамедова, С. Х., & Амирова, Ш. А. (2023). Определение показателей диастолической дисфункции правого желудочка у больных с АГ. *Science and Education*, *4*(5), 595-600.
16. Sheraliyev, S., Uralov, R., & Uzoqova, D. (2023). "DIABETIK TO 'PIQ" SINDROMI. *GOLDEN BRAIN*, *1*(8), 54-56.
17. Sherbek o'g'li, U. R. JIGAR TRANSPLANTATSIYASI O'TKAZILGAN BEMORLARDA GEPATOSELLULYAR KARSINOMA RIVOJLANISHIDA KALSINEVRIN INGBITORLARINI (CYA-SIKLOSPORIN A VA TAC-TAKROLIMUS) ORNI.
18. Gazkhanovna, M. A., Khaidarovna, M. F., & Ugli, U. R. S. (2020). Clinical And Electro-Neuromyographic Changes In The Pathology Of The Muscular System In Patients With Hemophilia. *The American Journal of Medical Sciences and Pharmaceutical Research*, *2*(11), 53-56.

ISSN: 2692-5206
AMERICAN ACADEMIC PUBLISHER
INTERNATIONAL JOURNAL OF MEDICAL SCIENCES

19. Uralov, R. S., Omonov, S. A., & Zaripov, J. S. SOME INDICATORS OF THE HEMOSTASIS SYSTEM IN THROMBOCYTOPENIA OF DRUG AND NON-DRUG GENESIS IN THE CLINIC INTERNAL DISEASES. *УЧЕНЫЙ XXI ВЕКА*, 28.
20. Ibragimov, K. I., Olimdjanova, F. J. Q., Ziyadullaev, S. K., Rizaev, J. A., & Kamalov, Z. S. (2022). The risk of cardiovascular disease in rheumatoid arthritis patients treated with disease-modifying antirheumatic drugs: a clinic based case control study.
21. Islamova, K. A., Olimdjanova, F. J. Q., Ziyadullaev, S. K., & Kamalov, Z. S. (2022). RISK FACTORS FOR EARLY DEVELOPMENT OF OSTEOARTHROSIS.
22. Исламова, К. А., Абдушукурова, К. Р., Хамраева, Н. А., & Эшмуратов, С. Э. (2023). ЭФФЕКТИВНОСТЬ ВНУТРИСУСТАВНОГО ВВЕДЕНИЯ ГИАЛУРОМ ХОНДРО ПРИ РАННЕМ ОСТЕОАРТРОЗЕ. *IQRO*, *2*(2), 186-193.
23. Eshmuratov, S., Khamrayev, X. X., & Xasanov, F. CLINICAL CHARACTERISTICS OF ADALIMUMAB IN TREATMENT OF PATIENTS WITH SEVERE RHEUMATOID ARTHRITIS.
24. Akramovna, I. K., & Rustamovna, A. K. (2024). Peculiarities of Rheumatoid Arthritis with Hereditary Predisposition. *American Journal of Bioscience and Clinical Integrity*, *1*(1), 11-17.
25. 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.
26. Alisherovna, K. M., Akramovna, I. K., Bakhtiyorovich, U. J., Nizamitdinovich, K. S., Jasurovna, J. S., Kairatovna, R. A., & Abdukholikovna, E. S. (2023). Exacerbations of chronic obstructive pulmonary disease and coronary atherosclerosis. *Journal of new century innovations*, *39*(1), 176-178.
27. 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.
28. 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.
29. Akramovna, I. K., & Alisherovna, K. M. (2024). CAUSES OF ARRHYTHMIA DURING PREGNANCY. *Journal of new century innovations*, *45*(3), 34-41.
30. Akramovna, I. K., Rafikovna, U. K., & Ergashevna, E. N. (2024). Current Perceptions of Chronic Pancreatitis. *International Journal of Alternative and Contemporary Therapy*, *2*(1), 12-16.
31. Abdurasulovna, H. N., Akramovna, I. K., Rustamovna, A. K., & Egamkulovich, X. B. (2023). Inflammatory Activity And Renal Pathology In Lupus Nephritis. *Spectrum Journal of Innovation, Reforms and Development*, *13*, 89-94.
32. Akramovna, I. K., & Rustamovna, A. K. (2023, November). ULTRATOVUSH TEKHIRUV USULINING ERTA RIVOZHLANGAN OSTEOARTHROSIS KASALLIGIDAGI DIAGNOSTIC AHAMIYATI. In *International Conference on Medicine and Life Sciences* (pp. 72-75).
33. Исламова, К. А., & Тоиров, Э. С. (2019). Значение факторов риска на качество жизни больных остеоартрозом. In *Актуальные вопросы современной медицинской науки и здравоохранения: сборник статей IV Международной научно-практической конференции молодых учёных и студентов, IV Всероссийского*

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34. Akramovna, I. K., & Xudoyberdiyevna, K. G. (2020). QANDLI DIABET KASALLIGI FONIDA YURAK QON TOMIR TIZIMI KASALLIKLARINING KLINIK KECHUV XUSUSIYATLARI. *Journal of cardiorespiratory research*, *1*(3), 59-62.
35. Исламова, К., & Карабаева, Г. (2020). ОСОБЕННОСТИ КЛИНИЧЕСКОГО ТЕЧЕНИЯ ЗАБОЛЕВАНИЙ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ НА ФОНЕ САХАРНОГО ДИАБЕТА. *Журнал кардиореспираторных исследований*, *1*(3), 59-62.
36. Хусинов, А. А., Исламова, К. А., & Зиядуллаев, Ш. Х. (2023). Поражение Желудочно-Кишечного Тракта У Больных Коронавирусной Инфекцией. *Central Asian Journal of Medical and Natural Science*, *4*(6), 580-585.
37. Исламова, К. А. (2023). Факторы Риска Раннего Развития Остеоартроза. *Journal of Science in Medicine and Life*, *1*(3), 1-7.
38. Исламова, К. А., & Хамраева, Н. А. (2023). Факторы Риска И Качество Жизни Больных Остеартрозом. *Central Asian Journal of Medical and Natural Science*, *4*(6), 268-273.
39. Абдушукурова, К. Р., & Хамраева, Н. А. (2023). Особенности Лечения Параклинических Проявлений Ревматоидного Артрита. *Central Asian Journal of Medical and Natural Science*, *4*(6), 256-262.
40. 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.
41. Alisherovna, K. M., Habibulloyevna, I. M., & Voxidovna, R. F. (2024). STRUCTURAL AND FUNCTIONAL FEATURES OF THE LEFT VENTRICLE IN PATIENTS WITH HEART FAILUREIN ISCHEMIC HEART DISEASE AND THYROTOXICOSIS. *Ta'lim innovatsiyasi va integratsiyasi*, *19*(4), 71-81.
42. 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.
43. Alisherovna, K. M., Yaxshiboyevich, U. M. R., & Yigitaliyevich, B. A. (2024). EVALUATION OF A NATRIURETIC PEPTIDE TO OPTIMIZE THE MANAGEMENT OF COMORBID PATIENTS WITH THYROTOXICOSIS AND HEART FAILURE. *Ta'lim innovatsiyasi va integratsiyasi*, *19*(4), 62-70.
44. Alisherovna, K. M., Erkinovna, S. D., Duskobilovich, B. S., & Samandarovich, 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.
45. Alisherovna, K. M., Davranovna, M. K., & Erkinovna, K. Z. (2024). CORONARY HEART DISEASE AND OSTEOPOROSIS IN POSTMENOPAUSAL WOMEN. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 40-45.
46. Alisherovna, K. M., Mansurovna, M. D., Erkinovna, N. D., Farxodovna, X. R., Toxirovna, M. M., Tolibovna, R. D., & Yorkinovna, E. N. (2024). ARTERIAL

ISSN: 2692-5206
AMERICAN ACADEMIC PUBLISHER
INTERNATIONAL JOURNAL OF MEDICAL SCIENCES

HYPERTENSION AND THYROID STATUS IN PATIENTS OF DIFFERENT AGES. *Ta'lim innovatsiyasi va integratsiyasi*, *19*(4), 122-129.

47. Davranovna, M. K. D. K., Alisherovna, K. M., & Erkinovna, K. Z. (2024). CARDIAC ARRHYTHMIAS IN PATIENTS WITH RHEUMATOID ARTHRITIS. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 65-71.
48. Davranovna, M. K. D. K., Alisherovna, K. M., & Erkinovna, K. Z. (2024). CARDIAC ARRHYTHMIAS IN PATIENTS WITH RHEUMATOID ARTHRITIS. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 65-71.
49. Erkinovna, K. Z., Alisherovna, K. M., & Davranovna, M. K. (2024). ARTERIAL HYPERTENSION AND ARRHYTHMIA. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 72-78.
50. Nizamitdinovich, K. S., Alisherovna, K. M., & Erkinovna, K. Z. (2024). ASSESSMENT OF THE RISK OF DEVELOPING DIABETES MELLITUS FOR MEN. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 114-123.
51. Alisherovna, K. M., Nizamitdinovich, K. S., & Erkinovna, K. Z. (2024). THE EFFECTIVENESS OF BISOPROLOL AND METFORMIN IN ARTERIAL HYPERTENSION AND METABOLIC SYNDROME. *Spectrum Journal of Innovation, Reforms and Development*, *26*, 106-113.
52. Sheraliyevich, X. F., & Farhod o'g, Z. O. A. (2024). JIGAR SERROZINI ANIQLASHDA INNOVATSION YECHIM. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *43*(1), 3-10.
53. Sheraliyevich, X. F. (2024). O'PKA ABSESI VA GANGRENASI. *Journal of new century innovations*, *46*(2), 152-153.