NEW RENAISSANCE international scientific journal ResearchBib IF - 11.01, ISSN: 3030-3753, Vatume 2 Issue 1

# **RISK FACTORS FOR THE DEVELOPMENT OF CLIMACTERIC DISORDERS IN**

# WOMEN WITH THE METABOLIC SYNDROME

### Jo'rayeva Gulhayo Jalol qizi

Asian International University

gulhayojorayeva058@gmail.com

#### https://doi.org/10.5281/zenodo.14759691

**Abstract.** This article describes the risk factors for the development of climacteric disorders in women with metabolic syndrome.

*Key words:* menopause, metabolic syndrome, estrogen, atherosclerotic disease, insulin resistance, diabetes, osteoporosis, climacteric, lipid spectrum.

# ФАКТОРЫ РИСКА РАЗВИТИЯ КЛИМАКТЕРИЧЕСКИХ РАССТРОЙСТВ У ЖЕНЩИН С МЕТАБОЛИЧЕСКИМ СИНДРОМОМ

*Аннотация.* В статье описаны факторы риска развития климактерических расстройств у женщин с метаболическим синдромом.

Ключевые слова: менопауза, метаболический синдром, эстроген, атеросклеротическое заболевание, инсулинорезистентность, сахарный диабет, остеопороз, климакс, липидный спектр.

**Relevance:** Menopause is the period that causes the most anxiety among women. Among them, women are more afraid of being overweight. The results of the 2019-2022 National Research on Nutrition of the Ministry of Health of the Republic of Uzbekistan show that in the conditions of Uzbekistan, women with metabolic syndrome are more likely to be 40-55 years old than women aged 20-39. more common in women. This age corresponds to perimenopause. During this period, the development of hormonal changes in the female body is observed. As we know, the estrogen hormone is important in the management of energy balance and sex hormones are also important for the metabolism of adipose tissue and other organs. As a result of a sharp decrease in the production of the estrogen hormone and an unhealthy lifestyle, there are risk factors that have a serious impact on a woman's health. Such risk factors include cardiovascular atherosclerotic disease, insulin resistance, and diabetes and osteoporosis.

**Objective**: To monitor and study risk factors that may develop in perimenopause and climactic women with metabolic syndrome.

**Materials and methods**: This study was conducted among the employees of maternity complex No. 9, which is one of the bases of the Department of Obstetrics and Gynecology of the Tashkent Medical Academy, and among women who applied to the gynecology department.



# **NEW RENAISSANCE** international scientific journal ResearchBib IF - 11.01, ISSN: 3030-3753, Valume 2 Issue 1

In the study, 72 women aged 42-56 were examined and divided into 4 groups. Group 1: 20 women with metabolic syndrome, but climacteric changes have not yet been observed; Group 2: 20 menopausal women without metabolic syndrome; Group 3: 20 women with metabolic syndrome and menopause. Group 4 (control) 12 women make up the control group and are conditionally healthy women. This study: dietary questionnaires, questionnaires on the manifestation of climacteric symptoms, and retrospective and anamnesis collection, as well as clinical (body mass index, arterial blood pressure), laboratory (blood glucose, insulin, lipid spectrum) conducted through inspections.

**Results**: According to the results of the study, the analyzes showed women aged 42-56 years. The average age of women in group 1 was  $45.2\pm4$  years, the average age of women in group 2 was  $51.6\pm3$  years, and the average age of women in group 3 was  $52.6\pm3$  years. In group 1 women without climacteric changes, the incidence of metabolic syndrome with total obesity was 40%, and the same amount of women in group 2, i.e. 40% had abdominal obesity and 15% had total obesity.

This means that it is caused by hormonal changes during the climax. An increase in arterial blood pressure was noted in 20% of women in group 1, and in 35% of women in group 2. 15% of women in group 1 and 10% of women in group 2 had insulin resistance. In addition, 3 (15%) of women in group 1 had obesity and hypertension, 2 (10%) had obesity and insulin resistance.

Women in group 3 form the category of women with both climacteric and metabolic changes, 6 (30%) of them have cardiovascular disease (angina, coronary artery disease), 5 (25%) have diabetes, 2 patients (10%) had osteoporosis and 7 patients (35%) had hypertension.

**Conclusion**: In women with metabolic syndrome, the occurrence of risk factors such as cardiovascular diseases, insulin resistance and diabetes, hypertension is higher than in women without metabolic syndrome. Hormonal changes during the climax intensify the processes caused by the metabolic changes in women, and lead to the negative side of the process.

#### REFERENCES

- Rajabova Oygul Islomovna.(2024). VIRUSLI GEPATITLAR VA TUG'RUQDAN KEYINGI ERTA QON KETISHLARNI KAMAYTIRISHNING YANGI TEXNOLOGIYALARI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 39(5), 99–106. <u>https://www.newjournal.org/index.php/01/article/view/11723</u>
- Rajabova Oygul Islomovna. (2024). A Comparative Analysis of the Effectiveness of Vaginal Progesterone, Cervical Pesar, and Their Combination for Preventing the Risk of Premature Labor in High-Risk Pregnant Women BEST JOURNAL OF INNOVATION IN SCIENCE, RESEARCH AND DEVELOPMENT, 3(3), 440-446. http://www.bjisrd.com/index.php/bjisrd/article/view/1849/1700

1091

 Rajabova Oygul Islomovna.(2024). MODERN CONCEPT OF RECURRENT VAGINAL INFECTIONS IN WOMEN OF REPRODUCTIVE AGE, 3(04), 128-131. <u>https://jhlsr.innovascience.uz/index.php/jhlsr/article/view/518/455</u>

NEW RENAISSANCE international scientific journal

ResearchBib IF - 11.01, ISSN: 3030-3753, Valume 2 Issue 1

- Rajabova Oygul Islomovna.(2024). METHODS OF PHARMACOTHERAPEUTIC TREATMENT OF ABNORMAL UTERINE BLEEDING IN GIRLS, 3(5),193-197 <u>https://mudarrisziyo.uz/index.php/pedagogika/article/view/945</u>
- Rajabova Oygul Islomovna.(2024). Method Stopping Atonic Bleeding From the Uterus after Childbirth Using Balloon Tamponade International Journal of Alternative and Contemporary Therapy with U.S. ISSN 2995-5378 In Volume 2, Issue 9 (2024) https://medicaljournals.eu/index.php/IJACT/article/view/965
- Rajabova Oygul Islomovna.(2024). Tactics for carrying women at high risk of recurrent miscarriage. New renaissance journal ResearchBib IF-2023: 11.01, ISSN: 3030-3753, Valume 1 Issue 8 Pp:509-514 <u>https://doi.org/10.5281/zenodo.13982730</u>
- Islomovna, R. O. CHARACTERISTICS OF UROGENITAL TRACT MICROBIOCENOSIS IN WOMEN WITH NON-DEVELOPING PREGNANCY. <u>https://doi.org/10.5281/zenodo.14528590</u>
- 8. Jo'rayeva, G. (2024). COMBINATION OF DIABETES AND METABOLIC SYNDROME. *Modern Science and Research*, *3*(12), 691-696.
- 9. https://doi.org/10.5281/zenodo.14528640
- 10. Numonova, A., & Narzulayeva, U. (2023). EPIDEMIOLOGY AND ETIOPATHOGENESIS OF CHF. Наука и инновация, 1(15), 115-119.
- Орипова Озода Олимовна, Самиева Гулноза Уткуровна, Хамидова Фарида Муиновна, & Нарзулаева Умида Рахматуллаевна (2020). Состояние плотности распределения лимфоидных клеток слизистой оболочки гортани и проявления местного иммунитета при хроническом ларингите (анализ секционного материала). Academy, (4 (55)), 83-86.
- Umida Rakhmatulloevna Narzulaeva, & Xamrayeva Muxlisa Farmon qizi. (2023).
   ETIOPATHOGENESIS OF HEMOLYTIC ANEMIA. Web of Medicine: Journal of Medicine, Practice and Nursing, 1(1), 1–4. Retrieved from https://webofjournals.com/index.php/5/article/view/26
- Нарзулаева, У., Самиева, Г., & Насирова, Ш. (2023). Гемореологические нарушения на ранних стадиях гипертензии в жарком климате. Журнал биомедицины и практики, 1(1), 221–225. <u>https://doi.org/10.26739/2181 -9300-2021-1-31</u>
- Umida Rakhmatulloevna Narzulaeva. (2023). Important Aspects of Etiology And Pathogenesis of Hemolytic Anemias. American Journal of Pediatric Medicine and Health

1092

 ResearchBib IF - 11.01, ISSN: 3030-3753, Valume 2 Issue 1

 Sciences
 (2993-2149), 1(7), 179–182.
 Retrieved from

NCF international scientific journal

https://grnjournal.us/index.php/AJPMHS/article/view/817

**NEW RENAISSA** 

- 15. Нарзулаева, У. Р., Самиева, Г. У., & Насирова, Ш. Ш. (2021). ИССИҚ ИҚЛИМДА КЕЧУВЧИ ГИПЕРТОНИЯ КАСАЛЛИГИНИНГ БОШЛАНҒИЧ БОСҚИЧЛАРИДА ГЕМОРЕОЛОГИК БУЗИЛИШЛАР. ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ, 6(1).
- Нарзулаева, У., Самиева, Г., Лапасова, З., & Таирова, С. (2023). Значение диеты в лечении артериальной гипертензии. Журнал биомедицины и практики, 1(3/2), 111– 116. <u>https://doi.org/10.26739/2181-9300-2021-3-98</u>
- 17. Narzulaeva Umida Rakhmatulloevna, Samieva Gulnoza Utkurovna, & Ismatova Marguba Shaukatovna (2020). SPECIFICITY OF THE CLINICAL COURSE OF THE INITIAL STAGES OF HYPERTENSION IN ARID ZONES OF UZBEKISTAN AND NON-DRUG APPROACHES TO TREATMENT. Кронос, (4 (43)), 15-17.