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MODERN MULTIMODAL THERAPY FOR OBESITY IN WOMEN: CLINICAL OUTCOMES AND METABOLIC BENEFITS

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Abstract: Obesity is a multifactorial chronic disease associated with metabolic disorders, cardiovascular complications, and impaired reproductive health in women. This study aimed to evaluate the effectiveness of a comprehensive therapeutic approach combining lifestyle modification with pharmacological treatment for obesity. Eighty-two women with obesity participated in a 24-week treatment program that included dietary counseling, increased physical activity, and therapy with sibutramine alone or in combination with metformin. The intervention resulted in significant reductions in body weight, waist circumference, daily caloric intake, and improvements in eating behavior, physical activity, and reproductive function, while demonstrating a favorable safety profile. A multidisciplinary approach to obesity management may improve metabolic health, reduce cardiovascular risk, and enhance the quality of life of women with obesity.

Keywords: obesity, women, metabolic syndrome, weight reduction, sibutramine, metformin, lifestyle modification, reproductive health, cardiovascular risk, eating behavior.

СОВРЕМЕННАЯ МУЛЬТИМОДАЛЬНАЯ ТЕРАПИЯ ОЖИРЕНИЯ У ЖЕНЩИН: КЛИНИЧЕСКИЕ РЕЗУЛЬТАТЫ И МЕТАБОЛИЧЕСКИЕ ПРЕИМУЩЕСТВА

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Аннотация: Ожирение представляет собой многофакторное хроническое заболевание, сопровождающееся метаболическими нарушениями, сердечно-

сосудистыми осложнениями и ухудшением репродуктивного здоровья женщин. Целью исследования явилась оценка эффективности комплексного подхода к лечению ожирения, основанного на сочетании модификации образа жизни и фармакотерапии. В исследование были включены 82 женщины с ожирением, получавшие в течение 24 недель диетотерапию, повышение физической активности и лечение сибутрамином в виде монотерапии или в комбинации с метформином. Комплексное лечение обеспечило достоверное снижение массы тела, окружности талии, суточной калорийности рациона, а также улучшение пищевого поведения, физической активности и репродуктивной функции при хорошей переносимости терапии. Многофакторный подход к лечению ожирения способствует улучшению метаболического здоровья, снижению сердечно-сосудистого риска и повышению качества жизни женщин.

Ключевые слова: ожирение, женщины, метаболический синдром, снижение массы тела, сибутрамин, метформин, модификация образа жизни, репродуктивное здоровье, сердечно-сосудистый риск, пищевое поведение.

Introduction: Obesity is a chronic multifactorial disease that has become one of the most significant public health challenges worldwide because of its increasing prevalence and associated metabolic complications. Excess adipose tissue contributes to insulin resistance, dyslipidemia, arterial hypertension, and chronic low-grade inflammation, leading to a substantially increased risk of cardiovascular disease and type 2 diabetes mellitus. In women, obesity is also associated with endocrine disturbances, menstrual irregularities, infertility, and impaired reproductive function, significantly reducing quality of life. Lifestyle modification, including dietary intervention and increased physical activity, remains the cornerstone of obesity management; however, long-term weight reduction is often difficult to achieve without additional therapeutic support. Pharmacological treatment combined with behavioral interventions has demonstrated favorable effects on body weight, metabolic control, and eating behavior. A multidisciplinary approach integrating nutritional counseling, physical activity, and evidence-based

pharmacotherapy may provide greater clinical benefits than lifestyle modification alone. Early identification of obesity-related metabolic disturbances and individualized treatment strategies are essential for preventing disease progression and reducing long-term cardiovascular complications. Therefore, evaluation of comprehensive therapeutic approaches remains an important area of clinical research and may contribute to improving metabolic health, reproductive function, and overall quality of life in women with obesity.

Aim of the study: To evaluate the clinical effectiveness and safety of a multidisciplinary therapeutic approach, including lifestyle modification and pharmacological treatment, for reducing body weight and improving metabolic and reproductive outcomes in women with obesity.

Materials and methods. A prospective observational study was conducted at the Department of Internal Medicine of a tertiary healthcare institution in Uzbekistan. The study included 82 women aged 18–49 years diagnosed with obesity according to established clinical criteria. Thirty-five healthy women of similar age served as the control group. Inclusion criteria included body mass index greater than 27 kg/m², waist circumference exceeding 80 cm, and the presence of metabolic abnormalities. Women with severe endocrine disorders, serious somatic diseases, or other conditions affecting body weight were excluded from the study. All participants underwent comprehensive clinical evaluation, including medical history, physical examination, anthropometric measurements, blood pressure assessment, biochemical analysis of lipid metabolism, glucose metabolism, and glycated hemoglobin. Eating behavior was assessed using the Dutch Eating Behavior Questionnaire (DEBQ), while reproductive health and quality of life were evaluated using standardized questionnaires. Patients received individualized dietary counseling, recommendations for regular physical activity, and pharmacological treatment with sibutramine alone or in combination with metformin for 24 weeks. Clinical assessments were performed at regular follow-up visits throughout the study period. Statistical analysis was conducted using IBM SPSS Statistics 26.0. Continuous variables were expressed as mean ± standard

deviation, and differences between baseline and post-treatment values were analyzed using Student's t-test. Statistical significance was accepted at $p < 0.05$.

Results. The multidisciplinary treatment program produced significant improvements in anthropometric, metabolic, behavioral, and reproductive outcomes after 24 weeks of therapy. Daily caloric intake decreased significantly in both treatment groups, accompanied by increased physical activity and improved eating behavior. Patients receiving pharmacological therapy demonstrated substantial reductions in body weight and waist circumference, with combination therapy producing slightly greater improvements than monotherapy. Mean body weight decreased by approximately 8.9 kg in the sibutramine group and 9.7 kg in the combined sibutramine–metformin group. Waist circumference decreased by 11.4 cm and 14.1 cm, respectively. Physical activity increased significantly according to pedometer recordings, indicating improved adherence to lifestyle recommendations. Reproductive outcomes also improved considerably, with normalization of the menstrual cycle observed in 83.8% of participants and restoration of ovulation in 75.8% of women. Nearly half of the patients reported increased libido, while more than one-third experienced improved sexual self-confidence. No significant changes in blood pressure, heart rate, electrocardiographic findings, glucose tolerance, or glycated hemoglobin were observed during treatment. The therapy was generally well tolerated, and only mild gastrointestinal adverse effects were reported in a small proportion of patients receiving metformin. Overall, the comprehensive therapeutic approach demonstrated high clinical effectiveness and an acceptable safety profile in women with obesity.

Conclusions: A multidisciplinary therapeutic approach combining lifestyle modification with pharmacological treatment effectively reduced body weight, improved eating behavior, increased physical activity, and enhanced reproductive health in women with obesity. The intervention demonstrated good safety and tolerability throughout the study period. Comprehensive obesity management may reduce metabolic risk factors, improve long-term clinical outcomes, and should be

considered an essential component of individualized treatment for women with obesity.

References.

1. Ziyadullaev, S. K., Sultonov, I. I., Dushanova, G. A., & Akbarovna, K. S. (2021). The Effectiveness Of Pharmacotherapy For Dmards With Ra Depending On The C3435t Polymorphism Of The Mdr1 Gene. *Int. J. of Aquatic Science*, *12*(3), 2908-2916.
2. Islomovich, S. I. (2024). GENDER CHARACTERISTICS OF THE CURRENT RHEUMATOID ARTHRITIS. *International journal of medical sciences*, *4*(10), 3-8.
3. Ilkhom, S. (2023). CAJAM–VOLUME 1. ISSUE 1. 2023. *Central Asian Journal of Advanced Medicine*, *1*(01), 16-19.
4. Kireev, V. V., Sultonov, I. I., Ziyadulaaev, S. K., Suyarov, A. A., Aripova, T. U., Usmanbekova, K. T., & Nasretdinova, M. T. (2021). Genetic Engineered Preparations-An Innovative Approach in the Treatment of Rheumatoid Arthritis. *Annals of the Romanian Society for Cell Biology*, *25*(3), 4114-4119.
5. Sultonov, I. I., Xasanov, F. S., Eshmuratov, S., Uralov, R. S., Shukurova, D., & Ziyadullayev, S. X. Predictors of Systemic Lupus Erythematosus: A Case-control Study. *International journal of health sciences*, *6*(S10), 175-182.
6. Khusainova, M. A., Vakhidov, J. J., Khayitov, S. M., & Mamadiyorova, M. M. (2023). Cardiac arrhythmias in patients with rheumatoid arthritis. *Science and Education*, *4*(2), 130-137.
7. 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.