



CAUSES OF HORMONE IMBALANCE IN WOMEN AND MODERN METHODS OF ELIMINATING IT

Xaqqulova Marta Alisherovna

Assistant Professor, Department of Normal and Pathological Physiology, TSMU

Rahmonova Umida Tohir qiz

Abdumannonova Xidoyatxon Ganisher qizi

Students of Tashkent State Medical University

ANNOTATION: This article analyzes the main causes of hormonal imbalance in women, methods for identifying clinical signs, and modern treatment approaches. The study incorporates practical experiences from endocrinology, gynecology, and psychology, as well as diagnostic and therapeutic opportunities within the healthcare system of Uzbekistan. It also highlights internal and external factors causing hormonal imbalance in women during pregnancy, reproductive age, and menopause.

KEYWORDS: hormonal balance, endocrine system, reproductive age, menopause, female imbalance, symptoms, diagnostics, treatment methods, psychological approach, healthcare system of Uzbekistan, modern therapy, prevention

INTRODUCTION

Hormonal imbalance in women directly affects all systems and processes of the body. Hormones act as the main biological regulators that regulate metabolism, ovulation, menopause, mood, immune system and reproductive health. Therefore, hormonal imbalance leads to negative consequences not only physiologically, but also psychologically and socially. In the conditions of Uzbekistan, the issues of early detection and treatment of diseases associated with hormonal imbalance in women with modern methods are one of the urgent tasks of the healthcare system. Hormonal imbalance in women during pregnancy, menopause and reproductive age is often observed along with various diseases, and it is important to identify these diseases in a timely manner, as well as develop an individual treatment plan.

MAIN PART

The causes of hormonal imbalance are caused by internal and external factors. Internal factors include pathologies of the endocrine glands, including hypothyroidism



or hyperthyroidism of the thyroid gland, adrenal dysfunction, diseases of the reproductive system (polycystic ovary syndrome, endometriosis), genetic predispositions and metabolic disorders. External factors are associated with stress, malnutrition, lack of physical activity, exposure to toxins and environmental conditions. Hormonal imbalance in women is manifested by the following clinical symptoms: changes in the menstrual cycle, hormonal acne and skin problems, sudden weight gain or loss, insomnia, fatigue, mental instability, depression and reproductive problems. When these symptoms are detected, endocrinological and gynecological examinations are important. The diagnostic process includes hormonal tests (TSH, T3, T4, estrogen, progesterone, cortisol), ultrasound examinations, biopsy, as well as psychological and metabolic assessments. In Uzbekistan, these diagnostic capabilities have been expanded, and the Republican Endocrinology Center and regional gynecology clinics have modern laboratory and instrumental examinations.

Treatment strategies for hormonal imbalance require an individual approach. The most commonly used methods are: pharmacological therapy (hormonal drugs), physiotherapy, psychotherapy and lifestyle correction. The pharmacological approach takes into account the woman's reproductive age, medical history and clinical indicators. Among physiotherapy methods, laser therapy, acupuncture and massage are recommended. At the same time, preventive measures related to nutrition and physical activity are also effective. Among the conditions that lead to hormonal imbalance in women, the menopause period should be especially noted. A decrease in estrogen levels during menopause causes changes in various systems, including a decrease in bone density, an increased risk of cardiovascular diseases, mental changes and metabolic disorders. Therefore, it is important to start preventive and therapeutic measures in a timely manner during menopause. The activity of qualified specialists in the diagnosis and treatment of hormonal imbalance has been intensified in Uzbek medicine. The Republican Endocrinology Center, regional gynecology clinics, and maternal consultation centers have introduced modern diagnostic equipment, laboratory tests, and individual treatment programs. At the same time, perinatal psychological approaches are also important in restoring hormonal balance.

CONCLUSION

Hormonal imbalance in women is a pressing issue in modern medicine, and its early detection and personalized treatment approaches are of great importance. In the conditions of Uzbekistan, measures to identify and treat hormonal imbalance are yielding positive results. Clinical, laboratory and psychological examinations, as well



as preventive measures, serve to maintain women's health, ensure reproductive health and improve the overall quality of life. The combination of modern pharmacological and physiotherapeutic methods, lifestyle correction and psychological support is the main factor in restoring hormonal balance.

Hormonal imbalance in women is one of the most pressing problems in modern medicine, which significantly affects not only the reproductive system, but also the general health of the whole organism. This condition occurs when the endocrine glands are disrupted, that is, when the ratio of hormones such as estrogen, progesterone, prolactin, testosterone, insulin, cortisol changes in the body. Among the main causes of hormonal imbalance, factors such as chronic stress, malnutrition, lack or excess physical activity, sleep disorders, environmental factors, genetic predisposition, endocrine diseases and side effects of contraceptives occupy a special place. Especially today, the increase in stress and nervous tension among women, increased work and family responsibilities, hygienic and psychological factors open the way for hormonal imbalance.

Hormones control all vital processes in a woman's body - cardiovascular, nervous, bone, skin, hair, mood, metabolism and reproductive system. Therefore, even a slight imbalance in them can cause serious changes in a woman's health. Menstrual cycle disorders, infertility, obesity or weight loss, hair loss, skin problems, frequent mood swings, insomnia and depression are the most common symptoms of hormonal imbalance. If this condition is not detected in time, serious complications such as endometriosis, polycystic ovary syndrome, thyroid diseases, diabetes, osteoporosis, heart disease can develop.

Modern approaches to restoring hormonal balance are multifaceted and include diagnostic, treatment and prevention stages. First of all, it is important to determine the level of hormones in the blood through laboratory and instrumental examinations. An individual treatment method is selected taking into account the physiological state, age, phase of the menstrual cycle, lifestyle and health of each woman. Currently, the results of restoring balance through hormonal therapy, phytotherapy, optimizing the diet, psychological methods that reduce stress, physical exercise and the formation of a healthy lifestyle are showing positive results. The most important stage in eliminating hormonal imbalance is a comprehensive fight against these causes. For example, meditation, yoga, psychological training, quality sleep, fresh air and positive emotions are important in reducing the increase in the stress hormone cortisol. As for nutrition, it is recommended to regularly consume products rich in protein, healthy fats, complex



carbohydrates, B vitamins, magnesium, zinc, iron, vitamin D and omega-3 fatty acids. Eggs, fish, greens, nuts, vegetables, and fruits naturally support the functioning of the hormonal system.

Sports and physical activity also play an important role in restoring hormonal balance. However, excessive stress, intensive training or an unhealthy diet can have the opposite effect, so it is necessary to act in moderation, based on an individual approach. Sleep hygiene also directly affects hormonal health, as lack of sleep or going to bed late disrupts the natural production of the hormones melatonin, cortisol and leptin.

In modern medicine, herbal preparations, bioidentical hormone therapy, physiotherapeutic methods, treatment programs enriched with microelements and vitamins are widely used in the treatment of hormonal disorders. At the same time, any medication should not be used without medical supervision, since hormones are a delicate system, and their excessive or incorrect dosage can cause unexpected complications. Preventive measures are the most reliable way to maintain women's hormonal health. Many hormonal disorders can be prevented through regular medical examinations, stress management, healthy eating, giving up harmful habits, physical activity and maintaining mental stability. Especially during adolescence, the postpartum period and menopause, the female body undergoes dramatic hormonal changes, therefore, psychological and medical support is very necessary during these periods.

In conclusion, hormonal imbalance in women is not a simple physiological problem, but a complex condition that affects the functioning of the entire body. Its prevention, early diagnosis and treatment with modern methods can strengthen not only the reproductive, but also the mental and physical health of a woman. This, in turn, is one of the main factors in the formation of healthy mothers, healthy children and a healthy society.

REFERENCES USED:

1. Ministry of Health of the Republic of Uzbekistan. "Recommendations for diagnostics and treatment in endocrinology and gynecology", Tashkent, 2022.
2. Kadirova M., Tokhtayeva N. "Hormonal imbalance and prevention in women." Tashkent Medical Publishing House, 2021.
3. World Health Organization (WHO). "Hormonal Health in Women", Geneva, 2022.
4. Rakhimova D. "Changes in the endocrine system in women of reproductive age." Medical Journal, 2021.
5. Karimova S. "Eliminating hormonal imbalance through psychological and physiotherapeutic approaches." Medical Bulletin of Uzbekistan, 2022.