



Explain the Effects of Hormonal Imbalance on the Female Reproductive System

Rakhimova Madina

Samarkand State Medical University

Abstract: Sex hormones in men are of great importance for the health of the whole body. To a greater extent, gonadosteroids are produced by the testes, and the concentration of some of them is regulated by the pituitary gland. The lack or excess of one or another hormone poses a serious threat to the human condition. Disturbance of balance directly affects general well-being, reproductive function and sexual desire. In this article, we will consider how to identify the problem in time and how hormonal drugs affect the male body.

Key words: Main male hormones, Other hormones are important, Causes of hormonal imbalance, Hormonal imbalance in men: symptoms

Male sex hormones produced by the ovaries and adrenal cortex are collectively called "androgens" in medicine. They are responsible for the formation of secondary sexual characteristics: facial and body hair, deep voice, etc., as well as the third - socio-cultural differences between men and women. The main male hormone is testosterone. With its help, intensive growth of body hair occurs, muscle mass increases, and sexual activity is regulated. The hormone dihydrotestosterone (DHT) plays a major role in the formation of male genitalia.

There are also a number of hormones involved in the synthesis of the above. They are:

dehydroepiandrosterone;
androsterone;
androstenedione;
androstenediol.

The correct balance of these hormones is the key to sexual health!

Other hormones are of great importance

In addition to the main sex hormones, several other hormones also affect sexual function. A small amount of female hormones (estrogens) is also present in the male body. They affect the nervous system, musculoskeletal system and liver. In men, female hormones are produced by the pituitary gland.

Luteinizing hormone directly affects testosterone production, and follicle-stimulating hormone directly affects seminal fluid production. Prolactin is also important. If hormonal imbalance is suspected in men, tests are prescribed not only for male but also for female hormones. Even with a balanced level of androgens in the blood, an incorrect balance of estrogens can cause changes in a man's appearance and the way his body functions.

Causes of hormonal imbalance

Failure in the production of hormones is often caused by pathological processes in the body or a sudden change in lifestyle. The most common failure in testosterone production is associated with hypogonadism, decreased testicular function. The reasons for this may be:

radiation exposure;
injury in the groin area;
inflammation of one or two testicles;
congenital disorder that appears with the onset of puberty;
cryptorchidism (a condition where one or both testicles do not descend into the scrotum).



Hypothalamo-pituitary diseases, which are a secondary cause of the development of sexual dysfunction, should be highlighted. Such disorders are caused by malnutrition, tumors, head injuries, brain infections, etc. In this case, there is a lack of estrogen. In men, the reproductive function is preserved throughout life, but with the onset of aging, the level of sex hormones gradually decreases. If there is no hormonal balance, this happens without any deterioration in well-being, without being noticed.

Hormonal imbalance in men: symptoms

hormonal imbalance (1)

Testosterone deficiency is hard to miss. The most common symptom is a decrease or complete loss of interest in sex and erectile dysfunction. The longer a man waits to see a doctor, the less likely he is to become a parent. Other symptoms of hormonal imbalance in men:

loss of muscle mass and decreased strength;

weight gain, fat accumulation in the side and abdomen;

deterioration of concentration;

depressed mood for a long time;

heart rhythm disorder;

intolerance to psycho-emotional and physical stress;

sleep disorder;

pain and discomfort in the spine and joints.

Remember: there is no shame in seeing a doctor! The specialist will prescribe all the necessary tests for you and help you choose a therapy that will improve your quality of life.

What happens if you ignore the problem?

Lack of androgens leads not only to the deterioration of life in the intimate sphere. The most dangerous and extremely common consequence of hormonal imbalance is obesity. Over time, metabolic syndrome develops, which leads to blood pressure instability and metabolic diseases. If you ignore the symptoms of hormonal imbalance for a long time, the risk of heart attack, stroke and diabetes increases.

When testosterone production is disrupted, androgens are gradually "replaced" by estrogens. An increase in the level of prolactin leads to breast enlargement, which is not only a cosmetic defect, but also a direct threat to health. With gynecomastia, the risk of developing breast tumors increases significantly. Too much DHT is also very dangerous. A man develops prostate hyperplasia, which often leads to adenoma and oncology.

Hormone therapy: advantages and disadvantages

Normally, the level of testosterone in the blood is at least 12 nanomoles per liter. If this indicator drops sharply (the blood contains less than 8 nanomoles of testosterone per liter), the patient is prescribed hormone replacement therapy. Drugs can be prescribed in different forms:

Injection. Injections can be short-term or long-term. The interval between them varies from 2 to 14 weeks.

Tablets. They should be taken daily with fatty foods.

Implants. They are injected under the skin and contain an amount of compressed testosterone that will last an adult male for six months.

Plasters. They are attached to the scrotum or skin and act for 24 hours.

Hormone therapy helps to quickly restore the patient's normal well-being and reduce the risk of diseases associated with an imbalance of androgens and estrogens. Unlike women, men may rarely gain weight during hormonal treatment. Like most drugs, drugs containing hormones have many side effects. What are the risks of hormonal drugs for men?

This therapy is not suitable for cancer patients. Hormonal drugs activate the growth of tumors with other risk factors. In addition, taking hormonal drugs often masks the problem without eliminating the cause of its occurrence.

An alternative to hormonal drugs



As it turns out, hormonal drugs should be taken for serious medical reasons. Such drugs are sold strictly by prescription, and you should not look for temporary solutions to buy them. As an additional measure for the treatment of hormonal imbalance in men, the following should be considered:

Vitamins. Vitamin-mineral complexes allow you to cope with increased physical and psycho-emotional stress. Their regular consumption contributes to the natural normalization of hormonal levels.

A DIETARY SUPPLEMENT IS NOT A DRUG.

Biologically active supplements. Dietary supplements are tools that activate the body's natural recovery processes. They consist of components of natural origin that are perfectly absorbed at any age. We recommend that you familiarize yourself with the section "Dietary supplements for men's health": you will find drugs with minimal contraindications and no side effects.

Men's Formula Antistress;

Solgar herbal complex for men.

A DIETARY SUPPLEMENT IS NOT A DRUG.

Read the instructions carefully before taking any medication!

How to prevent hormonal imbalance?

To reduce the risk of experiencing hormonal imbalance, it is recommended to take care of the quality of life. The main rules of maintaining men's health:

Eat well and drink enough fluids.

Provide yourself with reasonable physical activity every day.

Try to keep rest mode and sleep at least 7-9 hours a day.

Be in a good mood and avoid stress.

Check your body at least once a year and contact a specialist if you feel unwell.

Only a healthy lifestyle will help you protect yourself from hormone-related problems. Take care of your health!

List of used literature:

1. Voznesenskaya TG, Solovyova AD, Fokina NM // Psychoendocrine relationships in patients with cerebral obesity in a state of emotional stress // Problems of endocrinology;
2. Rakhimova, M. (2022). INFERTILITY IN WOMEN CLASSIFICATION, SYMPTOMS, CAUSES AND FACTORS, RECOMMENDATIONS FOR WOMEN. Science and innovation, 1(D7), 245-250.
3. Rakhimova, M. (2023). DISORDER OF THE MENSTRUAL CYCLE CAUSES, SYMPTOMS, CLASSIFICATION, TREATMENT METHODS. Science and innovation, 2(D2), 31-37.
4. Mannonovna, R. M. (2023). TORCH INFECTION: DANGER FOR PREGNANT WOMEN, PERIOD OF EXAMINATION. Science and Innovation, 2(2), 57-58.
5. Shodiyeva D., Shernazarov F. ANALYSIS OF THE COMPOUNDS PROVIDING ANTIHELMITIC EFFECTS OF CHICHORIUM INTYBUS THROUGH FRACTIONATION //Science and innovation. – 2023. – T. 2. – №. D2. – C. 64-70.
6. Mannonovna R. M. Cytomegalovirus Infection in Obstetrics and Gynecology //Scholastic: Journal of Natural and Medical Education. – 2023. – T. 2. – №. 6. – C. 176-182.
7. Mannonovna R. M. Gestosis During Pregnancy //Central Asian Journal of Medical and Natural Science. – 2023. – T. 4. – №. 4. – C. 59-61.
8. Farrukh S. ORGANIZATION OF DIGITALIZED MEDICINE AND HEALTH ACADEMY AND ITS SIGNIFICANCE IN MEDICINE //Science and innovation. – 2023. – T. 2. – №. Special Issue 8. – C. 493-499.
9. Madina Mannonovna, R. . (2024). Hormonal Changes in Women of Reproductive Age. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 4(2), 285–292.
10. Rahimova Madina Mannonovna. (2024). Effects of Sex Hormones on the Immune System. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 4(2), 385–390.