

Violation of the Menstrual Cycle in Hypoprolactinemia and Hyperprolactinemia

Rakhimova Madina

Samarkand State Medical University

Annotation. Hyperprolactinemia is a disease in which the level of prolactin hormone in the blood is significantly higher than normal values. This hormone is called "milk" and its action is primarily related to the enlargement and secretion of the mammary glands, stimulation of lactation (milk production). In fact, prolactin is involved in many biochemical processes that regulate the activity of the female body. It plays an important role in the functioning of the reproductive system, regulating the metabolism and correcting the psycho-emotional state. Therefore, a pathological increase in its level can lead to menstrual disorders, infertility, frigidity (absence of sexual desire), anorgasmia (inability to reach orgasm), obesity, osteoporosis, increased insulin secretion, etc

Keywords: Hyperprolactinemia, causes, origins, factors, prevention, treatment

Introduction

Physiological (normal) increase in prolactin level in women should be distinguished from pathological. Prolactin is produced in greater quantities during pregnancy, after childbirth, during breastfeeding, during sleep and even during vigorous physical activity. In this case, we are not talking about a disease - this is a simple temporary physiological condition that does not require treatment.

Causes of hyperprolactinemia

This pathological condition can appear as a result of pharmacological, pathological and idiopathic factors.

Pharmacological factors. Prolactin levels may increase as a result of taking certain drugs:

tranquilizers; antidepressants;

oral contraceptives containing estrogen;

neuroleptics;

drugs that lower blood pressure;

dopamine inhibitors and blockers;

anticonvulsants, etc.

Opiate use and smoking can also disrupt normal prolactin levels.

Pathological factors that cause an increase in the level of prolactin in the blood can be divided into organic and functional.

Organic tumors often include benign tumors of the pituitary gland, mainly adenomas and prolactinomas. They cause an increase in the production of prolactin. Such tumors are usually very small in size (up to 10 mm), practically do not increase in size over time or grow very slowly and respond well to drug treatment.

Functional factors are diseases that are the main cause of increased prolactin levels in the blood. These are diseases of the thyroid gland, ovaries (polycystic disease), adrenal glands, liver (cirrhosis), kidneys (chronic failure). Injuries and operations in the chest area can also be the cause.

Idiopathic factors. In their cases, the pituitary gland, without any obvious reason, begins to produce prolactin hormone in an increased volume. Why this happens is not yet fully understood.

Symptoms of the disease

Hyperprolactinemia is mainly manifested in the violation of the functioning of the female reproductive system, metabolic processes and psycho-emotional state.

Reproductive diseases often lead to infertility. It can:

complete absence of menstruation,

short period of menstruation (no more than two days),

a small amount of menstrual blood;

long menstrual period (more than 35 days);

a long break between menstruation (from several months to six months);

lack of ovulation;

hypoplasia of the uterus (a very thin layer of the endometrium - the inner mucous membrane);

decreased libido and inability to have an orgasm;

galactorrhoea (leakage of milk or colostrum from the breast, even if the patient is not breastfeeding);

imbalance of male and female hormones, male-type hair growth on the body.

Metabolic diseases:

obesity (often with decreased insulin sensitivity);

osteoporosis;

the amount of cholesterol in the blood increased;

acne and others.

Psycho-emotional symptoms:

insomnia;

quick fatigue;

emotional instability, etc.

If you suspect that this pathology is secondary, that is, due to another disease, the doctor may order additional tests to determine the condition of the thyroid gland, adrenal glands, and liver.

CT (computed tomography) and MRI (magnetic resonance imaging). With their help, it is possible to identify pituitary tumors that lead to increased production of prolactin. CT and MRI also help to identify pathologies of the adrenal glands, ovaries and other organs that contribute to the occurrence of hyperprolactinemia.

References:

1. Rakhimova, M. (2022). INFERTILITY IN WOMEN CLASSIFICATION, SYMPTOMS, CAUSES AND FACTORS, RECOMMENDATIONS FOR WOMEN. *Science and innovation*, 1(D7), 245-250.
2. Rakhimova, M. (2023). DISORDER OF THE MENSTRUAL CYCLE CAUSES, SYMPTOMS, CLASSIFICATION, TREATMENT METHODS. *Science and innovation*, 2(D2), 31-37.
3. Mannonovna, R. M. (2023). TORCH INFECTION: DANGER FOR PREGNANT WOMEN, PERIOD OF EXAMINATION. *Science and Innovation*, 2(2), 57-58.
4. Shodiyeva D., Shernazarov F. ANALYSIS OF THE COMPOUNDS PROVIDING ANTIHELMINTIC EFFECTS OF CHICHORIUM INTYBUS THROUGH FRACTIONATION // *Science and innovation*. – 2023. – T. 2. – №. D2. – C. 64-70.
5. Mannonovna R. M. Cytomegalovirus Infection in Obstetrics and Gynecology // *Scholastic: Journal of Natural and Medical Education*. – 2023. – T. 2. – №. 6. – C. 176-182.
6. Mannonovna R. M. Gestosis During Pregnancy // *Central Asian Journal of Medical and Natural Science*. – 2023. – T. 4. – №. 4. – C. 59-61.
7. 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.

8. Madina Mannonovna, R. . (2024). Hormonal Changes in Women of Reproductive Age. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 4(2), 285–292.
9. Rahimova Madina Mannonovna. (2024). Effects of Sex Hormones on the Immune System. EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE, 4(2), 385–390.