

MASTODYNYA: POSSIBILITIES OF THERAPY USING MICRONIZED PROGESTERONE.

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Abstract. Pain in the mammary gland (mastodynia) is one of the most common complaints with which women seek help from a gynecologist. Mastodynia can be caused by various reasons: inflammation, hormonal imbalance, taking medications of various groups, including hormonal contraceptives, tumor, intercostal neuralgia, etc.

Key words: premenstrual syndrome, mastodynia, mastopathy, Мемогель ®.

МАСТОДИНЬЯ: ВОЗМОЖНОСТИ ТЕРАПИИ С ПОМОЩЬЮ МИКРОНИЗИРОВАННОГО ПРОГЕСТЕРОНА.

Аннотация. Боль в молочной железе (мастодиния) — одна из самых частых жалоб, с которой женщины обращаются за помощью к гинекологу. Мастодиния может быть вызвана различными причинами: воспалением, гормональным дисбалансом, приемом лекарственных препаратов различных групп, в том числе гормональных контрацептивов, опухолью, межреберной невралгией и т. д.

Ключевые слова: предменструальный синдром, мастодиния, мастопатия, Мемогель ®.

The mammary gland is an organ of the female reproductive system, the development and functioning of which is closely related to the state of reproductive health at different age periods.

Numerous studies devoted to the study of the problem of mammary glands have shown that the mammary gland is a target organ for many hormones, primarily sex hormones [1].

Breast pain is one of the most common complaints that women bring to their doctor, in the vast majority of cases to a gynecologist. Mastodynia, or "mastalgia", is a concept that implies the presence of pain in the mammary gland, which can be caused by various reasons: inflammation, hormonal imbalance, taking medications of various groups, including hormonal contraceptives, tumor, intercostal neuralgia, etc.

Mastodynia is divided into cyclic and non-cyclic. Non-cyclic mastodynia, not associated with the menstrual cycle, can be a symptom of a number of diseases:

- sclerosing adenosis – increased proliferation of the epithelium in the terminal ducts and lobules, which leads to compression of the nerve endings and is perceived as pain;
- adenoma and fibroadenoma of the mammary gland;
- reactive sclerosis of connective tissue of the mammary gland;

- liposclerosis; • breast cancer;

• Teitz syndrome – inflammation of the osteochondral joints of the spine, osteochondrosis, scapulohumeral periarthritis, intercostal neuralgia. Cyclic mastodynia is associated with the functioning of the ovaries and the effect of sex hormones on the mammary glands. According to the International Classification of Diseases, 10th revision, mastodynia can be classified as an independent diagnosis in the absence of objective changes in the mammary gland.

Cyclic mastodynia can manifest itself as:

- against the background of the use of hormonal contraceptives (HC);
- as a symptom of premenstrual syndrome (PMS);
- as an independent symptom in the absence of other manifestations of PMS (premenstrual engorgement and pain); • as a symptom of benign breast dysplasia (mastopathy). Cyclic mastodynia in the background of the use of hormonal contraceptives (HC) Hormonal contraceptives (HC) are the most common means of contraception. Today, HC are prescribed not only for contraception, but also for preventive and therapeutic purposes. Studies conducted in recent years indicate additional effects of hormonal contraceptives: their use reduces the risk of ovarian and endometrial cancer, uterine fibroids, endometriosis, inflammatory diseases of the pelvic organs, chronic pelvic pain, menstrual irregularities, iron deficiency anemia and rheumatoid arthritis [2].

Reversible morphological changes in the mammary gland and the associated "adaptation pains" in the first few months after starting hormone therapy occur due to hormonal imbalance. As is known, during the "adaptation period" there is a change in hormonal balance, which causes hormonal changes in the mammary glands. Hormonal changes are caused by the influence of the components included in the contraceptive. Modern hormonal drugs consist of two components: estrogenic and gestagenic. The estrogenic component of modern hormonal contraceptives is ethinyl estradiol. Various synthetic progestins are most often used as a gestagenic component.

Mastodynia as an independent premenstrual symptom occurs in approximately 10% of healthy women and, if mild, does not require drug therapy. Mastodynia is explained by fluid retention (edema), compression of nerve endings, increased cell proliferation, the action of biologically active substances (BAS) produced in increased quantities, in particular histamine, serotonin, prostaglandins and pain amines. Immediately before menstruation, an increase in the mammary gland by 30-40% of the original size can be noted. These phenomena are manifested by severe subjective sensations in the form of pain, a feeling of distension, an increase in the volume of the glands, the appearance of seals, pain radiating to the shoulder. If we talk about whether cyclical mastodynia is a symptom of PMS, then scientific data on this issue are contradictory. It is assumed that the basis of the pathological process are various kinds of hormonal disorders,

manifested in a relative increase in the level of estrogens with a low level of progesterone, a violation of the metabolism of essential fatty acids, as well as psychoemotional disorders.

Nevertheless, the role of progesterone deficiency in the development of mastodynia seems to be the most reliable. Cyclic changes in the reproductive system during the menstrual cycle are reflected in the condition of the mammary glands. At the end of the follicular phase of the menstrual cycle, estrogens together with follicle-stimulating hormone (FSH) cause hyperplasia of the glandular lobules, which is then enhanced by progesterone. This is manifested by premenstrual tension of the mammary glands. Progesterone counteracts the proliferation of capillaries caused by estrogens and reduces the intensity of cyclic edema of the connective tissue stroma of the mammary gland. In addition, secretory transformations of the glandular component against the background of impaired secretion of progesterone are accompanied by fluid retention and overstretching of the mammary gland tissue, which leads to the formation of pain syndrome.

Probably, the same mechanism of pain syndrome formation occurs when taking hormonal contraception, as well as during puberty, premenopause and pregnancy. One of the methods of correcting hormonal imbalances in PMS, menstrual cycle disorders, etc. is the use of hormonal therapy: estrogens and progestins. At the same time, the use of both synthetic and natural analogues of female sex hormones can lead to fluid retention in the woman's body and also manifest itself, in particular, as mastodynia.

Prevention of occurrence and treatment options for mastodynia The arsenal of drugs that doctors use to treat mastodynia is extensive. In addition to traditional pharmacological drugs, it now includes vitamins, herbal teas, homeopathic remedies and hormonal drugs. Some authors recommend starting treatment with the development and strict adherence to a diet. It is believed that caffeine, theobromine, theophylline contribute to the development of fibrous tissue and the formation of fluid in cysts, so it is recommended to limit such products as coffee, tea, chocolate, cocoa or completely refuse to use them, which can significantly reduce pain and tension in the mammary glands. Since estrogen utilization occurs in the liver, any dietary violations that hinder or limit normal liver function (cholestasis, fatty foods, alcohol, other hepatotoxic substances) can eventually affect the clearance of estrogens in the body. Vitamin therapy should be included in the treatment of mastodynia. Vitamins enhance the therapeutic activity of active drugs, eliminate or reduce side effects, stabilize the activity of the peripheral and central nervous system, and strengthen the body's immune system. Vitamins A, B, and E are most often used to treat mastodynia. Phytotherapy is widely used to treat mastodynia - specially selected herbal infusions that normalize metabolism. Non-hormonal methods of treating breast diseases, such as phytotherapy, Klammin[®] - a complex of biologically active substances, Icelandic cetraria decoction, Mastodinon[®] - a homeopathic herbal preparation, vitamins A, E, C, B, iodine-

containing preparations, bioresonance therapy, acupuncture, etc., can provide a positive therapeutic effect, but it is often short-lived. This is what determines the search for new treatment methods, including hormone therapy.

Memogel® is a gel containing natural progesterone at a dose of 1 g of progesterone per 100 g of gel. One dose of the applicator contains 25 mg of progesterone. The advantage of this drug is that it can be prescribed both independently for the treatment of mastopathy and in combination with other methods of therapy aimed at correcting various gynecological diseases.

This is a drug for local use, which is applied to the surface of the mammary glands, with the exception of the areola and nipple. The drug is a natural, effective and safe remedy for the treatment of mastodynia. Skin applications allow increasing the concentration of natural progesterone in the tissues of the mammary gland, which leads to the correction of the imbalance between estrogens and progesterone at the level of the mammary gland.

Thus, Memogel® is an effective means for reducing and preventing symptoms of engorgement and soreness of the mammary glands when taking hormonal drugs, as well as in postmenstrual syndrome. This therapy is indicated to reduce side effects on breast tissue and prevent the patient from stopping taking hormonal contraceptives.

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