

**BENIGNANT BREAST HYPERPLASIA: DIAGNOSIS AND TREATMENT ALGORITHM****Mirza Nigmatovich Tillyashaikhov\* and Nadira Saidoripovna Shomansurova**Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology Farobi Street- 383,  
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**SUMMARY**

Physiology and pathology of the mammary glands have always been one of the most difficult areas of medical science and practice. This is a complex problem, the scientific, medical, diagnostic, methodological and organizational aspects of which are clearly interdisciplinary. Recent years have been characterized by a sharp increase in the frequency of hyperplastic processes and breast cancer. The largest proportion among benign pathology of the mammary glands is mastopathy or fibrocystic disease. Due to these circumstances, the study of development mechanisms, timely diagnosis and treatment mastopathy is a major medical and social problem.

**KEYWORDS:** Mastopathy, algorithm of diagnosis, algorithm of treatment.**OBJECTIVE:** to modernize the diagnosis algorithm for mastopathy.

Mastopathy is a benign hyperplastic process characterized by a wide range of proliferative and regressive changes in breast tissue with an incorrect ratio of epithelial and connective tissue components.<sup>[1]</sup>

The proliferative-secretory processes that occur in the breast, most actively regulate estrogens, progesterone, prolactin, thyroid hormones, hormones of adrenal glands, androgens, prostaglandins and etc.<sup>[3]</sup>

Estrogens affect the development and lengthening of the ducts of the mammary gland, an increase in their number, causing hypertrophy of the stroma of the gland, which can lead to kink of the duct, the formation of closed areas and the formation of cysts. Under the influence of estrogens, the amount of electrolytes (sodium) in the cell increases, which trap water, causing tissue swelling and pain.<sup>[2,3]</sup>

Progesterone contributes to an increase in the number of alveoli, under its influence, edema and swelling of the intralobular stroma occur in the luteal phase, and there is a reactive transformation of the epithelium in myoepithelium.<sup>[1,5]</sup>

Due to the violation of the ratio between estrogens and progesterone in 97.8% of women of reproductive age with neuroendocrine pathology, dishormonal hyperplasia occurs.<sup>[3,7]</sup>

Prolactin together with estrogens and progesterone affects the formation and functional activity of the breast,

stimulates thyroid hormones (thyroxine, triiodothyronine) play an important role in the morphogenesis and functional differentiation of mammary epithelial cells, are involved in the regulation of epidermal growth factor receptors, and the synthesis and metabolism of steroid ovarian hormones. Thyroid pathology is observed in 64% of women with various forms of mastopathy.<sup>[4,5]</sup>

Corticosteroids promote the formation of prolactin receptors in the breast and stimulate the growth of epithelial cells in synergism with prolactin.

Androgens suppress secretory processes in the breast, inhibit the pituitary gonadotropic function. Pancreatic hormones (insulin) together with progesterone, prolactin and corticosteroids contribute to the development of ducts in the breast.

Prostaglandins affect the permeability of the vascular wall, electrolyte and water balance in the tissues of the breast.

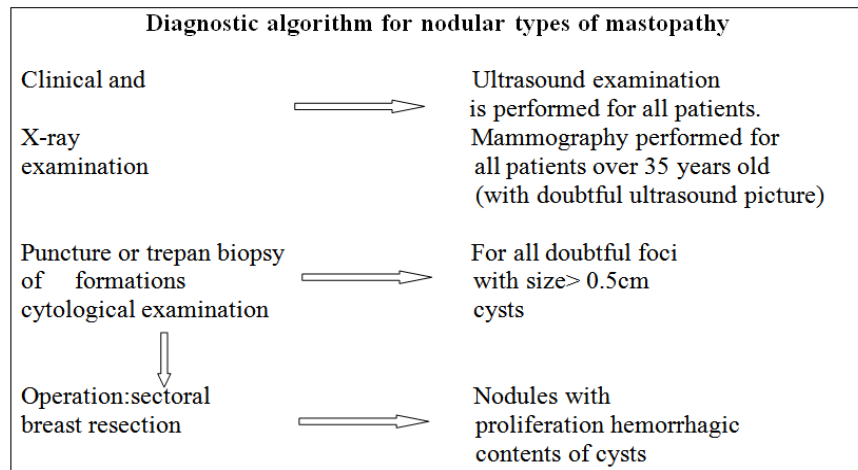
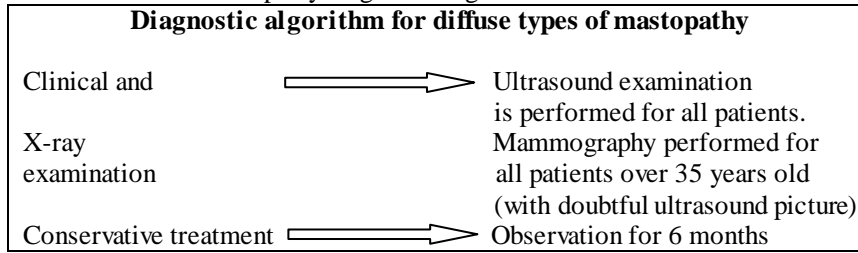
Enzymatic inactivation and conjugation of steroid hormones occurs in the liver. In patients with chronic pathology of the hepatobiliary system, on average, in 40-60% of cases, pathology of the breast is observed.<sup>[2,4]</sup>

Benign breast hyperplasia is of interest not only in connection with a significant frequency of occurrence, but mainly, as noted above, this is the background for the development of breast cancer.

Diagnosis of diseases of the mammary glands is based on examination of the mammary glands, their palpation,

mammography, ultrasound, puncture of nodules and suspicious areas.<sup>[3,8]</sup>

Despite the long history of studying mastopathy, it can be very difficult to find an adequate diagnostic and therapeutic algorithm. On the basis of our clinic mastopathy diagnostic algorithms were modernized:



Despite the fact that the history of treatment of mastopathy dates back more than 100 years, to date there are no standard treatment programs for various options for mastopathy. Questions remain open regarding the

duration of therapy, which ensures the normalization of hormonal-metabolic parameters. In connection with the above, we have developed an algorithm for the treatment of patients with a diagnosis of mastopathy.

#### Therapeutic tactics for various types of mastopathy

Clinical form of mastopathy	Operation	Puncture, aspiration of contents	Conservative treatment *
Diffuse mastopathy	-	-	+
Diffuse mastopathy with a predominance of the fibrous component and small cysts			+
Fibrous mastopathy with cysts over 3 cm with proliferation	+	+	+
Nodal form	+	+	+

#### A conservative non-hormonal treatment method includes

- The right choice of bra
- Diet, treatment of obesity and diabetes
- Vitamin therapy (A, C, E, B<sub>6</sub>, ascorbic acid)

#### Microdoses of iodine

- Hepatoprotectors
- Sedatives
- Diuretic herbs in the luteal phase.

Thus, summing up the above, with all forms of mastopathy, it is necessary to conduct pathogenetic substantiated conservative therapy, which should be

aimed at harmonizing the state of the neuroendocrine system, eliminating the imbalance of hormones in the tissues of the mammary glands.

The goal of comprehensive treatment of mastopathy is to improve the quality of life by eliminating the subjective manifestations of the disease and stopping the progression of the process, which ultimately aims to reduce the incidence of breast cancer.

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