



URGANCH DAVLAT TIBBIYOT INSTITUTI JANUBIY OROLBO‘YI TIBBIYOT JURNALI

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DEVELOPMENT TRENDS AND MORPHOLOGICAL CHARACTERISTICS OF PRECANCEROUS BREAST DISEASES IN WOMEN RESIDING IN THE ARAL SEA REGION

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Abstract . Breast cancer (BC),- the most common cancer in women is considered. 1.5 million new cases are detected every year and this is 25% of all malignant tumors. The incidence is growing rapidly in European countries. Especially often this process develops against the background of dyshormonal processes, based on this, a retrospective analysis was carried out in order to identify the role of dyshormonal pathology in the development of precancerous diseases.

Key words: breast cancer, dyshormonal diseases, histological variants, mastopathy, dyshormonal hiperplazia, fibroadenoma, precancerous diseases

OROL BO‘YI HUDIDIDA YASHOVCHI AYOLLARDA UT BEZINING SARATONOLDI KASALLIKLARINING RIVOJLANISH TENDENSIYALARI VA MORFOLOGIK TAVSIFI

Annotatsiya. Sut bezi saratoni (SBS) ayollar orasida eng ko‘p uchraydigan onkologik kasalliklardan biri hisoblanadi. Har yili 1,5 millionga yaqin yangi holat aniqlanadi va bu barcha xavfli o‘smalarning 25 foizini tashkil etadi. Yevropa mamlakatlarida kasallanish ko‘rsatkichi tez sur‘atlar bilan ortib bormoqda. Ayniqsa, ushbu jarayon ko‘pincha dishormonal o‘zgarishlar fonida rivojlanadi. Shu



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munosabat bilan dishormonal patologiyaning saratonoldi kasalliklari rivojlanishidagi o'rnini aniqlash maqsadida retrospektiv tahlil o'tkazildi.

Kalit so'zlar: sut bezi saratoni, dishormonal kasalliklar, gistologik variantlar, mastopatiya, dishormonal giperplaziya, fibroadenoma, saratonoldi kasalliklari.

ТЕНДЕНЦИИ РАЗВИТИЯ И МОРФОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ ПРЕДРАКОВЫХ ЗАБОЛЕВАНИЙ МОЛОЧНОЙ ЖЕЛЕЗЫ У ЖЕНЩИН, ПРОЖИВАЮЩИХ В ПРИАРАЛЬСКОМ РЕГИОНЕ

Аннотация. Рак молочной железы (РМЖ) является наиболее распространённым онкологическим заболеванием среди женщин. Ежегодно выявляется около 1,5 миллиона новых случаев, что составляет 25% всех злокачественных новообразований. Заболеваемость быстро растёт в странах Европы. Особенно часто данный процесс развивается на фоне дисгормональных нарушений. В связи с этим был проведён ретроспективный анализ с целью выявления роли дисгормональной патологии в развитии предраковых заболеваний молочной железы.

Ключевые слова: рак молочной железы, дисгормональные заболевания, гистологические варианты, мастопатия, дисгормональная гиперплазия, фибroadенoma, предраковые заболевания.

Introduction

Breast cancer (SBO) is a common cancer in women. Each year, 1.5 million women are diagnosed with breast cancer. This is 25% of all low-quality crops in the population. [one]. For almost a century, deaths from the disease have been increasing in all countries. In the European Union, 250,000 new cases of MCI have been diagnosed and 60,000 patients die from the disease. EU countries are 6-10 times more likely to get sick than Asian countries. One in 28 women in the United States dies from TCI. 8 of them are at risk for the disease. Due to the lack of screening programs in many countries, morbidity continues to rise and mortality rates are relatively high. [1,2].

The high incidence of precancerous lesions in women has a direct impact on the development of breast cancer. In this regard, early diagnosis of precancerous conditions, the study of their causes and prevention of their development into malignant tumors are important issues of early diagnosis and early detection of oncological diseases.

Breast cancer is one of the priority areas of modern medicine, with benign breast dysplasia (BMD) being the most common. In the population, their frequency is 30-43%. the development of dysplasia can be the result of many reasons, among which neuroendocrine diseases play the main role; a lot of information has been collected about the absolute hormonal dependence of these diseases. [7.9].

Breast cancer is a pathological process that can lead to adenocarcinoma. Precancerous lesions have different clinical manifestations and proceed in 3 stages.

1. Uneven diffuse hyperplasia - the tissue retains its normal structure, but the number of its components increases.

2. Focal proliferative stage - areas (foci) appear in the total mass of proliferating cells, in which cell division occurs especially intensively.

3. Stage of relatively benign tumor - proliferating cells lose their resemblance to the original tissue, but do not show a tendency to invasive growth and grow into healthy tissue. Precancerous processes can regress or stop developing for a long time. (6)

Thus, changes in the mammary gland, as a rule, are not a specific disease, but a variant of the body's response to hormonal disorders. In this regard, the most reasonable combined name for the processes occurring in the mammary gland is dyshormonal hyperplasia "DH", the simplified name of



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the pathology is "mastopathy". According to Davis and Gamp, the risk of breast cancer is 1.5-7 times higher in DG-type mastopathy [4,5].

The common etiopathogenesis, the relationship between mastopathy and breast changes in breast cancer, as well as the presence of DH before MCI are important reasons for close attention to this pathology. Unfortunately, we have to state the low level of medical vigilance in the treatment of DH and the uniformity of treatment approaches. The reason for this condition can be considered a wide polymorphism of clinical manifestations of mastopathy, many factors causing the disease, a long duration of the disease, including the period of undiagnosed disease. [3]. It is worth noting the low medical culture of the population.

Mastopathy (dyshormonal hyperplasia of the mammary glands - DH) is a disease characterized by a violation of the ratio of three components of breast tissue - connective, glandular and adipose, with various proliferative changes, according to different authors, is diagnosed in 60-80% of women of childbearing age. (Pushkarev S.B. et al., 2003). At the heart of mastopathy are the regulatory activity of the central nervous and hypothalamic-pituitary systems, dysfunction of the ovaries, adrenal glands, thyroid gland and liver, which affects hormonal homeostasis and leads to hyperplasia of breast tissue. According to the WHO, mastopathy is a fibrocystic breast disease characterized by a wide range of proliferative and regressive changes in breast tissue, in which the ratio of epithelial and connective tissue components is disturbed. Proliferative-secretory processes in the mammary gland are controlled by estrogens, progesterone, prolactin, thyroid hormones, adrenal glands, androgens, prostaglandins, etc. [1].

The main risk factors for DH:

1. Menstrual and sexual dysfunction

- Onset of menstruation before the age of 11 or after 15 years;
- menopause before 45 years of age or after 53 years;
- Sexual factors.

2. Disorders of pregnancy:

- infertility;
- miscarriages;
- multiple abortions;
- First birth after 30 years;
- the birth of the first child weighing more than 4 kg;
- features of lactation (lack of breastfeeding, short or long duration).

3. Diseases of the genital organs:

- uterine fibroids;
- ovarian cysts;
- endometriosis

4. Hereditary factors (cancer of the genital organs of the mother and breast).

5. Endocrine diseases:

- hypothyroidism (increases the risk of developing mastopathy by 3 times), hyperthyroidism;
- diabetes;
- hypothalamic syndrome and others.

6. Nervous diseases (prolonged stress leads to neuroses, neurasthenia).

7. Overweight.

8. Concomitant pathology (liver disease, cardiovascular pathology).

9. Chest trauma [4,5].

When studying the reasons for the development of DH, the question of the extent to which the disease is more common in women living on the islands was of interest, and in how many of them the violation of prokiferative processes turns into malignant tumors.

Causes of mastopathy:



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1. Hormonal disorders.

2. Chronic stressful situations.

3. Gynecological problems;

* Disorders of the menstrual cycle, ovaries, chronic diseases of the uterus, uterine fibroids, endometriosis;

* artificial termination of pregnancy - medical abortion;

* Short breastfeeding or lactation period;

Delay in the first pregnancy and childbirth (after 28 years);

* Menstrual cycle, late menopause;

Mastopathy is a disease of the mammary glands, affecting mainly women aged 20-25 to 45-50 years. According to the terminology of the World Health Organization (WHO), mastopathy is a fibrocystic disease of the breast, leading to a number of changes in its tissue. Distinguish between diffuse, nodular and fibrocystic forms of mastopathy. Fibroadenoma, cyst, adenosis, cystoepithelium, and other benign tumors also occur in the mammary glands. Scientists in this field note that the main causes of mastopathy are: hereditary factors, hormonal changes in the female body, the state of the nervous system, the ecological situation and an unhealthy lifestyle.

Gynecological diseases, in which many women experience changes in the breast tissue, are also inextricably linked with chronic inflammation of the ovaries, uterus, especially with the negative effect of abortion on breast tissue. In some cases, mastopathy is associated with endocrine and metabolic changes in the body (thyroid pathology, obesity, etc.). [8,10].

Table -1

Dyshormonal hyperplasia	Glandular dysplasia	Hyperplasia of the epithelium of the mammary gland
Diffuse dyshormonal fibrocystic disease	Focal hyperplasia	Fibrocystic Disease Protocol
Atypical protocol hyperplasia	Nodular fibrocystic changes	Breast hyperplasia
Fatty hyperplasia	Circular hyperplasia Benign tumor	

Currently, it is accepted that SCI is 3-5 times more common in women, and against the background of benign breast tumors, it often arises as a result of the proliferation of the epithelium of the nodular form of breast mastopathy. In this regard, in recent years, there has been an increasing interest in the study of benign tumors. Reducing mastopathy is a real way to reduce SBS.

Main part. To study the association of dyshormonal diseases in women with precancerous conditions.

Materials and methods: Retrospective analysis of outpatient cards and their case histories of patients who applied to the outpatient department of the Khorezm branch of the RIO and RIATM in 2015-2018.

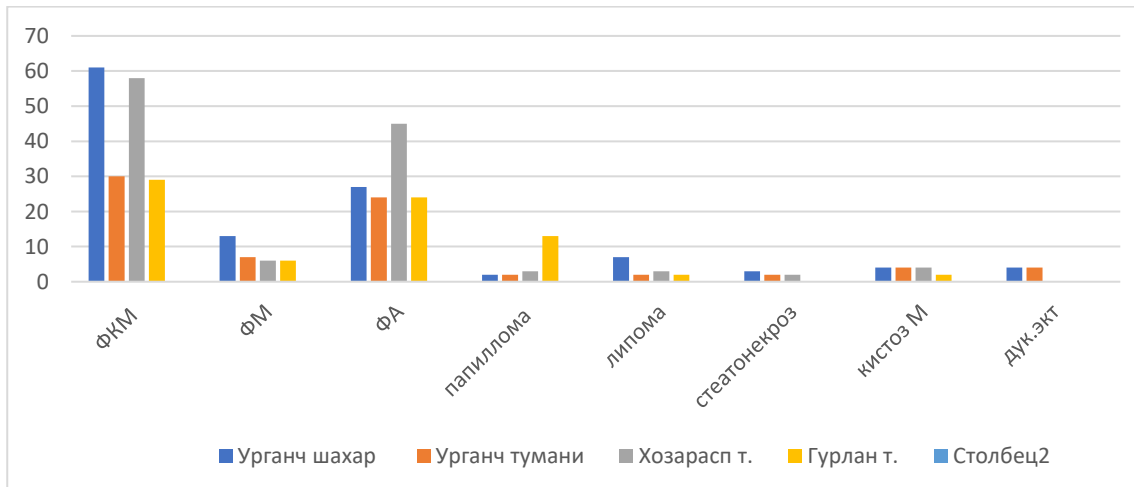
Results: A total of 393 outpatient records of women who applied to the outpatient department of the RIO and the Khorezm branch of RIATM were analyzed, of which 178 (45.24%) fibrocystic mastopathy (FCM), 120 (30.53%) fibroadenoma (FA), 32 (8.12%) nodular or fibrous mastopathy (FM), 7 (1.78%) steonecrosis, 20 (5%) papilloma, 14 (3.5%) cystic mastopathy (CM), 14 (3.5 %) lipomas and 8 (2%) had ductoectoses.



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The diagram shows that 45% of women with FCM are infected, with the majority (62) in Urgench and 58 (in the Khazarasp region). Fibroadenoma also took 2nd place with 45 cases in the Khazarasp region.

	Urgench city	Urgench district	Khazarasp region	Gurlan region	total
FKM	61	30	58	29	178
FM	13	7	6	6	32
FA	27	24	45	24	120
papilloma	2	2	3	13	20
lipoma	7	2	3	2	14
steatonecrosis	3	2	2	0	7
Cystic mastopathy	4	4	4	2	14
ductoectasia	4	4	0	0	8
Total	121	75	121	76	393

By age, 283 (72%) patients aged 18-44 years, 71 (18%) patients aged 45-59 years old, 28 (7%) patients aged 60-74 years old, 11 patients aged 75-90 years old (2.7%) there were no patients over 90 years old.

It can be seen that precancerous breast cancer is more common in women aged 18-44 years, and changes in hormonal status can lead to breast cancer dysplasia in such women. Such changes were observed in 47 examined women, and we observed that benign tumors in them became malignant and turned into malignant tumors. Of course, this is a very bad indicator, accounting for 11% of all examined patients. In our study, the anamnesis of such women, the absence of a normal sex life, multiple abortions, high abortions, the presence of persistent inflammation of the genitals and cysts are important.

In conclusion, it is of great importance in the early detection and prevention of oncological diseases, strengthening of oncological care in the polyclinic, primary health care departments, would serve to prevent the spread of the disease among young women.

REFERENCES

1. Adham A. Khodjanizayov, Baxrom S. Yuldashev, Mekhriban Kh. Khadjimuratova// Pathomorphological Characteristics of Metastatic Breast Cancer in Women Living in the Lower Aral Sea Region- American Journal of Medicine and Medical Sciences 2026, 16(2): 448-452
2. Atakhanova N.E., Almuradova D.M. Results of comprehensive treatment of operable triple-negative breast cancer // Bulletin of the Association of Physicians of Uzbekistan. – Tashkent, 2018. – No. 1. – P. 48–53.



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3. Alexandrova L.M., Starinsky V.V., Kaprin A.D., et al. Prevention of oncological diseases as the basis for interaction between the oncology service and primary healthcare // *Research and Practice in Medicine*. – 2017. – Vol. 4, No. 1. – P. 74–80.
4. Yuldashev B.S., Khadjimuratova M.K. Immunohistochemical characteristics of breast fibroadenoma disease in women living in Aral Sea region // *International Journal of Integrative and Modern Medicine*. – 2024. – Vol. 2, No. 11. – P. 203–206. – DOI: 10.2995/5319
5. Kakharov A.Zh. 2019 Clinical, morphological and molecular genetic features in the diagnosis and treatment of breast cancer."
6. De Boever J., Verheugen C., Van Maele G., Vandekerckhove D. Steroid concentrations in serum, breast glandular tissue, and breast cyst fluid in control and progesterone-treated patients. *Endocrinology of cystic breast disease*. Ed. A. Angeli. New York: Raven Press, 1983. Rr. 93-9.
7. Zava D.T., Groves M.N., Stanchik F.Z. Percutaneous absorption of progesterone. *Maturitas* 2014, 77 (2): 91-2
8. Kogan I.Yu., Myasnikova M.O., Musina E.V. Progesterone in the treatment of mastopathy. Ed. E.K. Ailamazyan. SPb, 2012.68 p. (in Russian).
9. Vysotskaya I.V., et al. *Endocrine-Sensitive Tumors of the Reproductive System: A Guide for Physicians*. – Moscow: Specialized Medical Book Publishing House (SIMK), 2014. – 126 p.
10. Lyubchenko L.N. Genetic testing in hereditary breast cancer // *Practical Oncology*. – 2014. – Vol. 15, No. 3. – P. 107–117.
11. Kuligina E.Sh. Epidemiological and molecular aspects of breast cancer // *Practical Oncology*. – 2010. – Vol. 11. – P. 203–216.
12. Meskikh E.V., Rozhkova N.I. Application of Progestogel in diffuse forms of mastopathy // *Tumors of the Female Reproductive System*. – 2012. – No. 1. – P. 57.
13. Semiglazov V.F., Merabishvili B.M., Semiglazov V.V., et al. Epidemiology and screening of breast cancer // *Problems in Oncology*. – 2017. – Vol. 63, No. 3. – P. 375–384.
14. Jorgensen T.J., Helzlsouer K.J., Clipp S.C., et al. DNA repair gene variants associated with benign breast disease in high cancer risk women // *Cancer Epidemiology, Biomarkers & Prevention*. – 2009. – Vol. 18, No. 1. – P. 346–350.