



Breast Cancer – Causes, Symptoms, Treatment and Prevention

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Abstract: Causes of the disease, their occurrence, methods of treatment. The choice of treatment depends on many factors: the stage of the disease, the age of the woman, the structure of the tumor and the rate of growth.

Keywords: cancer mutations, genetic predisposition, mastectomy, chemotherapy, hormone therapy.

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Breast cancer is a malignant tumor that develops in the breast tissue. It is the most common cancer among women in the world, with 99.4 cases per 100,000 women between the ages of 13 and 90. According to the WHO, between 800,000 and 1,000,000 new cases are registered worldwide every year.

Most tumors that arise in the mammary glands are of good quality and are not considered dangerous: they grow slowly, tumor cells do not differ significantly from healthy cells and do not spread to other organs or parts of the body.

Cancer mutations are caused by atypical changes in genes that regulate cell growth and keep them healthy. Poor quality cells proliferate uncontrollably, so over time they can spread beyond the primary tumor to surrounding healthy tissue, lymph nodes, and distant organs.

A malignant tumor that develops from breast cells is called breast cancer. Most often, the disease begins in the cells of the udder (mammary glands) or in the ducts (milk from the udder reaches the nipple).

Mastitis is a cancer that affects women of all ages and is more common in young women. The disease causes swelling and enlargement of the breasts, as well as an increase in body temperature and local temperature. The chest forms a dense, firm mass.

Saramassimon (roja) form – This type of cancer is similar to the inflammation of Sarama (roja). There is redness and unevenness of the breast, gland compaction. No nodules were found on palpation

Cancer Risk Factors – These are the causes that lead to cancer. But keep in mind that this is only about the possibility of developing cancer, and not about the inevitable development of the disease in a particular patient.

Risk factors are divided into two groups – those that cannot be influenced and those that can be minimized.

Unaffected risk factors include:

Female. In men, the disease rarely develops (this may be due to a mutation in the gene)
Age. The disease is diagnosed in 90% of cases in patients over 40 years old;
Genetic predisposition, the presence of mutations in the BRCA1 and BRCA2 genes;
Dangerous precancerous diseases of the mammary glands;
A history of breast cancer;
History of chest radiation exposure;
Early onset of menstruation or menarche (before 12 years of age), late menopause (after 55 years).

Possible risk factors:

Lack of pregnancy (increased risk if not pregnant), refusal to breastfeed, abortion;
Obesity;
Diabetes mellitus, hypertension;
Long-term use of steroid hormones, hormonal contraceptives;
Alcohol abuse, smoking;
Lack of physical activity;
Night work schedule.

Symptoms:

The formation of a dense mass in the breast, different from the surrounding tissue;
Changes in the size, shape, or appearance of the mammary glands;
Skin changes, itching, sunken areas;
Tightness in the chest;
Redness of the breast or part of it;

The skin looks like an orange peel.

These symptoms do not always mean the same as breast cancer. But a specialist can exclude a malignant disease only after an examination. If you have one or more of these symptoms, you will need complete, quality treatment. The choice of treatment depends on many factors: the stage of the disease, the age of the woman, the structure of the tumor and the rate of growth. Modern methods of treatment use the most optimal combination of surgical, radiation and chemotherapy methods, that is, an integrated approach. In therapy, specialists must approach each patient individually. A multidisciplinary panel of experts must offer the woman specific treatment options so that the treatment is successful both from an oncological and aesthetic point of view.

Operation.

When choosing the method of surgery, specialists plan in advance the option of restoring the shape and size of the breast. Surgical treatment involves two approaches: The method of breast reconstruction directly depends on them:

Lumpectomy – partial removal of the mammary glands;

A mastectomy is the complete removal of the mammary glands.

Mastectomy is required in the following cases:

If the patient has a small breast size;

The tumor grows on the skin or in the breast

If the tumor is very large;

If the tumor spreads to the chest.

In many cases, organ-sparing surgery is the preferred first choice. If there is no other option than mastectomy, the patient is offered various plastic surgery procedures for breast reconstruction depending on personal preference.

Chemotherapy

Chemotherapy can be prescribed both after surgery and before it. The goal of preoperative chemotherapy is to shrink the primary tumor so that it can be removed (lumpectomy) while preserving the breast.

After surgery, chemotherapy is prescribed to eliminate metastases and prevent future ones.

Radiation therapy.

Radiation therapy is used to treat breast cancer in three ways:

In the prevention of recurrence of the disease after surgery;

In symptomatic (palliative) treatment of tumors that cannot be removed;

With symptomatic treatment for complications due to prolonged metastases (pain, spinal cord or cerebral palsy).

Hormone therapy

Hormone therapy for breast cancer is used when the tumor has estrogen / progesterone receptors. It uses anti-estrogens such as tamoxifen, aromatase inhibitors, gonadotropin-releasing hormone.

Breast reconstruction.

Reconstructive surgery allows a woman to prevent stress from reshaping or removing her breasts. Various remodeling techniques are currently in use, which vary in complexity and duration.

Breast reconstruction methods:

Simultaneously – immediately after removal of the tumor during the operation;

Delayed – carried out after all stages of treatment.

Reconstructive surgery also differs in the type of tissue used for breast reconstruction. Depending on the situation, the body uses its own tissues (auto tissue) or permanent or temporary implants (all tissues).

Conclusion : Everyone can help their bodies stay as healthy as possible, including eating a balanced diet, maintaining a healthy body weight, quitting smoking, limiting alcohol, exercising regularly and exercising.

However, it is important to understand that a healthy lifestyle is not a guarantee that cancer is free, but a way to reduce the risk of developing the disease. Some women have a higher risk of developing breast cancer due to genetic factors. For example, if several close relatives (women and men) are diagnosed with breast cancer, especially at an early age, mutations in the BRCA1 or BRCA2 genes are more likely.

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