SCIENCE AND INNOVATION

INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

#### **BREAST CANCER DETECTION METHODS, SYMPTOMS, CAUSES, TREATMENT**

Madaminov Muxammadvali Ikromjon oʻgʻli

Tashkent Medical Academy

Farrukh Shernazarov

Samarkand State Medical University

#### https://doi.org/10.5281/zenodo.7401437

**Abstract.** Breast cancer (oncology) is a disease caused by the transformation of normal breast cells into cancer cells. Breast cancer is the second most common type of cancer after lung cancer and is the most common cancer among women. About 10% of women aged 13-90 are affected by this disease. This disease is less common in men (1%).

*Keywords:* causes, breast cancer self-diagnosis, diagnosis, breast cancer treatment, recovery rates.

## МЕТОДЫ ВЫЯВЛЕНИЯ РАКА МОЛОЧНОЙ ЖЕЛЕЗЫ, СИМПТОМЫ, ПРИЧИНЫ, ЛЕЧЕНИЕ

Аннотация. Рак молочной железы (онкология) — это заболевание, вызванное превращением нормальных клеток молочной железы в раковые. Рак молочной железы является вторым наиболее распространенным типом рака после рака легких и наиболее распространенным видом рака среди женщин. Около 10% женщин в возрасте 13-90 лет страдают этим заболеванием. Это заболевание реже встречается у мужчин (1%).

*Ключевые слова:* причины, самодиагностика рака молочной железы, диагностика, лечение рака молочной железы, показатели выздоровления.

#### 1. HEREDITY (GENETIC) DISPOSITION

Breast cancer often occurs in women who have relatives with this disease. First of all, it means mother and/or sisters. If there are cancer patients among close relatives, oncological diagnosis should be carried out from an early age.

According to statistics, the most common breast cancer occurs in women with high levels of the estrogen hormone. The longer the menstrual cycle lasts, the higher the level of the hormone estrogen in women. Childbirth and lack of pregnancy can also be related to this risk factor.

#### 3. PRESENCE OF CANCER OF THE SEXUAL ORGANS (INCLUDING CURE)

The direct relationship between the female genital organs and the mammary glands does its job: low-grade cancers of the cervix, uterus and other organs often cause breast cancer. will be

4. SMOKING, ALCOHOL BEVERAGES

Carcinogens, including alcohol and tobacco products, reduce the body's defenses and can cause cancer.

5. DIABETES, HYPERTENSION, OBESITY

These diseases indicate problems in the endocrine system.

6. TAKING EXOGENOUS HORMONES FOR 10 YEARS OR MORE

Long-term use of these drugs for contraceptive or therapeutic purposes has been found to increase the risk of cancer.

7. WOUNDS, MASTITIS

SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

Even if there is no risk factor from the above, the risk of developing this disease cannot be completely eliminated. The only way to reduce the damage is early diagnosis of oncological disease.

#### PERSONAL DETECTION OF BREAST CANCER

To find out whether a patient is at risk or not, it is necessary to be aware of what can cause breast cancer and who is most affected by this disease.

Not even the most qualified doctor can confirm the absence of breast cancer. If you have one or more of the symptoms of the disease listed below, you should definitely monitor the condition of the mammary glands, which will allow you to detect the disease in time.

Most often, breast cancer is detected in women who gave birth to their first child after the age of 30 or who did not give birth at all before this age. After the age of 50, the risk of the disease increases in all women without exception. Although breast cancer does not pass from generation to generation, if someone in your family has been affected by such diseases, unfortunately, you have an increased risk of developing the disease.

Modern methods of breast cancer diagnosis help to detect the disease at an early stage. Oncologists recommend a mammological examination every two years between the ages of 35 and 50, and an annual examination starting at the age of 50 is appropriate.

Anyone can self-diagnose breast cancer before going to the doctor. Symptoms of breast cancer are very clear: a small density is formed in the breast, usually painless and does not change in size and density within a month. You can determine the resulting density by feeling it yourself.

Pay attention to the following:

The shape of the breast: if the breast is "pulled back", it has become smaller, it is possible to talk about an oncological disease;

Breast shape: changes in shape, presence of any densities;

The structure of the mammary glands: any densities and hard nodules are checked;

The size of the lymph nodes: their enlargement is a frequent symptom in oncology; Skin color;

Your feelings: breast pain, experiencing unpleasant feelings during the menstrual cycle.

It does not take much time to diagnose breast cancer. During the examination, stand in front of the mirror, raise your hands above your head, look at your chest. Characteristic "depths" on the skin can tell about the presence of glands (densities).

If there are glands, if one or both breasts bleed, if discomfort occurs, you should immediately see a mammologist, who can correctly determine whether or not there is oncology.

IDENTIFY

If you have any suspicions or signs of breast cancer, visit your doctor for a professional examination. The mammologist conducts a series of examinations:

Mammography. This is the main diagnostic method, which involves radiography of the mammary glands. With its help, it is possible to determine the tumor (tumor), its shape and size. Computed tomography is also used to study the structure of the breast and tumors based on X-rays.

Let's see. Diagnosis of breast cancer in mammology begins with this method. In fact, it does not differ from the personal diagnosis method, but the result is more accurate.

UTT. The method available in almost any clinic allows to study the three-dimensional image of the tumor.

Magnetic resonance imaging. MRI will clarify the information obtained as a result of other studies.

Biopsy. This method helps to determine the type of tumor. Poor quality is determined by examining pieces of tumor tissue under a microscope.

Early diagnosis of oncological disease consists only of self-examination, doctor's examination and mammography. Other methods (CT, MRT, UTT, biopsy) are prescribed only after the density is determined and allow to determine the size, shape, and nature of tumors.

## TREATMENT OF BREAST CANCER

If the symptoms of breast cancer confirm your suspicions, you should immediately start treatment at an oncology clinic. It is not recommended to delay the treatment of the disease. The types of treatment currently available are:

## 1. OPERATIVE (RADICAL)

This treatment is aimed at the complete removal of the tumor through surgery. Surgical intervention is the only way to completely cure this disease. But it does not always give a positive result: a lot depends on the nature and stage of the cancer.

## 2. AUXILIARY (RADICAL IN CONDITIONAL APPROACH)

These treatments can be used before, during, and after surgery, or in rare cases instead of surgery. These include radiation therapy, chemotherapy, targeted and immunotherapy.

## 3. PALLIATIVE

If the diagnosis of oncology is made too late or the disease is deeply developed, even the complete removal of the breast will not benefit health. If the patient refuses surgery, metastasis will occur, and the oncologist can only prescribe palliative treatment. This method of treatment relieves the symptoms of the disease and prolongs life.

## RADICAL METHODS OF TREATMENT OF BREAST CANCER

A few decades ago, to treat this disease, it was necessary to completely remove the breast. This has forced many patients to refuse the most effective therapy. Currently, the complete removal of the breast is not always required: new types of operations and new methods have been created that allow at least partial preservation of the breast.

## LAMPECTOMY

Such an operation includes the removal of the tumor itself. It is carried out on the condition that the tumor is only in one area and is not large (up to 4 cm). Maintains breast shape and sensitivity after lumpectomy. After the operation, it is necessary to carry out radiation therapy (5-7 weeks).

Unfortunately, lumpectomy does not exclude relapses (recurrences) - they occur more often with lumpectomy than with other operations.

# RADICAL SECTOR RESECTION BY BLOKHIN

This type of surgery allows you to preserve the breast, but change its shape and size: 25-33% of the breast is removed, including the pectoralis minor muscle, lymph nodes in the armpits, under the spine. . Removal of tissue is necessary to prevent the development of metastases when breast cancer returns.

MASTECTOMY

SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

Radical mastectomy involves the complete removal of the breast and other tissues. In most cases, recurrences are not recorded in such an operation. It is effective only when there is

most cases, recurrences are not recorded in such an operation. It is effective only when there is no metastasis. However, in the presence of metastasis, mastectomy prolongs the patient's life and improves the quality of life. The cosmetic effect of mastectomy is very serious, but it is the only way to save life in large tumors.

In addition to traditional surgical methods, additional methods can be used: cryomammotomy and ablation (laser, radio wave, etc.). These methods are used for women who are prohibited from surgical operations (for example, patients with diabetes). In such cases, breast cancer patients can be successfully treated with less surgery, but relapses can also occur.

## RADICAL TREATMENT OF BREAST CANCER

Conditionally radical treatment requires long-term rehabilitation and has a very high efficiency. These methods include:

## RADIATION THERAPY

Exposure to radiation therapy is used only as an adjunct to surgery. During the procedure, cancer cells are destroyed directly in the tumor area. The main task of such treatment is to eliminate postoperative relapses.

## CHEMOTHERAPY

This involves taking chemicals that have a negative effect on cancer cells. These are poisons and affect healthy blood and body cells as well as cancer cells.

Chemotherapy drugs are produced as solutions or tablets for intravenous administration. Chemotherapy is sometimes done in several stages. They are used before and after surgery, sometimes they are used instead of surgery. After chemotherapy, the body can recover within a few months.

# TARGETED THERAPY

This method is aimed at blocking the HER2 gene, which causes cancer to grow. Medicines can slow tumor growth or prevent cancer from coming back after surgery.

## IMMUNOTHERAPY

The method uses the patient's body's own defense mechanisms. By stimulating the immune system, drugs help destroy cancer cells. Immunotherapy alone is not enough to treat breast cancer, so it is used only in combination with other methods (for example, with chemotherapy).

Treatment of breast oncology has traditionally been carried out by radical methods, and even if the results are successful, there is often a risk of recurrence. Chemotherapy and radiotherapy can stop the growth of metastasis.

## PALLIATIVE TREATMENT

Palliative care refers to treatment aimed at reducing the patient's suffering in the incurable stages of the disease. Palliative treatment includes strong analgesics, surgery to remove the center of breast cancer, drugs that strengthen the immune system and relieve symptoms.

This treatment is prescribed in the last stages of cancer.

# INDICATORS OF RECOVERY

Cancer is the most "insidious" disease that cannot be completely cured even by removing the tumor or the affected organ. Therefore, during surgery, not only mammary glands, but also tissues around them, including lymph nodes, can be removed.

SCIENCE AND INNOVATION INTERNATIONAL SCIENTIFIC JOURNAL VOLUME 1 ISSUE 8 UIF-2022: 8.2 | ISSN: 2181-3337

However, with adequate treatment, recovery (or long-term remission) is possible. The article shows only the main types of operations and methods of additional therapy, in fact, new drugs and methods appear every year.

Remission is a period in which there are no symptoms of the disease.

The most important thing for patients: the earlier the treatment starts, the more chances there are to cure the disease. In most cases, the cancer is completely eliminated in the first and second stages. But at the last stage, patients need constant supervision of an oncologist. Breast cancer is not a death sentence, you just need to follow the instructions of a qualified doctor.

## REFERENCES

- 1. Tohirova J., Shernazarov F. ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION //Science and innovation. 2022. T. 1. №. D5. C. 7-12.
- 2. Farhod o'g'li S. F. GASTRIT—SABABLARI, ALOMATLARI, TASHXISLASH, DAVOLASH, DORILAR, ASORATLARI, OLDINI OLISH //Лучший инноватор в области науки. 2022. Т. 1. №. 1. С. 103-107.
- 3. Tohirova J., Shernazarov F. ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION //Science and innovation. 2022. T. 1. №. D5. C. 7-12.
- 4. F. Shernazarov ATHEROSCLEROSIS: CAUSES, SYMPTOMS, DIAGNOSIS, TREATMENT AND PREVENTION 2022. // SAI. №D5. URL: https://cyberleninka.ru/article/n/atherosclerosis-causes-symptoms-diagnosis-treatment-andprevention (дата обращения: 20.10.2022).
- 5. F. Shernazarov, J. Tohirova, D. Jalalova TYPES OF HEMORRHAGIC DISEASES, CHANGES IN NEWBOENS, THEIR EARLY DIAGNOSIS // SAI. 2022. №D5. URL: https://cyberleninka.ru/article/n/types-of-hemorrhagic-diseases-changes-in-newboens-theirearly-diagnosis (дата обращения: 20.10.2022).
- 6. Qizi T. J. I., Farrukh S. TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID //Science and innovation. 2022. T. 1. №. D3. C. 317-320.
- 7. Shernazarov F., Azimov A. INCREASED BRAIN PRESSURE-CAUSES, SYMPTOMS, COMPLICATIONS, TREATMENT //Современная медицина: новые подходы и актуальные исследования. 2021. С. 73-77.
- qizi Tohirova J. I., ogʻli Ibragimov B. I., ogʻli Shernazarov F. F. CONGENITAL HEART DISEASE-CAUSES, CLASSIFICATION, DIAGNOSIS, TREATMENT, COMPLICATIONS, CONSEQUENCES //Eurasian Journal of Medical and Natural Sciences. – 2022. – T. 2. – №. 3. – C. 84-89.
- 9. Mratbaevna W. N., Farrux S. The Structure of the Heart and its Physiology in Regular Athletes //Eurasian Scientific Herald. 2022. T. 8. C. 102-105.
- 10. Farhod o'g'li S. F. GASTRIT—SABABLARI, ALOMATLARI, TASHXISLASH, DAVOLASH, DORILAR, ASORATLARI, OLDINI OLISH //Лучший инноватор в области науки. 2022. Т. 1. №. 1. С. 103-107.
- 11. Фаррух Ш. и др. ПУТИ УСТРАНЕНИЯ САХАРНОГО ДИАБЕТА //Science and innovation. 2022. Т. 1. №. D3. С. 313-316.

- 12. ПУТИ УСТРАНЕНИЯ САХАРНОГО ДИАБЕТА. Тохирова Жайрона Иззатилло Қизи, Шерназаров Фаррух «Science and innovation» 2022 yil 3-sonida 313-316 bet
- 13. https://doi.org/10.5281/zenodo.6803520
- Shernazarov Farrukh. (2022). TREATMENT OF MYOCARDIAL INFARCTION AND FIRST AID. "science and Innovation" International Scientific Journal. ISSN: 2181-3337, 1(3), 317–320. https://doi.org/10.5281/zenodo.6803550
- 15. Shernazarov Farrux. Eurasian Scientific Herald