Male Breast Cancer

Breast cancer is a disease in which cancer cells form in the tissues of the breast. Breast cancer can strike men at any age, but it is most common between 60 and 70 years of age. Male breast cancer makes up less than 1 percent of all breast cancer cases. Doctors diagnose about 2,500 new cases in the United States every year.

Types of breast cancer

The types of breast cancer are:

- **Infiltrating ductal carcinoma**: This cancer spreads beyond the breast ducts. Most men with breast cancer have this type of cancer.
- **Ductal carcinoma in situ**: These cancer cells are found in the lining of a duct. This type is also called intraductal carcinoma.
- **Inflammatory breast cancer**: With this type of cancer, the breast looks red and swollen and it feels warm.
- **Paget’s disease of the nipple**: This type of tumor grows from the breast ducts beneath the nipple onto the surface of the nipple.

Male breast cancer risk factors

Anything that increases your chance of getting a disease is called a risk factor. Risk factors for male breast cancer are:

- Age
- Exposure of the breast to radiation
- Low testicular function due to:
  - Inflammation of or injury to the testes
  - Undescended testes
- Gynecomastia (abnormal enlargement of the breast in men)
- Higher levels of estrogen in the body due to cirrhosis (liver disease) or Klinefelter’s syndrome (a genetic disorder)
- Female relatives who have had breast cancer, especially with an alteration in the BRCA2 gene
- BRCA1 or BRCA2 mutation

Breast cancer diagnosis in men

Typically, men with breast cancer have lumps that can be felt. Biopsies can be done to find cancer. A biopsy is the removal of tissue or fluid. The types of biopsies are:

- **Needle biopsy**: The doctor uses a thin needle to remove part of a lump, tissue or fluid. This procedure is also called a fine-needle aspiration biopsy.
- **Core biopsy**: The doctor uses a wide needle to remove part of a lump or tissue.
• **Excisional biopsy:** The doctor removes an entire lump or tissue.

After the tissue or fluid is removed, a doctor in a lab tests it for cancer.

**Survival for men with breast cancer**

Survival for men is similar to women when the stage (extent of the cancer in the body) at diagnosis is the same. Breast cancer in men, however, is often diagnosed at a later stage.

**Stages of male breast cancer**

Tests reveal if the cancer has spread within the breast or to other parts of the body. This process is called staging – when the doctor decides the stage of the disease. Knowing the stage is important in order to plan treatment. The clinical stages of breast cancer are:

**Stage 0 (carcinoma in situ)**
In stage 0, abnormal cells are in the breast. They have not spread to nearby tissue. This is called carcinoma in situ. The 2 types of breast carcinoma in situ are:
- Ductal carcinoma in situ (DCIS) - a noninvasive, precancerous condition in which abnormal cells are found in the lining of a breast duct. The cells have not spread outside the duct to other tissues in the breast. In some cases, DCIS may become invasive cancer and spread to other tissues, although it is not known how to predict which lesions will become invasive.
- Lobular carcinoma in situ (LCIS) - a condition in which abnormal cells are found in the lobules of the breast. This condition seldom become invasive cancer and is rare in men.

**Stage I**
The tumor is 2 centimeters or smaller and has not spread outside the breast.

**Stage IIA**
- No tumor is found in the breast but cancer is found in the axillary lymph nodes (the lymph nodes under the arm),
- The tumor is 2 centimeters or smaller and has spread to the axillary lymph nodes or
- The tumor is between 2 and 5 centimeters but has not spread to the axillary lymph nodes.

**Stage IIB**
The tumor is either:
- Between 2 and 5 centimeters and has spread to the axillary lymph nodes (the lymph nodes under the arm) or
- Larger than 5 centimeters but has not spread to the axillary lymph nodes.

**Stage IIIA**
- No tumor is found in the breast, but cancer is found in axillary lymph (the lymph nodes under the arm) nodes that are attached to each other or to other structures or
- The tumor is 5 centimeters or smaller and has spread to axillary lymph nodes that are attached to each other or to the structures or
• The tumor is larger than 5 centimeters and has spread to axillary lymph nodes that may be attached to each other or to other structures.

**Stage IIIb**
The cancer may be any size and:
• Has spread to tissues near the breast (the skin or chest wall, including the ribs and muscles in the chest) and
• May have spread to lymph nodes within the breast or under the arm.

**Stage IIIc**
The cancer:
• Has spread to lymph nodes beneath the collarbone and near the neck and
• May have spread to lymph nodes within the breast or under the arm and to tissues near the breast.

**Stage IV**
The cancer has spread to other organs of the body, most often the bones, lungs, liver or brain.

**Treatment**

There are 4 types of standard treatment:
• Surgery to remove the cancer
• Chemotherapy (chemo) - uses medicines to kill cancer cells
• Hormone treatment - uses hormones to stop cancer cells from growing
• Radiation treatment - uses high-dose X-rays to kill cancer cells

**Treatment by stage**

**Stage 0 or Stage I**
Most men in this group need surgery to remove the breast cancer. Doctors usually do a mastectomy, removal of the whole breast. Doctors will also, if needed, remove lymph nodes under the arm.

Lumpectomy or other breast-conserving procedures can sometimes be performed in men with breast cancer. If breast-conserving procedures are done, they should be followed by radiation treatment.

Hormone treatment (tamoxifen) is suggested for most men with estrogen receptor-positive tumors. Some men with stage I breast cancer may need chemo, depending on the size of the cancer and the tumor biology.

**Stage II**
The options for surgery and radiation treatment are the same as with stage I cancers. If the lymph nodes have cancer cells, hormone treatment, chemo or radiation may be needed.
Hormone treatment is suggested for most men with estrogen receptor-positive tumors. Some men will need chemotherapy, but this depends on a man’s age, overall health and tumor biology. Older men, particularly those in poor health, are less likely to have chemo.

Men may also need radiation if several lymph nodes are involved. Radiation treatment reduces the chance that the cancer will come back and it may increase the chance for cure.

**Stage III**
Stage III is generally treated with chemotherapy and surgery, followed by hormone treatment (if the tumor is estrogen or progesterone receptor positive). In addition, most doctors suggest radiation treatment to the chest wall.

**Stage IV**
The main treatment for stage IV is chemo, hormone treatment or both.

Radiation and surgery also treat certain symptoms. This depends on where the cancer has spread. For example, radiation treatment may help pain from cancer spreading to the bone. Also, medicines such as biphosphonates or RANK ligand inhibitors can help prevent bone damage caused by cancer that has spread.

**Recurrence**

Recurrent disease means that the cancer has come back after treatment. It may come back in the breast, in the soft tissues of the chest (the chest wall) or in another part of the body.

If the cancer comes back in the breast or chest wall and has not spread to other areas of the body, cure is still possible. Doctors suggest surgery, followed by radiation treatment. If the area has already received radiation, it may not be possible to have more. If the cancer comes back in a distant part of the body, it is treated the same as stage IV disease.

**Resources**

**The Learning Center**
The Learning Center is a patient education library. We provide current and reliable information on cancer prevention, treatment, coping and general health.

- Theodore N. Law Learning Center, Main Building, Floor 4, 713-745-8063
- Levit Family Learning Center, Mays Clinic, Floor 2, 713-563-8010
- Holden Foundation Learning Center, Jesse H. Jones Rotary House International, 713-745-0007

Books available in The Learning Center:
- “Saving Jack: A Man’s Struggle With Breast Cancer,” by Jack Willis
- “Diseases of the Breast,” 4th ed, by Harris, Lippman, Morrow and Osborne

**American Cancer Society**
800-227-2345
www.cancer.org
Across the United States, this voluntary organization offers free booklets, support groups, and programs like Reach to Recovery.

**National Cancer Institute’s Cancer Information Service (CIS)**
800-422-6237
www.cancer.gov
Supported by the National Cancer Institute, this free telephone service provides current information on cancer prevention, detection, diagnosis, treatment and rehabilitation. CIS also makes referrals for counseling, home care services, and hospice and screening programs. Bilingual counselors are on duty to help Spanish-speaking callers.