Coping With Male Breast Cancer

Breast Cancer
Task Force
of the Greater Miami Valley

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A collaborative effort of health care professionals and breast cancer survivors in the Greater Dayton Area

September 2009

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MALE BREAST CANCER

Among American men, breast cancer is not very common and makes up less than 1% of *all* (male and female) breast cancer cases. Although men of all ages can be affected with the disease, the average age of a man at the time of his diagnosis is between 60 and 70 years of age.

The overall survival for men with breast cancer is influenced by the extent, or stage, of the disease at the time of diagnosis. Because men have less breast tissue than women, health care professionals are able to find small cancerous areas. However, since men have less breast tissue, cancers do not need to grow very far to reach the chest muscles or the skin covering the breasts. Therefore, although male breast cancers are usually smaller than female's when first found, they have more often spread beyond the breast tissue.

Early detection improves the chances that male breast cancer, as well as many other cancers such as prostate and colorectal, can be successfully treated. The American Cancer Society recommends a yearly cancer-related health checkup for all men and women age 40 years and older. A health care provider can find many male breast cancers earlier if regular checkups are performed.

RISK FACTORS

Several factors increase a man's chances of developing breast cancer. Having one or more of these risk factors, however, does not necessarily mean that a man will get cancer:

- **Increased age**—The average age of a man at time of diagnosis is 65 years old.
- **Family history**—Having family members (male or female) with breast cancer, especially with a BRCA1 or BRCA2 gene mutation, increases both men's and women's chances of breast cancer.
- **Radiation exposure—**Men who have had their chest area exposed to radiation treatment have a higher risk of breast cancer.
- **Hormones**—Higher levels of estrogen either by disease or means of treatment increase incidence of breast cancer in men.
- **Genetic conditions**—Men with a genetic condition, such as Klinefelter's Syndrome, have an increased incidence of breast cancer.

Survival for men with breast cancer is very similar to survival for women with breast cancer when their stage (how advanced the cancer is) at diagnosis is the same. However, breast cancer in men is often diagnosed at a later stage when the ability to cure the cancer is limited. The treatment options and chance for recovery depend on the stage of the cancer, the cancer type, cancer cell characteristics, whether the cancer is found in both breasts, and the patient's age and general health.

IS IT BREAST CANCER?

Cancer is a group of many related diseases that begin in cells, the body's basic units of life. To understand cancer, it is helpful to know what happens when normal cells become cancerous.

The body is made up of many types of cells. Normally, cells grow and divide to produce more cells only when the body needs them. This orderly process helps keep the body healthy. However, cells sometimes keep dividing when new cells are not needed. These extra cells form a mass of tissue, called a growth or tumor. Tumors can be benign or malignant. Malignant tumors are cancerous. Cells in these tumors are abnormal. They divide out of order, and they can invade and damage nearby tissues. If a breast biopsy reveals malignant cells, this is considered a breast cancer.

Benign tumors are not cancerous. They can usually be removed, and in most cases, they do not come back. Cells from benign tumors do not spread to other parts of the body. A benign breast condition seen in males is gynecomastia, which is non-cancerous enlarged breast tissue in men.

Benign (non-cancerous) male breast disease—Gynecomastia

Gynecomastia is enlarged breast tissue that affects about one-third of males at some point in their lives. Gynecomastia is a benign breast condition, which may be present in one or both breasts, and is the most common male breast disorder. This benign (non-cancerous) condition is more common than breast cancer in men. It is not a tumor but rather just an increase in the amount of a man's breast tissue. The condition, common in adolescent boys due to changes in hormone balance, can come and go over a man's lifetime. The same condition is not unusual in older men and is also due to changes in their hormone balance. A man with gynecomastia has a button-like or disk-like growth under his nipple and areola, which can be felt and sometimes seen. Rarely, gynecomastia can occur because tumors or diseases of certain hormone-producing glands cause a man's body to produce more estrogen (the main female hormone). Although men's glands normally produce some estrogen, it is not enough to cause breast growth. Diseases of the liver, which is an important organ in male and female hormone metabolism, can change a man's hormone balance and lead to gynecomastia.

Many commonly prescribed medications can sometimes cause gynecomastia, too. These include some drugs used to treat ulcers and heartburn, high blood pressure, and heart failure. The use of marijuana may also increase a male's risk for developing gynecomastia. Men with gynecomastia should ask their doctors whether any medications they are taking might cause this condition.

SIGNS AND SYMPTOMS

Men who experience the following symptoms should see a physician as soon as possible:

- Abnormal lumps or swelling in either breast, nipple, or chest muscle
- Skin dimpling or puckering
- Nipple retraction (turning inward)
- Redness or scaling of the nipple or breast skin
- Nipple discharge

DETECTION

Early detection improves the chances that male breast cancer can be treated successfully. The American Cancer Society recommends a yearly cancer-related health checkup for all men age 40 and older. The following procedures may be used to detect breast abnormalities:

- **Complete medical history**

The first step in gathering a complete personal and family medical history is for the patient to provide the doctor with information about symptoms and risk factors for breast cancer.

- **Clinical breast exam**

A thorough clinical breast examination is performed to locate a lump or suspicious area and to feel its texture, size, and relationship to the skin and muscle tissue. The doctor will also look for evidence of spread, such as enlarged lymph nodes or an enlarged liver.

❖ **Diagnostic mammography**

Diagnostic mammography is an x-ray evaluation of the breast. In some cases, special images (known as cone views with magnification) are used to evaluate small areas of breast tissue easily. The result of this diagnostic testing may suggest that a biopsy is needed to tell whether or not the lesion (abnormal area) is cancer.

❖ **Breast ultrasound**

Ultrasounds, also known as sonographs, use high-frequency sound waves to outline part of the body. Breast ultrasound is often used to evaluate breast abnormalities that are found during mammography or a physical exam.

❖ **Nipple discharge examination**

Nipple discharge may be clear, colored, or bloody. This discharge can be examined under a microscope to determine if any cancer cells are present.

DIAGNOSIS

Diagnosis is the identification of an illness, in this case breast cancer. The only way to make a definitive diagnosis of cancer is by doing a biopsy (getting a piece of suspicious tissue) and examining it. A specialized doctor, or pathologist, often can determine the kind of cancer by how the cells look under the microscope.

- **Needle biopsy**

A needle biopsy is the easiest and quickest biopsy technique to obtain a small amount of breast tissue to test for cancer cells. A needle connected to a syringe is inserted into the tissue, and fluid or tissue is withdrawn for examination under a microscope.

- **Surgical biopsy**

A surgical biopsy is removal of all or part of the suspicious breast tissue in the operating room. Additional surrounding tissue may also be removed to determine the extent of the cancer cells within that tissue.

TYPES OF BREAST CANCER FOUND IN MEN

Ductal carcinoma in-situ (DCIS) – Abnormal cells that are found in the lining of a duct; also called intraductal carcinoma. This type of breast cancer does not spread to other breast tissue.

Infiltrating ducal carcinoma – Cancer that has spread beyond the cells lining ducts in the breast. Most men with breast cancer have this type of cancer.

Inflammatory breast cancer – A rare but aggressive type of cancer in which the breast looks red and swollen and feels warm. The symptoms may resemble a skin infection or rash.

BREAST CANCER STAGES

The stage of a cancer is based upon a pathologist's examination of the tissue. Pathologists determine stage based upon the status of three areas of concern: the size and type of tumor, whether cancer is present in the lymph nodes, and whether the cancer has spread to any other part of the body. Stages are defined by the following categories:

Stage 0 (early stage) indicates findings of DCIS. There is not a tumor, and there are no signs of spreading into lymph nodes or tissue beyond the breast.

Stage I (early stage) means that cancer cells are not found in the lymph nodes and the tumor is no more than 2cm (less than one inch) in diameter.

Stage II (early stage) means that cancer has spread to underarm lymph nodes and/or the tumor in the breast is 2 to 5cm (1 to 2 inches) in diameter.

Stage III (advanced stage) is also called locally advanced cancer. The tumor in the breast is usually large (more than 5cm, or 2 inches, in diameter), the cancer is extensive in the underarm lymph nodes, or it has spread to other lymph node areas or to other tissues near the breast.

Stage IV is metastatic cancer. The size of the tumor and the extent of its spread to lymph nodes are less important in this case than the fact that the cancer has spread from the breast to other organs of the body.

HOW IS MALE BREAST CANCER TREATED?

There are different types of treatment available for men with breast cancer. Certain factors affect treatment options. Some treatments are standard (the currently used treatment), while others are undergoing testing in clinical trials. Before starting treatment, patients may want to think about taking part in a clinical trial. A treatment clinical trial is a research study meant to help improve current treatments or obtain information on new treatments for patients with cancer. When clinical trials show that a new treatment is better than the "standard" treatment, the new treatment may become the standard treatment. Clinical trials take place in many parts of the country. Information about ongoing clinical trials is available from the National Cancer Institute web site at **www.cancer.gov.**

Choosing the most appropriate cancer treatment is a decision that ideally involves the patient, family, and health care team.

Standard treatment used to treat men with breast cancer may include more than one of the following:

- **Surgery**

Surgery for men with breast cancer is usually the removal of the breast tissue, the lining over the chest muscles, and sometimes part of the chest wall muscles. Some of the lymph nodes under the arm may also be removed and examined under a microscope. This type of surgery is called a modified radical mastectomy.

❖ **Adjuvant therapy**

Therapy given after an operation when cancer cells can no longer be seen is called adjuvant therapy. Even if the surgeon removes all of the cancer that can be seen at the time of the operation, the patient may be given radiation therapy, chemotherapy, and/or hormone therapy after surgery to kill or inhibit the growth of any cancer cells that may be left.

Adjuvant therapy for men with breast cancer should be considered on the same basis as that for a woman because there is no evidence that response to adjuvant therapy is different for men and women.

❖ **Chemotherapy**

Chemotherapy involves the use of drugs to kill cancer cells. Chemotherapy may be taken by mouth or put into the body by inserting a needle into a vein. Either type of chemotherapy is called systemic treatment because the drugs enter the bloodstream and kill cancer cells throughout the body.

❖ **Hormone therapy**

Hormones are chemicals produced by glands in the body and circulated in the bloodstream. Estrogen and progesterone are hormones that affect the way a cancer grows. If tests show that the cancer cells have estrogen and progesterone receptors (proteins found in some cancer cells to which estrogen and progesterone will attach), hormone therapy is used to block the way these hormones help the cancer grow. This may be done by using drugs that block the way hormones work or by surgically removing organs that make hormones, such as the testicles. Although estrogen is commonly thought of as a female hormone, it does occur in small amounts in males. Patients with early stages of breast cancer often receive hormone therapy with Tamoxifen (an anticancer drug that blocks the effects of estrogen in the body).

These treatments appear to increase survival in men as they do in women. The patient's response to hormone therapy depends on the presence of hormone receptors (proteins) in the tumor. Most breast cancers in men have these receptors. Hormone therapy is usually recommended for male breast cancer patients, but it can have many side effects. Each patient should review the drugs and side effects with his physician.

❖ **Radiation therapy**

Radiation therapy is the use of x-rays or other types of radiation to kill cancer cells and shrink tumors. Depending on the stage of cancer, the oncologist may recommend local radiation to the chest wall to improve the results of therapy. Recommendations are dependent on findings from the biopsy and/or surgery and are individualized to the specific findings in each patient.

For further information regarding the treatment of breast cancer, please refer to listed resources.

GLOSSARY

Adjuvant therapy — additional treatment given after the primary treatment to increase chances of a cure and to prevent the cancer from recurring.

Axillary lymph node dissection — removal of lymph nodes in the armpit to determine if cancerous cells are present.

BRCA1 or BRCA2 genes — genes that regulate our cell divisions and are found in everyone. When either of these genes is mutated, the risks for breast and related cancers are increased.

Chemotherapy — the use of chemical agents (drugs) to systemically treat cancer.

Clinical trial — a study of a drug or treatment on a large group of people to evaluate the effectiveness of the treatment.

Hormone therapy — treatment that blocks the effects of hormones upon cancers that depend on hormones to grow.

Invasive cancer — cancer that breaks through normal breast tissue barriers and invades surrounding areas.

Klinefelter Syndrome — a genetic condition, caused by the presence of an extra X chromosome, that leads to infertility and increased male breast cancer risk.

Lymph nodes — tissues in the lymphatic system that filter lymph fluid and help the immune system fight disease.

Modified radical mastectomy — a procedure performed by a surgeon, who removes the breast tissue, some lymph nodes under the arm, and the lining over the chest muscles.

Noninvasive cancer — a cancer confined to its tissue point of origin and not found in surrounding tissues.

Oncologist — a physician specialist who helps determine cancer treatment choices.

Pathologist — a physician specialist trained to distinguish normal and abnormal cells.

Radiation oncologist — a physician specialist trained in radiation treatment.

Radiation therapy — use of high-energy x-ray to kill cancer cells and shrink tumors.

Stage — a numerical designation of how far a cancer has progressed.

Surgical oncologist — a physician specialist trained in surgical removal of cancerous tumors.

RESOURCES

Because breast cancer is rare among men, less information and fewer resources are available to help men with breast cancer. The organizations listed below will help you get the information and support you need.

American Cancer Society
2808 Reading Road
Cincinnati, Ohio 45206-1117
1-800-ACS-2345
www.cancer.org

This national, community-based organization provides information and referrals to numerous local American Cancer Society community support services.

Breast Cancer Network of STRENGTH
1-800-221-2141
www.networkofstrength.org

A 24-hour hotline staffed solely by trained breast cancer survivors provides support, information, and education.

Male Breast Cancer Resource Center
Men's Health Network
PO Box 75972
Washington, DC 20013
(202)543-6461, Ext 101
www.menshealthnetwork.org

This resource center offers information about male breast cancer, signs and symptoms, treatment options, resources, and other useful information.

National Cancer Institute – Cancer Information Services
6116 Executive Boulevard, Room 3036 A
Bethesda, MD 20892
1-800-4CANCER (1-800-422-6237)
www.cancer.gov

This hotline provides callers with the opportunity to speak with a specially trained cancer information specialist who can give information on treatment and prevention

of cancer and can make appropriate local referrals. Community outreach services and clinical trials search are also available.

The Susan G. Komen Breast Cancer Foundation
5005 LBJ Freeway, Suite 250
Dallas, TX 75244
1-877-GoKomen (1-877-465-6636)
www.komen.org

The Komen Foundation is the nation's largest private funder of breast cancer research dollars. It provides educational information and support and has a large grassroots network of breast cancer survivors and activists fighting to save lives, empower people, ensure quality care for all, and energize science to find the cure.