Breast Cancer

A breast is made up of three main parts: glands, ducts, and connective tissue. The glands produce milk. The ducts are passages that carry milk to the nipple. The connective tissue (which consists of fibrous and fatty tissue) connects and holds everything together.

What Is a Normal Breast?

No breast is typical. What is normal for you may not be normal for another woman. Most women say their breasts feel lumpy or uneven. The way your breasts look and feel can be affected by getting your period, having children, losing or gaining weight, and taking certain medications. Breasts also tend to change as you age.

Lumps in the Breast

Many conditions can cause lumps in the breast, including cancer. But most breast lumps are caused by other medical conditions. The two most common causes of breast lumps are fibrocystic breast condition and cysts. Fibrocystic condition causes noncancerous changes in the breast that can make them lumpy, tender, and sore. Cysts are small fluid-filled sacs that can develop in the breast.

Common Kinds of Breast Cancer

There are different kinds of breast cancer. The kind of breast cancer depends on which cells in the breast turn into cancer.

Breast cancer can begin in different parts of the breast, like the ducts or the lobes.

Common kinds of breast cancer are

- **Ductal carcinoma.** The most common kind of breast cancer. It begins in the cells that line the milk ducts in the breast, also called the lining of the breast ducts.
 - o **Ductal carcinoma in situ (DCIS).** The abnormal cancer cells are only in the lining of the milk ducts, and have not spread to other tissues in the breast.
 - o **Invasive ductal carcinoma.** The abnormal cancer cells break through the ducts and spread into other parts of the breast tissue. Invasive cancer cells can also spread to other parts of the body.
- **Lobular carcinoma.** In this kind of breast cancer, the cancer cells begin in the lobes, or lobules, of the breast. Lobules are the glands that make milk.
 - Lobular carcinoma in situ (LCIS). The cancer cells are found only in the breast lobules. Lobular carcinoma in situ, or LCIS, does not spread to other tissues.
 - o **Invasive lobular carcinoma.** Cancer cells spread from the lobules to the breast tissues that are close by. These invasive cancer cells can also spread to other parts of the body

Risk Factors

Research has found several risk factors that may increase your chances of getting breast cancer.

Reproductive Risk Factors

- Being younger when you first had your menstrual period.
- Starting menopause at a later age.
- Being older at the birth of your first child.
- Never giving birth.
- Not breastfeeding.
- Long-term use of hormone-replacement therapy.

Other Risk Factors

- Getting older.
- Personal history of breast cancer or some non-cancerous breast diseases.
- Family history of breast cancer (mother, sister, daughter).
- Treatment with radiation therapy to the breast/chest.
- Being overweight (increases risk for breast cancer after menopause).
- Having changes in the breast cancer-related genes BRCA1 or BRCA2.
- Drinking alcohol (more than one drink a day).
- Not getting regular exercise.

Having a risk factor does not mean you will get the disease. Most women have some risk factors and most women do not get breast cancer. If you have breast cancer risk factors, talk with your doctor about ways you can lower your risk and about screening for breast cancer.

Prevention

You can help lower your risk of breast cancer in the following ways

- **Get screened for breast cancer regularly.** By getting the necessary exams, you can increase your chances of finding out early on, if you have breast cancer. For more information about the kinds of tests used to screen for breast cancer, and to learn how you can be screened
- **Control your weight and exercise.** Make healthy choices in the foods you eat and the kinds of drinks you have each day. Stay active.

- **Know your family history of breast cancer.** If you have a mother, sister, or daughter with breast cancer, ask your doctor what is your risk of getting breast cancer and how you can lower your risk.
- Find out the risks and benefits of hormone replacement therapy. Some women use hormone replacement therapy (HRT) to treat the symptoms of menopause. Ask your doctor about the risks and benefits of HRT and find out if hormone replacement therapy is right for you.
- Limit the amount of alcohol you drink.

Symptoms

Different people have different warning signs for breast cancer. Some people do not have any signs or symptoms at all. A person may find out they have breast cancer after a routine mammogram.

Some warning signs of breast cancer are

- New lump in the breast or underarm (armpit).
- Thickening or swelling of part of the breast.
- Irritation or dimpling of breast skin.
- Redness or flaky skin in the nipple area or the breast.
- Pulling in of the nipple or pain in the nipple area.
- Nipple discharge other than breast milk, including blood.
- Any change in the size or the shape of the breast.
- Pain in any area of the breast.

Keep in mind that some of these warning signs can happen with other conditions that are not cancer.

If you have any signs that worry you, be sure to see your doctor right away.

Screening

Kinds of Screening Tests

Breast cancer screening means checking a woman's breasts for cancer before there are signs or symptoms of the disease. Three main tests are used to screen the breasts for cancer. Talk to your doctor about which tests are right for you, and when you should have them.

• **Mammogram.** A mammogram is an X-ray of the breast. Mammograms are the best method to detect breast cancer early when it is easier to treat and before it is big enough to feel or cause symptoms. Having regular mammograms can lower the risk of dying from breast cancer. If you are age 50 to 74 years, be sure to have a screening mammogram every two years. If you are age 40–49 years, talk to your doctor about when and how often you should have a screening mammogram.

- **Clinical breast exam.** A clinical breast exam is an examination by a doctor or nurse, who uses his or her hands to feel for lumps or other changes.
- **Breast self-exam.** A breast self-exam is when you check your own breasts for lumps, changes in size or shape of the breast, or any other changes in the breasts or underarm (armpit).

Which tests to choose: Having a clinical breast exam or a breast self-exam have not been found to decrease risk of dying from breast cancer. Keep in mind that, at this time, the best way to find breast cancer is with a mammogram. If you choose to have clinical breast exams and to perform breast self-exams, be sure you also get regular mammograms.

Diagnosis

Doctors often use additional tests to find or diagnose breast cancer.

- **Breast ultrasound.** A machine uses sound waves to make detailed pictures, called sonograms, of areas inside the breast.
- **Diagnostic mammogram.** If you have a problem in your breast, such as lumps, or if an area of the breast looks abnormal on a screening mammogram, doctors may have you get a diagnostic mammogram. This is a more detailed X-ray of the breast.
- Magnetic resonance imaging (MRI). A kind of body scan that uses a magnet linked to a computer. The MRI scan will make detailed pictures of areas inside the breast.
- **Biopsy.** This is a test that removes tissue or fluid from the breast to be looked at under a microscope and do more testing. There are different kinds of biopsies (for example, fine-needle aspiration, core biopsy, or open biopsy).

Staging

If breast cancer is diagnosed, tests are done to find out if cancer cells have spread within the breast or to other parts of the body. This process is called staging. Whether the cancer is only in the breast, is found in lymph nodes under your arm, or has spread outside the breast determines your stage of breast cancer. The type and stage of breast cancer tells doctors what kind of treatment will be needed.

Treatment

Breast cancer is treated in several ways. It depends on the kind of breast cancer and how far it has spread. Treatments include surgery, chemotherapy, hormonal therapy, biologic therapy, and radiation. People with breast cancer often get more than one kind of treatment.

- **Surgery.** An operation where doctors cut out and remove cancer tissue.
- Chemotherapy. Using special medicines, or drugs to shrink or kill the cancer. The drugs can be pills you take or medicines given through an intravenous (IV) tube, or, sometimes, both.
- **Hormonal therapy.** Some cancers need certain hormones to grow. Hormonal treatment is used to block cancer cells from getting the hormones they need to grow.
- **Biological therapy.** This treatment works with your body's immune system to help it fight cancer or to control side effects from other cancer treatments. Side effects are

how your body reacts to drugs or other treatments. Biological therapy is different from chemotherapy, which attacks cancer cells directly.

• **Radiation.** The use of high-energy rays (similar to X-rays) to kill the cancer cells. The rays are aimed at the part of the body where the cancer is located.

It is common for doctors from different specialties to work together in treating breast cancer. Surgeons are doctors that perform operations. Medical oncologists are doctors that treat cancers with medicines. Radiation oncologists are doctors that treat cancers with radiation.

Sometimes people get an opinion from more than one breast cancer doctor. This is called a "second opinion." Getting a second opinion may help you choose the treatment option that is right for you.

Adapted from : Centers for Disease Control and Prevention

: World Health Organization