The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

Gynecologic Problems • EP026

Benign Breast Problems and Conditions

Any women have lumps or other symptoms that affect their breasts. Some of these problems or conditions can be benign, which means they are not cancer. Many benign conditions go away on their own or are easily treated. A few benign breast conditions can increase your risk of getting cancer in the future. You may need to have follow-up tests or exams with your obstetrician—gynecologist (ob-gyn) or other health care professional.

This pamphlet explains

- normal breast tissue
- common benign breast problems
- diagnosis, treatment, and follow-up

Normal Breast Tissue

Your breasts are made up of milk glands, fat, and fibrous tissue. Fibrous tissue is made up of microscopic fibers. This tissue gives the breast its shape.

Each breast has 15–20 sections called lobes. Each lobe has many smaller lobules. The lobules end in dozens of tiny milk glands that can produce milk. The lobes, lobules, and milk glands are linked by thin tubes called ducts.

Breast tissue responds to normal shifts in *hormone* levels throughout your *menstrual cycle*. It is not abnormal for breasts to feel swollen, more sensitive, or painful at certain times (see "Breast Pain").

Your breasts also change during pregnancy, breast-feeding, and *menopause*. You may notice changes in your breasts if you use hormonal contraception such as birth control pills or *hormone therapy* for menopause symptoms. It is important to know how your breasts normally look and feel. If you notice any changes, report them to your ob-gyn or other health care professional (see box "Breast Self-Awareness").

Common Benign Breast Problems

There are many benign breast problems. Common problems include pain, lumps or masses, infection, nipple discharge, and skin changes.

Breast Pain

Many women have breast pain. Treatment varies depending on the type of pain that you have.

Cyclic Breast Pain. This type of breast pain is related to the menstrual cycle, hormonal birth con-**Breast Tissue** trol, or hormone therapy for menopause. Symptoms may Lobule containing include sharp pain, burnmilk glands ing, or itching. One breast may hurt more than the Milk other. For many women, duct the symptoms are worse right before their menstrual period starts and Nipple get better after menstrual bleeding begins. Cyclic Fat breast pain is not linked to cancer, but it is a good idea to get it checked by your ob-gyn or other health care professional. The following measures may help relieve cyclic breast pain:

- Wear a well-fitted bra.
- For women who use combined hormonal birth control and experience breast pain, taking the birth control continuously may improve symptoms. If you take combined hormonal pills, this means skipping the hormone-free pills and starting the next pack of pills right away. For women who use the ring, this means leaving it in for four weeks and then putting the next one in right away.
- Take an over-the-counter pain reliever. If your pain is severe, your ob-gyn may prescribe medications for a limited time.

Breast Self-Awareness

Know how your breasts normally look and feel. Knowing what is normal for you will help you detect any changes that may signal a problem. Many women diagnosed with breast cancer first noticed the lump themselves, before a clinical breast exam or a mammogram. If you notice any of the following, contact your health care professional:

- A new lump
- Skin changes
 - —Thickening
 - —Dimpling
 - -Unexplained reddening
 - —Nipple scaling or redness
 - —Ulcers
- Pain (especially if it is one place or is getting worse)

Noncyclic Breast Pain. Noncyclic breast pain is not related to the menstrual cycle. It usually occurs in one breast in one specific area. You may feel pain all the time, or it may come and go.

It is not always clear what causes noncyclic pain. Benign conditions that can cause this type of pain include injury, infection, medications, and large breast size. In rare cases, noncyclic breast pain can be caused by breast cancer. If you have noncyclic breast pain, see your ob-gyn or other health care professional. It may be suggested that you have an imaging test of your breast (see "Diagnosis").

Lumps and Masses

There are many different types of breast lumps. Most are benign. If you feel a breast lump or mass, contact your ob-gyn or other health care professional to have a physical exam of your breasts. This is called a clinical breast exam. An imaging test usually is recommended to find out more about the lump or mass. Additional testing of *cells* taken from the lump (*biopsy*) also may be needed (see "Diagnosis").

In general, benign breast masses are divided into three types based on the kinds of cells that they have:
1) *nonproliferative*, 2) *proliferative without atypia*, and 3) *atypical hyperplasia*.

Nonproliferative. A nonproliferative mass has normal cells. An example of this type of mass is a *cyst*. A cyst is a fluid-filled sac. They usually are very small. They are quite common and occur in about one third of women aged 35–50 years. Most cysts do not increase a woman's risk of breast cancer and go away without any treatment. If cysts are large or causing discomfort, the fluid can be drained with a procedure called *fine-needle aspiration*.

Another type of nonproliferative mass is a simple *fibroadenoma*. These are solid, well-defined lumps that occur most often in young women and African American women. They usually are small (1–2 cm) and can occur singly or in groups. Simple fibroadenomas usually shrink or go away on their own. They typically do not require surgical removal unless they are large or keep growing.

Proliferative without atypia. In this type of breast mass, the cells are increasing in number but are otherwise normal. Having this type of lump slightly increases the risk of future breast cancer over the long term. An example of this type of breast lump is a complex fibroadenoma. A fibroadenoma is considered complex when a biopsy shows certain features, such as more cells than usual. Complex fibroadenomas usually are surgically removed, but sometimes they can just be watched to make sure they are not growing. This means seeing your ob-gyn or other health care professional for regular breast cancer exams.

Atypical hyperplasia. Hyperplasia is a condition in which cells in the breast ducts or lobes are increasing in number. Atypia means that the cells do not look normal under a microscope. Atypical hyperplasia

greatly increases the risk of developing breast cancer in the future. Surgery to remove the cells and the area around them is recommended, along with close follow-up. Medications also may be recommended to keep the condition from coming back.

Infection

Infection of the breast tissue is called *mastitis*. It most commonly happens when a woman is breastfeeding and a duct becomes clogged with milk and does not drain properly. Infection sometimes can occur unrelated to pregnancy and breastfeeding.

Mastitis can cause flu-like symptoms, such as fever, aches, and fatigue. Your breast will be red, swollen, warm, and painful in one specific area. If you have these symptoms, call your ob-gyn or other member of your health care team.

It is still safe to breastfeed your baby when you have mastitis—in fact, it will help speed healing. You may be prescribed an *antibiotic* that is safe to take during breastfeeding to treat the infection. Applying warm compresses can help relieve the pain.

Nipple Discharge

Discharge from the nipple is a common benign breast symptom. Benign discharge tends to occur in both breasts and only when the breast or nipple is squeezed. It is usually milky white or greenish in color. Discharge that is bloody or clear is more concerning.

During pregnancy, nipple discharge is normal as the breasts get ready to produce milk. In women who are not pregnant, it can be caused by hormonal changes. Some medications can cause nipple discharge. Any nipple discharge should be checked by an ob-gyn or other health care professional and may require breast imaging.

Skin Changes

Breast skin can be affected by common skin problems, including psoriasis, eczema, and allergic reactions. Yeast infection of the skin folds under the breast is a common condition. Women with larger breasts are more likely to have this problem. Some skin changes of the breast raise concern for cancer. These include redness, warmth, dimpling of the skin, and ulcers (small, red, painful blisters). Nipple changes such as crusting, scaling, ulcers, or a nipple that has changed shape also raise concern. Tell your ob-gyn or other health care professional about any skin changes that you notice.

Diagnosis

If you have breast symptoms, your ob-gyn or other health care professional first may ask you questions about when your symptoms started, how severe they are, and whether you have felt a mass or lump. You also will be asked about your risk factors for breast cancer. Your breast cancer risk is one of the things your health professional considers when deciding on a treatment approach.

In addition to a clinical breast exam, you may need to have an imaging test of your breast. Breast imaging can be done with *mammography*, an *ultrasound exam*, or *magnetic resonance imaging (MRI)*. The types of imaging that you have depend on your age. Imaging may be followed by a biopsy.

Mammography (Mammogram)

A mammogram is an X-ray of the breast tissue. It is done with a special machine that flattens the breast so that the most tissue can be viewed with the least radiation.

Screening mammography is used to screen for breast cancer. The American College of Obstetricians and Gynecologists recommends that women should be offered annual routine screening mammography beginning at age 40 years. *Diagnostic mammography* is used to find out more information about a breast mass or other signs or symptoms. It uses the same technology as screening mammography, but more views of the breast usually are taken. Certain sections can be magnified to give a detailed view of problem areas.

Another type of mammography is called *digital breast tomosynthesis*. This test creates 3-D images of your breasts. It is used only in certain cases for diagnosis, not for screening.

Ultrasound Exam

During an ultrasound exam, a machine that uses sound waves creates images of the inside of the breast. A gel is applied to the breast, and a handheld device is moved over it. This test can show whether breast lumps are solid or filled with fluid.

Magnetic Resonance Imaging

During an MRI exam, you are placed into a large machine that uses a magnet and sound waves to make images. Multiple pictures of your breasts are taken. These images are combined to make detailed pictures that give a clear view of any lumps or suspicious areas.

Biopsy

A biopsy may be recommended based on the results of an imaging test. There are several types of biopsies. The type you have depends on several factors, including the size and location of the lump or area:

- Fine-needle aspiration—A small sample of tissue from the lump is drawn out through a thin, hollow needle into a syringe.
- Core needle biopsy—A larger needle is used to withdraw small cylinders (cores) of breast tissue.
- *Excisional biopsy*—In this technique, a surgeon removes breast tissue with a scalpel.

Mammography, ultrasound, or MRI may be used to guide fine-needle aspiration or core needle biopsy. After the biopsy, the tissue that was removed is sent to a lab where it is examined. It may take a few days to get the results.

Treatment and Follow-Up

Results of imaging tests, biopsy results, and other factors, such as your age and breast cancer risk, are used to decide on a course of treatment. For some breast masses or areas that have abnormal cells, your physician may recommend removal. Sometimes this is done during a biopsy. In some cases, surgery is needed to remove the mass or area.

For other conditions, treatment may not be needed, only close follow-up. You may have more frequent clinical breast exams and imaging tests over the next 1–2 years. Even if your imaging and biopsy results are normal, you may still need to have follow-up exams and tests for a period of time to make sure that the mass or condition stays the same. Your physician will discuss with you the recommended course of follow-up for your age, health risks, and test results. To protect your health, it is important to follow these recommendations and ask any questions you may have.

Finally...

Changes in your breasts can happen as your hormone levels change or because of your age. Although these changes can sometimes cause lumps and other symptoms, these benign problems usually go away on their own or can be easily treated. To help detect changes in your breasts, be sure to have the recommended screening tests on time and become aware of how your breasts normally look and feel. Let your ob-gyn or other health care professional know right away if you notice any changes.

Glossary

Antibiotic: A drug that treats certain types of infections.

Atypical Hyperplasia: A condition in which cells in the breast ducts or lobes are increasing in number and do not look normal under a microscope.

Benign: Not cancer.

Biopsy: A minor surgical procedure to remove a small piece of tissue that is then examined under a microscope in a laboratory.

Cells: The smallest units of a structure in the body; the building blocks for all parts of the body.

Core Needle Biopsy: A biopsy in which a tissue sample is taken with a special type of cutting needle.

Cyst: A sac or pouch filled with fluid.

Diagnostic Mammography: A type of mammography that is used to check a breast lump or other condition for cancer.

Digital Breast Tomosynthesis: A type of mammography technology that creates 3-D images of the breast.

Excisional Biopsy: A biopsy that is done by a surgeon using a scalpel or other surgical tools.

Fibroadenoma: A type of solid, benign breast mass.

Fine-needle Aspiration: A procedure in which a needle and syringe are used to withdraw a small amount of tissue. The tissue sample then is examined under a microscope to look for cancer cells.

Hormone: A substance made in the body by cells or organs that controls the function of cells or organs. An example is estrogen, which controls the function of female reproductive organs.

Hormone Therapy: Treatment in which estrogen and often progestin are taken to help relieve some of the symptoms caused by low levels of these hormones.

Magnetic Resonance Imaging (MRI): A method of viewing internal organs and structures by using a strong magnetic field and sound waves.

Mammography: An imaging technique in which X-rays of the breast are used to detect breast cancer. The image that is created is called a mammogram.

Mastitis: Infection of the breast tissue.

Menopause: The time in a woman's life when menstruation stops; defined as the absence of menstrual periods for 1 year.

Menstrual Cycle: The monthly process of changes that occur to prepare a woman's body for possible pregnancy. A menstrual cycle is defined from the first day of menstrual bleeding of one cycle to the first day of menstrual bleeding of the next cycle.

Nonproliferative: A term used to describe a benign breast mass containing normal cells.

Obstetrician–Gynecologist (Ob-Gyn): A physician with special skills, training, and education in women's health.

Proliferative Without Atypia: A term that describes a benign breast mass in which the cells are increasing in number but are otherwise normal.

Screening Mammography: Mammography that is done to screen for breast cancer. The American College of Obstetricians and Gynecologists recommends that women should be offered annual routine screening mammography beginning at age 40 years.

Ultrasound Exam: A test in which sound waves are used to examine internal structures.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6-8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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The American College of Obstetricians and Gynecologists 409 12th Street, SW

PO Box 96920

Washington, DC 20090-6920