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Fibrosis and Simple Cysts in the Breast

Many breast lumps turn out to be caused by fibrosis and/or cysts, which are non-cancerous (benign) changes in breast tissue that many women get at some time in their lives. These changes are sometimes called *fibrocystic changes*, and used to be called *fibrocystic disease*.

Fibrosis and cysts are most common in women of child-bearing age, but they can affect women of any age. They may be found in different parts of the breast and in both breasts at the same time.

Fibrosis

Fibrosis refers to a large amount of fibrous tissue, the same tissue that ligaments and scar tissue are made of. Areas of fibrosis feel rubbery, firm, or hard to the touch.

Cysts

Cysts are fluid-filled, round or oval sacs within the breasts. They are often felt as a round, movable lump, which might also be tender to the touch. They are most often found in women in their 40s, but they can occur in women of any age. Monthly hormone changes often cause cysts to get bigger and become painful and sometimes more noticeable just before the menstrual period.

Cysts begin when fluid starts to build up inside the breast glands. **Microcysts** (tiny, microscopic cysts) are too small to feel and are found only when tissue is looked at under a microscope. If fluid continues to build up, **macrocyts** (large cysts) can form. These can be felt easily and can be as large as 1 or 2 inches across.

Diagnosis

Most often, fibrocystic changes are diagnosed based on symptoms, such as breast lumps, swelling, and/or tenderness or pain. These symptoms tend to be worse just before your menstrual period, and may change during different stages of your menstrual cycle. Your breasts may feel lumpy, and at times you may notice a clear or slightly cloudy nipple discharge.

Sometimes, one of the lumps might feel firmer or have other features that lead to a concern about cancer. When this happens, an [ultrasound](#)¹ may be done to see if the lump is solid or is just filled with fluid (called a **simple cyst**). Simple cysts are not usually a cause for concern. But if the ultrasound shows the lump is solid or if the cyst has both fluid and solid components (a **complex cyst**), a [biopsy](#)² may be needed to make sure that it's not cancer.

How do fibrosis and simple cysts affect your risk for breast cancer?

Neither fibrosis nor simple cysts increase your risk of later developing breast cancer. Complex cysts are more of a concern, as there is a small chance they might contain cancer or put you at risk of cancer later on, depending on what is found at the time of biopsy.

Treatment

Cyst fluid doesn't need to be removed unless it's causing discomfort. But it can be drained by putting a thin, hollow needle into the cyst, which might be done to confirm the diagnosis. Removing the fluid may reduce pressure and pain for some time. If removed, the fluid might come back later, but cysts may also go away over time. For cysts that continue to come back and cause symptoms, surgery to remove them might be an option.

Most women with fibrocystic changes and without bothersome symptoms do not need treatment, but they might be watched closely. If you have mild discomfort from fibrosis, you may get relief from well-fitted, supportive bras, applying heat, or using over-the-counter pain relievers.

Some women report that their breast symptoms improve if they avoid caffeine and other stimulants found in coffee, tea, chocolate, and many soft drinks. Studies have not found a clear link between these stimulants and breast symptoms, but many women feel that avoiding these foods and drinks for a couple of months is worth trying.

Because breast swelling toward the end of the menstrual cycle is painful for some women, some doctors recommend over-the-counter pain relievers such as acetaminophen or ibuprofen, or other medicines. It's been suggested that some types of vitamin or herbal supplements might relieve symptoms, but so far none have been proven to be helpful, and some may have side effects if taken in large doses. Some doctors prescribe hormones, such as oral contraceptives (birth control pills), [tamoxifen](#)³, or androgens. But these are usually given only to women with severe symptoms because they also can have serious side effects.

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
3. www.cancer.org/cancer/breast-cancer/risk-and-prevention/tamoxifen-and-

[raloxifene-for-breast-cancer-prevention.html](https://www.cancer.org/american-cancer-society/about-us/press-room/2019/09/10/raloxifene-for-breast-cancer-prevention.html)

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Hyperplasia of the Breast (Ductal or Lobular)

Hyperplasia is also known as epithelial hyperplasia or proliferative breast disease. It's an overgrowth of the cells that line the ducts or the milk glands (lobules) inside the breast.

Ductal hyperplasia (also called *duct epithelial hyperplasia*) is an overgrowth of the cells that line the small tubes (ducts) inside the breast, while **lobular hyperplasia** is an overgrowth of cell lining the milk glands (lobules). Ductal and lobular hyperplasia occur at about the same rate, and have about the same effect on breast cancer risk.

Hyperplasia is often described as either *usual* or *atypical* based on how the cells look under a microscope.

- In **usual hyperplasia**, the cells look very close to normal.
- In atypical hyperplasia (or hyperplasia with atypia), the cells are more distorted. This can be either **atypical ductal hyperplasia (ADH)** or **atypical lobular hyperplasia (ALH)**.

Diagnosis

Hyperplasia doesn't usually cause a lump that can be felt, but it can cause changes that can be seen on a [mammogram](#)¹. It's diagnosed by doing a [biopsy](#)². (A hollow needle may be used to remove a small piece of tissue that's checked in the lab. Or, surgery may be done to take out the abnormal breast tissue.)

How does hyperplasia affect your risk for breast cancer?

Hyperplasia can affect your risk for breast cancer, but how much depends on what type it is:

- **Mild hyperplasia of the usual type:** This does not increase the risk for breast cancer.
- **Moderate or florid hyperplasia of the usual type (without atypia), also known as usual hyperplasia:** The risk of breast cancer is about 1½ to 2 times that of a woman with no breast abnormalities.
- **Atypical hyperplasia (either ADH or ALH):** The risk of breast cancer is about 4 to 5 times higher than that of a woman with no breast abnormalities. More details about pathology reports showing atypical hyperplasia can be found in [Understanding Your Pathology Report: Atypical Hyperplasia](#)³.

Treatment

Most types of usual hyperplasia do not need to be treated. But if atypical hyperplasia (ADH or ALH) is found on a needle biopsy, more breast tissue around it might be removed with surgery to be sure that there is nothing more serious nearby, such as cancer. (This is more likely to be recommended for ADH than for ALH.)

Reducing breast cancer risk or finding it early

Atypical hyperplasia (ADH or ALH) is linked to a higher risk of breast cancer. Even though most women with atypical hyperplasia will not develop breast cancer, it's still important to talk with a health care provider about your risk and what, if any, options are best for you.

Options for women at high risk of breast cancer from atypical hyperplasia may include:

- **Seeing a health care provider more often**(such as every 6 to 12 months) for a breast exam along with a yearly [mammogram](#)⁴. Additional imaging with [breast MRIs](#)⁵ may also be recommended.
- **Making lifestyle changes to lower breast cancer risk.** To learn more, see [Can I Lower My Risk of Breast Cancer?](#)⁶
- **Taking medicine to help lower breast cancer risk.** For more on this, see [Deciding Whether to Use Medicine to Reduce Breast Cancer Risk](#)⁷.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-pathology-report/breast-pathology/atypical-hyperplasia.html
4. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms.html
5. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-mri-scans.html

6. www.cancer.org/cancer/breast-cancer/risk-and-prevention/can-i-lower-my-risk.html
7. www.cancer.org/cancer/breast-cancer/risk-and-prevention/deciding-whether-to-use-medicine-to-reduce-breast-cancer-risk.html

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Lobular Carcinoma in Situ (LCIS)

Lobular carcinoma in situ (LCIS) is a type of breast change that is sometimes seen when a [breast biopsy](#)¹ is done. In LCIS, cells that look like cancer cells are growing in the lining of the milk-producing glands of the breast (called the lobules), but they don't invade through the wall of the lobules.

LCIS is not considered to be cancer, and it typically does not spread beyond the lobule (become invasive breast cancer) if it isn't treated. But having LCIS does increase your risk of developing an invasive breast cancer in either breast later on, so close follow-up is important.

LCIS and another type of breast change ([atypical lobular hyperplasia, or ALH](#)) are types of **lobular neoplasia**. These are benign (non-cancerous) conditions, but they both increase your risk of breast cancer.

Diagnosis

LCIS is diagnosed by a [biopsy](#)², in which small pieces of breast tissue are removed and checked in the lab. Often, LCIS does not cause a lump that can be felt or changes that can be seen on a [mammogram](#)³. In most cases, LCIS is found when a biopsy is done for another breast problem that's nearby.

You can learn more about pathology reports showing LCIS in [Understanding Your Pathology Report: Lobular Carcinoma In Situ](#)⁴.

How does LCIS affect breast cancer risk?

Women with LCIS have about a 7 to 12 times higher risk of developing invasive cancer in either breast. For this reason, women with LCIS should make sure they have regular breast cancer screening tests and follow-up visits with a health care provider for the rest of their lives.

Treatment

Having LCIS does increase your risk of developing invasive breast cancer later on. But since LCIS is not a true cancer or pre-cancer, often no treatment is needed after the biopsy.

Sometimes if LCIS is found using a needle biopsy, the doctor might recommend that it be removed completely (with an [excisional biopsy](#)⁵ or some other type of [breast-conserving surgery](#)⁶) to help make sure that LCIS was the only abnormality there. This is especially true if the LCIS is described as **pleomorphic** (meaning the cells look more abnormal) or if it has **necrosis** (areas of dead cells), in which case it might be more likely to grow quickly.

Even after an excisional biopsy, if **pleomorphic LCIS** is found, some doctors might recommend another surgery to make sure it has all been removed. This is because this type of LCIS may be more likely to turn into invasive cancer.

Reducing breast cancer risk or finding it early

Women with LCIS are at higher risk for breast cancer, so close follow-up is very important. Close follow-up of both breasts is important because women with LCIS have the same increased risk of developing cancer in both breasts. Women should also talk to a health care provider about what they can do to help reduce their breast cancer risk. Options for women at high risk of breast cancer because of LCIS may include:

- **Seeing a health care provider more often** (such as every 6 to 12 months) for a breast exam along with the yearly mammogram. Additional imaging with [breast MRI](#)⁷ may also be recommended.
- **Making lifestyle changes to lower breast cancer risk.** To learn more, see [Can I Lower My Risk of Breast Cancer?](#)⁸
- **Taking medicine to help lower the risk of breast cancer.** For more on this, see [Deciding Whether to Use Medicine to Reduce Breast Cancer Risk](#)⁹.
- **Surgery, called [bilateral prophylactic mastectomy](#)¹⁰ (removal of both breasts), to reduce risk.** (This is more likely to be a reasonable option in women who also have other risk factors for breast cancer, such as a [BRCA gene mutation](#)¹¹.) This may be followed by delayed [breast reconstruction](#)¹².

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-biopsy.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
3. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
4. www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-pathology-report/breast-pathology/lobular-carcinoma-in-situ.html
5. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-biopsy/surgical-breast-biopsy.html
6. www.cancer.org/cancer/breast-cancer/treatment/surgery-for-breast-cancer/breast-conserving-surgery-lumpectomy.html
7. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-mri-scans.html
8. www.cancer.org/cancer/breast-cancer/risk-and-prevention/can-i-lower-my-risk.html
9. www.cancer.org/cancer/breast-cancer/risk-and-prevention/deciding-whether-to-use-medicine-to-reduce-breast-cancer-risk.html
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11. www.cancer.org/cancer/breast-cancer/risk-and-prevention/breast-cancer-risk-factors-you-cannot-change.html
12. www.cancer.org/cancer/breast-cancer/reconstruction-surgery.html

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Adenosis of the Breast

Adenosis is a benign (non-cancerous) breast condition in which the lobules (milk-producing glands) are enlarged, and there are more glands than usual. Adenosis is often found in biopsies of women who have [fibrosis or cysts in their breasts](#).

There are many other names for this condition, including aggregate adenosis, tumoral adenosis, or adenosis tumor. Even though some of these terms contain the term tumor, adenosis is not breast cancer.

Sclerosing adenosis is a special type of adenosis in which the enlarged lobules are distorted by scar-like tissue. This type may cause breast pain.

Diagnosis

If many enlarged lobules are close to one another, they may be large enough to be felt as a breast lump. In cases like this, a breast exam may not be enough to tell if the lump is adenosis or a breast cancer.

Calcifications (mineral deposits) can form in adenosis (including sclerosing adenosis) and in breast cancers. These can show up on [mammograms](#)¹, which can make it hard

to tell these conditions apart.

Because of these uncertainties, a [biopsy](#)² is usually needed to know if the breast change is caused by adenosis or cancer. (In a biopsy, small piece of breast tissue are removed and checked under a microscope.)

Treatment

Adenosis does not usually need to be treated, unless it is causing bothersome symptoms.

How does adenosis affect your risk for breast cancer?

Most types of adenosis are not thought to increase breast cancer risk, although some studies have found that women with sclerosing adenosis have a slightly higher risk of developing breast cancer.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html

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Fibroadenomas of the Breast

Fibroadenomas are common benign (non-cancerous) breast tumors made up of both glandular tissue and stromal (connective) tissue.

Fibroadenomas are most common in women in their 20s and 30s, but they can be found in women of any age. They tend to shrink after a woman goes through menopause.

Diagnosis

Some fibroadenomas are too small to be felt, but some are several inches across. Fibroadenomas can often feel like a marble within the breast. They tend to be round and have clear-cut borders. You can move them under the skin and they're usually firm or rubbery, but not tender. A woman can have one or many fibroadenomas. Some fibroadenomas are only found on an imaging test (like a [mammogram](#)¹ or [ultrasound](#)²).

A [biopsy](#)³ (taking out breast tissue to check it in the lab) is needed to know if a tumor is a fibroadenoma or some other problem.

Most fibroadenomas look the same all over when seen under a microscope and are called **simple fibroadenomas**. But some fibroadenomas have other changes, too, and are called **complex fibroadenomas**. (Complex fibroadenomas tend to be bigger and tend to occur in older patients.)

How do fibroadenomas affect your risk for breast cancer?

Simple fibroadenomas do not seem to increase breast cancer risk by much, if at all. Complex fibroadenomas seem to increase the risk slightly more than simple

fibroadenomas.

Treatment

Many doctors recommend removing fibroadenomas, especially if they keep growing or change the shape of the breast, to make sure that cancer is not causing the changes.

Sometimes these tumors stop growing or even shrink on their own, without any treatment. As long as the doctors are sure the masses are fibroadenomas and not breast cancer, they may be left in place and watched to be sure they don't grow. This approach is useful for women with many fibroadenomas that are not growing. In such cases, removing them might mean removing a lot of nearby normal breast tissue, causing scarring that would change the shape and texture of the breast. This could also make future mammograms harder to read.

It's important for women who have fibroadenomas to have regular breast exams or imaging tests to make sure the fibroadenomas are not growing.

Sometimes one or more new fibroadenomas can appear after one is removed. This means that another fibroadenoma has formed – it does not mean that the old one has come back.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-ultrasound.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html

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Phyllodes Tumors of the Breast

Phyllodes tumors (FILL-odes or full-OH-deez) can also be spelled phylloides tumors (full-OY-deez). These are rare breast tumors that start in the connective (stromal) tissue of the breast.

Phyllodes tumors are most common in women in their 40s, but women of any age can have them. Women with [Li-Fraumeni syndrome](#)¹ (a rare, inherited genetic condition) have an increased risk for phyllodes tumors.

Most phyllodes tumors are benign (not cancer), but about 1 out of 4 of these tumors are malignant (cancer).

Diagnosis

The tumors are usually felt as a painless breast lump, but some may hurt. They tend to

grow quickly and stretch the skin. Sometimes they are seen first on an imaging test (like an [ultrasound](#)² or [mammogram](#)³), in which case they're often hard to tell apart from [fibroadenomas](#). The diagnosis can often be made with a [core needle biopsy](#)⁴, but sometimes the entire tumor needs to be removed (during an [excisional biopsy](#)⁵) to know for sure that it's a phyllodes tumor, and whether it's malignant or not.

How do phyllodes tumors affect your risk for breast cancer?

Having a benign phyllodes tumor does not affect your breast cancer risk, but you may be watched more closely and get regular imaging tests, because these tumors can come back after surgery.

Treatment

[Breast-conserving surgery](#)⁶ (lumpectomy or partial mastectomy), in which part of the breast is removed, is typically the main treatment. Phyllodes tumors can sometimes come back in the same place if they're removed without taking enough of the normal tissue around them. For this reason, a margin of normal breast tissue around the tumor is taken out as well. [Mastectomy](#)⁷ (removal of the entire breast) may be needed if a cancer-free margin of normal breast tissue cannot be taken out with the tumor.

If the phyllodes tumor is cancer, a wider area of normal tissue will be removed along with the tumor. Or the entire breast might be removed with mastectomy. [Radiation therapy](#)⁸ might be given to the area after surgery, especially if it's not clear that all of the tumor was removed. Malignant phyllodes tumors are different from the more common types of breast cancer. They are less likely to respond to some of the treatments commonly used for breast cancer, such as [hormone therapy](#)⁹ or the [chemotherapy](#)¹⁰ drugs normally used for breast cancer. Phyllodes tumors that have spread to other parts of the body are often treated more like [sarcomas](#)¹¹ (soft-tissue cancers) than breast cancers.

Because these tumors can come back, close follow-up with frequent breast exams and imaging tests are usually recommended after treatment.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/genetics/family-cancer-syndromes.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
3. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-

- [detection/mammograms/mammogram-basics.html](#)
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Intraductal Papillomas of the Breast

Intraductal papillomas are benign (non-cancerous), wart-like tumors that grow within the milk ducts of the breast. They are made up of gland tissue along with fibrous tissue and blood vessels (called fibrovascular tissue).

Solitary papillomas (solitary intraductal papillomas) are single tumors that often grow in the large milk ducts near the nipple. They are a common cause of clear or bloody nipple discharge, especially when it comes from only one breast. They may be felt as a small lump behind or next to the nipple. Sometimes they cause pain.

Papillomas may also be found in small ducts in areas of the breast farther from the nipple. In this case, there are often several growths (**multiple papillomas**). These are less likely to cause nipple discharge.

In **papillomatosis**, there are very small areas of cell growth within the ducts, but they aren't as distinct as papillomas are.

Diagnosis

Ductograms (x-rays of the breast ducts) are sometimes helpful in finding papillomas. An

[ultrasound](#)¹ and/or [mammogram](#)² may be done to learn more about the size and location of papillomas. If the papilloma is large enough to be felt, a [biopsy](#)³ can be done. (This is where tissue is removed from the papilloma and looked at under a microscope.)

How do intraductal papillomas affect your risk for breast cancer?

Having a single (solitary) papilloma does not raise breast cancer risk unless it contains other breast changes, such as [atypical hyperplasia](#). However, having multiple papillomas increases breast cancer risk slightly.

Treatment

The usual treatment is [surgery](#)⁴ to remove the papilloma and the part of the duct it's in.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-ultrasound.html
2. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
4. www.cancer.org/cancer/breast-cancer/treatment/surgery-for-breast-cancer.html

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Granular Cell Tumors of the Breast

Granular cell tumors are thought to start in early forms of nerve cells. They are very rarely found in the breast. Most granular cell tumors are found in the skin or the mouth, but they are uncommon even in those places. They are almost never cancer.

A granular cell tumor of the breast can most often be felt as a firm lump that you can move, but some may be attached to the skin or chest wall. They are most often in the upper, inner part of the breast.

Diagnosis

A [mammogram](#)¹ and/or breast [ultrasound](#)² may be done to learn more about the shape, size, and location of the tumor. Granular cell tumors are sometimes thought to be cancer because they can form lumps that are fixed in place, and they can also sometimes look like cancer on a mammogram. A [biopsy](#)³ (removal of small pieces of breast tissue to be looked at under the microscope) is usually needed to be sure this breast change is not cancer.

Treatment

Granular cell tumors are usually removed along with a small margin (rim) of normal

breast tissue around them.

How do granular cell tumors affect your risk for breast cancer?

Granular cell tumors of the breast are not linked to a higher risk of breast cancer.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html

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Fat Necrosis and Oil Cysts in the Breast

Fat necrosis is a benign (non-cancerous) breast condition that happens when an area

of the fatty breast tissue is damaged, usually as a result of injury to the breast. It can also happen after breast surgery or radiation treatment. Fat necrosis is more common in women with very large breasts.

As the body repairs the damaged breast tissue, it's usually replaced by firm scar tissue. But some fat cells may respond differently to injury. Instead of forming scar tissue, the fat cells die and release their contents. This forms a sac-like collection of greasy fluid called an **oil cyst**.

Diagnosis

Oil cysts and areas of fat necrosis can form a lump that can be felt, but it usually doesn't hurt. The skin around the lump might look thicker, red, or bruised. Sometimes these changes can be hard to tell apart from cancers on a breast exam or even a [mammogram](#)¹. If this is the case, a [biopsy](#)² (removing all or part of the lump to look at the tissue under the microscope) might be needed to find out if the lump contains cancer cells.

Doctors can usually tell an oil cyst by the way it looks on an [ultrasound](#)³. But if there's a concern that it might be something else, a [needle aspiration](#)⁴ biopsy might be done, in which a thin, hollow needle is put into the cyst to take out the fluid for testing.

Treatment

Fat necrosis and oil cysts usually don't need to be treated. Sometimes fat necrosis goes away on its own. If a needle aspiration is done to remove the fluid in an oil cyst, it can also serve as treatment.

If the lump or lumpy area gets bigger or becomes bothersome, however, surgery may be done.

How do fat necrosis and oil cysts affect your risk for breast cancer?

These breast changes do not increase a woman's risk of breast cancer.

Hyperlinks

1. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-

- [cytology-specimens-for-cancer/biopsy-types.html](#)
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
 4. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-biopsy/fine-needle-aspiration-biopsy-of-the-breast.html

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Mastitis

Mastitis is inflammation (swelling) in the breast, which is usually caused by an infection. It most commonly affects women who are breastfeeding, but it can affect other women as well.

A clogged milk duct, not fully draining milk from the breast, or breaks in the skin of the nipple can lead to infection. This causes the body's white blood cells to release substances to fight the infection, which can lead to swelling and increased blood flow. The infected part of the breast may become swollen, painful, red, and warm to the touch. The woman may also have fever and a headache, or general flu-like symptoms.

Diagnosis

Mastitis can usually be diagnosed based on a woman's symptoms and the results of a breast exam. It usually affects only one breast.

Treatment

Mastitis is typically treated with antibiotics, along with emptying the milk from the breast. In some cases, a breast abscess (a collection of pus) may form. Abscesses are treated by draining the pus, either by surgery or by using a needle (often guided by [ultrasound](#)¹), and then antibiotics.

[Inflammatory breast cancer](#)² has symptoms that are a lot like mastitis and can be mistaken for an infection. If you've been diagnosed with mastitis and antibiotic treatment doesn't help within a week or so, you might need a skin [biopsy](#)³ to be sure it's not cancer. Inflammatory breast cancer can spread quickly, so don't put off going back to the doctor if you still have symptoms after antibiotic treatment.

How does mastitis affect your risk for breast cancer?

Having mastitis does not raise your risk of developing breast cancer.

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
2. www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/types-of-breast-cancer/inflammatory-breast-cancer.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html

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Duct Ectasia

Duct ectasia, also known as **mammary duct ectasia**, is a benign (non-cancerous) breast condition that occurs when a milk duct in the breast widens and its walls thicken. This can cause the duct to become blocked and lead to fluid build-up. It's more common in women who are getting close to menopause. But it can happen after menopause, too.

Diagnosis

Often, this condition causes no symptoms and is found when a [biopsy](#)¹ (removal of small pieces of breast tissue to be checked under a microscope) is done for another breast problem.

Less often, duct ectasia may cause a nipple discharge, which is often sticky and thick. The nipple and nearby breast tissue may be tender and red. The nipple may be pulled inward. Sometimes scar tissue around the abnormal duct causes a hard lump that may be confused with cancer. An [ultrasound](#)² and/or [mammogram](#)³ may be done to learn more about the changed part of your breast.

If there's a lump, a [biopsy](#)⁴ may be needed to make sure it's not cancer. A hollow needle is used to take a tiny piece of tissue from the area so it can be checked in the

lab for cancer cells.

Treatment

Duct ectasia sometimes gets better without treatment. Warm compresses and antibiotics may be used in some cases. If the symptoms do not go away, the abnormal duct may need to be removed with surgery.

How does duct ectasia affect your risk for breast cancer?

Duct ectasia does not increase your breast cancer risk.

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/ultrasound-for-cancer.html
3. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
4. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/breast-biopsy.html

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Other Non-cancerous Breast Conditions

These are some of the less common types of benign (non-cancerous) tumors and conditions that can be found in the breast.

Radial scars

Radial scars are also called **complex sclerosing lesions**. They're most often found when a breast [biopsy](#)¹ is done for some other purpose. Sometimes radial scars distort the normal breast tissue.

Radial scars are not really scars, but they look like scars when seen under a microscope. They do not usually cause symptoms, but they are important for 2 reasons:

- If they are large enough, they may look like cancer on a [mammogram](#)², or even on a biopsy.
- They seem to be linked to a slight increase in a woman's risk of developing breast cancer.

Women who have them may be advised to see their health care provider more often than usual so tests can be done to watch for changes in the radial scars. Many doctors recommend surgery to remove radial scars.

Other breast changes that are not cancer

Other benign lumps or tumors that may be found in the breast include the following. None of these conditions raises breast cancer risk, but they may need to be biopsied or removed to know what they are and be sure they don't have any cancer cells in them.

- **Lipoma:** a fatty tumor that can appear almost anywhere in the body, including the breast. It is usually not tender.
- **Hamartoma:** a smooth, painless lump formed by the overgrowth of mature breast cells, which may be made up of fatty, fibrous, and/or gland tissues
- **Hemangioma:** a rare tumor made of blood vessels
- **Hematoma:** a collection of blood within the breast caused by internal bleeding
- **Adenomyoepithelioma:** a very rare tumor formed by certain cells in the milk duct

walls

- **Neurofibroma:** a tumor that's an overgrowth of nerve cells

Hyperlinks

1. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer/biopsy-types.html
2. www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html

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