lumps, swelling, and/or tenderness or pain. These symptoms tend to be worse just before your menstrual period, and they may change (such as the lumps growing or shrinking) during different stages of your menstrual cycle. At times you may notice some nipple discharge.

If there is a concern about a lump possibly being cancer, a breast ultrasound[1] typically is done to see if the lump is solid or if it has fluid in it (that is, if it's a cyst). There are different types of cysts:

- A **simple cyst** is filled entirely with fluid. Simple cysts are not a cause for concern.
- A **complicated cyst** is similar to a simple cyst, but it has what looks like ‘dej 0 g 1 0 0 u-9si0 1 95

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mild discomfort, 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.

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Hyperplasia of the Breast

under a microscope.

- In **usual ductal hyperplasia**, there is an overgrowth of cells lining the ducts in the breast, but the cells look very close to normal.
- In atypical hyperplasia (or hyperplasia with atypia), the cells look more distorted and abnormal. This can be either **atypical ductal hyperplasia (ADH)** or **atypical lobular hyperplasia (ALH)**.

Diagnosis of hyperplasia

Hyperplasia doesn't usually cause a lump that can be felt, but it can sometimes cause changes that can be seen on a mammogram[1]. It's diagnosed by doing a biopsy[2], during which a hollow needle or surgery is used to take out some of the abnormal breast tissue for testing.

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:

- **Usual ductal hyperplasia (also known as moderate or florid hyperplasia of the usual type, without atypia):** The risk of breast cancer is about 1½ to 2 times higher than 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 of hyperplasia

Usual ductal hyperplasia is considered a normal finding in the breast and does not need to be treated.

If either **ADH or ALH** is found in a needle biopsy sample, surgery may be recommended to remove more breast tissue around it. This is to be sure that there is nothing more serious, such as cancer, nearby. If ADH or ALH is found after a surgical biopsy, typically no other treatment is needed.

Reducing breast cancer risk or finding it early

Both ADH and ALH are linked to a higher risk of breast cancer. Even though most women with ADH or ALH will not develop breast cancer, it's still important to talk with a health care provider about your risk and what you can do about it.

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Lobular Carcinoma in Situ (LCIS)

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, doctors typically recommend that women with LCIS have regular breast cancer screening tests and follow-up visits with a health care provider for the rest of their lives.

Treatment for LCIS

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[4] or some other type of breast-conserving surgery[5]) to help make sure that LCIS was the only abnormality there. This is especially true if the LCIS is described as **pleomorphic** or **florid**, in which case it might be more likely to grow quickly.

Even after an excisional biopsy, if **pleomorphic** or **florid LCIS** is found, some doctors might recommend another, more extensive surgery to make sure it has all been removed.

Reducing breast cancer risk or finding it early

Close follow-up 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

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[10].) This may be followed later by breast reconstruction[11].

Hyperlinks

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

Adenosis is a benign (non-cancerous) breast condition in which the lobules (milk-

distorted by scar-like tissue. This type may cause breast pain.

Diagnosis of breast adenosis

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 something else (such as breast cancer).

Calcifications (mineral deposits) can form in adenosis (including sclerosing adenosis), as well as 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 breast biopsy[2] is usually needed to know if the breast change is caused by adenosis or cancer. (In a biopsy, small pieces of breast tissue are removed and checked under a microscope.)

Treatment of adenosis

Adenosis doesn't usually need to be treated, unless it's 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 breast cancer.

Hyperlinks

1. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms/what-does-the-doctor-look-for-on-a-mammogram.html
2. www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests.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 of fibroadenomas

Some fibroadenomas are too small to be felt, but some can be up to several inches across. A woman can have one or many fibroadenomas.

Fibroadenomas can often feel like a marble within the breast. They tend to be round or oval and have clear-cut borders. You can move them under the skin, and they’re usually firm or rubbery, but not tender. Some fibroadenomas are only found by an imaging test

(such as a mammogram[1] or ultrasound[2]).

A breast biopsy[3] (removing some breast tissue to check it in the lab) may be needed to know for sure if a breast mass is a fibroadenoma (or some other condition).

Most fibroadenomas look the same all over when seen under a microscope. These 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 of fibroadenomas

Most fibroadenomas don't need to be treated. But doctors might recommend removing them in some cases, especially if they keep growing or change the shape of the breast.

Sometimes fibroadenomas stop growing or even shrink on their own, without any treatment. As long as the doctor feels sure the masses are fibroadenomas and not breast cancer, they can often be left in place and watched to be sure they don’t grow. This approach is useful for women with many fibroadenomas that aren't growing. In such cases, removing them might mean removing a lot of nearby normal breast tissue, causing scarring and changes in the shape and texture of the breast.

It’s important that women with fibroadenomas 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 usually means that another fibroadenoma has formed – it does not mean that the old one has come back.

Hyperlinks

1. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
2. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-ultrasound.html
3. www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/biopsy-types.html

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Phyllodes Tumors of the Breast

Phyllodes tumors (or phylloides tumors) are rare breast tumors that start in the connective (stromal) tissue of the breast, not the ducts or glands (which is where most breast cancers start). Most phyllodes tumors are benign and only a small number are malignant (cancer).

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. If you have a malignant phyllodes tumor, it does not affect your risk of getting other types of breast cancer. Still, you may be watched more closely and get regular imaging tests after treatment for a phyllodes tumor, because these tumors can sometimes come back after surgery.

Treatment of phyllodes tumors

Phyllodes tumors typically need to be removed completely with surgery.

If the tumor is found to be **benign**, an excisional biopsy might be all that is needed, as long as the tumor was removed completely.

If the tumor is **borderline or malignant**, a wider margin (area of normal tissue around the tumor) usually needs to be removed as well. This might be done with breast-conserving surgery[6]

Intraductal Papillomas of the Breast

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 of breast papillomas

Papillomas might cause symptoms such as clear or bloody nipple discharge (or a breast lump), or they might show up as an abnormal area on an imaging test (such as a mammogram[1] or breast ultrasound[2]).

A ductogram (galactogram), in which dye is injected into the nipple duct where the

detection/breast-ultrasound.html
3. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-biopsy.html
4. www.cancer.org/cancer/types/breast-cancer/treatment/surgery-for-breast-cancer.html

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Fat Necrosis and Oil Cysts in the Breast

As long as doctors are sure of the diagnosis, fat necrosis and oil cysts usually don't need to be treated. Sometimes fat necrosis goes away on its own. If a needle biopsy is done to remove the fluid in an oil cyst, it can also serve as treatment.

If the lump gets bigger or becomes bothersome, however, surgery may be done to remove it.

Hyperlinks

1. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms/what-does-the-doctor-look-for-on-a-mammogram.html
2. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms.html
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4. www.cancer.org/cancer/diagnosis-staging/tests/imaging-tests/ultrasound-for-cancer.html
5. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-biopsy/fine-needle-aspiration-biopsy-of-the-breast.html
6. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-biopsy/core-needle-biopsy-of-the-breast.html

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Mastitis

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 aspiration (using a thin, hollow 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.

Hyperlinks

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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 at other ages, too.

Diagnosis of duct ectasia

Often, this condition causes no symptoms and is found when a biopsy[1] (removal of small pieces of breast tissue to be checked with 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, and the nipple may be pulled inward. Sometimes scar tissue around the abnormal duct causes a hard lump that may be confused with cancer. A mammogram[2] and/or breast ultrasound[3] may be done to learn more about the changed part of your breast.

How does duct ectasia affect your breast cancer risk?

Duct ectasia does not increase your risk for breast cancer.

Treatment of duct ectasia

Duct ectasia that is causing symptoms sometimes gets better without treatment. Warm compresses and antibiotics may be used in some cases. If the symptoms don't go away, the abnormal duct might need to be surgically removed.

Hyperlinks

1. www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/biopsy-types.html
2. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
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Radial Scars and Some 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 show up as a distortion of the normal breast tissue on a mammogram.

Radial scars are not really scars, but they look like scars when seen with a microscope. They don't usually cause symptoms, but they are important because:

- If they are large enough, they may look like cancer on an imaging test such as 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.

Doctors often recommend surgery to remove radial scars, but in some cases they can use imaging tests instead to watch for any concerning changes.

Other breast changes that are not cancer

Other types of benign masses and other changes can also be found in the breast. Many of these are described on other Non-cancerous Breast Conditions pages.

normally surround and help insulate nerve cells. These tumors rarely start in the breast.

Hyperlinks

1. www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/biopsy-types.html
2. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/mammograms/mammogram-basics.html
3. www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-detection/breast-biopsy.html

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