

Breast Cancer

Ductal Carcinoma In Situ

Definitions

Ductal: Relating to the breast's milk ducts, the parts of the breast through which milk flows.

Carcinoma: A type of cancerous, or malignant, tumor.

In Situ: In its original place.

Non-invasive: Not spreading beyond the inside of the breast duct.

Calcification: Calcium deposits in the breast can be associated with Ductal Carcinoma In Situ. Clusters of these deposits may indicate cancer.

Malignant: Cancerous and capable of spreading.

Pathologist: A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

What is ductal carcinoma in situ (DCIS)?

Ductal carcinoma in situ is the earliest possible and most treatable diagnosis of breast cancer. Some experts consider it to be "pre-malignant." The most common form of non-invasive breast cancer, DCIS accounts for about 20 percent of all newly diagnosed breast cancers, according to the National Cancer Institute. Sometimes, DCIS is seen in association with an invasive form of breast cancer.

The diagnosis of DCIS is increasing because more women are receiving regular mammograms—and because of advancements in mammography technology, which can now find small areas of calcification in the breast. Experts estimate that about one-third of women with DCIS will develop invasive breast cancer within 10 years if the disease is left untreated.

Who is most likely to have DCIS?

Because of how DCIS is detected, it can be found in women earlier than age 45, which is the age breast cancer becomes more common. However, as a woman ages, breast cancer risk does not decline; therefore, DCIS can be found at any age. Less than 10 percent of women with breast cancer have a family history of the disease.

Other factors increasing the risk of having breast cancer include having no children or the first child after age 30, early menstruation, and consuming three or more alcoholic drinks a day.

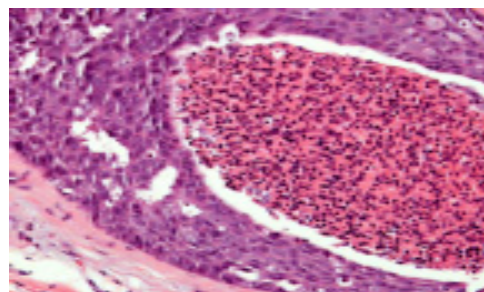
What characterizes DCIS?

DCIS is characterized by pre-cancerous or early-stage cell abnormalities in the breast ducts. On a mammogram, DCIS appears as areas of calcification.

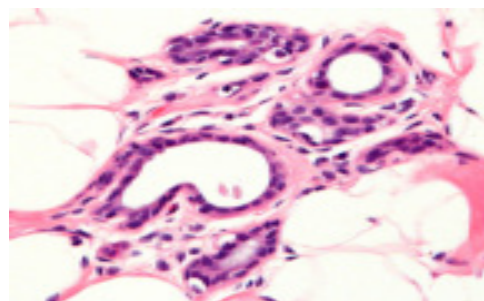
How does the pathologist make a diagnosis?

The pathologist examines **biopsy specimens**, along with other tests if necessary. If mammography shows suspicious findings, a biopsy may be recommended. A biopsy is the most widely used method for making a firm diagnosis of breast cancer. During a biopsy procedure, a primary care physician removes cells or tissues from the suspicious area for the pathologist to examine more closely in the laboratory. In some cases a biopsy may be performed with surgery.

To make a firm diagnosis of DCIS, the pathologist will investigate whether the malignancy has invaded tissue surrounding the ducts. A diagnosis of DCIS means the tumor remains only in its original place—"in situ."
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Ductal carcinoma in situ is the earliest possible and most treatable form of breast cancer.



Normal breast cells.

What kinds of questions should I ask my doctors?

Ask any question you want. There are no questions you should be reluctant to ask. Here are a few to consider:

- Please describe the type of cancer I have and what treatment options are available.
- What are the chances for full remission?
- What treatment options do you recommend? Why do you believe these are the best treatments?
- What are the pros and cons of these treatment options?
- What are the side effects?
- Should I receive a second opinion?
- Is your medical team experienced in treating the type of cancer I have?
- Can you provide me with information about the physicians and others on the medical team?

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What else does the pathologist look for?

The biopsy sample is tested for the presence of **estrogen receptors**. Women with DCIS containing this receptor are more likely to respond positively to hormone therapy. Due to continual advances in research, other tests may be used as well.

With all necessary tests completed, pathologists determine the cancer's **stage**. All DCIS tumors are Stage "Tis," which means the tumor is "in situ" and has not spread. The cure rate for stage "Tis" tumors is close to 100 percent if standard forms of treatment are followed.

How do doctors determine what surgery or treatment will be necessary?

The pathologist consults with your primary care physician after reviewing the test results. Together, using their combined experience and knowledge, they determine treatment options most appropriate for your condition.

What kinds of treatments are available for DCIS?

DCIS is treated through **surgery**, which is sometimes supplemented by **radiation therapy**. It's important to learn as much as you can about your treatment options and to make the decision that's right for you. Because having DCIS is not an emergency situation, you can take your time making your choices.

Advancements in surgical techniques have enabled about 70 percent of women to choose breast-conserving surgical treatments like **lumpectomy** rather than **mastectomy**, where the entire breast is removed. If you have DCIS, which is confined to one area of one breast, you are likely to be a good candidate for lumpectomy. If your breast cannot be conserved, breast reconstruction surgery may be a possibility after you recover from your initial operation to remove the cancer.

Radiation therapy is often used after lumpectomy and sometimes after mastectomy to rid the body of any microscopic remnants of the cancer in the area where the original tumor was found and removed.

For more information, go to www.cancer.org (American Cancer Society) or www.y-me.org.

Healing begins with the pathologists diagnosis. More than 70% of all decisions about your diagnosis, treatment, hospital admission, and discharge rest on the pathology report.