

Breast Cancer

Invasive Lobular Carcinoma

What is Invasive Lobular Carcinoma (ILC)?

Invasive Lobular Carcinoma, also known as Infiltrating Lobular Carcinoma, is a type of breast cancer that starts in a lobule and spreads to surrounding breast tissue. If not treated at an early stage, ILC also can move into other parts of the body, such as the uterus or ovaries. ILC is the second most common type of invasive breast cancer, accounting for 10 to 15 percent of all breast cancer cases.

Who is most likely to have ILC?

Women between the ages of 45 and 56 are most likely to have ILC. About 20 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.

Definitions

Invasive, Infiltrating:

Capable of spreading to other parts of the breast or body.

Lobular:

Relating to the breast lobule, the part of the breast that produces milk in a woman who has been recently pregnant or who is breast feeding.

Carcinoma:

A type of cancerous, or malignant, tumor.

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.

Lymphatic:

Relating to lymph glands, especially those located near the breast.

What characterizes ILC?

ILC is characterized by a general thickening of an area of the breast, usually the section above the nipple and toward the arm. You may not be able to feel a breast lump or hard mass. Instead, an area of breast tissue may only feel differently than the rest of your breast. ILC also is less likely to appear on a mammogram. When it does appear, it may show as a mass with fine spikes radiating from the edges or appear as an asymmetry compared to the other breast.

How does the pathologist make a diagnosis?

The pathologist examines a *biopsy specimen*, along with other tests if necessary. A biopsy is the most widely used method for detecting ILC breast cancer. During a biopsy procedure, the surgeon 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. The surgeon removes all or part of the tumor for the pathologist to examine.

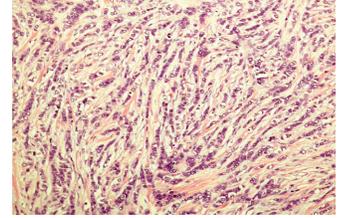
Laboratory testing enables the pathologist to determine the type of cancer and whether it is invasive.

The pathologist examines the tissue sample under a microscope and assigns a histologic type and *histologic tumor grade* to it. Grade 1 cancers tend to grow the slowest, while Grade 3 tumors spread more aggressively. The pathologist also notes the size of the tumor, how close the cancer is to the edge of the tissue removed by the surgeon, and whether the tumor invaded blood or lymphatic vessels. These factors help pathologists determine the likelihood of the cancer remaining in or returning to the affected area.

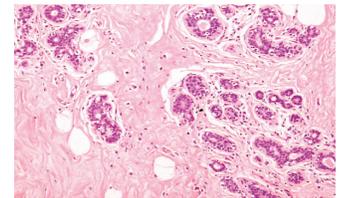
What else does the pathologist look for?

The biopsy sample is tested for the presence of *estrogen* and *progesterone receptors*. Women with cancers containing these receptors are more likely to respond positively to hormone therapy. Pathologists also may check for a protein called *HER2/neu*. Cancers with too much of this protein may respond to targeted therapy with Herceptin. Invasive lobular cancers are almost always negative for *HER2/neu*. Due to continual advances in research, other tests may be used as well. After reviewing the results of the laboratory tests, your clinician may recommend additional tests to determine to what extent malignant cells may have spread to other parts of the body. Depending on your situation, these tests may include a *chest x-ray*; a *bone scan*; and imaging tests including *computed tomography (CT)*, *magnetic resonance imaging (MRI)*, or *PET (positron emission tomography)*. All these tests can detect signs that the cancer may have spread to other parts of the body. With all necessary tests completed, pathologists determine the cancer's *stage*. Stage 1 ILC tumors are confined to the breast, and Stage 4 ILC tumors have spread beyond areas near the breast. Stages 2 and 3 describe conditions between these two extremes.

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



Invasive Lobular Carcinoma is characterized by a thickening of an area of the breast.



Normal breast cells.



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