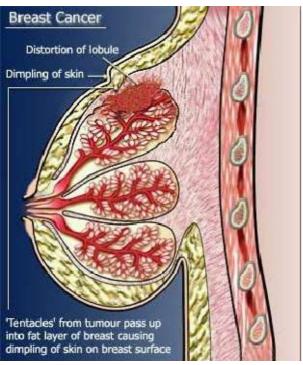
# **Breast cancer: detection and diagnosis**





# **Early detection**

Early detection is a key factor that can boost your chances of surviving breast cancer. If a cancer is detected while still localised in the breast, your chances of 5-year survival are often higher than 95 per cent.

To aid your chances of early detection, be aware of changes in your breasts, such as changes to the shape or size of a breast or nipple, skin redness, puckering or dimpling, scaliness or pulling in (inversion) of a nipple, a discharge, or a lump or area that feels different from the rest of the breast. Make sure you visit your doctor as soon as possible if you detect changes like these. However, try not to worry if you do detect a change as breast changes are common, and in most cases will not be due to breast cancer.

### **Breast self-examination**

Some doctors believe that monthly breast self-examinations may not be as useful as previously thought. Some studies have shown that routine, systematic breast self-examination does not lead to fewer deaths from breast cancer and, in fact, may lead to unnecessary biopsies and concern. Cancer associations differ in their positions on whether women should do breast self-exams. One thing is for sure — doing breast self-exams makes you familiar with how your breasts normally feel.

The Cancer Council Australia recommends 'breast awareness' — being familiar with the normal look and feel of your breasts, and reporting any unusual breast changes to your doctor immediately.

### **Mammograms**

BreastScreen Australia and the Cancer Council Australia recommend 2-yearly mammograms for all women aged 50-69. Mammograms (a procedure that uses low-level X-rays to detect abnormal areas in the breast) are one of the best methods of detecting breast cancer at an early stage.

BreastScreen Australia states that women aged 50-69 who have regular 2-yearly mammograms can reduce their risk of dying from breast cancer. BreastScreen Australia provides free screening mammograms to women aged 50-69 years. There are more than 500 screening locations around the country, including mobile units.

Although the scientific evidence is not strong enough to recommend regular screening mammograms for women aged 40-49 (unless they have a family history of breast cancer) they may request a free screening mammogram at BreastScreen Australia.

Women over 70 are also eligible for free screening mammograms through BreastScreen Australia.

In women before the menopause, breast tissue is dense, making mammograms difficult to read, so women under 40 do not usually have regular screening mammograms.

There are other screening mammogram services apart from BreastScreen Australia, so talk to your doctor if you think you need a mammogram.

# **Ultrasound**

As mentioned, the breast tissue of younger women is dense and thick and this makes mammograms difficult for doctors to read, so in these cases ultrasound can be used to view the breast tissue. Ultrasound is often the doctor's choice for checking women aged under 35.

### Magnetic resonance imaging

Magnetic resonance imaging (MRI) can also be used for breast screening in younger women (aged under 50) who are at high risk of breast cancer because of their family history or a genetic mutation (e.g. in the BRCA1 or BRCA2 genes).

# **Diagnosis**

A biopsy will be performed if a breast lump that could be a cancer is detected on a mammogram, ultrasound or MRI. This could take the form of an aspiration biopsy, a core biopsy or an excisional (surgical) biopsy.

# **Aspiration biopsy**

An aspiration biopsy (also called fine needle aspiration cytology) is when some cells are removed from the lump through a needle attached to a syringe. The cells are then sent away for analysis.

# **Core biopsy**

In a core biopsy a small sample of tissue is removed with a needle. This test is usually done under local anaesthetic. It is sometimes guided by ultrasound, so that the doctor can view the lump and make sure the needle is correctly positioned.

# **Excisional (surgical) biopsy**

In an excisional biopsy part of all of the lump is removed. This procedure is generally done under general anaesthetic.

If cancerous cells are found when the biopsy sample is analysed, further tests will need to be conducted to determine the characteristics of the cancer. You will also need further examinations to find out whether the cancer has spread from the breast.

Last Reviewed: 28/09/2011

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