Mammography

Mammography is a low dose x-ray of your breasts. It is used for screening and diagnosis of certain conditions that affect breast tissue. It is commonly used for the early detection of breast cancer. Mammography to detect breast cancer can be done by screening mammography or diagnostic mammography. A screening mammogram every two years is recommended for women aged 50 to 69 years.

Screening mammography

Screening mammography is provided as a free service through the BreastScreen Australia program. It is used to detect breast cancer early, when you are well and have no obvious breast symptoms. Screening mammograms can detect breast cancers that are too small to be felt by you or your doctor. Mammograms taken at different times can later be compared to show changes in breast tissue over time.

Screening mammograms can find most cancers present at the time of screening but, like other medical tests, they are not 100 per cent accurate. A visit to BreastScreen once every two years is still the best way to detect breast cancer early, before there are any signs of the disease.

Diagnostic mammography

Diagnostic mammography mostly takes place at a breast clinic or diagnostic imaging service. It is a test to investigate a breast symptom that you or your doctor may be concerned about, such as breast pain, a lump or discharge from the nipple.

Medical issues to consider

Your doctor, nurse or other health professional will explain the test. Make sure you understand why you are having the test and don't jump to the conclusion that you have breast cancer. Talk to your doctor about any concerns you may have. If you suspect you may be pregnant, tell your doctor.

Inform the clinic if you have breast implants, because the radiographer may use special techniques to take clear x-rays of your breasts. The implant hides some of the breast tissue so breast x-rays may be less effective for women with implants.

The tissue of younger women's breasts is usually more dense than that of older women and can show up as white areas on the x-ray. Breast cancers also show up as white areas on x-rays. This makes breast cancer more difficult to detect in screening mammograms for women in their 40s compared to women aged 50 to 69 years.

The procedure

Mammogram x-rays use very low doses of radiation, similar to that of many common x-rays. In preparing for the mammogram, wear a skirt or slacks and a top, rather than a dress, as you need to undress from the waist up.

The procedure will involve the following steps:

- You are asked to remove all jewellery and clothing above your waist and put on a gown that opens in the front.
- When you are ready and comfortable, you are positioned at the mammography machine – usually while standing. The radiographer positions your breast on the x-ray machine.

- While the mammogram is being taken, each breast is gently compressed between two flat plates on the x-ray machine to smooth out the breast tissue and to prevent any movement. Compressing the breast only lasts for a few seconds but some women may experience discomfort. If you feel any pain during the mammogram, you should let the radiographer know. They can release the compression and discuss whether you wish to continue. You can ask for the procedure to stop at any time.
- The x-rays are taken from different angles to make sure that the relevant part of your breast, or your whole breast, is x-rayed.
- The test itself may take only ten to 15 minutes to perform, but you may be asked to wait a short time while the images are processed to check that the images are technically satisfactory.

Immediately after the mammogram

Following a visit to BreastScreen Victoria for screening mammography, the results are usually posted within two weeks. Your doctor will also receive a copy of your results, if you have provided BreastScreen with their contact details.

Following diagnostic mammography, it may be necessary to make an appointment with your doctor to get the results. In diagnostic mammography, sometimes the radiologist may suggest that an ultrasound examination should be performed. This doesn't mean they have detected anything serious – sometimes ultrasound can be a more accurate way to examine breast tissue. Most women will be reassured that they do not have breast cancer. Some women may be asked to have further tests.

Further tests

Abnormal findings do not automatically mean that you have cancer. Sometimes further tests are needed because the mammography results are unclear. Some things that can cause difficulty with reading the film include:

- Glandular (lumpy) breasts, which are common in women under 30 years of age
- Dense (muscular) breasts, common in pre-menopausal women
- Previous breast surgery or radiation therapy
- Breast implants
- Movement of the breast during the procedure.

Remember, most women who are called back for further tests are found **not** to have breast cancer.

Possible complications

Mammography is a safe procedure that uses very low doses of radiation, similar to that of many common x-rays. Current research shows that the benefits of regular screening mammograms outweigh any possible risks from radiation.

Radiographers take special care to use minimal compression on the breast during the screening procedure. It is highly unlikely, but possible, that this compression could cause or worsen leaking of silicone or change the shape or texture of the breast in women with breast implants.

Taking care of yourself at home

Be advised by your doctor but, generally, there are no special instructions for aftercare following a mammogram.

Other forms of detection and diagnosis

Other methods used to help detect or diagnose breast conditions may include:

- **Breast awareness** – it is important for all women to know the normal look and feel of their breasts. If you notice any breast changes, nipple discharge or a lump, it is important that you visit your doctor as soon as possible.
- **Clinical examination** – the doctor physically examines the breast tissue to feel for lumps or thickenings.

- **Ultrasound scan** – a device that uses sound waves to form a picture of the inside of the breast.
- **Magnetic resonance imaging (MRI) scan** – a process that produces three-dimensional pictures of the breast using radio waves and a magnetic field.
- **Fine needle aspiration** – fluid or cells are drawn off using a fine needle, then examined in a laboratory.
- **Core biopsy** – a tissue sample is taken, using a needle under local anaesthetic, for examination in a laboratory.

Where to get help

- Your doctor
- BreastScreen Victoria Tel. 13 20 50

Things to remember

- Mammography is a low dose x-ray of your breasts.
- A mammogram is used to screen women without symptoms and to diagnose certain conditions that affect breast tissue in women who do have symptoms.
- Most women who are called back for further tests after an abnormal mammogram result are found **not** to have breast cancer.
- It is important for all women to know the normal look and feel of their breasts. If you notice any breast changes, nipple discharge or a lump, it is important that you visit your doctor as soon as possible.

This page has been produced in consultation with, and approved by:

BreastScreen Victoria