

# Breast cancer

## What are the facts about breast cancer in women?

About 1 in 11 to 15 women (1 in 11 in Australia) develops breast cancer. Breast cancer is uncommon under the age of 30 but it then steadily increases to a maximum at the age of about 60 years, being most common over 50 years.

Most cases start in the milk ducts and at first remain localised to the breast. If the tumour grows to about 25 mm (1 inch) cells can break off and spread (metastasise) via the blood stream and the lymphatic system to parts of the body such as the liver, lung and bones.

*Note:* very rarely breast cancer can develop in men.

## What are the symptoms?

The majority of people with breast cancer present with a breast lump most commonly in the upper, outer part towards the armpit. Other symptoms are:

- a lump that is usually painless (16% are painful)
- a hard and irregular lump
- change in breast shape
- puckering or dimpling of overlying skin
- nipple changes: inverted (turned in) or discharge.

It is unusual for the lump to be a noticeable bulge.

## What are the risk factors?

- Increasing age (over 40 years)
- Heredity—a strong family history
- Caucasian race
- Previous history of breast cancer
- Hormone replacement therapy, especially longer than 5 years
- Using the oral contraceptive pill
- Increased alcohol intake
- Obesity including heavy post-menopausal weight gain
- Early age of first period
- Later age of menopause (55 years or older)
- Childlessness or having children after 30
- Ionising radiation exposure

## What are the hereditary factors?

About 1 in 20 breast cancers are caused by specific genes (the BRCA 1 and 2 genes) which can be inherited. Those with a strong family history can be tested for the genes in a familial cancer clinic.

## What is the treatment?

The treatment depends on several factors including the size, type and nature of the cancer and the age, health and personal preference of the patient. The options include surgery, chemotherapy, radiotherapy and hormone treatment, usually a combination of two or more of these. The first-line treatment is usually an operation to remove the cancer, surrounding breast tissue and possibly adjacent lymph nodes.

The main surgical options are:

- *Breast-conserving surgery*—‘lumpectomy’ or partial mastectomy—where a smaller operation for a smaller tumour removes the cancer and some of the surrounding breast tissue.
- *Mastectomy*—removal of the entire breast with lymph nodes from the armpit. This is the surgery of choice for a large tumour.

Since the cancer cells first spread to the nearby lymph nodes in the armpit, it is usual to remove these or at least have radiotherapy to this area. It is also standard to follow surgery for proven cancer with cytotoxic chemotherapy or radiotherapy or anti-hormone therapy (e.g. tamoxifen) depending on the pathology report and advice of the specialist.

## Breast implants and reconstruction

Available options for cosmetic reasons include breast forms or prostheses to wear inside the bra, breast implants such as saline-filled devices and breast reconstruction using flaps of skin and muscle. These are often used following a mastectomy.

## What is the outlook?

The results of treatment continue to improve. The 5-year survival rate is now just over 80%.

## Breast cancer screening

It is recommended that screening mammography be performed on women between 50 and 70 years, and performed at least every 2 years.

### Key points

- Breast cancer affects 1 in 11 Australian women.
- The chances of cure are good.
- Breast cancer support groups are helpful.
- Treatment options include surgery (total or partial mastectomy), radiotherapy, chemotherapy and hormone therapy.

