BREAST CANCER
WHAT ARE MY SURGICAL OPTIONS?

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The aims of surgery

Every woman is different and requires her own treatment plan, as no two breast cancers are the same.

If diagnosed with breast cancer you may be advised to have surgery to remove the tumour. This can be a scary prospect, but if the diagnosis has been made while the cancer is still small, most women are able to have the tumour completely removed without removing the whole breast.

Alternatively, you may need, or choose to have a mastectomy (total removal of the breast).

Breast reconstruction may be done following a mastectomy. Reconstruction can be done at the same time as the breast cancer surgery (immediate) or some time afterwards (delayed).

For more information visit www.nzbcf.org.nz
The aims of surgery... continued

The aims of surgery are to:

+ Safely remove the cancer.
+ Obtain tissue to understand how advanced the cancer is and how to treat it.
+ Reduce the risk of recurrence.
+ Optimise quality of life.
+ Achieve an acceptable cosmetic result.

With all breast surgery, the pathology report from the tumour will determine if further treatment is recommended. This may mean more surgery, chemotherapy, radiotherapy, hormone-blocking therapy, targeted biological therapy or a combination of treatments.

Know your surgical options

There are a number of surgical options available and it’s important to make an informed decision about treatment. The aim of surgery is to completely remove the cancer from the breast and this can be done either with local excision or full mastectomy, usually depending on the size of the tumour.

If local excision (partial mastectomy) is appropriate, then there is usually no increase in survival to be gained by choosing to have a mastectomy (total removal of the breast). This is because survival depends on other factors, such as the type of tumour, whether it has spread beyond the breast, and its response to treatment.

Breast conserving surgery

Also known as partial mastectomy/wide local excision/lumpectomy.

To perform a partial mastectomy, the cancer is removed along with a wedge of surrounding healthy tissue. Usually the nipple is not removed. The aim is to remove the cancer while still leaving a cosmetically acceptable breast.

If the cancer is very small and unable to be felt, it may need to be localised with a fine, hooked, guidewire. This will be inserted just before the surgery (under local anaesthetic) and guides the surgeon to the area of concern.

Every effort is made to remove the cancer with one operation but microscopic examination of the removed tissue may show that more tissue needs to be taken, in which case a second procedure may be needed.

The time it will take to recover from a partial mastectomy often depends on whether lymph nodes were removed from the armpit (axilla) at the same time. The recovery process may differ by individual, but generally:

+ A hospital stay of at least one day is required.
+ Recovery usually occurs over a further 2-3 weeks, depending on the degree of lymph node surgery.
+ A drainage tube may be inserted into the armpit if lymph nodes have been removed.
+ Driving is not recommended for 1-2 weeks, nor any heavy lifting, to reduce the risk of bleeding.
+ Discuss with your specialist team about time off work.

Breast-conserving surgery is almost always followed by radiotherapy treatment to the remaining breast tissue, with the aim of destroying any remaining cancer cells. When consenting to partial mastectomy you should also have a discussion about radiotherapy treatment and what it involves.
Mastectomy usually reduces the need for radiotherapy although it still may be recommended in some cases.

Mastectomy

A mastectomy involves removal of all of the breast tissue including the nipple and areola and a portion of skin. As with a partial mastectomy, an operation removing lymph nodes from under the arm may be performed at the same time.

This will generally involve:

+ A hospital stay of at least 1 night.
+ 1-2 drains inserted. These will be removed when fluid output reduces.
+ Recovery over 3-4 weeks.
+ No heavy lifting for 3-4 weeks.
+ No driving for approximately 3 weeks.
+ Usually off work for 4 weeks.

Mastectomy usually reduces the need for radiotherapy although it still may be recommended in some cases to reduce the risk of the cancer recurring locally.

“Mastectomy usually reduces the need for radiotherapy although it still may be recommended in some cases.”

Lymph node surgery

Some lymph node surgery is usual for an invasive cancer. This is done to stage the disease (make clear whether it is confined to the breast or has involved the nearest lymph nodes.) This will determine if any additional treatments are needed after surgery.

Usually lymph node surgery is not required for DCIS (ductal carcinoma in situ) unless it is high grade and extensive or a mastectomy is required.

Most of the lymph nodes which drain from the breast are located in the armpit. After removal, the nodes are examined under a microscope to determine whether the cancer may have moved beyond the breast. This helps in planning any appropriate further treatment.

Sentinel node biopsy

Where possible, a sentinel node biopsy will be performed, (rather than a more extensive axillary node dissection), as this carries a significantly lower risk of causing complications such as lymphoedema (a permanent swelling), and nerve pain in the affected arm.

The sentinel node is the first lymph node that drains the breast and is usually located in the armpit. It is the first lymph node to which the breast cancer may possibly spread.

Sometimes more than one sentinel lymph node is identified. The sentinel node(s) is identified by a pre-operative mapping procedure where a small amount of radioactive substance and/or blue dye is injected into the area of the tumour or around the areola. Lymphatic vessels will carry these substances into the first or sentinel node. The node is then removed and examined under a microscope. If the node contains cancer cells, more lymph nodes may need to be removed and this may be done either at the same time as the breast surgery or sometimes as a second procedure.
Know your surgical options… continued

Axillary node dissection

If there is known involvement of the lymph nodes or if the sentinel node is found to contain cancer cells then a more extensive lymph node dissection may be performed. This will remove most of the lymph nodes in a selected area. The number of lymph nodes obtained will vary from person to person (commonly 10-30).

Your specialist team will give you specific information about how to look after your arm and reduce your lymphedema risk. For more information visit www.lymphoedemanz.org.nz

Following lymph node surgery you will be given an arm and shoulder exercise programme and it is important to follow this to ensure you regain a full range of movement.

You may like to ask for a copy of your test results to keep for your own records. For further information see www.nzbcf.org.nz/breastcancer

Following surgery, an informative booklet “What does my pathology report mean?” may be given to you by your breast nurse.

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Breast reconstruction

Breast reconstruction is a surgical procedure that recreates the shape of a breast after a mastectomy. This may be done at the same time as the mastectomy (immediate reconstruction) or at a later date (delayed reconstruction).

In some cases it may be advisable to delay reconstructive surgery until chemotherapy and radiotherapy treatments have been completed.

If you are considering having breast reconstruction you should discuss the options with a surgeon who is trained in reconstruction surgery.

There are two main types of reconstruction to consider:

1. Reconstruction using your own tissue

TRAM flap reconstruction

A pedicled TRAM flap (tummy flap) transfers skin and fat from your lower abdomen using the rectus abdominus muscle to provide the blood supply.
2. Implant surgery

The breast can also be reconstructed using implants. Depending on the type of implant used, this may be either a one or two-stage procedure.

A tissue-expander may be inserted first, under the chest muscle. This is a temporary implant which is gradually inflated with fluid to stretch the skin and chest muscle. This would then be replaced, in a second operation, by a permanent silicone implant. In some cases a combination tissue expander/breast implant may be used. This does not require a second operation.

Your reconstructive surgeon will give you detailed information about your options and discuss the most suitable method for you. Following breast reconstruction you may also be able to have a nipple reconstruction followed by tattooing of an areola.

Recovery from breast reconstruction surgery

+ Hospital stay: usually 3-7 days, depending on the procedure.
+ Recovery: a further 3-7 weeks, depending on the procedure. During this time there will be a limitation on driving and major activities.
+ Work: usually 3-6 weeks off, depending on the procedure.

Breast reconstruction... continued

DIEP free flap

A DIEP flap transfers the skin and fat from the lower abdomen but the muscles of the abdomen are not affected. Blood supply is maintained by reconnecting the blood vessels with the aid of a microscope (microsurgery).

Latissimus dorsi flap (lat dorsi)

A latissimus dorsi flap transfers skin and muscle from the back to recreate the breast. This may be combined with an implant.
# Questions to ask your surgeon

- How much of my breast needs to be removed?
- How will my breast look after surgery?
- What should I expect after surgery – drains, movement, discomfort, nerve damage and any ongoing changes?
- Will I have any feeling in my breast?
- When should I begin to use the affected arm and what arm exercises should I do to prevent stiffness?
- Will I require further treatment?
- If I choose to have implants will they need to be replaced in the future?
- How will the breast surgery affect my physical activity?
- Can I talk to someone who has had this operation?
- How much will the surgery cost?
- What can go wrong with the surgery?
- When will my first follow-up appointment be scheduled?
- What support is available after surgery – lymphoedema prevention, psychological support, survivorship care/lifestyle advice?

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**FIND OUT MORE!**

Further information on surgical options is provided at [www.nzbcf.org.nz/breastcancer/treatment/surgeryoptions](http://www.nzbcf.org.nz/breastcancer/treatment/surgeryoptions)
The New Zealand Breast Cancer Foundation is a charitable trust formed in 1994 to educate all New Zealanders on the life-saving benefits of early detection and the importance of screening mammograms.

Its focus includes:

- New Zealand-wide breast awareness and education programmes for the public and health professionals.
- Funding medical research, including breast cancer patient registers, which record detailed information about diagnosis, treatment and outcomes.
- Providing scholarships and grants for radiation therapy students.
- Supporting programmes which improve the quality of life of New Zealanders with breast cancer. These include:
  - **YWCA Encore**, a free exercise programme, with healthy lifestyle information, relaxation and peer support.
  - **PINC Cancer Rehabilitation**, an individualised rehabilitation programme to help maximise recovery after breast cancer treatments.
  - **Dragon Boating** teams, helping women with breast cancer regain physical strength.
  - **Sweet Louise**, which supports people living with secondary breast cancer.
- Advocating for improved breast cancer care and treatment for all New Zealanders.

**Can we help you further?**

- **0800 BCNurse**
- Visit the New Zealand Breast Cancer Foundation’s website www.nzbcf.org.nz
- Email your questions to breasthealth@nzbcf.org.nz or breastnurse@nzbcf.org.nz
- Phone our breast cancer advice line 0800 BCNurse (0800 2268 773)
- Phone one of our National Educators 0800 902 732
- Phone the Cancer Society 0800 226 237

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