Reconstruction after Mastectomy

The aim of breast reconstruction is to rebuild a breast shape after mastectomy. This may be done at the same time as mastectomy surgery (immediate), or at a separate time after mastectomy (delayed). There is no time limit; reconstruction may be done years later.

Reconstruction will generally require more complex surgery and recovery than a mastectomy; the extent of this will mostly depend on the type of reconstruction and your general health.

Should I have an immediate or delayed reconstruction?

Certain factors may influence whether immediate or delayed reconstruction is more suitable for each individual, such as other treatments that may be required. In many cases, reconstruction is recommended to be delayed until cancer treatment is completed.

Where a choice is offered, having a reconstruction at the same time as mastectomy may ease distress for some people, whereas for others waiting until later to make a decision is less stressful. Please discuss with your doctor or breast nurse if any queries.

It is important to note that reconstruction cannot recreate a natural breast, but provides a shape as part of your own body, and usually removes the requirement for an external bra filler or 'prosthesis'.

Reconstruction is a personal choice and is not a requirement of treatment, but is available to all women having mastectomy surgery (where possible), and can be done many years afterward.

Is reconstruction available to everyone?

Breast reconstruction is available through public and private hospitals, however not all hospitals are able to carry out this surgery. Major hospitals and hospitals with specialist breast services are usually able to provide these services.

Reconstruction may be performed by a Plastic Surgeon or a Breast Surgeon with additional skills in reconstruction (the types of reconstruction they perform may vary). Please check with your surgeon.

NB: Public hospitals operate on an 'urgency' basis. Delayed reconstruction or prophylactic (preventative) surgery is classified as non-urgent, therefore a 'wait-time' usually is required.

How much will it cost?

Reconstruction surgery is covered by Medicare, therefore is usually available at no cost in the public system. In private hospitals the cost will depend on the type of surgery, surgeon, private health insurance cover, etc. NB: 'out-of-pocket' expenses may be significant with some procedures in private hospitals. Please check with your surgeon and health fund.

What are the different types of reconstruction?

Reconstruction may involve using implants, your own body tissue (tissue transfer), or both. Not all types of reconstruction are suitable for each person. Your Breast or Plastic Surgeon will advise which type of surgery is most suitable, or may discuss different choices with you.

Each type of surgery has advantages and disadvantages, and differing circumstances for each individual may vary the outcome considerably, e.g. body shape, treatments, general health, etc.

» **'Implant only'** surgery is usually the simplest form of reconstruction, as surgery is not as complex and doesn't involve other parts of the body. However this does not suit all body shapes, and may not be advised with some treatments (e.g. possibly if had or planned to have radiation to chest wall).

» **Tissue transfer surgery** is more complex, involves surgery and scars to other areas (e.g. the back or tummy), usually has longer recovery, but may produce a more natural result. An implant may still be required in certain cases to provide enough volume.

Different types of reconstruction are outlined below (guide only). Various forms of each type may be performed by different surgeons. Your surgeon will discuss details with you.

Implant only

An implant is an artificial device usually filled with either silicone gel or saline. The implant is generally placed behind the chest-wall muscle (pectoralis major – or 'pecs') for coverage, which differs to cosmetic breast enlargement procedures where the implant is placed behind natural breast tissue (which is removed in mastectomy surgery).

'Implant only' surgery usually requires two stages. In the first stage, an inflation device or 'tissue expander' is inserted behind the muscle and skin at surgery. Saline is then injected into the expander at separate appointments over a number of weeks to stretch the muscle and skin outward. This creates a space or 'pocket' for the implant. In a second operation (usually day procedure), the expander is removed and the permanent implant is inserted.

In certain cases the permanent implant may be placed at initial surgery.

The diagram below shows the process to 'inflate' the expander, prior to exchanging to permanent implant.

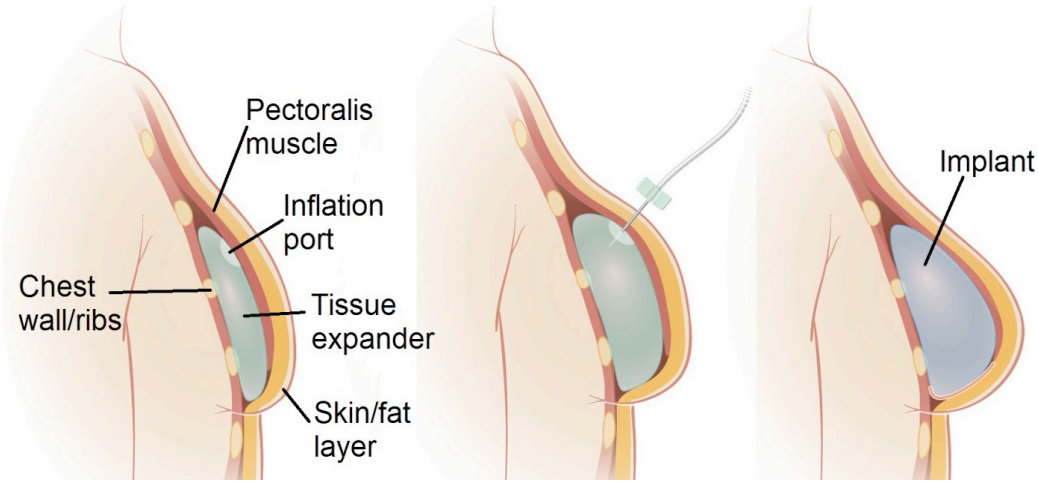

Figure 1: Implant Reconstruction using tissue expander

Tissue transfer

Two main types of 'tissue transfer' surgery are used for breast reconstruction:

- 'Back' operation; involves transferring muscle (latissimus dorsi muscle - LD), fat and skin from the back, and using this as the covering layer across the chest to create a shape. Usually an implant is required to attain enough volume (often using the inflation procedure & two-stage surgery described above).
- 'Tummy' operation; involves transferring muscle (transverse rectus abdominis muscle -TRAM), fat & skin; or fat & skin only (DIEP flap) from the abdomen to create shape and volume.

Both of these operations have the advantage of generally creating a more 'natural' appearance than implant alone, and the shape will usually also change size with your body if you gain or lose weight.

Disadvantages are they require more complex surgery, hospitalisation and recovery (tummy operation usually most complex), and will leave scars at the donor site (i.e. on the back or across the lower abdomen).

Variations on these types of reconstruction may be carried out by different surgeons, or other types of reconstruction using buttock transfer or breast-sharing, though these are less common. The below diagrams show the 'Back' and 'Tummy' reconstruction methods.

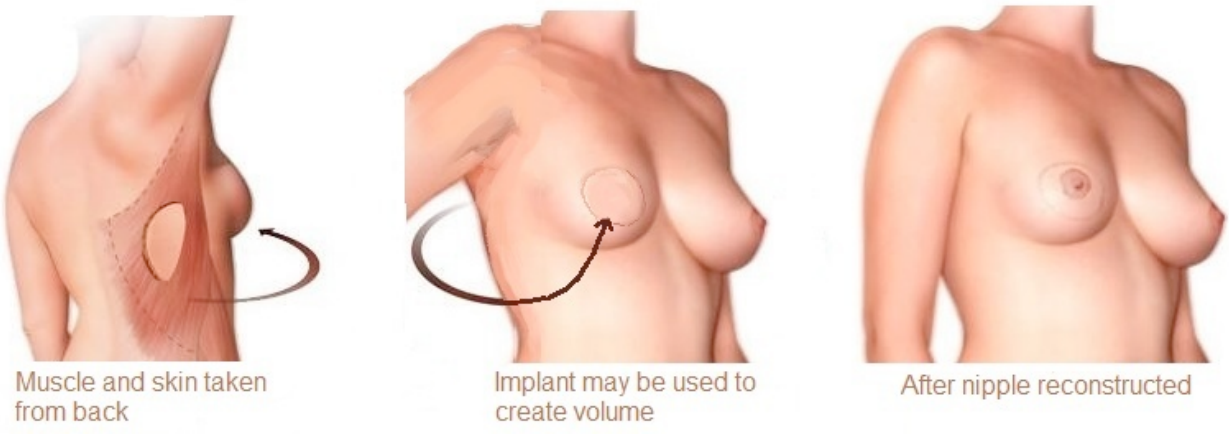

Figure 2: Latissimus Dorsi (Back) Reconstruction

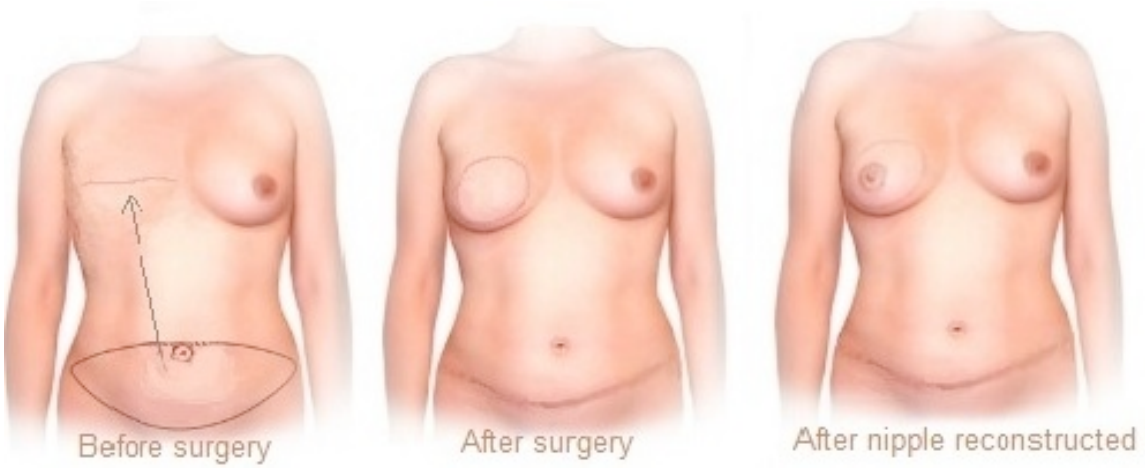

Figure 3: TRAM or DIEP (Tummy) Reconstruction

Can the nipple be reconstructed?

A 'nipple' shape may be created surgically using skin from the flap or from another site. This is usually preferred not to be done at the first reconstruction operation to allow healing and ensure placement is accurate. Colouration to recreate an areola (pinkish-brown area around nipple) may be achieved with tattooing when fully healed (NB: specialist tattooists may carry out this procedure for a cost).

What if my breasts are uneven after reconstruction?

Additional procedures may be required to 'fine-tune' the final result. This may involve further surgery to the reconstructed breast, or surgery to the other breast to match shape, e.g. a 'lift' or 'reduction'. This possibility is usually discussed with you at initial planning, however may not be considered until later depending on result.

Further information

A detailed booklet titled '*Understanding Breast Prostheses and Reconstruction*' is available to view online at

- www.cancercouncil.com.au/html/patientsfamiliesfriends/livingwithcancer/breastformsprostheses/downloads/breastforms_prostheses.pdf
- or is available free through the Cancer Council on 13 11 20.

More information is available from many different sources, including websites:

- Cancer Australia (aka National Breast and Ovarian Cancer Centre): www.canceraustralia.nbocc.org.au
- Cancer Network Australia: www.bcna.org.au
- Cancer Council Australia: www.cancer.org.au (refer to local state site)

or call 13 11 20

**** More sources and websites are listed under the Click's 'Resources' listings.**

The information provided in this Fact Sheet is basic and intended as a guide only.

For information relevant to you, please discuss with your doctor or breast nurse.

Information compiled by Glenys Longman, Click Online Breast Care Nurse, Jan 2012