Breast reconstruction and mastectomy

Summary

- After mastectomy, some women choose to have breast reconstruction surgery to mimic the look of their original breast in normal clothes.
- Breast reconstruction surgery can be performed at the same time as the mastectomy, or later on.
- The different types of breast reconstruction surgery include the insertion of prosthetic implants, and the transfer of skin flaps from other areas of the body to the chest.

Treatment for early breast cancer aims to remove the cancer and reduce the risk of the cancer spreading or coming back.

One of the main treatments for breast cancer is surgery. The two types of surgery are:

- breast conserving treatment (only part of the breast is removed – also known as partial mastectomy, wide local excision or lumpectomy)
- mastectomy (the whole breast is removed).

In most cases, breast cancer surgery will also involve the removal of one or more lymph nodes from the armpit (axilla).

Breast-conserving treatment, followed by radiotherapy, is just as effective in surviving breast cancer as a mastectomy. You may be able to choose between the two. Sometimes, however, the size and location of the cancer means that mastectomy offers the best chance of getting rid of all the cancer (for example, if the cancer is large compared to the size of the breast or the cancer is in more than one area of the breast).

Some women choose to have breast reconstruction surgery to give a similar appearance to the look of their original breast when wearing normal clothes.

Your doctor will discuss your situation in detail with you before you make any decisions about your treatment. You may also like to speak with a specialist breast care nurse about your treatment options.

Breast-conserving treatment (lumpectomy)

The tumour, some of the surrounding breast tissue (known as the margin) and nearby lymph nodes in the armpit are removed during breast-conserving treatment. Most of the breast remains, although it may be smaller than (and a different shape to) the remaining breast.

A follow-up operation is sometimes needed to make sure the margins of breast tissue surrounding the excised tumour (the place where the tumour was cut out) are free of cancer. Breast-conserving treatment includes radiotherapy, which is the use of x-rays to kill any remaining cancer cells. Research shows that women have fewer body image and sexuality concerns following breast-conserving treatment than after mastectomy.

Mastectomy

Mastectomy is an operation that removes the entire breast. Usually the underlying chest muscles are still intact. In most cases, breast cancer surgery will also involve the removal of one or more lymph nodes from the armpit (axilla).

Lymph nodes are found throughout the body (including the armpit). Their function is to protect the body against disease and infection. The lymph nodes in the arms are often the first place breast cancer cells spread to outside the breast. To check if cancer has spread to the lymph nodes they are removed via two methods:

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- **sentinel node biopsy** (SNB), or
- **axillary clearance** (AC).

When having a mastectomy your hospital stay will be between two and seven days. In some cases, radiotherapy and chemotherapy might be used after the operation.

**Complications of breast cancer surgery**

All types of surgery carry risks. Some of the possible complications of surgery include:

- infection
- death of tissue along the edges of the incision
- post-mastectomy pain syndrome (sharp pain on the chest wall).

**Side effects of breast cancer surgery**

Some of the side effects that happen in the first few months after surgery include:

- pins and needles across the chest
- numbness of the armpit and arm – surgery may damage nerves causing numbness. This can improve but may not go away completely. Shoulder exercises can help
- seroma – fluid may collect in or around the scar and can last up to six weeks after surgery. Your doctor or breast nurse can drain the fluid
- shoulder stiffness – exercises can help prevent or manage this. Your physiotherapist or occupational therapist can help
- **lymphoedema** – swelling of the arm, if the lymph nodes in the armpit have been removed
- breast pain
- changes in balance because the weight of one breast is missing
- **fatigue, depression** and anxiety – talk to your medical team about how you can manage these symptoms if they happen.

**Your feelings about breast cancer surgery**

For most women, having breast surgery brings up many difficult emotions. Feelings of sadness, anxiety and low self-esteem are very natural. Knowing where to get the right help with your feelings and side effects will help you cope better. There is a lot that can be done to help improve many of the side effects. This is why it is important to discuss any side effects with your specialist or breast care nurse.

**Breast forms (prostheses)**

After the operation, you may be given a temporary ‘breast form’. This is a soft breast-shaped cushion that you pin inside your bra. After around two months, when you are no longer sore and your surgical wound has healed, you can be fitted for a permanent ‘breast form’, or ‘external prosthesis’. This breast form is weighted to restore your balance. It also moves and looks like your other breast when worn under normal clothes.

Your local breast care nurse will be able to advise you where to purchase one in your area. You may also be eligible to receive partial or full reimbursement for a purchased prosthesis via Medicare.

**Breast reconstruction surgery**

If you decide that it’s what you want, surgeons can build you a new breast, either at the same time as your mastectomy (called an immediate reconstruction) or later on (a delayed reconstruction). A reconstructed breast will not look or feel the same as your original breast but, in normal clothes, you will look like you did before the mastectomy.

Depending on the type of reconstruction you choose, you may have scars on your breast and on other parts of your body. The actual method of reconstruction will depend on the nature of the problem. There is no single method that is suitable for all women.

There are two major types of breast reconstruction:
• **Implant reconstruction** – an implant is placed under the skin and muscle to recreate the shape of the breast
• **Flap reconstruction** – skin, fat and muscle are taken from elsewhere on the body to make the new breast.

**Implant reconstruction** (*prosthesis*)

The prosthetic implant reconstruction is suitable for women with smaller breasts. A special bag called a tissue expander is inserted under the skin and chest muscle, and is gradually filled with saline (through a small painless injection, over weeks or months) to promote a ‘pocket’ of skin. Once the pocket is large enough, a second operation is performed and the tissue expander is removed and a silicone or saline breast implant is inserted.

Saline implants are more susceptible to deflation than silicone, and a subsequent operation to replace the implant may be necessary. The main drawback of using implants is that they don’t look or feel like natural breasts, particularly after aging or changes to your weight.

**Flap reconstruction**

If you have larger breasts, do not have enough skin to cover an implant, or for other reasons prefer not to have an implant, one of several flap methods may be used. They are named after the muscles used in the reconstruction.

**TRAM flap**

*Transcutaneous rectus abdominus myocutaneous muscle (TRAM) flap reconstruction* is particularly suitable for women who have lax abdominal (loose stomach) skin. A section of skin and fat from the tummy is removed (similar to the ‘tummy tuck’ cosmetic operation) and transferred, along with a tag of abdominal muscle and two blood vessels, to the chest.

The flap’s blood vessels are connected to blood vessels of the armpit or beneath the ribs. The flap is then formed into the shape of a breast and sewn together. TRAM flap reconstruction offers a more natural looking breast (with normal ‘hang’) than prosthetic implant reconstruction. It does, however, leave a large scar across the abdomen where the muscle was removed.

Some women feel there is benefit in this procedure as they feel they have had a ‘tummy tuck’ as well. The reconstructed breast will change in size if you gain or lose weight.

**DIEP flap reconstruction**

Some surgeons now perform what is known as a *deep inferior epigastric artery perforator (DIEP) flap* method. It is a complicated operation, and uses only skin and fat to reconstruct the breast. As the rectus abdominis muscle is not used, supporting mesh is not required.

Advantages of this method are a quicker return to normal activities and a smaller risk of hernia. This method of flap reconstruction is now the preferred surgery as it has fewer post-operative complications and has a faster recovery time.

**Skin flaps from other areas of the body**

Other skin flaps used for breast reconstruction include:

• **breast** – this is known as breast-sharing reconstruction. Tissue from the remaining breast contributes to the reconstruction. This is suitable for women with large breasts
• **back** – this operation may be preferred if the chest muscles were removed during the mastectomy. Muscle from the back (*latissimus dorsi or LD flap*) and the overlying skin are taken and used to form a breast shape. In many cases, the reconstructed breast has to be filled out with an implant. The back is left with a visible scar and a slight hollowing near the shoulder blade where the muscle was removed.
• **buttock** – a small flap from the buttock (gluteus muscle) is sometimes taken if the abdominal skin isn’t sufficient. A vein needs to be taken from one leg in order to secure a blood supply to the tissue in its new location on the chest wall.
• **hip** – a flap of skin from the hip may be used if the abdomen and buttock are unsuitable.

**Complications of breast reconstruction**
As with all operations, there is a risk of complications. If these happen, your recovery will take longer.

Complications might relate to:

- healing
- your general health
- the anaesthetic
- infection
- bleeding
- loss of sensation
- muscle problems
- scars and body image.

Many complications are temporary, but some may be permanent. You should be aware of possible problems and discuss them with your surgeon or breast care nurse before the operation.

**Nipple reconstruction**

It is best to wait at least three months after breast reconstruction surgery before having a nipple reconstruction. This is to allow the new breast sufficient time to ‘drop’ into its position.

The new nipple is fashioned using skin flaps from either the abdominal scars or the reconstructed breast. It is then medically tattooed to colour-match it to the existing nipple and areola (although this is optional and is often not included in the cost of general breast reconstruction). The reconstructed nipple will not have any feeling.

Some women may prefer to use a nipple prosthesis, which can be attached to the reconstructed breast using special glue.

**Making decisions about breast reconstruction**

After having a complete mastectomy, there are various choices available. Reactions to the loss of a breast or breasts vary from woman to woman, and only you can choose what feels best for you.

It is important that you know the advantages and disadvantages of having a reconstruction. Breast reconstruction is a specialised form of surgery and you should talk it over with your breast surgeon first.

**Where to get help**

- Your GP
- Your specialists (breast surgeon or oncologist)
- Your breast care nurse
- Plastic surgeon
- Women’s health clinic
- **Cancer Council Victoria**, Cancer Information and Support Service – Tel. 13 11 20 to speak with specialist cancer nurses who will be able to provide you with clinical information and support about your diagnosis and treatment. Through the **Cancer Connect** program, they may also be able to connect you with women who have experienced a successful breast reconstruction.
- **Multilingual cancer phone line**, Victoria Tel. 13 14 50

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