

## BREAST RECONSTRUCTION

A GUIDE FOR PATIENTS

**B**reast reconstruction is an increasingly common surgical procedure for women who have had a mastectomy. The procedure can create a breast that resembles a natural breast in appearance and form. Women who have had successful breast reconstruction often report feeling happier with their appearance and having renewed self-confidence.

The surgeon creates the new breast mound by using either an artificial implant ("prosthesis") or tissue from the woman's own body. Surgeons use a wide range of techniques. Your surgeon will discuss with you which form of reconstruction is best for you.

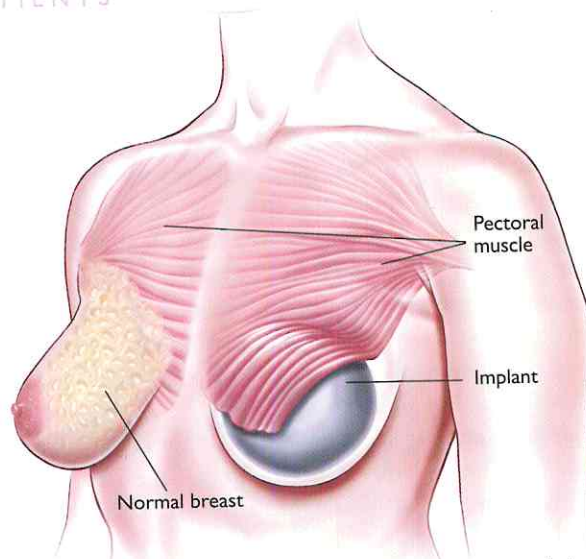
A surgeon may carry out breast reconstruction immediately following mastectomy, or some time later, after the area has healed. The best time will vary from patient to patient, and surgeon to surgeon, depending on each case.

The procedure best for you will depend on your age and general health, the size and shape of the other breast, and available body tissue. Breast reconstruction usually requires more than one operation.

Surgical reconstruction has no known link to the recurrence of cancer in the affected area. If cancer recurs in the area, it can usually be detected with little difficulty. Your surgeon may recommend that you continue periodic mammograms on both the reconstructed and the normal breast.

Reconstruction immediately after

mastectomy generally does not interfere with chemotherapy or radiotherapy. However, some studies have suggested that implants may not be a good option for women who need radiotherapy because radiotherapy can cause the skin around the implant to shrink. This can cause scar tissue, may interfere with healing, and could lead to a leaking implant.



The reconstructed breast is likely to have a slightly different size and shape than the normal breast. In the above illustration, the implant has been placed behind the pectoral muscle, but some patients may have the implant placed in front of the muscle. Other patients will have a breast created by the "free flap" or "pedicle flap" technique, as explained on pages two and three.

### TALK TO YOUR SURGEON

**T**he aim of this pamphlet is to provide you with general information. It is not a substitute for advice from your surgeon and does not contain all the known facts about breast reconstruction or every possible side effect of the surgery. Use this pamphlet only in consultation with your surgeon.

Read this pamphlet carefully, and save it for reference. Medical terms may need explanation by your surgeon. Your surgeon will be pleased to answer questions. It may be helpful to make a list of questions you wish to ask. If you have any concerns about treatment, recovery or complications, discuss them with your surgeon.

Your surgeon cannot guarantee that surgery will meet all of your expectations or that surgery has no risks.

**Consent form:** If you decide to undergo breast reconstruction, the surgeon will ask you to sign a consent form. Read it carefully. If you have any questions about it, ask your surgeon.

#### IMPORTANT: Fill in all details on the sticker below

DEAR DOCTOR: When you discuss this pamphlet with your patient, remove this sticker, and put it on the patient's medical history or card. This will remind you and the patient that this pamphlet has been provided. Some surgeons ask the patient to sign the sticker to confirm receipt of the pamphlet.

PEEL HERE

#### TREATMENT INFORMATION PAMPHLET

PROCEDURE: \_\_\_\_\_  
PATIENT'S NAME: \_\_\_\_\_  
DOCTOR'S NAME: \_\_\_\_\_  
EDITION NUMBER: \_\_\_\_\_ DATE:     /     /     ✓



# THE SURGICAL PROCEDURES OF BREAST RECONSTRUCTION

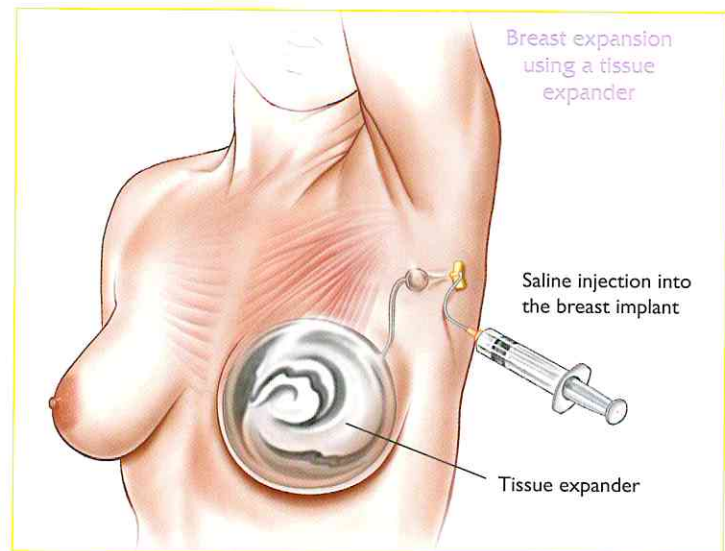
## BREAST IMPLANT AFTER TISSUE EXPANSION

A tissue expander is a small balloon-like device partly filled with saline (a weak salt solution similar to body fluids). It is surgically inserted under the skin and chest muscle. Over several weeks or months, more saline solution is injected once or twice weekly into the expander through a tiny valve under the skin.

As the solution inflates the expander, the overlying tissue is gradually stretched, making room for a breast implant. The surgeon then removes the tissue expander and puts the breast implant in place during the same operation. The final breast implant is a silicone bag that contains either silicone gel or saline. Both operations (the initial placement of the expander and the subsequent insertion of the breast implant) usually take less than an hour. They are performed under general anaesthesia.

Due to the firmness of the breast implant, the breast does not fall naturally to the side when you are lying down or fall forward when you are leaning over. The reconstructed breast may also have a rippled feel and be firmer to the touch.

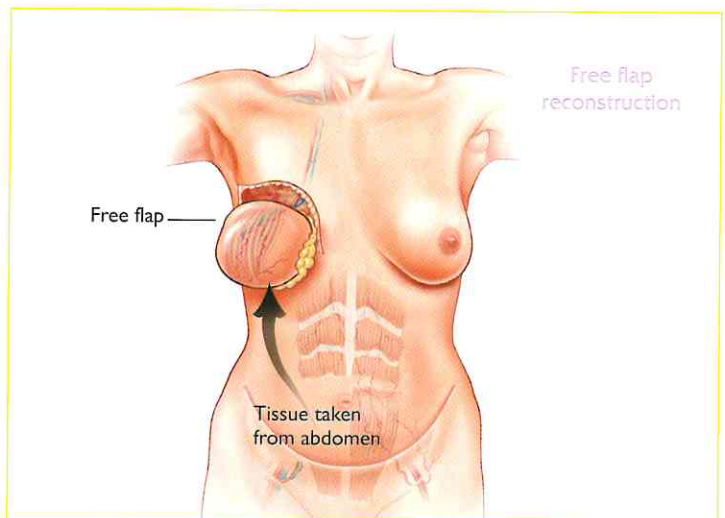
Your surgeon may recommend use of an ADM (autologous dermal matrix), which can cover and provide support to the lower part of the implant. A breast implant will usually need to be replaced at some stage.



## FLAP RECONSTRUCTION

With flap reconstruction, skin, fat and muscle from another part of the body are used to create the breast mound. This tissue (or "flap") can be taken from the abdomen, back or buttocks. The abdomen is the most common area. As the breast is created with the patient's own tissue, the long-term result may be more stable. There are two types of flap surgery: free flap reconstruction and pedicle flap reconstruction.

The TRAM flap and DIEP flap procedures are similar. Both provide good reconstruction outcomes. Your surgeon can provide further details about the flap reconstruction best in your case.



## THE DECISION TO HAVE TREATMENT

The decision whether to have a breast reconstruction should only be made after discussion with your plastic surgeon. Any decision should not be made in a rush. Make the decision only when you are satisfied with the information you have received and believe you have been well informed.

Your surgeon will be pleased to discuss the benefits, risks and limitations of treatment. Read about the risks of breast reconstruction on page 4. We encourage you to seek the opinion of another surgeon if you are uncertain about your surgeon's advice.

**Realistic expectations:** Patients who are healthy and have realistic expectations about what the surgery can achieve are suitable for breast reconstruction. Not everyone will get the same results from a breast reconstruction. Although an effective procedure for many women, breast reconstruction can never produce an exact duplicate of a natural breast.

## BEFORE SURGERY

Your surgeon needs to know your complete medical history to plan the best treatment. Fully disclose any health problems you may have had. Some may interfere with surgery, anaesthesia and

aftercare. Before surgery, tell the surgeon if you have had:

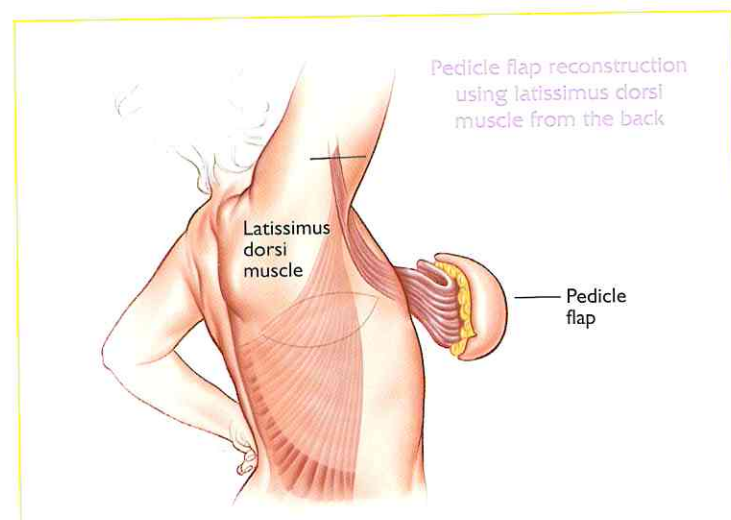
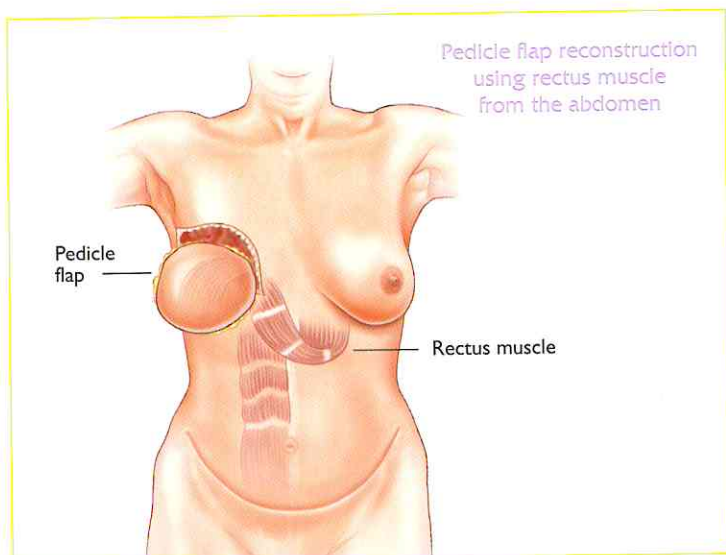
- an allergy or bad reaction to antibiotics, anaesthetic drugs, medicines, surgical tapes or dressings
- excessive bleeding or bruising when injured
- problems with blood clots in the legs or lungs
- recent or long-term illness
- psychological or psychiatric illness
- keloid scars or poor healing after previous surgery.

To detect problems that could complicate surgery or anaesthesia, blood tests, chest X-ray examinations, electrocardiogram (ECG), or other tests may be ordered.

Give the surgeon a list of ALL medicines you are taking or have recently taken. Include medicines prescribed by your family doctor and those bought "over the counter" without prescription. Include medicines taken for long-term treatments, such as insulin, blood thinners, and the contraceptive pill.

Some medicines increase the risk of bleeding during and after surgery. Your surgeon may recommend that you NOT take aspirin, medicines containing aspirin (such as cough syrups), large amounts of vitamins (particularly vitamin E), anti-inflammatory medicines (such as ibuprofen), herbal medications or garlic tablets. Discuss this carefully with your surgeon.





If you are taking a medicine to help prevent a blood clot (such as aspirin, warfarin, clopidogrel, or similar medications), ask your surgeon and prescribing doctor whether the dose should be changed or the medication stopped. Some doctors recommend stopping the contraceptive pill for a time before surgery to reduce the risk of blood clot problems. Check with your surgeon.

**NOTE:** If you smoke, the surgeon will insist that you stop at least four weeks before surgery because smoking can damage blood vessels and delay healing. It is best to quit.

## ANAESTHESIA

Breast reconstruction is performed under general anaesthesia. Modern anaesthesia is safe and effective, but does have some risks.

Rarely, side effects from an anaesthetic can be life threatening. Ask your anaesthetist for more information. Give your anaes-

## 1. Free flap reconstruction

The tissue used to form the flap is completely cut free from the donor site and attached to the site of the removed breast. As blood vessels in the donor site must be cut, they are reconnected to blood vessels in the chest using microvascular surgical techniques.

## 2. Pedicle flap reconstruction

The tissue used to form the flap is freed from the donor site, but the blood supply is not divided. The flap remains attached by the blood vessels and can be moved as far as the blood vessels allow.

It is repositioned at the site of the removed breast through the mastectomy incision. After being formed into a breast shape, it is stitched into position.

Both of these flap techniques will leave scars at the reconstructed breast and the donor site. In some cases, a breast implant may be needed to add more bulk to the transferred tissue.

Flap reconstruction surgery is more complex, and recovery time is longer than with the tissue expansion method.

However, as the breast is reconstructed from natural tissue, the results generally have a more natural feel and appearance.

## Follow-up surgery

The patient may need follow-up surgery to improve the outcome. The opposite breast may need to be reduced in size or lifted to give a more balanced look because the reconstructed breast will rarely be a precise match to the natural breast. Minor follow-up surgery can sometimes be performed under a local anaesthetic.

## Nipple and areolar reconstruction

This operation can be performed some months after the breast reconstruction. The reason for the delay is that the new breast will, at first, be higher than the other side. If the nipple were reconstructed too soon, it would not be positioned correctly.

The nipple can be reconstructed using part of the other nipple, a local flap or skin from elsewhere. Later, the colour of the nipple and areola can be added, using a special tattoo method. Nipple reconstruction is usually performed as day surgery and can be performed under local anaesthetic in some cases.

therapist a list of all the medications you are taking or have taken, and any allergies you may have.

## COSTS OF TREATMENT

Ask your surgeon for an estimate of surgical, anaesthetic and hospital fees that may apply. This is only an estimate because the actual treatment may differ from the proposed treatment. If more treatment is needed due to complications or you choose other options, extra costs can apply. Ask your surgeon about costs that may be covered by public health insurance or private health funds. Medicare benefits are payable in specific cases but usually not for cosmetic reasons.

Discuss costs before treatment rather than afterwards. If complications occur, more surgery may be needed. This will lead to more costs and inconvenience. A Medicare or health fund rebate may be available for treatment of complications.

## RECOVERY AFTER SURGERY

Immediately after surgery, you will be transferred from the operating theatre to a recovery room. Nursing staff will

monitor your heart rate, blood pressure, breathing and general recovery. You will usually be in hospital from two to five

days, depending on your particular case.

The reconstructed breast may be covered with dressings. The nursing staff



will change these regularly. With flap reconstruction the new breast will, at first, be larger than the other breast. However, over the next few weeks, it will gradually become smaller to match your natural breast.

For the first few days after surgery, you will be given injections for pain relief. It is normal to feel tired and sore for the first two weeks.

Surgical tubing may be put in place to drain excess fluids from the operation site. The drain will be removed within the first or second week after surgery. Stitches will be removed in a week to 10 days.

Your surgeon will advise you whether or not to wear a bra immediately after surgery and, if so, which type.

Once the wound line has healed, you can resume showers or baths; showers are preferable as soaking can increase the risk of wound infection. Avoid a direct spray of water onto the reconstructed breast, and use non-perfumed soap. Rinse and dry the area well, without rubbing.

You may be advised to massage the skin daily with oil or cream to keep it supple. Massage helps to prevent an implant becoming hard.

Normal sensation cannot be restored, but most women will notice recovery of some feeling in the reconstructed breast after about six months. For some women, the loss of sensation may be permanent.

After returning home, you will need help for at least a few days, as you will not

have normal arm movement on the side of the reconstructed breast. You should regain good arm movement within about six weeks. Some surgeons recommend specific exercises to help.

Do not do any overhead lifting or strenuous sporting activities for three to six weeks after surgery.

Your surgeon will advise when you will be able to return to work and resume normal activities. It may take some time to get used to your new breast.

Several months of healing may be needed before you see the final results. Scars initially will be raised and red, and will take six months to one year to fade.

## POSSIBLE COMPLICATIONS OF BREAST RECONSTRUCTION SURGERY

As with all surgical procedures, breast reconstruction does have risks, despite the highest standards of practice. When breast reconstruction has been performed by a qualified plastic surgeon, serious problems after surgery are uncommon. While your surgeon makes every attempt to minimise risks, complications can occur that may have permanent effects.

It is not usual for a surgeon to outline every possible side effect or rare complication of a surgical procedure. However, it is important that you have enough information about possible complications to fully weigh up the benefits, risks and limitations of surgery.

The following possible complications are listed to inform and not to alarm you. There may be others that are not listed.

### GENERAL RISKS OF SURGERY

- Pain and discomfort around the incisions.
- Haematoma (an accumulation of blood around the surgical site that may require drainage).
- Nausea (typically from the anaesthetic; this usually settles down quickly).
- Heavy bleeding from the incisions.
- Keloid or hypertrophic scars. Most scars fade and flatten, but some may become and remain raised, itchy, thick and red. A keloid or hypertrophic scar can be annoying but is not a threat to health. Additional surgery or chemical treatment may improve the scar.
- Separation of wound edges.
- Slow healing (most likely to occur in smokers).

- Allergic reaction to anaesthetic agents, antiseptic solutions, suture material, dressings or medications.
- Cardiovascular complications, which can be life threatening.
- Deep vein thrombosis (DVT) in a leg.

### SPECIFIC RISKS OF RECONSTRUCTION Implants

- Haematoma (a collection of blood) or seroma (a collection of serum) that may require draining.
- Infection around the implant – in rare cases, the implant may need to be removed. In such a case, several months of healing may be needed before a new implant can be inserted.
- Capsular contracture – the body's normal response to the implant is to form a capsule of scar tissue around it. This capsule can thicken and tighten, causing pain and hardening in the reconstructed breast. Correction may require further surgery.
- Leakage of the implant's contents (silicone gel or saline). Implants do deteriorate with time and may need to be replaced at least once during the patient's lifetime.
- Difference in size and shape (asymmetry) between the natural and reconstructed breasts due to changes in body weight, ageing and changes in tissue around the implant.
- Rupture of implants due to trauma can occur, although this would require considerable force.

### Flap reconstruction

- Loss of blood circulation to the reconstructed breast due to clotting in the rejoined blood vessels. This can

result in flap tissue dying (necrosis). If tissue death is extensive, the reconstructed breast must be removed. After surgery, nursing staff will closely monitor blood circulation to the flap. If the colour of the flap changes, an urgent return to the operating room may be needed so the surgeon can attempt to get the blood flowing through the blood vessels again and save the flap.

- Small areas of hardness (fat necrosis) may develop in the new breast. These often need to be removed surgically.
- Fluid collection (seroma) at the flap site.
- Weakened abdominal muscle, which can result in a hernia.
- Difference in size and shape (asymmetry) between the natural and reconstructed breasts.
- Temporary loss of full movement of the arm on the side of the reconstructed breast.

### REPORT TO YOUR SURGEON

Tell your surgeon at once if you develop any of the following:

- temperature higher than 38°C or chills
- heavy bleeding from the incisions
- severe pain or tenderness
- redness around an incision that is spreading
- dizzy, faint or short of breath
- any concerns you have regarding your surgery.

If your surgeon cannot be contacted, attend your family doctor or the Accident and Emergency department at your nearest hospital.