

# Breast Reconstruction

For Patients of Dr. Steven F. Morris

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# Breast Reconstruction

## Introduction

This pamphlet will help you understand more about breast reconstruction — when it is appropriate, how it is done, and what you can expect. It will help you understand the different surgical options you have and how they might affect your life, so that you can choose what is right for you. Medical terms used in this guide are explained near the end.

If you are considering breast reconstructive procedures, you should learn about and take part in decisions about your treatment. This guide is written to help with communication between you and the medical specialists who do reconstructive services. If you are informed, you will get more out of your consultation with your reconstructive surgeon. Please feel free to ask your doctors and nurses for more information.

## What is breast reconstruction?

Breast reconstruction is surgery to create a breast that looks like a natural breast. Most women who have had a mastectomy (part or all of the breast removed) or lumpectomy (breast tumour removed) can have their breast reconstructed. Breast reconstruction is covered by most provincial health plans.

Breast reconstruction is not a simple procedure. There are many options to consider as you and your doctor explore what is best for you.

The decision to have reconstruction is very personal. It is based on your feelings about your body, your health, your sexuality, and your tolerance for further surgeries. Breast reconstruction is not needed by everyone. Many women choose to do nothing or to wear an artificial breast form (prosthesis). It is up to you.

No matter what you decide to do, your decision is valid, and it will be respected by your health care providers.

## Why might I choose to have breast reconstruction?

There are many reasons why you might choose to have breast reconstruction. For example:

- › so clothes will fit better
- › to look and feel like yourself
- › to feel more sexually attractive
- › to avoid wearing a prosthesis
- › to be more physically active
- › to be reminded less about breast cancer
- › to feel physically whole

Some women are able to cope with a mastectomy and feel no need for reconstruction. For other women, the loss of a breast can sometimes lead to depression, lower self-esteem, and a feeling of loss of femininity. Scarring from a mastectomy can also be a reminder of cancer, and can lead to feelings of poor health.

Breast prostheses can work for many women after a mastectomy. They fit into your bra and can match the look of the natural breast quite closely in clothing. However, they may be unpleasant to use, cause neck or back pain, or limit your clothing options and physical activities. Breast reconstruction after a mastectomy can be an important part of restoration and rehabilitation in the treatment of breast cancer.

When considering breast reconstruction, it is important to realize that every surgical procedure has some risk. Risks of all breast reconstruction procedures include bleeding, infection, changes in skin sensation (feeling), scarring, slow healing, fluid buildup, allergic reactions, reactions to anesthesia (medicine to put you to sleep), breast asymmetry (unevenness), and unsatisfactory results.

## Where do I start?

This guide can help you with the first steps towards breast reconstruction. A consultation with your plastic surgeon will help you to understand which procedures may be available to you and what the likely outcomes may be. Although this guide can help to start the discussion, we recommend doing your own research to find the information you need to make decisions about your health care.

## **When should breast reconstruction be done?**

Reconstruction can be done at the time of your mastectomy (immediate reconstruction) or later (delayed reconstruction).

If you're having immediate reconstruction, your plastic surgeon will take over right after your mastectomy, while you are still under anesthesia. You will wake up from your mastectomy with a new breast mound. Immediate reconstruction may be right for you if your cancer can be completely removed by mastectomy, and the cancer has not spread to nearby lymph nodes. Immediate breast reconstruction may not be available in the community where your breast cancer surgery takes place.

Delayed reconstruction can be done months or even years after your mastectomy. Delayed reconstruction means having another surgery; however, it may be appropriate in some cases. You may need more time to decide if you are sure you want it. If you have other health conditions, such as obesity, high blood pressure, diabetes, or smoking, you may be advised to wait while you try to improve these conditions.

It is important to talk about these factors with your plastic surgeon. If you are considering breast reconstruction, even for a later date, it is important to meet with a plastic surgeon before your mastectomy.

### **Advantages of immediate reconstruction:**

- You don't wake up from surgery without a breast.
- Having only one surgery means fewer possible problems from anesthetic, one hospital stay, and a faster recovery time.

### **Advantages of delayed reconstruction:**

- Gives you more time to decide which breast reconstruction option is best for you.
- May be better if you are having other treatments, such as radiation or chemotherapy.

## **What type of breast reconstruction is best for me?**

Reconstruction of the breast mound can be done either with a synthetic (artificial) implant or with your own tissue. Synthetic breast implants are round pouches made of silicone filled with either a silicone gel or with saline (salt water). The implants are placed under the skin to create the shape of a breast.

Autologous (using your own tissue) reconstruction involves replacing breast tissue by moving “flaps” of skin, fat, and muscle from another part of the body to the breast area. We will talk about the different types of synthetic and autologous breast reconstruction in the next few pages.

## **What is implant reconstruction?**

Synthetic implants are round pouches made of silicone and filled with either silicone gel or saline that are placed under the skin and muscle. If you are interested in synthetic implants, you will meet with a plastic surgeon before your mastectomy and choose an implant that will match the size of your other breast. Synthetic implants can be inserted through the mastectomy incision (cut), so there is no new scar.

### **Implants are best for women who have:**

- › small breasts
- › healthy chest muscles
- › a modified radical mastectomy
- › not had radiation

### **Some advantages of implants are:**

- It is a shorter procedure (1-2 hours) with a fast recovery time (4-5 weeks).
- The surgery is usually done in 2 stages, about 3-4 months apart.
- It is possible to match your natural skin colour and texture.
- Skin sensation usually comes back.

## **Some disadvantages of implants are:**

- There is no natural aging or droop in the reconstructed breast.
- Implants cannot be used to create a large breast.
- Implants cannot be used for women who have had a modified radical mastectomy, have tight skin on the chest wall, or have radiation damage to the chest tissues.
- Implants may not last a lifetime. They may have to be adjusted or replaced in the future.
- An implant may look round and artificial, so it may be hard to make it match your normal breast.

## **Some possible complications of implants are:**

- The implant may become displaced (move to a different position, leading to asymmetry).
- Scar tissue buildup can cause a lot of firmness in the reconstructed breast.
- Possible infection, rupture (implant breaking open), or capsular contracture (hardening of the implant)

## **Tissue expanders**

Tissue expanders are the most common form of synthetic reconstruction. A tissue expander is an empty silicone bag that is placed behind the skin and chest muscle.

The tissue expander is then inflated (made bigger) over time using saline through an attached valve over 3-12 weeks after surgery. After the implant is fully inflated, a second surgery is usually needed to remove the expander and replace it with a permanent implant.

## **Tissue expanders are best for women who have:**

- › skin that is too tight for a silicone implant
- › small to medium breasts

## **Some advantages of tissue expanders are:**

- Small to medium breasts can be reconstructed.
- It is a short procedure (1-2 hours) with a fast recovery time (4-5 weeks).
- It is possible to match your natural skin colour and texture.
- Skin sensation usually comes back.

### **Some disadvantages of tissue expanders are:**

- Several outpatient visits are needed for inflation.
- There may be some discomfort during inflation.
- A second surgery is needed to replace the expander with a permanent implant.
- There is no natural aging or droop in the reconstructed breast.
- The permanent implants may not last a lifetime. They may have to be adjusted or replaced in the future.

### **Some rare complications of tissue expanders are:**

- The expander may be slightly displaced, leading to asymmetry.
- Scar tissue buildup can cause a lot of firmness in the reconstructed breast.
- The attached valve may not work.

### **What is autologous breast reconstruction?**

Autologous breast reconstruction is surgery to create a breast after a mastectomy or lumpectomy using your body's own (autologous) tissues.

Autologous breast reconstruction may be preferred because the tissues used are very similar to the breast.

### **What are the types of autologous breast reconstruction surgery?**

**Flap:** A flap is tissue (muscle, fat, and skin) that is moved with its blood supply from one part of the body to another.

**Pedicled flap:** If a flap stays attached to its original area, it is a pedicled flap.

**Free flap:** If a flap is removed and then the blood vessels are reattached, it is called a free microvascular flap.

**DIEP (Deep Inferior Epigastric Perforator) flap:** This is the most common type of flap used for autologous breast reconstruction. Skin is taken from the abdomen (belly). The muscles of the abdomen are preserved. The DIEP flap leaves a long scar across the lower abdomen.

**TRAM (Transverse Rectus Abdominis Myocutaneous) flap:** Skin is taken from the lower abdomen and the rectus abdominis muscle (your “abs”). The TRAM flap leaves a long scar across the lower abdomen.

**Latissimus dorsi flap (lat dorsi flap):** A section of skin and muscle (latissimus dorsi muscle) is taken from the back, on the same side as the mastectomy or lumpectomy. The muscle, fat, and skin are detached and slid around through a tunnel under the skin to form a new breast. Usually, a breast implant is also used to fill the reconstructed breast to the correct size.

**TAP (Thoracodorsal Artery Perforator) flap:** The TAP flap is similar to the lat dorsi flap. However, only the skin and fat from the back are used to form the new breast. A breast implant may also be used to fill the reconstructed breast to the correct size.

**Other flaps:** There are a number of other flaps which may be used to reconstruct the breast, including the:

- › DCIA (Deep Circumflex Iliac Artery) flap
- › PFA (Profunda Femoris Artery) perforator flap
- › SGAP (Superior Gluteal Artery) flap
- › IGAP (Inferior Gluteal Artery) flap
- › Lumbar artery flap

Your surgeon will talk with you about the best type of breast reconstruction for you.

## **Breast reconstruction after lumpectomy surgery**

If you have a lumpectomy instead of a mastectomy, there may be little or no change in the shape of your breast. However, the operated breast may not match the size or shape of the normal breast.

Depending on where the lumpectomy is done in the breast, there may be a variety of changes which can be reconstructed with one of the surgical methods listed above. For example, if you have a large lumpectomy, you may need a breast implant or an autologous reconstruction (a flap). If you have a small lumpectomy, fat grafting may be used. Fat grafting is when fat is taken using liposuction, usually from the abdomen, and injected into the breast to fill in where the lump was.

## **Nipple and areola reconstruction**

Some women also choose to have the nipple and areola (coloured ring around the nipple) reconstructed. This is usually done 4-6 months after the first reconstruction surgery so that the breast mound has time to settle in place. Skin from the inner thigh, buttocks (bum), or other nipple can be used to make a new nipple. The areola can also be created using medical tattooing. Nipple and areola reconstruction is usually done under local anesthetic. The reconstructed nipple will not have the same sensation as a natural nipple.

## **Which option is right for me?**

Talk about your options with a plastic surgeon to make sure that you understand the advantages and disadvantages of each procedure. Each woman has different reasons for having breast reconstruction. Think about what is important to you so you can make the best choice.

MSI will cover the cost of changes to the other breast to achieve breast symmetry (both breasts are the same shape). These changes can be done at the same time as the reconstruction, or at a later date. However, MSI may **not** cover the cost of some secondary procedures (such as fat grafting). You will be responsible for the cost up if you still wish to go ahead with these secondary procedures.

Remember that this is a personal choice. **There is no right or wrong answer.** Your health care team will respect your decision.

## Surgery timelines

Type of reconstruction	Surgery time (hours)	Hospital time (days)	Time to light activity (days)	Time to vigorous activity (weeks)
Implant or tissue expander	1-2	0-1	3-4	3-4
Lat dorsi flap	3-4	1-2	7-10	6-8
DIEP flap	5-6	3-4	7-10	6-8
Other flaps	5-6	3-4	7-10	6-8

### How long will it take to recover?

Recovery time is different for each patient and depends on the type of surgery. Most scars will fade over time, however this may take several years, and they will never go away completely.

Exercise is an important part of your recovery; however, too much activity too quickly may slow your recovery. Light activities like walking can be a good way to start getting back to normal. Follow your surgeon's advice on when to return to your normal activities.

Losing a breast can be a very hard experience. It is normal to feel emotions like anger, despair, fear, hope, or sadness. It will take time to get used to your new breast shape and sensation. Over time, your new breast will begin to feel more and more like a part of you.

## **What should I ask my plastic surgeon?**

If you decide to have breast reconstruction, it is important to remember that it is your decision and your body. You should feel comfortable talking with health care staff and asking questions. It is OK to make requests, be critical, and ask for changes. If you understand the procedure and have realistic expectations, you are more likely to be satisfied with your results.

### **You may wish to ask:**

- What will my breast reconstruction look like: in 1 month? in 6 months? in 1 year?
- When can I go back to work?
- When can I return to other activities (such as running, lifting heavy objects, having sex, etc.)?
- Can I see photos of a patient who has had this procedure?
- Can I talk to patients who have had breast reconstruction?
- How long will I have to stay in the hospital?
- What will my new breast look and feel like?
- What type of surgery would you recommend for me?
- What are the risks of this procedure?
- What are the possible complications?
- How likely is it that these complications will happen?

## Medical words to know

**Breast augmentation** – A surgical procedure which makes the breast larger by implanting a prosthesis.

**Breast implant** – A silicone pouch filled with silicone gel or saline (salt water) that can be placed in the body in place of breast tissue.

**Breast reconstruction** – Surgery to create a breast that looks like a natural breast after a mastectomy or lumpectomy.

**Capsular contracture** – Scar tissue growth around an implant which causes a hard, sometimes deformed appearance.

**Delayed reconstruction** – Breast reconstruction that takes place weeks, months, or years after a mastectomy or lumpectomy.

**Flap** – Tissue (muscle, fat, and skin) that is moved with its blood supply from one part of the body to another.

**Flap reconstruction** – Surgery to create a breast after a mastectomy or lumpectomy using a flap to form the breast mound.

**Immediate reconstruction** – Breast reconstruction that takes place during the same surgery as a mastectomy or lumpectomy.

**Inpatient surgery** – After surgery, the patient stays overnight in the hospital.

**Latissimus dorsi flap reconstruction** – Breast reconstruction that uses the patient's own tissue from the latissimus dorsi muscle (in the back) to build a breast mound.

**Lumpectomy** – Surgery to remove a cancerous tumour and a small amount of surrounding tissue.

**Lymph nodes** – Structures in the body that act as filters to catch bacteria and cancer cells, and that help the body's immune system.

**Mastectomy** – Surgery to remove breast tissue because of a cancerous or precancerous growth.

**Mastopexy** – Surgery to lift and tighten the breast by removing sagging skin caused by gravity and aging.

**Modified radical mastectomy** – Surgery to remove the breast, some fat, and most of the lymph nodes in the armpit, leaving most of the chest wall muscles in place.

**Outpatient surgery** – After surgery, the patient does not stay overnight in the hospital.

**Pectoralis major** – A muscle in the upper chest which supports the breasts and is needed for arm movements.

**Prosthesis** – Any artificial body part.

**Ptosis** – Sagging. Breast ptosis is usually because of normal aging and the pull of gravity, or changes caused by pregnancy or weight loss.

**Radical mastectomy** – Surgery to remove the breast, underlying muscles, and lymph nodes in the armpit.

**Saline** – A liquid made of water and a small amount of salt.

**Silicone** – A material used in medical implants, made mainly of silicone, carbon, hydrogen, and oxygen.

**Silicone gel** – Silicone that is half solid and half liquid, used as a filling in breast implants. It feels similar to a natural breast.

**Simple mastectomy** – Surgery to remove the breast only.

**Tissue expander** – A breast implant that is inflated with saline over time to stretch the tissues and create a breast mound.

**Tram flap reconstruction** – Breast reconstruction that uses the patient's own tissue from the lower abdomen and the rectus abdominis muscle to form a breast mound.

## Resources

**Canadian Cancer Society – Nova Scotia Division:** 902-423-6183

**Cancer Information Service:** 1-888-939-3333

**Cancer Connection:** <https://cancerconnection.ca/home>

**Canadian Breast Cancer Foundation – Atlantic Region:** 902-422-5520

**Nova Scotia Cancer Care Program:**

Phone: 1-866-599-2267

Email: [cancercareinfo@nshealth.ca](mailto:cancercareinfo@nshealth.ca)

### Online resources

**Canadian Collaboration on Breast Reconstruction:**

Information about surgical techniques and finding a plastic surgeon

- › [www.breastreconstructioncanada.ca](http://www.breastreconstructioncanada.ca)

**Cancer Support Community:**

Information, patient videos, and support resources on breast reconstruction

- › [www.cancersupportcommunity.org/MainMenu/About-Cancer/Types-of-Cancer/Breast-Cancer/Breast-Reconstruction](http://www.cancersupportcommunity.org/MainMenu/About-Cancer/Types-of-Cancer/Breast-Cancer/Breast-Reconstruction)

**Canadian Cancer Society – Breast Cancer Support Services:**

- › [www.cancer.ca/en/about-us/a-future-without-breast-cancer/breast-cancer-support-services](http://www.cancer.ca/en/about-us/a-future-without-breast-cancer/breast-cancer-support-services)

**Breastcancer.org:**

Information about breast reconstruction

- › [www.breastcancer.org/treatment/surgery/reconstruction](http://www.breastcancer.org/treatment/surgery/reconstruction)

**Canadian Society of Plastic Surgeons:**

Information about surgical techniques and choosing a plastic surgeon

- › [www.plasticsurgery.ca](http://www.plasticsurgery.ca)

## **American Society of Plastic Surgeons:**

Information about surgical techniques and selecting a plastic surgeon

› [www.plasticsurgery.org](http://www.plasticsurgery.org)

## **American Cancer Society®:**

Information about risks and complications

› <https://www.cancer.org/cancer/breast-cancer/reconstruction-surgery.html>

## **Books**

Lorant, T., Eskenazi, L., Love, S. (2001). *Reconstructing Aphrodite. Patient stories and photographs about breast reconstruction.*

Katz, A. (2009). *Woman cancer sex.* Oncology Nursing Society.

Olivoto, I. (2006). *The intelligent patient guide to breast cancer : all you need to know to take an active part in your treatment.* Vancouver, Intelligent Patient Guide. (Pink Rose Project).

Silver, M. (2004). *Breast cancer husband: how to help your wife (and yourself) through diagnosis, treatment, and beyond.* Rodale.



