

## Options for Breast Reconstruction

UW Health offers many types of breast reconstruction. The two most common either use implants or your own body fat/skin from your belly. A third type uses one of your back muscles with or without an implant. There are other ways to rebuild a breast, but these are most commonly chosen. This handout will describe each.

### Using an Implant

#### About This Option

This option uses synthetic implants, which are often silicone-filled. In the United States, more than 70% of women choose this method.

In most cases, this is done in two surgeries:

- **First surgery:** An expander (balloon) is placed at the site of the mastectomy. The expander helps to stretch and shape the chest wall skin over 2 to 4 months to the desired size and shape.
- **Second surgery:** The expander is removed and replaced with a silicone implant.

For some patients the reconstruction can be done in one surgery. The implant is placed directly into the breast without an expander.

#### Am I a candidate for this option?

Candidates are those who:

- Want a cup size between B to D
- Have not had radiation treatment to the breast or chest
- Are within a certain body weight to height ratio (e.g., less than 190 pounds for a 5'5" height)

#### Advantages

- Faster recovery, shorter healing time, and shorter hospital stay compared to using your own body fat/skin.
- A young look and feel to the breast.
- Smaller scars which are often limited to the breast.

#### Placement of the Implant

There are two ways to place an implant.

- **Submuscular** means the implant is placed **below the chest wall muscle**. This is the more traditional way of doing it. Benefits include a lower risk of infection and less wound healing problems. There can be more pain during recovery. Also, the implant will move unnaturally with shoulder movements.
- **Prepectoral** means the implant is placed **above the chest wall muscle**. With this approach the implant is placed where the breast tissue was removed. It gives a more natural shape with less pain. There is a lower chance of long-term discomfort and no animation deformity. Risks include a higher chance of infection and hiding any recurrence in the muscle.

#### More About Implant Reconstruction

A two-stage approach is most common. At the time of the mastectomy, a short-term “expander” (like a balloon) is placed. Over the next 2-4 months you come back to the clinic to have the expander “filled.” Filling is when salt water (saline) is put in the expander. You can see and feel the breast get bigger with each fill.

When you get to a size that you like, a second surgery is scheduled to take out the expander and put in the implant.

In a few cases, we can do a one-stage approach. The implant is placed at the time of the mastectomy without an expander. **Not all patients qualify for this option.** This direct (one-stage) implant also uses Alloderm or a synthetic mesh (see below). With either approach (1 or 2 stage), there is a high chance you will need a touch up.

### Risks

- Infection or the skin not healing: The implant may need to be taken out.
- High touch-up rate: Many patients need more surgery to improve the cosmetic outcome of the implant. (Often done outpatient and can be scheduled at your convenience.)
- Capsular contracture: Scar tissue can form around the implant and change the shape or position.
- Silicone leak/implant rupture: Most of these do not cause any symptoms. They are seen on mammograms or MRIs. The FDA recommends having an MRI or ultrasound 3-5 years after getting an implant. Most implants are changed every 10-15 years.
- Animation deformity: If the implant is placed under the chest muscles, it will move with your shoulder movements. This does not happen with protectoral reconstruction (described below).
- Ripples: Folds often seen in the upper part of the breast. Easier to notice when you lean forward.
- Might be associated with very rare ALCL lymphoma (cancer of the immune system).

- Breast implants give a young look to the breast. Some women prefer this. Others may feel it is an unnatural look. Breast implants do not gain or lose weight, move, or age like a natural breast.
- Breast implant illness: These are symptoms that have been linked to implants, but there is no scientific evidence how and if implants cause these symptoms.

## Using Your Own Body Fat/Skin

### About This Option

This method uses the skin and fat from the lower belly to reconstruct the breast. This is in some aspects similar to a cosmetic tummy tuck, but instead of throwing away the excess skin and fat, we use them to reconstruct the breast.

Most of these reconstructions are DIEP (deep inferior epigastric artery) flaps. In this surgery we take the excess skin and fat of the lower belly. We preserve core muscles as much as possible. This lowers the chance for problems in the abdominal wall, but muscles can still be damaged. This approach has shown long-term success. As you heal, the new fat becomes part of you and should last forever.

### Am I a candidate for this option?

Candidates are those who:

- Have not had a tummy tuck in the past.
- Do not have large scars in the belly area.
- Are within a certain body weight to height ratio (e.g. 145-215 pounds for a 5'5" height).

### Advantages

- Uses your own tissues; there is no need for silicone or other foreign materials.
- A more natural look and feel to the breast.
- You will get a "tummy tuck"-like effect.
- No long-term upkeep is needed.
- Late complications are uncommon.

### Risks

- Time to heal: This is a major surgery. It requires a 3-5 day hospital stay and a long recovery, described below.
- Belly complications: While we often do not include the abdominal (belly) muscles in this method, there is still a chance for a hernia, weakness of the belly muscles, or rarely, long term pain/tightness in the belly.
- Loss of fat: Fat may not survive when moved to the breast.
- The breast will change in size with weight changes, just like the fat did when it was in your belly.
- Touch ups: Most patients need a touch up procedure to make the breast look better. (Often done outpatient and can be scheduled at your convenience.)
- Use of important blood vessels: We use one of the chest vessels (internal mammary artery) to supply blood to the breast. This vessel is also sometimes used when a person needs heart surgery.
- Your lower belly will be permanently numb after surgery.

DIEP surgery is a long surgery, but our doctors and nurses are well trained to manage patients having this surgery. DIEP involves a hospital stay of 3-5 days. Healing time is longer and requires:

- 4-8 weeks off of work.
- Up to 3 months to return to full activity.
- Up to 6 months for the feeling of tightness in the belly to go away.

## **Other Things to Know**

### **Using the Back Muscles for Flaps (Latissimus Dorsi)**

This option takes one of your back muscles and moves it to the breast, where it is placed over an expander. The normal expansion process continues until you get to a size that you like. Surgery is then needed to take out the expander and place an implant.

The back muscle acts as an extra layer of tissue over the implant. This adds volume to the breast and makes it look more natural. You will have a scar on your back. The side where the muscle was taken from will be slimmer than the other side. The muscle function will be permanently gone. There is a small chance the muscle will not survive after it is moved to the breast, and you may have weakness with some shoulder movements.

### **Touch Ups**

While we aim for the best cosmetic outcome in the first surgery, most patients need a touch up. This is true for both types of reconstruction – implants and skin/fat use. Most touch ups are done outpatient and scheduled at your convenience.

One of the most common touch ups is called fat grafting. Fat is collected using liposuction from somewhere on the body. This fat is injected into the breast. This adds more volume and can correct any areas of concern.

Other touch ups may include:

- replacing the implants with a different size or shape,
- changing the position of the implant,
- making the breast smaller/larger, and
- revising scars.

### **Reconstruction on Both Sides**

If surgery is done on both breasts, the same type of reconstruction is often used on both sides. Both breasts are then more similar in size and shape. When only one breast is done, the other breast often needs surgery to make it match the reconstructed breast. This can be an augmentation (making larger), a reduction (making smaller), or a breast lift. Perfect symmetry is hard to achieve, but we try to match size and shape as much as possible.

### **Alloderm and Mesh**

Alloderm is a mesh made of human skin. It does not have any living cells and does not cause rejection or an immune reaction. It is often used with implants. Benefits include making expansions easier, helping you reach the second stage of surgery faster, and perhaps enhancing your cosmetic outcome. It can increase your infection risk, and requires keeping drains in longer after surgery.

If you have a DIEP, we may use a synthetic mesh in the abdomen. This lowers the chances of a hernia forming. The mesh is foreign to your body and can cause problems.

### **Changes in Breast Sensation**

After a mastectomy, most patients have little to no feeling in the skin of the breast. This will not change with reconstruction. While the size and shape of the breast can be changed, the breast will not feel, look, or move like a natural breast. Implants move less, are more firm, and may feel cold in the winter. Most people do not have long-term pain after the surgery, but occasionally pain may persist (even for those who do not have reconstruction). Some people have pulling, cramps, or decreased feeling at the site of the reconstruction. This should improve with time.

## **Nipple Reconstruction**

If the nipple is removed with the mastectomy, then you will have the option of reconstruction of a new nipple. This is usually done 3 months after the last surgery. The procedure is simple and takes about 20 minutes. It can be done under local anesthesia in clinic or with light anesthesia. Tattooing can then be done to replace the color of the areola.

## **Impact of Radiation**

Radiation changes the outcomes and options for breast reconstruction. Your options are:

- Delaying the reconstruction for 12 months after finishing radiation. However, this usually eliminates implants as an option. You will either need to use the belly fat or the back muscles for reconstruction.
- Placing the expander at the time of the mastectomy, and then receiving radiation. Several months after radiation is completed you can then decide if you want to proceed with implant or flap reconstruction. This option preserves all of your choices. It spares you having to live for a year without any reconstruction. However, radiation does increase the risk of implant problems and wound breakdown.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 11/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7862