Breast Reconstruction – Frequently Asked Questions

GENERAL
Do I need to have breast reconstruction?
It is never medically necessary to have breast reconstruction. This is considered an elective procedure, meaning you can choose to have it done or not. Some women choose to have a mastectomy (removal of all of the breast tissue) without reconstruction. Although it is considered elective, it is not considered solely cosmetic. Federal law mandates all insurance plans pay for breast reconstruction if a mastectomy is indicated.

What is the difference between immediate and delayed reconstruction?
Many patients prefer to have reconstruction done (or at least the process started) at the same time as their mastectomy for a number of reasons. If you have breast reconstruction done at the same time as your mastectomy this is called immediate reconstruction. Delayed reconstruction is the term used if you choose to have the mastectomy done and then wait for reconstruction to be done months, or even years later. The majority of surgeries done at Penn Medicine are immediate reconstruction. With immediate reconstruction you are decreasing your overall number of surgeries, you may have a better chance at an optimal cosmetic result and for many women there is a psychological benefit to immediately pursuing reconstruction.

Are all women candidates for immediate breast reconstruction?
The vast majority of women are candidates for breast reconstruction. There are a variety of reconstructive options and you may not be a candidate for all types. You and your plastic surgeon will discuss which type of breast reconstruction best fits your situation.

What are the major types of breast reconstruction available?
There are 3 major types of breast reconstruction. The first is a tissue expander/implant reconstruction. The second uses all your own tissues, typically from the abdomen but can come from your buttock or thighs. The third, less common option is a combination of the 2 methods using your own tissue from the back, latissimus muscle, plus an implant underneath.

IMPLANT RECONSTRUCTION
I am interested in implant reconstruction. What is involved?
Implant reconstruction is almost always at least a two step procedure. At the time of mastectomy we will put in a tissue expander, which is a balloon device that is placed underneath the skin and muscles of the chest wall. At the time of surgery, the surgeon will try to put in a small amount of saline into the expander through a valve in the device however, you will have very little projection. You are usually in the hospital for 2 days for this surgery and recovery time is about 4 weeks.

After you heal from the mastectomy, approximately 3-4 weeks, you will begin the process of tissue expansion. This means that you will need to come into the office on a weekly or every other week basis. At your office visit, a small needle will be inserted through the skin in the chest wall and into the valve in the tissue expander. A small amount of saline is added at each visit. The chest muscle and skin are slowly stretched to accommodate the appropriate sized implant with some discomfort. Once your tissue expanders have the correct amount of saline in them you will need to wait another 4-6 weeks before the second stage of the surgery. If you need to undergo chemotherapy, the next stage is delayed until chemotherapy is completed.

In the second stage we will go in through the same incision on the breast, remove the tissue expander and place implants. This can be either silicone (gel) or saline filled implants. Both types of implants are made of a silicone shell, the difference is what the implants are filled with. Both are safe.
Your plastic surgeon will help you to make the choice of permanent implants that are best for you. This surgery does not require an overnight stay in the hospital and recovery takes about 2 weeks. The whole process from time of mastectomy to when the final implants are placed takes anywhere between 3-6 months.

**Do my implants last forever?**
Implants are not lifetime devices and both saline and silicone implants can rupture and leak. If you have saline implants you will notice a slow deflation of the implant. The body is able to absorb the salt water leaking out of the implant and over a few days to weeks you will notice that your implant gets smaller. If you have silicone implants, there may be a change in the shape of the implant, however, oftentimes, there is no change at all. Many times, the only way to detect a leak in a silicone implant is through MRI. If you choose silicone implants you will be scheduled for periodic MRIs to ensure that your implants are still intact. Implant rupture rates, regardless of saline or silicone are approximately 1% per year; this means that your implant can rupture at anytime after being placed. Most implants will need to be replaced every 15-20 years.

**Why do you need to do tissue expansion? My friend had breast augmentation and they just put the implants without tissue expansion.**
Placing implants after mastectomy is very different than putting in implants for cosmetic augmentation. When women have an augmentation their skin and breast tissue is left intact. These healthy tissues are better able to stretch to accommodate and cushion the breast implant. After a mastectomy your breast skin is very thin. The breast surgeon needs to make sure that all breast tissue is removed and in order to do this you are left with only a very thin layer of breast skin. This breast skin is not able to stretch in the way it needs to in order to accommodate an implant. This is why we have to very slowly and gently stretch the tissues using a tissue expander.

**I may need chemotherapy. Can I still have implants?**
Women who need post mastectomy chemotherapy are still candidates for implants. Sometimes we need to change surgery dates based on your chemotherapy. For example, we will postpone your second stage surgery (to remove the tissue expanders and place the implants) until you are a safe period of time from your last chemotherapy. This time period can vary from 3 weeks to several months and will be determined by your plastic surgeon and medical oncologist. This gives your body the necessary time to recover. Women undergoing chemotherapy may also take longer to heal their incisions. This is normal and expected.

**I may need (or have already had) radiation to my breast area. Can I still have implants?**
Radiation and the impact on implants is something that needs to be discussed carefully with your surgeon. It is true that women who have implants and radiation are at higher risk for multiple complications, such as capsular contracture.

**AUTOLOGOUS TISSUE RECONSTRUCTION**
**I keep hearing about TRAM flap reconstruction. What is this all about?**
The TRAM flap stands for transverse rectus abdominus myocutaneous flap. This type of reconstruction is when the skin, fat, and blood vessels are taken from your abdomen and transferred to the chest and made into a breast mound. There are two very different types of TRAM flap reconstruction and it is important to understand the difference.

One type of TRAM flap is a pedicled TRAM, this means leaves the flap attached to its original blood supply and tunnels it under the skin to the breast area. This type of surgery can significantly decrease the strength that you have in your abdomen. This type of surgery is not usually not performed at Penn Medicine.
The other type of TRAM flap that is a free TRAM. In this type of flap, the surgeon cuts the flap of skin, fat, blood vessels, and only a small portion of the muscle is removed from its original location and sutures the blood vessels to donor blood vessels in the chest. Although this type of flap requires more skill, it preserves the strength and function of your abdominal wall.

There are 2 other special flaps that can be taken from the abdomen called the DIEP or SIEA flap, that also require suturing the blood vessels together. These flaps take NO muscle from your abdomen.

At Penn Medicine, the most common flaps performed are the free TRAM, DIEP, and SIEA flaps. The remainder of the questions here will only address this type of surgery.

Why do people choose this type of breast reconstruction? Doesn’t it take longer to recover from than implant surgery?

It is true that breast reconstruction using a free flap is more work up front; you are in the hospital for longer (usually 4 days) and has a longer recovery, 6 weeks. However there are many advantages to this type of breast reconstruction. Below is a brief summary of advantages and disadvantages. However, you will need to speak to your plastic surgeon to decide the best type of reconstruction for you.

Advantages of a free flap breast reconstruction:
1. You have your own tissue being used to reconstruct your breast.
2. The flap reconstruction does not deflate which may occur with a breast implant.
3. The flap reconstruction does not need to be replaced which may occur with a breast implant if the implant is too old.
4. You do not have to wear a breast prosthesis.
5. Since there is no breast implant, infection from the implant is avoided.
6. The bottom half of your abdomen will be less distended, this is similar to a “tummy tuck.”

Disadvantages of a free flap reconstruction:
1. The surgery time during the operation is long. For unilateral (one breast) surgery is approximately 4 to 5 hours, and for bilateral (both breasts) surgery may take 7 to 9 hours, which includes mastectomy time.
2. Rarely, the breast free flap may not survive and the flap signal may be lost. This is a major complication but the probability is low. Should this happen, your plastic surgeon will take you back to the operating room to evaluate the flap, and salvage of the reconstruction can occur to result in a successful reconstruction.
3. There will be scars on your abdomen and breast. There is a risk of hernia.

I do not want any muscle taken from my abdominal wall. Can you guarantee this prior to surgery?

Although it is always a priority to take no abdominal wall muscle, in our experience, it is not always the prudent approach. The type of flap you will have will depend on the anatomy of your blood vessels and the amount of tissue needed to give you an aesthetically pleasing result. If you choose to have this type of surgery you must understand that there is a chance we will need to take a small piece of muscle from your abdomen to ensure the success of the breast reconstruction.

Are there different types of free flap breast reconstructions?

Yes, there are several different types of free flap breast reconstruction.

Usually the tissue is taken from your lower abdomen. There are 3 possible types of free flap reconstruction from the lower abdomen. As discussed previously, the decision of which of these three is best for you is not finalized until the surgery is started and we can look at the anatomy of your abdominal wall.
1. Free TRAM flap = Free Transverse Rectus Abdominis Myocutaneous Flap, in this surgery skin, fat, blood vessels and a small piece of muscle are taken
2. DIEP flap = Deep Inferior Epigastric Perforator flap, in this surgery the abdominal muscle is cut in order to get the vessels but no muscle is taken.
3. SIEA flap = Superficial Inferior Epigastric Artery flap, in this surgery no incisions are made to the abdominal muscle, all vessels taken are from on top of the muscle.

If you have had a previous major abdominal surgery such as an abdominoplasty (tummy tuck) or if you do not have enough tissue on your lower abdomen to reconstruct your breast we can also use tissue from your buttocks or inner thighs.
1. S-GAP flap = Superior Gluteal Artery Perforator Flap, in this surgery, the upper portion of your buttock is taken
2. I-GAP flap = Inferior Gluteal Artery Perforator Flap, in this surgery the lower portion of your buttock is taken
3. TUG/TMG flap = Transverse Upper Gracilis or Transverse Myocutaneous Gracilis Flap, in this surgery, the upper portion of your thighs are taken

Many abdominal operations, such as Cesarean sections, do not limit our ability to use the tissue of the lower abdomen.

BEFORE THE SURGERY
What do I need to do for surgery?
Once you have decided to undergo mastectomy and reconstruction, you need to decide what type of reconstruction you desire. You will then need to contact your surgeons to let them know you are ready to schedule your procedure. A pre-operative appointment will be set up for you in which you will need pre-operative laboratories and other studies. Sometimes, you will require medical or cardiology clearance.

If you choose mastectomy and implant reconstruction, you should plan to be in the hospital for 1-2 days with recovery at home of approximately 4 weeks. Depending on your insurance coverage, you will likely have a home visiting nurse to check on you daily. You can expect your first tissue expansion at 2-4 weeks post-operatively.

If you choose mastectomy and flap reconstruction, you should plan to be in the hospital 3-5 days with recovery at home of approximately 6 weeks. Depending on your insurance coverage, you will likely have a home visiting nurse to check on you daily. You can expect to see the nurse in the clinic before you see your surgeon at 2-6 weeks postoperatively.

DAY OF SURGERY
What can I and my family and friends expect on the day of surgery?
The hospital will call you the day before surgery to tell you what time to arrive at the hospital. This is an automated message. You will report to the hospital “Admission Center,” to check in. You will then be escorted to the preoperative holding area in which you will prepare for surgery. Once you are checked in and settled, your family and friends will be asked to re-join you in the holding area.

Once you are called for surgery, you will be escorted to the operating suite and your family will be escorted to the family waiting area. Your family will check in and leave a contact number and either wait for your surgery to be completed or leave and wait to hear from the receptionist or surgeon once the surgery is completed.
Should your family wish to wait, there will be a patient liaison that will give updates on the progress of your surgery. There is also a screen showing when your surgery started and ended. There will be plenty of time for your loved ones to get something to eat in the cafeteria, walk around, or go home to take care of important things while you are in surgery as long as they leave a number in which they can be reached with the receptionist.

Once your surgery is completed, your family can expect to hear from the surgeon. They can then expect to see you either in the recovery room or after you have been transferred to your patient room. Often there is a delay of 30-90 minutes from the end of your surgery to when you will see your loved ones.

**Can my family or friend stay with me at the hospital?**
The general rule is that you are not allowed to have overnight visitors. However, this may be waived but is up to the discretion of the charge nurse. You will also have the option to stay in the Pavillion, your guests will be able to stay with you in this environment.

### POST-OPERATIVE PERIOD

**Tell me about the hospitalization period**

After surgery, you will be admitted to an intermediate care floor (level of care between a regular bed and an intensive care unit bed). A nurse will be checking the blood flow to your flap every hour for the first 48 hours. This is done in a noninvasive way and is not painful or uncomfortable.

You will have several drains called Jackson-Pratt or “JP” drains post-operatively. These drains will remove the excess fluid from the surgical sites that would otherwise collect there. You will be going home with some or all of these drains. You will receive education while in the hospital on how to care for these.

After the first 2 days, you will be transferred to a regular bed. You will be up and walking on the second day after surgery and should be eating regular food by this time. Patients typically spend 4 to 5 days in the hospital after this surgery before going home.

**How long will I need to be out of work for?**

For implant reconstruction most women take 4 weeks off of work following the mastectomy and placement of the tissue expanders and one week off of work after the second stage surgery (removal of tissue expanders and placement of the permanent implant). Many women are able to return to work during the tissue expansion process.

For tissue flap reconstruction women generally take 6 weeks off of work.

**When can I drive?**

It is safe to resume driving when all the drains are out (more about these below), when you are off all prescription pain medication and when you have regained safe range of motion of your arms. For most women this is about 3 weeks after the mastectomy.

**Tell me about the surgical drains.**

Jackson Pratt (JP) drains are placed under the skin during surgery to remove a collection of blood and other fluids. The drain looks like a narrow plastic tubing that connects to a drainage bulb (which is about the size of a closed fist). The JP drains expedite the drainage process and help decrease the chance of infection. You usually will go home with some drains. On an average, drains may stay up to
1 to 3 weeks. You will have at least one drain underneath the arms on the side of your mastectomy. If you use your own tissue you will have two drains in the abdominal area. The drains are fairly easy to take care of. You and your family members will be taught to care for them while you are in the hospital. Generally three times per day you will need to strip the tubing (clean it from the outside to make sure the tube stays open) and empty the fluid in the collection bulb. You will need to keep track of the 24 hour total of fluid coming out of each drain. A plastic surgery nurse will keep in touch with you over the phone and use these totals to determine when the drains need to be removed. The drains are easily removed in the office.

**What activity limitations do I have?**
While the drains are in you cannot take a bath or submerge yourself in water. Showering with the drains in is fine. You also want to limit reaching and excessive stretching of your arms immediately after your mastectomy. Once the drains for the breasts are removed you may be given exercises to start. Generally these range of motion exercises are not started until 48 hours after the drains are removed.

If you have had tissue taken from your abdomen you will not be able to lift anything more than 7-10 lbs or do any strenuous exercise for 6 weeks. Walking is fine and can actually speed your recovery.

**Do I need to have any special supplies at home for my recovery?**
Bring to the hospital a shirt that either buttons or zips up the front. Just after surgery it can be painful to raise your arms overhead.

Sometimes your surgeon will request that you buy a special supportive bra to wear after surgery. This should be a bra without underwires and one that closes in the front. Many department stores sell these in the sports bra section. You can also purchase one at the Faith and Hope Boutique at the Cancer Center. Some women are also more comfortable in a camisole with a self bra.

If you are not progressing as expected after surgery, it is not uncommon for your physician to start physical therapy to aide in your recovery.