

What is Free Flap Reconstruction?

Free flap reconstruction refers to a surgical technique using your own tissue and moving this to another part of the body, similar to a transplant to yourself. The skin, fat, and occasionally muscle, is removed from the body completely and placed in a new location.

Breast reconstruction using free flaps is one of the techniques used to restore volume after a mastectomy. Generally surgery is insured for a medically approved reason. This may be for breast cancer, genetic syndromes, or congenital breast malformation.

Within breast reconstruction, Dr. Lee has subspecialty expertise as fellowship-trained microsurgeon.

Who Can Have Breast Free Flap Reconstruction?

Breast reconstructive surgery is meant to improve the quality of life following a medical diagnosis. A physician referral is needed for breast implant reconstruction. The most common reasons for free flap reconstruction are related to cancer treatment.

Patients must be in good general health, enough to safely undergo prolonged general anesthesia. A BMI under 30 decreases wound healing and surgical complications. Patients must not be active smokers.

There must be adequate donor tissue that is present to be able to be transferred. Most commonly this comes from the lower abdominal skin and fat, under the umbilicus. The strength of your abdominal core muscles will be evaluated to determine your risk of weakness after surgery.

A personal consultation is needed to determine whether a breast reconstruction with free flaps is possible.

Breast Cancer Free Flap Reconstruction

Dr. Lee is a specialist in breast cancer reconstruction and has extensive experience with the breast cancer surgical pathway. This must be a team approach with the first goal to cure cancer. There are many ways this can be approached and the treatment plan is customized to your particular care.

Breast free flap surgery is the choice of reconstruction for those who prefer a natural tissue option.

PROS:

- No foreign material is implanted in the body.
- Natural tissue reconstruction lasts forever
- There are no implant-associated complications such as rupture.
- The breast is shaped more naturally and is softer.
- The breast is dynamic and can change proportionally with weight gains or losses.

CONS:

- Additional donor scars needed – often long, and spans from hip bone to hip bone.
- Surgically complex requiring an all-day surgery (can be 8+ hours).
- Can only be performed at hospitals with specialized equipment and surgeons able to perform breast microsurgery.
- Extended hospital stay is required to monitor the breast and allow recovery (3–5 days).
- Longer recovery period – 3 months to recover energy and a normal activity level

When Can You Start Breast Free Flap Reconstruction?

Breast cancer reconstruction can start at the same time as the mastectomy (“Immediate”) or start after the mastectomy as a separate surgery (“Delayed”).

IMMEDIATE RECONSTRUCTION: The mastectomy and breast reconstruction take place on the same day. With free flap surgery, you will wake up with a formed breast.

PROS:

- Reconstruction starts at the same time as the mastectomy, saving yourself from additional surgery later. The breast skin or nipple can be “saved” for a more aesthetic result.

CONS:

- Cancer status is not confirmed and more treatment (radiotherapy or chemotherapy) may be needed. The addition of extra time and surgical complexity may increase complications. Wound complications may delay the next steps in cancer treatment. In some cases, the size may be limited by the amount of skin and abdominal tissue present.

DELAYED RECONSTRUCTION:

PROS:

- Cancer has been treated fully. The decision is not time-sensitive and can occur at your convenience. You can optimize your body to prepare for this surgery.

CONS:

- The breast skin needs to be replaced and there will be a large visible “patch” of abdominal skin on the reconstructed breast, without a nipple.

After Surgery

Prepare to be off for 3 months after surgery to achieve the pre-surgical energy and activity level. By 2 weeks you may be socially presentable, but under your clothing you will have fresh scars, gauze dressings, an abdominal binder, and you will feel tired.

FIRST 2 WEEKS:

- You will have dressings in place to cover the breast
- There will be temporary tubes that drain the extra fluid buildup in the implant pocket. Your surgeon will arrange home care nursing to help with dressing and drain care.
- You will also be given pain medication and antibiotics medications during the recovery period.
- You will be closely followed by your surgeon to monitor for signs of infection or wound healing problems.

2-8 WEEKS

- You will wear an abdominal binder to support your healing abdominal muscles.
- No heavy or cardiovascular exercise is recommended.

8-12 WEEKS

- No activity restrictions
- You may slowly start to exercise and build strength
- You may start to discuss nipple reconstruction or tattoos

Clear communication as a part of the cancer care team is important to Dr. Lee. During this time Dr. Lee will communicate with the team to adjust your care as updates and changes may occur.

Breast Surveillance After Free Flap Reconstruction

One year after surgery, your result is stable and the scars have fully matured. Since the breast tissue is not present, routine mammography is not required. Maintenance is simple and involves breast physical examinations for detection of masses. No further surgeries are required unless you request this for small revisions.

Schedule a personal consultation with Dr. Lee to talk about breast cancer free flap reconstruction.