TDAP/LICAP Breast Reconstruction

WHAT IS A TDAP FLAP?

The TDAP, or thoracodorsal artery perforator flap, is a method of reconstructing the breast using your own tissues after a lumpectomy or mastectomy. Skin and fat from near the armpit area and side of the back are transferred to reconstruct defects of the outer breast, usually without sacrificing muscle tissue. Its blood flow is based off of branches, or perforators, of the thoracodorsal artery. The incision is usually well concealed and may be oriented transversely or vertically on the back based on your anatomy and reconstructive requirements.

WHAT IS A LICAP FLAP?
The LICAP, or *lateral intercostal artery perforator* flap, is a method of reconstructing the breast using skin and fat from the side of the chest, near the armpit area. It is used to reconstruct outer breast defects following lumpectomy or other procedures. It is based off a branch or perforator of the lateral intercostal artery. The incision is usually well concealed.

**WHAT IS A PERFORATOR FLAP?**

Perforator flaps represent a new advance in microsurgery. These flaps are compromised of skin and fat tissue and spare muscle tissue. They are based off of arteries and veins that send branches that penetrate through or between the muscles and into the fat and skin. Using advanced microsurgical techniques, the fat and skin can be removed and used for reconstruction without removing the muscle tissue.

TDAP and LICAP flaps are particularly effective in reconstructing partial defects of the outer breast in patients within a relatively broad weight range, Scars are usually well concealed in the armpit area. TDAP and LICAP flaps represent an alternative to fat grafting, breast implants and other traditional flaps for reconstructing lumpectomy defects.

**SIX WEEKS BEFORE SURGERY**

1. **Smoking affects healing.** Please stop smoking or ANY nicotine products for at least 6 weeks before surgery and one month after. If needed, we can prescribe Chantix to help you quit. Our office may perform a urine nicotine test at any time before your surgery to confirm that you have quit smoking.

**TWO WEEKS BEFORE SURGERY**

1. Some medications can interfere with anesthesia and cause undesirable side effects that could affect your surgery. Please read over the enclosed “Medication and Supplement Alert List” and let us know if you take any of them. You should refrain from using Aspirin for 2 weeks prior to surgery. Tylenol is a good medicine to take for any aches or pains you may have prior to your surgery.

2. If you develop a cold, facial sore, or any other illness prior to surgery, please notify us.
EVENING BEFORE SURGERY

1. Drink 24 oz of a clear carbohydrate beverage (Gatorade/power aid) or water
2. Eat a late dinner of your choosing
3. Have some jello and/or soup available for after surgery.
4. Get a good night’s rest.

MORNING OF SURGERY

1. Drink 12 oz of water 4 hours before your scheduled surgery - *Do not drink milk, juice with pulp, cream, or sugar the morning of surgery*
2. Do not wear contact lenses, wigs, hairpins, hairpieces or jewelry. Dress in old, loose, comfortable clothes. Do not wear pullover tops or pantyhose. Remove all body piercing jewelry from all locations. Wear slip-on shoes.
3. Have someone drive you to your surgery and make certain someone will be available to take you home and stay with you for 24 hours. Put a pillow and blanket in the car for the trip home. A vehicle that allows you to recline is best.
4. When in the hospital, you will be given the following oral medicines (we will give these to you at the hospital – there is no need to obtain or take these beforehand). These are: Tylenol, Gabapentin, Celecoxib, and Oxycontin.
5. You will receive a paravertebral block prior to surgery. This is administered by the anesthesia team and is designed to numb the nerves in the chest area to reduce pain during surgery.
6. **DO NOT SMOKE**

AFTER SURGERY

HOSPITAL CARE AFTER SURGERY:

1. **Diet.** Your diet will be slowly advanced after surgery with clear fluids and then light foods. Please be sure to consume a diet rich in protein once you are discharged home after surgery. This will encourage wound healing and may reduce your risk of post-operative seromas (collections of fluid that drain tubes may otherwise have to deal with).

2. **Caffeine-free diet.** It is best to avoid chocolate and caffeinated coffee, tea, or supplements for several weeks after a TDAP or LICAP flap to improve blood flow to your reconstruction and reduce the risk of wound healing or infection problems.

3. **Blood Clot Prevention.** To reduce the risk of blood clots after surgery you will be treated with a drug called *Lovenox*. This drug, also known as *low molecular weight heparin* is injected under the skin of the abdomen daily for up to 5 days after surgery. You will also have specialized stockings on your lower legs that intermittently massage your ankles. These also reduce the risks of blood clots.
4. **Pain Control after Surgery.** You are given an Enhanced Recovery After Surgery or ERAS protocol. This is a protocol that incorporates best medical practices to optimize your comfort and speed up recovery. The ERAS protocol may include:
   - Regional local anesthetic block(s) administered by your surgeon during surgery.
   - Celecoxib (Celebrex) – a selective cox-2 inhibitor, this is an anti-inflammatory medicine
   - Gabapentin (Neurontin) – this medicine dulls nerve-related pain
   - Oxycontin – narcotic medicine for pain control
   - Acetaminophen (Tylenol) – non-narcotic pain control
   - Hydromorphone (Morphine) – for pain control when oral medicines are not enough
   - Zofran – a powerful anti-nausea medicine
   - Colace – a stool softener to prevent constipation due to the narcotic medicines

5. **Preventing Fevers after Surgery.** Deep breathing helps keep your lungs inflated and prevent fevers after surgery. When flap tissue is taken from your abdomen, post-operative pain can make it hard to take deep breaths but it's important to do it anyway. To help coach you to take big breaths you will be provided with an *incentive spirometer*. This device has a mouthpiece attached to a hose that you take big breaths into. It shows you how big a breath you are taking and provides you with direct visual feedback to see how you are doing and to motivate and remind you to continue to take big breaths.

6. **Blood Transfusions after Surgery.** On occasion, blood transfusions are required to restore your blood counts following microvascular breast reconstruction surgery. The decision to transfuse you is made when the risk of a blood transfusion (allergic reaction, or the very low risk of transmission of an infection) is outweighed by the risks of having a blood count that is too low (stress on the heart, kidneys, and brain).

7. **Preventing Infections after Surgery.** A limited course of antibiotics are typically prescribed after surgery. The type of antibiotic depends on several factors including which allergies you have.

8. **Drains** are occasionally used with TDAP and LICAP flap surgery and serve to draw off any accumulating fluid after surgery. The bulb should be kept collapsed at all times. Please keep a record of *when and how much* fluid is emptied from the bulb in *milliliters*. Record the output from each drain separately. Bring this record with you to any office appointment where you still have drains. Usually, drains are removed when they make less than 30 cc within a 24 hour period. On average, they will stay in for up to 1 week.

Drains may be cumbersome. To avoid having them dangle or tug you may wish to purchase a “fanny pack” that is worn round the waist and can function as a receptacle for your drains or a belt to which you can safety pin your drains.

We may use an antiseptic-impregnated disk or “biopatch” around your drain where it exits the skin to reduce bacterial contamination.
9. **Wound Glue.** The wounds have been sealed with Dermabond. No wound care except cleaning is required. Do not use ointment over Dermabond glue as it will dissolve the glue.

10. **Showering.** You may shower as soon as you are discharged home. The incisions can get soapy and wet, but avoid soaking them or applying full showerhead pressure to them.

11. **Bras.** To avoid compressing your flap reconstruction, you may be asked to avoid wearing a bra for a few weeks after surgery.

**OTHER POST-OPERATIVE INSTRUCTIONS**

1. If the reconstruction is performed at the same time as the lumpectomy, your breast cancer surgeon will provide you with the final pathology report typically within 5-10 days. On rare occasions, if further cancer cells remain in the breast, then additional surgery to remove more breast tissue may be performed. Otherwise, radiation therapy will be initiated per the discretion of your radiation oncologist usually within 6 to 8 weeks.

2. You may gradually resume normal daily activities once you are discharged home, being careful to avoid any activity that causes pain or discomfort. Strenuous or sexual activities and exercises are to be avoided for 3 to 4 weeks – your doctor will guide you on when to advance your activity. If it hurts, back off. Start slow and progress as tolerated.

3. Driving may be resumed when a sharp turn of the steering wheel will not cause pain and when you are off regular narcotic pain medicine.

4. Bruising and swelling are normal. This will disappear with time.

5. Unusual sensations like numbness, sharpness, and burning are common during the healing process. These sensations may last several weeks to months and will gradually disappear.

6. If you have any questions, sudden onset of extreme pain, fever, or redness, or a new wound, please call Dr. Myckatyn or Dr. Tenenbaum’s office at **314-996-8800**.

**RETURNING TO WORK:**

1. Working from home : 1 week
2. Desk job : 3 weeks
3. Up on your feet a lot : 4 to 5 weeks
4. Manual labor : 6 to 8 weeks (depends on need for radiation therapy)
GENERAL INFORMATION:

1. Strenuous activity/heavy lifting of objects greater than 10 lbs should be avoided initially. Your physician can help guide you through increasing your activity levels. If it hurts, back off. Start slow and progress as tolerated. All incisions will be extremely sensitive to sunlight for one year. Direct sun contact is to be avoided and use a sunscreen with SPF 30 or greater for the first 6 months and at least SPF 15 for the next 6 months. Excellent sunscreen options are offered through our various skin care lines.

2. Please take all medication carefully and as directed.

3. If you have nausea, vomiting, rash, shortness of breath, or diarrhea after taking your medications, please call the office.

4. If you develop a fever (oral temperature greater than 101), redness or increased pain at the surgical incisions, please call us immediately.

FOLLOW-UP:

Follow-up after surgery varies based on the extent of the procedure, any pre-existing health conditions you may have, how far away you live, and in the unusual event where there is a complication. For many patients follow-up includes:

a) Follow-up within 5 to 14 days with our Nurses to pull drains, check wounds, and to address any minor questions or concerns

b) Physician follow-up at 3 weeks, 6 months, and perhaps other visits to confirm you are healing well.