



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

DIEP and TRAM Flap Breast Reconstruction

Patient Care Instructions

General Information

Breast reconstruction using your own body's tissue from your abdomen with either a free TRAM or DIEP flap has the advantages of forming a natural appearing and feeling breast. The abdominal tissue is removed with its blood vessels and transplanted to the chest vessels to assume a new role as living tissue under the breast skin. The blood vessels and tissue are fragile and can be injured very easily. Dr. Ramanadham promotes the healing of the free flap with close observation for the first 72 hours. It is common to be placed in the ICU for the first 24-72 hours. The flap is monitored with a Doppler ultrasound, which detects a pulse and blood flow within the flap. Most patients will be hospitalized from three to seven days but this varies for the individual patient. Despite the increased complexity of the procedure the increased length of recovery, Dr. Ramanadham strives to make this breast reconstruction method a reliable option with a very predictable recovery.

Things to handle prior to your surgery

Avoid all NSAIDs (motrin, aspirin, ibuprofen, etc) for 7-10 days prior to procedure unless otherwise directed by your doctor. Continued use may cause bleeding.

Avoid all herbal medicine or supplements for 3 weeks prior to procedure. Continued use may cause bleeding.

Arrange for someone to drive you home from the hospital and stay with you for at least 2 to 3 days.

Necessary medications will be called into your pharmacy or prescriptions given to you when you leave the hospital.

Protein supplementation can be started one to two weeks before surgery and should include over 20 grams of additional protein daily.

Have electrolyte containing fluids such as Gatorade or electrolyte water on hand.

Have stool softeners/laxatives on hand, such as Colace, Biscodyl, Milk of Magnesia. These can be purchased at your local pharmacy.

Review the attached list of medications not to take during the perioperative period. If you have any further questions that were not addressed during your consultation then please call Dr. Ramanadham's office.

If you are unsure if you can stop a medication then please call our office or the prescribing provider to confirm if this is medically safe.

For your convenience, we have included a **Suggested Shopping List** in the addendum to these instructions.

Pre-Operative Guidelines



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

Smoking should be stopped a minimum of 4 weeks prior to surgery. Smoking should be avoided for at least 4 weeks after surgery as well. Smoking can greatly interfere with healing and lead to postoperative complications.

Do not eat or drink anything after midnight the night before surgery. This includes no water, gum, or hard candy.

Blood pressure and/or heart medications can be taken with a sip of water as directed by your prescribing physician.

If you take medication for diabetes then confirm with your prescribing physician how to manage these medications prior to surgery.

If you are prone to nausea or motion sickness let your anesthesiologist know on the day of surgery. Medications can be started prior to surgery or during surgery to help improve your postoperative experience.

Post-Operative Care

Take pain medication and muscle relaxants as prescribed. Do not drink alcohol with these medications.

Continue Aspirin 81mg every day for a total of 4 weeks.

You may be given a blood thinner in the form of a shot that should be continued as directed.

Take a suggested stool softener/laxative until bowels begin to function normally after surgery. A combination of anesthesia, muscle relaxants and pain medications usually make these necessary for a few days.

Do not smoke or be around smoking as even second hand smoke delays healing and increases the risk of severe complications and even failure of the reconstruction. This should be avoided for more than 4 weeks before surgery and 4 weeks after surgery.

Get plenty of rest.

A surgical bra is acceptable if it is provided by Dr. Ramanadham. It should be loose. Avoid wearing any other bras or any compressive clothing on your chest.

Follow a well-balanced diet, which includes protein and is limited in salt intake. A high salt diet or meal, can lead to increased swelling and prolonged recovery. It is best to continue the protein supplementation for approximately 3 weeks after surgery.

Oral hydration should include the use of electrolyte containing fluids such as Gatorade or a low calorie substitute.

Limit the amount of caffeinated beverages as they can promote dehydration; however Dr. Ramanadham recommends you maintain your daily average of caffeine to avoid headaches.

If given a binder wear it as much as tolerated for 2 to 3 weeks after your operation. You may take it off to shower. Avoid allowing the binder to migrate upwards towards your reconstructed breasts.

Activity Restrictions



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

Walking is encouraged shortly after the operation and can be increased over the first 2 weeks. You will likely begin walking the day after surgery as directed by Dr. Ramanadham while you are in the hospital.

Light cardiovascular exercise can be resumed after 4 weeks with all activities to be resumed at 6 weeks.

It is important to walk slightly “stooped over” bent at the hips for 7 to 14 days to reduce tension on the lower abdominal incision. This helps to protect the incision as it heals and improves the scar long-term. With time you will progressively be able to stand straight.

Keep your head elevated to about 40 degrees (2 pillows) with knees slightly bent and hips in flexed position. A recliner or back wedge pillow can be helpful to make this position tolerable for one week. Pillows under your head and knees will help as well.

Do not lift anything heavier than 10 pounds for 6 weeks.

Do not drive for approximately 10 to 14 days or until you are no longer taking oral pain medications or muscle relaxers.

Do not run, lift weights, play tennis or golf for 6 weeks after surgery. It is important to keep your heart rate under 100 beats per minute for 4 weeks.

Light cardiovascular exercises can be resumed gradually after 4 weeks.
Heavy lifting/stretching (Yoga) can be resumed after 6 weeks.

Incision Care

You will have clear skin glue dressing on all incisions. The abdominal incisions will have dressings on top of this that might be removed during the hospital stay.

The glue will protect the incision for 3 weeks and will peel off on its own.

You may have yellow gauze inside of your belly button with overlying white gauze and a clear plastic tape on your belly button. This will be removed 2 days after surgery.

If you have persistent sutures, they will be removed in 7 to 14 days.

You may shower 3 days after the operation. Make sure someone is with you at your first shower.

The abdominal binder should be removed for showering, but it should otherwise be worn at all times. Any gauze and tape can be discarded and need not be replaced after the first shower.

Please make sure the abdominal binder does not touch your reconstructed breast(s)

You may gently begin washing your incisions with mild soap and water but do not submerge the incisions for at least 4 weeks (no baths)



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

Do not use a heating pad; heat may burn the area.

Do not wear a bra (other than a surgical bra) for at least 4 weeks or until instructed by Dr. Ramanadham as this can compress the flap and cause permanent injury to the tissue.

Sleep with pillows under your knees. Some women choose to sleep in a recliner or lounge chair.

Drain Care

Dr. Ramanadham will place one or two small silicone tubes under the skin in the area of surgery (breast and abdomen). These will be connected to a suction bulb. These drains help collect fluid which can normally occur in the area of healing. You may have 4 to 6 drains total. They will each be removed when ready.

Care for the drains will be reviewed by the nurse on discharge.

Keep your drainage bulbs collapsed to create a mild suction. Record the time and amounts of drainage over a 24 hour period. It is very important to accurately record each individual drain output.

Generally, drains will remain until individual daily drainage is 30 cc or less for 2 consecutive days. A sheet is provided to you for recording these amounts. It is very important to accurately record each drain output. The breast drains can sometimes be removed prior to discharge from the hospital.

Umbilical/Belly Button Care

Two days after surgery, the umbilical dressing can be removed. No further care is needed other than to keep this area clean and dry. Gently clean the inside of the belly button with a Qtip.

What to Expect after Breast Reconstruction Surgery with a DIEP Flap

The reconstructed breast will have moderate swelling which may look larger than the other side, especially if radiation therapy was performed on that side.

In most situations the reconstructed breast will have two different skin tones due to the use of abdominal skin.

Moderate swelling of the abdomen is expected. The majority of this will subside in 6 weeks to 3 months.

It is common to have discomfort of the abdomen and chest. Mild burning around the incisions after breast reconstruction surgery is normal, and will improve shortly after surgery.

Discomfort in the areas of the abdominal surgery and muscle repair may worsen with increased activity and relates to internal sutures that Dr. Ramanadham places to shape this area of the abdomen. This will relax with time and can be relieved with maintaining the flexed position and utilizing medication for muscle spasms (Valium).

You can expect some slight bloody oozing from the suture lines and swelling of the incisions. Gauze may be applied if it is bothersome. However, you should call the clinic if you have continuous bleeding, significantly more swelling on one side than the other, or any severe pain associated with swelling.



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

Tightness of the abdomen is a normal feeling after this surgery. This may worsen over the first 2 days. This will relax with time and can be relieved with maintaining the flexed position, keeping compression on the abdomen and utilizing medication for muscle spasms (Valium).

There may be a feeling of numbness of the lower abdomen and breast that will subside with time.

Red discoloration of the incisions may occur if there is significant swelling, especially in the area of the sutures.

This will resolve when as the incisions heal.

Constipation is common after any operation, and is secondary to the anesthetic, pain medication and dehydration.

Please stay well hydrated and use the recommended stool softener and/or laxative until bowels return to normal.

When to Call the Office

If you have increased swelling, firmness and/or color change of the reconstructed breast. In bilateral reconstructions, if one side is significantly different from the other. This may signify a change in the flap circulation which is serious and you should contact the clinic or Dr. Ramanadham.

If you have increased swelling and bruising on the abdomen. Remove any covering/dressing to make this determination. This may represent a hematoma (collection of blood) or a seroma (collection of clear fluid).

If you have increasing redness or swelling around the incision.

If you have severe pain not relieved by pain medication.

If you have any side effects from the medication: rash, nausea, headache, vomiting.

If you have fever over 101.

If you have yellow or greenish drainage from an incision or notice a foul odor.

If you notice some vaginal burning and itching or severe diarrhea as a result of the antibiotics used during and after surgery.

For medical questions, please call our office.

Follow-up Care and Appointments

Drains will remain in the breasts and abdomen until totals are 30 cc or less for 24 hours over 2 consecutive days. You will need to measure drainage amounts and record these on the provided sheet. Please call the clinic when any drain is are ready to be removed.

You will be seen by Dr. Ramanadham approximately 1 week after discharge from the hospital. You will also be seen at 3 weeks, 8 weeks and 12 weeks. This is subject to change.



SMITA R. RAMANADHAM, M.D.
PLASTIC SURGERY

Suggested Shopping List

Items to have on hand prior to surgery

DIET and TRAM Flap Breast Reconstruction

- Prescriptions will be called into your local pharmacy as ordered by Dr. Ramanadham or given to you while in the hospital upon discharge. Typical medications are as follows but these will be tailored to your needs.
 - Norco (pain medication)
 - Valium (muscle relaxant and anti-anxiety medication)
 - Keflex (Antibiotic)
 - Lovenox (blood thinner)
 - Zofran (nausea)

- Bacitracin or Neosporin Ointment

- **Aspirin 81 mg**

- Gatorade or another low calorie alternative, such as water with electrolytes

- Protein Supplements

- Stool softener / laxative (choose one):
 - Docusate (Colace) 100 mg orally 2 to 3 times daily when taking pain medication
 - Milk of Magnesia 30cc/1 Tablespoon twice daily when taking pain medication
 - Prune juice or Sorbitol orally
 - Biscodyl or Magnesium Citrate as needed for constipation