DIEP Flap Breast Reconstruction Surgery

DIEP Flap Breast Reconstruction is a microsurgical procedure that uses your own tissue to rebuild one or both breasts following a mastectomy. Blood vessels, skin and fat are taken from the lower abdomen and transferred to the chest area to rebuild your breasts, giving you a natural look and feel. This procedure is often done at the same time as your mastectomy or after treatment is completed. The advantages of DIEP Flap reconstruction are that it uses your own tissue and it does not involve removing abdominal muscles, which improves recovery time and reduces the risk of hernia.

If you are considering this procedure, you will meet with your oncology surgeon and plastic surgeon who will work together to give you the best outcome for your health and the optimal aesthetic result.

Your oncology surgeon will discuss with you the type of mastectomy—skin sparing, nipple sparing, modified radical or radical—that is recommended for your specific case. Your plastic surgeon with discuss reconstruction options, one of which is DIEP Flap, and explain the procedures involved.

The average length of surgery can take between six and 12 hours depending on whether you are having a single or double mastectomy with reconstruction. Following surgery, you will recover in the ICU at the hospital for up to five days. During this time, the doctors and nurses will closely monitor the blood circulation in the tissue transfer to ensure that it remains healthy.

Planning for Your Surgery

Prior to your surgery, you will need to make preparations for your at-home recovery. The following is a summary of tips from patients who have undergone mastectomy with DIEP Flap reconstruction. This is intended to help you plan for your procedure and must not be construed as medical advice. Always consult your doctor with any questions or concerns you have.

CLOTHING

After surgery, you will have limited range of motion in your arms which will make getting dressed more challenging. In addition, you will be bandaged and will have drains in both your upper chest and lower abdomen. You will need clothing that is easy to get on and off. You will not be able to reach behind you to zip zippers or pull clothing over your head for a while.

- You will need tops or dresses that button or zip down the front. Consider having a tailor add a long zipper to a favorite t-shirt dress or tank dress.
- If you prefer blouses and pants, make sure that they are roomy enough to slide over your arms and hips without tugging or twisting your body.
- Try clothing out beforehand to see which ones allow the least amount of movement in your arms to get on and off. (One person suggested pretending that you have T-Rex arms.)
- You will have drains in your lower abdomen, take that factor into consideration with pants that will need to be pulled up and down when you use the restroom.

Bras and Underwear

You will be sent home from the hospital in a mastectomy bra that has a front closure; the hospital may also supply an extra one for you to take home. You will wear these during the initial healing process. If you would like to purchase additional mastectomy bras, order two sizes—one in your normal band-width and cup size and one a band-with size larger since you may have some swelling postsurgery. Most stores will allow you to return the one that doesn't fit. There are lingerie companies that specialize in post-mastectomy garments, but often you can find acceptable bras at department stores and can order online.

Also, ask your plastic surgeon when you can switch to another type of bra and get his/her recommendation before you buy. Bras with underwires will not be permitted until you are completely healed. Consider buying some hip hugger or waist high underwear to wear during your recovery if you wear bikinis. Bikini underwear might rub against your incision and cause irritation. Stay away from tight underwear that may constrict circulation. One advantage of "granny panties" is that you can tuck the extra tubing from your drains into your underwear to keep it from pulling on the incision–just be careful not to crimp the tubing which can interfere with drainage.

Tip: If your surgery involves removal of your nipples, take a photo of them prior to surgery. When it comes time to have your new nipples tattooed, this will help the physician or physician assistant match your natural color.

Shoes

Slip-on flats with rubber soles are ideal for your initial recovery period. Bending down to tie laces or adjust straps will be difficult. You also will want to reduce the possibility of tripping and falling during this time. If you reach out to catch yourself, you can inadvertently put stress on your incisions.

PREPARING YOUR HOME

Sleeping/Resting

Your doctor will want you to only sleep on your back during your recovery. Side or stomach sleeping can put pressure on your new breasts or incision sites and damage the tissue transfer.

You will need a recliner or bed wedge to keep your head and knees elevated during your recovery. If you buy or rent a recliner, consider getting one with electric controls since using your arms and legs to bring the chair to an upright position will put stress on your surgical sites. If you do not have access to a recliner, purchase a foam wedge to place under your back to keep you in a semi-upright position and place pillows on either side to keep you from rolling over in your sleep. You also will need pillows to go under your knees and thighs to keep stress off of your abdominal incision.

Consider setting up your recuperation base in an area of your home with easy access to the kitchen, a restroom, your computer and television. Have a small table within reach for your medications, water, snacks, tissues, cell phone, reading material, reading glasses and other items that you will need throughout the day. Have a lightweight blanket close at hand too since you will likely take many naps during the day as you recover. Sleep as much as you need during this time. If you have stairs in your home, be very careful going up and down the first few weeks as you will be walking bent forward and your center of balance may be slightly off.

Meals

Stock your pantry with easy to prepare foods. Peanut butter, cheese, fruit, pre-cut vegetables, nuts, crackers, microwavable frozen meals, pre-prepared salads and refrigerated pre-prepared meals are good choices for this period of time. You may also find it helpful to create a list of online meal delivery and grocery shopping delivery sources that can help you until you are fully recovered.

You may experience loss of strength in your hands for a few weeks after your surgery (it goes away). Opening bags, jars, containers, seals, etc. will be more difficult than you may expect. You can open some items ahead of time and store the contents in zip lock bags in your refrigerator or pantry. You can open jar lids ahead of time and lightly screw them back on (make sure these items are shelf-stable or refrigerated afterward). Keep a pair of scissors handy for bags, boxes and cellophane wrappers.

In the kitchen, place dishes, glasses, cups, cookware, small appliances, and utensils—anything you may need for meal preparation—on the countertop since you will not be allowed or be able to reach more than a few inches for several weeks. Ideally, everything you need should be at waist level. Bending down will also be difficult due to weakness from the surgery. You also should not lift anything more than five pounds.

If you absolutely must use a step stool, be extremely careful. For the first few weeks, allow others to help you put dishes in the

dishwasher and clean the kitchen. Your main job is to heal – almost everything else can wait.

The Bathroom

Prepare your bathroom to make showering, brushing your teeth and washing your face easy. Place a chair or stool near your sink and have the items you use within reach on the countertop. Do as much as you can in a seated position to conserve your energy. Keep a bottle of water or glass handy to rinse your mouth after you brush your teeth. If you are also using a powder room during the day, keep a washcloth, toothbrush and toothpaste in that area too.

Bathing

Your doctor will give you instructions on bathing. In the beginning, you may be allowed only to sponge bathe and you will likely need help with this.

After your incisions have healed to a certain point, your doctor will give you permission to shower (still no tub baths or saunas). You may need help bathing and washing your hair the first few times. It is somewhat humbling and embarrassing to have someone help you bathe, but a shower will make you feel so much better.

You may want to buy an inexpensive plastic outdoor chair or a shower bench (Walgreen's and CVS have them), but be sure it is non-slip and stable and will not cause you to have any difficulties getting in and out of your shower stall or bathtub.

When you are standing in the shower, keep a hand on the wall or shower door handle to steady yourself. You may find that your center of gravity is a little different and you will be weak after your surgery. You will get stronger with time. You will need to keep your drains from hanging loose and pulling on your incisions. You can use a lanyard, ribbon or cord tied loosely around your neck for your upper drains. Use large safety pins to attach them (the drains have a loop that is conveniently placed near the bulb that you can thread the safety pin through). For your lower drains, you can hook them onto a plastic belt or cloth belt tied around your waist. Avoid letting them dangle and pull on the incisions which will cause irritation and discomfort and pain. Hang the belt and lanyard across the bath tub or a cabinet knob to allow it to dry in between showers.

Before you shower, be very careful not to tug on the skin around your incisions when you remove your dressings. Do not attempt to clean your incisions unless your plastic surgeon has given you instructions. Tape residue will eventually come off; do not attempt to rub it or put alcohol or lotion on it.

If you do not have a removable shower head, consider buying one – they are not expensive and they are easy to install. Leave the wand out of its holder so that you can reach it easily once you can shower on your own. This type of shower head/sprayer will allow you to direct the water away from areas that need to stay dry.

Place your shampoo and body wash or soap where you can reach them easily – remember your range of motion will be limited for several weeks. Consider putting these items into smaller, lightweight bottles which will be easier to manage.

Have your towel and robe as close as possible outside the shower and step out onto a mat so that you do not slip. Have a chair handy so that you can sit while you dry off. Be gentle with your skin and pat yourself dry. Let your hair air dry or have someone dry it for After you dry off, you will need to replace your surgical dressing per your doctor's orders. Have the dressings, tape and scissors near the chair at your sink. You may need help with replacing your dressings in the beginning. Follow your doctor's instructions and do not add any lotions, creams or scar remedies unless you have checked with him or her first.

AT THE HOSPITAL

Your Surgery

Your doctors will discuss the specifics of your surgery in your pre-op visit. Ask for an estimate of how long your surgery is expected to take so that you can inform your family or friends in advance so that they will not worry.

When you go in for your surgery, wear something loose and comfortable that you can wear home after your surgery (easy on, easy off). You will not need extra clothing for the hospital as you will wear hospital gowns for the length of your stay which typically will be five days.

After your surgery, you may spend most of your recovery time in ICU so that the nurses and doctors can monitor the circulation in the tissue transfer. During this time, you will need to keep your head and knees elevated. Make sure the head and lower end of the bed are positioned properly and use a pillow or two under your thighs. Do not lie flat since this position can put pressure and strain on your abdominal incisions.

You will be given a lot of fluid during surgery and may be surprised to find that your legs are extremely swollen. This will resolve over several days as you become more mobile.

Physical Therapy

While you are in the hospital, the nurses and/or physical therapists will have you walk short distances in the hallway several times a day for a few minutes each time. You will be bent forward at the waist to keep stress off of your abdominal incision. Walking in this position is uncomfortable and exhausting – and your lower back will hurt, but walking is essential to your recovery. You will continue to walk in this bent forward position for several weeks. As your incisions heal, your plastic surgeon will allow you to start easing into a more upright position. Although it is not comfortable to walk bent over, you must do it. Take it slow and follow your doctor's instructions. Standing upright too soon can cause complications.

Before you are released from the hospital, you will be given a series of exercises to do at home to recover range of motion in your arms and shoulders. Ask your plastic surgeon to review the exercises and get his or her approval before starting them. He or she may want you to avoid certain exercises and/or delay starting others until a few weeks after your surgery. Once you are cleared to start the exercises, plan to do them several times a day, every day; it will pay off later. Consider pairing them with another activity so it will be easier to get into a routine. For instance, do them before or after your medication and/or before a meal or snack. Once you are steady on your feet, you can do some of them in the shower; the warm water will help relax the muscles and make doing the exercises easier. Using soap on your hands can help you slide your hands up the shower wall and gently stretch those muscles. Your body will let you know how far it can go each time. Eventually, if you are diligent, you will regain your normal range of motion.

In addition to these, your doctor will want you to walk several times throughout the day to aid your recovery and prevent blood clots.

You can walk inside your home at first and then later, outdoors. Before your surgery, it may be helpful to create a pathway in your home and remove any obstacles that could become tripping hazards.

Going Home from the Hospital

While at the hospital, the nurses will show you how to empty your drains and measure and record the fluid that has collected. You will continue this procedure once you are home. Try to empty your drains at the same times each day. You will take these records to your follow-up appointments with your plastic surgeon, who will review the output and determine when the drains can be safely removed. Your upper drains will come out first– usually two to three weeks following surgery. The lower drains take longer and may remain in place for four to six weeks, sometimes longer.

Your doctor will give you specific instructions for caring for your incisions and when to come to the office for a follow-up appointment. You will also receive prescriptions for various medications you may need.

For the ride home from the hospital, have your driver bring a soft pillow that you can put between your abdomen and the seat belt. Have him/her place the shoulder strap behind your back to keep pressure off of your chest and use only the lap portion of the seatbelt.

When you get home, write out a schedule for your medications (or have someone do this for you) and set an alarm on your phone or clock to remind you when they are due. Use this signal also as a reminder to do the exercises that the physical therapist recommended for your recovery once your doctor has given

approval. Be sure you take your medications as prescribed and check with your doctor before adding supplements or taking any over-the-counter medications. If your prescription medications don't seem to be working, contact your doctor.

This is a time for you to rest and recover. If possible, have someone stay with you for the first few days after you are home. You will appreciate the help. Allowing others to help also helps them deal with your recovery.

If you have stairs at home, have someone help you go up and down for the first few days. You will be weak from the surgery and the anesthesia, and your balance may be off since you will not be able to stand erect.

Other Recovery Notes

Recovery takes 6-8 weeks. Don't rush it. This is a marathon, not a sprint. Once you start feeling better, make an effort to get dressed, including makeup and hair, every day.

Do not lift or carry anything weighing more than 5 pounds. Let someone else do the housework and cooking, or simply let it wait. There are reasonably priced maid services that can clean the key parts of your home. There is nothing more important at this point than concentrating on your health.

You will need someone to drive you to appointments for the first couple of weeks. Your doctor will tell you when you can resume driving.

During the day, consider pinning your lower drains to your dress or top to make it easier to use the restroom. Just make sure they are positioned in such a way that they do not tug or pull on your incision.

As soon as you get stronger, you may want to start or resume an exercise program, but check with your doctor before doing any exercises other than walking and your range of motion exercises.

OTHER ITEMS YOU MAY WANT TO KNOW ABOUT

Dog ears

Sometimes there can be a little pouch of tissue just above and toward the ends of your lower incision. These are referred to as "dog ears". They usually lessen in appearance as your body heals, but if they remain, they can be removed at a second "touch-up" surgery.

Incisions

Navel – Your new navel may be flattened out a bit and you may have a couple of small incisions in this area. Over a period of time, it may resume a more natural appearance. If not, it can be improved through a touch-up surgery.

Lower Abdomen - Your lower incision will be low along the bikini line and will extend to the sides of the hips. You will have a drain on each side of this incision. Be careful about jostling these as they can be painful if tension is placed on them. You may have a pooch between the scar line and the public bone. This goes away with time and exercise.

Breasts – The incisions in the breast area will vary depending on the type of mastectomy you have. For nipple sparing and skin sparing, the mastectomy and reconstruction is done through the natural

nipple area with a few tiny incisions near the sides of the chest. After touch up surgery if you have a breast lift, you may have an additional scar from the base of the areola to the crease. These scars fade and become almost invisible with time.

Abdominal Tightness – As a result of the surgery, you may have extreme tightness in the lower abdomen at first. As the area heals and over the course of the year, this area will soften but may retain some of its tightness.

Pathology Report

A few weeks after your surgery, you will have a follow-up appointment with your oncology surgeon who will share your pathology report with you. If there is something you do not understand, ask him or your oncologist questions. There are many factors that go into predicting your prognosis and no one source can interpret your report for you better than your medical caregivers.

TOUCH-UP SURGERY

You may have a second surgery months after your initial surgery to fine tune your initial reconstruction. In this surgery, your plastic surgeon may perform a breast lift, refine the size of the areola area, build new nipples, transfer additional fat to your breasts, revise scar tissue and reduce your "dog ears." If you do not want to have nipple reconstruction, you can opt instead for realistic looking nipple tattoos.

If you have a breast lift as part of this surgery, you will have incisions around the new nipple and the areolas and under the breast. Touch up of other areas may include adding fat to the breast area and fine-tuning the abdominal area with liposuction. If liposuction is part of your follow-up procedure, you will wear an elastic surgical garment for 6-8 weeks. In addition, you will go braless while the transferred fat develops a blood supply and also while your new nipples heal. About 12 weeks after this surgery, you will be evaluated to decide when tattooing can be done to restore a more natural color to the nipples and areolas. Tattooing is relatively painless and is done in the office as an outpatient procedure.

If you are having nipple reconstruction, you will have to keep pressure off of the surgical area for several weeks. You will not be allowed to wear a bra during this time. You will need some soft loose tops that cover, but do not constrict this area. You will need to sleep on your back so that you don't put pressure on your chest area. Sleeping in a recliner or on a bed wedge will help keep you from turning to your side or stomach. If you sleep with blankets, avoid covering the nipple area since they will possibly put pressure on your chest. To keep your arms and shoulders warm, you can wear a robe that is left open in front and pulled away from your nipple area. If your upper chest gets chilly, a hand towel or light sweater placed across this area may help.

Your surgeon will also give you instructions on bathing and keeping your incisions clean and dry. If you are instructed to keep the area dry, you can purchase a plastic shower robe or inexpensive lightweight rain poncho for your upper body. As an alternative, you can use a shower wand and be careful to avoid getting your chest area wet. Until you are given permission to get your chest wet, it will be difficult for you to wash your hair in the shower. Instead, you may want to consider washing your hair in the kitchen sink.

If you have the nipple area tattooed, you will be given instructions on caring for the tattoos until they are healed and the ink has set.

Typically, you will have a follow-up appointment to touch up the tattoos about six weeks after the initial tattooing.

If you are having fat grafting, you will be sent home in a surgical compression garment which will be worn continuously except for bathing for several weeks, unless otherwise instructed. It may be helpful to order a second compression garment so that you will have one to change into while the other is in the wash. Before purchasing, check with your doctor to make sure that the garment you are considering will provide enough compression. In the first few days, you will have post-surgical swelling and may need some assistance in getting the garment back on after you bathe. Once again, for the best long-term results, follow your doctor's orders. If your skin gets itchy, use a lightweight moisturizer after bathing, but be careful to avoid incisions. Swelling and bruising may take several months to completely diminish. Check with your doctor before resuming exercise.

You may find that your body shape has changed and you may have lost or gained inches in different areas. Your clothes may not fit the same and you may want to purchase a few new items. Wait a few months before replacing your wardrobe or having things altered; allow your body to adjust to the changes.

A WORD ABOUT FAMILY

Your family is on this journey with you. It is often easier to be the patient than it is to be the bystander. Keep them in the loop. They will want to help you as much as they can.

Please share this document with your caregivers so that they will know what to expect. Let your children know that you are recovering and that your spouse, partner, relatives or friends will be helping for a while since you will be unavailable to do the many things you normally do for them.

If you have small children, you will not be able to pick them up for a while. In the first few days of at-home recovery, give them air hugs and kisses and let them know that mommy has a "boo-boo" that has to heal. Put a small chair next to your recliner or bed so that they can sit close to you. Let them bring you things if they can and let them tuck you in at night. Small children like to help and giving them a role allows them to show their care and love. When you are more mobile, explain that they can sit next to you on the sofa for a while, but it will be a few more weeks before they can sit on your lap. You can use a calendar to let them count down the days with you.

If you have older children, you can explain more about your reconstruction and recovery, but keep it simple. Answer their questions and concerns. Reassure them that you will be back to normal in a few weeks, and that you will appreciate their help while you are recovering.