

Breast Reconstruction Surgery

Information for
Patients & Family

TRAM Flap and Latissimus Dorsi

Adapted from: Breast Reconstruction Surgery: TRAM Flap and Latissimus Dorsi
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Schover, L. (1998). Sexuality & cancer for the women who has cancer, and her partner American Cancer Society.

References

- Berger, K. & Bostwick, J. (1998). A woman's decision. Breast cancer care, treatment and reconstruction. (2nd ed.). St. Louis, Missouri: Quality Medical Publishing.
- British Columbia Cancer Agency Breast Cancer Tumour Task Force (1998). Management of breast cancer related lymphedema. A guide for women with lymphedema. Vancouver: B.C. Cancer Agency.
- Canadian Medical Association. (1998). Canadian Breast Cancer Initiative. Questions and answers on breast cancer. A guide for women and their physicians. Based on The Canadian Clinical Practice Guidelines for the Care and Treatment of Breast Cancer. Ont. Ottawa: Canadian Medical Association.
- Cotter, A. (1999). From this moment on. A guide for those recently diagnosed with cancer. Toronto: MacMillan Canada.
- Harris, S. (1999). Physio Corner. Abreast in the nineties. Breast Cancer Information Project. Spring Volume 5, No. 1.
- Love, S. & Lindsey, K. (1991). Dr. Susan Love's breast book. Reading, Massachusetts: Addison-Wesley.

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Physiotherapists who provide breast cancer rehabilitation may be consulted. Call the Cancer Society's Cancer information line at 1-888-939-3333.

Summary

The information in this booklet comes from the voices of many women who have shared with us their experience of undergoing breast reconstruction. The nurses, doctors, physiotherapists and dietitians who are privileged to care for these women compiled this booklet.

We welcome comments about the content and format of this booklet. If you would like to contribute to the booklet or have suggestions for improving the content or format, please speak to your nurse or doctor.

- ◆ If you develop any signs of infection (red, painful, hot to touch or swollen areas) in your arm or hand, notify your doctor as soon as possible. It is important to use your arm in the activities of daily living, including swimming, biking or walking to stimulate lymph drainage.

When your plastic surgeon says you are ready you can include swimming and other activities to stimulate lymph drainage.

What is lymphatic vessel cording?

After axillary node dissection and/or radiation treatment to the axilla, a condition known as "lymphatic vessel cording", hardening of the lymphatic vessels may occur. This condition is described as a stiffness or tightness in the under-arm, forearm and wrist.

Fine cords (like violin strings) running down the inside of the arm and sometimes into the forearm may be noticed. Previously gained range of motion may be lost. Lymphatic vessel cording usually resolves without treatment within weeks or months. It is not recommended that the cords be snapped but rather slow prolonged stretching to maintain shoulder and elbow range is important.

Introduction

This booklet provides general information to help you understand more about autologous (your own tissue) breast reconstruction and the recovery period after surgery. Your plastic surgeon and nurses will provide you with more details about your type of surgery. Please do not hesitate to ask them questions.

You may find that some of the information in this booklet does not apply to you.

What is autologous breast reconstruction

Autologous breast reconstruction involves replacing breast tissue lost during mastectomy (or trauma) by moving flaps of muscle, fat and skin from another part of the body to the breast area. The two most common places (donor sites) from which the muscle, fat and skin (tissue) are moved are the stomach or upper back area. The muscle used from the stomach is called the transverse rectus abdominis myocutaneous (TRAM) flap and from the back, the latissimus dorsi muscle.

Two different methods are used to transfer the tissue from the donor site to the chest area:

a) When the **pedicle method** is used, the muscle and skin flap are tunnelled upwards from the donor site to the breast area while still attached to the blood supply.

b) When the **free flap method** is used, the muscle and skin flap are lifted, detached and then moved to the breast area. Microsurgery is used to reattach the blood vessels of the flap to those under the arm.

Care after surgery differs depending on whether the pedicle flap or free flap method was used. The method used more often at UBC Hospital is the pedicle method.

The aim of breast reconstruction is to match the natural breast as closely as possible in shape, colour and texture. However, the reconstructed breast will not precisely match the appearance, shape, movement, sensation (feeling) or sensitivity of your natural breast. The reconstructed breast may also feel firmer and slightly cooler, and its colour may be paler (depending on the colour of your skin) than your natural breast. Women with darker skin colour may have darker scars than those with fair complexions.

Lymph fluid passes through the lymph nodes (and into the bloodstream) which act as a strainer to keep your arm free of bacteria. If you had lymph nodes removed and the lymph fluid can no longer leave your arm through the normal channels in your armpit, your arm may swell. You may develop infection and pain. This condition is called lymphedema. For further information about lymphedema call the Cancer Society's Cancer information line at 1-888-939-3333.

If lymph nodes were removed, it is important to always protect the skin to the arm and hand on the side where the lymph nodes were removed to avoid the risk of infection.

- ◆ Avoid cuts, scratches, burns (including sun burns) and insect bites to your arm.
- ◆ Wear gloves when gardening or oven mitts when reaching into the oven or barbecuing.
- ◆ Have blood drawn, intravenous lines or injections given in the opposite arm if possible.
- ◆ Try to avoid shovelling snow or carrying a heavy over-the-shoulder bag.
- ◆ Use an electric razor with a narrow head for underarm shaving.
- ◆ Wash cuts promptly, treat them with anti-bacterial medication and cover them with a bandaid.

Brest self-examination and mammogram after reconstruction

It is important to check both your natural breast and your reconstructed breast each month. Check with your surgeon when to start and how to do breast self-examination on your reconstructed breast. If you have never been taught how to examine your breasts and would like to learn breast self-examination or if you want additional information call the Cancer Society information line at 1-888-939-3333.

It is recommended that you have a yearly mammogram of your natural breast. Mammography is not routinely required on the TRAM reconstruction. It is only needed if there is a concern. Your plastic surgeon will advise you whether a mammogram is suitable for your reconstructed breast.

What is lymphedema?

Lymph nodes (glands) located in the armpit and close to the collarbone are often removed during breast cancer surgery (axillary dissection). These nodes can give important information about how far the cancer has spread.

In some cases, surgery is required to balance the size and shape of the breasts. This "balancing" may involve lifting and/or reducing the size of your natural breast. This may be done during the initial breast reconstruction surgery or at the time of nipple reconstruction.

Nipple reconstruction

Nipple reconstruction is done at a later stage (about four to six months after the first surgery). Tissue from the breast mound is used or part of the opposite nipple is used to make a new nipple. The areola may be created by tattooing or by using a pigmented skin graft from the upper thigh area. The reconstructed nipple will not have the same sensation as a natural nipple.

Before Surgery

Before your surgery you will sign a consent form in your surgeons' office. It is important that you are well informed about the breast reconstruction procedure, possible risks, and complications. Your expectations of the surgery need to be realistic. Therefore, it is important that you ask your plastic surgeon any questions you may have.

Preparing for Surgery

You will be in the hospital for three to five days.

- ◆ You need to arrange for help at home, as you should not do household activities such as vacuuming washing floors, laundry or gardening for at least three to four weeks after you leave the hospital.
- ◆ You should not drive a motor vehicle for two weeks after the surgery as sudden braking and impact from seat belts may injure your reconstructed breast(s).
- ◆ Smoking increases the risk for serious complications. Therefore, it is important to stop smoking at least three months before and for one month after the surgery. Contact your family doctor if you need help to stop smoking. If you use Nicoderm patches to stop smoking, it is important that you stop using these two months before surgery, as Nicoderm patches have similar negative health effects as smoking.
- ◆ If you are taking aspirin or products containing aspirin, you need to stop taking them two weeks before surgery as these products could cause bleeding during or after surgery.

The nerve that supplies feeling to the breast and nipple is disconnected during surgery. Therefore, the feeling of pleasure from touching the breast and nipple is mostly lost. However, breast reconstruction can boost some women's feelings of wholeness and attractiveness which may help them enjoy sex more.

Women differ about their need and readiness for intimacy. Some women feel it works best when a partner follows her lead and does not rush to start sexual activity. Many women have said that keeping romance in a relationship, as part of recovery was important as it helped make the relationship feel normal. Other women have said that they needed to openly communicate their feelings and fears to their partners to improve their partner's understanding of the situation. Some women have found that their partners go through a grieving process as well.

Clothing

You may wear a bra to provide breast support as soon as all the wounds are completely healed. Avoid wearing bras that are tight and/or have underwires. Instead, wear a loose fitting stretch bra or a sports bra that has a clasp.

Wear loose comfortable clothing for the first few weeks.

- ◆ Each person's recovery is individual, and there is no right or wrong way to cope with it. Many women with breast cancer cope by sharing their worries and feelings with family and/or friends. Other women cope by attending support groups.

If you would like to know about patient and family counselling services, ask your doctor or the nurses for this information.

- ◆ If you feel that learning about your condition will help relieve your anxiety and fear of the unknown or if you would like information about support groups, the Cancer Society has a telephone information line and volunteers will provide you with excellent information (1-888-939-3333).

Sexuality

Check with your plastic surgeon about returning to sexual activity. Some women who have had breast reconstruction surgery feel uneasy about returning to sexual activity. They worry about how their changed appearance will affect their relationship with their partner. Some men worry about making the wrong moves or saying the wrong things.

- ◆ If you are taking herbal medicines, these should be stopped two weeks before surgery as they also can cause bleeding.
- ◆ You will be required to visit the Pre-Admission Clinic at the hospital before your surgery day. The nurse in the clinic will give you specific instructions about preparation for surgery and will teach you about what to expect during and after surgery. The nurse will also explain to you how to use a pain scale so that your pain can be rated. This information helps the nurse to treat your pain. After surgery your pain will be controlled using a Patient Controlled Analgesia pump (PCA). You will be given a brochure that explains the use of this pump.
- ◆ An anesthetist in the pre-admission clinic may see you. It is important to tell the anesthetist or nurse if you have had motion sickness, problems with anesthetics, nausea (sick to your stomach), vomiting, and/or unrelieved pain after surgery.

What happens during surgery?

The length of time for this surgery varies from three to six hours and depends on the type of breast reconstruction procedure; if a mastectomy is done at the same time, whether a balancing procedure is needed on the opposite breast and if one or two breasts are reconstructed.

- ◆ An intravenous (IV) will be placed in your arm to provide you with anesthesia, fluids and medications during and after surgery.
- ◆ Elastic stockings and leg pumps will be placed on your legs to help the flow of blood and prevent blood clots from forming in your blood vessels.
- ◆ Once you are asleep a catheter (tube) will be put into your bladder to drain urine. The catheter will remain in place overnight.
- ◆ The surgeon will place a number of small plastic drains in your wounds to drain fluid from the surgical area.

Call your plastic surgeon if you notice any of the following:

- ◆ new drainage, green/yellow or foul smelling drainage from the wound lines or drain site
- ◆ increased redness and/or heat around the wound site, or change of color over the breast and/or around the donor site
- ◆ increased pain or swelling of the breast
- ◆ a temperature of 38.5°C (100.5°F)
- ◆ calf pain, redness and/or swelling
- ◆ seroma in the donor or breast site

Go to an Emergency Department if you experience the following:

- ◆ sudden severe chest pain or shortness of breath

Emotional adjustment

Losing a breast can be a devastating experience. You and your partner may go through a period of grief after the loss of your breast. Some of the emotions you may feel are anger, anxiety, fear, despair or hope, sadness or depression or acceptance. It takes time to adjust to the change in your new breast shape and sensation. Overtime your new breast will begin to feel more a part of you.

What exercises should I do at home?

Exercise is important in your recovery. Walking daily is an ideal way to exercise. You can gradually increase the distance and speed you walk everyday when you feel up to it. However, avoid high-impact aerobics, jogging, lifting heavy objects including weights, bouncing on a rebounder and swimming until your surgeon approves.

- ♦ To speed your recovery, it is important to avoid overactivity. Rest when you feel tired.
- ♦ Before you go home the physiotherapist will teach you how to do the exercises to increase comfort and movement of your shoulder and arm, and tell you when to start doing them.

You

will be provided with a written copy of exercise instructions.

- ♦ Avoid holding your shoulder forward on the mastectomy side as this may cause the shoulder muscle to tighten.
- ♦ Your plastic surgeon will tell you when it is safe to do exercises that involve your stomach or back muscles.

What happens after surgery?

Day of Surgery

- ♦ After surgery, you will be moved from the operating room to the recovery room. The length of stay in the recovery room varies with each person.

In the recovery room the nurse will check your vital signs (pulse, blood pressure and breathing), the wound, IV and urine amount. You may receive oxygen through a small face mask to help you breath. Once your condition is stable, you will be moved to your room.

When you are in your room, the nurses will continue to check your condition. The temperature to your breast will also be checked. As the days pass the frequency of these checks will decrease.

- ♦ While you are in bed, the head of the bed will be up and your knees will be bent to prevent stretching of the skin closures in the lower stomach (TRAM only).
- ♦ The nurses will encourage you to take deep breaths and to do leg and foot exercises to prevent blood clots and improve the blood flow throughout the body. To detect lung complications, the nurses and physiotherapists will check your breathing by listening to your chest with a stethoscope.

- ◆ You will be required to wear the leg pumps device until you are up walking several times a day. The compression stockings are usually removed on the day you go home.
- ◆ You will be encouraged to take sips of water or clear fluids. When you are able to tolerate the fluids without feeling nauseous your diet will be increased. To control nausea, let the nurse know and you will be given medication.

Pain Control

- You may experience pain and/or a sensation of tightness around the new breast, ribcage, stomach and donor site. If you had a mastectomy and axillary node dissection (glands were removed from your armpit to see if the cancer has spread) you may also experience some numbness in the upper, inner arm. These sensations will all decrease as time passes.
- Some patients have lower back pain and find that an ice-pack or sitting in chair relieves the pain.

The nurses will ask you to rate your pain by using a pain scale. Pain can prevent you from moving, deep breathing and sleeping, all of which could slow your recovery. The nurses will teach you how to cope with the pain.

- ◆ Your plastic surgeon or homecare nurse will remove the drain when drainage has decreased to less than 35 mls in 24 hours. Some people experience a stinging sensation when the drain is removed. Some fluid may leak from the opening after the drain is removed. If that occurs, cover the area with sterile gauze until the opening is closed. This takes between 24 and 48 hours.
- ◆ You may shower 24-48 hours after the drain is removed.

What is a seroma?

When the drain is removed, sometimes fluid continues to build up and you may develop a pocket of fluid called a seroma.

The body may absorb seromas if they are small, but if they are large, the surgeon may need to remove the fluid using a syringe and needle. This procedure is done in the surgeon's office and may have to be repeated several times during your recovery. Occasionally, a drain may need to be inserted to drain the fluid.

- ◆ The application of Vitamin E to the wound lines in the first six weeks is not recommended, as some surgeons believe this may widen the scars.
- ◆ If your scars are exposed to the sun, use sunscreen with SPF 30 after surgery. Sun exposure can lead to severe sun burns. As well, sunbathing in a one piece dark bathing suit can lead to heat conduction injury to the stomach or breast reconstruction area. Therefore, following TRAM surgery, SPF 30 sunscreen and a light colored bathing suit is recommended.

Drain care

Before you go home, the nurse will teach you how to empty the drain and prevent the tubing from becoming blocked (stripping the tubing). You will be given written instructions about drain emptying and stripping. It is important to make sure the drain(s) is working to prevent the collection of fluid inside the wound area. If fluid is not coming out of the drain, notify the homecare nurse, or your plastic surgeon if you do not have a homecare nurse.

- In addition to pain medication, simple relaxation methods or listening to soothing music on a Walkman helps relieve pain.

Do not hesitate to tell the nurse if your pain is not controlled with the PCA. Some patients are afraid to bother the nurse or fear becoming addicted to the medication. For most patients there is no chance of addiction to medication after surgery. Preventing severe to moderate pain in the early stages after surgery will also prevent pain from persisting later.

Day 1 after surgery

- ◆ In the morning, if you had a pedicle flap procedure, the nurse or physiotherapist will help you get up into a chair at the bedside to that you may wash yourself.

To increase your activity, you are encouraged to take short walks at least three times a day. This can be painful, but it is important for a safe recovery. Activity improves the blood flow throughout the body and can lower the risk of developing blood clots. Pressing the PCA button for pain medication before moving or getting out of bed will make it easier for you to get up. Holding a pillow over your stomach when you move may also ease the pain.

- ◆ When you get out of bed or are walking, avoid stretching your stomach muscles (TRAM). Do this by keeping your upper body bent forward when you move or walk.

To avoid using your stomach muscles when getting out of bed, roll to the edge of the bed and push yourself up with your arms.

- ◆ The catheter will be removed from your bladder. Some patients have difficulty passing urine after the catheter comes out. Tell the nurse if this happens to you. After the catheter is out, you will be helped to the bathroom.
- ◆ The doctor and nurse will examine the reconstructed breast and change the dressings when necessary. To help you become more comfortable with your new breast, we encourage you to look at your breast during dressing changes. You may see some redness, and/or blue areas or swelling across the new breast and the donor site. This is normal and will improve over time.
- ◆ Your food can be increased whenever you are able to eat.
- ◆ If you have nausea, it is important to tell the nurse. She will give you anti-nausea medication.

- ◆ Keep the wound clean by showering every day 24 hours after the drains are removed. Gently pat the wound dry with a clean towel; do not rub the area. Avoid tub baths until your wounds are fully healed. Soaking in the tub may increase the risk of infection.
- ◆ If you want to shave under your arm on the mastectomy side, use an electric razor. Do not use deodorant under your arm on the mastectomy side if there is any break in the skin.
- ◆ After the stitches have dissolved and your wounds have healed (about 3 weeks after surgery), the surgeon may suggest that you massage and move your new breast(s) around to keep it as soft as possible.
- ◆ Wound healing (breast and stomach) may be slow as problems may occur. If this occurs, homecare nurses will help you to care for the wounds.
- ◆ Some surgeons believe that the scar may be improved by applying tape to them for about three months after the surgery. Apply 3M Micropore one inch paper tape along the length of the scar.

Constipation

Pain medication (Tylenol #3 with Codeine) will cause constipation. To avoid constipation, take two plain or extra strength Tylenol instead of Tylenol with codeine. A high fibre diet (grains, dried fruit and vegetables), drinking plenty of fluids and walking will prevent constipation. If you are constipated take a mild laxative, stool softener or use a glycochrine suppository. Your pharmacist can suggest a laxative for you.

Wound care

Your surgeon may refer you to homecare nursing if you go home with drains or need wound dressings changed. This will be arranged while you are in the hospital. The homecare nurses will help you to care for the drains and/or dressings and any other health problems you may encounter once you are home.

- ◆ The wound lines across the new breast and the donor site are closed with stitches that dissolve (sutures) and paper tapes (Steri-strips). Do not remove the Steri-strips. They may fall off on their own. There may be some bruising, tenderness and also slight bleeding around the wound. This is normal and will improve over time.

Days 2-3 after surgery

- ◆ On day two, the nurse or physiotherapist will help you walk to the bathroom to wash. Increase your activity by gradually increasing the distance you walk every day. After each walk sit in a chair for 30 minutes.

It is important to increase your walking in the hall to at least three times a day. As you become stronger you will be able to get up on your own.

- ◆ The physiotherapist will show you how to exercise your arm on the reconstructed side. It is important to do the exercises in order to gain full range of movement in the arm/shoulder and to avoid complications. Exercising the arm may cause discomfort at first but it will become less so as time goes on.
- ◆ You will be on a regular high protein diet to help with wound healing. Beginning on day three, you should try to eat at least half to most of the food on your tray as the days go by.
- ◆ You will be given a daily stool softener to prevent constipation and straining during bowel movements.

- ♦ If you have any concerns or feel anxious about your surgery, diagnosis or recovery, do not hesitate to talk to the nurses who are available to answer your questions, provide support and help you cope with the situation.
- ♦ Depending on the level of your pain, the PCA will be removed and you will be given pain medication by mouth. Tell the nurse if your pain is not controlled with this medication.

How will I take care of myself at home?

The time it takes to recover from the surgery depends on your general health and the extent of the surgery. Most women are able to resume their normal activities within 10-12 weeks, some as early as 6-8 weeks. However, some women experience fatigue for a number of months.

To get comfortable while lying down, place pillows under your knees and head to reduce the strain on your stomach wound and muscles. A foam wedge under the knees or as a back rest may be used. As well, lying in a curved position when on your side will be more comfortable. It is best for the first week at home to have a family member/friend to help you.

To help wound healing, eat different types of food high in protein (meat, fish, chicken, eggs, beans, nuts, soup, milk and cheese), fruit and vegetables and grains (brown bread, bran, oats). Drink six to eight cups of water daily.

Pain at home

You will be given a prescription for pain medication. However, if the pain is mild to moderate, you may prefer plain or extra strength Tylenol. You will have a loss of sensation (numbness) in the stomach area (TRAM only) and the reconstructed breast. Therefore, it is important to avoid using a hot water bottle; hot bags or heating pad as these may cause burns.

If you had a TRAM, you may have tightness in the stomach area. This will decrease over time. Some women develop highly sensitive skin around the stomach wound after the TRAM surgery. This is normal and occurs because the nerves cut during surgery start regenerating. It may take 12-18 months to settle and gentle massage may help desensitize the area. Your new breast(s) will feel numb for 6-18 months or longer after the surgery.