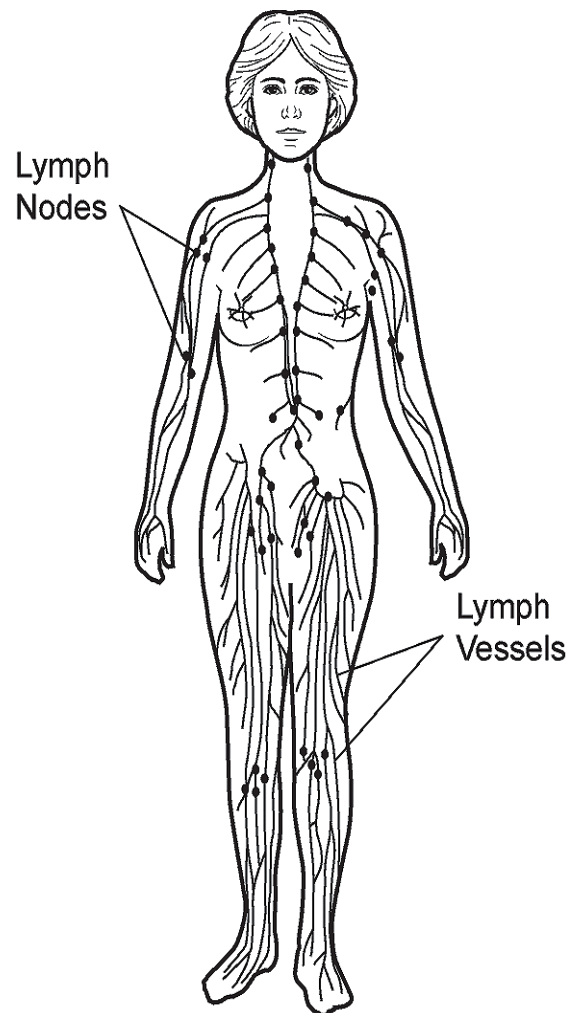


Lymphedema and Treatment Options

Your lymphatic (lymph) system is an important part of your body's immune system. Your lymphatic system is made up of lymph vessels, lymph nodes and lymphatic tissue. Your lymph vessels work to move lymphatic fluid throughout your body. Lymphatic fluid carries white blood cells that help fight infection. Lymph nodes act as "filtering stations" to help your body fight off bacteria and viruses.

If any part of the lymphatic system is damaged, or missing, lymphatic fluid can start to collect in tissues and cause swelling. **Lymphedema** is a buildup of clear lymphatic fluid under your skin which causes swelling. The location and amount of swelling is different for each person. It is most often seen in one, or both of your arms or legs. This swelling can also be found in the breast, head, neck or genitals.

Lymphedema can happen to both men and women and is a lifelong condition that has no cure. Lymphedema can be managed with early diagnosis, treatment and ongoing care to help reduce your swelling and pain.



This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

There are 2 types of lymphedema:

Primary Lymphedema

This is a rare type of lymphedema and can happen when people are born with an abnormal lymphatic system. Their lymph vessels are unable to manage lymphatic fluid properly. This problem may be seen at birth, or later, during puberty or adulthood.

Secondary Lymphedema

This is the most common type of lymphedema and can happen when something damages your lymphatic system. This problem can be caused by trauma, injury, cancer, surgery, radiation therapy, infection or being overweight. In many cases, cancer or cancer treatment is the cause.

Symptoms of Lymphedema

Symptoms of lymphedema are different for each person. Symptoms most often show up within the first 2 to 3 years after treatment, but your risk is lifelong. Lymphedema may develop very slowly.

Early symptoms of lymphedema include:

- A feeling of heaviness
- Swelling or tightness
- Aching or fatigue in your arm, leg or affected body part
- Decreased ability to bend or move your arm or leg

Swelling may or may not be present at first. **It is important to tell your doctor right away if you have any of these symptoms.** Treatment may help to slow, prevent or even reverse lymphedema when found early.

If lymphedema gets worse, your hand, foot or other affected part of your body may look swollen. Your jewelry may feel tight or your shoes or clothes may not fit any longer. This swelling may increase and become more uncomfortable. Your swelling may be less in the morning, after you have been lying down during the night, then become worse during the day, when you are up. Some people with lymphedema have a tingling feeling, like pins and needles in the area.

Increased swelling may cause the affected area to feel spongy and leave an indent when you push on your skin. Sometimes the skin can become thick or hardened. The area may also become shiny, may not grow hair, or you may have blisters or small growths in this area.

Lymphedema and Treatment Options

Lymphedema Treatments

Surgical and non-surgical treatments are available for this problem. These treatments aim to prevent lymphedema or to make your symptoms better or keep them from getting worse. Your doctor, nurse or certified lymphedema therapist can help you find the treatment that is the best for you. They can also teach you how to manage this problem at home.

Non-Surgical Treatments

Non-surgical treatment is called complex decongestive therapy (CDT) and includes manual therapy, exercise, compression and daily skin care.

- **Manual Therapy**

There are 2 basic types of manual therapy used to treat lymphedema:

- ▶ Manual Lymphatic Drainage (MLD) is a specific and gentle form of manual therapy that helps move the fluid from the affected area to other parts of your body. You should only do this technique if you have been taught by a certified lymphedema therapist and told how often this manual therapy should be done.
- ▶ Soft tissue mobilization (myofascial release) is a type of massage done by a certified lymphedema therapist to loosen scar tissue and any areas of tightness that may cause swelling.

- **Exercise**

Gentle stretching and exercise is used to help lymphatic fluid flow more easily, loosen tissue and improve your strength and range-of-motion. Exercise may also be helpful with weight control, which is an important part of lymphedema therapy. A certified lymphedema therapist can help develop a program that is right for you.

- **Compression Garments**

Elastic fabric garments, such as support stockings or compression sleeves may be used to put pressure on your arm or leg to help control swelling. This can help to move fluid out from areas that swell due to lymphedema and to keep new fluid from returning to this area. A certified lymphedema therapist can fit you with a compression sleeve and tell you how often to wear it, if needed.

- **Bandaging**

Cotton, low-stretch bandages may be used to put constant pressure on the area to help control swelling. A certified lymphedema therapist can teach you how to wrap your arm, leg or other affected body part, if needed.

- **Skin Care**

You will be taught how to care for your skin in the area where you have lymphedema or any areas that are at risk. It is important to take special care of your arm or leg to help reduce your risk of injury and infection. Infection or injury can make your lymphedema worse and cause even more tissue damage. To prevent problems with your skin, you should:

- ▶ Keep your skin clean.
- ▶ Use a low pH (between 4 to 6) lotion each day that is free of perfumes and dyes to prevent dryness.
- ▶ Use sunscreen (SPF 30 or higher) and insect repellent to decrease your risk of skin damage.

For more information on skin care, ask for the patient education handout, **Lymphedema - How to Protect Your Arms or Legs**.

Surgical Treatments

You may be scheduled for an Indocyanine Green (ICG) Lymphogram. A lymphogram is a test used to detect lymphedema and show how well your lymphatic system works. This test helps your doctor determine the best treatment for you.

Surgical treatment options are available to prevent or manage your lymphedema. These options may include prophylactic lymphovenous bypass (pLVB), lymphovenous bypass (LVB), vascularized lymph node transfer and liposuction. Your doctor, nurse or advanced practice provider will talk with you about the treatment option that is best for you.

Types of Lymphedema Surgery

Prophylactic Lymphovenous Bypass (pLVB)

Prophylactic Lymphovenous Bypass (pLVB) is a procedure to help prevent lymphedema. Your doctor, nurse or advance practice provider will talk with you more about this type of surgery, if it is an option for you.

A pLVB is done at the same time as your axillary lymph node dissection to help prevent lymphedema in your affected arm. After your lymph nodes are removed, your surgeon will use contrast dye to find cut lymphatic channels. These lymphatic channels are then connected to a nearby vein to help move lymphatic fluid out of your arm.

Lymphovenous Bypass (LVB)

Lymphovenous Bypass (LVB) is a procedure to help treat lymphedema that has developed. Your doctor, nurse or advance practice provider will talk with you more about this type of surgery, if it is an option for you.

LVB is a procedure done in the operating room. Your surgeon injects contrast dye into your lymphatic system to find areas of damage.

Damaged lymphatic channels are then connected to nearby veins to help move lymphatic fluid out of the area. This procedure can help to reduce your swelling and decrease your risk of cellulitis.

Vascularized Lymph Node Transfer

Vascularized lymph node transfer is a procedure done to improve the function of your lymphatic system. During this procedure, healthy lymph nodes are moved from your abdomen to your affected limb (arm or leg).

Your doctor then reattaches their blood supply. Moving healthy lymph nodes to this area can help to reduce your swelling and decrease the risk of cellulitis.

Liposuction

Liposuction is a procedure used to remove fat from an area. During the procedure, small incisions are made into your skin and a small tube is inserted into your tissue. Your doctor uses suction to remove fat from the area. Liposuction to manage lymphedema may be an option for you if you do not have fluid changes, but still have a large limb (arm or leg).

Frequently Asked Questions About Surgical Treatment

Who can have surgery?

Surgery may be an option for anyone with lymphedema. It is important to talk with your doctor, nurse or advanced practice provider about the treatment option that is right for you.

What should I expect from surgery?

Many patients see improvement, but the results are different for each person. Surgery may not help every patient and will not cure lymphedema. Surgery may help to:

- Lower the amount of swelling and lessen the area affected by lymphedema
- Reverse some of the changes seen in your affected arm or leg
- Decrease your pain, arm or leg heaviness and risk of infection

A certified lymphedema therapist will work with you before and after your surgery to help you manage your lymphedema. They will take measurements before and after your surgery to record your improvement and determine what follow-up care is needed.

Will I still need to manage my lymphedema after surgery?

Your surgeon will decide what treatment plan is best for you. The risk of lymphedema is lifelong. You may need to keep wearing your compression garment and do massages and exercises to manage your lymphedema. It is important to continue good skin care. Follow-up care with your certified lymphedema therapist may also be needed after your surgery.

Will my health insurance pay for this surgery?

Surgical treatment of lymphedema may be covered by your health insurance plan. Every insurance plan is different. You should check with your insurance company about what your plan covers before your surgery.

Lymphedema Clinic

A special clinic to help with lymphedema is located in The Stefanie Spielman Comprehensive Breast Center, 1145 Olentangy River Road, Columbus, OH 43212. You will need a doctor's order for this service. You may make an appointment at the Lymphedema Clinic by calling (614) 293-0043.

The Lymphedema Clinic offers the following treatments:

- Manual Lymphatic Drainage (MLD)
- Skin care
- Specialized compression bandaging
- Lymph drainage exercises
- Measurement and fitting of compression garments
- Physical Therapy