The lymphatic system

Your lymphatic system plays a significant role in immune function and circulation. It collects lymph (water, proteins and large molecules) from the tissue and carries it back into the bloodstream. The system is made up of lymph vessels meeting up with lymph nodes that are in your neck, armpits and groin.
Lymphedema

When the normal transportation of lymphatic fluid is disrupted from a problem in the lymph vessels or lymph nodes, a backup of the fluid occurs. This swelling, due to excess lymphatic fluid in the tissues, is called lymphedema. There are many causes of lymphedema.

Lymphedema can develop following infection, cancer, radiation or removal of lymph nodes. Symptoms may develop within a few weeks or years after these procedures, or not at all. Lymphedema can also be hereditary or related to obesity.
How is lymphedema diagnosed?
Lymphedema is diagnosed by a medical doctor (MD), primarily from reviewing your medical history and measurements of the affected area. Diagnostic imaging may be indicated to assist your doctor in identifying the cause of your swelling. Lymphoscintigraphy is a specialized imaging procedure to look at the lymph flow inside the lymphatic system.

Symptoms of lymphedema
• Swelling in an arm, leg, the chest, neck or groin
• Feeling of heaviness, skin tightness or weakness in the affected limb
• Difficulty with clothes fitting
• Infections
• Skin changes
• Difficulty performing daily activities

Precautions for lymphedema
• Wear non-constrictive clothing and jewelry
• Avoid trauma or injury to the affected limb, including blood pressure checks and skin punctures
• Avoid extreme heat or cold on affected body part

Individualized precautions will be provided by your lymphedema therapist.

Treatment for lymphedema
There is no cure for lymphedema at this time. Diuretic medications have not demonstrated long term effectiveness. Various surgical procedures are developing and not common, with mixed results. The goal of treatment is to reduce the swelling and maintain the reduction. This is assisted by a trained lymphedema therapist, performing Complete Decongestive Therapy (CDT).

Complete decongestive therapy is safe and non-invasive. It is the gold standard of lymphedema treatment and, with follow through, has demonstrated good results.

CDT consists of two phases:
• Initial therapy phase
• Self-management phase
Phase 1: Initial therapy phase

This phase consists of four components:

1. **Manual lymphatic drainage (MLD):** A gentle superficial massage technique which stimulates healthy lymph nodes and facilitates movement of lymphatic fluid back into the circulation system. Performed consistently and in combination with the other components, MLD decreases the volume of the affected limb or body area.

2. **Compression therapy:** Specialized short stretch bandaging is applied by a trained therapist and worn day and night, until the limb volume is reduced to its full potential. This prevents the accumulation of fluid, improves the function of muscle pumps and lymphatic return, and helps reduce fibrotic tissue. Once the affected area has been decongested, your therapist will assist with the selection of an appropriate compression garment that will be worn daily. In some cases, a night garment may be worn as well.

3. **Decongestive exercises:** A customized program is designed with exercises to aid further volume reduction of the affected area. It is performed while wearing the bandages or compression garment, and includes gentle active motion.

4. **Skin and nail care:** The skin/nails are often dry, increasing the risk for infection. Following cleaning, a low pH lotion is applied.

Phase 2: Self-management phase

This phase includes compression garment wear, self-manual lymphatic drainage and decongestive exercises, meticulous skin care and proper nutrition and weight management. In some cases, a pneumatic compression pump may be recommended during the self-management phase of CDT.
What to expect during your first visit

You will have an evaluation with a licensed therapist trained in lymphedema treatment. Your therapist will review your history and functional limitations due to lymphedema, take measurements of the affected area, and discuss the best treatment plan for you. Please wear loose fitting clothing.

How to take care of yourself

Eat whole foods and maintain a low sodium diet
Achieving and maintaining a healthy weight is helpful in lymphedema management. Meals should focus on a variety of fruits, vegetables, whole grains, beans, nuts, lean protein and low fat dairy foods. Many packaged and processed foods contain high levels of sodium, which can increase swelling. Consult with your lymphedema therapist or physician if nutrition or weight management is a challenge.

Wear properly fitting shoes with non-skid soles
Purchase new shoes if your feet have changed. Shoes with adjustable closures that do not create excess pressure on your feet are ideal.

Use adaptive devices
Lower extremity swelling may affect your balance and ability to walk. Use a device, such as a cane, walker, or wheelchair if you have any trouble with safety. Use a bath chair to prevent falling in the shower or tub. Your therapist can make a recommendation on the most appropriate equipment.

Make your home safer

Lower extremity or abdominal swelling may impair your safety in your home.

- Remove items that you can trip over in walkways (throw rugs, clothes, shoes).
- Keep commonly used items on easy-to-reach counters.
- Install grab bars around your toilet and in the shower or bathtub.
- Have a lamp or lighting in your bedroom you can reach without walking.
- Ask for assistance with household chores or self-care if necessary.

Get a Lifeline monitor if you live alone
If you feel imbalanced or have difficulty with walking, consider getting a lifeline monitor if you live alone. Lifeline monitors let you remain independent and safe in your own home. A push of a button can summon help when you need it. Lifeline is easier to use than a telephone. Call (800) 852-5433 or (800) 371-8574 for more information.

Quit Smoking
You may already know that cigarette smoke causes increased risks of cancer, heart disease and stroke. Smoking affects your ability to heal and inhibits the lymphatic system. Stopping smoking is important for your health and management of lymphedema. If you’re having trouble cutting down or quitting, join a support group, speak with your doctor, or call 1-800-NOBUTTS or 1-800-QUITNOW for information and support.
Resources

- lymphaticnetwork.org
- lymphedemablog.com
- lymphnotes.com
- stanfordhealthcare.org/medical-clinics/center-lymphatic-venous-disorders/media.html
- ridleytreecc.org/cancer-center

Thank you

The staff at Goleta Valley Cottage Hospital Outpatient Therapy Services are here to meet your lymphedema needs. Our goal is to provide the most comprehensive and compassionate care possible to assist with the treatment and management of your lymphedema. Thank you for choosing Goleta Valley Cottage Hospital for your healthcare needs.