Guide to Lymphedema
Lymphedema is a prevalent condition that affects more than 4 million Americans and nearly 140 million people worldwide. With limited treatment options available, a lymphedema diagnosis can have a significant impact on your self-esteem, daily activities and overall quality of life. At our state-of-the-art Plastic and Reconstructive Surgery Center, we are committed to providing the best treatment options available for lymphedema to help you regain the quality of life you deserve.

What is Lymphedema?

Lymphedema is a chronic, debilitating condition that affects the body’s lymphatic system. The lymphatic system, which is part of your immune system, is comprised of your lymph nodes, lymphatic channels, spleen, thymus gland, tonsils and adenoids. It can detect and neutralize foreign cells and proteins, bacteria, viruses and cancerous cells.

The lymphatic system is critical in maintaining bodily fluid balance by absorbing and returning fluid that leaks from the vascular system into the body’s tissues. This fluid is collected from the tissues into small lymphatic channels, or vessels. These vessels drain through a series of lymph nodes into a central lymphatic channel, which then empties into the venous system.

When the body’s lymphatic vessels are unable to adequately drain fluid, lymphedema occurs. This results in an accumulation of lymphatic fluid, which causes abnormal swelling and pain to occur in a particular part of the body. In many cases, this pain and swelling will arise in the arms or legs.

Causes of Lymphedema

There are two types of lymphedema — primary and secondary. Primary lymphedema is an inherited condition that is caused by the abnormal development of the body’s lymphatic vessels. Although rare, primary lymphedema tends to occur most often in women. Common causes of primary lymphedema include:

**Meige’s disease:** This hereditary condition, also known as lymphedema praecox, typically causes lymphedema to develop during childhood or around the time of puberty. However, it may not begin to show initial symptoms until your 20s or even your early 30s. Meige’s disease causes the body’s lymphatic vessels to form without the necessary valves that prevent lymphatic fluid from flowing backward. As a result, the body is unable to properly drain lymphatic fluid from the limbs.

**Milroy’s disease:** Also known as congenital lymphedema, Milroy’s disease is an inherited disorder that begins during infancy. This condition causes the body’s lymph nodes to form abnormally, which eventually leads to the development of lymphedema.

**Late-onset lymphedema:** Late-onset lymphedema, or lymphedema tarda, is a very rare condition that has no known cause and does not begin developing until after age 35.

While primary lymphedema is typically inherited, secondary lymphedema occurs as a result of another disease, procedure or treatment. Secondary lymphedema is much more common than primary lymphedema, and it is often caused by damage to the lymph nodes or vessels. Specific causes of secondary lymphedema include:

**Cancer:** When cancerous cells block the body’s lymphatic vessels, lymphedema may occur. For example, a tumor that is located near a lymph node or vessel could become large enough to hinder the proper flow of lymphatic fluid. As a result, this may lead to the development of lymphedema.
**Radiation treatment:** Radiation treatment for cancer can lead to scarring and inflammation of the lymph nodes and lymph vessels. Over time, this may restrict the flow of lymphatic fluid and lead to lymphedema.

**Surgery:** When the body’s lymph nodes and vessels are surgically removed or cut, lymphedema can occur. In many cases, breast cancer patients must undergo a procedure that involves the removal of one or more lymph nodes in the armpit in order to determine if the cancer has spread. If the body's remaining lymph nodes and vessels are unable to compensate for the nodes and vessels that have been removed, lymphedema may develop in the patient’s arm.

**Infection:** Recurrent infections that affect the lymph system may cause damage and result in lymphedema or make the existing lymphedema worse. Patients with lymphedema are at a greater risk for developing recurrent infections.

**Medications:** Certain medications, such as tamoxifen, have been known to cause lymphedema.

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**Symptoms of Lymphedema**

When you have been diagnosed with lymphedema, the symptoms can have a debilitating effect on your quality of life. Over time, these symptoms can progressively worsen, especially if left untreated. Common symptoms of lymphedema include:

- Pain or discomfort in the affected limb
- Restricted range of motion
- Swelling in the affected limb
- A feeling of heaviness or tightness in the affected area
- Fatigue
- Hardening, thickening or discoloration of the skin overlying the lymphedema
- Recurring infections in the affected limb

While not as common, lymphedema may also lead to a deformity known as elephantiasis when left untreated.

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**Treatment at the Plastic and Reconstructive Surgery Center**

Until recently, decongestive therapy, which involves intensive massaging and compression, was the only available treatment option for lymphedema patients. While compression garments and pump therapy offer some degree of symptom relief, these therapies can be time-consuming and often fail to provide long-term curative results.

At the UF Health Cancer Center – Orlando Health, our plastic and reconstructive surgeons are among a handful of surgeons in the country — and the only in Florida — to perform a revolutionary procedure known as a vascularized lymph node transfer. This reconstructive procedure, which offers complete or near-complete elimination of lymphedema, involves the harvesting and transferring of healthy lymph nodes and vessels from a viable donor site to the affected lymphedemic limb.
Our specially trained surgeons employ advanced microsurgical techniques to transfer five to eight healthy lymph nodes into the affected body part. Over time, these vascularized lymph nodes will grow new lymphatic channels, bridging the gap between the blocked and unblocked vessels and allowing the lymphatic fluid to drain properly.

The revolutionary vascularized lymph node transfer has shown promising long-term results for many of our patients. Following the procedure, patients typically experience an overall decrease or complete resolution of lymphedema symptoms. This includes reduced pain, swelling and tightness in the arm, improved range of motion and a feeling of lightness in the affected limb. Many patients begin to see symptom improvement within one to two months following the surgery, and maximum results are typically achieved within two years.

At our Plastic and Reconstructive Surgery Center, our expert surgeons are committed to providing the most advanced treatment options available for lymphedema. It is our goal to help you return to the normal, pain-free lifestyle you deserve.

Jeffrey Feiner, MD; Richard Klein, MD, MPH, FACS; Kenneth Lee, MD, FACS.

If you are experiencing severe pain, swelling, heaviness or tightness in your arms or legs, contact us right away to schedule an appointment. Our knowledgeable and experienced specialists are here to help.

Call 321.843.7771 to schedule an appointment.