

## Lymphedema

### *How Physical Therapy Can Help*

#### **What is lymphedema?**

**The lymphatic system** collects excess fluid and proteins (lymph) from the body tissues and carries them back to the bloodstream. Lymph is moved slowly through larger and larger lymphatic vessels and passes through small bean-shaped structures called lymph nodes.

**Edema**, or swelling, may occur when there is an increase in the amount of fluid, proteins, and other substances in the body tissues. **Lymphedema** occurs when the normal drainage of fluid is disrupted. It may be caused by a blockage or cut in the lymphatic system, usually the lymph nodes in the groin area and the armpit. Blockages may be caused by infection, cancer, or scar tissue from radiation therapy or surgical removal of lymph nodes. Lymphedema can be classified as either “primary” or “secondary.” Primary lymphedema is a congenital or hereditary condition that results in a malformation of the lymphatic vessels and/or nodes. Secondary lymphedema is an insufficiency of the lymphatic system that results from an external trauma to the system, such as surgical removal of lymph nodes, radiation therapy, or a traumatic injury.

#### **How do I know if my swelling is lymphedema?**

Lymphedema will always involve swelling that is greater in one limb than in the other. If you have a known incapacity of the lymphatic system (from the above mentioned causes) and are experiencing swelling in that body region, you may have lymphedema. *If you have a cardiac, kidney, and/or liver condition, check with your physician or physical therapist to determine if your swelling may be from this condition.*

#### **Risk factors for lymphedema**

- Breast cancer, if the patient received radiation therapy or had lymph nodes removed.
- Radiation therapy to the underarm area after surgical removal of the lymph nodes and having a large number of lymph nodes removed.
- Surgical removal of lymph nodes in the underarm, groin, or pelvic regions (applies also to abdominal nodes as noted below).
- Radiation therapy to the underarm, groin, pelvic, or neck regions.
- Scar tissue in the lymphatic ducts or veins and under the collarbones, caused by surgery or radiation therapy.
- Cancer that has spread to the lymph nodes in the neck, chest, underarm, pelvis, or abdomen.
- Tumors growing in the pelvis or abdomen that involve or put pressure on the lymphatic vessels and/or the large lymphatic duct in the chest and block lymph drainage.
- Problems after surgery that cause inflammation of the arm or leg
- Being older.
- Having an inadequate diet or being overweight. These conditions may delay recovery and increase the risk for lymphedema.

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### **What are the symptoms of lymphedema?**

The most common symptom of lymphedema is the *appearance of swelling* in a body region that has been affected by lymph node removal and/or radiation therapy. Also, there may be a “heavy” feeling in the affected area. Clothing may feel more restrictive and you may notice less flexibility in the involved joints. The following are other signs and symptoms of lymphedema:

- Feelings of tightness in the arm or leg.
- Rings or shoes that become tight.
- Weakness in the arm or leg.
- Aching or heaviness in the arm or leg.

### **How do I know if I have an infection in my lymphedematous limb?**

The following are possible signs of infection: redness, swelling, pain, warmth of the limb to the touch, and fever and/or chills. If you notice persistent swelling, it is very important that you seek immediate medical advice as early diagnosis and treatment improves both the prognosis and the condition.

### **What can I do to help prevent lymphedema?**

Better recovery occurs when lymphedema is discovered early. To detect the condition early, you need to make sure that you are examined for the following: comparison of actual weight to ideal weight; measurements of the arms and legs; ability to perform activities of daily living; history of edema, previous radiation therapy, or surgery; and other medical illnesses such as diabetes, high blood pressure, kidney disease, heart disease, or phlebitis (inflammation of the veins).

Poor drainage of the lymphatic system due to surgical removal of the lymph nodes or radiation therapy may make the affected arm or leg more susceptible to serious infection. *Even a small infection may lead to serious lymphedema.* You can help prevent lymphedema by avoiding cuts and abrasions, needle-sticks and blood draws, burns, and insect bites.

### **Should I limit the use of the lymphedematous limb?**

Each person is different in the response to activity in a limb with lymphedema or that is at risk for lymphedema. If you have had lymph nodes removed, be cautious regarding the level of activity that you perform with the compromised limb. Take care not to “overdo it,” or strain the limb with excessively heavy lifting or excessive exercise. If you have lymphedema, work the limb within your range of tolerance to prevent the condition from progressing. Be sure to wear some form of compression on the limb when exercising or undertaking an excessively strenuous activity.

### **A diagnosis of lymphedema**

There is no specific criterion for diagnosing lymphedema. However, about half of patients with mild edema describe their affected arm or leg as feeling heavier or fuller than usual. To be evaluated for lymphedema, a medical history and physical examination should be completed. The medical history should include any past surgeries, problems after surgery, and the time between surgery and the onset of symptoms of edema. Any changes in the edema should be determined, as should any history of injury or infection. Knowing which medications you are currently taking is also important for diagnosis.

### **How can physical therapy help?**

While there is no cure for lymphedema, the condition can be managed through a combination of early detection, clinical treatment, education, and home management. In the early stages of lymphedema, when very mild swelling is present, the condition is managed by compression garment wear, exercise, and elevation. If the condition progresses, physical therapist management may include:

- Manual lymph drainage (to help improve the flow of lymph from the affected arm or leg).
- Compression garment wear following lymphatic drainage.
- Skin care (such as cleaning the skin of the arm or leg daily and moisten with lotion).
- Exercise to improve cardiovascular health and help decrease swelling in some cases.
- Patient education (instruction in proper diet to decrease fluid retention and how to avoid injury and infection).
- Garment fitting.

### **Getting in touch with a physical therapist**

If you think you may benefit from physical therapy, ask your physician to refer you to a physical therapist who specializes in this treatment area. The American Physical Therapy Association (APTA) offers a “**Find A PT**” database at [www.apta.org](http://www.apta.org). You also may wish to visit APTA’s Oncology Section at <http://www.oncologypt.org/>.

### **Who are physical therapists?**

Physical therapists are experts in movement and function, especially when movement involves changes in “normal” movement patterns. Physical therapists are licensed by the state in which they practice, and most hold masters degrees. Physical therapists are dedicated to promoting health and wellness of all Americans through preventing functional decline and the development of certain conditions. To learn more about physical therapy and physical therapists, please visit the American Physical Therapy Association’s (APTA’s) Web site at [www.apta.org](http://www.apta.org).

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*This lymphedema fact sheet is a public service from APTA and the Oncology Section of APTA. It is not intended to be a substitute for professional health care.*