Lymphedema in the Head and Neck Cancer Patient

**What is lymphedema?**

Lymphedema is a chronic swelling that happens when lymph fluid is not moving well through the lymph system. It starts to build up in the tissues which leads to swelling. The lymph system is made up of lymph nodes and vessels. They run throughout the body to drain extra fluid and return it to the blood near the heart. Lymph nodes filter viruses, dying cells, foreign matter, and bacteria to fight infection. The lymph system also recycles proteins throughout the body.

**What causes lymphedema in head and neck cancer patients?**

Lymphedema in the head and neck cancer patient can happen in any part of the head, neck, and face. There are a large number of lymph nodes in these areas. Lymphedema can happen after cancer treatment because parts of the lymph system have been removed or harmed by surgery or radiation. Also, scar tissue from these treatments can disrupt the lymph system’s function.

Lymphedema occurs 2-6 months after treatment. Lymphedema can happen internally or externally. Internal lymphedema can happen anywhere inside the body, such as the oral cavity, tongue, larynx (voicebox), airway and throat. External lymphedema happens in the neck and face and can include lips, nose, eyelids, ears, and so on. A patient can have either internal or external lymphedema, or both.

**How is it diagnosed?**

The more lymph nodes removed or harmed during treatment, the greater the chance of having lymphedema. It is normal to have swelling during and shortly after treatment that resolves on its own; this is not lymphedema. Your provider can help determine between normal swelling and lymphedema. Sometimes the normal swelling from surgery goes completely away but if it persists past 6 weeks, treatment may be needed.

The most common symptoms a patient first reports are swelling, skin tightness, or achiness. A provider will do a physical exam to evaluate these symptoms and any signs of lymphedema. If swelling is found, the provider may measure the swelling or rate it using a standard scale for lymphedema.

**What are the symptoms?**

Symptoms of lymphedema in the head and neck patient vary, depending upon where the edema is and the severity. Symptoms can include:

- Swelling in any part of the head and neck that may feel hard to the touch
- A feeling of tight skin/muscles
- Decreased range in motion in the neck and shoulders
- Change in vision or hearing
- New difficulty breathing, swallowing, eating and speaking
- Feeling congested
- Pain in the ear

Patients may also feel embarrassment and frustration due to these changes.

**What is the treatment for head and neck lymphedema?**
The earlier lymphedema is treated, the better the outcomes for the patient. Patients may be referred to a therapist to learn strategies to reduce the risk of developing lymphedema, including:

- Prevention of injury and infection to the head and neck
- Regular exercise and maintaining a healthy weight
- Using proper body mechanics and sleeping positions
- Protecting your skin and keeping it moisturized
- Refrain from tight clothing, scarves and jewelry around the neck

If you have been diagnosed with lymphedema, your treatment course will most likely consist of complete decongestive therapy (CDT). CDT includes:

- Manual lymphatic drainage, which uses a series of gentle, circular massage strokes to promote lymphatic flow.
- Compression, which is achieved by using compression bands or garments that are worn around the chin, face and head to provide gentle support to the soft tissues, encourage less swelling and reabsorption of swelling by the body.
- Exercise, which can include strengthening area muscles and increasing range of motion.
- Self-Care, including risk reduction and continuing the above treatments.

It is important to find a therapist who has specialized training in lymphedema to provide this therapy. Therapy is typically done in two phases. The first phase (called the intensive phase) is over a period of 2-4 weeks, with the focus on reducing the swelling and teaching the patient how to self-manage. These initial treatments are done in an outpatient therapy center. The therapist will spend time teaching the patient and caregiver how to continue these treatments at home. Phase two (the homecare phase) consists of the treatments being continued at home.

In severe cases, patients should be followed closely as the swelling could block the airway, making it difficult to breathe. Lymphedema in the head and neck cancer patient population is manageable when diagnosed and treated early. Report any symptoms to your provider for evaluation.