## Lymphedema – Precautions and Treatment

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Lymphedema is swelling of the entire arm or leg due to an inability of the lymphatic system to return lymph to the trunk.

## What is the lymphatic system and how does it work?

Lymph is a high protein fluid found around the outside of the cells and blood vessels. This fluid is constantly flowing from the blood vessels into the lymphatic vessels. These vessels carry lymph back toward the trunk and eventually back into the blood vessels in the upper chest. Along the way, the lymph is cleaned and regulated by the lymph nodes. Lymph vessels are small, fragile and easily compressed by scar tissue and infection. The lymphatic system cleans the body and helps fight infection. If there is a cut, the body calls down the lymphatic fluid to help heal the area.

## Why does lymphedema occur?

Lymphedema may occur for several reasons. The most common conditions associated with lymphedema are radiation or surgery to remove the lymph nodes in the armpit or groin. Removal of the lymph nodes in the armpit (axillary node dissection) is commonly done with mastectomy surgery. Removal of the lymph nodes in the groin may be associated with surgery for cancer in the prostate, uterus, or other pelvic organs. About 20% of patients having mastectomy and axillary node dissection will develop lymphedema. Radiation therapy increases the occurrence of lymphedema. Swelling of the arm may occur many months or years after the surgery.

It is not fully known why some people develop lymphedema and others do not. When the arm pit or groin nodes are traumatized the body has a hard time moving fluid out of the limb. The fluid goes down but can not get back up. Lymphedema is a chronic condition. It is best to avoid it if possible.

## How can I avoid lymphedema?

There are several precautions that help decrease the possibility of lymphedema occurrence. These precautions are lifelong.

- Avoid casual injury keep the skin intact
  - Avoid cuts, scratches, insect or animal bites, sun burns, blisters, rashes
  - No injections or blood samples in that limb ever
  - This will decrease the chance of infection.
  - If you do get a cut, keep it clean and covered, use antibiotic cream
  - Call the doctor if a cut or skin sore looks angry, red, weepy, or infected
- Avoid changing fluid movement
  - Avoid excessive heat sun, hot tubs, heating pads that can increase swelling
  - Maintain good circulation avoid tight clothing and jewelry
  - No blood pressures in that limb ever
- Air travel It is suggested that compression garments be worn during air travel even before lymphedema occurs
- Activity and exercise can increase swelling. Monitor your response and make good decisions. Use a compression garment during exercises and hard activities.

If you have had lymph node surgery, notify the doctor immediately if you notice a sense of swelling or fullness in your arm or leg. Appropriate treatment, given early can manage the condition better. Treatments include:

- Manual lymphatic drainage A special form of massage regular massage is not recommended
- Multi-layered bandaging to maintain compression on the limb. These are worn all day for 3 to 14 days
- Compression garments for long term use
- Special exercise and education
- Some practitioners use gradient sequential pump to assist in moving the excess lymph out of the limb. The pump must be used in combination with other treatments, pumping without massage can result in hardened tissue.

Therapy is quite intensive but is covered by most health insurance. You must have a prescription to be seen in physical therapy for lymphedema treatment. Call your doctor or speak to your therapist if you have questions.