# **Patient Education**



# Lymphedema Management

You are at risk for developing lymphedema if you had lymph nodes removed surgically or received radiation to an area of the body with lymph nodes.

# Lymphatic System

The lymphatic (or lymph) system is a network of lymph vessels, tissues and organs that carry lymph fluid throughout the body.

Normally, lymph nodes filter fluid as it flows through them, trapping bacteria, viruses and other foreign substances. Without normal lymph drainage, fluid can build up in the affected arm or leg, and lymphedema can develop. Lymphedema is a type of swelling that happens when the lymphatic system becomes blocked and is not able to take the lymph fluid back to the heart.

# **Risk for Developing Lymphedema**

Most lymph nodes are located in the neck, underarms, the deep abdominal area and the groin. If lymph nodes in the underarm have been removed surgically or have received radiation, then you are at risk for developing lymphedema in these areas:

- Affected arm (the side of the body where the lymph nodes were removed or damaged)
- The upper part of the chest on the affected side
- The upper back of the affected side

Not all patients who have had lymph nodes removed or radiation will develop lymphedema. Approximately 30 percent of women who have surgery for breast cancer and/or radiation will develop lymphedema. We don't know why some patients develop lymphedema and others don't. There is no cure for lymphedema; it is a chronic condition. However, there are ways to manage lymphedema. With treatment, lymphedema can improve and in some cases, appear to go away completely. Although lymphedema can be controlled, there is always a risk that it may return.

# **Stages of Lymphedema**

The stages listed below are sometimes used to describe lymphedema.

- **Subclinical:** No swelling is visible, but there may be a bursting sensation, tightness or heaviness in the arm.
- Stage I: This stage is also called reversible lymphedema. Over time, the arm becomes

swollen and may feel heavy. The swelling will go down completely by elevating the arm.

- **Stage II**: This stage is also called irreversible lymphedema. The arm is swollen and feels spongy or hard. The swelling will not decrease or go down after elevating the arm. When the lymphedema is not treated, it can progress to stage III.
- **Stage III**: This stage is also called elephantiasis. The skin typically becomes very dry, scaly, and the affected limb becomes large. There may be fluid leaking from the limb and skin infections are common.

# Way to Prevent or Reduce Lymphedema

The best way to prevent or reduce lymphedema is to follow the lymphedema precautions. You should have received this information in writing from your physical therapist. Follow these guidelines:

#### Infection and Injury Prevention

- Do not have blood draws or have your blood pressure taken in the affected arm. Use your healthy arm.
- Do not wear tight fitting clothes and tight fitting bras. Avoid bra straps that are tight or indent the skin. It is best to wear a bra with no wire.
- Avoid tight fitting jewelry or anything that will leave a deep indentation in the skin and block the flow of the lymphatic fluid and circulation.
- It is best to minimize sleeping on the affected side.
- Avoid any trauma or injury to your affected arm and or trunk to decrease swelling.

#### Skin Care

- Keep your skin clean and bathe daily.
- Avoid exposing your skin to heat. For example, do not take long hot showers, long hot baths, sit in hot tubs, steam rooms and whirl pools if the temperature is 102°F or higher and your skin is exposed to heat for 15 minutes or longer.
- During summer months, avoid being in the heat, stay in air conditioned areas as much as possible.

#### Exercise

- It is helpful to exercise your affected arm. The action of the muscles contracting and relaxing is what pumps the fluid in the lymphatic vessels back to the heart. Although moderate exercise is helpful, do not exercise or use your arm in daily activities to the point of fatigue (tiredness).
- If you do repetitive or strenuous exercise or activity like yard work, housework, gardening, or typing for a long period of time, stop and rest your arm before it becomes tired and then go back to the activity.

#### Diet

- Drink at least eight to10 glasses of water a day, 8-ounce size each. By drinking lots of water and keeping yourself hydrated, it helps to flush the lymphatic fluid and reduce the lymphedema or the risk of developing lymphedema.
- Avoid salt and do not add it to your food if you notice that it causes your body to retain fluid.

Be aware of hidden salts in fast food and canned soups. Avoid monosodium glutamate (MSG) which may be in Chinese food and processed packaged foods. Read labels to help avoid salt and MSG.

- Limit your intake of alcohol and caffeine if you notice they cause you to become dehydrated. Being dehydrated can cause swelling. If you have a cup of coffee, or a glass of wine, be sure to drink a glass of water afterwards to add water to your body.
- Limit your intake of red meat if you notice it causes you to swell. The protein in red meat is hard to digest. The longer protein stays in the body it attracts more fluid to the tissue. It is better to eat easily digestible protein which is found in vegetables, seafood and poultry products.

#### Elevation

Take advantage of gravity. Whenever possible, keep your affected arm higher than your heart. For example, keep your arm over your head when sleeping or on pillows by your side. When sitting, use arm rests or rest your arm over the couch. When you are taking a long walk, instead of having your arm hang at you side, bend and swing your arm, open and close your hand or lift your arm over your head periodically. This way, you are using your muscles to pump the fluid back to your heart.

#### Cellulitis

People with lymphedema are always at risk for developing an infection in the affected arm, the upper back and upper chest on the affected side. One of the jobs of the lymph nodes is to fight infection. If they have been removed, any cut or opening in the skin could possibly cause an infection in the skin, called cellulitis.

To prevent cellulitis, it is important to never get needle sticks, IV's, blood draws, vaccinations or other procedures on the affected arm. Health care providers do not know this. It is important to be your own advocate and insist that blood pressure, IV's and other procedures always be done on your healthy arm. Also avoid cuts, scratches, insect bites, burns and animal scratches to the affected arm.

If an opening in the skin happens, wash it with soap and water if available. If soap and water are not available, use alcohol wipes or hand sanitizer to clean the area. Next, apply a topical antibacterial ointment on the area and cover it with a bandage. It is a good idea to always carry these items with you in a plastic zipper-style baggie.

Watch for signs of infection. If the affected arm, leg or side of the body is red, hot or painful with red streaks and/or you have fever or chills, this could be a sign of an infection or cellulitis. If you think you have an infection, go to the nearest hospital emergency room or call your doctor. An infection can make you very sick and can spread to other parts of the body and can trigger or increase lymphedema. Cellulitis can develop on the affected arm or trunk without having an opening or cut in the skin. It is important to examine your skin regularly for any redness, pain, red streaks (especially with fevers and/or chills) and to get medical attention.

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