

# LYMPHEDEMA

The term lymphedema comes from the lymphatic system, which helps coordinate the immune system's function to protect the body from foreign substances and includes an extensive network of lymph vessels and lymph nodes. Here's how the lymphatic system works:

- Excess fluid is collected from the space between tissues in the body and moves through the lymph vessels. The fluid (now called lymph) isn't pumped through the body like blood, but instead is "pushed" through the lymph system as the vessels are compressed by surrounding muscles.
- Filters called lymph nodes remove certain harmful substances from the lymph fluid, such as bacteria and debris. The fluid from most tissues or organs is filtered through one or more lymph nodes before draining into the bloodstream.

## What Is Lymphedema?

Lymphedema is an abnormal buildup of fluid that causes swelling, most often in the arms or legs. The condition develops when lymph vessels or lymph nodes are missing, impaired, damaged, or removed. There are two types of lymphedema: primary and secondary.

Primary lymphedema is rare and is caused by the absence of, or abnormalities in, certain lymph vessels at birth.

Secondary lymphedema occurs as a result of a blockage or interruption that alters the flow of lymph through the lymphatic system and can develop from an infection, cancer, surgery, scar tissue formation, trauma, deep vein thrombosis (a blood clot in a vein), radiation, or other cancer treatment.

## Who Is at Risk for Developing Lymphedema?

People who have had any of the following procedures may be at risk for developing lymphedema:

- Simple mastectomy in combination with axillary (arm pit) lymph node removal.
- Lumpectomy in combination with axillary lymph node removal.
- Modified radical mastectomy in combination with axillary lymph node removal.
- Combined cancer surgery and radiation therapy to a lymph node region (such as the neck, armpit, groin, pelvis or abdomen).
- Radiation therapy to a lymph node region.

Lymphedema can occur within a few days, months, or years after surgery. A small amount of swelling is normal for the first four to six weeks after surgery.

## What Happens After My Breast Cancer Surgery?

Lymphedema develops after breast surgery because there is an alteration in the pathway that drains the fluids involved in the immune system. It can occur at any time after the surgery. If untreated, it can become worse.

Following surgery, a physician will examine you and take arm measurements. Sometimes, there may be redness or pain in the arm, which may be a sign of inflammation. Depending on your symptoms, your physician will then consider the best treatment options for you.

## What Are the Signs and Symptoms of Lymphedema?

If you suspect any of the symptoms of lymphedema listed below, call your health care provider right away. Prompt treatment can help get the condition under control.

- Swelling in the arms, hands, fingers, shoulders, chest, or legs. The swelling may occur for the first time after a traumatic event (such as bruises, cuts, sunburn, and sports injuries), after an infection in the part of the body that was treated for cancer, or after an airplane trip lasting more than three hours.
- A "full" or heavy sensation in the arms or legs.
- Skin tightness.
- Decreased flexibility in the hand, wrist, or ankle.
- Difficulty fitting into clothing in one specific area.
- Tight-fitting bracelet, watch, or ring that wasn't tight before.