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What Is Lymphedema?

Lymphedema is a build-up of lymph fluid in the fatty tissues just under your skin. This build-up might cause swelling and discomfort. It often happens in the arms or legs, but can also happen in the face, neck, trunk, abdomen (belly), or genitals.

It's important to know that lymphedema can sometimes become severe and cause serious problems, and often is a long-term or chronic condition. This is why early and careful management is needed to help reduce symptoms and keep it from getting worse.

What is the lymph system?

The lymph (or lymphatic) system is part of your body's immune system. It is a network of lymph nodes, ducts or vessels, and organs that work together to collect and carry clear lymph fluid through the body tissues to the blood. This is much like how veins collect blood from distant parts of the body (like the hands and arms) and carry it back to the heart.

- **Lymph fluid** circulates through the body and contains proteins, salts, and water, as well as white blood cells, which help fight [infection](#)¹.
- **Lymph vessels or ducts** have one-way valves that work with body muscles to help move the fluid through the body and control the flow.
- **Lymph nodes** are small, bean-sized glands along the lymph vessels that work to help filter foreign substances, such as tumor cells and infections. Lymph nodes are in many parts of the body, including the neck, armpit, chest, abdomen (belly), and groin.
- The **tonsils, adenoids, spleen, and thymus** are also parts of the lymph system.

How does lymphedema start?

Lymphedema can occur when the lymph system is damaged, which can prevent the lymph fluid from returning to the blood. For people with cancer, the build-up of lymph fluid can be caused by:

- [Cancer surgery](#)², especially when lymph nodes are removed
- [Radiation therapy](#)³ that can damage nearby lymph nodes or lymph vessels
- Infections that damage surrounding tissue or cause scarring
- Other health conditions, such as heart or vascular disease, arthritis, and eczema
- Gene changes or mutations that involve the lymph system
- Injury or trauma to a certain area of the body
- Increased white blood cells from [leukemia](#)⁴

What are signs and symptoms of lymphedema?

It's important to know the signs and symptoms of lymphedema, so it can be recognized and treated right away.

Common signs and symptoms of lymphedema can include:

- Swelling in part of the body (such as your breast, chest, shoulder, arm, or leg)
- Skin feeling tight or hard, changing in texture, looking red, or feeling hot
- New aching, tingling, numbness, or other discomfort in the area. The area might also feel full or heavy.
- Less movement or flexibility in nearby joints (such as your hand, wrist, or shoulder)
- Trouble fitting your arm into a jacket or sleeve, or trouble fitting into or buttoning your pants
- Collars, rings, watches, and/or bracelets feeling tight even though you haven't gained weight

Lymphedema often develops in the arms or legs when surgery or other treatment affects those areas, but it can develop in other parts of the body, too.

- If lymphedema develops after [breast cancer treatment](#)⁵, it can affect the breast, chest, and underarm, as well as the arm closest to the surgery.
- After cancer in the abdomen (belly) or pelvis has been treated, lymphedema may appear as swelling of the abdomen, genitals, or one or both legs.

- Treatment of tumors in the [head and neck area](#)⁶ might lead to lymphedema in the face and neck.

What are the stages of lymphedema?

The severity of lymphedema is often described by its stage:

Stage 0: No swelling, but subtle symptoms such as feeling the affected area is heavy or full, or that the skin is tight

Stage 1: Swelling of the affected area. There is increased size or stiffness of the arm or leg or affected area. For the arms or legs, the swelling improves when the arm or leg is raised.

Stage 2: More swelling than stage 1, which does not improve when the arm or leg is elevated. The affected area is hard and larger in size than stage 1.

Stage 3: Much more swelling than stage 2. The swelling might be so severe that you cannot lift or move the arm or leg on your own without using your other arm. The skin can become very dry and thick. The swelling can cause fluid to leak from the skin or blisters to form.

There is more risk for infection in the affected area that is at the later stages, such as stage 2 or 3.

The early stages (stages 0 and 1) of lymphedema are often reversible, while the later stages (stages 2 and 3) tend not to respond as well to treatment. This is why it's very important to see your health care provider as soon as you notice any concerning symptoms.

Know the signs of cellulitis

Cellulitis is an infection in the tissues just under your skin. It can lead to lymphedema. **Cellulitis is an urgent medical problem that you need to tell your doctor about right away.**

Signs and symptoms of cellulitis include redness, warmth, pain, and possibly cracking or peeling of the skin in the area that's infected. Fever and flu-like symptoms may also be present. If it becomes a repeated problem, antibiotics may be needed to keep it

under control.

Lymphedema can also lead to cellulitis, so it is important to watch for signs and symptoms.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/infections.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html
3. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html
4. www.cancer.org/cancer/leukemia.html
5. www.cancer.org/cancer/breast-cancer/treatment.html
6. www.cancer.org/cancer/head-neck-cancer.html

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