What Is Cancer-related Lymphedema?

Lymphedema (limf-uh-DEE-muh) is a build-up of lymph fluid in the fatty tissues just under your skin. This build-up causes swelling, most often in the arms or legs. Lymphedema can also affect the face, neck, abdomen (belly), and genitals – depending on the part of the body that was treated.

If you are being or have been treated for cancer, talk to someone on your cancer care team about your risk of lymphedema and what you can do to help lower it. Once chronic lymphedema has started, it cannot be cured. But early and careful management can reduce symptoms and help keep it from getting worse.

What is the lymph system?

Our bodies have a network of lymph nodes and lymph vessels that collect and carry watery, clear lymph fluid, much like veins collect blood from distant parts of the body (like the hands and arms) and carry it back to the heart.

Lymph fluid contains proteins, salts, and water, as well as white blood cells, which help fight infection. In the lymph vessels, one-way valves work with body muscles to help move the fluid through the body and control the flow.

Lymph nodes are small collections of tissue along the lymph vessels that work as filters for harmful substances and help fight infection.
The lymph system

What causes cancer-related lymphedema?

Any change in the structure of the lymph system puts a person at risk for lymphedema.

Surgery

During surgery for cancer the doctor may take out lymph nodes near the tumor to see if the cancer has spread. When lymph nodes are removed, lymph vessels that carry fluid from that area to the rest of the body are taken out, too, because they go through and
are wrapped around the nodes.

Taking out lymph nodes and vessels makes it harder for the lymph fluid in the arms, legs, or other body parts to flow to the chest where it can get back into the bloodstream. If the remaining lymph vessels cannot remove enough of the fluid in the area, the fluid builds up and causes swelling, or lymphedema.

**Radiation**

Radiation treatment can affect the flow of lymph fluid by scarring and damaging the lymph nodes and vessels. This increases the risk for lymphedema.

**Cancer**

Sometimes, a tumor itself can block part of the lymph system and cause lymphedema.

**Infection**

Infections that restrict lymph flow can cause lymphedema.

**Can lymphedema be prevented?**

There is no sure way to prevent all cases of lymphedema, but there are ways to lower the risk of it developing. For example, when lymph nodes need to be removed, some modern surgery techniques might be helpful:

- **Sentinel lymph node biopsy** (SLNB) is a major advance in cancer surgery. It’s used to find the lymph nodes the tumor drains into so they can be checked for cancer. If cancer is not found in these nodes, it allows the surgeon to remove fewer lymph nodes. SLNB has shown to help reduce the risk of lymphedema.
- **Axillary reverse mapping** (ARM) is a technique that uses a blue dye put in the upper arm to help find the lymph nodes that drain the arm. The surgeon can then try to not alter these lymph nodes. Results are not clear that ARM helps reduce lymphedema.

There might be things you can do to lower your risk as well. Talk to your health care team about your risk of lymphedema. If you are at risk, it’s important to know what to watch for (see below), and to take the steps to help reduce your risk part of your daily routine for the rest of your life.
When does lymphedema develop?

Just after surgery: Temporary lymphedema

Lymphedema can start right after surgery. This is called temporary (or short-term) lymphedema. It’s usually mild and goes away in the next month or so. It can also start later, about 6 to 8 weeks after surgery or radiation.

Even though this type of lymphedema usually goes away on its own over time, you should tell your doctor about it right away. The swollen area may look red and feel hot, which could also be a sign of blood clot, infection, or other problem that needs to be checked.

If there are no other problems causing the swelling, temporary lymphedema might be treated by raising the arm or leg and taking medicines to help reduce inflammation.

Months or years after cancer treatment: Chronic lymphedema

This form of lymphedema develops slowly over time. It may show up many months or even years after cancer treatment. The swelling can range from mild to severe. The lymph fluid that collects in the skin and underlying tissues can be very uncomfortable. It can keep nutrients from reaching the cells, interfere with wound healing, and lead to infections.

Lymphedema can be a long-term problem, but there are ways to manage it. The key is to get help right away. Lymphedema is easier to treat and more likely to respond to treatment if it’s treated early.

Signs of lymphedema

If lymphedema does develop, it’s important to recognize it early so you can start treatment right away.

Common signs and symptoms you should watch for include:

- Swelling
- Part of your body (like your arm, leg, belly, or genitals) feeling full or heavy
- Skin changing texture, feeling tight or hard, or looking red
- New aching, tingling, numbness, or other discomfort in the area
- Less movement or flexibility in nearby joints (like your hand, wrist, or ankle) or your
eyelid(s), throat, or lips
- Trouble fitting into clothes in one area, such as a sleeve, pant leg, or shoe being tight
- Collars, rings, watches, and/or bracelets feeling tight even though you haven’t gained weight

At first, the skin usually stays soft, and raising the affected body part might relieve the swelling. But over time, the swollen area may become hot and red and the skin hard and stiff. If untreated, movement and use of the affected part may become limited.

When to get help

Call your doctor, nurse, physical therapist, or lymphedema therapist if you notice any of the signs of lymphedema listed above or any of these changes:

- If any part of the affected area, such as an arm or a leg, feels hot, looks red, or swells suddenly. These could be a sign of infection or a blood clot, and you might need treatment right away.
- If you have a temperature of 100.5°F or higher (taken by mouth) that’s not related to a cold or flu
- If you have any new pain in the affected area with no known cause

Know what’s normal for you

If you’ve had lymph nodes removed or radiation treatment, look closely at your body in front of a mirror. Compare both sides of your body and look for changes in size, shape, or skin color. Get to know your body and what’s normal for you. This way you can spot changes and get treatment right away. Let your doctor or nurse know if you notice any of the signs listed above.

Some doctors measure the affected body part (like a leg or arm) before surgery, then re-measure afterward so that swelling can be detected and treated before it becomes obvious. You can ask your doctor to take these measurements or refer you to a physical therapist to have this done. If possible, ask to be referred to a certified lymphedema therapist (CLT).

To find a certified lymphedema therapist contact: Lymphology Association of North America (LANA) www.cltnathan.org National Lymphedema
Network (NLN) 1-800-541-3259 www.lymphnet.org

Be sure to check your health insurance to make sure lymphedema screening and therapy is covered.

Hyperlinks


References


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