For People at Risk of Lymphedema

Lymphedema that is related to cancer is most commonly caused by lymph node removal during surgery for cancer, or by the tumor itself which might block part of the lymph system. Increased white blood cells due to leukemia or infection can also restrict lymph flow and cause lymphedema.

Sometimes lymph flow can be slowed or reduced in people with a very high white blood cell count due to leukemia or inflammation due to an infection. This might lead to swelling and lymphedema.

People who have many lymph nodes removed and/or radiation therapy have a higher risk of long-term lymphedema. But at this time there's no way to predict who will develop it.

Lymphedema can become a problem after surgery or radiation treatment for nearly any type of cancer, but it's most commonly seen in:

- Breast cancer
- Prostate cancer
- Pelvic area cancers (such as bladder, penile, testicular, endometrial, vulvar, or cervical cancer)
- Lymphoma
- Melanoma
- Head and neck cancers

Lymphedema often develops in the arms or legs when surgery or treatment affects those areas, but it can develop in other parts of the body, too.
If lymphedema develops after breast cancer treatment, 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 has been linked with lymphedema in the face, mouth, eyes, and neck.

**Can lymphedema be prevented?**

There is no sure way to prevent all cases of lymphedema related to cancer. However, there are surgical techniques to remove lymph nodes that lower the risk of it developing.

- Axillary reverse mapping (ARM) is a technique that uses a blue dye put in the upper arm during surgery for breast cancer to help find the lymph nodes that drain the arm. Then, if possible, the surgeon can try to avoid disturbing these lymph nodes so lymph fluid can drain normally.
- **Sentinel lymph node biopsy** (SLNB) and **axillary lymph node dissection** (ALND) are procedures that used ARM. They are used to find lymph nodes the tumor drains into so they can be checked for cancer and removed if needed. SLNB checks for a few lymph nodes while ALND checks many more lymph nodes. If cancer is not found in these nodes, these procedures help to limit the number of lymph nodes removed so the risk of lymphedema might be lower.

**What to look for**

It’s important to know the signs and symptoms of lymphedema and to recognize it early so you can start treatment right away. At first, the skin usually stays soft, and raising the affected body part might relieve the swelling. It's possible the swollen area may become hot and red and the skin hard and stiff. If lymphedema is not treated, movement and use of the affected body part might become limited and there is more risk for infection and **skin problems**.

Common signs and symptoms of lymphedema are:

- Swelling in the body (like your breast, chest, shoulder, arm, or leg)
- Skin changing texture, feeling tight or hard, or looking red.
- New aching, tingling, numbness, or other discomfort in the area. This can also feel
like the area is feeling full or heavy.
- Less movement or flexibility in nearby joints (like 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

To help reduce your risk for lymphedema

There is no sure way to prevent lymphedema related to cancer, but there are ways to help lower your risk for it, and to reduce the chance of it getting worse.

Get regular medical check-ups

Regular check-ups should include screening for lymphedema. Screening is for people who have not noticed or reported symptoms. If you’ve been keeping track of the measurements of the affected part of your body, this may be part of the check-up. Talk to your cancer care team about how often you should be checked.

Report any changes to your doctor

Healing and recovery from surgery or other treatments for cancer take time. As you heal, you will learn how the affected part of your body looks and feels. Report any changes in size, color, temperature, feeling, or skin condition to your doctor right away.

Get to and/or stay at a healthy weight

Being obese puts people at higher risk for lymphedema, and obesity can make it harder to treat lymphedema. Talk to your cancer care team about what a healthy weight is for you. Get their advice on how to get to and/or stay at that weight.

Exercise

It’s important to use the part of your body that’s affected by cancer for normal, everyday activities. This will help you heal properly and regain strength. Using your muscles also helps the lymph fluid circulate and drain like it should. It also helps keep your muscles flexible and helps reduce scarring. Work with a trained fitness or health professional to design an exercise plan that’s right for you and starts at a low level of intensity and
progresses slowly to avoid overuse. Contact the American Physical Therapy Association (APTA) at www.apta.org or 1-800-999-2782 to find a physical therapist near you who works with people with cancer.

Avoid infections, burns, and injuries

Your body responds to infection, burn, or injury by sending extra fluid and white blood cells to the area. If lymph nodes and vessels are missing or damaged, it’s harder for your body to move this extra fluid, which can trigger or worsen lymphedema.

For women who have had a mastectomy, some doctors recommend having blood drawn, IVs, and shots done in the unaffected arm if possible. Some also recommend getting flu shots and other vaccinations in the unaffected arm or somewhere else, like the hip. But, not all experts agree with this restriction. And, if the woman had a bilateral mastectomy it's not possible to have an unaffected arm. For this reason, it's important to ask your doctor about whether this restriction is right for your situation.

Know the signs of cellulitis

Cellulitis is an infection in the tissues just under your skin. Signs and symptoms of this problem include redness, warmth, pain, and possibly cracking or peeling on the skin in the area that's infected. Fever and flu-like symptoms may also be present. This is an urgent medical problem that you need to tell your doctor about right away.

Cellulitis can lead to or worsen lymphedema. In fact, if it becomes a repeated problem, antibiotics may be needed to keep it under control.

Avoid constriction

Constriction or squeezing of the arm or leg may increase the pressure in nearby blood and lymph vessels. This can lead to increased fluid and swelling (much like water building up behind a dam). Some people have linked this with the start of lymphedema.

Tips if your arm has lymphedema and is swollen:

- Wear loose jewelry, clothing, bras, and gloves. Avoid anything that fits too tightly or puts pressure around your chest, arm, or wrist. Clothing and compression garments should be supportive and have smooth, even compression.
- Do not use shoulder straps when carrying briefcases and purses.
- Wear a loose-fitting bra with padded straps that don’t dig into your shoulder. Make
sure underwires don’t put pressure on your breast or chest. After a mastectomy, use a lightweight prosthesis (breast form). A heavy prosthesis might put too much pressure on the area.

- Many doctors recommend you have your blood pressure taken on the unaffected arm, if possible. If both arms are affected, blood pressure can be taken on your thigh. Or, you can ask that blood pressure be measured by someone using a hand pump and stethoscope rather than using a machine; the machines often use high pressures for a longer time.

**Tips if your lower body or leg has lymphedema and is swollen:**

- Wear loose clothing. Avoid anything that fits too tightly or puts pressure around your waist, legs, or genitals, such as undergarments or pants with tight elastic bands.
- Wear well-fitting, closed shoes instead of sandals or slippers. Do not go barefoot.
- Keep your feet clean and dry. Wear soft protective socks (cotton or padded types).
- Some people at risk of leg lymphedema might benefit from wearing a compression stocking when up and walking around. A compression stocking can help squeeze the lymph fluid through the remaining vessels before it builds up. The stocking must be well fitted to apply the right pressure while avoiding too much tightness near the top of the stocking. Ask your doctor, nurse, or therapist if you should be fitted for a compression stocking.
- Avoid socks or stockings with tight elastic bands.
- Try not to stand or sit in one place for too long (more than 30 minutes). Do not cross your legs when sitting.

**Using compression garments**

Compression garments are fitted sleeves or stockings that can help prevent swelling by moving lymph fluid from the arm or leg back into the body. Careful fitting is needed, and it's very important to follow your health care team's advice on getting fitted, using, and caring for the garment.

Compression garments are most often used by people who already have lymphedema. But if you're at risk for lymphedema, you might want to ask about using one to help lower your risk in certain situations. For instance, the risk for lymphedema might
increase with air travel, possibly because of air pressure changes. But there are pros and cons to using a compression garment on long or frequent flights. Ask your doctor or therapist if you should be fitted for a garment to wear during air travel. You might also want to discuss ways to safely move and exercise your affected body part during long flights.

Be sure compression garments fit well and are worn properly

Do not use a poorly fitting compression garment under any circumstances. This may increase your risk for lymphedema or make it worse.

You usually don’t need a compression garment to prevent lymphedema during exercise. But if you’ve noticed swelling while exercising, talk to your doctor or therapist.
Hyperlinks

2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/swelling.html

References


Written by

The American Cancer Society medical and editorial content team (www.cancer.org/cancer/acs-medical-content-and-news-staff.html)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy (www.cancer.org/about-us/policies/content-usage.html).