After Treatment for Breast Cancer: Preventing Lymphedema

Listen to theCancer.Net Podcast: After Breast Cancer: Preventing Lymphedema[1], adapted from this feature.

Lymphedema is an abnormal buildup of fluid (lymph) that causes swelling, usually in the arms and legs. Lymph is the fluid that carries immune cells (mostly lymphocytes) and proteins found in the blood throughout the body. It is similar to a "highway" for your immune system. Lymph nodes are tiny, bean-shaped organs that fight infection. They can be compared to "rest stops" for your immune cells. Sometimes they are also referred to as filters. Any treatment?such as radiation therapy or surgery?that stops or slows the drainage of the lymph nodes under the arm increases the risk of lymphedema. This article discusses lymphedema caused by surgery and/or radiation therapy for breast cancer [2].

Causes

Lymphedema in the arms and hands occurs in about 5% to 40% of women who have had a mastectomy with removal of all the axillary (underarm) lymph nodes. This range is large because experts don't always agree on how to define lymphedema, and it can be difficult to measure. Women who have had the following procedures may also be at risk for developing lymphedema:

- A lumpectomy with an axillary lymph node removal or a sentinel lymph node biopsy (removal of a few lymph nodes to check for evidence of cancer)
- Radiation therapy to the underarm area after surgical removal or biopsy of the axillary lymph nodes

Symptoms

The development of lymphedema is often difficult to notice in the beginning and may first appear as a feeling of tightness around the shoulder, arm, or hand. You may also notice decreased flexibility in your arm, wrist, or hand, or your arm may feel heavy. The condition may develop within a few days, months, or even years after surgery. In extreme cases, the lymphedema can extend from the hand through the entire arm to include the chest wall. Talk with your doctor if you think you have lymphedema.

Ways to lower your risk

Although it's not possible to predict who will develop lymphedema, you can take steps to reduce your risk.

- Ask your doctor or nurse for suggestions on daily stretching exercises. These can begin a week after surgery and/or radiation therapy, or whenever recommended by your doctor. Continue these exercises up to 18 months after surgery and treatment to maintain your range of motion.
- Exercise regularly [3]. Be sure to check with your doctor before starting or resuming an exercise program. If your normal fitness regimen included using arm weights, ask the doctor how long you should wait before resuming this activity and whether he or she recommends any weight restrictions. However, stop exercising at the first sign of pain. In addition, if your arm on the side where you had the surgery becomes tired during exercise, cool down and elevate it.
- Avoid sudden increases in the amount of physical work performed with the arm on the surgery side (for example, packing up your house for a move). It is important to gradually build up your level of activity with your arm.
- Maintain an ideal body weight [4] for your age and height. Women who are obese are more likely to develop lymphedema.
- Wear clothing and jewelry that is loose and does not pinch or squeeze your arm or hand, like a tight sleeve or bracelet does, because this can cause the fluid to build up and lead to lymphedema.
- Lighten your purse and try not to carry it or heavy bags over your shoulder on the side where the surgery was performed to avoid direct pressure and constriction of your arm.
- Avoid extreme temperature changes. Having a burn on your hand or arm can increase the risk of developing lymphedema. For example, don't use hot tubs, whirlpools, saunas, or steam baths. Use warm instead of very hot water when bathing or washing dishes.
- To prevent sunburn [5] and skin breakdown, always wear sunscreen that is at least sun protection factor (SPF) 15 and cover the arm completely when outdoors, or stay out of the sun altogether, particularly during the hottest part of the day.
- Avoid blood pressure readings in the affected arm.
- When traveling [6] by air, ask the doctor if you should wear a compression sleeve on the affected arm. If possible, keep the arm elevated (above the level of your heart) and flex it frequently during the trip.
- When sitting or sleeping, elevate the arm on a pillow and avoid lying on the affected side for an extended period of time.

More on exercising with lymphedema

Doctors once advised women to avoid weightlifting exercises with the arm where they had their surgery. However, this sometimes led to women avoiding all types of exercise, which then caused muscle weakness and increased the risk of injury. Recent research has shown that weightlifting, if started slowly and with gradual increases in weight, is safe. In fact, women who lift weights may actually have a lower risk of getting lymphedema than women who do not exercise.

Avoid infections

When a greater number of lymph nodes are removed during breast cancer surgery, the risk of developing lymphedema and infections increases. This is because the lymph nodes help keep the immune system functioning properly by filtering harmful, foreign substances, such as bacteria, from the lymph fluid.

Avoiding infection is probably the most important thing you can do to reduce your risk of developing lymphedema. Below are steps you can take to reduce this risk:

- Wash your hands with soap and warm water frequently, especially before preparing food and after using the bathroom or touching dirty linens or clothes.
- Protect the skin from scratches, sores, burns (including sunburn), and other problems that might cause infection.
- Wear gloves while doing housework or gardening.
- Avoid having cuticles cut when getting a manicure.
- Use insect repellents to prevent bug bites, but avoid the ones that contain alcohol.
- Apply moisturizer daily to prevent skin chapping.
- Avoid needle sticks of any type in the affected arm, such as having your blood drawn or having an IV (intravenous) line.
- Use thimbles when sewing.
- Use an electric shaver to remove underarm hair, as it may be less likely to cut or break the skin than other razors or hair removal methods.

Call your doctor at the first sign of an infection, since he or she may need to immediately prescribe antibiotics for you. In addition to fevers and chills, other signs and symptoms that you should watch for on the arm or hand on the same side as the surgery include the following:

- Rash or red blotches
- Red streaks
- Pain, tenderness, redness, or swelling
- A wound or cut that won't heal
- A red, warm, or draining sore

Managing lymphedema

There is no cure for lymphedema, which makes proper care and treatment of the affected arm even more important.

Ask the doctor to recommend a therapist who specializes in managing lymphedema. Lymphedema therapists are physical therapists, occupational therapists, or other health professionals who have special training in helping patients manage lymphedema. The therapist can assess your condition and develop a treatment plan, which may include specific exercises, limitation of certain activities that are too vigorous or repetitive, and recommendations for complete decongestive therapy, consisting of a compression sleeve, bandaging, manual lymph drainage, education in self-care, and possibly a drainage pump.

More Information

Managing Side Effects: Fluid in the Arms or Legs or Lymphedema [7]

After a Mastectomy: What to Know [8]

Additional Resources

The National Lymphedema Network [9]

LIVE**STRONG**: Lymphedema [10]

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Links:
[1] http://www.cancer.net/sites/cancer.net/files/After_Breast_Cancer_Preventing_Lymphedema.mp3
[2] http://www.cancer.net/node/18618
[3] http://www.cancer.net/node/24996
[4] http://www.cancer.net/node/25008
[5] http://www.cancer.net/node/24659
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