People who have had treatment for breast cancer are at risk for developing lymphedema. This fact sheet will give you information about lymphedema, treatment for lymphedema and what you can do to try to limit your risk.

What is lymphedema?

Lymph fluid, lymphocytes (white blood cells), lymph vessels and lymph nodes are part of the body’s lymphatic system that removes waste and protects the body from infections and disease. The lymphatic system collects excess fluid, proteins and other substances from the body’s tissues. This fluid is called “lymph.” It is moved through the body in tiny vessels that are much smaller than veins. Bean-shaped lymph nodes filter the fluid to remove waste and bacteria, and other lymph vessels carry the lymph back to the bloodstream. Surgery or radiation therapy can cause a break or blockage in the lymphatic system. If the flow of lymph is blocked, fluid can collect in the fatty tissues just under the skin causing edema or swelling. This type of swelling is called “Lymphedema”.

What causes lymphedema?

Both surgery and radiation therapy can affect the network of lymph vessels and nodes blocking the flow of lymph fluid. This causes the swelling that often happens after surgery and radiation, but it should decrease slowly as you heal. If the swelling does not go away or if it seems to increase, this may be lymphedema. Lymphedema can develop soon after breast surgery or radiation treatment, or it may happen weeks, months or even years later.

What is my risk of developing lymphedema?

There is no research that shows what causes some people to develop lymphedema. Extensive lymph node removal and radiation therapy to the lymph node areas increase the risk of developing edema. Not everyone who undergoes these treatments will develop lymphedema.

Having a lumpectomy alone carries the smallest risk of developing lymphedema. Sentinel node biopsy also decreases the risk of lymphedema because it limits the surgery in the lymph node system.

Other risk factors are a wound infection after surgery, and being overweight.
How will I know if I have lymphedema?

Lymphedema can begin anywhere in the area of your body that was treated. This can include your chest, arm or back. For example, if you had surgery on your right breast, the area from the center of your chest to your right shoulder or breast, under your right arm, along your right side and down your right arm could develop lymphedema. The most common site for lymphedema is in the arm and hand. The lymph fluid can collect in your hand alone, only at your elbow, or in your whole arm.

Some early signs of lymphedema can be:
- Puffiness or swelling of your hand or arm
- Clothing, bra or jewelry feel tighter than usual
- Jewelry or clothing leave a dent or mark on your skin
- A feeling of fullness in your breast, chest or arm
- A sensation of heaviness or fatigue in your arm
- An area of your skin that is red or warm to the touch

Is there a way to measure lymphedema?

There are several ways to measure your arm for lymphedema. A tape measure is commonly used. At MGH we use a device called a perometer. Other ways to measure are by water displacement or bio-impedence. Whatever way your arm is measured, have it done regularly, ideally every six months. Speak to your doctor, nurse or physical therapist about having your arm measured.

Can lymphedema be treated?

- Yes, lymphedema can be treated and treatment can make a difference. Your doctor or nurse can refer you to a trained lymphedema therapist.
- You will learn how to massage your arm, do helpful exercises, and bandage your arm, if necessary.
- A compression glove or sleeve to wear during the day or night can be useful and may also be a treatment option.
FACT SHEET

LYMPHEDEMA AND BREAST CANCER

Can I prevent lymphedema?

There is no medical evidence that lymphedema can be prevented. However, many patients have shared information about what may have triggered their lymphedema. Good skin care, maintaining an ideal weight and exercise are important in taking care of the health of your arm. Be aware of your body’s response to any activity or injury.

Please talk with your doctor, nurse or physical therapist about any concerns or questions you have about developing lymphedema.

How can I protect myself from skin infections?

- Wash any cuts with soap and water.
- Wear gloves while gardening, doing dishes or housework.
- Protect yourself from insect bites.
- Use skin cream to avoid chapped, dry or broken skin.
- Avoid sunburns, use sunblock with an SPF of 30 or more.
- Avoid scratches or bites from pets.
- Be careful with sharp objects or edges.
- Do not cut your cuticles (the skin around your nails) during a manicure or pedicure. Push back the nail cuticles instead.
- Choose a nail salon that is clean and uses sterile instruments. Some people bring their own instruments with them.
- Avoid repeated punctures of the skin on the treated side. For example, blood tests or finger sticks to check blood sugars.

Contact your health care provider if an area of your arm or chest becomes red, painful or swollen, or if you have fever or chills. These symptoms can be signs of infection.

Exercise and Activities

Regular exercise is important for many reasons. It is good for your circulation and helps you reach or maintain your ideal weight. Our goal is to help you return to the activities you enjoy and that are a part your daily lifestyle. Any cautions noted below are based on experiences some peoples associated with developing lymphedema. There is no medical research to support this. Use your common sense and gradually return to activity.
1. **Lifting heavy objects**
   - The amount of weight that is safe to lift is different for each person. It is best to start by lifting lightweight objects. Start with one to two pounds.
   - Gradually increase the weight you lift but pay attention to how your body reacts.
   - Pain and swelling after the activity are signs that you are doing too much.
   - Try not to carry your purse, heavy bags or luggage over your shoulder on the treated side.

2. **Repetitive movements**
   - For most people repetitive arm movements such as mopping, vacuuming, painting, rowing, weight lifting and using exercise machines are not a problem. However some patients feel these types of activities may have triggered their lymphedema.
   - As you do activities like these, be aware of any symptoms in your arm or hand. If your arm or hand does swell or hurt during or after an activity, you should stop or decrease the force or amount of time you use your arm and hand in this way.

3. **Hot tubs or saunas**
   - The heat from hot tubs or saunas has been a problem for some people.
   - If you are going to use a hot tub or sauna, start gradually and monitor your body for signs of swelling.

4. **Blood Pressure Tests**
   - A person at risk for lymphedema usually avoids having anything tight on their arm, wrist or hand on the treated side.
   - If you can, avoid having your blood pressure taken on the treated side.
   - There is no research that supports this choice, but it is another example of something that may have caused a problem for some people.

5. **Airplane travel**
   - If you have lymphedema, use your sleeve when flying in an airplane.
   - If you do not have lymphedema, there is no evidence that you need to wear a sleeve as “prevention” when traveling. As the length of flights and frequency of travel varies, you should discuss the use of a sleeve with your physician, nurse or physical therapist.
LYMPHEDEMA AND BREAST CANCER

Developing lymphedema can be a possibility, but it is not a certainty. Be mindful but not fearful about using your arm.

Feel free to discuss your questions with your doctor, nurse or physical therapist.

Questions? Always call your doctor or nurse.
Information? The Cancer Resource Room (866) 724-6737 or massgeneral.org/cancer/crr