Lymphedema and Breast Cancer

People who have had treatment for breast cancer are at risk for developing lymphedema. This pamphlet will give you information about lymphedema and its treatment.

What is lymphedema?
Lymphedema is swelling caused by lymph fluid that collects in the tissues under the skin. Lymph fluid, lymphocytes (white blood cells), lymph vessels, and lymph nodes are part of the body’s lymphatic system that removes cell 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. Other lymph vessels carry the lymph back to the bloodstream.

Surgery or radiation therapy can cause a break or blockage in the lymph system. If the flow of lymph is blocked, fluid can collect in the fatty tissues under the skin causing lymphedema.

What causes lymphedema?
Both surgery and radiation therapy can block the flow of lymph fluid by damaging the network of lymph vessels and nodes. 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?**

Extensive lymph node removal and radiation therapy to the lymph node areas increase the risk of developing lymphedema. 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 for lymphedema are a wound infection after surgery, and being overweight.

There is no research that shows why some people develop lymphedema, while others do not.

**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 diagnose 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, the measurement will increase if you have lymphedema. Speak to your doctor, nurse, or physical therapist about having your arm measured.

A perometer is used to measure this woman’s arm.
**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.

**Can I prevent lymphedema?**
There is no medical evidence that lymphedema can be prevented. 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 part of your daily lifestyle. Many patients have shared their thoughts about what might have triggered their lymphedema. Any cautions noted below are based on patients’ experiences, not on medical research. Use your common sense.

**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 two to three pounds.

• Gradually increase the weight you lift but pay attention to how your body reacts. Pain and swelling after an 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.
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.

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.

Blood pressure tests

- People at risk for lymphedema usually avoid 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.
Airplane travel

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

Developing lymphedema is 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.