

Lymphedema: Prevention and Treatment for the Arm

Lymphatic System

The lymphatic (or lymph) system is a network of lymph vessels, tissues and organs that carry lymph fluid throughout the body.

Normally, lymph nodes filter fluid as it flows through them, trapping bacteria, viruses and other foreign substances. Without normal lymph drainage, fluid can build up in the affected part of the body, and lymphedema can develop. Lymphedema is a type of swelling that happens when the lymphatic system becomes blocked and is not able to take the lymph fluid back to the heart.

Lymphedema

Lymphedema is a buildup of fluid that occurs when fluid drained by the lymph vessels does not flow out of the arm, hand, chest and upper back on the side of your surgery. This fluid buildup may result in swelling. Lymphedema may occur when some of the lymph nodes under the arm have been removed during surgery or treated with radiation, or when cancer has spread to these lymph nodes. When the lymph system does not drain properly, the arm is at risk for developing lymphedema.

Although it is not always clear why some people have swelling and others do not, it is sometimes related to infection, injury or trauma involving the arm. Lymphedema can occur even years after surgery or radiation treatment and may not necessarily be related to a recurrence of cancer.

With improvements to surgery and radiation therapy, lymphedema is less likely to occur than in the past. Although most patients have a low risk of developing lymphedema, it is important for you to be aware of this condition and what you can do to prevent it.

If you notice any swelling in your **arm, hand, upper back or chest**, call your doctor or primary care center **as soon as possible**. You may be referred to Rehabilitation Services for help managing lymphedema. Early treatment can help prevent problems.

Lymph Drainage

Follow these guidelines to promote lymph drainage:

- **Maintain full active range of motion in the arm on the side of your surgery.**
Doing the exercises you received may help drainage. These exercises are designed to help you achieve full range of motion of your shoulder.
- **Maintain an active lifestyle and avoid being sedentary.**
- **Prevent trapping more fluid in the arm on the side of your surgery.**

- When having your blood pressure taken, whenever possible, use the opposite arm or the legs.
- Wear loose-fitting jewelry or watches with adjustable bands on the affected arm.
- Wear properly fitted bras to avoid trapping fluid in the chest wall and arm.
- **Do not** wear tight or elastic shirt sleeves.
- **Prevent tiring the arm.** Avoid carrying heavy objects, moving heavy furniture or doing activities that cause sudden excessive force or strain on the affected side.
- **To prevent lymphedema during long car trips or airplane flights**
 - Drink plenty of water.
 - Stand and/or stretch when it is safe to do so.
 - Do arm and breathing exercises every 2 hours.
 - Elevate the arm with pillows.

Infection and Injury Precautions

Infection or injuries may trigger the onset of lymphedema. Lymphedema may become more severe if your hand or arm is infected or injured. Follow these precautions:

- **Avoid needle insertions in your affected arm. Whenever possible, use your healthy arm for blood draws, and when receiving vaccinations or injections.** If you need a medical procedure on your affected arm, such as removing skin growths, ask your cancer doctor first.
- **Avoid excessive heat, such as saunas, whirlpool spas or extremely hot showers. Keep the arm cool in hot weather.**
 - Do not sunbathe.
 - Stay in air-conditioned places.
 - Place the arm under cool running water.
 - Place cool towels over the arm.
- **Prevent burns to the arm.**
 - Use long padded mitts near the oven, grill or fireplace.
 - Protect the arm from sunburn by using a sunscreen with a sun protection factor (SPF) of at least 15 or higher and by wearing long sleeves.
- **Avoid cuts and scratches to the hand and arm.**
 - Use an electric shaver when shaving under the arm to prevent razor cuts.
 - Wear heavy gloves and long-sleeved shirts while doing work (such as gardening) that may cause scratches or cuts.
 - Use a thimble to protect against puncture wounds while sewing.
 - Use a cutting board while chopping or slicing foods.
 - Avoid shelling shrimp or crawfish with your bare hands. Use heavy duty gloves that cannot be punctured by the sharp points of the shrimp or crawfish.
 - Use insect spray to help prevent insect bites.
 - Treat cuts, burns, insect bites and scrapes immediately. Thoroughly wash the site, apply an antibacterial ointment and cover with a bandage.
- **Avoid harsh detergents or deodorants.**

Wear rubber gloves if your hands will be in water for an extended length of time or in contact with harsh chemicals (such as cleaning solutions).

- **Keep hands and cuticles soft.**
 - Apply a moisturizing lotion after washing to prevent your hand from becoming chapped, dry or cracked.
 - **Do not** cut the cuticle on your hand. Use a cuticle softener cream and gently ease the cuticle back with a cotton-tipped swab.
 - Keep your nail edges smooth and do not bite your fingernails.
 - Use your own instruments when you get a manicure.
 - Check your fingernails for signs of a fungal infection (i.e., discoloration, thickening, crumbling edges, or cracks).
 - Call your doctor if your nails become infected.

If you begin to develop lymphedema, contact your doctor for a referral to Rehabilitation Services. Physical therapists provide a comprehensive program to help manage lymphedema that includes education, special exercises, compression bandaging, manual lymphatic drainage therapy and fitting of compression garments.

Call your doctor **immediately** if your **arm, hand, upper back or chest** shows signs of infection. **These can include the following.**

- Red streaks on the arm or chest wall
- Red, warm, or unusually hard, swollen, or painful arm, hand, upper back, or chest wall
- A feeling of heaviness or constant aching in the arm or chest wall
- Elevated body temperature (fever)

For more information, call the Baptist Rehabilitation Center at 904.202.4200.