

## LYMPHEDEMA OVERVIEW

### Overview

Lymphedema is a swelling of a part of the body, usually an extremity, caused by the accumulation of lymph. Lymph is a protein-rich fluid produced by the lymphatic system to fight infection and assist your body's immune system. Lymphatic fluid is filtered through the lymph glands as it circulates through narrow vessels removing bacteria, toxins and dead cells. When the lymph glands become infected, or have been weakened; removed or destroyed, they lose their ability to transfer the lymphatic fluid. Lymphedema results when fluid accumulates in the tissues.

The swelling can also occur in the face, neck and abdomen. Up to 30% of breast cancer survivors will develop lymphedema, and it may appear anytime from days to years after the surgery. Lymphedema is a chronic or continuing condition. It *cannot* be cured in the sense that it will disappear completely. Left untreated, lymphedema usually worsens, causing swollen limbs with limited motion heaviness. The good news is that lymphedema can almost always be controlled by proper care, without medication and without surgery.

The primary treatments for lymphedema include:

- *Manual Lymphatic Drainage* – This gentle massage technique, developed in Europe and refined in the US, transports fluid from the tissues back into the lymphatic system for flow into the bloodstream.
- *Compression Bandaging* – The affected limb is wrapped to amplify muscle action which increases flow into the lymph system.
- *Sequential Pumping* - This external compression device helps move fluid out of the soft tissues of the affected area.
- *Compression Garment* – Patients wear this specially fitted elastic sleeve or stocking to reduce and help prevent further swelling.
- *Therapeutic Exercise* – Your therapist will show you a variety of exercises that aid in increasing lymphatic flow.
- *Awareness* – Prevention and immediate treatment is key to dealing lymphedema. You should always take great care to protect your affected limb. (See reverse side for specifics.)

### Life Long Exercises

These exercises will enable you to maintain your range of motion, increase your flexibility and help you strengthen affected areas. You should incorporate these simple exercises into your daily pattern for the rest of your life.

### **Wall Climbing**

- Face the wall.
- Gradually walk your fingertips up from waist level until you feel a slight pulling under your arm.
- Then walk your fingers slowly downward back to waist level.
- Repeat 5-10 times twice daily.
- For variation, you may stand beside the wall and walk each arm up and down individually.

### **Ball Squeezes**

- Elevate you affected arm above heart level.
- Squeeze a ball (rubber, tennis or stress-relief) and hold for 5 seconds.
- Repeat this exercise at least twice per day.

### **Shoulder Flexion**

- Lie on your back and clasp your hands together.
- Straighten your arms and lift your hands over your head as far as you can go without feeling pain.
- As you regain flexibility, progressively lift your hands further over your head.
- Gently lower your arms back to your waist.
- Begin at 5 lifts and work up to 10.
- Repeat this exercise at least twice per day.

### **Shoulder Abduction**

- Lie on your back with your arms straight by your side.
- Slide your affected arm out to the side.
- Lift it up with the goal of your arm touching your ear.
- Gently lower your arm and slide it back to your side.
- Repeat this exercise 5-10 times at least twice a day.

### **Lymphedema Prevention Tips For Upper Extremities**

Anyone who has had a simple mastectomy, lumpectomy or modified radical mastectomy in combination with axillary node dissection and, often, radiation therapy is at risk for developing lymphedema. Lymphedema can occur immediately postoperatively, within a few months, a couple of years, or 20 years or more after cancer therapy. With proper education and care, lymphedema can be avoided or, if it develops, kept well under control.

- Absolutely do not ignore any slight increase of swelling in the arm, hand, fingers, neck or chest wall (*consult with your doctor immediately*).

- Never allow an injection, IV or a blood drawing in the affected arm(s). Wear a Lymphedema Alert bracelet (call 1-800-541-3259 for more information).
- Have blood pressure checked on the unaffected arm, or on the leg (thigh), if bilateral lymphedema.
- Keep the "at-risk" arm, spotlessly clean. Use lotion (Eucerin, Lymphoderm) after bathing. When drying it, be gentle, but thorough. Make sure to dry any creases and between the fingers.
- Avoid vigorous, repetitive movements against resistance with the affected arm (scrubbing, pushing, pulling).
- Avoid heavy lifting with the affected arm.
- Never carry heavy handbags or bags with over-the-shoulder straps.
- Do not wear tight jewelry or elastic bands around affected fingers or arm(s).
- Avoid extreme temperature changes when bathing, washing dishes, or (no sauna or hot tub). Keep the arm protected from the sun.
- Avoid any type of trauma (bruising, cuts, sunburn or other burns, sports injuries, insect bites, cat scratches).
- Wear gloves while doing housework, gardening or any type of work that could result in even a minor injury.
- When manicuring your nails, avoid cutting your cuticles (*inform your manicurist*)
- Exercise is important, but consult with your therapist. Do not overtire an arm at risk; if it starts to ache, lie down and elevate it. *Recommended exercises:* walking, swimming, light aerobics, bike riding, and specially designed ballet or yoga. (*Do not lift more than 15 lbs.*)
- When traveling by air, patients with lymphedema (or at risk) should wear a compression sleeve. Additional bandages may be required on a long flight. Increase fluid intake while in the air.
- Patients with large breasts should wear light breast prostheses (heavy prostheses may put too much pressure on the lymph nodes above the collar bone). Soft padded shoulder straps may have to be worn. Wear a well-fitted bra: not too tight, ideally with no underwire.
- Use an electric razor to remove hair from axilla. Maintain electric razor properly, replacing heads as needed.
- Patients with lymphedema should wear a well-fitted compression sleeve during all waking hours. At least every 4-6 months, see your therapist for follow-up. If the sleeve is too loose, most likely the arm circumference has reduced or the sleeve is worn.
- **Warning:** If you notice a rash, itching, redness, pain, increase of temperature or fever, see your physician immediately. An inflammation in the affected arm could be the beginning or worsening of lymphedema.
- Maintain your ideal weight with a well-balanced, low sodium, high-fiber diet. Avoid smoking & alcohol. Lymphedema is a high protein edema, but eating too little protein will not reduce the protein element in the lymph fluid; rather, this may weaken the connective tissue and worsen the

condition. Diet should contain easily digested protein (chicken, fish or tofu).

### **Lymphedema Prevention Tips for Lower Extremities**

Anyone who has had gynecological, melanoma, prostate or kidney cancer in combination with inguinal node dissection and, often, radiation therapy is at risk for developing lymphedema. Lymphedema can occur immediately postoperatively, within a few months, a couple of years, or 20 years or more after cancer therapy. With proper education and care, lymphedema can be avoided or, if it develops, kept under control.

- Absolutely do not ignore any slight increase of swelling in the toes, foot, ankle, leg, abdomen, or genitals (*consult with your doctor immediately*).
- Never allow an injection or a blood drawing in the affected leg(s). Wear a Lymphedema Alert necklace.
- Keep the "at-risk" leg, spotlessly clean. Use lotion (Eucerin, Lymphoderm) after bathing. When drying it, be gentle, but thorough. Make sure to dry any creases and between the toes.
- Avoid vigorous, repetitive movements against resistance with the affected legs.
- Do not wear socks, stockings or undergarments with tight elastic bands.
- Avoid extreme temperature changes when bathing or sunbathing (no sauna or hot tub). Keep the legs protected from the sun.
- Avoid any type of trauma (bruising, cuts, sunburn or other burns, sports injuries, insect bites, cat scratches).
- When manicuring your toenails, avoid cutting your cuticles (*inform your pedicurist*).
- Exercise is important, but consult with your therapist. Do not overtire a leg at risk; if it starts to ache, lie down and elevate it. *Recommended exercises*: walking, swimming, light aerobics, bike riding, and yoga.
- When traveling by air, patients with lymphedema (or at risk) must wear a compression stocking. Additional bandages may be required on a long flight. Be sure to drink plenty of water.
- Use an electric razor to remove hair from your legs. Be sure to maintain the razor and replace heads as needed.
- Patients who have lymphedema should wear a well-fitted compression stocking during all waking hours. At least every 4-6 months, see your therapist for follow-up. If the stocking is too loose, most likely the leg circumference has reduced or the stocking is worn.
- **Warning:** If you notice a rash, itching, redness, pain, increase of temperature or fever, see your physician immediately. An inflammation in the affected leg could be the beginning or a worsening of lymphedema.
- Maintain your ideal weight with a well-balanced, low sodium, high-fiber diet. Avoid smoking and alcoholic beverages. Lymphedema is a high-protein edema which is not related to the protein found in foods. Eating less protein will not reduce the protein element in the lymph fluid; rather,

this may weaken the connective tissue and possibly worsen the condition. The diet should contain protein that is easily digested, such as chicken, fish or tofu.

- Always wear closed shoes (high tops or well-fitted boots are highly recommended). No sandals, slippers or going barefoot. Dry feet carefully after swimming.
- As a preventative measure, see a podiatrist once a year to check for and treat fungi, ingrown toenails, calluses, pressure areas, athlete's foot.
- Wear clean socks and hosiery at all times.
- Use talcum powder on feet, especially if you perspire a great deal. Talcum will make it easier to pull on your compression stockings. Be sure to wear rubber gloves, as well, when pulling on stockings. Powder behind the knee often helps; it prevents rubbing and irritation.