



BASSETT HEALTHCARE

Lymphedema: What is it and who is at risk?

Most of us can recall those days in science class when we learned about our circulation system – the heart at the center to act as a pump, the arteries to carry oxygen-rich blood to the tissues, and the veins to return blood back to the heart. However, an important member of the circulation system received little, if any, attention – the lymphatic system. Miles of tiny blood vessels under the surface of the skin constantly leak clear fluid and protein to bathe our tissues. This clear protein fluid is called *lymph*. Lymph is important in keeping us healthy by carrying away waste products from the tissues back to the general circulation for removal from the body.

Lymph travels back to the heart through fragile vessels known as *lymphatics*. 500 to 600 lymph nodes serve as filters and little manufacturing plants for lymph cells which help fight infection. In other words, the members of our lymph system work as our “sanitation engineers.”

The lymphatic system may become damaged through injury, infection, surgery, cancer or cancer treatment. Occasionally, the lymph system will not fully develop or functions improperly due to an inherited defect. When injured or non-functional, the lymphatic vessels are not capable of carrying lymph fluid back to the heart for re-circulation. The abnormal collection of lymph in a body part (usually an arm or leg) is known as *lymphedema*. The build-up of lymph fluid usually starts slowly and is hard to notice until there is obvious swelling. Since the fluid collects near the surface of the skin, the affected part looks “puffy.” Over time, the protein in the fluid becomes hard, causing the skin to feel and look thicker. Lymph fluid can collect as bubbles on the surface of the skin, or may leak out as a clear, colorless, odorless liquid.

The most common cause for development of lymphedema in the United States is cancer and cancer treatments, since surgery, radiation therapy, and chemotherapy all can damage lymph nodes and lymph vessels. Not everyone who receives cancer therapy will develop lymphedema – the rate of occurrence varies from 20 to 80 percent. Research is greatly needed to identify those most at risk and investigate best practice outcomes.

Lymphedema is a chronic condition – it can not be cured. But it can be treated – the sooner the problem is recognized, the more likely the treatment will successfully control swelling. Early and watchful care by both the patient and medical staff are very important

in controlling lymphedema and preventing unwanted consequences, such as infection, discomfort, or disuse of a limb.

Lymphedema treatment goals include 1) reducing the affected limb to near-normal size 2) maintain normal skin tone, and 3) maintain normal function. All therapies combine skin care, exercise and weight control, with some form of compression against the skin, either by special bandages, elastic sleeves or stockings, or mechanical pumps. Not all patients are candidates for any one approach – treatment needs to be planned based on each person’s needs and situation after a thorough medical examination and explanation of the options. A written prescription is required before beginning any lymphedema therapy. It is strongly recommended that lymphedema care be provided only by certified lymphedema therapists.

Lymphedema lasts a lifetime. This does not mean, however, that there are always a lifetime of associated problems. A patient who is thoroughly educated in treatment and prevention measures and takes an active part in managing the disease is the best resource for maintaining an active, healthy lifestyle. The National Lymphedema Network, 1-800-541-3259 or www.lymphnet.org, is also an excellent resource for patients, family, and professionals who would like to learn more about this problem.

For more information, contact Bassett Healthcare’s Prime Care Clinic at 1-800-BASSETT.

Patty Lewis, MSN, FNP, is a nurse practitioner with Bassett Healthcare.