Managing lymphedema
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The lymphatic system, also known as “the other circulatory system,” filters bacteria and other waste from the body and removes excess fluid from tissues. This complex system works with the immune system to keep the body healthy. Lymphedema occurs when parts of the lymph system become weakened or damaged and can no longer drain properly. As a result, lymph fluid can collect in the soft tissues, causing swelling and discomfort. Some people are born with primary lymphedema: the lymph system never develops properly. More often, secondary lymphedema develops when lymph nodes or vessels are damaged or removed during cancer surgery or radiation treatment. Removing 4 or more lymph nodes to determine whether cancer cells have spread increases risk for lymphedema.

Unfortunately, there is not enough awareness of the serious impact lymphedema can have on quality of life, including discomfort, susceptibility to infection, poor body image, social isolation, and anxiety. It is important to know how to reduce your risk for lymphedema and to recognize the signs.

Sign and symptoms of lymphedema:
• Swelling of part or all of an arm or leg, fingers, or toes
• Feeling of heaviness or tightness
• Restricted range of motion
• Aching, tingling, or discomfort
• Recurring infections
• Hardening or thickening of the skin

Evidence-based tips for risk reduction practices:
• Be wary of what Google says!
• Avoid tight clothing.
• Skin care is critical, because the skin is the first barrier against infection. Avoid cuts, scratches, burns, and dry skin.
• Avoid limb constriction.
• Maintain a healthy weight.
• Avoid extreme temperatures when possible.
• If lymph nodes were removed from an arm, isolated use of the at-risk arm does not appear to increase the risk for lymphedema.
• There is no established link between air travel and lymphedema; nor is there any evidence that compression garments are beneficial to those as risk while flying.

Managing lymphedema
Managing early-stage symptoms and diligent care of the affected limb can prevent lymphedema from progressively becoming worse and irreversible. In stage 0 lymphedema, swelling occurs, although it is not evident. Lymphedema may be difficult to detect at this stage, when symptoms can be reversed with compression wear. Stage 1 lymphedema occurs when fluid that accumulates is resolved by elevating the limb. Stage 2 lymphedema is characterized by swelling that does not respond to limb elevation and the skin appears to be pitted. In stage 3 lymphedema, the skin thickens, limbs become large and swollen (sometimes massively), and extensive scarring develops.

The gold standard of lymphedema management is complete decongestive therapy (CDT), a combination of manual lymph drainage (specialized massage by a lymph professional that stimulates and redirects lymphatic fluid drainage; this is a short-term solution), compression bandaging (reduces swelling), and compression garments.

New surgical treatments for lymphedema
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Surgical lymphedema procedures
Surgical procedures that relieve the symptoms of lymphedema are relatively recent in the U.S., and not many surgeons are qualified to perform it. A surgical option may be considered if a patient and their lymphedema therapist are dissatisfied with the results from complete decongestive therapy (CDT) alone. No long-term data is available for surgical outcomes and health insurance may or may not cover the surgeries. Some facilities charge high fees for these procedures because Medicare will reimburse, but at variable rates.

Types of lymphedema surgeries
Lymphatic bypass is microsurgery that can improve early-stage lymphatic function. Dye is injected and picked up by the lymphatic channels to map the lymph system and identify obstructions. Super microsurgery is used to perform lymphatic bypass. This procedure uses a high magnification microscope that can also connect minute and delicate blood vessels or nerves. During bypass, a new lymphatic pathway is formed by connecting and rerouting the blocked lymph channel to a nearby vein so that it can drain properly. One study showed that 96% of patients reported symptom relief following this procedure; 74% of individuals from the same study reported having quantitative improvement.

Vascularized lymph node transfer replaces damaged lymph nodes with healthy nodes that are taken from elsewhere in the body. Available for later stages of lymphedema, it is somewhat experimental and there is concern that moving a lymph node from one part of the body to another may create lymphedema in the donor area. However, moving nodes from the abdomen (in conjunction with DIEP flap breast reconstruction) seems to work well.
Surgical debulking is used to address extreme cases of lymphedema, when fluid, fat, and protein collect in the tissues, adding significant weight and size to the limb. During debulking skin and deep tissue are surgically removed. Debulking surgery may also include applying a skin graft to muscle.