

Is that area swollen?

By Christine Knight, PT, CLT

Swelling occurs when there is an excessive amount of fluid in the body's tissue spaces. Swelling is defined as edema when it occurs in a body part that is outside of the joint space.

Edema is a symptom, not a diagnosis. It can be a symptom of a medical condition such as congestive heart failure, liver or kidney disease, deep vein thrombosis (blood clot); from a side effect of medications or from pregnancy. Edema can also be caused by weakness or damage to the veins in your legs or an inadequate lymphatic system. Edema can be brought on by uncontrolled trauma such as a fall, breaking a bone, or controlled trauma such as orthopedic surgery. To effectively control edema, diagnosis and treatment of its underlying cause is imperative.

Persistent edema secondary to trauma and/or weakness in veins can be managed with components of Complete Decongestive Therapy (CDT), including manual lymphatic drainage (MLD) and compression. MLD helps to pull the fluid out of the tissue spaces. Stiff wraps, sleeves or socks for compression can dramatically help move fluid out of an area and prevent it from returning. The more fluid present and the longer it stays, the harder it becomes to get it out of an area, with more compression necessary to keep it under control.

The removal of lymph nodes and radiation treatments due to cancer can be less obvious causes of swelling. Edema brought on in this way is actually referred to as secondary lymphedema due to the injury to the lymphatic system. The lymphatic system carries 10% of the body's fluid back to the heart. This fluid contains protein molecules that are too big to fit into the veins and can amount to 2

Meet the PT:



Christine Knight

With 29 years of experience in treating orthopedic conditions and sports medicine injuries, Christine currently practices at Integrated Rehab in the Manchester, Connecticut location. In 2009, she became certified in the treatment of lymphedema and swelling disorders, through the Boris/Lasinski School in conjunction with Sacred Heart University. The certification is in Complex Lymphedema Therapy, also known as Complete Decongestive Therapy and is the Casley-Smith (Australian) method for treating lymphedema. In order to become a certified lymphedema therapist one must successfully complete a 135 hour curriculum, pass a written exam and demonstrate proficiency by

liters of fluid each day. When this protein rich fluid is left in the tissue spaces, it makes the area more prone to infections. The protein molecules also cause scar tissue to proliferate, which can lead to a hardening of the tissues called fibrosis.

Anyone who has had lymph node removal or radiation treatments is at risk for developing lymphedema. Lymphedema can develop immediately or many years after injury to the lymphatic system. Anyone at risk should be educated in the warning signs, simple MLD and exercise. Once lymphedema develops it can worsen without treatment. Effective treatment utilizes CDT (a multifaceted treatment approach) consisting of: MLD, compression, exercise, skin care, and self management education. If you have any questions concerning swelling, please do not hesitate to contact me at 860.645.3810 or cknight@integrehab.com.

passing practical exams.

Before joining Integrated Rehab in 2005, Knight was the administrator of Healthsouth in Glastonbury, where she managed business operations for the clinic and provided patient care. Her previous positions also include director of Physical Therapy and Sports Medicine Associates in Glastonbury, and director of Chelmsford Physical Therapy in Chelmsford, Mass. Knight received her degree in physical therapy from the University of Connecticut.

Contact Christine by calling 860.645.3810 or cknight@integrehab.com.