

Obesity and Lymphedema

Obesity contributes to the onset of lymphedema and often worsens the symptoms of already existing lymphedema. In a study conducted by researchers of the University of Missouri-Columbia (published in 2008 in the [Journal of Lymphoedema Vol.3, No.2](#)), it was suggested that the risk of developing upper extremity lymphedema following breast cancer surgery was 40-60 percent higher in women with a body mass index (BMI) classified as overweight or obese, compared to women with normal weight. In their study, which included 193 breast cancer survivors, researchers also report that the risk of lymphedema is especially high in overweight or obese women who experience cancer treatment involving the dominant side, or experience post-operative swelling.

Excessive weight, especially morbid obesity, may also contribute to the onset of primary and secondary lymphedema involving the lower extremities. Being overweight can have a negative impact on the return of lymphatic fluid from the lower extremities; additional fluid volumes associated with obesity may overwhelm an already impaired lymphatic system. Direct pressure on lymphatic vessels by excess fatty tissue, impaired diaphragmatic breathing and decreased muscular function can also be factors contributing to the manifestation of lymphedema. Chronic venous insufficiency (CVI) is often associated with obesity; the increased burden on the lymphatic system in CVI can play a significant role in the manifestation of lower extremity lymphedema.



Treatment progress in existing lymphedema may be seriously hampered in patients with a high BMI. With obese patients it is often difficult to apply bandages, especially in cases of lymphedema affecting the lower extremities. Furthermore, the compressive materials (bandages, garments) applied to the affected extremities have a tendency to slide in obese patients. Compression garments may have to be custom ordered, creating an additional financial burden to the patient.

Exercise, a very important aspect in the management of lymphedema may be negatively affected as well. Mobility problems associated with a high body mass index can affect the patients' participation in treatment, and exercise protocols used in lymphedema therapy for the upper and lower extremities may have to be modified accordingly.

Weight management and proper nutrition are essential for successful long-term lymphedema management. Please also see [Nutritional Aspects in Lymphedema](#) in the next blog entry.

Additional Resources:

<http://www.intellicure.com/index/Files/ArticlesAbstracts/MorbidObesityLymphedemaManagement.pdf>

<http://onlinelibrary.wiley.com/doi/10.1111/j.1524-4741.2009.00855.x/abstract>

http://www.lymphedemapeople.com/wiki/doku.php?id=obesity_and_lymphedema

http://www.lymphnet.org/lymphedemaFAQs/questions/question_07_05.htm