Diuretics

Diuretics promote excess fluid in the body to be excreted. Although diuretics may be beneficial in the short-term, and may be indicated in those cases when lymphedema is associated with systemic conditions (ascites, hydrothorax, protein-loosing enteropathy), they may be harmful and contribute to the worsening of lymphedema-related symptoms if used long-term.

Here is why: Lymphedema is an abnormal accumulation of water and protein molecules in the body's soft tissues, which is caused by a dysfunction of the lymphatic system. Swelling (edema) other than lymphedema may be caused by a variety of conditions, such as congestive heart failure, renal diseases, or venous insufficiencies. These swellings do not contain a higher level of proteins in the accumulated fluid, and are defined as edemas.

Diuretics used for lymphedema are limited to remove the water content of the swelling, while the protein molecules remain in the soft tissues. The dehydration effect of diuretics causes a higher concentration of the protein mass in the edema fluid, which may cause the tissues to become more fibrotic and increase the potential for secondary inflammations. In addition, the remaining proteins characteristically draw more water to the swollen areas as soon as the diuretic loses its effectiveness and may cause the volume of the lymphedema to increase.

The 2009 Consensus Document (4) of the International Society of Lymphology states: "Diuretic agents are occasionally useful during the initial treatment phase of complete decongestive therapy (CDT). Long-term administration, however, is discouraged for its marginal benefits in treatment of peripheral lymphedema and potentially may induce fluid and electrolyte imbalance"