

Effective Treatment of Lymphedema of the Extremities

Dicken S. C. Ko, MD; Robert Lerner, MD; Guenter Klose, CCDPI; et al

Setting the scene:

To define the immediate and long-term volumetric reduction following complete decongestive physiotherapy (CDP) for lymphedema.

What did they do?

Two hundred ninety-nine patients referred for evaluation of lymphedema of the upper (2% primary, 98% secondary) or lower (61.3% primary, 38.7% secondary) extremities were treated with CDP for an average duration of 15.7 days. Lymphedema reduction was measured following completion of treatment and at 6- and 12-month follow-up visits. Complete decongestive physiotherapy is a 2-phase noninvasive therapeutic regimen. The first phase consists of manual lymphatic massage, multilayered inelastic compression bandaging, remedial exercises, and meticulous skin care. Phase 2 focuses on self-care by means of daytime elastic sleeve or stocking compression, nocturnal wrapping, and continued exercises. Average limb volumes in milliliters were calculated prior to treatment, at the end of phase 1, and at 6- to 12-month intervals during phase 2 to assess percent volume reduction. Lymphedema reduction averaged 59.1% after upper-extremity CDP and 67.7% after lower-extremity treatment. With an average follow-up of 9 months, this improvement was maintained in compliant patients (86%) at 90% of the initial reduction for upper extremities and lower extremities. Noncompliant patients lost a part (33%) of their initial reduction. The incidence of infections decreased from 1.10 infections per patient per year to 0.65 infections per patient per year after a complete course of CDP.

Takeaway message:

Complete decongestive physiotherapy is a highly effective treatment for both primary and secondary lymphedema. The initial reductions in volume achieved are maintained in the majority of the treated patients. These patients typically report a significant recovery from their previous cosmetic and functional impairments, and also from the psychosocial limitations they experienced from a physical stigma they felt was often trivialized by the medical and payor communities.