

# Simplified Approach to Severe Lymphedema: What Every Vascular Surgeon Should Know

NOTES

*Byung-Boong Lee, MD, Seoul, Korea*

---

Chronic lymphedema is a clinical condition of diffuse swelling of the affected limb/region owing to lymphatic circulation disorder by the blockage of lymph-transporting/-collecting system. It is a steadily progressive condition affecting the entire surrounding soft tissue and results in potentially life-threatening conditions (eg, sepsis, lymphangiosarcoma). The surgery involving lymphnode dissection (eg, breast/ uterine cancer surgery) or radiation therapy to lymphnodes is the most common cause of secondary lymphedema in developed countries. Careful plans to prevent, if not reduce, this anticipated iatrogenic condition following the interruption of lymph nodes/lymph-collecting vessels is mandated. Vigilant surveillance to detect the latent/subclinical lymphedema is essential for early and effective management with a minimum morbidity. Once lymphedema has set in, an aggressive control with a complex decongestive-based therapy (CDT) with/without compression therapy combined is warranted at the earliest possible time. The role of reconstructive (early stage) and/or excisional surgical therapy (late stage) remains a part of multidisciplinary team management, and full integration with CD-based therapy with strict criteria of indication can deliver most effective control of the condition, either in early or late stages of lymphedema. The patient compliance to commit to lifetime maintenance of CD therapy is the most important factor in the successful management, and prevention/treatment of systemic/local infection (eg, cellulitis, erysipelas) comes next. Our experiences, at the Lymphedema Clinic, Samsung Medical Center, Seoul, Korea, between December 2002 and January 1995 with these various therapies in 1,065 patients are worth mentioning as favorable. The majority of patients (806 of 1,065) presented secondary lymphedema following cancer surgery and/or radiation therapy: 308 breast cancer and 498 cervical/uterine cancer. CDT-based treatment was implemented as basic therapy. Various surgical therapies were added in 54 patients (65 limbs) to reinforce failing CDT, when the disease progressed despite maximum therapy: venolymphatic reconstructive surgery (n = 19), free lymphnodes transplant surgery (n = 13), and excisional surgery (n = 33). Satisfactory results of CDT were highly dependent on patient compliance. Satisfactory clinical improvement following reconstructive as well as excisional surgery showed that patients' complying with postoperative CDT is the most crucial factor. Of the patients treated only with CD-based therapy, patients with good compliance (618 of 1,011) were able to prevent or minimize disease progression in the majority of cases (488 of 618), regardless of clinical stage. The presently implemented treatment regimen, therefore, is not curative. Rather, it effectively prevents disease progress in principle and produces a satisfactory outcome in the majority when the patient is compliant and maintains self-motivated home treatment following hospital-initiated care. Surgical therapy is effective only when fully integrated with CD and/or compression therapy.