

## LETTER TO THE EDITOR

Recently, I read the March 1994 volume 27, No. 1 of *Lymphology* and specifically the Editorial by Prof. Michael Földi from Germany. In general I agree with much of what Dr. Földi has to say. For example, there is little or no role for use of diuretic drugs in the management of lymphedema. Moreover, premature use of elastic stockings or sleeves before the bulk of the edema fluid has been properly evacuated is certainly a recurring problem with unsophisticated practitioners. I take exception, however, to the negative characterizations about the use of sequential pneumatic compression in the extremities of patients with peripheral lymphedema.

Our protocol consists of combining sequential gradient pumping with the appreciation that only after a notable decrease in size of the limb is obtained are compression garments prescribed. When sequential gradient pumping is combined with ace wraps (which correlates roughly with his vigorous bandaging technique), we obtain satisfactory results. Because our clinical experience is primarily with children who are naturally active physically, we have not prescribed remedial gymnastics.

In children followed for several years, we have found that continued attention to meticulous skin care (as Dr. Földi mentioned), consistent use of a pneumatic pump system in the evening, compression garments that are custom-made to fit with an in-built pressure gradient whereby the stockinette provides greater pressure distally than proximally effectively controls lymphedema.

Overall, it seems that the common denominators in lymphedema management involve meticulous skin care, avoidance of cellulitis, a commitment to wrapping-bandaging and either pneumatic pumping or massage to diminish the sequestered fluid, and careful attention to wearing of an appropriate elastic stockinette or sleeve.

I disagree with the broad characterization that sequential gradient pumps promote

persistent genital or scrotal edema. Whereas some patients have lymphedema that involves the genitalia, we have yet to find in the subset of pediatric patients an increase of genitalia edema after pneumatic compression pumping of the legs where such edema did not exist before treatment. Conversely, in a few children with genital swelling, the edema regressed after therapy (1). These occurrences still require a full explanation. For balance to Dr. Földi's Editorial, I refer readers also to the following articles (2-4).

In summary, whereas I agree with Dr. Földi that scientific truth cannot be assessed by vote of the majority, we, at the same time, need to recognize that there is some validity and perhaps conformity in how these patients are treated in other clinics. Indeed, even diverse treatment modalities may turn out to share physiologic similarities. Finally, I am still unsatisfied that there are enough data on any number of clinical interventions in patients with peripheral lymphedema to feel confident about which treatment is optimal. We must await more basic understanding of lymphatic function and unbiased trials of treatment options worldwide.

### REFERENCES

1. Alexander, MA, ES Wright, JB Wright, et al: Lymphedema treated with a linear pump: Pediatric case report. *Arch. Phys. Med. Rehab.* 64 (1983), 132-133.
2. Klein, MJ, MA Alexander, J Wright, et al: Treatment of adult lower extremity lymphedema with the Wright linear pump: Statistical analysis of a clinical trial. *Arch. Phys. Med. Rehab.* 69 (1988), 202-206.
3. Richmond, DM, TF O'Donnell, A Zelikowski: Sequential pneumatic compression of lymphedema. *Arch. Surg.* 120 (1985), 1116-1119.
4. Pappas, CJ, TF O'Donnell: Long-term results of compression treatment for lymphedema. *J. Vasc. Surg.* 4 (1992), 555-561.

**Michael A. Alexander, M.D.**  
**Thomas Jefferson University and**  
**A.I. duPont Institute**  
**Wilmington, Delaware USA**