THE IMPORTANCE AND PRACTICAL ASPECTS OF TRACKING AND DOCUMENTING LIMB VOLUME CHANGES

Nancy Sims, RN, BSN, CLT-LANA, Harvey N. Mayrovitz, PhD, Nova Southeastern University, Fort Lauderdale, FL

Purpose/Rational:
Limb edema/lymphedema associated with chronic venous insufficiency, venous ulcers, following breast, gynecological or prostrate surgery, and other conditions, are treated with compression bandaging. Documentation of therapeutic progress is important to the patient, therapist, referring physician, and to "bill-payers".

Objective:
Although there are several methods to measure sequential changes in limb volume (e.g. water displacement and photoelectric scanners), the simple tape measure used to measure limb circumferences is the most practical method in most clinical settings. However, it is a fairly common practice to measure and report only changes in circumference at selected sites and not to actually calculate limb volume. In cases of unilateral limb involvement, the uninvolved limb is frequently not, or insufficiently measured. These practices, which in part are due to inadequate available information, yield limited and frequently misleading information about limb volume changes and the effectiveness of treatment.

Outcomes:
To address these issues, a detailed, standardized measuring protocol was developed that addresses key methodological issues including initial measurement procedures, importance of positioning, segment selection, measuring technique, repeatability and documentation. Limb volume calculations for a variety of conditions have been implemented into an easy to use computer program that provides time saving graphical tracking, simplified record keeping and automated documentation.

Conclusion:
A standardized protocol for measuring limb volumes provides objective documentation of the effectiveness of compression therapy.

Financial Assistance/Disclosure:
No financial assistance has been received for this project.