Topic
Survey of Lymphedema Patients Treated with Comprehensive Decongestive Physiotherapy (CDP)

Authors
Jane Ratcliff Hill, PhD, PT, Certified Lymphedema Therapist, Upledger Institute*
Rhonda King Jarvis, LPTA, Level II Skills Upledger Lymphedema Training

*Bruno Chikly, MD, DO (hon.) is The Upledger Institute’s Lymphedema Therapy Training and Program Director.

Definition
Comprehensive Decongestive Physiotherapy (CDP) is a labor-intensive procedure that includes manual lymph drainage, compression bandaging, therapeutic exercise, the fitting of an appropriate compression garment, skin care and precautions and education of the patient and family member/friend/caregiver in all of the above.

Problem
Compliance of the patient as a major issue in long-term treatment management is well documented. The skills of manual lymph drainage and compression bandaging are moderately difficult to perform effectively.

This survey addressed the following questions:
1. Can a patient and/or family member/friend/caregiver effectively perform manual lymph drainage and compression bandaging?
2. Can a patient obtain and properly utilize a compression garment?
3. Can therapists effectively perform the treatment of CDP as well as teach the required skills to the patient and family member/friend/caregiver within the approved number of treatment visits?
4. Do patients and/or their support person continue the lymphedema therapy after completion of the visits with the therapists?

Methodology
During March 2003, a survey was conducted of lymphedema patients referred between August 2001 and January 2003 to the physical therapy department of Johnston Memorial Hospital (JMH) in Abingdon, Virginia. The physical therapy department is a general care outpatient/inpatient department and the treating therapists in the survey are general care therapists who do not exclusively treat lymphedema patients.

The sample size was 33. Of these 33 patients, 26 were cancer patients and four were venous stasis patients. All patients received CDP as outpatients. There were 28 females and five males. The age range was 43-85. Per decade of life, the number of patients in the sample was as follows: 40 (4), 50 (10), 60 (7), 70 (6), 80 (6). Eighteen different physicians from five different specialties referred the patients. Family practice physicians referred the most patients.

Criteria for subject selection for the survey were:
- Referred to the JMH physical therapy department for lymphedema therapy.
- All patients referred for lymphedema therapy regardless of the insurance status.
- Patients referred primarily for wound care with coexistent edema not accepted into the survey due to not receiving the entire procedure of CDP.

Survey
The survey consisted of the following:

1. A retroactive chart review with the following pre-selected questions:
   - Age
   - Referring physician
   - Number of visits
   - Any extension of visits required?
   - A support person available?
   - Patient/support person able to perform manual lymph drainage?
   - Patient/support person able to perform compression bandaging?
   - Patient correctly demonstrated therapeutic drainage exercises?
• Patient able to obtain a day garment?
• Patient able to obtain a night garment?
• Patient correctly able to discuss skin care and precautions to avoid infections and swelling

2. A telephone interview with the patient with the following pre-selected questions:
• Are you continuing your manual lymph drainage (MLD)? How often? Do you perform the MLD by yourself or with help?
• Are you doing your compression bandaging? When? How often?
• What are you using for night compression?
• Are you wearing your day compression garment? Any trouble getting it on or off? Does someone help you? Any problems with the garment? How long do you wear the garment?
• Are you doing some drainage exercises? What exercises? How often?

Results
1. All but two patients were successful in effectively performing CDP. Of these two patients, one had no family or friend to help her with the skills and the other did not demonstrate the determination to perform the skills even though the family member did.

2. All patients were able to obtain and correctly utilize a compression garment for wear during the day. However, four patients lacked the funds necessary to purchase a garment for daywear and thus temporary elastic garments or donated garments were provided.

Only one patient was able to afford a night garment which replaces the necessity of nightly bandaging the limb. Compression is recommended 20-22 hours a day. The night garments vary in price from $400 - $1600.

3. Therapists completed the lymphedema treatments with good outcome as well as the education of the patient and support person within the approved number of insurance visits. In only three patients, extension of visits was needed. The range of visits was 1 - 49 with an average number of visits of 12.

4. All patients reported continuing their treatment. At the time of the survey (3/03), the period of time since completion of treatment varied from two years to one month. Many had adapted the protocol to fit their lifestyle demands. None was experiencing increased chronic edema. All were regularly seen by their physicians for follow up visits.

Conclusions
1. 94% of the patients and their family/friend/caregiver could effectively perform manual lymph drainage and compression bandaging.

2. 100% of the patients were able to obtain a day compression garment. 12% of these patients needed free (donated or temporary) day compression garments.

Only 1 of 33 patients (3%) was able to obtain a night garment to replace the nightly compression bandaging.

100% of the patients or their support person were able to properly don and doff the compression garment.

3. In 91% of the patients (30 of the 33 patients), the lymphedema therapists were able to effectively treat the patients and effectively train the patient and their support person within the initially approved number of insurance visits. Three patients required requests for extension of visits. The three requests were approved. Thus 100% of the patients were treated within the insurance approved visits.

4. Compliance of the patient and support person during the treatment and after the completion of the treatment was excellent.

Future Work/Observations
1. Conduct a survey of lymphedema patients once per year utilizing a similar survey methodology. The current sample size is small. Determine if the positive CDP results continue with other
patients.

2. For easier compliance, do not start CDP until after completion of chemotherapy treatments due to the patient's fatigue and often nausea associated with the chemotherapy. The patient is unable to fully participate in the required steps of CDP. Daily CDP appointments conflict with the chemotherapy appointments.

3. Patients who live further than one hour from the physical therapy clinic should make arrangements to stay near the clinic during the first two weeks of treatments. The CDP treatments are daily and intensive and often tiring. The travel depletes the patient's strength and affects appointment compliance.

4. Continue to search for less expensive alternatives for night garments.

5. Pursue Medicare reimbursement for bandages and compression garments for lymphedema patients.

6. Arrange a three-month post CDP follow up physical therapy visit even if this must be conducted at no charge to the patient. The survey of compliance can be incorporated into this visit.

7. Obtain a digital camera for pre and post photos.

8. Always obtain 8 cm volumetric measurements pre and post CDP. Appropriate time must be allotted in the treatment schedule for this activity.

References