

Practical Considerations for Therapy and Functional Restoration for Individuals with Lymphedema and Morbid Obesity

Adapted from 2014 NLN Presentation Therapy and Functional Restoration for Individuals with Lymphedema and Morbid Obesity

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Morbid obesity is one of the significant challenges facing medicine worldwide and is linked to increased risk for developing lymphedema and/or making the treatment of lymphedema more difficult. The presence of significant comorbidities such as sleep apnea, hypertension, diabetes, and pulmonary hypertension adds to the challenge of treating lymphedema. Functional impairments, environmental constraints, and lack of resources hinder both the patient and therapist from carrying out their ideal plan of care. The challenging issues related to the patient with lymphedema and morbid obesity can reach beyond the typical locus of control of both the patient and lymphedema therapist. Often the resources available to many clinics, hospitals, and communities are limited and difficult to access. Therefore, effective treatment requires careful planning and coordinated services with many other aspects, including caregivers, insurance, durable medical equipment (DME), transportation, and medical specialties. Treatment strategies need to focus on the larger array of issues such as weight loss, diet/healthy eating, functional mobility, hygiene/self-care, compression garments, clothing/footwear, and limited physical activity. Individuals often need significant physical, financial, psychosocial, and case management resources to be

successful. The “team approach,” while ideal, is often fragmented and not available to many therapists and/or patients. The ability of clinics to provide appropriate facilities and equipment to safeguard the patient with lymphedema and morbid obesity during their treatment is limited at best. Specialty centers that have the necessary infrastructure to manage patients with morbid obesity and lymphedema are often geographically inaccessible and very limited in number.

Unique program guidelines

In the July-September 2007 issue of *LymphLink*, Dr. Caroline Fife wrote the cover article, “Morbid Obesity and Lymphedema Management.” She clearly outlined the challenges faced by lymphedema clinics, but more importantly, emphasized the need for clinics to set guidelines for the safe, effective evaluation and treatment of the patient with lymphedema and morbid obesity.¹ These guidelines are still an excellent starting point for any treatment facility that has not established clear and consistent guidelines for participation.

Practically speaking, the starting point for identifying any weight limit starts with a thorough assessment of the current clinic equipment. The treatment table and waiting room furniture weight limits are of

primary concern. Many hospital facilities have a patient safety committee that can help therapists establish these safety guidelines in a clear, concise fashion to avoid any sense of arbitrary or discriminatory treatment. Once a weight limit is established, it is important to have a resource list of clinics that are equipped to handle patients with needs exceeding those set by the facility.

Practical concerns

A variety of practical concerns should be evaluated at each clinic so that staff can give patients accurate information about the clinic’s accessibility and features. Common items to address include: weight limits of treatment tables/waiting room furniture, accessible bathroom facilities and/or shower facilities, cost and access to indoor/outdoor parking, valet parking and drop-off points for mobility/transport services, and distances from these points into the clinic. Our clinic created an intake form based on our specific limitations/capabilities to help patients decide if our clinic would be a good fit for them. For example, we had a patient who chose our clinic because we have an indoor parking garage that only costs \$1.00, while the other clinic has open air/outdoor parking that costs \$4.00. This can be an issue for patients

having to deal with inclement weather or financial issues. We also clearly explain to patients that the shortest path to our clinic is 250 feet, which they need to be able to negotiate. These environmental concerns are not typically considered when scheduling patients; however, a patient's compliance can be affected by such practical issues as local traffic patterns, parking cost/ location, and ease of access in the facility. A clinic with knowledge of these issues is actually creating a culture of success for their patients.

Being realistic

The time and energy it takes patients with morbid obesity to perform activities of daily living (ADLs) and other everyday tasks can often be underestimated. Having reasonable expectations for what a patient can do in a day is important for creating a realistic treatment plan. Set short term goals for basic tasks, measure the exact times it takes for patients to do each of these tasks, and assess where that leaves them in the bigger picture. If a patient cannot meet basic goals, such as having clean bandaging material or proper hygiene, it is highly unlikely they will be able to meet more complex, long-term goals. A patient's failure to reach these basic goals need not be a judgment that they are non-compliant, as it could be indicative of a larger problem such as no access to laundry facilities, lack of energy, or inability to get assistance with these tasks. By clearly assessing any issues, identifying barriers, and offering potential solutions, a plan can be established that may start with a less intense treatment strategy that grows into the intensive phase as a patient's skills, habits, and resources change. Typical barriers include:

1. Inability to perform daily hygiene, self-care
2. Lack of financial resources for bandaging material, garments, bandaging alternatives
3. Inadequate transportation
4. Decreased mobility affecting access into clinic, toileting during/after treatments, bed mobility
5. Inadequate home support

Checklists can be created that clearly define tasks that a patient needs to

complete to reach each goal. Identifying the rationale and expected time to complete the task allows the therapist and patient to monitor progress toward the goals. Competency of each task can be clearly documented, and patients can gain confidence with each step. Many of the tasks/ goals assigned to patients are not intuitive, so these clear steps, rationales, and timeframes can guide a patient in the direction of new healthy habits. Unless the tasks are clearly defined and measured, patients and therapists can otherwise overestimate the capability and competency while performing basic tasks. This can lead to an unclear sense of why the treatment is or is not working. A well-intentioned therapist may actually be doing more of the treatment than they realize, leaving the patient without the pre-requisite skills for successful self-management.

Managing fatigue and other issues

Many patients with lymphedema and morbid obesity are relatively homebound for long periods of time. They are often surprised by the energy required to get to and from the treatment facility. Patients using transportation services often have to be ready for the bus/taxi/van to pick them up hours before or after their appointment. A single therapy appointment could actually require an additional 2 to 3 hours of time before and/or after the scheduled therapy appointment. For some, treatment may resemble a full-time job. Awareness of a patient's transportation arrangement is critical, as significant comorbidities can make extended periods of time away from the home unsafe, uncomfortable, or unmanageable. A patient arriving upset or exhausted by a challenging and/or prolonged transportation situation may not be prepared to jump right into treatment. Patients often forgo necessary medications, meals, and toileting to get to appointments on time. Diabetic emergencies, incontinence, hunger, and fatigue are just a few of the consequences. Planning ahead can prevent many of these issues from occurring. Teaching patients how to monitor their levels of exertion with a 0-10 modified Borg scale (rating of perceived exertion scale) can help document progress toward goals and possibly explain why a patient is not tolerating treatment.

Addressing personal hygiene and incontinence

Having a frank discussion about hygiene and toileting needs is another crucial first step toward successful treatment. Personal hygiene can be a significant challenge for patients with morbid obesity and lymphedema. Meticulous skin and nail care is a cornerstone of lymphedema management. Patients are often reluctant to discuss issues such as the inability to perform self-care after toileting, incontinence, or accidental soiling of clothing/bandages or treatment equipment. An empathic, clinical approach to sensitive issues builds confidence for the patient. Clinicians can problem solve challenging hygiene issues with their knowledge of assistive devices, adaptive equipment, and patient/caregiver education. Planning to have extra supplies, clothing, or bandaging materials is important if a patient has ongoing continence issues. Patients and caregivers must be given clear instructions to remove soiled bandages to prevent infections and urine burns. Early treatment sessions must focus on demonstrating competence with skin care.

Modified treatment techniques and treatment plans

For patients who are unsure about their ability to tolerate treatment, starting with a 2 week trial is a good way to assess their readiness to proceed. Demonstrating compliance with skin care, bandage management, and tolerating bandaging of the lower legs is a good goal during the 2 week trial. Reassure patients that developing new habits takes time, especially if a patient seems resistant to the care plan, arrives late for appointments, or does not have the necessary supplies ready. If the trial does not work, the patient will still have some knowledge of what they can work on until they are ready to commit to treatment. Ensure family/caregivers are also learning at the same pace and remain committed to the care plan. Patients must still be able to manage their other comorbid conditions during intensive treatment.

Bandaging and garment fitting

Patients with morbid obesity and lymphedema pay significantly more for bandaging supplies, garments, and compression alternatives. Estimating

the cost for these supplies and garments is necessary prior to committing to treatment. Arranging for fitters to see patients in the clinic is of utmost importance, as the measurements, fittings, and education are often very complicated and require the simultaneous input from the patient, fitter, and therapists. Have a contingency plan if garments don't fit properly or the patient cannot don and doff the garments independently (or with assistance from family/caregivers). It is often necessary to monitor vital signs during garment donning/doffing. Multiple visits are often required to gain proficiency with managing the transition between day garments and night garments/bandaging. Consider mixing and matching various garment styles, manufacturers, or materials if it promotes compliance and ease of donning/doffing. Have appropriate adaptive/assistive devices for donning/doffing available. Many patients will need a variety of strategies to adequately manage their lymphedema and morbid obesity. They will need new garments more frequently if ongoing weight loss occurs. Establishing strong relationships between all involved parties will ensure ongoing success.

Patient Presentation

Patient is a 65 year-old morbidly obese patient (BMI >60 kg/m²) originally assessed at our clinic for bilateral lipo-lymphedema and venous insufficiency. She reported a history of edema and weeping ulcers on the left leg for more than 10 years. Due to the weeping wounds, pain, and swelling in her lower legs, she has been unable to wear regular footwear and/or leave her home. She has not had treatment due to a lack of insurance coverage and living alone, but recently moved in with her daughter. The patient also has hypertension, severe osteoarthritis of the knees, morbid obesity (BMI > 60), history of breast cancer, and macular degeneration. She had a significant history of cellulitis.

Her barriers to care included the following:

Limited funding: The patient had no secondary Medicare coverage, so she had to pay the 20% co-insurance for her treatment. She had to utilize charity funding for garments as she had no DME benefits. She chose to learn bandaging to save money and utilized Velcro binders and grey

foam at night and a combination of garments and binders for day wear.

Transportation: Her daughter had a full-time job with limited ability to miss work hours, forcing the patient to sit in the hospital lobby for upwards of 4 to 6 hours on a typical treatment day.

Mobility: The patient had significant difficulty managing the stairs in her house, especially during winter weather, as her preferred footwear was a non-slip hospital sock for the first 2 months. She did progress to a plastic clog-style shoe. She required assistance to lift her legs onto the treatment table for the first month. She required extra time for toileting and was concerned about incontinence.

Treatment:

The patient was treated with modified complete decongestive therapy. The original intensity and time frame was twice a week for two weeks, which was a trial to assess if the patient felt she was able to continue with a more rigorous schedule. She initiated a modified intensive phase consisting of 1 to 3 visits per week that lasted for three months. The patient was seen for a total of 29 visits between December and April. Treatment began approximately one month after the evaluation, with the patient being taught skin care after seeing her primary care physician for a fungal infection prior to starting actual treatment. She obtained her supplies, set up transportation with her daughter, and practiced going up and down her steps in anticipation of starting her treatment. She opted to be dropped off at the valet parking area, as it was the shortest path to our clinic (250 feet). Approximately one month into treatment, she had a bout of cellulitis

and was hospitalized at our facility for 3 days. Her treatment was re-started immediately after discharge.

Outcome:

Her left lower leg decreased by 41 cm at the ankle (from 77 cm to 39 cm) and the right ankle decreased 24 cm. Her left calf decreased 19 cm and the right calf lost 10 cm. She also lost some girth in the knees and thighs, though we did not aggressively treat these areas. She was able to perform her self-care management, including skin care, bandaging, and donning/doffing knee high custom compression garments with binders and bandages. This hybrid solution was most effective and comfortable for the patient, as her skin was still fragile from years of stress. She was actively working on a weight loss plan and planning to see the orthopedic surgeon regarding her severe knee arthritis. Future goals include weight loss, treating her thighs, and planning to have total knee replacements. The patient was able to independently negotiate her stairs, wear slip-on shoes for the first time in 10 years, and wear regular plus-size clothing. She has no further drainage and the pain substantially decreased.

References

1. Fife, C. Benavides S. Morbid obesity and lymphedema management. *LymphLink*. 2007; 19(3): 1-3.

