

The Occupational Therapist's Role in Lymphedema Treatment and Self-Management

Occupational Therapists are university trained and licensed healthcare rehabilitation professionals, with specialized clinical skills to assist Lymphedema clients in the effective treatment and management of this chronic medical condition. The World Federation of Occupational Therapy (WFOT, 2009) defines Occupational Therapy as the following:

“Occupational Therapy is a profession concerned with promoting health and well-being through occupation. The primary goal of Occupational Therapy is to enable people to participate in the activities of everyday life. Occupational Therapists achieve this outcome by enabling people to do things that will enhance their ability to participate or by modifying the environment to better support participation. Occupational Therapists have a broad education that equips them with skills and knowledge to work collaboratively with individuals or groups of people who have an impairment of body structure or function due to a health condition, and who experience barriers to participation.”

Occupational Therapists (OT's) specialize in addressing how medical concerns may impact our client's ability to return or engage in their regular daily living activities including personal care, work, leisure, family and social activities. Published healthcare research suggests Lymphedema clients often report a negative impact on their daily activities (Ramos, O'Donnell, and Knight, 1999; Woods, Tobin, and Mortimer, 1995). OT's academic training and clinical

experience provides the appropriate healthcare background to take a holistic approach to care by adapting treatment recommendations to consider their clients entire medical picture and functional concerns. In addition, recognized conservative Lymphedema treatment, Complete Decongestive Therapy (CDT), includes long term client self-management as key to care for this chronic condition (The Diagnosis and Treatment of Peripheral Lymphedema, 2009). To effectively control and manage Lymphedema over time, clients must work with their therapist to learn and integrate strategies, techniques, and supplies including: routine use of graduated compression garments, skin care, exercise, and self-bandaging, into their everyday activities. As OT's are rehabilitation specialists trained to assess and help their clients address medical concerns and the impact on their regular daily activities, OT's trained in CDT are ideally suited to work with Lymphedema clients in integrating education, Lymphedema self-management, and addressing daily living concerns into treatment sessions.

One important component of CDT is integrating client self-management education into treatment sessions. Vignes, Porcher, Arrault, and Dupuy (2007) comment on the importance of client compliance with routine use of graduated compression garments and low stretch self-bandaging as crucial to stabilize Lymphedema volume over time. Clients who effectively integrate self-management strategies may help expedite the rehabilitative process, improve clinical outcomes, and reduce the frequency of required follow-up healthcare visits to address Lymphedema-related concerns. Unfortunately, Lymphedema clients often experience several challenges implementing these recommended

self-care management strategies. Mayoritz (2009) identified three commonly reported client barriers: mobility restrictions, location of Lymphedema, and the daily time required to complete care. Chronic Lymphedema may contribute to clients developing physical impairments including: impaired strength, endurance, dexterity, and mobility, contributing to difficulties with Lymphedema self-management (Crane (2009); Helms, Kuhn, Moser, Remmel, and Kreienberg (2009)). The OT's skills in activity analysis will facilitate addressing a client's challenges through introducing adaptive strategies, equipment and biomechanical education to promote client independence. OT's may also collaborate with other health professionals such as physiotherapists to address these issues. A client's ability to solve these concerns may be the difference between managing their Lymphedema independently, versus having to rely on routine caregiver or family assistance.

Client's effective self-management may contribute to a reduction in secondary complications including the risk of serious infection requiring emergency department visits or hospitalization (Williams, Franks, and Moffatt, 2005). Dicken, Ko, Lerner, Klose, and Kosimi (1998) found that incidence of infections decreased from 1.10 infections per patient per year to 0.65 infections per patient per year after a course of intensive therapy followed by consistent client self-management. The OT needs to consider their client's abilities with bathing, skin care, wound care, infection awareness, and ability to don and doff appropriately fitted graduated compression garments. The OT may incorporate

client appropriate adapted strategies and equipment to support improved client performance.

Research suggests Lymphedema onset poses a significant risk of psychological morbidity with clients' ability to engage in meaningful, purposeful, activities of daily living. McWayne and Heiney (2005) report clients may note symptoms of frustration, distress, depression and anxiety with onset. The study suggests clients also report a perceived loss of independence with leisure and vocational pursuits. The OT has a role to provide education, treatment, support and case coordination, assisting our clients to access appropriate referrals to other healthcare professionals, to assist clients with improving psychosocial status and to try and return clients to meaningful activities.

Evidence suggests Lymphedema clients often report difficulties in returning to regular daily living activities. McWayne and Heiney (2005) report some Lymphedema clients have complained of difficulties in their ability to complete basic self-care activities including dressing and bathing. Radina and Armer (2001) report clients have modified routine home management tasks to reduce flare up of symptoms. Ridner (2009) reported Lymphedema clients may reduce their social and leisure activities. In my clinical experience, clients have reported flare up of Lymphedema after completing routine homemaking activities including vacuuming and cleaning, and during a wide range of leisure and social pursuits including: golfing, playing with children/grandchildren, knitting, or utilizing a computer. Lymphedema clients may also experience difficulties with return to vocational activities. Soran et al. (2006) found the level of hand use based on

vocational requirements was a statistically significant risk factor in Lymphedema onset. Return to work concerns cited by clients in my clinical practice include: decreased workplace durability, an increase in Lymphedema-related pain symptoms, and perceived limb volume increases. Occupational Therapy completion of an ergonomic assessment and job demands analysis provides opportunity to address workplace set up, work conditioning, and work behaviors to support a successful return to work. Overall, a review of clinical practice assessment outcomes in 2008 while working in my Calgary outpatient clinic suggested 60% of clients reported at a minimum, one regular daily living activity impacted since developing Lymphedema. Many clients reported multiple daily living activities impacted by the onset of Lymphedema. These specific concerns were subsequently incorporated into our treatment plan and interventions. As both research and clinical evidence suggests, Lymphedema clients routinely experience difficulties with daily living activities, and OT's are trained to help clients meet these challenges.

Lymphedema management is an under recognized healthcare issue for Canadians. In 2003 I opened an interdisciplinary rehabilitation clinic in Calgary, without public funding, to meet an unmet need for Lymphedema clients in southern Alberta. Positive clinical outcomes led to partial public funding in 2006 and Calgary's Tom Baker Cancer Center launching an internally operated, publically funded program in 2009. My vision for B.C. is to partner with stakeholders including clients, healthcare providers, healthcare leaders, vendors, academic centers, and government funding agencies, to offer a comprehensive,

accessible healthcare service to all British Columbia residents who develop Lymphedema from primary or secondary causes. My hope is that this program can be a model for services to Canadians nationwide. I am currently planning to open an outpatient clinic in 2012. In the interim, I am offering community homecare based services. Please visit our clinic website:

www.canadianlymphedema.com to learn more about my clinic experience and treatment services.

In summary, as Lymphedema is a chronic medical condition that may concurrently negatively impact a return to daily living activities, and requires clients to integrate self-management strategies into daily life, Occupational Therapists may play an important role as part of a healthcare team in providing assessment and treatment services to meet the needs of this under-served Canadian population.

References:

- Crane, P. (2009). Management of sacroiliac dysfunction and lower extremity Lymphedema using a comprehensive treatment approach: A case report. *Physiotherapy Theory and Practice*, 25(1), 37-43.
- Dicken, S.C., Ko, R., Lerner, G., Klose, G., & Cosimi, A.B. (1998). Effective Treatment of Lymphedema of the Extremities. *Arch. Surg.*, 133, 452-458.
- Helms, G., Kuhn, T., Moser, L., Remmel, E., & Kreienberg, R. (2009). Shoulder-arm morbidity in patients with sentinel node biopsy and complete axillary dissection – data from a prospective randomised trial. *EJSO*, 35, 696-701.
- The Diagnosis and Treatment of Peripheral Lymphedema. 2009 Consensus Document of the International Society of Lymphology (2009). *Lymphology*, 42, 51-60.
- Mayrovitz, H. N. (2009). The Standard of Care for Lymphedema: Current Concepts and Physiological Considerations. *Lymphatic Research & Biology*, 7(2), 101-108.

- McWayne, J., & Heiney, S. (2005). Psychologic and Social Sequelae of Secondary Lymphedema. *Cancer*, 104(3), 457-466.
- Radina, M.E. & Armer, J. M. (2001). Post-Breast Cancer Lymphedema and the Family: A Qualitative Investigation of Families Coping With Chronic Illness. *Journal of Family Nursing*, 7, 281-299.
- Ramos, S.M., O'Donnell, L.S., & Knight, G. (1999). Edema Volume, Not Timing, Is the Key to Success in Lymphedema Treatment. *The American Journal of Surgery*, 178, 311-315.
- Ridner, S. (2009). The Psycho-Social Impact of Lymphedema. *Lymphatic Research & Biology*, 7(2), 109-112.
- Soran, A., D'Angelo, G., Begovic, M., Ardic, F., Harlak, A., Wieand, H., et al. (2006). Breast Cancer-Related Lymphedema-What Are the Significant Predictors and How They Affect the Severity of Lymphedema? *The Breast Journal*, 12(6), 536-543.
- Vignes, S., Porcher, R., Arrault, M., & Dupuy, A. (2007). Long-term management of Breast cancer-related Lymphedema after intensive decongestive Physiotherapy. *Breast Cancer Res Treat*, 101, 285-290.

Williams, A.F., Franks, P.J., & Moffatt, C.J. (2005). Lymphoedema: estimating the size of the problem. *Palliative Medicine*, 19, 300-313.

Woods, M., Tobin, M., & Mortimer, P. (1995). The psychosocial morbidity of breast cancer patients with lymphoedema. *Cancer Nursing*, 18(6), 467-471.

World Federation of Occupational Therapists. (2009). What is Occupational Therapy? Retrieved November 7, 2009, from <http://www.wfot.org/information.asp>