

**Title:**

A Prospective Evaluation of Health-Related Quality of Life in Lymphedema Treatment

**Chia Yu Lin, MS**

Department of Nursing, Chang Gung Memorial Hospital and Chang Gung University, Taoyuan, Taiwan  
Hsueh-Erh Liu, PhD

Department of Nursing, College of Nursing, Chang Gung University of Science and Technology, Tao-Yuan, Taiwan

**Session Title:**

Evidence-Based Practice Poster Session 2

**Slot (superslotted):**

EBP PST 2: Saturday, 29 July 2017: 12:00 PM-1:30 PM

**Slot (superslotted):**

EBP PST 2: Saturday, 29 July 2017: 2:45 PM-3:30 PM

**Keywords:**

lymphedema, quality of life and vascularized lymph node transfer

**References:**

Ridner, S. H., Fu, M. R., Wanchai, A., Stewart, B. R., Armer, J. M., & Cormier, J. N. (2012). Self-management of lymphedema: a systematic review of the literature from 2004 to 2011. *Nurs Res*, 61(4), 291-299. doi: 10.1097/NNR.0b013e31824f82b2

Wanchai, A., Beck, M., Stewart, B. R., & Armer, J. M. (2013). Management of lymphedema for cancer patients with complex needs. *Semin Oncol Nurs*, 29(1), 61-65. doi: 10.1016/j.soncn.2012.12.001

Shigaki, C. L., Madsen, R., Wanchai, A., Stewart, B. R., & Armer, J. M. (2013). Upper extremity lymphedema: presence and effect on functioning five years after breast cancer treatment. *Rehabil Psychol*, 58(4), 342-349. doi: 10.1037/a0034657

Rodrick, J. R., Poage, E., Wanchai, A., Stewart, B. R., Cormier, J. N., & Armer, J. M. (2014). Complementary, alternative, and other noncomplete decongestive therapy treatment methods in the management of lymphedema: a systematic search and review. *PM R*, 6(3), 250-274; quiz 274. doi: 10.1016/j.pmrj.2013.09.008

**Abstract Summary:**

Vascularized lymph node flap transfer was the flap of choice for lower extremity lymphedema. Although physical rehabilitation is important for lymphedema treatment, there is no standardized procedure for different stage lymphedema. Nurses should update knowledge at the same time.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Lymphedema treatment method	Describe content providing to learner to meet objective
identify lymphedema grading	Describe content providing to learner to meet objective

**Abstract Text:**

## Background

The vascularized lymph node flap transfer was the flap of choice for lower extremity lymphedema. Although physical rehabilitation is important for lymphedema treatment, there is no standardized procedure for different stage lymphedema. This study was conducted to investigate the vascularized lymph node transfer (VLNT) and Complete Decongestive Therapy (CDT) long term result in lymphedema.

## Methods

An IRB-approved prospective study was performed of patients who underwent vascularized lymph node transfer for symptomatic upper (ULL) or lower limb (LLL) lymphedema. Patients who had either submental or groin VLN transfer for upper or lower limb lymphedema were isolated. Outcomes were assessed using improvement of circumference reduction, decreased number of episodes of cellulitis and health-related quality of life (HRQOL) metric.

## Result

A total 138 patients were identified and met inclusion criteria. More identified patients underwent VLN (50.7%) as compared to CDT (49.3%) for lymphedema. Patient age, BMI, tobacco use, diabetes, hypertension, lymphedema grading and lymphedema reason were similar between groups ( $p=0.4$ ;  $p=0.2$ ;  $p=0.6$ ,  $p=0.5$ ,  $p=0.5$ ,  $p=0.7$ ,  $p=0.7$ , respectively). Circumference reduction was higher in the VLN group (35.3%) as compared to the CDT group (23.4%) and post-operative episodes of cellulitis was higher in the CDT group ( $4 \pm 1.5$  times per years) as compared to the VLN group ( $1.4 \pm 1.3$  times per years) during the 12-month follow-up evaluation, have statistical significance ( $p=0.03$  and  $p=0.04$ , respectively). In HRQoL part, overall quality of life and function, body appearance, symptom, and mood domains were all significantly improved in the VNL group ( $p<0.01$  within each domain).

## Conclusion

The vascularized lymph node transfer and complete decongestive therapy VLN and are both valuable treatment options in treating lymphedema especially VLN transferred in severe lymphedema (Grade III to IV) was more effective. These improvements are mirrored by improvements in patient-reported outcomes and quality of life measures. These changes can be seen 12 month post-operatively and continued steady improvement can be expected.