Innovative Lymphedema Management Program (LMP) in TWH for Breast Cancer Patients to improve service efficiency and effectiveness

Leung SY (1), So E (1), Wong S (1), Kwong A (2), Suen D (2)
(1) Physiotherapy Department, Tung Wah Hospital (2) Department of Surgery, Queen Mary Hospital / Tung Wah Hospital

Introduction
Lymphedema is one of the most significant complications after breast cancer surgery. The Physiotherapist, a certified lymphedema therapist, introduced the Complete Decongestive Therapy (CDT) in TWH since 2011. CDT is the evidence-based international gold standard for treating lymphedema. The components include Manual Lymph Drainage, compression bandaging, remedial Exercise, meticulous skin and nail care, and instructions in self-care. An innovative structural Lymphedema Management Program (LMP) was established in Jul 2012 that patient empowerment was highly emphasized with specific goal in each session.

Objectives
(1) minimize patients' suffering (2) better use of resource (3) improving the effective use of treatment sessions

Methodology
Subjects with lymphedema were recruited in non-structural Prior program (PP) (Jan 2011- Jun 2012, 18 months) and structural LMP (Jul-Dec 2012, 6 months). The additional inclusion criteria of LMP were (1) required treatments on all 5 CDT components (2) agreed to perform self-management. Outcome measures of LMP were compared to the PP in (i) waiting time (from initial assessment to the 1st session of treatment) and (ii) total follow-up period required (from initial assessment to discharge date), (iii) arm circumference and (iv) satisfaction survey in LMP.

Result
27 and 5 patients were recruited in the PP and LMP respectively. The results of PP were compared against LMP. The mean waiting time reduced from 105.4 days to 30.8 days and the mean total follow-up period required decreased from 141.7 days to 69 days. Through LMP, patients could be discharged within approximately 6 sessions of treatment whereas the mean arm circumference reduction was 21.5% and the mean subjective overall improvement was 48.8%. Besides, 80% patients understood the
needs and advantages of self-management, agreed that self-management could improve lymphedema and LMP could help them. Conclusions: Since the waiting time in LMP was shortened, patients’ suffering could be minimized. As the total follow-up period required was shorter, more new patients could be treated and hence the better use of resource. Furthermore, lymphedema could be improved after approximately 6 sessions of follow-up, effective use of treatment session was achieved. However, the subject number in LMP was small, further study for the effectiveness is needed.