**Problem: Lymphedema after surgery for breast cancer**

* 23-38% - the number of women suffer from >2cm increase in upper arm circumference after axillary lymph node dissection.1

**Intervention**

- Combined physical therapy (also known as Complex Decongestive Therapy). 2,3

* + Phase 1: Manual lymph drainage, ROM exercises, Vasopneumatic compression, multi-layered bandage compression.
  + Phase 2: Compression by low-stretch elastic garments.

**Evidence**

- In a randomized, controlled trial of 120 patients, **early combined physical therapy** with an educational strategy compared with the educational strategy alone was associated with a **lower risk of secondary lymphedema 12 months after surgery for breast cancer with axillary node dissection**. The control group (education only) had a 25% incidence rate, with the early physical therapy group decreasing incidence to 7%.3 These patients were treated 3X/week for 3 weeks.

- A randomized clinical trial on the prevention of secondary lymphedema through exercises and an educational strategy **alone** has not been proven effective.4

- In a retrospective review of 250 patients, **combined physical therapy with exercises were associated with a significant reduction in lymphedema volume**.5

- While complex physical therapy is often performed “daily with treatments of more than one hour in duration for a period of four weeks”, a **modified program requiring twice-weekly treatments has also been proven effective**. For mild lymphedema and lymphedema prevention daily treatment is likely unnecessary.6

- **Early** postsurgical rehabilitation after mastectomy for breast cancer **improves shoulder mobility and functional capacity** when compared with patients who did not receive postsurgical rehabilitation. No adverse effects of rehabilitation were reported.7

**Refer**

- Early/prior to symptoms: Patients who have undergone breast surgery for breast cancer involving axillary lymph node resection.

- Late/after symptoms: Any patient with early lymphedema or shoulder ROM difficulty or pain.

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References

1. Petrek J, Heelan M. Incidence of breast carcinoma-related lymphedema. *Cancer*. 1998;83:2776-81.

2. The Diagnosis and Treatment of Peripheral Lymphedema. 2009 Consensus Document of the International Society of Lymphology. *Lymphology*. 2009;42:51-60.

3. Lacomba M, Sanchez M, et al. Effectiveness of early physiotherapy to prevent lymphedema after surgery for breast cancer: randomized, single blinded, clinical trial. *BMJ*. 2010;340:b5396.

4. Box R, Reul-Hirche H, Bullock-Saxton J, Furnival C. Physiotherapy after breast cancer surgery: results of a randomised controlled studyto minimise lymphedema. *Br Cancer Res Treat.* 2002;75:51-64.

5. Koul R, Dufan T. Efficacy of complete decongestive therapy and manual lymphatic drainage on treatment-related lymphedema in breast cancer. *Int J Rad Onc*. 2007;67:641-846.

6. Matthews K, Smith J. Effectiveness of modified complex physical therapy for lymphoedema treatment. *Australian Journal of Physiotherapy*.1996;42:323-328.

7. Wingate L. Efficacy of physical therapy for patients who have undergone mastectomies - a prospective study. Physical Therapy. 1985;65:896-900.