

# Multidisciplinary Approaches to the Management of Breast-Cancer-Related Lymphedema

Solmaz Fakhari<sup>1</sup>, Hadi Mohammad Khanli<sup>2</sup>, Babak Sabermarouf<sup>3\*</sup>

- 1. Department of Anesthesiology, Tabriz University of Medical Sciences, Tabriz, Iran
- 2. Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran
- 3. Cardiovascular Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

## Dear Editor,

Breast-cancer-related lymphedema is significant morbidity mostly observed following primary treatments for breast cancer (surgery, radiation, and chemotherapy) (1). Multiple complications might accompany lymphedema including cosmetic deformity, psychological disorders, consistent pain, and consequently decreased quality of life. Treatment mostly focuses on reducing edema and its subsequent pain; however, no definite treatment has been hitherto introduced (2). Surgical approaches in the management of lymphedema are efficient including physiologic methods (e.g. flap interposition, lymph transfer, and lymphatic bypass) and reductive techniques liposuction) (3). While the former mostly targets at reducing lymphedema through restoring lymphatic drainage, the latter aims at removing fibrofatty tissues which contribute to stasis. Microsurgical variation lymphatic bypass has gained popularity, in accumulated the lymph the lymphedematous limb is redirected. Nonsurgical approaches are also practiced in most cases. Comprehensive decongestive therapy,

consisting of skin care, exercise, special bandaging and massage, is the most frequently used non-surgical approach efficacy of which could be enhanced in combination with selfmanagement strategies (4).

Recently techniques newer have been introduced to tackle lymphedema and its associated pain. Manual lymph drainage, stellate ganglion block, acupuncture, deep oscillation, and pneumatic compression have been efficiently used in several studies. Moreover, significant short-term progress has been reported following other modalities such as low-level laser therapy (5). The complexity of breast-cancer-related lymphedema and its complications necessitates a multidisciplinary approach with the primary goal of easing the burden of the disease on the breast cancer patients. In addition, developing special guidelines encompassing these multidisciplinary approaches and providing educational and training programs for both the patients and their families seems to be pivotal.

#### **Corresponding author:**

**Babak Sabermarouf** 

Cardiovascular Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

Tel: +989143157278 E-mail: babak\_sm@yahoo.com

Received: 10-05-2013, Accepted: 17-05-2013, Published: 07-06-2013

Received: 10-05-2015, Accepted: 17-05-2015, accepted: 17-05-2015,



### **Letter to Editor**

## Advances in Bioscience & Clinical Medicine



## **Conflicts of interest**

The authors declare that they have no conflict of interest.

## References

- 1. Disipio T, Rye S, Newman B, Hayes S. Incidence of unilateral arm lymphoedema after breast cancer: a systematic review and meta-analysis. Lancet Oncol. 2013;14:500-515.
- 2. Huang TW, Tseng SH, Lin CC, Bai CH, Chen CS, Hung CS, Wu CH, Tam KW. Effects of manual lymphatic drainage on breast cancer-related lymphedema: a systematic review and meta-analysis of randomized controlled trials. World J Surg Oncol. 2013;11:15.
- 3. Chang DW. Lymphaticovenular bypass surgery for lymphedema management in breast cancer patients. Handchir Mikrochir Plast Chir. 2012;44:343-347.
- 4. Randheer S, Kadambari D, Srinivasan K, Bhuvaneswari V, Bhanumathy M, Salaja R. Comprehensive decongestive therapy in postmastectomy lymphedema: an Indian perspective. Indian J Cancer. 2011;48:397-402.
- 5. Omar MT, Shaheen AA, Zafar H. A systematic review of the effect of low-level laser therapy in the management of breast cancer-related lymphedema. Support Care Cancer. 2012;20:2977-2984.

