

■ Article

# Lymphedema Following Breast Cancer: Regions Affected, Severity of Symptoms, and Benefits of Treatment From the Patients' Perspective

Robyn Sierla, BAppSc (OT), Teresa Sze Mun Lee, PhD, BAppSc (Physio) (Hons), Deborah Black, PhD, MStat, DipEd, BSc, and Sharon Lynn Kilbreath, PhD, MCISc, BSc (Physio)



© iStockphoto.com/peepo

Limited high-quality research has focused on the efficacy of lymphedema treatments and symptomatic relief. With that in mind, the authors conducted a cross-sectional survey to describe the presentation of breast cancer–related lymphedema, treatment modalities used, and perceived effectiveness. An electronic validated questionnaire to assess the presentation of lymphedema, severity of swelling and discomfort, number of modalities tried, and the benefits gained from treatment was completed by the Review and Survey Group of the Breast Cancer Network of Australia. Thirty-five percent of participants reported the presence of lymphedema, a majority of which reported it to be mild or moderate for magnitude of swelling and for discomfort. The correlation was weak between magnitude of swelling and discomfort. Compression, massage,

and exercise were the most commonly used modalities in these patients. Notably, chest wall or breast lymphedema—about which research is lacking—was as common as hand lymphedema. Women experienced discomfort and physical changes, although the severity of the two was not related. Some benefit was reported for all modalities, but no particular modality was considered extremely helpful. Oncology nurses are ideally positioned to monitor women for early signs of swelling and to advise women on the range of treatments available.

Robyn Sierla, BAppSc (OT), is an occupational therapist in the Occupational Therapy Department at Royal Prince Alfred Hospital in Camperdown; Teresa Sze Mun Lee, PhD, BAppSc (Physio) (Hons), is a lymphedema physiotherapist at Royal North Shore Hospital in St. Leonards; and Deborah Black, PhD, MStat, DipEd, BSc, is an associate dean of staff development and Sharon Lynn Kilbreath, PhD, MCISc, BSc (Physio), is a National Breast Cancer Foundation Research Fellow and a member of the Faculty of Health Sciences, both at the University of Sydney in Lidcombe, all in New South Wales, Australia. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. Kilbreath can be reached at [sharon.kilbreath@sydney.edu.au](mailto:sharon.kilbreath@sydney.edu.au), with copy to editor at [CJONEditor@ons.org](mailto:CJONEditor@ons.org). (First submission August 2012. Revision submitted October 2012. Accepted for publication October 17, 2012.)

Digital Object Identifier:10.1188/13.CJON.325-331

Lymphedema is a chronic condition that can occur following treatment for breast cancer. Although the mechanism is not fully understood, lymphedema can be progressive. Initially, swelling is caused by interstitial accumulation of fluids and plasma proteins, which is followed by increased deposition of adipose tissue and connective tissue, as well as an increase in numbers of fibroblasts and neutrophils (Jensen, Simonsen, Karlsmark, & Bulow, 2010). Size and shape distortions of affected areas, increased risk of infection, skin changes, discomfort, and psychosocial impacts all can be significant for those with lymphedema (International Consensus, 2006). Treatment for lymphedema aims to reduce the amount of fluid and prevent additional accumulation, with the ultimate goal of halting or reversing the effects. International guidelines recommend compression, massage, skin care,

exercise, and elevation to treat lymphedema. In addition, surgical, pharmacologic, complementary and alternative medicines (CAMs), and other interventions are used (Hayes, 2008; International Consensus, 2006; Moseley, Carati, & Piller, 2007). However, research into the efficacy of those modalities generally has been of poor methodologic quality and limited in focus (Badger, Preston, Seers, & Mortimer, 2004; Karki, Anttila, Tasmuth, & Rautakorpi, 2009). In addition, attention to symptomatic relief is lacking, with outcome measures reported only on the physical changes (Devoogdt et al., 2011; Karki et al., 2009; Torres Lacomba et al., 2010). Research also is limited on the management of lymphedema in the chest wall or breast region, which can present secondary to treatment of breast cancer.

Because of the paucity of high-quality studies in this area, the aim of the current study was to (a) describe the magnitude