

ONS Guidelines™ for Cancer Treatment–Related Lymphedema

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PURPOSE: Lymphedema is a chronic condition that may result from cancer-related surgery. The incidence of lymphedema varies greatly; however, patients remain at risk for life and may experience decreased quality of life and functional capacity. Providing recommendations for an evidence-based guideline for care of cancer treatment-related lymphedema will help to improve outcomes for patients with this chronic condition.

METHODOLOGIC APPROACH: A panel of healthcare professionals with patient representation convened to develop a national clinical practice guideline on prospective surveillance, risk reduction, and conservative treatment of lymphedema. Systematic reviews of the literature were conducted and the GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) methodology approach was used to assess the evidence.

FINDINGS: The panel made multiple recommendations for patients who are at risk for or experiencing lymphedema.

IMPLICATIONS FOR NURSING: Early diagnosis and treatment of lymphedema may mitigate symptoms. This evidence-based guideline supports patients, clinicians, and other healthcare professionals in clinical decision making.

KEYWORDS lymphedema; prospective surveillance; GRADE; guideline development; systematic review
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Secondary (acquired) lymphedema is a chronic condition most commonly resulting from cancer treatment (surgery, radiation therapy, and/or chemotherapy), affecting an estimated three to five million people in the United States and tens of millions worldwide (Lymphedema Education & Research Network, 2020; Sleigh & Manna, 2019). Lymphedema is characterized by an accumulation of protein-rich lymphatic fluid in the affected part of the body, potentially affecting function, psychological and physiologic factors, family roles and relationships, and occupational roles and productivity. Secondary lymphedema can be caused from surgical trauma to the lymphatic channels, radiation therapy, infection, scarring associated with wound healing, and compression of the lymphatics by tumors (Armer et al., 2004; Chang & Cormier, 2013; Földi & Földi, 2012; Lasinski et al., 2012; National Cancer Institute, 2019; Shah et al., 2012). Most commonly, secondary lymphedema is associated with cancer-related treatment for breast, gynecologic, prostate, lymphoma, melanoma, and head and neck cancers (National Cancer Institute, 2019). The most common cancer treatment-related lymphedema is associated with breast cancer (National Cancer Institute, 2019; Sleigh & Manna, 2019), in part related to the relatively high incidence and prevalence of breast cancer cases and the relatively high survival rate. The American Cancer Society (ACS) estimates 271,270 new breast cancer cases in 2019, of which an estimated 10% to 40% may develop breast cancer-related lymphedema (BCRL) (ACS, 2019; Armer & Stewart, 2010).

Lymphedema is a chronic condition, without a known cure, and survivors whose lymphatic systems are damaged by cancer treatment are considered at