

## Arm Morbidity and Disability After Breast Cancer: New Directions for Care

Roanne L. Thomas-MacLean, PhD, Thomas Hack, PhD, Winkle Kwan, MD, Anna Towers, MD, Baukje Miedema, PhD, and Andrea Tilley, BScPT



This article has been chosen as particularly suitable for reading and discussion in a Journal Club format. The following questions are posed to stimulate thoughtful critique and exchange of opinions, possibly leading to changes on your unit. Formulate your answers as you read the article. Photocopying of this article for group discussion purposes is permitted.

1. Do we routinely assess patients preoperatively for arm motion and circumference?
2. What is our experience regarding postoperative symptoms in patients undergoing breast surgery and axillary lymph node dissection or sentinel lymph node biopsy?
3. Is there a difference between postoperative education for patients undergoing axillary lymph node dissection versus sentinel lymph node biopsy? Should there be a difference?
4. Do we have a routine follow-up assessment strategy for women following breast cancer surgery? Does the strategy vary depending on the type of surgery?
5. What techniques do we routinely employ to assess patients postoperatively? Are they adequate?
6. What changes should we consider in our pre- and postoperative routines to reflect the findings discussed in the study?

At the end of the session, take time to recap the discussion and make plans to follow through with suggested strategies.

**Purpose/Objectives:** To chart the incidence and course of three types of arm morbidity (lymphedema, pain, and range of motion [ROM] restrictions) in women with breast cancer 6–12 months after surgery and the relationship between arm morbidity and disability.

**Design:** Longitudinal mixed methods approach.

**Setting:** Four sites across Canada.

**Sample:** 347 patients with breast cancer 6–12 months after surgery at first point of data collection.

**Methods:** Incidence rates were calculated for three types of arm morbidity, correlations between arm morbidity and disability were computed, and open-ended survey responses were compiled and reviewed.

**Main Research Variables:** Lymphedema, pain, ROM, and arm, shoulder, and hand disabilities.

**Findings:** Almost 12% of participants experienced lymphedema, 39% reported pain, and about 50% had ROM restrictions. Little overlap in the three types of arm morbidity was observed. Pain and ROM restrictions correlated significantly with disability, but most women did not discuss arm morbidity with healthcare professionals.

**Conclusions:** Pain and ROM restrictions are prevalent 6–12 months after surgery, but lymphedema is not. Pain and ROM restrictions are associated with disability.

**Implications for Nursing:** Screening for pain and ROM restrictions should be part of breast cancer follow-up care. Left untreated, arm morbidity could have a long-term effect on quality of life. Additional research into the longevity of various arm morbidity symptoms and possible interrelationships also is required.

### Key Points . . .

- Lack of standardized and substantiated measures for assessing arm morbidity symptoms may inhibit the response of healthcare professionals.
- Arm morbidity pain significantly affects activities of daily living and the quality of life of breast cancer survivors.
- Healthcare professionals may increase their ability to assess, treat, and educate patients through pertinent questioning of patients regarding activities of daily living.

*Roanne L. Thomas-MacLean, PhD, is an assistant professor in the Department of Sociology at the University of Saskatchewan in Saskatoon; Thomas Hack, PhD, is an associate professor in the Faculty of Nursing at the Nursing University of Manitoba in Winnipeg; Winkle Kwan, MD, is a radiation oncologist at the British Columbia Cancer Agency in Surrey; Anna Towers, MD, is the director of the Palliative Care Division at McGill University in Montreal; Baukje Miedema, PhD, is the director of research in the Family Medicine Teaching Unit at Dalhousie University in Fredericton; and Andrea Tilley, BScPT, is a clinical physiotherapist at the Atlantic Health Sciences Corporation in Rothesay, all in Canada. (Submitted March 2007. Accepted for publication May 17, 2007.)*

Digital Object Identifier: 10.1188/08.ONF.65-71