Eighteen Sensations After Breast Cancer Surgery: A Comparison of Sentinel Lymph Node Biopsy and Axillary Lymph Node Dissection

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**Purpose/Objectives**: To evaluate prevalence, severity, and level of distress of 18 sensations at 3–15 days (baseline), 3 months, and 6 months after breast cancer surgery; to compare sentinel lymph node biopsy (SLNB) to SLNB with immediate or delayed axillary lymph node dissection; to evaluate the Breast Sensation Assessment Scale® (BSAS®) for reliability and validity.

**Design**: Prospective, descriptive.

**Setting**: Evelyn H. Lauder Ambulatory Breast Center at Memorial Sloan-Kettering Cancer Center in New York City.

**Sample**: 283 women with breast cancer; 187 had SLNB, and 96 had SLNB and axillary lymph node dissection.

**Methods**: Patients completed the BSAS® at baseline, three months, and six months after surgery.

**Main Research Variables**: Prevalence, severity, and level of distress of sensations in patients who had breast cancer surgery.

**Findings**: Sensations were less prevalent, severe, and distressing following SLNB compared with axillary lymph node dissection at all three time points. Tenderness and soreness remained highly prevalent following SLNB at the three time points. Tenderness, soreness, tightness, and numbness were among the most severe and distressing symptoms in both groups. The BSAS® demonstrated good reliability and validity.

**Conclusions**: Overall prevalence, severity, and level of distress were lower following SLNB compared with axillary lymph node dissection at baseline, three months, and six months after surgery. Certain sensations remained prevalent, severe, and distressing in both groups. The BSAS® is a reliable and valid instrument.

**Implications for Nursing**: Nurses should be familiar with prevalent sensations patients experience after SLNB and axillary lymph node dissection so they can provide education and support.

Patients who undergo breast cancer surgery often describe a variety of postoperative sensations in and around their axilla, breast, and chest wall and question whether these feelings are normal. At times, these sensations can be severe and distressing. If not prepared adequately prior to surgery, patients can interpret these postoperative sensations as an indication that something is wrong, adding uncertainty and anxiety to an already stressful event. The benefits of providing preparatory information to patients who are undergoing diagnostic or therapeutic procedures have been well documented. A variety of studies have demonstrated that distress during a threatening event is reduced when subjects have accurate expectations about the physical sensations they will experience (Johnson, 1972, 1996; McHugh, Christman, & Johnson, 1982).

The sensations that patients experience after breast cancer surgery are poorly understood and are understudied with regard to prevalence, severity, level of distress, and duration. In particular, little research is available that documents the impact of postoperative sensations on patients following a

**Key Points . . .**

- Sensations are less prevalent, severe, and distressing following sentinel lymph node biopsy (SLNB) compared with axillary lymph node dissection at 3–15 days, 3 months, and 6 months after breast cancer surgery.

- Certain sensations remain prevalent, severe, and distressing for at least six months following SLNB.

- The Breast Sensation Assessment Scale®, which has been tested for reliability and validity, can be used by nurses in their clinical practice to evaluate sensations.

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