Eastern Health

Clinical Practice Guidelines – Breast Disease Site

Guideline Title:	Sentinel Node Biopsy in Breast Cancer - **Summary**	**Date:**	**(O):** **(R):**	Nov 30, 2011
Tumor Group:	Breast Disease Site Group	**Page:**		1 of 3
Issuing Authority:	Dr. Rod Martin Clinical Chief, Surgical Program	**Date Signed:**		**February 15, 2013**
Adapted From	The Cancer Care Ontario's "Sentinel Lymph Node Biopsy in Early-Stage Breast Cancer: Guideline Recommendations", July 2009 (1).			

Target Population:

The recommendations are aimed toward patients who have been diagnosed with cancer of the breast and meet the selection criteria for sentinel lymph node biopsy (SLNB).

Recommendations:

All patients who have been diagnosed with early-stage cancer of the breast (ie. without clinically or pathologically positive lymph nodes) should be eligible for sentinel lymph node biopsy when they meet the selection criteria for its use. The selection criteria include those patients who have T1 or T2 unifocal tumors that are less than 3 cms in diameter*.

Circumstances where SLNB would **not** be recommended*:

- inflammatory or T4 breast cancer
- prior axillary surgery (unless minimal).

The clinical circumstances for patients with breast cancer where the evidence is *inconclusive* or *inadequate* are those with*:

- T3 or T4 (tumors larger than 3 cm in diameter) tumors
- internal mammary lymph nodes
- multifocal tumors
- before neoadjuvant therapy
- DCIS treated by lumpectomy**
- pregnant or breastfeeding women
- known allergies to blue dye
- previously treated breast cancer or non-oncologic axillary surgery on the affected breast** .

**Adapted from the CCO guideline "sentinel node biopsy in early-stage breast cancer" (1).*
***In some circumstances, treatment decisions will be made on a case-by-case basis.*

Qualifying Statements:

- In the Cancer Care Ontario (CCO) SLNB 2008 guideline, the evidence review revealed four randomized control trials (RCTs) comparing SLNB to ALND, which reported high SN detection rates from 95.1% to 97.2% and accuracy rates from 94.4% to 97.6% (1). The false-negative rates were low and node-positive rates were similar between ALND and SLNB-alone arms (1-5). The Sentinella-GIVOM non-inferiority trial also revealed only one axillary recurrence in 345 SN-negative patients at 55.6 months of follow-up, and similar disease-free and overall survival rates between the two arms (6). Since the CCO guideline was published, our literature search revealed 3 more RCTs, a meta-analysis, and a 10 year follow-up study of a RCT, which all confirm the equivalency of SLNB to the ALND in early stage breast cancer (7-11).
- Preoperative lymphoscintigraphy is the preferred standard of care where available. The combination use of radioisotope and blue dye is preferred though using either alone is acceptable. The combination approach of intradermal, periareolar of colloid injection is preferred by the nuclear medicine program within Eastern Health (12-14). Frequently, gentle massage is used over the injection site to help facilitate the clearance of the radiocolloid (15). The blue dye injection is given in the upper outer quadrant of the areola. If the patient has had a previous surgery (ex. previous breast biopsy) in this area, the injection is always given above the scar to ensure the scar tissue does not interfere with the dispersion of the isotope/dye to the SN(s). The surgeon then uses a hand held detection probe to identify the location of the radioactive SN(s). The Sentinel Lymph Node working group agreed that there is not enough quality evidence to pursue internal mammary node mapping at this time.
- During the intraoperative SLNB procedure, the pathologist has to be at the ready and available to receive the SN specimens from the operating room. To allow timely and efficient processing of the specimens, a completed pathology requisition from the surgeon should accompany them. The surgeon should indicate which node is believed to be sentinel. The pathologist will process the SN(s) via frozen section examination as per Eastern Health's pathology protocol, and communicate the result to the surgeon as promptly as possible (16,17).

Disclaimer:

These guidelines are a statement of consensus of the Breast Disease Site Group regarding their views of currently accepted approaches to diagnosis and treatment. Any clinician seeking to apply or consult the guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment.

Contact Information:

For more information on this guideline, please contact Dr. Christopher Cox MD FRCSC, St. John's, NL; Telephone 709-237-7022. For the complete guideline on this topic or for access to any of our guidelines, please visit our Cancer Care Program website at www.easternhealth.ca

Literature Support:

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