Accuracy of Sentinel Lymph Node Biopsy in Patients with Large Primary Breast Tumors

Reviewers: Li Liu, MD
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Précis: Sentinel lymph nodes biopsy in patients with 2-5 cm breast cancers appears accurate

Introduction

The sentinel lymph node (SLN) is the first lymph node to drain the primary tumor. In theory, if the SLN does not contain metastatic cancer, the remainder of the nodal basin will be negative for metastases. Therefore, nodal dissection can be avoided in patients with negative SLN. In breast cancer, multiple studies have shown that the SLN is accurate in predicting the absence of nodal metastasis for early stage breast cancers (Lancet 1997 Jun 28;349(9069):1864-7). In this study, the researchers assessed the accuracy of SLN biopsy in patients with large breast cancers and clinically negative axilla prior to induction chemotherapy.

Method

A total of 103 patients with breast tumors classified as T2 (at least 2 cm but not larger than 5cm) were studied. Combined blue dye and radiotracer were utilized to identify SLN. In 87 cases, a complete axillary lymph node dissection was performed after SLN identification.

Results

- Sentinel lymph nodes were identified in 99% of the cases.
- Metastasis was identified in 59% of the cases.
- The false-negative rate was 2%.

Discussion

In this study, the researchers reported that clinically negative axilla in patients with large breast cancers were accurately staged using sentinel lymph nodes biopsy. The very low false-negative rate makes SLN biopsy an accurate technique that may spare this class of patient further axillary interventions.