Morbidity following Sentinel Lymph Node Biopsy versus Axillary Lymph Node Dissection for Patients with Breast Carcinoma

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Précis: Sentinel lymph nodes biopsy is associated with negligible morbidity

Introduction
The histologic status of axillary lymph nodes, one of the most important prognostic indicators in patients with breast cancer, directly affects clinical management. However, over 80% of women who undergo axillary dissection have at least one postoperative complication in the arm, and psychological distress is common (Canadian Journal Surgery 1993 Aug; 36(4): 315-20). A potential alternative to axillary lymphadenectomy is sentinel lymph node (SLN) biopsy. In this study, the researchers looked at the morbidity associated with SLN biopsy.

Method
In this study, the researchers prospectively compared morbidity rates for 35 women undergoing SLN biopsy and 35 women undergoing complete axillary lymph node dissection. All patients were free of lymph node metastases.

Results
- Axillary lymph node dissection was associated with a significant increase in upper and forearm lymphedema, numbness, and motion restriction of the operated arm compared with the SLN biopsy.
- Arm stiffness and strength did not differ between the two groups.
- Neither surgical procedure significantly affected activities of daily living.

Discussion
In this study, sentinel lymph node biopsies were associated with considerably less postoperative morbidity than axillary lymph node dissection in women with breast cancer. Like other new medical techniques, there is a learning curve for surgeons. The procedure can be technically challenging and the success rate and morbidity varies among surgeons and according to the patient characteristics.