

Occult Breast Lesion Localization and Concomitant Sentinel Lymph Node Biopsy in Early Breast Cancer (SNOLL)

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Abstract

Aims: Mammographic screening and the increasing resolution output of mammography have raised the identification number of small-size mammary lesions without clinical expression. The aim of this study was to evaluate in a prospective study the localization technique and concomitant sentinel lymph node biopsy for breast cancer (SNOLL - Sentinel lymph Node biopsy and Occult Lesion Localization).

Methods: We identified by means of imaging techniques a number of 107 patients with clinically occult suspicious breast tumors. All patients preoperatively underwent a protocol in which the injection of 99mTc-nannocolloid under imaging procedures was performed. Surgical excision was performed, guided by the hand held gammaprobe. The sentinel lymph node was identified as an axillary hot spot on the probe.

Results: All primary lesions were identified and were clear of invasive margins needing excision. 98 tumors proved to be malignant on frozen sections. 7 lesions could not be clearly examined through frozen section and 2 proved to be benign. 6 out of 7 suspicious lesions confirmed to be malignant on paraffin embedded sections. Sentinel lymph node was identified in a number of 95 out of 98 patients. In 14 cases complete axillary lymphadenectomy was performed. The average specimen weight was 40grams.

Conclusions: Using this technique, we removed the lesions identified prior to surgery in all cases, achieving a complete pathologic diagnostic, the necessary surgical treatment and also prognostic data by axillary lymph node assessment.

Key words: ROLL, breast cancer, non palpable breast lesions, sentinel lymph node

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