Micrometastasis of Breast Cancer in the Sentinel Lymph Nodes

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Abstract : The surgical procedure for early breast cancer patients with negative axillary lymph nodes has changed from routine axillary clearance to a sentinel lymph node biopsy (SLNB). The presence of metastatic lymph nodes and the number of involved lymph nodes helps to determine the appropriate adjuvant systemic therapy. The significance of micrometastasis in the sentinel lymph nodes has been the subject of much debate, because the prognostic and therapeutic implication of micrometastasis to these lymph nodes remains unclear. This study retrospectively evaluated the clinical features of breast cancer patients with axillary micrometastasis. Two hundred and eighteen patients with early stage breast cancer underwent surgery including a SLNB between June 1996 and April 2009. A total 201 of SLNB procedures were successful and analyzed. The median follow-up was 37.7 months. A metastatic lesion was located in sentinel lymph nodes in 39 (19.4%) patients. The sentinel lymph nodes contained micrometastases in 9 of 201 patients (4.5%). Metastatic foci in non-sentinel lymph nodes were detected as macrometastases in one patient with micrometastases. None of the patients with micrometastases developed local recurrence or distant metastasis. The results suggest that avoiding an axillary lymph node dissection was not appropiate for a patient with micrometastases in the sentinel lymph nodes.

Key words : **Micrometastasis, Breast cancer, Sentinel lymph node, Axillary lymph node dissection**