

Original Paper

Evaluation of diagnostic value of sentinel lymph node biopsy in breast cancer

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Abstract

Background and Objective: Dissection of the axillary lymph nodes is considered as one of the common measures in management of breast cancer. Edema and limitation in hand movement are accompanied with dissection of axillary lymph nodes. Sentinel lymph node biopsy can be used to evaluate axillary metastasis. This study was carried out to evaluate the diagnostic value of sentinel lymph node biopsy in patients with breast cancer.

Materials and Methods: This descriptive study was performed on 30 selected patients with breast cancer less than 5 cm without any involvement of axillary lymph nodes in Ghaem Hospital in Mashhad, North-East of Iran during 2009 -10. Initially, the lymphoscintigraphy was performed. Subsequently, prior to the surgery, the blue dye as a marker was injected for detecting sentinel lymph node and with the use of probe gamma counter and observing blue color on lymph nodes, the sentinel node was determined and separated. Finally, axillary dissection was performed for removing the lymph nodes of I and II level in all patients.

Results: Among 30 patients who were evaluated for sentinel lymph nodes and axillary dissection, false negative were observed only in two cases (6.6 %). The sensitivity rate was determined to be 84.6%.

Conclusion: Considering the high success rate of detection of sentinel lymph node and limited false negative cases, sentinel lymph node biopsy is recommended in cases of breast cancer without axillary involvement.

Keywords: Axillary dissection, Breast cancer, Sentinel lymph node biopsy

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