Validity of sentinel lymph node biopsy in Taiwanese breast cancer patients

劉自嘉

Liu TJ

摘要

Abstract

Background/Purpose: The clinical validity of sentinel lymph node (SLN) biopsy in Taiwanese breast cancer patients from 16 institutes in two consecutive periods was analyzed. Methods: Data from the initial period between January 3, 1999 and July 2004 and data from the later period after August 2004 to February 2005 were compared. Data on the use of a tracer, SLN identification, harvest and examination, false negative rate (FNR) and the number of patients spared axillary lymph node dissection (ALND) were analyzed. Results: A total of 3308 patients with clinical axilla negative breast cancer underwent SLN biopsies in 16 hospitals (11 in both periods and 5 in the period before August 2004). Comparison of data from the two periods revealed that in the later period, use of combined blue dye and isotope tracer increased from 40% to 80%, the 95% SLN biopsy success rate increased from 50% to 80%, hospitals conducting intraoperative SLN examination increased from 80% to 93%, and the 95% match to permanent section rate increased from 30% to 80%. In the initial period, eight hospitals had less than 7% FNR, while in the later period this had decreased to 4.1% in these hospitals. Another three hospitals had FNR greater than 7% in the initial period, which had decreased to 0% in the later period. Hospitals with more than 100 cases of SLN biopsy had an average 3.8% FNR, whereas hospitals with less than 100 cases of SLN biopsy experience had an 8.2% FNR (p<0.01). Conclusion: This study found that the SLN biopsy success rate increased after the use of combined tracers and with experience. FNR was controlled to within 5% among breast surgeons with accumulated experience exceeding 100 cases. It is recommended that ALND-sparing surgery be suspended temporarily in hospitals with FNR greater than 5%.