Caution urged with repeat sentinel lymph node biopsies

In a recent letter to the editor, Dr Zgajnar and colleagues asked whether sentinel lymph node (SLN) biopsies should be performed in patients with isolated local recurrence following breast conservation therapy and a previous SLN procedure [1]. In the context of this question, they asked whether a second SLN biopsy is feasible and predictive of axillary lymph node status. We would like to report our experience with a repeat SLN biopsy in a patient with an isolated breast recurrence.

A 48-year-old women underwent a wide local excision and SLN biopsy for a T1a invasive breast cancer with an extensive intraductal component. She had two SLNs and one non-sentinel lymph node removed; they were all negative for metastatic disease. The SLNs were evaluated by serial sectioning and immunohistochemistry with pancytokeratin antibodies. She did not receive adjuvant whole-breast radiotherapy or chemotherapy. Twenty months after initial diagnosis, she presented with an isolated breast recurrence and underwent re-excision and a repeat sentinel lymphadenectomy. Sentinel nodes on the second occasion were well identified by radio-nuclide localization. The SLN removed at that time was also negative for metastatic disease. She was treated with whole-breast radiotherapy and doxorubicin-based chemotherapy. She did not undergo an axillary node dissection nor did she receive axillary radiotherapy. Ten months after her local recurrence, she presented with an axillary recurrence and simultaneous lung and liver metastasis. Although it was possible to identify a SLN at her second sentinel node biopsy, this SLN was falsely negative. Our experience with this patient suggests that the previous axillary and/or breast surgery had altered the lymphatic channels draining the breast cancer.

Detection of a local recurrence of breast cancer is an indicator of the biology of the disease and may indicate that the patient is at risk of systemic recurrence [2]. Based on our experience, and until further data are available from randomized trials, we recommend that patients who develop an isolated local recurrence after breast conservation surgery and have a SLN detected should be considered for an axillary node dissection. A repeat sentinel lymphadenectomy may be misleading, but obviously more cases need to be studied and reported.

M. A. Chung & B. Cady
The Breast Health Center, Women and Infants Hospital, Providence, RI, USA (E-mail: mchung@wihri.org)

References

DOI: 10.1093/annonc/mdf317