Improved detection of axillary hot nodes in lymphoscintigraphy in breast cancer located in the upper lateral quadrant with additional projection imaging

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Background: Sentinel node (SN) biopsy has been becoming a standard method for early stage breast cancer. Scintigraphic image of SN helps the biopsy procedure. It is reported that the scintigraphic detection rate is not 100%. The value of taking additional projection view in SN detection was assessed in breast cancer patients. **Patients and Methods:** Consecutive 114 breast cancer patients with upper lateral quadrant tumor were included in this study. After injection of ^{99m}Tc-phytate, scintigram was taken at the projection of anterior oblique (AO) 30° view and an additional AO 60° view. Images were evaluated visually. **Results:** In 7 of 114 patients, an axillary hot node was hidden on the activity at the injected site on AO 30° view, and was visualized on AO 60° view. In 17 of 114 patients, the axillary hot node was seen as a hump from the injected activity, and was separate on AO 60° view. In 90 of 114 patients, the axillary hot node was separately seen on AO 30° view. **Conclusion:** Multi-directional views are helpful to depict the axillary sentinel nodes that are concealed behind the injected radioactivity.

Key words: breast cancer, axillary sentinel node, ^{99m}Tc-phytate, scintigraphy, multiple views