

## The need for skin pen marking for sentinel lymph node biopsy: A comparative study

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[View references \(33\)](#)

### Abstract

**Introduction:** There is a consensus in the literature that sentinel lymph node biopsy is the standard procedure for axillary staging in early stage (I and II) breast cancer patients. Usually during lymphoscintigraphy, the location of the sentinel lymph node is marked on the skin by an indelible ink. In this study we evaluated this issue in our patients. **Methods:** 40 patients with the clinical diagnosis of early stage breast cancer (stage I or II) were included into the study. All patients received periareolar intradermal injections of 18,0 MBq Tc-99m antimony sulfide colloid 2-3 hours before the surgery and 2 ml patent blue V dye in a subdermal and periareolar fashion during surgery. The patients were divided randomly into two groups (20 patients in each group). In group I, the anterior and lateral locations of the sentinel lymph node were marked on the skin with an indelible ink. In group II, no skin marking was used. A sentinel node was defined as any blue node or any node with an ex vivo radioisotope count of twofold or greater than the axillary background. All patients underwent standard axillary lymph node dissection after sentinel node biopsy. **Results:** Mean age and tumor size were not significantly different between groups. SLN detection rate and number of detected SLNs were not significantly different either ( $P > 0.05$ ). Number of detected lymph nodes was  $1.2 \pm 0.42$  and  $1.2 \pm 0.61$  in group I and II of the patients, respectively. False negative rate (negative SLN and positive axillary nodes) for both groups were 0%. **Conclusion:** Although marking the location of the sentinel lymph node on the skin with an indelible ink can guide the surgeon during surgery, it can not increase the sentinel lymph node detection rate or improve the results of sentinel lymph node biopsy.

### Reaxys Database Information

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Lymphoscintigraphy; Sentinel lymph node; Skin marking; Tc-99m antimony sulfide colloid

#### Indexed Keywords

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