(1/6) and 85.7% (6/7), respectively. There was a trend for higher SR in the combined detection of SLNB.

The SR, FNR and accuracy of SLNB in 33 pts with obvious clinical ALN downstage were 97.0% (32/33), 15.0% (3/20) and 90.6% (29/32), respectively. The rates in the other 55 pts with no significant ALN downstage were 76.2% (42/55), 19.5% (8/41) and 80.9% (34/42), respectively. The p values were 0.011, 0.667, and 0.247, respectively.

Conclusion: The distribution of ALN metastases in LABC after NCT was quite the same as that in early breast cancer, with very low incidence of skip metastases. There was a trend for higher SLNB SR with the combination of Methylene blue with colloid. Significant higher SR was found in pts with obvious clinical ALN downstage, though with similar FNR and accuracy.

Table 1. The distribution of ALN metastases after NCT

Status of ALN at different levels			Patients	
L1	L2	L3	No.	(%)
L1(−)	L2(−)	L3(−)	112	(30.3%)
L1(−)	L2(+)	L3(+)	1	(0.2%)
L1(−)	L2(−)	L3(+)	0	(0.0%)
L1(−)	L2(+)	L3(−)	0	(0.0%)
L1(+)	L2(−)	L3(−)	146	(39.5%)
L1(+)	L2(−)	L3(+)	32	(8.6%)
L1(+)	L2(+)	L3(−)	41	(11.1%)
L1(+)	L2(+)	L3(+)	38	(10.3%)

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Preoperative lymphscintigraphy did not improve the success rate of sentinel node biopsy in breast cancer patients

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Background: The role of preoperative lymphoscintigraphy in sentinel lymph node biopsy (SLNB) remains controversial in breast cancer patients.

Material and Methods: Firstly, we retrospectively analyzed a database containing 716 breast cancer patients who received SLNB. Secondly, we had a prospective randomized clinical trail, in which 113 patients with breast cancer were randomized into two groups. Preoperative lymphoscintigraphy was done in group one, and no preoperative lymphoscintigraphy in group two. Before SLNB, 99mTc labeled sulfur colloid and blue dye were injected subcutaneously above the primary tumor or around the biopsy cavity in all the patients. Either “hot” or blue nodes were regarded as sentinel lymph nodes (SLN). The success rates of SLNB between two groups were compared. No patients enrolled in the study received neoadjuvant chemotherapy.

Results: In the retrospective study, the success rate of SLNB was 98.2% (703/716). SLNs were well imaged by lymphoscintigraphy in 86.6% patients, and SLNs were located extra-axilla in 36 patients. The visualization of SLN in lymphoscintigraphy was not associated with histopathologic type, location and stage of primary tumor, and time interval from injection of radiocolloid to surgery. However, the negative lymphoscintigraphy results were associated with excision biopsy before injection of radiocolliod and axillary node metastases. Failure of surgical identification of axillary SLN was associated with whether hot spot was imaged by lymphoscintigraphy. In the prospective study, the total success rate of SLNB was 96.4% (109/113). There are 62 patients were randomized into group with preoperative lymphoscintigraphy (well imaged by lymphoscintigraphy in 88.7% patients) with the success rate of SLNB of 96.8% (60/62), and 52 patients were randomized into group without preoperative lymphoscintigraphy with success rate of 98.0% (50/51). There was no significant difference between two groups in success rate of SLNB (fisher exact test, p = 1.00).

Conclusion: Although preoperative lymphoscintigraphy was helpful in finding extra-axillary SLN. However, it could not improve the success rate and reduce the false negative rate of SLNB in breast cancer patients. Considering the complexity, time consumes, and cost of preoperative lymphoscintigraphy, it should be undergone for investigation purpose only at present.

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Sentinel node biopsy in patients with prior aesthetic breast surgery

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Background: Sentinel lymph node biopsy (SLNB) is the standard method for axillary staging in early-stage breast cancer. Recent studies have tried to elucidate controversies about initial contraindications to the technique. Up to date, there is little data to recommend sentinel node biopsy in patients with previous aesthetic breast surgery. Here we discuss our experience on sentinel node biopsy in patients with previous aesthetic breast surgery.

Materials and Methods: Between April 2001 and June 2007, 70 patients with previous breast aesthetic surgery underwent SLNB. Seventy five percent of patients had had a previous breast augmentation and 25% a breast reduction mammoplasty. All patients underwent lymphoscintigraphy with 99Tc the day before surgery. Sentinel node biopsy was performed in all patients and followed by axillary dissection when it was positive.

Results: The mean time from aesthetic surgery to tumour diagnosis was 10 years. Mean age at cosmetic surgery was 38 years old. Seventy percent of patients underwent conservative breast surgery and 30% mastectomy. The sentinel node Identification rate was 100%. Lymphoscintigraphy showed bilateral drainage in two patients and drainage to the ipsilateral internal mammary chain in one case. The SLNB was positive in 23 cases (32%), of which 5 (7%) had micrometastasis, and 18 (25%) had macrometastasis. After a median follow up of 19 months no axillary recurrences were observed. One patient developed an ipsilateral breast local recurrence and one patient a distant metastasis.

Conclusions: Lymphoscintigraphy and sentinel node biopsy can accurately stage the axilla in patients with early-stage breast cancer and a previous aesthetic breast surgery. The presence of breast augmentation or reduction surgery is not a contraindication to SLNB technique.

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Axillary recurrence of breast cancer after negative sentinel lymph node biopsy

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Background: Sentinel lymph node biopsy (SLNB) is gaining popularity over axillary lymph node dissection for the detection of node-negative breast cancer, as it is less invasive and false negative results are generally less than 22%. However, regional node recurrence is a major concern for those whose cancer is detected by SLNB. We conducted a retrospective analysis of patient outcomes for those who had received SLNB to assess the rate of recurrence.

Materials and Methods: We examined the charts of 720 patients who had been diagnosed with breast cancer between December 2003 and January 2006 and whose SLNB was negative. Of this sample, 174 underwent the SLNB and axillary dissection; 453 patients had an SLNB and node sampling; 93 received only the SLNB. The SLNB was performed using a 99mTc-radiocolloid subareolar injection.

Results: The mean number of sentinel lymph nodes removed was 2.1 per patient. At a median follow up of 26 months (range 16−48 months), recurrence appeared in only 3 cases. All three had originally received only the SLNB; all three were also hormone receptor negative. Two of the cases were also c-erbB2 negative. All three recurrences occurred in the axilla; in two of the cases, there was also a recurrence in the internal mammary lymph node.

Conclusion: Axillary recurrence of breast cancer is low in patients who receive an SLNB. For those who are also hormone receptor negative, however, it may be important to also sample lymph nodes and examine internal mammary lymph nodes.

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Breast cancer patients with micrometastases versus non-metastatic lymph nodes – what is different?

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Background: Characterization of Breast Cancer (BC) patients (pts) with micrometastases (micm) in Sentinel Lymph Nodes (SLN) and comparison with BC pts with non-metastatic SLN (pT1 BC).

Material and Methods: Analysis of 312 BC pts diagnosed and treated in our department from January 1998 to October 2007.