

COMPARISON OF LONG-TIME PROGNOSIS FOR BREAST CANCER PATIENTS BETWEEN SENTINEL LYMPH NODE BIOPSY WITH BLUE DYE ALONE AND COMBINED METHOD

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Introduction: Sentinel lymph node biopsy (SLNB) for early stage of breast cancer has become a standard procedure worldwide. To identify SLN, blue dyes (BD) and/or radioisotope (RI) tracers have been popularly used. It has already been showed that combined method has superiority in both identification rate and false-negative rate than the dye alone, however, long-time prognosis of SLNB by BD alone compared with combined method has not been enough examined yet.

Aim: In this study, we re-evaluate the practice of performing sentinel lymph node biopsy with BD alone.

Methods:

- ✓ A retrospective analysis
- ✓ 114 consecutive patients with breast cancer
- ✓ Between January 2014 and March 2015

January 2014—September 2014

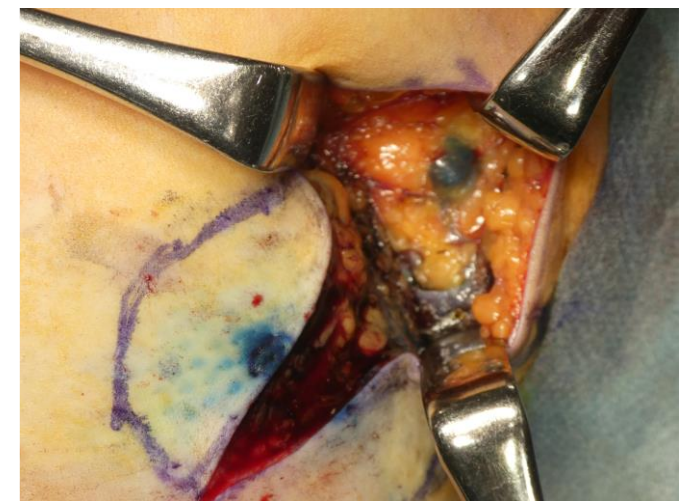
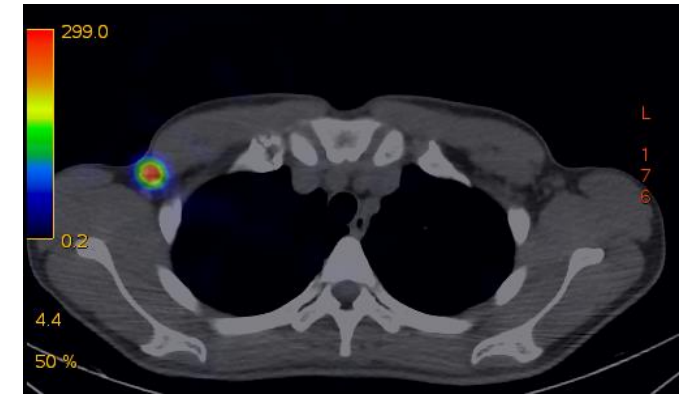
SLNB with **combined dye and isotope**

October 2014—March 2015

SLNB with **dye alone**

(because of gamma probe failure)

- ✓ Done by experienced surgeons for SNB



	Blue dye + RI (n=66)	Blue dye alone (n=48)
Averaged Age (y)	56.7	57.1
Clinical tumor stage		
Tis	6	5
T1	45	25
T2	15	18
Operation		
Total mastectomy	30	31
Breast conserving treatment	36	17
Histologic type of tumor		
Non-invasive ductal carcinoma	5	2
Invasive ductal carcinoma	56	37
Other type of invasive carcinoma	5	9
Body mass index (kg/m ²)		
<20	15	14
20 ≤, <25	36	25
25 ≤	15	9

Results: There was no difference between the groups in the operation time, time for SLN procedure, number of SLN, and postoperative recurrence. All the patients have survived, except only one patient who refused adjuvant chemotherapy in the combined method group and died at 40 months after operation. One patient with BD alone was confirmed liver metastases 6 years after operation.

	Blue dye + RI (n=66)	Blue dye alone (n=48)	P value
SN identified	66/66 (100%)	48/48 (100%)	
Time to SN identification (Mean)	28 minutes (12-66)	29 minutes (13-58)	P = 0.324
Operation time (Mean)	96 minutes (40-212)	102.5 minutes (47-237)	P = 0.340
Number of SN identified (Mean)	2 (1-4)	2 (1-5)	P = 0.252
	*In 3 cases, SN was identified by RI alone		
SN with metastasis (Rate)	13 cases (19.6%)	6 cases (12.5%)	P = 0.34

	Blue dye + RI (n=66)	Blue dye alone (n=48)
Post-operative period (month) (Mean)	48 (34-55)	38 (36-48)
Recurrence (Rate)	1/66 (1.5%)	1/48 (2.0%)

Conclusion: Our results indicate that the long-time prognosis of SLNB with BD alone is comparable to the combined method. Therefore, SLNB with BD alone remains an option because of its technical simplicity and needless of any additional equipment or procedures.