

The role of a second tracer injection in the success rate of SN identification in patients with non-visualisation of axillary SNs was also studied.

Methods: Patient group I consisted of 356 breast cancer patients who underwent LS and SN biopsy after intratumoural injection of 99Tcm – labelled albumin colloid (Nanocoll®) with a median dose of 92 (range 50–119) MBq. In the patient group II (178 patients) the dose of the tracer was adjusted according to BMI: 113 patients with BMI < 26 received 80 MBq, those 41 with BMI 26–30 received 100 MBq and those 24 with BMI > 30 received 140 MBq. Anterior and lateral scintigraphic imaging was performed approximately four hours after the injection and SN biopsy was performed within 26 hours. A second tracer injection, intratumoural or subdermal, was given in 39 of the 81 patients without axillary hot spots in LS.

Results: Non-visualisation rate of axillary sentinel nodes was 49/356 (14%) in group I and 31/178 (17%) in group II (table 1). The parasternal sentinel nodes were visualised in 68 (19%) patients in group I and 21 (12%) patients in group II.

Table 1. Non-visualisation of axillary sentinel nodes

Patient group	BMI<26	BMI 26–30	BMI>30
I	21/217	19/90	9/49
II	13/113	13/41	5/24

The intraoperative SN identification failed in 3 patients with and 3 without axillary metastases in 39 patients receiving a second injection. 22 patients (3 with and 19 without axillary metastases) of the 42 without a second injection underwent axillary clearance because of non-identification of SNs.

Conclusions: Adjusting the dose of the radioactive tracer according to BMI did not lead to optimised SN visualisation in LS. The failure rate in intraoperative SN identification is minimised using a second tracer injection in patients without axillary hot spots in LS.

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POSTER

The number of resected axillary lymph nodes (ALN) influences the risk for axillary recurrences in node-positive, but not in node-negative patients

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Background: Based on broad evidence, the International Consensus Conference, 'Primary Therapy of Early Breast Cancer' St. Gallen 2003 established sentinel lymph node excision as sufficient surgical procedure in the axilla of node-negative breast cancer patients. However, there is little data available, whether the excision of a low number of ALN increases the risk for axillary recurrences, compared to systematic axillary dissection.

Material and Methods: By multivariate analysis of 3800 pts. treated for early breast cancer UICC stage I–III, we investigated the prognostic relevance of the number of resected ALN for axillary recurrences in patients with and without evidence of axillary lymph node metastases. Pts. with carcinoma in situ, distant metastases at time of presentation, primary systemic therapy, unknown hormone receptor status or histopathological grading were excluded. Data were contemporaneously collected and pts. were followed for a mean of 72 months.

Results: Axillary recurrences as sole manifestation site of recurrence occurred in 67 pts (1.7%). In node negative patients (n=2667), multivariate analysis, allowing for number of removed ALN, histopathological grading, tumor size and hormone receptor status, revealed only grading (P=.04, RR 2.7, 95%CI 1.1–6.1) and tumor size (P=.03, RR 2.8, 95%CI 1.1–6.1), but not the number of removed ALN (P=.42) as predictor for axillary recurrence. In contrast, in node positive pts. (n=1133), multivariate analysis demonstrated the number of removed ALN as independent significant predictor for axillary recurrences (P=.002, RR 9.9, 95%CI 2.7–35.3), next to tumorous fixation of ALN (P=.005, RR 3.6, 95%CI 1.5–8.3).

Discussion: There is no evidence that a low number of removed ALN increases the risk for axillary recurrences in node negative pts. However, evidence suggest that complete axillary dissection should be maintained in node positive pts.

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POSTER

Long-term follow-up of sentinel node negative breast cancer patients: a quality control

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Sentinel node biopsy (SNB) in breast cancer accurately predicts axillary status and is generally adopted for disease staging. To evaluate the feasibility of this technique it is important to determine the frequency and impact of local axillary failure after negative SNB. The purpose of this study

was to evaluate the axillary recurrence rate in our institute and to determine if axillary control is lost in case of recurrence. From November 1998 to November 2001, 330 consecutive patients with T1–2 breast cancer without clinical or sonographic signs of lymph node involvement, underwent SNB. 190 patients who had a negative sentinel node biopsy without additional axillary dissection were studied prospectively in order to identify tumour recurrence. After a median follow-up of 42 months (24–60) four patients (2%) developed overt axillary disease. The recurrences were treated with axillary node dissection, chemotherapy and radiotherapy in case of involvement of four or more lymph nodes. During follow-up no more axillary recurrences occurred. Reassessment of the SNB procedures revealed two doubtful procedures. In one patient the axillary 'recurrence' was due to a new primary carcinoma. This study provides reassurance that SNB is safe. In case of recurrence, the axilla can be treated successfully without losing locally control. It also emphasises that conventional axillary dissection should be performed in case of doubt of the SNB procedure.

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POSTER

Patients needs and preferences in routine follow-up after treatment for breast cancer

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Background: After primary care for breast cancer patients participate in routine follow-up care. Informational needs of patients may change over time. In this study we focussed on a patient's needs and preferences in a routine follow-up programme 2–4 years after treatment for primary breast cancer. These needs include information and preferences regarding additional investigations and organisation of follow-up care.

Methods: A cross-sectional survey was performed using a postal questionnaire among women without any sign of relapse during the routine follow-up period. The questionnaire was sent 2–4 years after primary surgical treatment.

Results: Most important to patients was information on long-term effects of treatment and prognosis, discussion of prevention of breast cancer and hereditary factors and changes in the untreated breast. Patients preferred additional investigations (such as X-ray and blood tests) to be part of routine follow-up visits. More than half of the patients preferred lifetime follow-up, performed by a hospital doctor. Less satisfaction with interpersonal aspects and higher scores on the HADS-anxiety scale were related to higher informational needs. Higher scores on the HADS-anxiety and depression scale were related to stronger preferences for additional investigations. Receiving adjuvant hormonal or radiotherapy was related to a preference for a more intensive follow-up schedule. There were no significant differences between patients treated with mastectomy compared to those treated with breast conserving therapy. During routine follow-up after a diagnosis of breast cancer, not all patients needed all types of information.

Conclusion: When introducing alternative follow-up schedules, individual patients' information needs and preferences should be identified early and incorporated into the follow-up routine care, to target resources and maximise the likelihood that positive patient outcomes will result.

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POSTER

Detection of sentinel lymph node in breast cancer: blue dye technique versus combined blue dye–radioactive tracer technique

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Background: Sentinel lymph node biopsy in breast cancer can be used to select patients in which axillary lymph node dissection could be avoided. In this study we compared the value of two methods for identification of sentinel node (SN) using either only blue dye or combination of blue dye and radioactive tracer.

Material and methods: All patients were women with clinically T1–2N0M0 breast cancer. They were randomized into two groups. Group A: In 50 patients SN marking was performed only with blue dye with visual intraoperative identification of SNs. Group B: In 100 patients combined SN marking was performed (blue dye and radiotracer) with intraoperative visual and gamma probe (Gammamed IV®-Capintec) identification of SNs. We used 2 ml of blue dye Patentblau V® (Byk Gulden). Radiotracer was Antimony sulfide marked with Tc 99 m and of 0.3 mCi (9.6 MBq) activity. Application method of both contrasts was peritumoral. Radiotracer