

tected groups were compared regarding intraoperative sentinel node detection rates, accuracy, predictive value of a negative sentinel node, and false negative rates.

Results: Intraoperative sentinel node identification was significantly better for symptomatic breast tumours where 112/123 (91%) cases were successfully biopsied compared with 89/113 (79%) screen detected cases ($p < 0.05$). The overall accuracy and predictive value of the negative sentinel node was greater for screen detected lesions although this failed to reach statistical significance (98.9% versus 95.8%, 98.6% versus 91.5% respectively). There was one false negative case in the screen detected group compared with five in the symptomatic group, although due to the low prevalence of axillary lymph node involvement in screen detected population, there was no difference in false negative rates (5.9% screening, 7.8% symptomatic).

Conclusion: Although the accuracy of sentinel node biopsy is maintained for small screen detected breast cancers, failure to identify the node in approximately 20% of cases may limit the clinical usefulness of the technique in this important patient subgroup.

O-58. PATIENTS WHO ARE NODE NEGATIVE ON AXILLARY NODE SAMPLING: DO THEY RECUR BECAUSE OF OCCULT LYMPH NODE METASTASES MISSED BY THE PATHOLOGIST?

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We examined axillary lymph nodes from 26 node negative breast cancer patients managed by axillary node sampling and no further axillary treatment who subsequently developed axillary recurrence (mean follow up of 7 years) and from 26 matched controls who were node negative on axillary node sample but have not developed axillary recurrence. Lymph nodes were sectioned at 2 additional levels, 100 microns apart. 3 sections at each level were stained with H&E and antibodies to PanCK and MUC1 protein. The original H&E sections from each node were also reviewed.

		No. of cases	No. of nodes	Mets overlooked	No. of Micromets	Total No. of Mets
Axillary	Recur Gp	26	133	2 (8%)	2 (8%)	4 (16%)
	Control Gp	26	133	0	3 (12%)	3 (12%)

Two patients had metastases overlooked at the time of sampling. 2 patients from the recurrence group and 3 from the control group had axillary nodes which contained nodal micrometastases. Immunohistochemistry was important in identifying all these. Although a small series, this study suggests that axillary recurrence after sampling is not due to missed axillary node metastases but that either the wrong nodes are sampled or axillary recurrence develops subsequently.

O-59. SENTINEL NODE (SN) BIOPSY CAN SAFELY REPLACE AXILLARY NODE SAMPLING FOR STAGING EARLY BREAST CANCER

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Our standard method of assessing axillary node status is sampling of a minimum of four axillary lymph nodes identified by the surgeon. In this study, we assessed the role of SN biopsy in predicting axillary node status and the intraoperative assessment of SN with frozen section (FS) and imprint cytology.

All patients with primary breast cancer up to 2.5 cm in diameter underwent SN identification between April 1998 and March 2001. SN(s) were identified by using both radioisotope and/or blue dye techniques. The SN was assessed intraoperatively using FS only or FS and imprint cytology depending on the availability of cytological expertise. All patients had a sample of a minimum of 4 axillary lymph nodes removed or full axillary clearance if FS of SN was positive.

The SN was identified intraoperatively in 142 of 150 cases (94.66%). An average of 1.3 SN was identified per patient. According to final histology the SN was positive in 51 of 142 patients. Forty-four of these positive SN were identified intraoperatively and 7 were reported falsely negative on FS. Axillary node status was in concordance with the final SN status in all patients. The sensitivity of SN was 100% though the sensitivity of intraoperative assessment was 86.3% (44/51) with a specificity of 100%.

In our unit, axillary sampling does not provide any additional benefit in assessing the axillary nodal status in those patients that have a SN successfully identified. Intraoperative assessment using FS with or without imprint cytology can spare re-operation in up to 86% of node positive patients if axillary clearance is considered to be the best treatment for involved axillae

O-60. SERVICE IMPLICATIONS OF INTRODUCING SENTINEL NODE BIOPSY: EXTRAPOLATIONS FROM THE FIRST 100 PATIENTS RANDOMISED TO THE ALMANAC TRIAL

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Introduction: Randomisation to the ALMANAC Trial sentinel node mapping (SNM) v axillary clearance (AC) started in Guildford in December 1999. In one calendar year surgery was performed on 284 new breast cancers, 33 of which had pure DCIS and the remainder were potentially suitable for the trial.

Methods: 5 groups of patients were identified. 66 had absolute exclusion criteria. 61% of these had positive nodes (N+). 56 had relative exclusion criteria and 14% were N+. 22 refused randomisation and 23% were N+. In 6 patients SNM alone was specifically recommended and all were N-. 100 women accepted randomisation and 26% of these were N+.