

is unknown. IHC thus appears to be of limited value in the histopathological examination of SLNs.

O-11. Sentinel node biopsy in early breast cancer and its role in nodal micrometastasis: experience at National University Hospital, Singapore

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Objectives: Sentinel lymph node biopsy (SLNB) is fast becoming the standard procedure for the axillary treatment of early breast cancer. We started in Jan 2002, firstly with validation for individual surgeon, where SLNB using Patent blue dye, is performed together with axillary lymph node dissection (ALND). Following this, patients with early breast cancer were offered SLNB. We aim to validate our data against other centres and to assess if patent blue dye alone can be offered if radioisotope facility is not available. We also like to analyse the percentage of micrometastasis alone in SLNB and the need for subsequent ALND.

Material and methods: Between January 2002 and January 2005, 90 patient underwent SLNB under GA. Preoperative 5 ml of Patent blue dye was injected intradermal, peritumoral or periareolar. The SLN was identified intra-operatively by visual inspection after tracing the duct. Following frozen section, ALND was performed for all positive SLNB, including micrometastasis.

Results: In 87/90 patients (96.7%) at least one sentinel node was found. In 65/87 patients (74.7%) the sentinel node was negative on both FS and IHC. Of the remaining 25/87 (25.3%) patients who were positive, 21/25 (84%) were found on frozen examination while 4/25 (16%) were micrometastasis and found only on subsequent IHC. These 4 patients underwent ALND as a second procedure.

Conclusions: Patent blue dye alone may be used in SLNB with good results, if radioisotope facility is not available. Although the preliminary result suggests that ALND may not be needed for micrometastasis in SLNB, we need further trial to confirm this and to look at long term axillary recurrence and survival data.

O-12. Can axillary staging be avoided in a selected group of older women with small non-high grade breast tumours?

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With an increasing proportion of node negative patients, a selective policy for managing the axilla may be more appropriate. Axillary sampling and sentinel node biopsy are alternative methods for staging the axilla, but observation alone may be an acceptable approach for some patients.

In a retrospective analysis of 355 breast cancer patients with either grade I (≤ 20 mm) or grade II (≤ 20 mm) oestrogen receptor (ER) positive tumours without lymphovascular invasion (LVI), the overall incidence of positive nodes in this good prognostic group of patients was 13% (95% CI 9.5–16.5). When the

analysis was confined to grade I tumours (≤ 20 mm) and grade II tumours (≤ 10 mm) the overall incidence of nodal metastases was 10% and only 2.7% of grade I tumours (≤ 10 mm) had nodal involvement.

In a related study of 173 patients with small (≤ 10 mm), non-high grade (I and II), ER positive invasive ductal carcinomas (NST) without LVI, axillary surgery was either omitted (135 patients) or delayed (38 patients) at the time of wide local excision or mastectomy. Rates of axillary recurrence at a median follow up of 36 months were only 1% when axillary surgery was omitted according to patient choice/departmental policy and no cases of uncontrolled axillary recurrence were documented.

These results support the conclusion that axillary surgery (staging/therapeutic) can be safely omitted in a selected subgroup of patients for whom the probability of nodal metastases is of similar magnitude to the false negative rates reported for the sentinel node biopsy technique (5–10%) and for whom the risk:benefit ratio for detection of node positive cases does not justify any form of axillary procedure at the time of primary surgery.

O-13. Morbidity following sentinel lymph node biopsy in primary breast cancer – a randomised controlled trial

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Sentinel lymph node biopsy (SLNB) is a newly developed method of staging the axilla and has the potential to avoid an axillary lymph node dissection (ALND) in lymph node negative patients, thereby minimising morbidity. The aim of this study is to investigate physical and psychological morbidity following SLNB in the treatment of early breast cancer in a randomised controlled trial.

Methods: Between November 1999 and February 2003, 298 patients with early breast cancer (tumours 3 cm or less on ultrasound) who were clinically node negative, were randomly allocated to undergo ALND (control group) or SLNB, followed by ALND if subsequently found to be lymph node positive (study group). A detailed assessment of physical and psychological morbidity was performed over a period of one year post-operatively.

Results: A significant reduction in post-operative arm swelling, rate of seroma formation, numbness, loss of light touch and pinprick was observed in the study group. Although shoulder mobility was less impaired on average in the study group, this was significant only for abduction at one month and flexion at three months. Scores reflecting quality of life and psychological morbidity were significantly better in the study group in the immediate post-operative period with fewer long-term differences.

Conclusion: SLNB in patients undergoing surgery for breast cancer results in a significant reduction in physical and psychological morbidity.