

Results: 215 sentinel nodes were harvested from 125 patients. 28 patients (22.4%) of patients had metastases detectable on H&E staining, warranting completion axillary lymph node dissection. The operating surgeon detected patients with metastatic nodes with a sensitivity of 64.3% and specificity of 87.6% when compared to H&E staining. By contrast the sensitivity and specificity of touch imprint cytology was 75.8% and 100% respectively.

Conclusions: Clinical assessment of sentinel nodes to determine completion axillary dissection fails to detect more than one third of metastatic nodes, and more importantly would result in unnecessary axillary dissection in almost one in eight patients. Touch imprint cytology is modestly more sensitive than clinical assessment, but 100% specific. Use thereof would hence increase the detection of metastases, whilst avoiding unnecessary axillary lymph node dissection. Clinical assessment of sentinel nodes for determination of completion axillary lymph node dissection cannot be advocated due unacceptable specificity.

O-100. The BASO II trial of primary treatment of tumours of excellent prognosis: 2005 update

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This trial examined additional treatments to Wide Local Excision with clear margins, in Grade I, node negative tumours of 2cm or less with clear margins (Nottingham Prognostic Index ≤ 2.4 , predicted 10 year survival 96%. Between 1992 and 2000, 1158 eligible women were randomised to a 2 x 2 design. The primary outcome measure is local recurrence (LR), defined as tumour in the treated breast.

The median follow up is 77 months (range 39–144). Survival is excellent, only 14 deaths from breast cancer, giving a 10 year actuarial survival of 96%.

LR by randomisation are:

| Randomisation | n | LR | LR% PA |
|------------------------------------|-----|----|--------|
| Radiotherapy (RT) to intact breast | 570 | 13 | 0.4 |
| No RT | 568 | 37 | 1.0 |
| Tamoxifen | 214 | 6 | 0.4 |
| No Tamoxifen | 216 | 15 | 1.0 |
| RT plus Tamoxifen | 98 | 0 | Nil |
| No RT, No Tamoxifen | 96 | 9 | 1.4 |

However for those entering only to the RT or Tamoxifen comparisons, the other therapy could have been given electively, the results by treatment received are:

| Received | n | LR | LR% PA |
|-------------------|-----|----|--------|
| Neither therapy | 175 | 24 | 2.1 |
| RT Only | 182 | 9 | 0.8 |
| Tamoxifen only | 421 | 17 | 0.6 |
| RT plus Tamoxifen | 380 | 3 | 0.1 |

A local recurrence rate of 2% per annum is too high from surgery alone and 4 of the 14 breast cancer deaths followed local recurrence.

Tamoxifen in the short term is as effective as RT in lowering local recurrence to very acceptable levels. Since around 20% of screen detected cancers fall into this group this result has important cost, waiting times and workload implications for Radiotherapy units, if born out by longer follow up.

O-101. Increased risk of local relapse and decreased survival after breast conserving therapy (BCT) in the under 40's

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An audit of all patients (1816) treated between 1981 and 1998 by BCT (surgery with radiotherapy to the breast) showed almost identical cause specific survival for patients in their 40's, 50's and 60's, slightly poorer for patients 70 and over, but significantly worse for patients under 40. In order to avoid bias from the effect of screening, the 152 patients under 40 have been compared with the 382 aged 40–49.

Patients under 40 were less likely to have ER rich tumours (51% v 72%, $p < 0.0001$). The younger group appeared to have higher grade tumours (9% v 23% grade 1, 61% v 44% grade 3, $p = 0.0077$) although tumour grade was known for only 59%. There was no difference in tumour size, node positivity, number of nodes involved or in the distribution of the Nottingham Prognostic Index. The younger patients were slightly more likely to have had an axillary clearance (26% v 34%, $p = 0.0731$) and more likely to have received adjuvant chemotherapy (46% v 29%, $p = 0.0007$).

Cause specific actuarial survival at 5 years was 77.6% for the younger group v 93.7%, and 72.4% v 85.4% at 10 years ($p = 0.0002$). Local relapse in the breast was more common in the younger patients; 16.4% v 4.6% at 5 years and 23.90% v 10.2% at 10 years ($p \leq 0.0001$).

Conclusions: These young patients present a problem in management as they have higher relapse rates and poorer prognosis in spite of receiving standard management.

O-102. The effect on survival of local recurrence (LR) after breast conserving surgery

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Cases which suffered prior LR have a worse survival (63% at 10 years) than those which do not (87%). This study is of 687 consecutive cases treated at Nottingham City Hospital in 1990–96 by Breast Conserving Surgery (BCS). Cases were analysed by the Nottingham Prognostic Index (NPI).

LR rates (actuarial) are given to 108 months. Survival was analysed with/without LR:

| | n | n LR | % LR | % Survival | | Death from breast cancer | |
|-------|-----|------|------|------------|----|--------------------------|-------|
| | | | | No LR | LR | Relative Risk | p |
| EPG | 144 | 21 | 15 | 99 | 81 | 19x | 0.001 |
| GPG | 188 | 23 | 12 | 96 | 81 | 5x | 0.089 |
| MPGI | 218 | 19 | 9 | 82 | 53 | 3x | 0.003 |
| MPGII | 84 | 7 | 8 | 70 | 43 | 2x | 0.085 |
| PPG | 42 | 9 | 21 | 65 | 7 | 2x | 0.001 |