

#### O-94. CHANGING PATTERNS OF SURGERY: THE TRENT BREAST SCREENING PROGRAM 1997–2000

L.J.M. Caldon, J.A. Reed, M.W.R. Reed. *University of Sheffield & Trent Quality Assurance Reference Centre, UK*

There remains marked inter- and intra-regional variation in the surgical management of breast cancer. This observational study is based on Quality Assurance data collected by the Trent Breast Screening Program between April 1997 and April 2000. During this period 385,620 women were screened in the region's 11 units, detecting 2256 (1765 invasive) surgically managed primary breast cancers. The mastectomy (Mx) rates for all cancers were as shown:

| Year                      | 1997/98 | 1998/99 | 1999/00 |
|---------------------------|---------|---------|---------|
| Trent screen detected     |         |         |         |
| Mx Rate (%)               | 45      | 36      | 33      |
| [Unit Median (range)]     | (24–64) | (18–48) | (21–46) |
| National screen detected  |         |         |         |
| Mx Rate (%)               | 28.5    | 28      | 30      |
| [Regional median (range)] | (20–44) | (20–38) | (21–45) |

Distribution of tumour size and nodal involvement was unchanged during the period of study. Data reveals the excess Mx rate is largely in the management of smaller invasive tumours in Trent, rather than due to the use of conservation in large tumours nationally. Comparison of Trent and national average (%) Mx rates by size for invasive tumours:

| Size (mm) | 1997/98<br>Trent:National | 1998/99<br>Trent:National | 1999/00<br>Trent:National |
|-----------|---------------------------|---------------------------|---------------------------|
| <15       | 34:19                     | 26:18                     | 25:19                     |
| 15–<20    | 43:29                     | 36:26                     | 28:27                     |
| 20–50     | 58:45                     | 53:45                     | 61:47                     |
| >50       | 100:85                    | 78:80                     | 82:87                     |

The Trent mastectomy rate has fallen considerably in the last three years. The overall rate still exceeds the national average and there is marked intra-regional variation in practice. Research is needed to investigate whether professional characteristics are a potential causative factor.

#### O-95. MRI ENABLES ACCURATE DIAGNOSIS AND SINGLE STAGE SURGICAL RESECTION OF INVASIVE LOBULAR BREAST CANCERS

K. Munot, B. Dall, G. Parkin, R. Achuthan, K. Horgan. *The General Infirmary at Leeds, UK*

**Background:** Conventional imaging with mammography and ultrasound (US) has several limitations for the diagnosis and determination of extent of invasive lobular breast cancers (ILC). Our aim was to determine whether MRI provided additional information.

**Methods:** 20 patients found to have ILC had undergone imaging with dynamic contrast enhanced MRI. MRI was performed to aid detection of malignancy in 6 patients with clinically suspicious presentations but normal/indeterminate imaging on mammography and US. In the remaining 14 patients with ILC MRI was performed to determine tumour extent.

**Results:** MRI accurately identified malignancy in 5 of the 6 patients with normal/indeterminate imaging on both mammography and US. In 8 (57.1%) of the 14 patients, where MRI was performed to determine tumour extent, it provided significant additional information compared to conventional imaging. These included 5 patients in whom conventional imaging grossly underestimated the extent of the tumour, 2 patients in whom MRI correctly identified an unsuspected tumour in the contralateral breast and one patient in whom MRI accurately predicted invasion of the pectoral muscle with malignancy. When compared with the final histology, there was excellent correlation between the size of the tumour on MRI ( $r = 0.967$ ) as compared to mammography ( $r = 0.663$ ) and US ( $r = 0.673$ ), thus enabling a single stage surgical resection in all cases. There were no false positive lesions identified on MRI in any of these patients.

**Conclusions:** MRI can provide considerable additional information when allied with conventional imaging in the detection and characterisation of ILC. By accurately assessing tumour extent it provides important information for pre-operative planning and single-stage resection of ILC, which will often be diagnosed with core biopsy.

#### O-96. ROUTINE HOSPITAL FOLLOW UP OF BREAST CANCER – TIME FOR A NEW APPROACH?

J. Donnelly, P. Mack, L.A. Donaldson. *Grimsby Hospital, UK*

**Purpose:** To determine how recurrent breast cancer presents to our hospital, with the aim of revising our follow-up strategy. The study was prompted by the increased pressure on breast clinics from increased new patient referrals and the 2 week wait.

**Patients and Methods:** All patients who underwent surgery as primary treatment for breast cancer between 1992 and 1998 were reviewed. Details about recurrent disease were obtained from our breast cancer database.

**Results:** Of 643 patients, 108 developed recurrence. We retrieved information on 104 of these, of whom 67 had metastatic, 19 local and 14 regional recurrence. Four 2<sup>nd</sup> primary tumours in the contralateral breast were seen.

When patients symptoms developed, 77 (74%) were seen at an early (interval) clinic appointment. 55 were referred by their GP, 16 from another hospital department and 6 self-referred. 18 (17.3%) brought attention to their symptoms at a routine appointment. Unsuspected disease, locoregional in all cases, was elicited on routine examination by the clinic doctor in 7 (6.7%) patients, who thus represented 1.1% of the 643 from this period, attending for follow-up. Surveillance imaging detected 2 cases. The median time to histological confirmation of recurrence was 9 days (range 1 to 208 days) and confirmation by imaging 4 days (1 to 68

days). Patients seen as an interval referral had had symptoms of recurrence for a median time of 3 weeks (range 2 days–1 year) before consulting a doctor. This compared with a median of 4 weeks (range 2 days–4 months) for those attending routinely.

**Discussion:** Our experience established that recurrent breast cancer is rarely detected as the result of routine clinic examination. Surveillance imaging also has a low yield. In our practice most recurrent disease is detected as the result of an interval appointment made by patient. Routine hospital-based follow-up of breast cancer patients appears to be inefficient and unnecessary. We believe that given adequate preparation and education an improved system should be implemented whereby patients are discharged to their GPs upon completion of their treatment, with immediate access to specialist clinic review should the need arise.

#### O-97. SHOULD WE FOLLOW BREAST CANCER PATIENTS

J. Kokan, M. Wise, C. Yiangou. *Queen Alexandra Hospital, Portsmouth, UK*

It has been routine practice for breast cancer patients in this country to be followed up in breast clinics regularly in order to detect locoregional recurrence and distant metastases.

**Aim:** To review breast cancer recurrences and see whether they are detected in routine follow up clinics.

**Methods:** Retrospective study based on 238 consecutive patients of breast cancer treated in 1995 in our hospital. These patients have now been followed up for at least 5 years.

**Results:** Operation was performed in 195 followed by radiotherapy, chemotherapy, Tamoxifen alone or combination of these. A total of 51 (21%) were found to have local recurrence or metastatic disease. 30 (12%) had locoregional recurrence, 11 (4.6%) of these were subsequently found to have distant metastases. 17 of 30 were detected at a routine visit on clinical examination and subsequently confirmed by further investigations. 21 (9%) developed distant metastases only. 9 of 21 were diagnosed at a routine clinic visit.

There was an association between metastatic disease and younger age, higher grade of primary tumour and advanced stage of disease, at first presentation. This was however not the case with locoregional recurrences.

**Conclusion:** A significant percentage of breast cancer recurrences, both locoregional and distant, are detected at routine follow up clinics. The ideal frequency of follow up visits to the clinic is not known, but sub groups of patients should be identified, based on age and histopathological characteristics, who would benefit from more frequent follow up.

#### O-98. INCIDENCE OF LYMPH NODE METASTASES IN INFILTRATING BREAST CANCERS OF LESS THAN 10 MM

C.M. Sharp, C.R. Wilson, J.C. Doughty, W.G. George. *Western Infirmary, Glasgow, UK*

**Background:** Axillary clearance carries with it significant morbidity. Some studies have suggested that axillary surgery may be avoided in women with invasive cancers of 5 mm or less as the incidence of node positivity in this group is small.

**Methods:** 412 patients with invasive cancers less than 10 mm treated between 1995 and 2000 were identified from the prospective Greater Glasgow Health Board Audit of Operable breast cancer. The incidence of lymph node metastases in relation to tumour size, grade and ER status was examined.

##### Results:

| Grade | 5 mm (node +ve) | 6–9 mm (node +ve) |
|-------|-----------------|-------------------|
| 1     | 5.9%            | 7%                |
| 2     | 11%             | 12.9%             |
| 3     | 27.8%           | 31.7%             |
| Total | 11.4%           | 12.4%             |

There was no significant difference in the incidence of nodal metastases between cancers of 5 mm and those of 6–9 mm ( $p > 0.1$ ). High nuclear grade was associated with an increased risk of nodal spread ( $p < 0.001$ ), as was a negative ER status ( $p < 0.01$ ).

**Conclusions:** Our data demonstrates that grade 1 tumours of 10 mm or less have a very low incidence of nodal metastases and should therefore undergo a less radical axillary staging procedure, such as sentinel node biopsy, which would spare 95% of women an unnecessary axillary clearance.

#### O-99. USE OF HORMONAL REPLACEMENT THERAPY (HRT) DOES NOT ADVERSELY AFFECT SURVIVAL FROM SCREEN DETECTED BREAST CANCER

R. Prasad, J. Iddon, W.F. Knox, M. Wilson, L. Barr, A. Baildam, N.J. Bundred. *University Hospital of South Manchester, UK*

**Background and Aim:** HRT increases the incidence of breast cancer but its effect on mortality from breast cancer remains controversial. To determine mortality in HRT users who developed screen detected cancers between 1991–97 we collected HRT history indicating duration, dose and type of HRT and present follow up of 589 women.

**Methods and Study:** A total of 589 patients with prevalent and first incident screen detected cancers between 1991–97 were studied. Of the total, 417 patients had never used HRT and 172 patients had a history of HRT. Women on HRT developed well differentiated tumours  $p \leq 0.02$  but node status and tumour size did not differ between HRT users and non-users. The median follow up was 5 years and 11 months.

**Results** are summarised in the table.