

bifurcation =  $86.16 \pm 5.11$ , to optic chiasma =  $75.11 \pm 5.82$ , to ipsilateral anterior clinoidal process =  $65.69 \pm 6.62$ , to ipsilateral posterior clinoidal process =  $74.3 \pm 7.29$ , to ipsilateral optic canal =  $63.73 \pm 6.13$ .

**Conclusion:** Using endoscope alone during conducting the keyhole approach is better/or no advantage over Using the endoscope as an assistance tool. Our recommendations are to use the introduced measurements in this study for the devolvement of a complete set of instruments for the pure endoscopic approach. We do belief that after starting the pure endoscopic approaches with more advances of technology of endoscopes the pure endoscopic approaches may replace the microscopic in near future.

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## Breast surgery

### 0108: POST-MASTECTOMY BREAST RECONSTRUCTION: OPTIONS FOR THE PATIENT

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Medical students often struggle when faced with “surgical management” questions. This is made more complicated when the surgical treatment options for a condition are multiple, and are heavily influenced by patient input, as is the case for breast reconstruction post-mastectomy. The case report presented uses a stepwise approach to simplify the surgical management of breast reconstruction post-mastectomy into three key questions:

- 1) Does the patient want breast reconstruction surgery?
- 2) Is anything stopping the patient from having immediate breast reconstruction post-mastectomy?
- 3) What sort of breast reconstruction does the patient want?

The case of Mrs. X, a patient with a ductal carcinoma in situ in her right breast, will be used as an example to help understand the possible answers to these three questions.

Such a simplified, systematic approach to surgical management helps medical students understand how elective surgical decisions are made.

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### 0135: PROVIDING INFORMATION ON LOCAL RATES OF RE-EXCISION FOR BREAST CANCER IS IMPORTANT IN INFORMING PATIENT CHOICE PRIOR TO BREAST CONSERVING SURGERY

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**Introduction:** Wide local excision followed by radiotherapy is an established alternative to mastectomy, but may be complicated by positive margins. We aimed to determine the rate of positive margins following WLE in our breast unit to aid patient decision making on breast conserving surgery vs mastectomy.

**Method:** All cases of margin re-excision following wide local excision for breast cancer between 2012 and 2015 were identified from a prospectively maintained database. We determined rates of margin positivity, number of procedures per patient, presence of invasive/pre-invasive disease in re-excision specimens, and tumour factors including size, DCIS, grade and vascular invasion.

**Result:** 585 wide local excisions for breast cancer were performed during the study period. 61 (10.4%) needed re-excision of margins. Further invasive or pre-invasive disease was identified in 7 (11.5%) re-excision specimens. Three (4.9%) required a third procedure to complete their surgical management. Factors associated with need for re-excision were similar to those previously documented.

**Discussion:** Re-excision rates following WLE in our hospital are acceptable with 95% of women achieving clear margins after only two procedures

(minimum standard). Sharing this information with women considering breast conservation versus mastectomy may help them to make more informed decisions about their treatment options.

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### 0288: FUNDING PATIENT AND PUBLIC PARTICIPATION IN RESEARCH: AN ALTERNATIVE TO TRADITIONAL SOURCES

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**Aim:** Traditionally, research funding is provided by specialty specific associations, disease specific organisations, national research councils, small charities, the Royal colleges and industry. Recently, crowdfunding has been used to fund medical research. Our collaborative was awarded a £4,700 grant by ABS to investigate the public's perception of breast cancer research priorities. Our aim was to secure additional resources to supplement our grant and incentivise public participation.

**Method:** Collaborative members approached local retail outlets and meeting venues to seek donations to the study. A number of national chains were sent requests by post.

**Result:** A total of 19 establishments were contacted. Donations were received from five establishments (26%). These were in the form of retail vouchers with face value of £650 and free use of meeting rooms (for the public participation events) to the value of £750. The retail vouchers will be used to incentivise public participation in our study. In addition, due to the relationships built up with those organisations, we have been able to recruit participants amongst their staff thereby enhancing the diversity of our participant pool.

**Conclusion:** A non-traditional approach to funding research is a viable option for researchers, especially for public participation studies.

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### 0354: FIVE-YEAR LOCAL RECURRENCE FOR BREAST CANCER; THE PRESENTATION OF OUR LOCAL DATA

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**Background:** Breast cancer is the most common cancer in women, affecting 1 in 8. Overall survival has now reached 80%. Although, in the UK local recurrence rate is largely unknown.

**Method:** Analysis of collected data for all patients diagnosed with breast cancer at our trust from 2005–2009 to enable 5 year follow up. Comparison to current literature, and statistical analysis of our results was performed

**Result:** 1075 patients were identified. 137 (12.64%) patients had breast cancer related deaths, giving overall 5 year survival of 74.7%. 19 (1.74%) patients developed local recurrence. 78.9% of patients self-presented with their recurrence out of the surveillance program. A multiple logistic regression model was created using the individually statistically significant variables. The analysis highlighted a likelihood ratio of 3.08 (95% CI 1.81–5.43) for Sentinel Lymph Node positivity, and 1.97 (95% CI 1.11–3.4) for tumour size; no other variables contributed significantly to the model.

**Conclusion:** Our local recurrence rate is significantly lower than the perceived rate of 1–2% per year. Patient self-assessment detected the majority of local recurrence; questioning the benefit of annual clinician review and in keeping with the national drive.

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### 0493: AXILLARY ASSESSMENT IN INVASIVE LOBULAR CANCERS

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**Aim:** Pre-operative axillary ultrasound (AUS) guides axilla staging thus preventing further axillary treatment following sentinel lymph node biopsy (SLNB). AUS has a sensitivity of approximately 50% in invasive ductal cancers (IDC). Literature suggests invasive lobular cancer (ILC) has a distinctive biological growth pattern, making axillary assessment more challenging. This study aimed to assess if AUS for ILC was less sensitive than IDC.

**Method:** Patients diagnosed with lobular breast cancer were retrieved from our databases. Data collected included axillary imaging, fine needle aspiration cytology (FNAC), axillary surgery and nodal histology.

**Result:** 102 patients were diagnosed with ILC or mixed IDC/ILC breast cancer over 12 months. All underwent pre-operative AUS. 34 patients had abnormal axillary imaging and FNAC; 50% of these demonstrated malignant nodal involvement. 80% of all patients (82/102) underwent SLNB and 19% (n = 19) underwent axillary clearance surgery. 23/82 patients (28%) had false negative radiological+/-cytological normal axillae and demonstrated  $\geq 1$  positive lymph node on SLNB. The sensitivity of AUS for ILC was 42.5%.

**Conclusion:** Our results correlate with current literature sensitivity of AUS for ILC and IDC. However a false negative rate of approximately 25%, in both our study and the literature, indicates the need for improved accuracy of AUS.

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#### 0514: LYMPH NODE POSITIVITY IN PATIENTS UNDERGOING PRIMARY AXILLARY NODE CLEARANCE ON THE BASIS OF TUMOUR SIZE OR MULTICENTRICITY

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**Introduction:** Sentinel lymph node biopsy (SLNB) is associated with decreased morbidity compared with traditional axillary node clearance (ANC). SLNB is recommended for the majority of early breast cancers with ultrasound-negative axillae. Large tumour size and multicentricity are regarded by some as relative contraindications to SLNB. The aim of this study is to identify the proportion of patients having primary ANC on the basis of large tumour size or multicentricity that had disease-positive lymph nodes.

**Method:** A retrospective review of the clinical records of all patients proceeding to primary ANC between 2007 and 2012 was undertaken. Data on investigations, surgical planning and histopathology was collected.

**Result:** 270 patients had primary ANC. 17 on the basis of tumour size > 3 cm and 17 because of multicentricity. 4 patients in the large tumour group and 7 in the multicentric group had macroscopic lymph node metastases.

**Conclusion:** 77% of the large tumour group and 58% of the multicentric group could have been spared ANC. Axillary USS excludes large volume disease that could render SLNB inaccurate. Consequently SLNB should be offered in these patients.

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#### 0708: CANCER REGISTER DOCUMENTATION; ARE WE ACCURATE?

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**Aim:** In the Homerton Breast Service, patients are discussed at weekly regional Multidisciplinary Team (MDT) meetings. Information is documented on MDT Proforma sheets by Consultant Breast Surgeons and transferred to Somerset, an electronic cancer register.

As Somerset is a record of performance, an initial audit is warranted to investigate the accuracy of transfer of information from the Proforma onto Somerset. The objectives are to define applicable standards for future audits and to identify ways of improving accuracy.

**Method:** Common sections of the Proforma sheets and Somerset of 40 pre-operative (Pre-Op) and 40 post-operative (Post-Op) patients were compared.

**Result:** Pre-Op and Post-Op Care Plan were documented with 87.5% and 80% accuracy respectively. Areas to improve in are Pre-Op Tumour Markers (25%) and Cytology (9.5%). Areas of particular importance are Surgery (62.5%) and Adjuvant Radiotherapy (52%), with incorrect or missing information on Somerset.

**Conclusion:** Accuracy of Somerset documentation is less than desirable. Recommendations for improvement are live recording of information on Somerset during MDT meetings and filling information under appropriate headings on Somerset. The standards for the next audit should be 100% accuracy for critical information such as Staging, Tumour Markers, Adjuvant Therapy and Care Plan.

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#### 0721: DOES THE ONCOTYPE DX ASSAY RECURRENCE SCORE CORRELATE WITH OTHER PREDICTIVE TOOLS WHEN PLANNING ADJUVANT CHEMOTHERAPY IN EARLY BREAST CANCER?

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**Introduction:** Oncotype DX is a 21 gene assay that determines the individual risk of breast cancer recurrence and thereby helps to predict chemotherapy benefit.

**Aim:** To review our experience with Oncotype DX and assess its correlation with other frequently used predictive tools (NPI, Adjuvant Online!, PREDICT).

**Method:** A retrospective case note review of all patients who underwent Oncotype was performed to determine baseline characteristics and recurrence score. NPI, Adjuvant Online! and PREDICT scores were compared.

**Result:** 94 female patients, median age 56(29–77) had an Oncotype DX assay. 74.5% had invasive ductal carcinoma, 63.8% were LN-ve and all were ER+ve and HER2-ve. 44 obtained a low recurrence score (<18), 1 had chemotherapy; 42 had an intermediate recurrence score (18–30), 19 of whom were offered chemotherapy (5 declined) and 8 patients obtained a high recurrence score ( $\geq 31$ ), all were offered chemotherapy (1 declined). The correlation of the Oncotype recurrence score with NPI ( $r = 0.0689, p = 0.51$ ), Adjuvant Online! ( $r = -0.0374, p = 0.72$ ) and PREDICT ( $r = 0.0669, p = 0.52$ ) was poor.

**Conclusion:** Oncotype DX has been incorporated into our practice and significantly affects our decision making, highlighted by only 2.27% in the low recurrence score group being offered chemotherapy. Oncotype shows no correlation with other commonly used predictive tools in this cohort.

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#### 0757: CROSS SECTIONAL STUDY OF A SINGLE UNIT'S EXPERIENCE WITH POST MASTECTOMY RECONSTRUCTION IN BREAST CANCER PATIENTS

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**Background:** Up to 30% of women undergoing mastectomy for breast cancer will opt to have a breast reconstruction, either at the time of mastectomy or following completion of adjuvant treatment. We sought to assess patient satisfaction with different types of breast reconstruction using a validated questionnaire, The Breast Q.

**Method:** 105 patients that had undergone breast reconstruction following mastectomy for breast cancer from June 2005 to December 2011 were identified from patient database.

**Result:** 60 of the 105 patients completed the questionnaire (response rate: 57%). Breast Q scores (breast, overall outcome, sexual and psychosocial well being) were significantly higher in patients with delayed reconstruction ( $p < 0.05$ ). Complication rates were higher in those who had received radiation therapy particularly in those that had implants and axillary surgery ( $p < 0.05$ ). Overall Breast Q scores were observed to be higher in women above 50, those with a lower TNM staging and at 3 years post reconstructive surgery.