Conclusion: Wound infection following breast cancer surgery can have severe consequences by delaying the start of adjuvant chemo-radiotherapy and affect the outcome of patients. This audit indicates that prophylactic antibiotics substantially reduce the risk of post-operative wound infections in breast surgery and thus avoid delay in start of adjuvant treatment or any additional operation required for definitive treatment.

0747: ULTRASOUND MARKING OF THE WIRE-TIP PRIOR TO WIRE GUIDED WIDE LOCAL EXCISION SHOWS PROMISE IN IMPROVING OUTCOME FOR IMPAIRABLE BREAST CANCER

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Aim: We examined whether pre-operative ultrasound marking (PUM) of the wire-tip improved outcome for women undergoing wire-guided wide local excision (WLE) of impalpable breast cancer.

Methods: Between 01/2010 and 06/2011, 33 women underwent wire-guided WLE in our institution. Via a retrospective analysis of case-notes we identified patients who had undergone PUM of the wire-tip. Patient age, tumour characteristics, operating time, mass of specimen excised and further procedures (cavity-shave) were recorded.

Results: 12 women underwent PUM of the wire-tip (group a), 21 women did not (group b). Both groups were well matched for age, histological grade of tumour and tumour size. The median mass of specimen excised was 48.5g (range 24-92g) for group a and 57g (range 22-140g) for group b (p=0.14). Median operating time was 36.5mins (range 19-52mins) for group a compared to 41mins (range 24-103mins) for group b (p=0.001). None of the patients in group a (0%) required a further cavity-shave compared with 5 of the patients in group b (24%).

Conclusions: PUM of the wire-tip shows promise as an adjunct in wire-guided WLE of impairable breast cancer, reducing the mass of specimen removed (with obvious aesthetic implications), the operating time, and the number of repeat procedures to which the patient is subjected.

0782: ANALYSIS OF SOCIAL STATUS AND BREAST CANCER PROGNOSIS USING WELSH INDEX OF MULTIPLE DEPRIVATION AND ACORN CLASSIFICATION: DOES A GAP EXIST?

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Introduction: There has been an implied association between poor health and social deprivation. Our study assessed whether a gap in patient outcome for breast cancer exists between different strata of society within a geographical region in Wales.

Methods: A retrospective cohort of 745 breast cancer patients was recruited using cancer registry data from January 2008 to February 2011. Welsh Index of Multiple Deprivation (WIMD) along with 4 deprivation categories from the ACORN classification based on patient postcodes were used as a measure of deprivation. Nottingham Prognostic Index (NPI) was used as a marker of patient outcome.

Results: Analysis of WIMD demonstrated no correlation with NPI (coefficient: 0.042; p: 0.25). The incidence of breast cancer was highest (30%) in the least deprived category of patients (20%-26% for the remaining categories). The mean NPI score was 3.1 for the least deprived group (3.2 for other categories). 38% of the least deprived patients had an excellent prognostic outcome (32%-34% for other categories).11% of the least deprived patients had a poor prognosis (9%-11% for other categories).

Conclusions: Our results show no statistically significant difference in either the incidence of breast cancer or outcome from treatment of the disease between different strata of society.

0882: THE ROLE OF AXILLARY ULTRASOUND IN EARLY INVASIVE BREAST CANCER

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Aim: Axillary node metastases influence the management of women with invasive breast cancer. Guidelines recommend axillary ultrasound for all patients, with fine needle aspiration (FNA) if abnormal. The study aim was to assess axillary ultrasound accuracy in a specialist breast centre.

Methods: All cancer patients with early invasive breast cancer, from August 2010 to August 2011 inclusively, were identified. Patient demographics, axillary ultrasound and histology results were obtained. Mann Whitney U and Fishers Exact tests were used, with a p value of <0.05 considered significant.

Results: 197 patients were identified; 9 were excluded due to incomplete data. All had axillary ultrasound; 31.0% were abnormal. 64.0% of abnormal lesions were malignant histologically. Ultrasound sensitivity and specificity were 60.9% and 82.5% respectively. Positive and negative predictive values were 65.0% and 79.8% respectively. Overall accuracy was 75.0%. The median (IQR) proportion of involved nodes was higher in those with a positive pre-operative ultrasound (50.0%(14.3-85.7%); vs.17.5%(8.2-42.5%); p=0.02), although harvested nodes were similar (17.0(11.0-23.0)vs.14.0(2.7-30.3); p=0.22). A lower proportion of patients with micrometastatic disease (35.7%) had a positive ultrasound compared to macroscopic nodal disease (85.7%; p=0.004).

Conclusions: Ultrasound accurately assesses axillary lymph node status. Routine ultrasound should help avoid excessive axillary surgery.

0897: PREDICTING RESPONSE – THE USE OF NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER A 5 YEAR REVIEW

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This study aimed to determine the rate of pCR following neoadjuvant chemotherapy, identify clinicopathologic factors associated with pCR and validate the efficacy of a published nomogram (Neoadjuvant) (1) in predicting pCR.

Data was collected on patients with breast cancer treated with neo-adjuvant chemotherapy at SVUH from July 2006 to July 2011. Patient demographics, tumour clinicopathologic parameters and chemotherapeutic regimens were recorded. Response to neoadjuvant chemotherapy was assessed radiologically and pathologically. Where sufficient data was available the Neoadjuvant nomogram was used to calculate the probability of pCR. Predictive accuracy was assessed by calculating the area under the receiver operating characteristic (ROC).

89 patients were treated with neoadjuvant chemotherapy during the study period. pCR was observed in 14%. Estrogen receptor (ER) negativity and Her2/neu receptor positivity were significantly associated with pCR (p<0.05). All tumours exhibiting a pCR were invasive ductal carcinomas. No invasive lobular carcinoma exhibited a pCR to neoadjuvant chemotherapy. The ROC of the validated nomogram in our breast cancer population revealed a value of 0.87.