

between the two groups. Intraoperative identification and excision of the localised lesion was successful in all patients as confirmed with specimen radiography. Overall no significant differences were observed in the proportion of patients requiring re-excision between the two groups (Magseed 16% vs. WGL 14% $p=0.692$). Specimens size by weight were similar for both groups; the mean weight was 39.6 gr in the Magseed cohort and 44.5 gr in the wire localisation cohort ($p=0.206$).

Conclusions: In our series Magseed localisation proved to be as reliable and effective as wire guided localisation in terms of lesion identification, excision with tumour free margins, re-operation rate and specimen weight.

P038. AN OBJECTIVE AESTHETIC OUTCOME TOOL USING 3-DIMENSIONAL SURFACE IMAGING (3D-SI) TO REPLACE PANEL ASSESSMENT FOR BREAST CONSERVING TREATMENT (BCT)

Amy R. Godden^{1,2}, Rachel L. O'Connell^{1,2}, Aikaterini Michal¹, Kabir Mohammed¹, Lisa Wolf¹, Peter A. Barry¹, Katherine D.C. Krupa¹, Anna M. Kirby^{1,2}, Jennifer E. Rusby^{1,2}. ¹Royal Marsden NHS Foundation Trust, Sutton, United Kingdom; ²Institute of Cancer Research, London, United Kingdom

Introduction: The aesthetic goal for BCT is maintenance of symmetry. No gold standard exists to evaluate aesthetic outcome. Panel assessment is most commonly used. With heterogeneous methodology, inherent bias, and poor internal consistency, comparison is unreliable. 3D-SI has advantages over standard photography in that it provides additional views and measures, is quick and simple, and does not require a photographer. It is, however, more expensive. We describe the development of an objective outcome tool using 3D-SI.

Methods: REC approved study. 290 women who underwent BCT 1-5 years previously had 3D-SI (VECTRA XT). 3D measures were derived using Mirror™ Software, and panel assessment was performed (5 members, blinded to patient ID and surgeon, Harvard 4-point scale). 190 women comprised a training set to create the tool. Measures were entered into a multivariate model to predict panel score. The predicted scores of the remaining 100 women were compared to observed panel assessment for validation.

Results: 6 objective measures were significantly associated with panel score by multivariate analysis and were used in the tool. Correlation between predicted and actual panel score for the training and validation set was moderate ($R=0.67$ & 0.65 respectively). Limits of agreement in Bland Altman were -1.2 to 1.2 in the training set and -1.2 to 1.1 for the validation set.

Conclusions: The preliminary tool has reasonable correlation but defaults towards the median panel score. Adjustment may be required to improve clinical utility. This objective tool will enable the communication and comparison of results in research and provides a method to benchmark clinical performance.

P039. LAVAGE COMBINED WITH MINIMALLY INVASIVE SURGERY IN TREATMENT OF PLASMA CELL MASTITIS: A CLINICAL STUDY

Hongli Wu, Ningxia People's Hospital, Yinchuan, China

More often seen as plasma cell mastitis (PCM) and granulomatous mastitis, non-lactating mastitis is regarded as one of the world's difficult and complicated diseases. Due to such characters as suddenness, rapid progress, difficult to cure, long course of disease and easy recurrence, the disease is called "non-fatal cancer." The average age of patients is 32, and the clinical manifestation is breast lumps accompanied by painful ulceration. Traditionally the treatment of the disease used to be surgical resection and incision drainage; however the treatment not only had a recurrence rate of 48.84% but also had a tendency of destroying the shape of the breasts. This presentation reports our treatment of the disease through individualized technical means such as duct scope, assisted vacuum resection, intravenous needle indwelling as well as single or combined syringe for flushing, repairing inflammatory areas to gain clinical effect of achieving complete and seamless healing. The report highlights the innovation in four aspects: (1) Breast tissue resection defects were avoided; (2) The treatment process is simple and there is less pain in the wounds; (3) Economical and practical

(4) Preservation of breasts and prevention of recurrence and (5) It is likely to be the first in China.

P040. RADIOLOGICAL AND SURGICAL EFFICACY OF NEOADJUVANT SINGLE VS DUAL BLOCKADE IN HER 2 POSITIVE BREAST CANCER AND ITS IMPACT ON SURGICAL PLANNING: A RETROSPECTIVE SINGLE CENTRE STUDY

Aishah Hakim, Pankaj Roy, Department of Breast Surgery, Oxford University Hospitals, Oxford, United Kingdom

Introduction: Dual anti-HER-2 therapy with pertuzumab and trastuzumab has been shown to increase rates of pathological complete response in HER-2 positive breast cancers. The use of dual blockade was approved by NICE in Dec 2016, however the benefit is yet to filter into surgical practice to allow an increase in rates of breast conserving surgery.

Methods: A locally approved retrospective single centre service evaluation analysing all HER-2 positive patients managed with neoadjuvant chemotherapy (NACT) between January 2015 and April 2017. Breast imaging was also evaluated to ascertain correlation to surgical findings.

Results: 55 HER-2 positive non-metastatic breast cancer patients received NACT; of these 48 (24 dual blockade vs 21 trastuzumab alone) had MRI prior to and following chemotherapy. Dual blockade had greater radiological complete response (rCR, 71% vs 21% Herceptin) and superior pathological complete response (pCR). In respect to lymph node disease, rCR was achieved in 69% of patients managed with dual blockade (9/13) vs Trastuzumab alone (64%, 9/14). pCR was achieved in 73% cases treated with dual blockade (11/15), vs 28% (4/14) with trastuzumab. We intend to present our analysis on the potential impact on surgical planning with the change in the response rate by adding pertuzumab.

Conclusion: Use of neoadjuvant dual anti-HER-2 blockade increases rates of pCR and has the potential to increase BCS rates, leading to improved cosmesis and patient satisfaction.

P041. DO WAITING TIMES FOR SURGERY HAVE AN IMPACT ON BREAST CANCER TUMOUR SIZES?

Suzanne Robat¹, Tanja Gagliardi², Daina Greiskalna², Yazan Masannat^{2,1}. ¹University of Aberdeen, Aberdeen, United Kingdom; ²Aberdeen Royal Infirmary, Aberdeen, United Kingdom

Background: Over the years, breast cancer incidence rates have been increasing, putting more pressure on the health service. With this yearly increase and the limitation of resources, there is always some waiting between presentation, diagnosis and treatment. This retrospective audit is to evaluate tumour growth while waiting for surgery (Approved by NHS Grampian Clinical Effectiveness Team).

Methods: Patients diagnosed with breast cancer who underwent wire guided wide local excision at Aberdeen Royal Infirmary in 2017 were identified and the first 100 were included. 62 of these patients had a measurable lesion on mammogram at presentation and on the day of surgery. The tumour diameters were measured by two radiologists independently comparing the mammograms at presentation and on the day of surgery. Tumour sizes were calculated as well as the difference between the sizes on presentation and on the day of surgery.

Results: The two radiologists had an Intraclass Correlation Coefficient of 0.812, showing that their measurements were in good agreement. Waiting times averaged 70 days. Paired t-test showed there was no significant difference between tumour volumes on mammograms taken at initial detection and on mammograms taken on the day of surgery ($p = 0.76$). Different waiting times from initial detection to surgery did not affect tumour volume significantly either ($p = 0.92$). Paired t-test also showed that tumours did not change in grades significantly either ($p = 0.235$).

Conclusions: Delays in treatment did not cause significant increase in tumour size or cause an advancement in tumour grade.

P042. EVALUATION OF A BREAST CANCER SURVIVORSHIP PROGRAMME: 7-YEAR PATIENT OUTCOMES AND SERVICE EXPERIENCE

Kimberley Edwards, Alexander Wilkins, Penelope McManus. Hull and East Yorkshire NHS Trust, Hull, United Kingdom