TRAM flaps. The risk factors for transfusion include obesity, peri-operative anaemia and bilateral cases. There are contradictory reports regarding immediate procedures being a risk factor. The data is variable with lack of consistency, emphasising the importance of a systematic analysis of the studies.

Conclusion: We have identified the most common predictors for post operative transfusion for DIEP and TRAM flaps. This information is valuable to patients and clinicians during preoperative counselling and consent.

**0495: IMPROVING POST OPERATIVE PAIN MANAGEMENT IN SUBPECTORAL TISSUE EXPANDER IMPLANT RECONSTRUCTION OF THE BREAST USING AN ELASTOMERIC PUMP**

S. Hallam, A. Chaudhry, A. Chambers, S. Govindarajulu, A. Sahu, S. Cawthorn, North Bristol NHS Trust, UK

Aim: Postoperative pain after breast surgery leads to delayed mobilization and prolonged stay. We performed a retrospective analysis of patients undergoing skin-sparing mastectomy and subpectoral implant reconstruction. Hypothesis: Does the use of an elastomeric local anesthetic pump improve pain control and length of stay (LOS).

Methods: 25 consecutive patients undergoing the above procedure were sited with an elastomeric local anesthetic infusion pump intra-operatively, in addition to standard regular and PRN analgesia. The control group contained 25 patients undergoing the same procedure receiving standard analgesia alone. Visual Analogue Scales (VAS) were recorded at 24 hours in addition to PRN analgesic requirements.

Results: Median age was 51 (26–75) in the intervention group and 50 (28–70) in the control. Mean VAS score was 0.28 (0.61SD) at 24 hours in the intervention group and 1.84 (0.37SD) in the control, p<0.0001. Mean LOS was 1.8 days (0.71 SD), and 2.28 days (0.94 SD) in the control, p=0.252. There were no complications involving catheter placement, local anaesthetic leakage or toxicity.

Conclusion: We found significantly reduced pain and trend towards reduced and length of stay with the local anesthetic infusion pump. The elastomeric pump is a step towards enhanced patient recovery following mastectomy and implant reconstruction.

**0521: EXPLORING THE POTENTIAL OF USING THE TRAINEE COLLABORATIVE MODEL TO DELIVER HIGH-QUALITY, LARGE-SCALE PROSPECTIVE MULTICENTRE STUDIES IN RECONSTRUCTIVE BREAST SURGERY: THE IBRA (IMPLANT BREAST RECONSTRUCTION EVALUATION) STUDY**

On behalf of the Breast Reconstruction Research CollaborativeBreast Reconstruction Research Collaborative, United Kingdom

Aim: The introduction of techniques to augment the subpectoral pocket has revolutionised the practice of implant-based breast reconstruction(IBM), but evidence to support the safety and efficacy of these techniques is lacking. High-quality data are required, but large prospective cohort-studies are expensive and time-consuming. Adoption of the trainee research collaborative model may effectively overcome these barriers.

We report early experience with the iBRA(implant Breast Reconstruction evAluation) study which has employed this innovative methodology in breast-surgery for the first time.

Methods: The iBRA study has 4-phases that aim to inform the feasibility and conduct of a future RCT including a national practice questionnaire(NPQ) and prospective audit. Trainee leads have been identified at each centre via the Mammary Fold and Reconstructive Surgery Trials Network. Leads are responsible for completing the NPQ with the support of a lead consultant and identifying patients for the prospective audit, collecting in-hospital and 30-day outcome data and obtaining consent for patient-reported outcome questionnaires.

Results: Between May-Dec2014, 67 units have completed the NPQ. Over 100 collaborators have recruited 328 patients from 35 centres and the study is running 6-months ahead of schedule.

Conclusion: The iBRA study has demonstrated that the trainee collaborative model is an effective means delivering large-scale prospective studies in breast-surgery.

**0529: LOCAL RECURRENCE FOLLOWING BREAST CONSERVING SURGERY FOR DUCTAL CARCINOMA IN-SITU: THE EDINBURGH EXPERIENCE**

G.E. EKATAH, M.J. DIXON. Western General Hospital Edinburgh, UK

Aim: Ductal carcinoma in-situ (DCIS) represents 5% of symptomatic and 50% of screen-detected breast malignancies. Historically managed with mastectomy, providing excellent long-term outcomes, Breast Conserving Surgery (BCS) +/-adjuvant radiotherapy now represents the mainstay management option for DCIS providing better cosmetic outcomes with no adverse impact on overall survival. The main drawback of BCS remains local recurrence – DCIS or invasive breast cancer, which are associated with significant morbidity and mortality. Given advances in DCIS management, the study aims to compare local recurrence rates as well as ‘time to recurrence’ over the last 10 years to previously published data from the Edinburgh breast unit.

Methods: Retrospective single-centre study of patients with histologically confirmed primary DCIS who underwent BCS between January 2000 and January 2010.

Results: Of the 477 eligible patients, 7.8% (n=37) developed local recurrence following BCS (median follow-up = 63months), a significant decrease from 15% previously reported within the same unit. The median time-to-recurrence was 27months. There is also trend towards decreasing local recurrence rates with increasing use of adjuvant radiotherapy.

Conclusion: Advances in DCIS management and widespread use of adjuvant radiotherapy have contributed to a significant reduction in local recurrence rates following BCS for DCIS.

**0530: EXPLORING VARIATIONS IN THE PROVISION AND PRACTICE OF IMPLANT-BASED BREAST RECONSTRUCTION IN THE UK: INITIAL RESULTS FROM THE IBRA NATIONAL PRACTICE QUESTIONNAIRE**

On behalf of the Breast Reconstruction Research CollaborativeBreast Reconstruction Research Collaborative, United Kingdom

Aim: The introduction of lower-pole sling-procedures has revolutionised the practice of implant-based breast-reconstruction (IBBR), but data regarding the availability and practice of these procedures is limited. The iBRA (implant Breast Reconstruction evAluation) Study aims to explore the practice and outcomes of IBBR to inform the feasibility of undertaking an RCT comparing techniques.

We report the early results of iBRA Phase-1, a National Practice Questionnaire (NPQ) which aims to comprehensively describe current national-practice.

Methods: A questionnaire developed by the iBRA Steering-Group was completed by trainee and consultant leads at breast and plastic surgical-units across the UK. Simple summary statistics were calculated and variations in service-provision, practice and adherence to guidelines evaluated.

Results: 44-units have completed the NPQ to-date. Variation was demonstrated in the provision of novel-techniques especially the availability of biological (n=32, 72.7%) and synthetic (n=10, 20.5%)meshes and in patient-selection. There was lack of consistency in peri- and post-operative management particularly duration of antibiotic-use (induction-only-vs,14-day-course) and drain-policy (no-drains-vs,2-drains-for-14-days). Few units (n=14, 37.8%) had written management protocols and only half (n=20) prospectively-audited their outcomes.

Conclusion: Early analysis of the iBRA-NPQ has demonstrated marked variation in the provision and practice of IBBR. Phase-2 of the iBRA Study will determine the safety and efficacy of different approaches to IBBR and allow evidence-based best practice to be explored.

**0571: ARTISS HUMAN FIBRIN SEALANT GLUE FOR MASTECTOMY FLAP ADHERENCE**

M. Venn, E. Babu. The Hillingdon Hospitals NHS Foundation Trust, UK