

Teaching Hospital, Dundee were recruited prospectively over a 2-month period. Patients with dementia (AMT < 8), visual impairment were excluded. 59 patients recruited in loop-1 were given Likert scale questionnaires assessing knowledge of the hip fracture, treatments and complications. 64 patients recruited in loop-2 were given new information leaflets and completed the same questionnaire. Scores per question and total scores were assessed. Statistically significant improvement ( $p < 0.0001$ ) was observed in understanding injury, treatment options, complications and prognosis. Total score improved from 11.7 to 18.5 ( $p < 0.001$ ).

**Conclusion:** We observed significant benefit to patients' understanding of hip fracture with new leaflet provision in addition to existing modalities. Further study to elucidate optimal information content and delivery is required.

#### 0917: PREDICTORS OF OUTCOMES OF ARTHROSCOPIC ROTATOR CUFF REPAIR: A PILOT STUDY

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**Aim:** To analyse retrospective data on arthroscopic rotator cuff repair over a 3 year period to correlate patient, injury or repair specific factors with post-operative functional outcome scores.

**Methods:** Data was collected retrospectively for all arthroscopic rotator cuff repairs performed by the senior surgeons between 2010 and 2013 at two sites ( $n = 375$ ). Outcome scores collected via questionnaires were: Oxford Shoulder Score, Constant-Murley Shoulder Score, Quick DASH score as well as patient satisfaction ratings and pain scores on a visual analogue scale. These were correlated with 12 patient, injury or repair specific factors using SPSS 20.0 for Windows.

**Results:** Of the 375 patients, only 43 responded within the timeframe of this pilot study and were used for analysis. Overall, arthroscopic cuff repair was found to be beneficial in terms of all outcome scores. Factors found to significantly affect outcome scores were: gender, fatty degeneration of the cuff, tendon retraction, transverse tear width and tentatively, the number of bone anchors used during repair.

**Conclusion:** The numbers used in this pilot study are not sufficient to provide solid conclusions, but we found significant correlations for gender, tear width, tendon retraction, fatty degeneration and potentially bone anchor use. These correlations warrant further study.

#### 0922: AN AUDIT OF THE DIAGNOSIS AND MANAGEMENT OF SEPTIC ARTHRITIS IN ADULTS IN THREE GLASGOW TEACHING HOSPITALS

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**Aim:** To evaluate how the diagnosis and management of septic arthritis (native and prosthetic) in three Glasgow teaching hospitals correlated with published evidence based guidelines.

**Methods:** We extracted and analysed 12 months of positive joint aspirate data from our laboratory system. Electronic records and case notes were reviewed for compliance, using the standards defined in the published guidance. Audit was performed using the Royal College of Pathologists template. Compliance was defined as 100% of the standards being achieved, or documentation explaining variance.

**Results:** 57 patients were identified as having culture positive bacterial septic arthritis. 86 samples were received in total from 58 affected joints. Of these 63.8% were native joints and 36.2% were prosthetic. A single bacterial pathogen was isolated in 87.7% of patients, with polymicrobial infection being identified in 12.2%. Staph aureus (MSSA) was the most common pathogen.

**Conclusion:** This audit highlighted significant variation across the range of standards when compared with evidence-based guidelines. Overall only 3 standards were achieved in over 90% of case. Importantly empirical therapy was appropriate in over 90% of cases. Alteration of antibiotic therapy according to gram stain and culture results was also appropriate in over 90% of cases.

#### 0940: ASSESSING THE DOCUMENTED CLINICAL EVALUATION OF INTRA-OPERATIVE ORTHOPAEDIC FLUOROSCOPY IMAGING IN ACCORDANCE WITH IONISING RADIATION (MEDICAL EXPOSURE) REGULATIONS

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**Aim:** Ionising Radiation (Medical Exposure) Regulations 2000 (IR(ME)R) were established to minimise dangers of radiation exposure through medical investigations.

IR(ME)R specifies "a clinical evaluation of the outcome of each medical exposure must be recorded". This includes orthopaedic fluoroscopic screening, with hospital policies including written agreements transferring evaluating responsibility to the operating team. Use of fluoroscopy without a documented evaluation would be unlawful. This audit assesses whether this responsibility is addressed in our unit.

**Methods:** Retrospective review of orthopaedic operative notes who received intra-operative fluoroscopic imaging at the Bristol Royal Infirmary over a four week period. A 100% compliance standard was set.

**Results:** 109 orthopaedic operations were carried out during the sample period. 51 cases used fluoroscopic imaging. 39% of operation notes did not include a documented evaluation of the images obtained, with 27% of these being composed by surgical trainees.

**Conclusion:** A significant number of fluoroscopy procedures lacked a documented evaluation by trainees. Subsequently, post-op imaging is potentially being repeated, increasing patient radiation exposure with potential health and legislation implications. We aim to re-audit the benefit of significantly improving this practice through education awareness of IR(ME)R to surgical trainees and introduction of an operative-note proforma to prompt imaging evaluation.

#### 0953: IS LOW ENERGY POLYTRAUMA A PREDICTOR FOR BLOOD TRANSFUSION IN THE ELDERLY? A CASE CONTROL STUDY

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**Aim:** Hip fractures and its operative management is associated with acute blood loss leading to acute anaemia, which has an increased strain on vital organs.

**Aim:** To assess whether there is an increased need for blood transfusion in elderly patients with multiple fragility fracture and its impact on their functional outcome.

**Methods:** We included 26 patients (Group A) who had a fragility fractures alongside a hip fracture, over a period of three years. As a control group we randomly selected, 26 patients (Group B) with an isolated hip fracture. Both groups were treated surgically for the hip fracture. The need for blood transfusion and functional outcome was assessed and compared.

**Results:** The preoperative haemoglobin was less than 110 g/L in 20% of patients in Group A compared to 24% in Group B, with a greater mean postoperative drop in the haemoglobin level in the former group and subsequently a greater need for transfusions (OR 2.61). The one month mortality was better in Group A, with better functional outcome in those who received blood transfusion in Group A.

**Conclusion:** Elderly patients have a reduced functional reserve hence require more transfusions and this has a positive impact on the functional outcome.

#### 0974: BEST PRACTICE TARIFF FOR FRACTURED NECK OF FEMUR: A COMPLETED AUDIT FROM A BUSY DISTRICT GENERAL HOSPITAL

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**Aim:** To evaluate the department's compliance with best practice criteria set out by the Department of Health and submitted to the National Hip Fracture Database. This was re-audited after NOF pathway was updated.

**Methods:** A retrospective audit of all patients treated for a fractured neck of femur between April–September 2013, and re-audit from December 2013–April 2014 after changes were made.

**Results:** 187 and 113 patients in first and second loops respectively. Mean age 85.2 (83.5) ( $p = 0.178$ ). Median ASA unchanged at 3 ( $p = 0.170$ ). Significant increase in patients meeting all criteria 64.6% (37.4%)