to perform USS on patients with unknown rotator cuff pathology after clinical examination.

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0824: MANAGEMENT OF BUCKLE FRACTURES OF THE DISTAL RADIUS IN A DISTRICT GENERAL HOSPITAL – AN AUDIT

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Aim: Buckle fractures account for almost half of all paediatric fractures. Buckle fractures of the distal radius treated with futura splints have good functional outcomes. We audited the management of distal radius paediatric buckle fractures and our aderance to the Alder Hey Splinting guidelines.
Method: We retrospectively analysed data from 46 consecutive patients seen in the fracture clinic for injuries sustained between 2009-2014. There were 28 males and 18 females with average age of 8.3 years (Range1.5-16 years). Of the total, 54% (n=25) of the fractures were right-sided, and 44% (n=20) were left-sided.
Result: Six patients (13%) of patients were treated with above elbow casts, 24 patients (52%) of patients were treated with below elbow casts. One patient was treated with a futura splint and one with strapping alone. The average cast immobilisation time was 3.3 weeks.
Conclusion: The majority (65%) of patients with buckle fractures did not adhere to the Alder Hey Splinting guidelines.
The type of immobilisation used might reflect the anxiety of parents, who may question the protection of splints over the perceived robustness of the full plaster cast. This anxiety maybe reduced if parents are given further information regarding buckle fractures at the time of consultation.

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0858: DOES ADDITIONAL RECONSTRUCTION OF THE ANTEROLATERAL LIGAMENT DURING A PRIMARY ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION AFFECT TIBIAL ROTATIONAL LAXITY? – A CASE SERIES

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Given its lateralised position, we hypothesised that the newly discovered anterolateral ligament (ALL) of the knee would provide restraint to internal rotation, and if reconstructed, would subsequently restore rotational stability in ACL-deficient knees.
Only patients with an MRI-confirmed diagnosis of ACL rupture were included in the study. Patients assigned a grade-3 pivot-shift underwent dual (ACL + ALL) ligament reconstruction (Group 2), whist patients with an absent pivot-shift, grade 1 or grade 2 underwent single (ACL) ligament reconstruction (Group 1). The total range of rotation (TRR) was measured using a 3D kinematic-system at 30°, 60° and 90° of knee flexion, preoperatively on the pathology-free contralateral normal knee (CNK) and ACL-deficient knee (ADK). Measurements were repeated postoperatively on the ACL-reconstructed knee (ARK).
All patients achieved a postoperative TRR equivalent to the CNK. The absolute reduction in TRR at 30° of knee flexion was significantly higher in Group 2 compared to Group 1 (-8.15° vs. -2.96°; $p<0.001$), with corresponding findings at 60° and 90°. Similarly, the percentage reduction was significantly greater in Group 2 at 30° (28.04% vs. 13.31%; $p<0.001$) and 90°.
We therefore recommend that ACL-deficient knees with a grade-3 pivot-shift should undergo reconstruction of the both the ACL and ALL.

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0932: SAVING CELLS AND MONEY – A COST EFFECTIVENESS ASSESSMENT OF INTRA OPERATIVE CELL SALVAGE IN REVISION ORTHOPAEDIC SURGERY

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Introduction: Revision orthopaedic surgery is associated with increased blood loss, higher postoperative transfusion rates and extended hospital stay. This study sought to evaluate efficacy and cost-effectiveness of having intraoperative cell salvage (ICS).
Method: Patients who underwent hip and knee revision arthroplasty over a 12 month period were identified from the national joint registry (NJR). The volume of blood loss, allogenic postoperative transfusion requirements and hospital stay were recorded.
Result: Data was obtained for 41 of 57 revision procedures in this period. 13 patients required postoperative transfusions, (8 hip, 5 knee). The transfusion rate after all revisions was 31%; 42% for hip and 22% after a knee revision. Mean haemoglobin (Hb) loss was 25.8g/L for all revisions. The average transfused units (U) per patient were 0.59 U for all revisions. The cost of an Orthopat ICS is estimated at £79 per case irrespective of amounts re-transfused and blood is £167 per unit. Average blood cost per patient with no cell saver was £98.53 for all revisions. With an extra day hospital stay for the patients requiring a transfusion, costs £438.53 for all revisions.
Conclusion: In this study we found having ICS was 5.5 times cheaper for all revisions.

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1045: POST OPERATIVE ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION (ACLR) REHABILITATION COMPLIANCE

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Introduction: Anterior Cruciate Ligament Reconstruction post-operative rehabilitation post-operatively helps patients return to active lifestyle.
Method: This is a retrospective study of ACLR rehabilitation compliance of 63 consecutive patients operated by two lower limb orthopaedic surgeons in our institution. ACLR rehabilitation was commenced immediate post-operatively and patients were advised to attend at least 36 sessions. Patients were assessed at 3monthly intervals with modified lysholm score.
Result: 61 patients were included in this study who had ACLR in 2013 and 2014 in our teaching hospital. The average number of post-operative rehabilitation sessions attended by patients was 7 and average number of follow-up clinic sessions attended by each patient was 4.
81% of total sessions attended by patients occurred during the first 3 months post-operatively. 52% of patients did not attend any physiotherapy sessions beyond 3 months post-operative. There was no statistical correlation between the age of the patient, type of procedure (e.g. primary or revision), number of clinic sessions attended and sex of the patient with compliance to the physiotherapy rehabilitation protocol. However, patient who had complications had higher compliance (50%).
Conclusion: Compliance of supervised ACLR rehabilitation exercise was poor but highest attendance occurred during the first 3 months of post-operative period.

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1064: CLINICAL OUTCOMES OF MINIMALLY INVASIVE CALCANEAL FRACTURE MANAGEMENT

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Aim: The purpose of the study is to assess clinically reported outcomes of minimally invasive calcaneal fracture repair.
Method: Fifteen patients (18 calcaneal fractures) with calcaneal fractures who underwent minimally invasive surgical repair were selected for the study. The patient clinical notes were evaluated at three months and one year following surgery. Data was reviewed on chronic pain, degenerative changes, ankle stiffness and weight bearing. Patients X-rays were reviewed one year following surgery for arthritic changes. Patients were further contacted to partake in a Foot and Ankle Outcome Survey.