and 8.6). 20 graft biopsies were performed demonstrating; rejection (n = 10), TAC toxicity (n = 7), disease recurrence (n = 2) and vascular occlusion (n = 1). Mean (SD) day 0 TAC levels in these groups were 9.6 (± 4.3), 11.6 (± 7.2), 17.0 (± 16) and 11.6 respectively. Appropriate statistical comparisons were made between groups.

Conclusions: Therapeutic TAC levels were achieved with a pre-operative loading regimen in the majority of patients, even those who developed rejection, DGF and TAC toxicity. Further analysis and comparison with non preloaded patients is necessary to determine the efficacy of this treatment.

0862: USE OF AORTIC ALLOGRAFT IN RETROHEPATIC INFEROVERNA CAVA RECONSTRUCTION: A CASE SERIES

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Aims: Reconstruction or replacement of the inferior vena cava (IVC) may be necessary to treat IVC obstruction e.g. post-liver transplantation, or to enable tumour excision. Previous techniques have involved using synthetic or natural venous material. The optimal choice of material is unclear. We aim to assess the feasibility of using aortic allograft for IVC reconstruction.

Methods: Cases in which fresh or cryopreserved aortic allograft were used to reconstruct the retrohepatic IVC were recorded and followed up retrospectively.

Results: Since 2007 six patients have undergone reconstruction of the retrohepatic IVC with fresh or cryopreserved aortic allograft. The surgical procedure was successful in all cases, however one patient died 6 weeks post-operatively from a complication of chest drain insertion and one died 10 weeks post-operatively from tumour recurrence.

Conclusions: To our knowledge, our group is the first to be using aortic allograft for the IVC reconstruction. Aortic allograft offers a promising alternative to previous techniques: a better size match; decreased infection and thrombosis rate compared to synthetic graft; decreased stenosis and aneurysm formation compared to cryopreserved venous graft. We therefore recommend that in planned procedures, cryopreserved (or fresh ABO-matched) aortic allograft represents the optimal choice of graft material for IVC reconstruction.

0894: CAN REGISTRAR TRAINEES PERFORM VASCULAR ACCESS SURGERY EFFECTIVELY?

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In some centres, vascular access surgery is performed exclusively by transplant surgeons. With vascular training program reconfiguration, discussions concerning how vascular trainees can become skilled in fistula formation continue.

Aim: To compare early patency rates for fistula surgery performed by trainees and consultants.

Method: Data was collected prospectively between October 2010 and 2011 on 241 fistulas performed in a single UK centre. All access surgery is performed by transplant surgeons who supervise registrar trainees. Complete data was available for 197 fistulas and these were analysed (78 radiocephalic, 104 brachiocephalic, 15 brachiobasilic). Early patency rate was defined as palpable thrill and audible bruit at 6 cm from the anastomosis at 2 weeks. We compared patency rates when the first surgeon was a trainee or consultant. Chi-squared calculations were performed for statistical significance.

Results: Early patency rate for surgery performed by registrars was 72% and for consultants 81%. This was not significant (p = 0.224). Subanalysis according to fistula type revealed no significant difference (radiocephalic p = 0.155, brachiocephalic p = 0.729, brachiobasilic p = 0.360).

Conclusion: A mix of registrar grades achieved patency rates comparable with consultants. We conclude that vascular access surgery is effective when performed by trainees and provides useful skills transferable to other areas of surgery.

1112: STATIC COLD STORAGE VERSUS HYPOThERMIC MACHINE PERfusion FOR PRESERVATION OF MARGINAL RENAL ALLOGRAFTS: A REAL TIME COMPARISON USING RAPID SAMPLING MICRDiALYSIS (RSM)

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Aim: Static cold storage (SCS) and hypothermic machine perfusion (HMP) are two techniques used to reduce ischaemic injury sustained by renal allografts during the preservation period. We aimed to assess the feasibility of using our novel, clinically validated, rapid sampling microdialysis (rsMD) system in the organ preservation setting, and use it to compare the effects of each technique on tissue metabolism and ischaemia in real time.

Method: 12 porcine kidneys were retrieved, subjected to 15 minutes of warm ischaemia and placed upon clinical models of SCS (n = 6) or HMP (n = 6) for 24 or 10 hours respectively. A microdialysis catheter was tunnelled into the renal cortex and connected to the rsMD analyser, producing lactate concentrations every 60 seconds.

Results: HMP Kidneys displayed excellent perfusion parameters and the analyser reliably detected quantifiable concentrations of lactate in all experiments. Initial lactate concentrations were significantly higher in kidneys preserved using SCS.

Conclusions: This is the first study confirm the feasibility of rsMD for monitoring the effects of SCS and HMP on renal metabolism and ischaemia in real time. The different cortical lactate profiles in the two groups suggest HMP is superior to SCS at attenuating injury accumulated during procurement and warm ischaemia.

TRAUMA/EMERGENCY SURGERY

0008: A SYSTEMATIC REVIEW OF TREATMENT OF ACROMICLAVICULAR JOINT (ACJ) INJURIES

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Hypothesis: There is not enough evidence in the literature to support either surgery or conservative treatment in the management of acute grade III ACJ injuries. This systematic review aims to establish an evidence base for effective treatment of grade III ACJ injuries.

Eligibility Criteria: A review of all articles published on PubMed in English language in relation to the treatment of ACJ injuries was done. All systematic reviews, meta-analyses and randomised controlled trials (RCTs) were critically reviewed and analysed.

Results of search: There were eleven studies which include a Meta-analysis, 3 Systematic reviews, a Literature review and 6 RCTs. Five of these studies recommended non-operative treatment as the best form of management for acute ACJ dislocations, among which only one clearly recommended non-operative treatment for acute grade III ACJ dislocation. The remaining six studies did not find any statistical significance between operative and non-operative treatment of acute ACJ dislocations (at least Rockwood grade III) in terms of functional outcomes and patient satisfaction. None of the studies reviewed recommended surgery as the best overall form of treatment for acute ACJ dislocations grade III-VI.

Conclusion: There is no adequate literature to support the recommendation of operative management for acute grade III ACJ dislocations.

0170: THE TRAUMA OF SURGICAL TRAINING. AN AUDIT OF TRAUMA EXPOSURE & THE IMPACT OF ATLS ON CORE SURGICAL TRAINEES IN THE NORTHERN DEANEY

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Introduction: Successful completion of Advanced Trauma Life Support (ATLS®) is an essential person specification for entry into Specialty Training in General Surgery.

Aim: To establish the trauma exposure Northern Deaney core surgical trainees (CST) experience, and the impact of completing ATLS on both experience and confidence in handling trauma scenarios.

Methods: A survey of all CST in the Northern Deaney, establishing their experience in the trauma skills taught during ATLS, and the impact of completing ATLS on their procedural experience, and confidence in handling trauma.

Results: 39 questionnaires were completed reflecting 426 months of CST. Prior to ATLS 6 (15%) trainees had inserted a central line, 6 (15%) a chest
drain, 4 (10%) an endotracheal tube and 4 (10%) an orthopaedic traction splint. Numbers did not increase significantly following ATLS. Confidence to perform trauma procedures un-supervised was unaffected by ATLS completion. Confidence to assess trauma patients did improve. No trainees had performed diagnostic peritoneal lavage, venous cut down, intra-osseous line insertion, surgical or needle circothyroidotomy.

Conclusion: CST in the Northern Deanery report limited exposure to trauma.

ATLS has minimal affect on trainees confidence to perform trauma related procedures. ATLS does improve their confidence to assess trauma patients

0214: IS THE INJURY SEVERITY SCORE (ISS) RELEVANT IN COMPLEX LOWER LIMB TRAUMA?
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Introduction: Injury Severity Score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries. Major trauma is defined as ISS score equal or more than 16. Our aim was to study the relationship between ISS and return of limb function after open fractures of the lower limb when treated in a specialist centre.

Methods: Retrospective case note analysis of 50 patients with lower limb trauma requiring free flap coverage. We examined age, mechanism of injury, type of fracture, Gustilo classification, ISS score, hospital stay, complications and Enneking score to measure outcome.

Results: The mean age of patients at time of surgery is 44.1 yrs (range 5–90). 38% of patients had road traffic accidents, 30% had a fall. 52% had Gustilo 3B fractures while 26% had closed fractures initially. We had 2 flap failures. The average ISS score is 8.3 (range: 1 to 26).

Conclusion: Mean ISS for patients with severe complex lower limb trauma was 8.3. These patients would not have been referred to a major trauma centre based on the ISS; however, they are best treated in a specialist centre indicating that a specialist Ortho-Plastic centre is integral to a Major trauma centre.

0233: LAPAROSCOPIC APPENDECTOMY: ARE WE DOING TOO MANY THAT ARE AVOIDABLE?
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Introduction: Appendicitis is the most common intra-abdominal condition requiring surgery. Non-appendiceal pathologies in the right iliac fossa (RIF) can clinically mimic appendicitis raising diagnostic doubt.

The use of laparoscopy in managing RIF pain has increased the negative appendicectomy rate.

Aim: Can biochemical and radiological investigations be used to guide the decision for laparoscopy.

Methods: All patients undergoing emergency diagnostic laparoscopy or laparoscopic appendectomy over 10 months at the Heart of England Foundation Trust retrospectively analysed. Data collected on white cell count (WCC), C Reactive Protein (CRP), ultrasound scan (USS) findings, laparoscopic findings and histology.

Results: N =221 representing 15% of patients presenting with RIF pain. F/M ratio 3:1. Negative appendicectomy rate 27%. 70/221 patients had WCC, CRP and USS performed. Where all three investigations are normal it strongly predicts for a normal appendix and so initial conservative management can be pursued.

0328: AN AUDIT OF EMERGENCY CT IMAGING REPORTING IN ACUTE GENERAL SURGICAL PATIENTS
Guy Martin, Khalil Hassanally, Stefano Palazzo, Neil Soneji. Northwick Park & St Mark’s Hospital, London, UK

Aim: To audit the frequency, causative factors and impact on patient care of delayed amendments to emergency CT imaging reports in a District General Hospital

Methods: 731 consecutive emergency surgical admissions over an 8-week period were studied. 240 emergency CT scans were performed and imaging reports analyzed for amendments made following initial publication. Amendments were classified into major or minor based upon the degree of initial reporting inaccuracy and impact on patient care.

Results: 32.8% of patients had emergency CT imaging performed producing 240 imaging reports 19.6% (47) of CT reports were amended following publication:
25 53.2% minor amendments; 26 22 (46.8%) major amendments
Impact of out-of-hours and weekend reporting on the frequency of amendments to CT reports: 46.8% of amendments during weekend reporting; 32% of amendments during out-of-hours reporting; 21.5% of amendments during normal hours; Delay in amendments being made to imaging reports significantly increased at weekends and out-of-hours.

Conclusions: A significant number of imaging reports are subject to change following publication of an initial reporting of imaging at weekends and out-of-hours increases the frequency of amendments being made Initial mis-reporting of CT imaging in the acute surgical patient can adversely affect patient care

0338: IS THAT A RING I SEE? RADIOLOGICAL REVIEW OF ALL HAND & WRIST TRAUMA AT STAFFORD HOSPITAL IN 2010
Thomas Moores, David Morley. Stafford General Hospital, Staffordshire, UK

Introduction: Trauma surgeons teach that part of “basic first aid” in the treatment of upper limb injury that rings should be removed during the initial assessment, preventing complications of oedema secondary to trauma, because rings are a fixed diameter and act as a tourniquet for that distal digit. No national or local guidelines exist for ED clinicians that recommend ring removal as part of upper limb trauma initial assessment.

Methods: A retrospective radiological review of all hand, wrist, scaphoid and finger trauma at Stafford General Hospital’s between 1st January and 31st December 2010. All radiographs were reviewed noting the presence of rings and the associated injury.

Results: There were a total of 5140 radiographs taken for wrist and hand trauma in 2010, with 191 rings not removed as part of the initial assessment or prior to a radiograph being taken. 70/191 radiographs with rings visible had an associated fracture, dislocation, or soft tissue injury.

Discussion: The standards are not being met for “basic first aid” assessment and management of upper limb trauma, this may be because there is no no local or national guidance, or evidence in the trauma literature upon the removal of rings as part of this assessment.

0344: EXPERIENCES OF LOWER LIMB OPEN FRACTURE MANAGEMENT AT THE ROYAL UNITED HOSPITAL, BATH
William Carlino, Caroline Bartolo, Gavin Jennings. Royal United Hospital, Bath, UK

Aim: The aim of this audit was to review open lower limb fracture management at the Royal United Hospital and identify adherence to the British Orthopaedic Association Standards for Trauma 4 (BOAST 4).

Method: We retrospectively collected data on all open lower limb fractures between September 2009 and January 2011.

Results: We identified thirteen consecutive open lower limb fractures. Antibiotics were appropriately administered on admission in 15% of patients. 62% had a photograph documented. 92% had a saline soaked dressing applied, neurovascular status documented while 85% had the fracture splinted before x-ray. 60% of patients were discussed with plastics and underwent early transfer. 80% of patients had wound debridement within 24 hours. 67% had definitive treatment within seventy two hours.

Conclusion: The management of open lower limb fractures was suboptimal. As with all audits the areas highlighted in which teams are under-performing may reflect poor management, poor documentation or both. Clearly there it is also an area to ensure all new Emergency Department and Orthopaedic trainees are aware of BOAST 4 standards. The antibiotics failures reflects delayed updates in local policy, the microbiology department are aware. An open fracture pro-forma and poster campaign has been initiated. A re-audit is planned.