0819  TRANS-RECTAL ULTRASOUND GUIDED PROSTATE BIOPSY RELATED SEPSIS: A DHG EXPERIENCE OF FLUOROQUINOLONES
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Introduction: Though it is proven that post Transrectal Ultrasound (TRUS) guided biopsies of the prostate infection rates are reduced with prophylactic antibiotics - there is widespread variation with no consensus. Fluoroquinolones are most common but there are reports of fluoroquinolone-resistant strains of E. coli causing post-biopsy sepsis.

Methods: In a DHG, we performed an interventional study of patients undergoing a TRUS biopsy comparing a prospective group with a retrospective control. The control group comprised 71 consecutive patients in a 6 month period.

New antimicrobial prophylaxis guidelines were introduced and 92 patients were then followed, with comparable profiles to the controls. The primary end-point was hospitalisation secondary to sepsis within a month.

Results: The control group consisted of 3 days of ciprofloxacin 500mg BD PO, and the new regimen comprised Metronidazole 500mg PO prior to, and Gentamicin 160mg IV immediately before, the procedure. There were 4(4.3%) cases of documented TRUS-biopsy related sepsis with the new regimen compared to the one case (1.4%) in control group. All urine cultures were negative, though E.coli was the most frequent cause of urosepsis (50%) on blood cultures.

Conclusion: Our study supports the use of fluoroquinolones as part of a prophylactic regime for TRUS biopsies of the prostate.

0823  IS THE TIMING OF DEFINITIVE SKELETAL FIXATION AND SOFT TISSUE COVERAGE IN THE MANAGEMENT OF GUSTILLO TYPE 3 OPEN TIBIAL FRACTURES COMPLIANT WITH BOA/BAPRAS GUIDELINES?
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Introduction: BOA/BAPRAS guidelines state that in complex lower limb trauma first debridement take place within 24hrs; soft tissue coverage is achieved at time of definitive skeletal fixation within 7 days of injury. This study investigates compliance with BOA/BAPRAS guidelines in regard to the timing of soft tissue reconstruction in the management of lower limb trauma in one UK Centre.

Methods: A retrospective audit was carried out from 2009-2010. 175 cases of lower limb trauma with plastic surgery input were identified. 21 patients were identified as having a Gustillo type 3 open tibial fractures. 15 male and 6 female patients were included with an age range of 17-88 years. The management of patients was compared with the BOA/BAPRAS guidelines.

Results/Discussion: 95% had their first debridement with in 24 hours. 85% of patients had definitive soft tissue reconstruction within 7 days, 40% at time of definitive soft tissue fixation. Three patients had local flaps and 18 had a free tissue transfer.

Conclusion: This study demonstrates good compliance with timing of first debridement and soft tissue coverage. However it highlights the need for greater co-operation between Orthopaedic/Plastic teams in achieving soft tissue coverage at the time of definitive soft tissue coverage.

0833  THE MANAGEMENT OF ACUTE SHOULDER DISLOCATION
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Background: Shoulder dislocation is the most common joint dislocation. Modern advances in radiological imaging and shoulder surgery have emphasised the dangers of the traditional reduction techniques such as Kocher’s and the Hippocratic method, which are still advocated by text books and clinicians.

Aim: To discover the current management techniques for acute traumatic anterior shoulder dislocation. A survey was conducted of orthopaedic and emergency physicians to discover their preferred reduction techniques, analgesia, position of immobilisation and imaging.

Method: 50 questionnaires were collected from London trainees (CT/STs). The most popular reduction technique used was Kocher’s (56%).

Results: Most respondents favoured initially using inhaled Ethonox (60%) for analgesia and if unsuccessful used systemic analgesia and sedation (opiates and/or benzodiazepines). Only 8% of trainees used an intra-articular block. The majority of trainees (80%) immobilise the shoulder in internal rotation. All trainees perform pre- and post-reduction X-Rays and 32% would recommend a MRI after reduction.

Conclusion: We believe that trainees should adopt safer reduction techniques such as Milch’s, Stimpson and Scapular Techniques. Kocher’s and Hippocratic techniques have been associated with neurovascular complications and fractures and are generally not recommended. We also feel that guidelines should be introduced for the management of this problem.

0834  CHARACTERISATION OF LABEL RETAINING CELLS IN THE MOUSE FLEXOR TENDON USING BROMODEOXYURIDINE PULSE-CHASE EXPERIMENTS
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Aim: Tendon healing is slow and poor following injury. Current management is often surgical but it has its drawbacks due to delayed healing or adhesion formation. We hypothesise that this is due to low numbers of tendon progenitor cells giving rise to tendons’ poor healing potential. Bromodeoxyuridine (BrdU) pulse-chase experiments allow the detection of label retaining cells (LRCs). BrdU incorporates into the DNA during S phase. BrdU can then be detected using standard immunohistochemistry. This study aims to quantify and spatially locate tendon progenitor cells in the mouse flexor tendon.

Method: Mice were injected with 10μg/g BrdU twice daily for a period of three days. The label was then chased for one, four or eight weeks. Cell density and percentage of BrdU-positive cells in the skin and the flexor tendon were calculated.

Results: LRC density in the flexor tendon was 18.5 (4.4), 28.2 (6.0), and 1.6 (0.2) cells/mm2 after one, four and eight weeks of chase, respectively. LRC density was significantly higher at the entheses of the flexor tendon than in its core (P < 0.5). In skin, LRC density was significantly higher than that in the flexor tendon (P < 0.5). The spatial distribution of LRCs was represented in a three-dimensional model.

0835  THE VASCULARITY OF ZONE II
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Aim: We report our experience of setting up and running a Deanery wide monthly teaching programme for all surgical Core Trainees.

Methods: In 2007 we performed a needs analysis by questionnaire to all 56 surgical SHOs in the Oxford Deanery.

Results: The questionnaire was returned by 45 SHOs, with 75% in favour of a regional teaching programme, as only 50% received formal teaching at a local level. The vast majority (86%) of trainees asked for clinical cases, followed by basic surgical skills (76%) and exam practice (71%). Critical Care, Anatomy and Physiology were asked for by 69%, 64% and 58% respectively. Other suggestions included journal club, patient safety, medical ethics and career advice.

Conclusion: We constructed a teaching blueprint mapped on the ISCP Curriculum with one themed teaching session per month. We also compiled a Deanery booklist of recommended reading material and basis of “homework” prior to teaching sessions. Each teaching session consists of three parts, utilising different teaching modalities, with a main focus on small group work and discussion of topics with senior trainees and consultants. We collect feedback after every session, enabling continuous improvement of the programme, which is now in its third year.
Aim: To explore the vascular patterns of the branches distal to the common palmar digital arteries.

Method: The study was carried out on the radial and ulnar margins of 12 fingers from 3 cadaveric hands. The dissection was done under 6.5-10x magnification using a surgical microscope. The hands were pre-injected with latex.

Results: Similar pattern was identified in the number, anastomoses and size of the branches. The cutaneous and palmar plate branches were variably placed along each source vessel. The transverse palmar arches are not always visible; this might affect the success rate of some reverse island flaps since they depend on the reverse flow from these arches. The arteries (including the radialis indicis artery) were closer to the anterior surface of each finger than previously described. Incisions that are used to harvest common flaps may affect the delicate branches to flexor sheath.

Conclusion: An understanding of the branching patterns of the proper palmar digital arteries is useful in determining the degree of vascular risk accompanied commonly performed procedures i.e. tendon injuries and finger tips reconstruction. The descriptions produced may improve pre-operative planning and facilitate more accurate assessment of poorly vascularised repairs.

ABSTRACTS

0837 INDEPENDENT TREATMENT CENTRES CAN BE UTILISED TO FACILITATE EARLY DISCHARGE IN THE CONTEXT OF ONE-STOP RAPID ACCESS COLORECTAL CLINICS
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Aim: The aim of this pilot study was to evaluate the benefit of running one-stop clinics in conjunction with an Independent Treatment Centre (ITC) in the diagnosing and management of colorectal cancers.

Method: We reviewed the clinic letters of all patients referred to a two week wait (2WW) clinic, comparing those who were seen in the one-stop clinic in collaboration with an ITC with those seen in the standard NHS clinic.

Results: Of 99 patients, 45(45%) were seen in the ITC clinic, 43 of whom had a flexible sigmoidoscopy (FS) on the same day, 8(18%) were referred for colonoscopy and 13(28%) for further imaging. 27(60%) were found to have no significant pathology and were discharged that day. 54/99(54%) were seen at the standard clinic with a separate endoscopy appointment. Only 3(6%) of these patients were discharged the same day, with 34(63%) referred for colonoscopy, 6(11%) for FS, 19(35%) further imaging, and 2(4%) for surgery.

Conclusion: This pilot study showed that a well-organised one-stop service can be provided by a rapid access clinic in collaboration with an ITC. Subsequently, all 2WW patients are being seen in the ITC and we will continue to report on their outcomes.

0839 DEVELOPMENT OF CONSENSUS-BASED GUIDELINES FOR ACUTE LIMB ISCHAEMIA – A REGIONAL AUDIT COLLABORATION
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Aims: The authors aim was to determine the current management of acute limb ischaemia in the Severn Deanery and compare against available international guidelines in order to develop consensus-based guidelines.

Methods: Initial patient data collection began at a Trust level and included all patients presenting with acute limb ischaemia. Details of patient's presenting features, along with timing to vascular review and management, including anti-coagulation were included. Data was collected using the Survey-Monkey database and smart-phones. The audit was distributed regionally via the Severn and Peninsula Audit and Research Collaborative for Surgeons (SPARCS).

Results: Trust level data collection revealed discrepancy between patient's initial management. Inconsistencies were discovered between time to vascular review and instigation of initial treatment. Initial management included decision to image and treatment with anti-coagulation. At time of audit no local Trust protocols were available in managing patients with acute limb ischaemia.

Conclusions: Significant inconsistencies were identified in the initial management of acute limb ischaemia. A major reason for this is the lack of internationally recognised evidence-based guidelines. Consensus-based guidelines have been developed in order to aid in the management of acute limb ischaemia. These are being implemented across Trusts as part of an ongoing quality improvement project.

0842 AN INTELLIGENT REFERRAL CO-ORDINATION SERVICE COMBINED WITH ADVICE AND FOCUSED EDUCATION IN PRIMARY CARE IS CURRENTLY NECESSARY TO SAFEGUARD REFERRAL QUALITY
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Aims: Patient referral from primary to secondary care varies in quality can often be directed to the wrong subspecialty. Could a regional intelligent referral co-ordination service (RCS) providing focused education efficiently improve the precision of referrals, assist GPs in preventing unnecessary referrals and benefit patient care?

Methods: A prospective pilot study of a regional referral co-ordination service requiring collaboration between the PCT, primary care and two DGH’s. All gastrointestinal (upper/lower GI/liver/biliary), vascular and general surgical referrals over 30 weeks were reviewed by single clinician. Referral appropriateness, urgency, designated specialty and requested service was assessed. Advice, education including optional open-dialog was provided for sub-optimal referrals. Referrals were adjusted or postponed at this point.

Results: L221 patient referrals were assessed. 42%(510) required adjusting. Of these; 75%(385) were adjusted and processed with focussed education, 15%(74) led to treatment advice thereby avoiding referral, 10%(51) required discussion before establishing patient pathways. Those adjusted and processed; 38%(148) were upgraded in urgency, 3%(13) were downgraded, 25%(96) went straight-to-test, 20%(76) were redirect from inappropriate investigations.

Conclusions: The RCS efficiently provided focussed personal education to GPs. Referrals were dramatically improved, demonstrating clear benefits to patient care. Focussed support is needed to help GPs accurately and efficiently refer patients.

0846 SELECTIVE USE OF CT REDUCES NEGATIVE APPENDICECOTOMY RATES AND HOSPITAL STAY. A PROSPECTIVE STUDY
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Aims: To demonstrate that selective abdominal CT has a benefit in reducing negative appendicectomy rates associated surgical complications, length of hospital stay and overall NHS costs.

Methods: Over a two year period in a District General Hospital a total of 404 patients were admitted with right iliac fossa (RIF) pain. Of these patients those who were found to have symptoms, signs and a WCC giving an Alvorado score of 8+ were referred for CT. Of these: 75%(385) were adjusted and processed with focussed education, 15%(74) led to treatment advice thereby avoiding referral, 10%(51) required discussion before establishing patient pathways. Those adjusted and processed: 38%(148) were upgraded in urgency, 3%(13) were downgraded, 25%(96) went straight-to-test, 20%(76) were redirect from inappropriate investigations.

Conclusions: The RCS efficiently provided focussed personal education to GPs. Referrals were dramatically improved, demonstrating clear benefits to patient care. Focussed support is needed to help GPs accurately and efficiently refer patients.

0848 GROUP A STREPTOCOCCUS OUTBREAK – A CLINICAL GOVERNANCE ISSUE
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