to have hyperbilirubinaemia (p < 0.001). The specificity of hyperbilirubinaemia for perforation or gangrene was 70%.

**Conclusion:** Hyperbilirubinaemia is a valuable marker for acute appendicitis. Patients with hyperbilirubinaemia are also more likely to have appendiceal perforation or gangrene. Bilirubin should be incorporated in the assessment of suspected appendicitis.

ASiT Short Paper Prize 0530  CAN SURGEONS USE LOCAL ANAESTHETICALLY SAFELY? A SURVEY OF THE NEW AAGBI GUIDELINES

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**Introduction:** Most surgical specialties use local anaesthetics (LA) in their caseloads, mostly in the theatre setting with an anaesthetist present. However, plastic and orthopaedic surgeons also use these agents independently for day cases. The aim of this study is to assess the use of LA and management of toxicity in accordance with the AAGBI Safety Guidelines in these two surgical specialties.

**Method:** 40 surgeons of training and consultant grade at a teaching hospital participated in a questionnaire to see whether they recognised and were able to manage LA toxicity. Results were treated as parametric, following a normal distribution, and a Pearson correlation was used to quantify association between two variables.

**Results:** An even spread of plastic and orthopaedic surgeons were questioned, predominantly SpR or ST1–3 levels (65%). Most administered LA on a weekly or daily basis (52.5%). A significant number of doctors of all grades failed to calculate the correct mass of LA (42.5%, p = 0.05). Most could recognise the signs of LA toxicity (90%). However less than 10% were aware of the use of lipid emulsion for management.

**Conclusion:** Whilst LA is a commonly used agent by surgeons, there is still lack of understanding for the immediate management of its complications.

ASiT Short Paper Prize 0518  CEMENTED HEMIARTROPLASTY IS ASSOCIATED WITH A HIGHER EARLY MORTALITY RATE THAN UNCEMENTED HEMIARTROPLASTY—FACT OR FICTION?

Talaat Al-Atassi, Daud Tai Shan Chou, Chris Boulton, Christopher Gerrard Moran. Queens Medical Centre, Nottingham University Hospital, Nottingham, UK

**Introduction:** Cemented hemiarthroplasty for neck of femur fractures has been advocated over uncemented hemiarthroplasty due to better post-operative recovery. However, studies have shown adverse effects of bone cement on the cardio-respiratory system which may lead to higher morbidity and mortality. The aim was to compare early mortality rates for cemented vs. uncemented hemiarthroplasties.

**Method:** Cohort study of hip fractures treated with hemiarthroplasty between 1999-2009 at one institute. 3094 hemiarthroplasties; out of which 1002 (32.4%) were cemented and 2092 (67.6%) were uncemented. 48hour and 30day mortality rates for the two groups were compared and a multivariate Cox regression model used to eliminate confounding factors.

**Results:** The study showed that, after eliminating confounding factors, 48hour mortality in the cemented group was 0.3% compared to 0.5% in the uncemented group (p = 0.388). However, the adjusted 30day mortality rate for the cemented group (4%) was shown to be significantly lower than for the uncemented group (10.8%) (p = 0.001).

**Conclusion:** The use of cement in hip hemiarthroplasty is not associated with an increased rate of mortality at 48hours or at 30days. Along with emerging evidence of better functional outcome with the use of a cemented prosthesis, we support the use of cement for all patients undergoing hip hemiarthroplasty.

ASiT Short Paper Prize 0504  ULTRASOUND SCANNING OF PLANTAR FASCIAS DISEASE – BASIS FOR A NEW CLASSIFICATION

Edmund Leong, John Afolayan, Andrew Carne, Matthew Solan. Royal Surrey County Hospital, Guildford, Surrey, UK

**Introduction:** Plantar fasciopathy is a common cause of heel pain, and is usually treated in primary care. Intractable cases are difficult to treat. Currently plantar fasciopathy is not routinely imaged and treatment is empirical. At the Royal Surrey, intractable cases undergo ultrasound scanning, with targeted therapy, in a dedicated clinic.

**Methods:** Patients referred to the clinic, over 18 months, with symptoms longer than 6 months and failed initial management were prospectively followed. Their ultrasound scans were reviewed, and disease characteristics were examined.

**Results:** 120 patients had plantar fasciopathy exclusively. 64% had typical insertional pathology only. The remaining 36% had atypical findings of distal disease or a combination of insertional and distal disease. These patients have either distal thickening or discrete fibromas.

**Conclusion:** We have demonstrated a high proportion of atypical non-insertional plantar disease in our cohort. Patients with atypical features are more resistant to treatments. Ultrasound scanning is valuable in characterising plantar pathology, which would otherwise not be detected. We propose a new classification of insertional or non-insertional plantar fasciopathy (in keeping with current classification of Achilles tendinopathy). Empirical treatment is inadequate for recalcitrant plantar fasciopathies. By using our proposed classification, both current and future treatments can be better evaluated.

ASiT Short Paper Prize 0507  ARE BIGGER HOSPITALS BETTER? THE EDUCATIONAL ENVIRONMENT IN THE OPERATING THEATRE

Melanie Field 1, Scott Mitchell 2, David Van Dellen 1, David Wall 3, 1 Queen Elizabeth Hospitals, Birmingham, UK; 2 New Cross Hospital, Wolverhampton, UK; 3 West Midlands Deanery, Birmingham, UK

**Aims:** There has been a perception that for surgical trainees the best theatre experience can be gained in the smaller district general hospitals. We aimed to assess whether the theatre educational environment differed between hospitals of different size, different surgical specialties and whether the assessment was influenced by the desire to undertake a surgical career.

**Methods:** The Surgical Theatre Educational Environment Measure (STEE) questionnaire was distributed to surgical trainees (FY1 to SpR) in the West Midlands to assess their perception of the educational environment in theatre. This assesses 4 areas relating to available opportunities, interaction with the trainer, atmosphere within theatre and supervision and workload.

**Results:** 153 questionnaires were analysed. Higher grade of trainee was significantly associated with higher scores for STEEM overall (mean FY1 score 138/200 and SpR score 155/200 p = 0.000). No statistical difference was seen between surgical specialties, gender or desire to be a surgeon.

**Conclusions:** Smaller size of hospital was significantly associated with higher STEEM score overall (small DGH 153/200, Large DGH 146/200, University Hospital 138/200 p = 0.001).

ASiT Short Paper Prize 0893  A NEW CLASSIFICATION SYSTEM FOR PERFORATED DIVERTICULITIS

D.P. O'Leary, E. Myers, E. Andrews, M. McCourt, H.P. Redmond. Cork University Hospital, Cork, Ireland

**Introduction:** Since its conception in 1978, the Hinchey score has been used to describe bowel perforation secondary to diverticular disease. Hinchey himself declared that Hinchey II and III perforations were closed “most of the time”, however his staging system does not account for this.

**Aims:** To categorise Hinchey II and III patients requiring operative intervention according to the presence of a sealed or persistent micro-perforation.

**Methods:** A retrospective review was conducted of all patients admitted to a diagnosis of diverticulitis between January 1999 and July 2010.

**Results:** 1,551 patients were identified and 116 had radiological evidence of perforated diverticulitis. 51 patients had clinical and radiological evidence of generalised peritonitis and underwent emergency surgery. At laparotomy, 21 patients had faecalant peritonitis (Hinchey IV), 25 patients