**Methods**: Electronic records were retrospectively analysed for all patients undergoing joint aspiration for suspected septic arthritis between 2013 and  $2014 \, (N=155)$ . Patients with skeletal immaturity and prosthetic joints were excluded. Outcome measures included length of stay and final diagnoses.

**Results**: Knee aspirations were most commonly performed (N=108). Of these 40% of patients were discharged before 48 hours (prior to culture/crystal results being available). 2 patients had positive gram-stain results and were treated as septic arthritis. 55 patients had positive crystal results (N.B crystal analysis not performed in 18 patients).

**Conclusion**: Referrals from ED for swollen knee joints are the most common. However, only a minority of these have eventual diagnoses of septic arthritis. We propose that patients without overt signs of sepsis deemed suitable for discharge may be initially managed without orthopaedic input, with subsequent follow up with Orthopaedic or Rheumatology services once full culture/crystal results are available.

# 0687: WHO PERFORMS DYNAMIC HIP SCREW FOR NECK OF FEMUR FRACTURE? A STUDY FROM A DISTRICT GENERAL HOSPITAL

R. Arshad, O. Riaz\*, S. Nisar. Calderdale and Huddersfield Foundation Trust,

**Aim**: Dynamic Hip Screw (DHS) is the most common operation in Orthopaedics for neck of femur fracture in the UK. Recent reports show a possible decreasing trend in the proportion performed by junior trainees. This study examined current practice in DHS operations at a District General Hospital (DGH) and whether the grade of primary surgeon influenced outcome.

**Methods**: A retrospective audit of a sample of 50 DHS performed over a 3 month period at our DGH.

**Results**: The primary surgeon was consultant for 3 (6%) operations, middle grade performed 42 (84%) operations, and SHOs performed 5 (10%). A consultant was present and scrubbed in 2 (4%) of the operations performed by SHO surgeons. There was no significant difference in duration of operating time between consultant and middle grade surgeons (p = 0.25) or consultant and SHOs surgeons (p = 0.27). There were no deaths within 30 days of surgery and the rate of post-operative complications were not significantly different between training grades (p = 0.54).

**Conclusion**: This study indicates that DHS commonly performed less by junior surgical trainees in this DGH, however there are no without adverse effects on morbidity. It is important for SHOs to perform DHS operations as it requirement for ST3 applications.

# 0743: ACCELERATED DISCHARGE FOLLOWING TOTAL KNEE REPLACEMENT WITH LOCAL ANAESTHETIC INFUSION

A. Chu<sup>\*</sup>, D. Cadoux-Hudson, D. Clarke, H. Fox, C. Bailey. *Royal Hampshire County Hospital, UK* 

Aim: Enhanced recovery programmes (ERP) have become standard procedure for patients undergoing lower limb arthroplasty. Opiate sparing is an integral part of ERP intended to reduce the associated morbidity and allow early mobilisation and therefore accelerate discharge. Intra-operative local anaesthetic infiltration (LAI) for total knee replacements (TKR) have been shown to reduce opiate use, improve pain scores and shorten inpatient stay. The use of LAI (Chirocaine, adrenaline and normal saline) is at the surgeon's discretion. The aim of our study was to evaluate if the use of intra-operative LAI accelerated recovery.

**Methods**: A retrospective case series of 85 consecutive TKRs between January and December 2014. The surgeon, use of LAI, age, gender, date of surgery and discharge dates were collated. Statistical analysis was assessed using the Mann-Whitney U-Test (p-value of <0.05). Hospital length of stay was used as the outcome measure.

**Results**: 37 patients received LAI versus 48 who did not. Both groups had similar gender and age profiles. The average length of stay following LAI was 4.7 days compared to 6 days in those without LAI (P = 0.0056).

**Conclusion**: The use of LAI as part of an enhanced recovery programme does appear allow faster discharge following TKR.

# 0800: DISTAL FEMORAL FRACTURES IN THE ELDERLY: REDUCED MORTALITY RATES WITH LOCKING PLATES?

J. Kukadia, M. Hassan\*, N. Ashwood. Burton Hospitals NHS Foundation Trust, UK

**Aim:** Distal femoral fractures (DFF) are associated with high mortality rates in the elderly and are particularly challenging to treat in this high risk population. Our aim was to evaluate the effectiveness of our management of DFF.

**Methods**: 78 patients with DFF were included in a retrospective study at our department, from 2006–2012. Data was collected on: demographics, injury related data and outcomes.

**Results** Demographics: The majority of our study population constituted females older than 65 years old. Injury related data: 78% of fractures were native DFF and 22% peri-prosthetic. 67% of patients underwent operative intervention. Outcomes: 68% of patients regained their pre-operative mobility status. Greatest length of hospital stay was found with increasing age and our overall 1-year mortality rate was 26%. Both mortality rate and length of stay were found to be least with the use of locking plates and greatest in those treated conservatively.

**Conclusion**: DFF are likely to increase given the ageing population. Although our study was small, we propose surgical management of DFF provides better mortality outcomes amongst the elderly population, particularly when treated with locking plates. We also suggest patients should receive early routine orthogeriatric review to minimise delay to surgery to improve outcome.

# 0856: HEALTH AND SAFETY AUDIT – AVAILABILITY AND USE OF LEAD THYROID PROTECTORS IN ORTHOPAEDIC THEATRES

T. Rifai\*, O. Khan, Guys and St Thomas' NHS Trust, UK

**Aim**: Exposure of the thyroid to radiation is associated with thyroid cancer. Recent studies have suggested that orthopaedic surgeons using image intensifier in theatres are at potential risk of thyroid cancer if not adequately protected by a lead thyroid guard. Our aim was to determine the use and availability of neck guards among orthopaedic surgeons and theatre staff in our trust. All staff working within 1 metre of the image intensifier should wear a thyroid neck guard as per national guidelines

**Methods**: Prospectively all staff members were monitored over a two week period in a selected trauma theatre and their compliance and role recorded on a spreadsheet. Availability of thyroid neck guards was also recorded.

Following this two-week period, education of theatre staff members both through posters and increased awareness of the guidelines was undertaken. A repeat audit was then undertaken over a two-week period.

**Results**: Intervention revealed an improvement from 55% to 76% compliance in all staff members. Surgeons were the poorest performing whilst radiographers were 100% complaint with the use of neck guards.

**Conclusion**: There was persistently a surplus of neck guards, but a potential shortage was identified should compliance increase.

#### **0891: PATIENTS' UNDERSTANDING OF HIP FRACTURE: A MULTI-CENTRE AUDIT**

N. Makaram <sup>1,\*</sup>, S. Wong <sup>2</sup>, S. Conlin <sup>1</sup>, R. Ramaesh <sup>2</sup>, B. Clift <sup>1</sup>. <sup>1</sup> Ninewells Hospital Department of Orthopaedics and Trauma, UK; <sup>2</sup> Royal Infirmary of Edinburgh, UK

**Aim**: Patient education significantly improves outcomes following a wide array of injuries. However, the majority of orthopaedic trauma patients show limited comprehension of their injury and treatment pathway. Hip fracture is a commonly sustained injury, and good comprehension of mechanism, treatments and rehabilitation is essential for optimal recovery. **Methods**: We assessed patients' existing understanding of hip fracture, treatment options, complications and prognosis, and the effect of a new patient information leaflet on understanding.

Results: Patients with hip fractures presenting to the Orthopaedic departments at the Royal Infirmary of Edinburgh and Ninewells