Conclusions: We conclude that staff training about trust guidelines has reduced errors in the prescription and administration of dabigatran. Anticoagulation omission on the day of surgery has been halved. There has been a shift towards prescribing tinzaparin for inpatient VTE prophylaxis. Further recommendations to improve practice are necessary in order to reduce delays in receiving anticoagulation post-operatively.

**0628: THE INTRODUCTION OF A MULTIDISCIPLINARY HIP FRACTURE PATHWAY CAN OPTIMISE PATIENT CARE AND REDUCE MORTALITY: A PROSPECTIVE AUDIT OF 161 PATIENTS**

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Aim: A multidisciplinary hip fracture pathway was introduced in our institution to facilitate rapid preoperative medical optimisation and early surgery for patients with hip fractures. We aimed to assess its impact on patient care and outcomes.

Method: Prospective data was collected on 161 patients in six months before and after implementation of the pathway, including: time to orthogeriatric assessment (TtG); time to surgery (TtS); length of hospital stay (LOS); return to original accommodation; and inpatient mortality. Significance was tested using Chi Squared and unpaired Student t-Tests.

Results: With implementation of the pathway, 85% of patients received a pre-operative medical assessment (19% before, p = 0.0001). There were significant reductions in average TtG (91 to 19 hours, p = 0.0001), LOS (24.8 to 19.5 days, p = 0.029), and mortality (14% to 4%, p = 0.0336), with an increase in patients returning to their original accommodation (57% to 80%, p = 0.0069). Whilst limited by theatre scheduling, there was an observed reduction in TtS (37 to 31 hours, p = 0.0663).

Conclusions: Rapid medical optimisation and prompt surgery can significantly improve outcomes in this challenging group of patients, often with complex comorbidities. Successful implementation of a multidisciplinary pathway can also reduce demand on services by facilitating return of patients to their pre-morbid accommodation.

**0642: AN AUDIT OF THE USE OF THE PAVLIK HARNESS TO TREAT DEVELOPMENTAL DYSPLASIA OF THE HIP (DDH)**

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Aim: To ascertain the length of time required for the patient’s hips to return to normal on ultrasound scan (USS) and to identify any correlations between the length of time taken and any patient characteristics.

Method: Patient records were used to determine the characteristics and outcomes of patients treated by the same orthopaedic surgeon and physiotherapist using the Pavlik Harness. The time taken for the hips to return to normal on USS was taken to be the time for the alpha angle to return to normal for the patient’s age.

Results: Fourteen patients were identified; four had bilateral DDH. Thirteen patients needed no further treatment and the remaining patient was subsequently treated with a Hip Spica. The range of starting angles was 37–57° and treatment time was 14–82 days. On analysis it was found that there is a correlation between a shorter treatment time and a higher alpha angle at the onset of treatment (R² Linea = 0.633).

Conclusions: Research into this area is recommended as it may inform appropriate USS interval times in the treatment of DDH using the Pavlik Harness.

**0650: HIP FRACTURE MANAGEMENT AUDIT AT EPSOM AND ST HELEIR NHS TRUST**

Harry Li. Epsom and St Helier NHS Trust, London, UK

Background: There are 30,000 new incidences of hip fractures annually in the UK with numbers projected upwards.

Method: Data was collected from the National Hip Fracture Database over the period September 2009 to August 2010 for all patients admitted to St Helier Hospital with fractured neck of femur. Data was audited against 3 national standards in the BOA-BGS Blue Book.

Results: 436 patients: 106 men mean age 81; 330 women mean age 83. 58% were admitted to an orthopaedic ward within 4 hours vs 60% nationally. 89.5% of medically fit patients had an operation within 48 hours vs 72.8% nationally; and 78.4% received orthogeriatric input vs 42.4% nationally. 53 patients died during their admission; 31 patients (58.5%) had an ASA of grade 3 or 4. Of these, 15 patients (28%) were admitted to an orthopaedic ward within 4 hours; 31 patients (58.5%) operated on within 48 hours; and 11 patients (20.8%) did not receive any orthogeriatric input.

Conclusion: St Helier Hospital is performing well nationally. However, the 53 patients who died could have received better orthopaedic/MDT management. Many were medically unfit. This recognises the importance of medical team input yet only 1 in 5 of the deceased received orthogeriatric review.

**0663: DO PATIENTS UNDERSTAND INFORMATION LEAFLETS FOR SURGERY?**

Michael Barrett, Craig Smith, Peter Kenyon, Glyn Thomas. Wirral University Teaching Hospital, Liverpool, Merseyside, UK

Introduction: Patient informations leaflets (PILs) are frequently used to convey detailed information to patients regarding surgery. The Department of Health guidelines on the production of PILs suggest keeping the content simple, with a recommended maximum reading age of the literature to be suitable for an eleven year old (sixth grade student) to read and understand. This is nationally the average adult reading age.

Methods: We assessed the readability of PILs using the Flesch-Kincaid Grade Level (FKGL) and Flesch-Kincaid Reading Ease (FKRE) formulae.

Results: 26 patient information leaflets identified. 100% of articles had a FKGL greater than the maximum recommended grade 6. Mean FKGL grade 10.7. 84% of PILs rated ‘difficult’, 16% rated ‘moderate’ for ease of reading. Mean FKRE was ‘difficult’, mean FKRE score 49.9.

Discussions: Patient information leaflets are difficult to read, exceed the recommend levels of reading difficulty and are beyond the reading ability of most adults. It is therefore essential when producing patient information leaflets to take this into account, and simplify the language and analyse the complexity of the text. Following this the PILs reviewed have been revised to improve the ease of reading for patients.

**0705: THE USE OF PROPHYLACTIC PERI-OPERATIVE GENTAMICIN IN ELECTIVE ARTHROPLASTY PATIENTS: IS IT SAFE?**

Sian Jones, Karun Veravalli, Claire Toppiss. Morriston Hospital, Swansea, UK

Introduction: With the aim of reducing rates of Clostridium difficile infection, ABMU Health Board changed their guidelines for antimicrobial orthopaedic prophylaxis (in line with current practice nationally). This recommends single dose gentamicin (weight based) in combination with flucloxacillin. Following introduction, concern was raised regarding a perceived increased incidence of acute kidney injury (AKI).

Methods: Pre- and post-operative creatinine values of two patient groups were compared. Group 1 (n=230) received pre-operative cefuroxime and group 2 (n=185) received single dose gentamicin and flucloxacillin. Data was analysed using Arcus statistical package. The stage of AKI was determined using the Acute Kidney Injury Clinical Practice Guidelines, published by the UK Renal Association.

Results: There was no statistically significant difference between the pre-operative (median 76, 74.5; p<0.05) nor post-operative creatinine values (median 74, 76; p<0.05) of the two groups. The incidence of AKI did not change with the new antibiotic protocol, but there was a reduction in rates of Clostridium difficile infection (37 cases in 2009, 31 in 2010 within the orthopaedic department).

Conclusion: This audit has demonstrated that single dose gentamicin in combination with flucloxacillin does not increase the risk of AKI. We can therefore safely continue its use for elective orthopaedic patients.

**0717: OPTIMAL TIMING FOR SYNDROMETIC SCREW REMOVAL – A STUDY BY RADIOLOGICAL ASSESSMENT**

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Objective: To compare the radiological outcome of syndrometic injuries of ankle following the syndrometic screw removal before and after eight weeks.