abnormality had surgery under general anaesthetic. No patient required cardiac surgery or balloon angioplasty pre-operatively. Patients having pre-operative echo had significant delay to surgery (average 2.7 days, range 0–6 days) compared to ‘non-echo’ group (average 1.1 days, range 0–3 days) (P < .001). There was no significant difference in length of stay and mortality at 28 days between the groups. We are now developing departmental guidelines for requesting echo in hip fracture patients with cardiac murmur to prevent unnecessary avoidable delay, and plan to re-audit.


1B.12

Total hip replacement in acute displaced intracapsular proximal femoral fractures—the role of large diameter heads & their effect on dislocation rates

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Introduction: Current literature supports the use of total hip replacement (THR) for the treatment of displaced intra-capsular proximal femoral fractures (DIPFF). Case series of patients receiving this treatment show dislocation rates higher that than of patients who have THR to treat osteoarthritis. Large diameter THR have mechanical advantages in terms of dislocation and their role in DIPFF has yet to be assessed.

Objectives: To assess the role of large diameter THR on the rate of dislocation when used to treat DIPFF.

Design: Single surgeon, case series.

Level of evidence: Level IV.

Setting: Level I trauma centre.

Inclusion criteria:

(1) Displaced intra-capsular proximal femoral fracture (Garden III & IV).
(2) Age > 65 years.
(3) Independently mobile pre-operatively for distances greater than a mile, with no more than 1 stick as a mobility aid.
(4) Abbreviated mental test score of 9/10 or greater.

Exclusion criteria:

(1) Pathological fractures.
(2) Additional fractures of the femur.

Outcomes:

(1) Mortality & Morbidity.
(2) Dislocation rate.

Patients/Participants: Patients who presented between May 2006 and December 2008 and met the requirements had a collarless polished tapered (CPT®) (Zimmer) femoral stem cemented (2nd generation technique), Metasul® (Zimmer) large diameter head and uncemented Durom® (Zimmer) cup inserted as a primary procedure via a modified Hardinge technique. Follow up was via routine clinic appointments, letter to GP and phone conversation with patient.

Results: 67 patients were selected (49 females) average age was 74.6 (67–87). Follow up was for an average of 14 months (3–39 months). No dislocations or deaths were recorded for this period of time. One patient had aseptic loosening of the acetabular component and two patients sustained peri-prosthetic fractures following falls (Vancouver B)—these cases were revised successfully.

Conclusions: This study suggests that the high rates of dislocation associated with THR for PPF can be limited by the use of large diameter components. This study should be followed by a multicentre multi-surgeon study.

Keywords: Hip; Fracture; Proximal; Femoral; Femur; Total; Replacement; Large; Diameter

Conflict of interest: All authors declare that there is no conflict of interest and there has been no financial support for this project.

doi:10.1016/j.injury.2010.07.335

1B.13

Anticoagulation management in patient undergoing elective and emergency orthopaedic procedures

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Introduction: Warfarin is an oral anticoagulant which antagonises the effects of vitamin K. Warfarin remains the treatment of choice for the majority of patients with venous thromboembolism, atrial fibrillation and valvular heart disease or valve replacement unless contraindicated. Careful monitoring of international normalised ratio (INR) is indicated during period of treatment. Poor management of patients on warfarin often leads to delay in surgery, life threatening bleeding during or after operation and unnecessary delay in discharge from hospitals in United Kingdom.

Methods: We carried out a prospective study on patients who were on warfarin and underwent elective and emergency orthopaedic procedures during period of study – August 2007 to April 2008. All patients included in the study were identified from admission notes during period of study. All data regarding indications for warfarin, pre and post procedures INR, elective or emergency orthopaedic procedures and complications were collected using a standard proforma.

Results: 18 patients, 12 male and 6 female were included into the study. Patients’ age ranged from 47 to 87 with mean of 76. The indications for warfarin therapy were atrial fibrillation in 12 patients, deep vein thrombosis in 5 patients and left ventricular aneurysm in 1 patient. 18 procedures, 10 elective and 8 emergency orthopaedic procedures were carried out during period of study. Elective procedures – 7 primary joint arthroplasty, 1 revision hip arthroplasty, 1 removal of metalwork and 1 metatarsophalangeal joint fusion. Emergency procedures – 4 hip hemiarthroplasty, 2 dynamic hip screw fixation, 1 external fixator application and 1 open reduction and internal fixation of ankle. All elective admission patients were pre-assessed in clinic prior to admission and were advised to stop warfarin based on their INR level. Patients with INR 2–3 had their warfarin stopped 4 days prior to surgery while patients with INR 3–4.5 had their warfarin stopped 5 days prior to surgery. This group of patients had their INR check on admission and ranged from 1.1 to 1.5. This group of patients had no reversal therapy and no cancellations were made to their operation. 8 emergency admission patients had INR of 1.4–4.7 on admission with mean of 2.7. 5 patients had reversal therapy while 3 patients had no reversal therapy. Pharmacological methods used to reduce the INR were fresh frozen plasma in 1 patient and Vitamin K in 4 other patients. 2 patients that received reversal therapy had operation on day 1, 2 on day 3 and 1 on day 5. 1 patient that had no reversal therapy was operated on day 1, 1 on day 3 and 1 on day 5. Patient that received no reversal therapy and operated on day 5 of admission died post-operatively from medical complications. Mean delay for patient that had reversal therapy was 2.2 days compared to 3 days in patient with no reversal therapy. All patients in this study had prophylactic low molecular weight heparin while off warfarin. Patients were recommenced on their normal dose of warfarin the day after their operation. 1 patient in the emergency admission group had INR....