

Patients and methods: A retrospective study of 145 consecutive patients treated for ankle fractures over a period of 12 months between January and December 2008. Results were collated excluding talar and pilon fractures. Emergency department presentation times were noted and time of anaesthetic to determine surgical delay. Notes were reviewed for inpatient stay and postoperative complications.

Results: There were 62 male and 83 female patients with a mean age of 49 years. In total, 117 (80%) patients were operated on within 24 h of presentation (early group). 28 patients' surgery was delayed beyond 24 h (delayed group). Of the 117 patients the mean inpatient stay was 3.79 days (± 2.39) whereas in the delayed group the mean stay was 8.57 days (± 6.54). Of the delayed group, 57% of the cases had swelling as the cause of a postponed operation, whereas other causes included lack of theatre time and lack of fitness for surgery. In the early group, 5 patients (4.27%) had wound infections and one patient had a chest infection (0.85%). Four patients (14.28%) from the delayed group developed wound infections all of whom were from patients with ankle swelling.

Conclusion: We recommend that policies be put in place to provide early operative intervention for patients with fractured ankles prior to the development of swelling as this would result in improved patient outcome and significant financial savings.

doi:10.1016/j.injury.2010.07.419

1A.6

Does pre-operative dehydration mask anaemia in hip fracture?

G.J. Love (MRCS, Specialist Registrar)*, P.K. Rickhuss (FRCS, Consultant Orthopaedic Surgeon)

Department of Trauma and Orthopaedics, Ninewells Hospital, Dundee, DD1 9SY 01382 660111, UK

E-mail address: gavin.love@nhs.net (G.J. Love).

Anaemia is common amongst patients presenting with hip fracture. Acute dehydration may lead to the degree of anaemia being underestimated on admission. Following restitution of circulatory volume surprising drops in haemoglobin concentration are sometimes observed post-operatively. These may be falsely attributed to the operative procedure. There is evidence in the literature that blood loss is often underestimated in hip fracture but no studies have investigated this postulated pre-operative drop in haemoglobin concentration. We therefore conducted a study of haemoglobin concentration to establish whether there was a change in concentration pre-operatively. Forty-two consecutive patients admitted with hip fracture underwent haemoglobin measurement at the time of admission (our usual practice) and at the time of anaesthetic administration. A significant drop in haemoglobin concentration (1.09 g/dl) was observed ($P=0.0014$). Haemoglobin concentration is often overestimated at the time of admission for hip fracture. Outcome for these patients may be improved by early recognition and treatment of anaemia, particularly those high risk patients with multiple comorbidities. **Keywords:** Hip fracture; Anaemia; Transfusion; Dehydration

doi:10.1016/j.injury.2010.07.420

Rehospitalisation following foot and ankle trauma surgery

N.K. Rath*, A.R. Guha, A. Khurana, R. Thomas, S. Hemmadi, D. O'Doherty

Foot and Ankle Unit, University Hospital of Wales, Cardiff, UK

Aim of the study: To evaluate the causes of rehospitalisation following foot and ankle trauma surgery.

Methods: Patients undergoing Foot and Ankle surgery following trauma at the University Hospital of Wales over one financial year (April 2007–March 2008) were retrospectively studied. Patients were identified using the hospital OPCS-4 coding system and all scheduled and unscheduled visits to hospital investigated. Patients were followed up for a mean period of 9 months (Range 1–14 months) following surgery.

Results: The records for 259 patients were evaluated, out of which 143 were male and rest 116 were female. The median age was 42 (Range 1–72). Of these, about 16% of foot and ankle trauma patients (41/259) either attended the A&E Department or had an unplanned clinic visit at some stage of their follow up. Almost 90% of these patients were admitted to hospital (median stay 2 day, range 1–19 days) for further management.

Only five patients (4 A&E; 1 medical) simply re-attended, but were not admitted. The majority of these patients had superficial wound infections (3/4) where as only one patient had plaster-related problem. Only one patient presented to physician 20 days post ORIF of ankle following a cardiac arrest.

Thirty-six patients (14%) were re-admitted to hospital of which 16 underwent planned removal of metal work where as 5 patients had metalwork removed due to infection and 9 patients had soft-tissue infection requiring antibiotics or debridement.

Conclusion: The overall infection rate following foot and ankle surgery in trauma patients was 6.5% (3 A&E + 14 T&O/259), whereas there was no proven thromboembolic episode. The revision rate following foot and ankle trauma surgery was 1.9%.

doi:10.1016/j.injury.2010.07.421

1A.8

Functional outcome following talar injuries

H.B. Tan, O. Obakponovwe, E. Karadimas, N. Harris, N. Kanakaris, P.V. Giannoudis

Academic Department of Trauma and Orthopaedics, Leeds Teaching Hospitals NHS Trust University of Leeds, UK

Purpose: To evaluate the short to mid-term functional outcome of patients with talar fractures treated in our department.

Patients and methods: This is a retrospective-cohort-study, including all adults with talar (neck/body/dome) fractures over a 4.5-year period. Patients <16 years or those with penetrating trauma were excluded. Demographics, ISS, associated injuries, method of treatment, mode and timing of post-operative mobilisation, complications, and functional/radiological outcome were recorded and analysed. Fractures were classified using the Hawkins and Sneppen classifications by two different reviewers, and the functional outcome was assessed using the Olerud-Molander scoring system. The median follow-up was 24.5 months (6–60). Descriptive statistical methods were used for comprehensive presentation of the results and statistical significance was set to $p < 0.05$.

Results: Between March 2005 and September 2009, out of 13,950 patients seen in our department, 45 (0.32%) were identified with talar fractures. Five were excluded as they did not meet the study