12 Abstracts

The aim of this study was to assess the usefulness of Cast index and an indigenously developed Gap index as measures of poor moulding of plaster.

Twenty cases of re-manipulation of distal third forearm fractures excluding growth plate injuries were compared with a control of 80 consecutive patients treated by MUA and plaster. Five patients in the control group had an axial deviation of more than 10 degrees but were not remanipulated and therefore were included in the failure group. The Gap index and the Cast index of the two groups were compared as predictors of failure of conservative treatment.

The groups were similar in terms of demography and post reduction alignment. There was a significant difference (<0.001) in the Cast index and the Gap index of both the groups. The sensitivity of the Cast index (>0.8) in predicting failure of plaster was 48% while that of the sum of Gap index (>0.15) in AP and Lat view was 88%. Gap index was found to be more accurate (84%) than Cast index (78%) in predicting failure. At a level of Cast index of more than 0.8 the relative risk of failure is 6.8 as compared to 35 when the sum of Gap index is more than 0.15.

The Gap index is a better predictor of failure than the Cast index. A quick assessment of these indices, especially by the less experienced surgeons, is a good practice before accepting any plaster following a manipulation of distal radial fractures. It would not only save the patient a second anaesthesia but also complications of a more extensive second procedure and of course hospital resources.

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## Reduction of acute shoulder dislocation which method to achieve '4 h' target

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Introduction: Acute anterior shoulder dislocation with out any fracture may be reduced by various methods and commonly performed by junior doctors. Various methods have been described in the literature.

*Aim*: To investigate effective method of reducing shoulder with less use of resources and early discharge from the department.

*Study design*: Prospective clinical audit July 1999—December 2004.

*Method*: We prospectively studied 79 patients undergone shoulder reduction in the department.

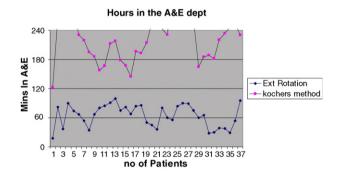
Forty-one patients were treated Kocher's method using sedation and analgesic and 38 patients treated with external rotation method using either entonox or intra articular lignocaine according to patients' preference.

Result: Two patients had respiratory arrest requiring reversal of sedation and admitted for 24 h observation. Four in the Kocher methods and two in the external rotation methods required general anaesthetic to reduce. The mean length of stay (and standard deviation) in the Emergency Department is 21.89  $\pm$  45.27 min for the patients treated with Kocher's method with sedation and 64.24  $\pm$  22.41 min for external Rotation methods.

Any of the method had any complication.

Conclusion: The Kocher's method of shoulder reduction is associated with risk and involves more resources. Mean length of stay in the department is 3.4 times more than the external rotation method which only requires one physician.

Chart showing time spends in A&E Department for Shoulder Dislocation Treatment:



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## The management of open tibial fractures

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Background: In 1997, the British Orthopaedic Association and the British Association of Plastic Surgeons produced guidelines regarding the optimal combined management of open fractures of the tibial diaphysis. These have formed the backbone of how we treat open fractures today, including early administration of intravenous antibiotics and early radical debridement of soft tissues with skeletal stabilisation within 6 h from the time of injury. We performed a retrospective audit of patients admitted with open fractures of the tibial diaphysis to a teaching hospital in East Anglia over the past 8 years and compared the management to the current gold standard of the BOA/BAPS guidelines.

Methods: Patients were identified from the Accident and Emergency Admission Database. Those