

The casualty notes are assessed on a form which covers patient waiting time, reason for attendance, disposal of patients and also a value judgment of the completeness of the triage nurse's and doctor's notes, and the treatment given to the patient.

When required detailed comments are then made on a separate sheet, where again the patient is identified by his or her casualty number only. These comment sheets form the basis for the regular audit meetings.

Any deaths which occur in the department are also assessed on the comment sheet, together with the information from the post-mortem results. This allows the management to be critically evaluated, and any avoidable factors identified for future action.

A master sheet is useful for the compilation of monthly figures for future comparisons. This gives useful statistical information, plus information on the percentage of the doctor's and nurses notes which warranted further comment. It highlights where the quality of service can be improved, by revealing the frequency and severity of the omissions which have occurred.

Due to the inclusion of the subjective value judgment of the quality of treatment given, the audit should be performed by the same senior member of staff over a number of months.

In an Accident and Emergency Department of our size, a time commitment of one person for 1–2 h a week will cover the assessment of the casualty notes and the collection of the data.

It is too early to see if the regular feedback, which this auditing system gives, leads to lasting improvement in the quality of the service we give to the public. However, the way in which medical auditing encourages a critical attitude to one's own work should improve each individual doctor's future performance.

Copies of the forms used in this audit method may be obtained from the Accident and Emergency Department of the Royal Preston Hospital.

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Is anaesthesia necessary for reducing shoulder dislocation?

Sir

I read with interest the article by A. Banerjee (*Archives of Emergency Medicine*, 1990, 7, 240) and would agree with him that anaesthesia is mostly unnecessary for the reduction of dislocated shoulders. However, I feel that withholding analgesia from patients with a notoriously painful condition is not an advance in emergency medicine practice.

Delays in treatment will undoubtedly occur even in the best organized departments, and many will have to wait for an X-ray examination. Although the technique as described can be used to effect immediate reduction in those not

requiring radiography (perhaps those with recurrent dislocations who have had previous films and the elderly who are unlikely to need stabilizing surgery in the future) the addition of Entonox would add no risk or inconvenience. In those likely to be kept waiting I would advocate the use of intravenous analgesia before X-ray and afterwards reduction by an experienced operator, without sedation. Unfortunately it is often the unsupervised inexperienced managing such patients and for them a second doctor competent in the technique of sedation is required for the patient's comfort and safety. Until experienced senior A&E staff are freely available to supervise their juniors patients may not be treated in the most efficient manner theoretically possible, but we should nevertheless strive to treat them safely and not allow them to suffer in pain.

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Serious eye injuries caused by darts

Sir

The prevention of accidents can only be achieved by knowledge of causes and consequences. The importance of identification of the causes and prevention of accidents has led to the formation of the Medical Commission on Accident Prevention and the Child Accident Prevention Trust. These bodies often depend upon clinicians to identify and report new or unrecognized causes of severe injury. Penetrating eye injuries can cause severe ocular damage with lasting visual impairment and cosmetic disfigurement. Darts have only recently been recognized as a cause of severe eye injury (Cole & Smerdon, 1988).

We have reviewed 21 patients with penetrating eye injuries caused by darts. All injuries occurred between 1 January 1982 and 31 December 1988 and were identified via the surgical database and the operating theatre books at the two hospitals. Two patients with injuries probably caused by darts were not included in the study as we were unable to obtain satisfactory historical and clinical details. Thirteen patients were interviewed and examined by the authors while the information on the remaining patients was obtained from their medical records. The minimum follow-up was 11 months.

All the patients were children with 15 patients aged below 10 years and five between 11 and 13 years. The male to female ratio was 2.5:1 (15:6). There were 9 right and 12 left eyes involved. All injuries occurred in the home setting either the patient's or a friend's. Four patients took longer than 24 h after injury to attend hospital. Two of these patients were afraid to tell their parents of the injury while the other two did not realize the severity of the injury. In 10 cases the dart was thrown by another child while three injuries resulted from the dart bouncing off the target. Pulling the dart out of the board resulted in four injuries while the exact mechanism of injury was unknown in the remaining four. It was difficult to