

Highlights from this issue

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Extrication, getting out of trouble!

This interesting paper looks at what the delaying factors are in getting patients out of vehicles which have been involved in an incident.

The factors were identified from on scene examination for over 150 incidents with data being collected from the on site commander as well as logging time details from the walkie-talkie conversations that occurred in relation to the removal of the patient.

The mean time was 33 minutes, with a range of 10-124 minutes for extricationthe authors identified 7 factors that contributed to making it take longer to extricate the patient from the vehicle. Out of interest, what do you think they are?

The knowledge of the time taken and complicating circumstances are important clinical pieces of information that have to be factored in when managing a patient, especially in the secondary setting remote from the scene. Trauma management is about managing changes in the patient's pathophysiology so insight into the problems the patient faced in the prehospital setting is vital.

The big needle or the little needle

Arterial blood gas sampling can be a painful process with potential complications such as haematoma, parathesiae or tenderness being common ones.

This single blinded randomised control trial, involving 119 patients, was conducted to see which size was less painful to use. The patients were fairly matched for age, sex and sites that were used, as was the number of different types of clinicians involved in the trial.

A 10 point visual scale was used and the findings were a bit surprising in that there was no difference between the two gauges of needles, size 23 and 25, but the clinicians found the 25 gauge harder to use. There was no difference between how many attempts were required to secure sufficient sample for arterial blood gas analysis.

What is of interest, although not a key point, is that the relative risk of a complication such as a haematoma was 4 times

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that in the 23 gauge needle compared with the smaller one, as there were 11 cases with the 23 gauge needle compared to only 3 with the 25 gauge one.

The authors point out that there are limitations to the work as it is a single centre and that the needles were identifiable by their colour hence the single blinding. It is also noted that the trial did take quite a while to conduct but this seems to be due to the very comprehensive and thorough way in which they approached this question. They call for the study to be conducted in more centres and to look at the utility of such a technique in everyday practice.

The focus on patient care and thinking about how to improve practice makes this good reading.

Implementing human factors in clinical practice

What can you learn from the aviation industry? Human factors (HF) are important in all walks of life and their contribution to improving patient safety is still to be examined. The aviation industry has a long experience of reducing adverse events by imbedding consideration of HF into training and into the everyday practice of flying.

Can this really fit to the complexities involved in the running parts of the NHS? Studying a course that involved health staff of different specialities and grades from an ED and Theatres in one Trust is a good attempt to see if HF understanding and techniques in the NHS can be helpful.

The answers are yes and maybe! A key comment was that, organisational culture and the hierarchical structures can be an assistance and an impediment at the same time. The participants felt so much better informed and that the teaching about HF was essential. Can improved HF understanding your setting?

Paediatric ED re-attendance rates: **Comparing Nurse** Practitioners and other clinicians

Paediatric Emergency Practitioners (PENPS) make a difference?

This study is retrospective review of medical notes of two 14 day periods between November 2011 and June 2012 from the Bristol



Children's hospital. Comparisons were made with 4 PENPs (with between 4-16 years experience) and the rest of the medical staff including juniors consultants.

PENPs saw mostly older children with trauma in P4 triage category; the seven day unplanned re-attendance rate for PENPs was similar to consultant medical staff and lower than for doctors in training., though when taking into account the case mix, this distinct was less clear.

Frequent callers to the ambulance service: patient profiling and impact of case management on patient utilisation of the ambulance service

Ten times or more in a month makes a frequent caller and maybe there are better ways to support these users of the service. There may also be a cost benefit when considering that an ambulance call out costs about £255 to take a patient to an ED. So, the London Ambulance Service (LAS) set up a team to help with these callers. Firstly, they identified the reasons for the calls and then developed 4 different systems to offer these callers. These systems of interventions varied from evaluating the calls and patient behaviour over 6 weeks to establishing multi-agency reviews. Forty percent of callers had mental health matters, either on a long standing basis or with acute events, whilst over 16% had suicidal ideation.

There are very important and interesting aspects to this work including the 'joining up' role that LAS has undertaken, as it highlights that an assessment of need is important to help the callers, and then proposes different options, to respond to the patient's clinical condition.

