

Highlights from this issue

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Firearms figures—is life getting more dangerous?

This retrospective study has data on firearm injuries from the Traumatic Audit and Research Network (which includes in-hospital deaths and severely injured patients) matched with data from the Office for National Surveys which provides information on prehospital and hospital deaths from 1990 to 2007/8 (*see page 10*). While US data have shown an increase in deaths over time, there has so far been a lack of information to inform the veracity of UK media speculation of increasing morbidity and mortality. This paper suggests that there are significant regional differences relating to age and that there are gender-related risks of death. These outcomes vary depending on whether or not the firearm injuries are self-inflicted or the result of being assaulted (eg, young men attend hospitals more commonly with assaults). The authors discuss the injury prevention and training implications of the data.

Can ultrasound help to solve the LRTI?

If the thoracic CT scan is the 'gold standard' for diagnosing pneumonia, then positive chest x-rays provide agreement for only 65% of cases (*see page 19*). However, thoracic CT scans are expensive, may not always be readily available, are associated with higher radiation doses than chest x-rays (or ultrasonography!) and are not portable (unlike chest x-rays or ultrasound which can be performed at the patient's bedside). Conveniently, chest x-rays (in conjunction with clinical findings) are used in the emergency department to make the diagnosis of pneumonia, but the use of ultrasound as a rapid assessment tool to rule in certain conditions is widespread (eg, free fluid in an abdomen subjected to trauma can be discerned within a few minutes by FAST scanning if conducted by a trained and competent emergency trainee). This article compares the accuracy of bedside lung ultrasound and chest x-rays in confirming the clinical suspicion of

pneumonia, the reference standard being the diagnosis at discharge. Some patients had thoracic CT scans as well, allowing comparisons of the two bedside imaging modalities to be compared against a 'gold standard'. The ultrasound was performed by a single operator prior to the chest x-ray, which was read by a senior radiologist on duty; further x-rays or CT thoracic imaging was carried out when clinically indicated. Discrepancies between the ultrasound findings and the chest x-rays were resolved by an independent radiologist. All treating physicians were blinded to the ultrasound results. The findings are challenging, but the paper begs the questions: could you use this as a tool in your department and, in your expert hands, would you match the results?

Not a shocking state of affairs

This is a prospective cohort study of the ability of emergency department nurses to recognise ventricular fibrillation (VF)/pulseless ventricular tachycardia (VT) and their willingness to undertake immediate defibrillation (*see page 24*). Following directed training, two-thirds of the nurses became more confident in doing so. This must have a bearing on survival outcomes and should lead the reader to think about what the practice is locally.

Winching them in?

This paper from the Lake District showed that, over a 3-year period, one-third of people sufficiently injured on the rugged terrain to warrant helicopter evacuation could have been directly lifted in by a hoist or long line (*see page 56*). This would have cut down the need for hazardous ground transportation (for the patient and the attendant mountain rescue team) and improved the recovery time. It is noteworthy that the Sea Air Rescue service helicopters are equipped with hoists but are a limited resource, stationed over 30 min away, whereas the local Helicopter Emergency Medical Base is only 10 min flying time from the casualty sites. The use of a long line or hoist system would fit with accepted international standards.

It's raining cats and dogs and people!

Six million emergency cases as transported by emergency services from the Hospital Authority in Hong Kong were stratified by age, triage levels, hospital admission status, comprehensive social security assistance and gender from May 2006 to April 2009 (*see page 60*). The results suggest that inclement weather had little effect on calls for children, which was not the case for the elderly population, that there was an increased need for more hospital beds in bad weather and receiving financial benefit was more likely to be associated with the use of emergency services.

Now for two papers on airway management.

I can't see!!

In this study, emergency medical technicians tried to intubate a manikin which had black coffee flooding the back of the oropharynx to mimic severe upper airway haemorrhage (*see page 54*). The emergency medical technicians had to try to intubate with a laryngoscope or with a suction laryngoscope, the latter giving better results. Interestingly, the percentage of oesophageal intubation was high, even with the suction laryngoscope, at 9% of cases.

What's better for teaching how to tube the odd airway?

Twenty anaesthetists were asked to intubate a manikin in a number of different positions to mimic the problems faced in prehospital entrapment scenarios (ie, when unable to perform direct laryngoscopy) using the Intubating ILMA system or the Airtraq device (*see page 32*). They were able to intubate the manikin within 120 s by either system, but there were considerable differences between the two ways of managing the airway.