

JournalScan

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When in doubt, examine the patient ▶ Retrospective chart review of patients admitted to a general medical service in Chicago found that 26% had new physical findings, leading to a change in diagnosis and treatment, when examined by the attending physician on take. The author acknowledged the small sample size (100 patients over 28 days) and lack of control group. Even taking this into account, in a clinical era of reliance upon sophisticated and technologically advanced investigations, it is refreshing to be reminded of the role of traditional examination skills.

▲ **Reilly BM**. Physical examination in the care of medical inpatients: an observational study. *Lancet* 2003;362:1100–5.

Drug related admissions ▶ Prescribed drug related problems are well recognised. This observational study adds to an already large body of evidence. Some 6.5% of medical admissions to an acute teaching hospital screened by a pharmacist were judged to have resulted from drug related problems. Most of these were deemed to have been potentially preventable. The “problems” included prescribing problems, monitoring problems, and adherence/compliance problems. Of particular relevance to A&E, there was a comparatively large number of patients who presented with gastrointestinal problems having been prescribed non-steroidal anti-inflammatory agents in the presence of two or more “risk factors”.

▲ **Howard RL**, Avery AJ, Howard PD, *et al*. Investigation into the reasons for preventable drug related admissions to a medical admissions unit: observational study. *Qual Saf Health Care* 2003;12:280–5.

Antibiotic therapy for secondary prevention of myocardial infarction ▶ It has been suggested that *Chlamydia pneumoniae* infection plays a part in the pathogenesis of coronary artery disease. This randomised placebo controlled trial looked at the possible role of a three month course of azithromycin in over 7747 patients with a recent myocardial infarction and positive IgG titres for *C pneumoniae*. No difference in the rates of death, re-infarction or need for re-vascularisation was found at 14 months.

▲ **O'Connor CM**, Dunne MW, Pfeffer MA, *et al*. Azithromycin for the secondary prevention of coronary heart disease events. The WIZARD study: a randomized controlled trial. *JAMA* 2003;290:1459–66.

A trial of automotive external defibrillators in out of hospital cardiac arrest ▶ This was the first of two companion papers on the potential role of automotive external defibrillators (AEDs) in the prehospital setting. This study was performed in the city of Amsterdam and the surrounding area. The benefits of having AEDs available to police and fire fighters out of hospital were smaller than might have been expected. Improved rates of return of spontaneous circulation and admission to hospital were not translated into significantly improved hospital discharge rates. Delays of typically more than 10 minutes before arrival of first responder equipped with an AED might explain the disappointing results. This underlines the importance of having an integrated system with good communication (as well as good equipment) to achieve best outcomes for patients with prehospital cardiac arrest.

▲ **van Alem AP**, Vrenken RH, de Vos R, *et al*. Use of automated external defibrillator by first responders in out of hospital cardiac arrest: prospective controlled trial. *BMJ* 2003;327:1312–15.

Public place defibrillators deemed not cost effective ▶ An economic modelling exercise examined the potential effects of installing defibrillators in all major airports, railway stations, and bus stations in Scotland. Having made reasonable assumptions

(based upon local data) in terms of improved survival from having an available automated external defibrillator, the cost per life year was £29 625, and the cost per quality adjusted life year was £41 146. The authors conclude that installing these public place defibrillators would be poor value for money, when compared against other potential interventions (such as appropriately training additional first responders).

▲ **Walker A**, Sirel JM, Marsden AK, *et al*. Cost effectiveness and cost utility model of public place defibrillators in improving survival after prehospital cardiopulmonary arrest. *BMJ* 2003;327:1316–19.

Why do patients leave without being seen? ▶ Ninety seven of 172 patients who had left a Minnesota emergency department without being seen completed a telephone questionnaire on their reasons for leaving. Some gave more than one reason. Forty seven per cent left because the waiting time was too long, 24% because their symptoms improved or did not worsen. Eighteen per cent felt that they were being ignored or poorly treated by the ED staff. Eighty five per cent of responders said that more frequent updates on the waiting time might encourage them to stay longer.

▲ **Arendt KW**, Sadosty AT, Weaver AL, *et al*. The left-without-being-seen patients: what would keep them from leaving? *Ann Emerg Med* 2003;42:317–23.

Opioid analgesia does not affect diagnosis of abdominal pain ▶ This double blinded randomised controlled trial (originally published in the *J Am Coll Surg*) included 74 adult patients with severe abdominal pain of less than 72 hours duration. Patients were randomised to receive either intravenous morphine (up to 15 mg) or saline placebo. The top two diagnoses of the examining doctor were compared with the hospital discharge diagnosis. The use of morphine did not have any significant effect upon diagnostic accuracy. Although the results support current practice, it was disappointing that, for various reasons, 91% of patients presenting with abdominal pain were excluded from the trial.

▲ **Pitts S**. Morphine sulphate analgesia did not affect diagnostic accuracy in undifferentiated abdominal pain. *Evidence Based Medicine* 2003;8:152.

More evidence for the Canadian C-spine rule ▶ Emergency physicians will welcome further evidence to support use of the Canadian cervical spine “decision rule”. A prospective multicentre cohort study of more than 6000 alert patients with a suggestive mechanism or neck pain after injury found that use of the rule would decrease use of radiography by 17.5%. The rule had a sensitivity of 100% for fractures requiring some form of stabilisation, compared with 92% for physician judgement.

▲ **Bandiera G**, Stiell IG, Wells GA, *et al*. The Canadian C-spine rule performs better than unstructured physician judgement. *Ann Emerg Med* 2003;42:395–402.

A major incident in London ▶ This article summarises the management of the 1999 Brixton bombings. The role of the A&E department and the range of injuries are described. The authors make the point that clinicians working in civilian practice are unlikely to be familiar with the management of blast injuries. They emphasise the importance of having multidisciplinary consultant involvement and for appropriate staff debriefing.

▲ **Hart AJ**, Mannion S, Earnshaw P, *et al*. The London nail bombings: the St Thomas' Hospital experience *Injury* 2003;34:830–3.

Quality of care in transfer of head injured patients ▶ The standard of resuscitation and care during transfer of 50 consecutive patients arriving at a neurosurgical centre in Essex was compared with Advanced Trauma Life Support (ATLS) and Association of Anaesthetists of Great Britain and Ireland (AAGBI) guidelines. Among patients requiring acute neurosurgical intervention, the time from A&E presentation to arrival was mean 7.4 (SD 2.2) hours. Seventeen patients were transferred without a hard collar and 26 had “inadequate” cervical spine imaging. Seven patients were hypoxic. Two had systolic blood pressures of less than 90 mm Hg and three had a systolic pressure of over 210 mm Hg. Forty two patients were escorted by an anaesthetist. Twelve escorts did not

meet the AAGBI standards for level of experience. Although the incidence of hypoxia, hypotension, and missed injuries was less than in previous studies, there seems to be considerable room for further improvement. Avoiding delays in transfer continues to pose a considerable challenge.

▲ **Price J**, Suttner N, Aspos AR. Have ATLS and national guidelines improved the quality of resuscitation and transfer of head-injured patients? A prospective survey from a Regional Neurosurgical Unit. *Injury* 2003;**34**:834–8.

Prehospital care in multi-trauma with head injury ► This Australian retrospective study of the care of 2010 patients with severe blunt trauma does little to settle controversy regarding the prehospital care of patients with head injuries and other severe injuries. However, certain aspects of the study design, particularly patient selection (medical teams were more likely to be sent to the most severely injured patients), make the results very difficult to interpret.

▲ **Lee A**, Garner A, Fearnside M, *et al.* Level of prehospital care and risk of mortality in patients with and without severe blunt head injury. *Injury* 2003;**34**:815–19.

Keep pulling at work ► This paper looked at the effect of arm traction on lateral cervical spine radiographs in 20 healthy volunteers in hard collars. Traction was provided by pulling on both wrists. The mean improvement with traction was two thirds of a vertebral body, with 15% of subjects showing an improvement of one entire vertebral body. Based upon these data, it seems that pulling does work.

▲ **Bowe CT**, Burton JH, Chandler RC, *et al.* The effect of arm traction on the adequacy of cross-table lateral cervical spine radiographs. *J Trauma* 2003;**55**:800–1.

Does traffic calming reduce accidents? ► The authors of this meta-analysis of 16 trials claim that traffic calming measures (road narrowing, speed humps, mini-roundabouts, etc) have the potential to decrease road traffic injuries. The data are not overwhelmingly persuasive, reflecting the difficulty of performing robust trials in this area.

▲ **Bunn F**, Collier T, Frost C, *et al.* Traffic calming for the prevention of road traffic injuries: systematic review and meta-analysis. *Injury Prevention* 2003;**9**:200–4.

Intravenous fluids in seriously ill children—time to rethink? ► This review of fluid therapy warns against the use of hypotonic maintenance fluids in ill children. The authors advocate

the use of 0.9% saline with added glucose as the fluid of choice to avoid the complications associated with hyponatraemia and fluid overload in critically ill children with impaired free water clearance. In the absence of robust randomised controlled trials, the authors have based their opinion largely upon case reports and animal studies.

▲ **Duke T**, Molyneux E. Intravenous fluids for seriously ill children: time to reconsider. *Lancet* 2003;**362**:1320–3.

Corticosteroids in Kawasaki disease ► This prospective non-blinded randomised controlled trial of children with Kawasaki disease attempted to examine the potential benefit of adding pulsed methylprednisolone to intravenous immunoglobulin. Seventy one patients were eligible for this Boston study: 10 declined, 20 were not enrolled because lack of time, and two were excluded because of baseline coronary artery abnormalities. Children treated with corticosteroids had fewer adverse events in hospital, had less fever, and needed less paracetamol. There was no significant difference in coronary artery abnormalities. The authors acknowledge the small size of their study and some other design limitations and call for a large multicentre double blinded trial.

▲ **Sundel RP**, Baker AL, Fulton DR, *et al.* Corticosteroids in the initial treatment of Kawasaki disease: report of a randomized trial. *J Pediatr* 2003;**142**:611–16.

Chest radiographs in paediatric blunt trauma ► This study set out to determine clinical markers associated with abnormal chest radiographs in non-intubated children who had sustained blunt trauma. Based upon retrospective US data, the authors conclude that the following are good predictors of an abnormal chest radiograph: abnormal respiratory rate, chest wall tenderness, or back abrasions. It remains to be seen whether or not this knowledge will safely enable fewer radiographs to be taken.

▲ **Gittleman MA**, Gonzalez-del-Rey J, Brody AS, *et al.* Clinical predictors for the selective use of chest radiographs in pediatric blunt trauma evaluations. *J Trauma* 2003;**55**:670–6.

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