Back to the future

Medicine (including Emergency Medicine) has become increasingly reliant on ‘tests’ and, certainly amongst younger practitioners, the thought of ruling a diagnosis in or out on clinical grounds alone is almost unthinkable. This is particularly so when the condition being considered is potentially fatal. In a challenging article Balwinder Singh from the Mayo Clinic and co-workers report the results of a systematic review and meta-analysis of the clinical utility of the Pulmonary Embolism Rule-out Criteria (PERC). They found 13 cohorts from six countries that included 14,844 patients and report a pooled sensitivity of 97% with tight CIs. They argue that this is sufficient to allow PERC to be used to rule-out pulmonary embolus in low risk patients without the need for any tests. Go and read the paper for yourself and see if you feel comfortable with the criteria themselves, with the evidence they found and with the analysis they present. Then ask yourself whether you are happy to save the expense and time of a d-dimer test for these patients or whether your worry about ‘missing’ 3 patients with pulmonary embolus out of every 100 still makes you want a ‘test’ as well. You might then add the emerging evidence of ‘over-diagnosis’ of pulmonary embolus and rerun your analysis again to see if you get a different answer.

Overcrowded

Emergency Department overcrowding is a problem, it seems, all around the world. In two related papers authors from Norway and Eire look at two different aspects of the issue. Borge Lillebo et al from Trondheim undertook a prospective observational study at a single out-of-hours primary care centre to determine the proportion of primary care referred patients who could have been dealt with by alternatives to admission if such alternatives had existed. They found that over 20% of referrals for admission were amenable to alternatives—this reflects the experience of many Emergency Physicians. Eoin Fogarty and Fergal Cummins from Limerick looked at admission rates and Emergency Department overcrowding in their short paper. Practitioners of Emergency Medicine all have their own firm belief about whether a link exists between the two. What do you believe? Go and look at the full article to see if their data supports you. If it doesn’t then challenge yourself to understand why not and consider changing your stance.

Violence and aggression

Also in this issue we have international perspectives on violence and abusive behaviours against staff—this time from workers in Nigeria and Iran. Kolawole Ogundipe and co-workers from Ibadan undertook a questionnaire based survey of 81 nurses working in six tertiary hospitals across five Nigerian states. They found that 65% of respondents had been direct victims of violence (most often by men). Perhaps the most chilling line in this whole fascinating article is ‘only (sic) 15.8% of nurses had been threatened with a weapon over a 1-year period’. Go and see the data for yourself and wonder at the resilience of Nigerian Emergency Nurses. On a similar theme Hossein Alimohammadi et al from Tehran undertook a cross-sectional survey at seven Emergency Department residences across Iran. Again large numbers of residents were aware of abuse and again they report that most perpetrators of abuse were men.

Thinking differently

In a fascinating article that everyone should read Mark Hauswald from Albuquerque examines critically the ‘highly ritualised’ approach to spinal care. He argues convincingly that more thought should be given to the biomechanics, anatomy, physiology and the physics of spinal injury and spinal care. Further, the harms that occur because of delays secondary to carrying out the rituals need to be accounted for when the approach to care is being debated. Read this for yourself and you may, like me, start to believe that a more rational approach to this problem is on the cards.

And finally the children...

We have a great smorgasbord of articles on Paediatric Emergency Medicine from around the world this month. Anna Wasilewska et al from Poland report on the epidemiology of poisoning in Bialystok. A headline finding is that half of the poisoned children were hospitalised because of alcohol intoxication. Nisa Kehler and co-workers from Birmingham, UK look at the presentations to the Emergency Department that turned out to be because of vitamin D deficiency. The two commonest presentations were abdominal pain and seizure, though many children were diagnosed as the result of the finding of a raised alkaline phosphatase after non-specific presentations. Yu-Chen Chang and others from Tai-Yuan, Taiwan look at the new five part Taiwanese paediatric triage scale and compare it to the old four part scale. Unsurprisingly the newer scale, which is structured very like the Canadian and Manchester systems, is more discriminatory. Two papers relating to paediatric cardiac arrest complete the set. First Conor Deasy et al from Melbourne look at the effect of adding coronial findings on childhood cardiac arrest to the out of hospital cardiac arrest registry. The inclusion greatly improved the accuracy of the registry and, the authors argue, has implications not only for EMS providers but also for the wider healthcare system. Finally Domagoj Schunk from Germany report a manikin study to compare the use of three supraglottic airway devices by paramedics, nurse anaesthetists and anaesthetic residents in children. Go and see what and who was best (if anything or anyone was).