Access to primary care and emergency admission rates

It is ‘obvious’ that there is a link between primary, urgent and emergency care—after all, the patients who are seen in all three settings are often the same people. It is less obvious which particular characteristics of the patients, the practices and the hospitals affect the relationship. In a study based in Leicester, England, Bankart and colleagues have examined emergency admission rates—looking at both the known suspects (population deprivation, practice size, age, ethnicity, gender and distance) and the novel measures of access to primary care and practice quality. Their study confirms the previously recognised associations; more interestingly, they found no association between practice quality as reflected in the Quality and Outcomes Framework and emergency admission rates, but they did show an association with patients’ reports of access to a named primary care physician. The better the reported access, the lower the admission rate. They argue that even small changes in perceived access can result in a significant change in admission rates (see page 558).

On the bounce

In a paper from Dundee, Scotland, Bogacz and coworkers give us a different take on trampoline injuries. They focus on one factor associated with injury—simultaneous trampoline use—and develop a computer simulation model to help to understand the biomechanical implications. Their work is focused particularly on the smaller user (generally a child). Perhaps the most easy-to-understand outcome is the ‘equivalent fall height’ that they calculate (see page 594).

Mean platelet volume in heart disease

Two separate studies in this issue look at mean platelet volume in heart disease. Platelet volume is associated with platelet activity—the larger the platelet, the more active it is. In the first study, Hsin Chu et al from Taipei, Taiwan, looked at the mean platelet volume in 282 patients presenting with acute chest pain. They found that the mean volumes were significantly higher in the 69 patients with acute coronary syndrome and higher still in the 28 patients with acute myocardial infarction. Mean platelet volume was found to be an independent predictor of acute coronary syndrome in patients with acute chest pain (OR 8.866 (4.081 to 19.265)) (see page 569). In the second study, Hayati Kandis and others from Duzce, Turkey, studied the mean platelet volume in 207 patients with heart failure, of whom 136 had decompensated episodes. They found that mean platelet volume was significantly higher in the decompensated group and further found that it was an independent predictor of mortality in this group as well (OR 1.553 (1.024 to 2.354)) (see page 575). It remains to be seen whether these interesting observations can be turned into practical tools for emergency physicians in either condition.

Give us a break

What a clinician says and what a patient hears can be very different indeed. In an interesting study carried out in Middlesbrough, England, Azam and Harrison asked 100 patients to rate the severity of five descriptions of a broken bone. It is very clear from the results that different descriptions are perceived as implying different degrees of severity and further that the implied severity may not reflect the actual severity of the injury (see page 601). See if you can guess whether a fracture is worse than a break or whether a crack trumps a greenstick fracture before you find out what the study says.

Drunken enough for the emergency department?

Emergency department overcrowding probably occurs all over the world and, in most domains that allow alcohol, drunkenness is a major contributor to the problem. In the USA and elsewhere, emergency physicians and others are searching for tools that can safely identify which of these patients need to attend the emergency department for assessment and care, and which patients can be safely managed in lower acuity settings. Keith Fowler and colleagues from San Francisco, USA, report the findings of a study looking at this problem. They studied 99 apparently drunk patients who had both prehospital (paramedical) and emergency department records. Of the 99 patients, some 18 required either admission or some other emergency department care. Consensus-derived guidelines identified 40 patients for care outside the emergency department—but among these were five patients who needed care in that setting. The authors conclude that while most apparently drunk patients turn out not to need the services of an emergency department, it is very difficult to prospectively identify the ones who do not. Perhaps we just have to accept that the place to safely decide whether the service of the emergency department is needed for these patients is, in fact, the emergency department itself (see page 579).

Prehospital non-invasive palliative ventilation for acute pulmonary oedema

In an interesting systematic review, Simpson and Bendall from Rozelle, Australia, look at the evidence for prehospital initiation of non-invasive ventilation in patients with acute cardiogenic pulmonary oedema. As is so often the case, there were very few randomised studies and the end point of most interest (mortality) was not addressed. However, the authors argue that the evidence that is available seems to suggest that, at the least, prehospital non-invasive positive palliative ventilation (NIPV) gives earlier symptomatic relief. Is the evidence strong enough to make this recommendation, or are bigger, better studies looking at mortality as well needed before NIPV is introduced into prehospital practice? (see page 609).