LETTERS TO THE EDITOR

Exsanguinating pelvic fractures

EDITOR,—The resuscitation protocol for patients with multiple trauma (fig 1, algorithm) in the article by Meek and Ross on managing exsanguinating pelvic fractures in the UK is contrary to the discussion on imaging the abdomen in the text. We are told that clinical examination is less reliable in multiple trauma to identify occult intraperitoneal injury, yet the algorithm (fig 1) recommends that the haemodynamically stable polytraumatised patient with pelvic ring fracture should be "watched very closely". This group should undergo immediate computed tomography instead. Computed tomography is able to detect associated intraperitoneal injury, as well as demonstrate the extent of retroperitoneal haematoma and injury to retroperitoneal structures such as the kidneys. It should also specifically include more caudal cuts to provide additional detail regarding the configuration of the pelvic fracture, and may allow three dimensional bony reconstruction. Although the main concern of the paper was the management of exsanguinating patients with pelvic fractures, the algorithm would be strengthened by adopting this key alternative of computed tomography in investigating haemodynamically stable patients. Otherwise, the paper was an excellent review of management priorities in this potentially troublesome group of unstable trauma patients.

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The authors reply

We thank Dr Brown for highlighting an apparent contradiction in our review and we agree with his comments about computed tomography in stable patients, although our review was concerned with the exsanguinating patient. In addition to close observation, emergency computed tomography of the pelvis, abdomen, and other areas as indicated in these stable patients is indeed valuable. The box labelled "Watch very closely" should read "Watch very closely, computed tomography of pelvis and abdomen".


Cost of alternative models of care for primary care patients attending accident and emergency departments

EDITOR,—Among the tentative conclusions that Leydon et al make in their review paper is the suggestion that primary care physicians working in accident and emergency (A&E) departments conduct fewer investigations and make fewer referrals than A&E doctors. In coming to this conclusion they refer to four papers: three from the UK and one from the Republic of Ireland. It would be valuable to examine the findings of two of these papers more closely before accepting the conclusion of Leydon et al uncritically.

Dale et al attempt to randomly allocate primary care patients to a given doctor (general practitioner (GP) or A&E training grade) during certain sessions in the A&E department. They point out that this system broke down when the primary care workforce was excessive at which time additional doctors assisted in the treatment of these patients. In addition registrars assigned to treat primary care type patients were often prevented from completing these sessions by departmental circumstances. The registrars in this study identified a higher percentage of fractures in the primary care patients (9.3%) than the GP's (6.6%). This last piece of information gives rise to a number of possibilities, among them that the triage process was not rigorously applied, which in turn implies that the registrars and GP's dealt with different patient populations.

Murphy et al in their randomised controlled trial carried out in St James's Hospital, Dublin made the valuable point that the lower rate of investigation and referral by GP's may reflect the fact that the more experienced than the senior house officers they worked with. Murphy and his coauthors avoided triage bias by looking at all category 3 (semiurgent) and category 4 (delay acceptable) patients. They did not attempt to separate “primary care” from “A&E” patients. This prudent measure avoids the apparent error of Dale's paper and reflects the reality that there will always be a patient who could be looked after appropriately in an A&E or primary care setting, depending on the aptitude of individual GP's.

It is likely that GP's working in A&E look after non-urgent attenders more cost efficiently than less experienced A&E doctors. However, it is also a fact of life in most of the country's A&E departments (even those which provide a designated primary care service staffed by GP's) that A&E doctors will continue to look after some primary care problems. This being the case it would be useful to increase the emphasis on primary care in senior house officer and specialist registrar education programmes. It also highlights the desirability of a primary care secondment in the specialist registrar training programme. These measures could lead to a reduction of unnecessary investigation and admission by junior A&E doctors.

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The authors and Professor George Freeman reply

Mr EGGLESTON (rightly) points out the "tentative" nature of our conclusions in our review paper. This was a function of the limited information on the actual costs associated with some of the primary care interventions reviewed. Notwithstanding this hurdle we proceeded to systematically examine the evidence for the expected proportions of different methods of dealing with the primary care attendant at the A&E department. EGGLESTON's suggestion that there may have been a difference in the case mix dealt with by GP's and hospital doctors in the Dale study is valid. Indeed Dale and his colleagues high lighted this issue from this single centre study. We noted this was not thought to be significant. The possible biases were fully explored in the Dale analysis, such as the possibility that the pressures in the A&E environment may have affected the triage system in operation, and these were not thought to be significant.

Further, the size of the study, the significant difference in per case costs between GP and hospital A&E attenders, and the similar levels of patient satisfaction expressed during follow up strongly supports the argument that GP's can treat certain types of patient more cost effectively in the A&E department, without deleterious effects on patient outcome and satisfaction. This conclusion is corroborated by other studies, in particular the study conducted by Murphy and his colleagues in Dublin.

The effect that experience has on a doctor's (whether GP, senior house officer, or registrar) method of practice is, of course, an important issue that requires careful exploration in this context. In terms of years of experience, in the study of Dale et al GP's were all in the early years of their careers and the differential was not regarded as significant. This may not be the case in other studies (median age in Murphy's paper was 32 for GP's and 26 for the usual A&E medical staff). Differences in investigations, referrals, and so on may just interact with years of experience but also with the type of experience, training, and “culture” worked in. Why GP's treating certain types of patients appears to be cheaper, despite higher staff costs per hour, is unclear. Is it experience and the confidence that follows? Is it training? Further, what effect does patient expectation play on the trajectory of the consultation and the decisions made? Do patients expect more "active" investigative work from a "hospital" doctor than from a GP working in A&E? These questions might be fruitfully explored further.

Finally, we would support the idea that senior house officer and specialist registrar training programmes should increase the emphasis on primary care and should include a secondment in general practice. This could lead to a better understanding by registrars of the GP's role and of the evidence for cost effective management of these patient populations.


Primary care problems in patients attending a semi-rural accident and emergency unit

EDITOR,—We were interested to read the article by Cottingham,1 however his article appears to be based on false premises and contains a number of serious inaccuracies. The aim of his study is described as being to...
The early management of meningococcal disease

EDITOR,—We commend the publication of a review of the early management of meningococcal disease. This is certainly a condition in which the doctors of first contact must have a knowledge out of proportion to their previous experience.

It was disappointing, however, that this review focused on purpura as the sole cutaneous manifestation of meningococcaemia. It is almost universally recognised that a febrile tachycardic child with a purpuric rash should be treated as having meningococcal septicaemia. There was, however, no mention of less specific skin appearances of meningococcal disease in this review.

In a prospective study of meningococcal disease presenting to hospital 13% had a maculopapular rash only. The authors could not find any evidence that meningococcal disease presenting with a maculopapular rash alone was less severe than that presenting with purpura.

Another prospective study found 22 out of 126 children presenting with meningococcal disease had maculopapular rather than haemorrhagic rashes. This group reported a fatal illustrative case of meningococcemia misdiagnosed as measles in the presence of a maculopapular rash. The delayed or misdiagnosis of meningococcal disease in the presence of a maculopapular rash has been reported elsewhere.

The algorithm presented in the review offers false reassurance. The underlying message should be that the differential diagnosis of a toxic enfeebled child must also consider meningococcal disease whether they have a purpuric rash, a maculopapular rash, or no rash at all. To take reassurance from the absence of purpura or petechiae shows a lack of understanding of the spectrum of presentation of meningococcal disease.

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Ecstasy related trauma

EDITOR,—Each year there are an estimated 50 000 deaths and 1 5 million casualties as a result of road traffic accidents within the European Union, and it has been estimated that at least 10% of these victims have taken some form of psychotherapeutic medication that may have contributed to their accident. MDMA (3,4-methylenedioxymethamphetamine), widely known as ecstasy, is now cited as Europe’s second most commonly used illicit drug and is likely to play a steadily increasing part in the etiology of trauma. Over a three month period we treated 16 cases of cardiac arrhythmias who had been injured as a result of road traffic accidents. Reckless driving was the cause of all accidents. Impaired mental function caused considerable difficulty in assessing neurological status in seven patients and the systemic effects of MDMA, including sinus tachycardia and hypotension made general assessment problematic in 10. An array of serious injuries including 25 fractures were sustained by these patients. Eight who required acute surgery suffered no significant anaesthetic complications. We estimate the overall cost of hospital care for this group to be in excess of £50 000.

We believe that greater public awareness of the risks of driving under the influence of MDMA is desirable and advise that accident and emergency staff familiarise themselves with the effects of this drug in order to safely assess and manage these patients.

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