We are particularly interested in the use of activated charcoal in the emergency management of paracetamol overdose. Arch Emerg Med 1990; 7:148-54.

The authors reply

We are grateful for the opportunity to respond to these comments regarding our paper.

With regard to the suggestion that we implied gastric lavage to be an inappropriate measure in scenarios 1 and 2, we must stress that the intention of our paper was to provoke debate (successfully it would appear) rather than to suggest management guidelines.

The paper by Underhill et al (reference 3 above) showed paracetamol levels falling by a mean of 39-5% over the two hours following lavage. This does not demonstrate causality, particularly in the absence of an adequate control group. The paper also demonstrated a mean fall in serum paracetamol levels of 40-77% following administration of ipecacuanha and of 92-5% over the same two hour period following administration of activated charcoal. The difference between results for lavage and ipecacuanha was not significant. The fall in paracetamol levels following charcoal was significantly greater than both other forms of treatment. The paper concludes that "activated charcoal was more effective at limiting absorption of paracetamol following overdose than either gastric lavage or ipecacuanha induced emesis". The authors also comment that gastric lavage was not a risk-free procedure.

The new guidelines for the management of paracetamol poisoning recommend lavage or charcoal rather than lavage with charcoal as the optimal treatment within two hours of ingestion (reference 2 above).

Support surfaces

EDITOR,—I was concerned to read the paper by P W Main and M E Lovell entitled "A review of seven support surfaces with emphasis on their protection of the spinally injured."

I would not in any way doubt their findings on the pressure problems related to the use of long spinal boards. Unfortunately, however, they seem to have missed the whole point of the use of spine boards in the prehospital care of critically injured patients. Although the spine board may provide a surface for in-line immobilisation of the spine, its primary function is in the road traffic accident setting, where it is used to extricate patients from vehicles and for their subsequent transportation to hospital.

The spine board is the only tool that can be used to slide a patient with a serious injury from a vehicle with safe in-line minimal immobilisation of the spine and retain that immobilisation on route to hospital. With the use of a board for both rearward and side extrication from a vehicle, the patient can be extricated with support to the whole spine safely from virtually any vehicle accident. The board’s construction, specifically designed with a slippery surface to slide patients from the wreck, has the advantage in prehospital care as an extrication device. This is not possible with a vacuum mattress or scoop types of stretcher or, in fact, any other type of stretcher system where the stretcher is placed between the patient and the board and then lowered onto a vacuum mattress. This, however, would be time consuming and probably not warranted; it would add time to the evacuation process which is already long.

As covered in our paper, the spinal board is not an ideal surface. The spine is not flat! The neck is extended on the board; it causes patients without spinal injury pain and discomfort; it causes pressure sores in those patients with (often irreversible) spinal injury, who may stay on the board until they arrive at a spinal centre. Patients are left on the board for longer than necessary and there is a caution about causing or extending an injury. This is usually until a radiological series is performed. These x rays may also be needed because of pain caused by lying on a board, which cannot be differentiated from significant trauma. We do not think that in most settings rapid removal from the board takes place, and many casualty departments own boards to continue this type of spinal immobilisation.

Although we do not expect change in practice from our paper we wish to highlight the above points and agree with Dr Carney’s suggestion that spinal boards should only be used for the short periods of transfer to hospital from the scene of the accident.

P W MAIN
M E LOVELL
208 (Mereseyside) Field Hospital
Paxton (200)
Chevassue House; Sarum Road;
Liverpool; L25 2XP

Fast tracking patients with a proximal femoral fracture

EDITOR,—Ryan et al are right to highlight the need for improvement in the management of patients with proximal femoral fractures in accident and emergency departments in the United Kingdom but even with the fast tracking system in place, over 75% of their patients waited two hours or more in the A&E department before transfer. Consequently, we feel that the system does not fully address the real priorities for treatment of such patients. We define these priorities as (a) prompt assessment of the fracture, (b) prompt imaging and other investigations to allow for a plan of action, (c) the primary prevention of common complications such as pressure sores, and (d) the evacuation of the casualty. We wonder what percentage of calls that an ambulance crew attends and where a spinal board is used are for extrication.

We suspect that it is few. It would be helpful if such information were collected, since no direct figures are available. We are grateful to Mr DA Boot (Mersey Trauma Outcome Study) for providing information from the study. This database, compiled from clinical notes, reveals that of the 658 patients with a trauma score greater than 15, only 51 patients were recorded as trapped and requiring extrication (personal communication).