ambulance officers should assess the competence of general practitioners to perform cardiopulmonary resuscitation in the M.R.C.G.P. examination [2]—a suggestion we find totally unacceptable. We recommend that doctors involved in the pre-hospital environment should be encouraged to achieve the Diploma in Immediate Care (D.I.P. I.M.C. R.C.S. Ed.) (Further information available from: Royal College of Surgeons of Edinburgh, 8 Nicholson Street, Edinburgh).

Centralization of trauma centres will not necessarily stop the arrival of the seriously injured at the District General Hospital casualty departments. Hence it is important that algorithms as laid down by Advanced Trauma Life Support (ATLS) should be used more widely in these units [3]. We suggest that the "designated team leader" could also be an anaesthetist; trauma is not solely a surgical problem and up to 90% of traumatized patients do not initially require a surgeon [4]. As hypoxia "wrecks the machinery", the anaesthetist is in the ideal position to optimize tissue oxygen delivery. The management of the severely injured involves resuscitation, anaesthesia and life support procedures, often simultaneously.

However, anaesthesia for trauma is not anaesthesia for the patient with a full stomach; and thus there is a need for a subspecialty—the trauma anaesthetist. This proposal would be based on the trauma anaesthesia/critical care specialists (TA/CCS) as used at the Maryland Institute of Emergency Medical Systems in the U.S.A. [4]. The TA/CCS is the first member of the trauma team to take charge of the injured patient arriving at the Shock Trauma Centre. In Europe, the trauma patient is directed at all stages by the anaesthetist or reanimatologist [5,6].

We agree that the role of helicopters in accident services in the U.K. merits further research and evaluation. Recently, the advantages of helicopters in transfers between hospitals were published, but without mention of the disadvantages [7]. Nobody doubts that helicopters may improve survival significantly in civilian trauma [7], but they are expensive and crashes do occur, sometimes with fatal outcome. The criteria for selecting patients who will benefit from helicopter transfer, and guidelines for operational conditions by the aviation authorities need to be established [8]. There are also potential problems of interference between aircraft electronics and electrical medical equipment that require consideration [9].

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REFERENCES


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SIR,—Thank you for the opportunity to respond to the comments of Drs deMello and Restall. As they indicate, centralization of the management of seriously injured patients in Trauma Centres will not exclude completely their admission to Accident and Emergency (A & E) departments. However, many of the recommendations in the Royal College of Surgeons report [1], such as improved training of ambulance personnel in the assessment of the severity of injury with better radio-communication to, and medical input from the Trauma Centre should ensure that most patients are conveyed to the appropriate hospital. Training of all A & E senior registrars within Trauma Centres, good local liaison between the Trauma Centres and referring A & E departments with specialized interhospital transfer have been recommended and should improve the care of any seriously injured patient admitted to an A & E department. The Royal College of Surgeons of England has now established Advanced Trauma Life Support courses in the United Kingdom and, hopefully, the algorithmic approach taught by these courses will become more widely used, resulting in a more unified approach to the injured patient.

As the report recommends, the anaesthetists working in the Trauma Centres will be specially trained in trauma management. While I agree that the trauma anaesthetist will have a central role, being with the patient from admission to the Trauma Centre until their admission to the Intensive Care Unit, no single specialty has a monopoly on the qualities which would make a good team leader.

Helicopters are expensive and have limitations. Their use can be justified only to reduce the time between injury and appropriate care for the seriously injured patient [2]. It requires proper evaluation to find their cost-effective role within an integrated trauma system in the United Kingdom.

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REFERENCES


HALOTHANE HEPATITIS

SIR,—Dr Speedy, in his paper "Halothane Hepatitis: A Case Report" [1], speculates on the possibility of repeated halothane-induced hepatic failure in a patient who received 12 anaesthetics over a 24-yr period. Seven of the anaesthetics probably included halothane.

It is not surprising to find that concentrations of the non-specific tissue enzyme AST(SGOT) were increased after surgery for a burst abdomen, total hip replacement, revision