most worrying injuries are trapped in vehicles so it is not possible—and indeed may be dangerous—to lay them out in the position shown in the illustration. Vomiting in the unconscious is rarely a problem; far more dangerous is invisible passive regurgitation and subsequent aspiration, which their recommended position is guaranteed to produce. The "recovery position" is taught widely and it is unreasonable to postulate exceptions to it which actual roadside experience shows to be deleterious.

Endotracheal intubation may worsen the comparatively rare unstable bony cervical injury with preserved cord, but an unsecured airway which denies protection from aspiration as well as the benefit of hyperventilation for the common coexisting cerebral insult is arguably the greater danger. Furthermore, the suggestion that fibreoptic equipment is going to become portable, robust, and cheap enough for the average practitioner to carry in his car boot I find unlikely.

It is also unfortunate that, having shown a helmeted motorcyclist in their illustration the authors make no reference to the difficulties of managing such people—particular problems are caused by the currently popular full face helmet.

ROWLAND L COTTINGHAM

Royal Surrey County Hospital,
Guildford, Surrey GU2 5XX

SIR,—Mr Andrew Swain and colleagues condemn the recovery position because the "standard" recovery (semiprone) position necessitates cervical rotation. One variant of the recovery position has this disadvantage, and if they seek to outlaw this we would agree since there is both needless rotation of the spine and the likelihood of diaphragmatic splinting and subsequent underventilation is high, especially if carelessly carried out.

The position advocated by ourselves and the Resuscitation Council (probably a best contender for a "standard" position) is one in which the head remains neutral in respect to both flexion and extension and also rotation and lateral flexion; it is a stable side position (which is not semiprone) and allows for full excursion of one hemidiaphragm. Though advice is given to turn the head in advance of the trunk when using this position in general, the sections on spinal injury make it clear that rolling the victim of trauma should be a "log roll." The view of St John Ambulance is that the prospect of spinal injury should be entertained in all traumatic causes of unconsciousness followed by a careful turn (log roll) without rotation of the head into a stable side position with the head remaining in neutral to protect compromised airway and ventilation.

ANDREW RAFFLE
J C GRAHAM
HARRY BAKER

St John Ambulance,
London SW1X 7EF

**The authors reply below.—ED, *BMJ*.

SIR,—Our article was intended to direct the attention of doctors to the particular problems posed by patients with spinal cord injury. We do not refute or underestimate the value of the recovery position in standard first aid teaching but, as the following case report illustrates, it is not always appropriate for the patient to be semiprone.

A rugby player sustained a forced flexion injury when a scrum collapsed. He was found lying semiprone on the pitch and when examined by a doctor attending the match could move his legs on command. Using a scoop stretcher the patient was lifted "as he lay," but on arrival at the provincial district general hospital he was tetraplegic with a C4-5 bilateral facet dislocation. In spite of reduction being achieved the same day the tetraplegia persisted. Had he been placed supine with the head and neck held in the neutral position neurological damage would have been minimised.

The question of positioning an unconscious patient with a possible cervical injury is a vexed one which frequently demands some compromise according to the patient's overall state. Unless the patient is actually vomiting he should initially be placed supine for cardiopulmonary resuscitation (including intubation) and rapid assessment of chest and abdomen, as multiple injuries often coexist. If the airway remains insecure we regard the semiprone recovery position as unacceptable because of the degree of rotation imposed, and in these circumstances we agree with the Resuscitation Council and St John Ambulance that the patient should be turned to the lateral position, as mentioned in our article. However, this position also has disadvantages in that support or splintage of the head and neck is more difficult (a cervical collar alone is inadequate) and general assessment of the patient is compromised. If the lateral position is advocated by St John Ambulance we cannot find reference to it in its current first aid manual.

Our first article does not deal with transportation of the casualty. The second article implies that the patient is transported supine. Clearly this should only be so in the conscious or intubated unconscious patient; otherwise the lateral position should be used.

We state that airway patency and adequate oxygenation must take priority and strongly support the principle of endotracheal intubation. However, this is not always easy if the conscious level is fluctuating or a prevertebral haematoma is present and one may have to fall back on the minimum requirements for maintaining an airway, which we mention in the article. The use of hyperventilation for coexisting cerebral injury has not been shown to be beneficial[1] and we do not consider intubation warranted for this purpose alone.

We are sorry that Dr Cottingham places so much importance on points outside the main topic. It was inappropriate in a general article to comment on problems posed by specific accident situations.

ANDREW SWAIN

Accident and Emergency Department,
Charing Cross Hospital,
London W6 8RF

DAVID GRUNDY
JOHN RUSSELL

Duke of Cornwall Spinal Treatment Centre,
Odstock Hospital,
Salisbury SP2 8BJ

1 Jennett B, Teasdale G, Fry J, *et al.* Treatment for severe head injury. *J Neurol Neurosurg Psychiatry* 1980;43:289-95.

Hospices: the future

SIR,—As a specialist in community medicine, chairman of a hospice service in the North East Thames region, and a practising terminal care physician I am responding to the leading article by Dr Tony Smith.

Health care professionals who believe that the current wave of public enthusiasm for hospice charities is likely to be short lived fail to realise that the driving force behind the hospice movement is the public's perception of the care that patients with advanced cancer receive from the NHS and the local authorities. It will falter only when the public believes that the quantity and quality of care from the statutory agencies can meet the needs of patients at a critical turning point in their lives. About two in five of us will develop a neoplastic disease and one in five will die of cancer. Very few of us will fail to observe as professionals, as relatives or friends, or as patients the care that is available in the management of terminal malignant disease. The hospice movement has been going strong for several decades now and to my knowledge no hospices, once operational, have failed from lack of public support.

I support completely the cost effectiveness of home care. Fortunately it also meets the needs of many patients. However, effective home care requires the backup of beds in a district general hospital or hospice for the patient who may require medical or nursing care that cannot be provided at home or for the patient who lacks family support or whose home environment is inappropriate for the proper nursing care of a seriously ill and highly dependent patient.

In the immediate future the needs of patients will be best met by a positive collaboration between health districts and the hospice movement. When possible it is in the best interests of the health district to offer financial and other support to hospices provided by the voluntary sector since this will provide a service at a relatively small cost because public contributions of money, time, and skills will maximise any support from the health authority. As hospices must register with and be approved by the health authority standards of care can be monitored. In the long term a joint approach by NHS and the charities will enable a cost effective and adequate service to be provided.

Finally, what must be avoided is a destructive and self defeating struggle between professionals or organisations for "supremacy" in this now recognised area of patient and family care. We must together strive to care for our patients in a way that we would wish to be cared for ourselves.

RICHARD BEAVER

St Francis Hospice,
Havering-atte-Bower,
Romford, Essex

Growth hormone 1985

SIR,—As the manufacturers of methionyl human growth hormone (somatrem; Somatonorm) referred to by Professor R D G Milner in his leading article (7 December, p 1593) we at KabiVitrum welcome his comments on the ethical, organisational, and commercial issues raised by the introduction of our contamination free biosynthetic product.

Similar concerns may well arise to a greater or lesser degree as biosynthetic technology is adapted to other preparations. It would be to nobody's benefit if, despite the new found availability of these products, treatment is withheld or delayed because of a lack of definition of who should prescribe, who should dispense, and who should pay.

For a highly specific indication such as growth hormone deficiency it should be possible within the existing framework to arrange these matters in a way which is agreed by the medical profession, the regulatory authorities, and the manufacturers and thereby provide a safeguard against the risks of non-treatment or inappropriate treatment indicated by Professor Milner. The system must, however, be sufficiently flexible to accommodate wider prescribing should the product become licensed for other indications.

Failure of the "bureaucratic machine" to resolve these problems may well delay positive development on the cost issue, which is perceived by some to be a restraint on current prescribing. Somatrem is currently priced comparably with commercially produced pituitary derived growth hormone,