

possible to recruit nurses for this type of work." I have, however, known keen young nurses to be actively discouraged from working in intensive care units with "all that complicated dangerous electronic equipment."

The geographical separation of operating theatres has also been deployed as an argument against the provision of recovery rooms in some hospitals, but others have demonstrated that it is possible to overcome this difficulty if there is a will to do so. It may be that anaesthetists themselves are partly to blame for not refusing to work where recovery wards and intensive care units do not exist. It has, however, become almost traditional among medical staff in the NHS to do the best that they can in the prevailing circumstances and to be ever optimistic that persuasion rather than confrontation will bring about change.

I am now privileged to work in a district where the majority of the medical and nursing staff have long since recognised the need for and value to patients of recovery and intensive care units. I have great sympathy for those of my anaesthetist colleagues who still have to watch their patients disappear to some distant ward staffed on a general basis, and who are effectively denied the possibility of making a decision to ventilate safely and electively the more seriously ill cases postoperatively because of the lack of facilities and trained supervision.

T B BOULTON

Royal Berkshire Hospital,
Reading

¹ Lunn JN, Mushin WW. *Mortality associated with anaesthesia*. London: Nuffield Provincial Hospitals Trust, 1982.

SIR,—Anaesthetics are poisons, and the physical state of anaesthesia is as close to death as any doctor or dentist deliberately contracts to bring a patient. That is true whether the surgery is major or minor (there is no such thing as a "minor" anaesthetic), whether anaesthesia is induced by general practitioner or specialist, and whether it takes place in a district hospital starved of resources or in a referral centre where those resources are sometimes taken for granted.

For these reasons, and after five years of incalculable effort, the publication of the Association of Anaesthetists' study on mortality related to anaesthesia¹ is a key event. We have long known—or rather we think we have known—what is needed to put our house in order. Now we have the hard evidence and a numerical base from which to start. That is the true measure of Dr Lunn and Professor Mushin's achievement, and it is the one aspect of the audit to which your leading article (21 August, p 530) does less than justice.

The report reaches at least two important conclusions. Firstly, despite public concern² and editorial dismay British anaesthesia in fact is extremely safe—safer probably than anywhere in the world. Nevertheless, in setting the highest standards, the association rightly feels it could and should do more to make it still safer. An estimated anaesthetic mortality of 1:10 000 within six days of operation (about 280 deaths a year in three million administrations) compares not too unfavourably with the estimated surgical mortality of 60:10 000. The second conclusion is equally clear: we need the best anaesthetists we can get. "Anaesthesia carries more risk in the hands of inexperienced doctors than any other branch of medicine."³

Anaesthesia then is not for the amateur or the faint-hearted. But there is a worldwide shortage of anaesthetists of any calibre.³ Instead of bewailing the fact, the Department of Health, clinicians who persistently belittle the specialty, and—most important—the deans of medical schools might do better to ask why. "Is the traditional one or two weeks 'untimely ripp'd' and grudgingly from the five or six years of his education sufficient to afford the medical student an insight into the scope of modern anaesthesia? It would do much for the morale of what is necessarily the single largest hospital specialty, not to mention the beneficent effects on its recruitment, if like our colleagues in surgery, medicine, and general practice anaesthetists were allowed to tell of what they know.⁴ They have now told us.

Anaesthesia is a young specialty. With the association's report, which incidentally is a model of plain English, the specialty comes of age. It is a proud moment.

PETER V SCOTT

Department of Anaesthetics,
Bromsgrove General Hospital,
Bromsgrove, Worcs B61 0BB

¹ Lunn JN, Mushin WW. *Mortality associated with anaesthesia*. London: Nuffield Provincial Hospitals Trust, 1982.

² Anonymous. *The Times* 1982 Aug 10:3 (col 4).

³ Roddy PC, Hambleton R. *DHEW publication No (HRA)77-31*, 1976.

⁴ Scott PV. *Anaesthesia* 1980;**35**:581-4.

all the deaths attributable solely to anaesthesia.

J M MANNERS

Shackleton Department of
Anaesthetics,
Southampton General Hospital,
Southampton SO9 4XY

SIR,—Like much of the reaction to the recent survey of anaesthetic mortality¹ your leading article (21 August, p 530) is a little unsympathetic. The report is described as depressing, but is it really so depressing that anaesthesia is totally responsible for the death of one patient in 10 000 when one considers the many potential causes of disaster to which every one of those 10 000 is exposed? Comparisons with other specialties may not be valid, but are British anaesthetists deserving of so critical a reaction? The report estimates that 60 patients in 10 000 die within six days of surgery, that one of those 60 dies as a result of anaesthesia, and that anaesthesia may play a part in another six. What of the other 53?

J A W WILDSMITH

Royal Infirmary of Edinburgh,
Edinburgh EH3 9YW

¹ Lunn JN, Mushin WW. *Mortality associated with anaesthesia*. London: Nuffield Provincial Hospitals Trust, 1982.

Standard intravenous regional analgesia

SIR,—It is ironic that the article on standard intravenous regional analgesia (21 August, p 554) should appear in the same issue as a leading article drawing attention to deaths in anaesthesia. The article did not have an anaesthetist as an author, and stated baldly that it is unnecessary to fast the patient. Loss of consciousness and convulsions are very real hazards as the cuff may suddenly deflate unnoticed by the surgeon, and we know of two patients who have convulsed despite the cuff remaining inflated. Aspiration of vomit, inadequate care of the airway, and inadequate resuscitation may then lead to death. Your leading article pointed out that inhalation of vomit is a major cause of mortality associated with anaesthesia. Diazepam 10 mg followed by a further 10 mg for uncontrolled convulsions is foolhardy advice as the most likely result is respiratory arrest.

It is our view, as anaesthetists, that the technique of intravenous regional anaesthesia, while useful, has real risks, and that patients should be starved and given care as skilled as that for a general anaesthetic, which is not possible with an operator-anaesthetist.

J I ALEXANDER
J B BOWES
G M COOPER
N GOODMAN
D G HUGHES

P HUTTON
R W JOHNSON
C PRYS-ROBERTS
N B WILLIAMS

Bristol Royal Infirmary,
Bristol BS2 8HW

SIR,—Your recent article on intravenous regional analgesia (21 August, p 554) prompts me to tell you of a problem that was encountered with this method of anaesthesia when it was used in the fracture department of Cardiff Royal Infirmary.

During the period when intravenous anaesthesia was used for the reduction of Colles

SIR,—It is a great shame that your leading article (21 August, p 530) did not mention the excessive working hours of many of the doctors administering general anaesthetics. I wonder how many of the deaths resulted from anaesthetics administered by harassed SHOs late at night, perhaps after 70 or more hours on duty. While the correction of the underfunding, or perhaps the inappropriate funding, of the National Health Service is important, the first priority must be to ensure that the excessive hours of juniors in all specialties, but anaesthetics in particular, are corrected without further delay.

C G HEGGS

London W5

SIR,—Your leading article (21 August, p 530) makes the comment that a depressing picture emerges from a report stating that one in 10 000 patients undergoing surgery died as a result of anaesthesia alone. I find it remarkable that you made no comment regarding the six in 1000 patients dying within six days of operation, although the risks of operation appear to be 60 times greater than the risks of anaesthesia. If 280 deaths in Britain each year are totally attributable to anaesthesia then 16 520 are related to surgery.

Surely your constructive remarks regarding anaesthesia-related deaths should be applied to the far greater number of non-anaesthetic deaths. Should there not be a closer look at the selection and assessment of patients for operation, the choice of operation, and the skill and expertise of those carrying out the surgery and postoperative care? Certainly anaesthetists expect a review of the 0.01% of patients who die as the result of the anaesthetic, but equally the causes of the 0.6% deaths, almost all of which are not due to anaesthesia alone, should be analysed. After all, a mere 2% reduction in non-anaesthetic deaths would save 330 lives a year, which is more than