and Cardiovascular Surgeons in Leeds in September last year we reported our experience from St Thomas's Hospital of 123 male patients operated on for ischaemic heart disease by one surgeon (BTW): 72% were working one year after operation, with a further 6% classified as fit to work but unemployed; 8% had retired; and only 14% were still classified as having symptoms. These results have been briefly reported¹ and we will be publishing full details of this study shortly.

We accept the reservation that no comparison has been made with other forms of therapy.

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¹ *The Times*, 30 September 1978.

Driving after anaesthetics

SIR,—I was most interested in the correspondence between Dr J D J Harvard and Dr P J F Baskett and Professor M D A Vickers (10 March, p 686) on the subject of driving after general anaesthesia. Many anaesthetists instruct their patients not to drive for at least 24 hours following general anaesthesia. Dr Harvard's suggestion that the time limit should be 48 hours certainly appears a little too cautious, but none the less safe.

Day-case anaesthesia is practised at many British hospitals, and these days anaesthetists do have a variety of short-acting anaesthetic agents with rapid recovery at their disposal. In recent years Kortilla¹ has published frequently on the hazards of driving following various anaesthetic techniques. I should add that a great deal of his work has involved human volunteers. However, patients frequently ignore medical advice in the immediate postoperative period. An assessment of 100 postoperative outpatient cases in 1972 by Ogg² revealed that 73% of car owners undergoing day-case surgery drove within 24 hours; 30% drove within 12 hours and 9% actually drove themselves home unaccompanied. No major traffic accidents were reported after this study.

With these results in mind, I have been attempting in Cambridge to discover why patients should disregard medical advice. Is this a sign of the times? I have studied memory function after day-case anaesthesia, and my results so far show that many outpatients fail to retain new information or advice given to them in the postoperative period for up to three hours after simple general anaesthesia. However, memory function can be enhanced in the postoperative period if patients are given both written and verbal instructions before surgery. It would appear from my recent research that outpatients do not disregard medical advice through malice. They fail to comply with instructions because of a failure of memory retention for new information after simple anaesthesia.

In my own outpatient anaesthetic practice I confine the duration of anaesthesia to 30 minutes. All patients are accompanied home by a responsible adult, and they are given preoperative instructions not to drive, operate heavy machinery, or return to work for at least 24 hours.

The whole question of when it is safe to

drive after general anaesthesia could be answered. Outpatient or volunteer anaesthetists could submit themselves to general anaesthesia and take driving tests at 24 and 48 hours at a police driving school on some deserted aerodrome. I know of no published work on this aspect of anaesthetic practice.

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¹ Kortilla, K, *et al*, *Anaesthesiology*, 1975, **43**, 291.

² Ogg, T W, *British Medical Journal*, 1972, **1**, 573.

SIR,—Most anaesthetists with substantial involvement in anaesthesia for short-stay patients will be aware of the advice contained in *Medical Aspects of Fitness to Drive*.¹ My attention was forcibly focused on the problem by a patient who drove through a local general practitioner's front fence on his way home after a general anaesthetic for an outpatient vasectomy at a local teaching hospital.

Apart from advising patients verbally and issuing written instructions for day-stay patients, I have studied a series of patients undergoing termination of pregnancy under general anaesthesia in our day-stay unit. The unexpected result of this study is that 50% of these patients did not return to work the following day and that 20% complained of drowsiness on the day after their anaesthetic. I ascribed this to the use of 10 mg diazepam in the anaesthetic "cocktail," and I have now deleted this from the cocktail and I am studying a further group of patients. It can be argued that termination of pregnancy is psychologically, if not physically, traumatic, but in the public's mind termination of pregnancy is clearly regarded as a "lunch-time operation" par excellence. Other workers studying day-stay for dental anaesthesia have found broadly similar results.²

Clearly, there is a need for careful clinical evaluation of the sequelae of anaesthesia for short-stay surgery to ensure that only genuinely short-acting agents are used and patients are not subsequently put at risk through ignorance.

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¹ Harvard, J D J, in *Medical Aspects of Fitness to Drive*, ed A Raffle, 3rd edn, p 43. London, Medical Commission on Accident Prevention, 1976.

² Muir, V M J, Leonard, M, and Haddaway, E, *Anaesthesia*, 1976, **31**, 171.

Use of car headlamps

SIR,—Dr D F Martin (17 February, p 490), in advocating the use of headlamps, particularly in snow and rain, would be adding to the trouble of glare from reflection even though the headlamps were properly aligned and dipped. Glare is bad enough even when roads are dry. Lots of people with normal eyesight cannot stand the glare of oncoming headlamps and it is one of the causes of accidents. Some cars have as many headlamps as rally drivers and think they can blaze their way through without any consideration for others. It is not so much requiring to be seen as being able to see anything else. One may remain blinded for an appreciable time after the offending car has gone by. It is also very often impossible to see indicator lights adjacent to headlamps, and a driver with headlamps on may think he has made adequate indication of his intention to

turn right or overtake when, in fact, his indicator has been completely drowned by his own headlamp.

Quite apart from people with normal eyes, there are many with perfectly adequate sight for driving who have chronic irritation from one cause or another (such as seborrhoeic blepharitis, dry eyes and rosacea, early lens opacity, old corneal nebulae, or just some degree of pigment deficiency) and who get blinded all the more easily by dazzle. One should not penalise our blue-eyed boys or anyone else. This suggestion of excessive use of headlamps is something the BMA should condemn. It is no substitute for good street lighting; and if that is good, as it should be for urban areas, then routine use of headlamps does more harm than good. One can flash them more effectively at crossings or other danger spots if they are not on at all than if they are.

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Preventing motorcycle accidents

SIR,—We entirely agree with the comments made by Dr J C Avery (10 March p 686) concerning the compulsory wearing of crash helmets. In addition, we feel there is a need for much more stringent legislation governing the use of motorcycles. In a recent survey in Newcastle¹ we noted nearly a 50% rise in the number of injured motorcyclists during 1978 compared with 1977; since the police, on whose figures national numbers are based, investigated only half the accidents in our survey, the true magnitude of the national problem may be even larger. In many accidents in this survey the lack of experience of the motorcyclists was a major factor, 60% having held a provisional licence for under six months. With the rates for fatal or serious accidents to motorcycle drivers now a staggering 1.3% per 100 vehicles in use,² legislation must be enacted towards preventing accidents.

We would suggest that the age of eligibility for a provisional licence should be raised to 17 years, similar to that of a motorcar driver (at present 16-year-olds can legally ride only mopeds, although many disregard this). Formal training before being allowed on the roads should be compulsory, and an enforced, stringent, motorcycle driving test is also needed to replace the current inadequate test, and this should include a section on motorcycle safety. Improved investigations and detection of motorcycle offences by the police would be of value. Many drivers in our survey admitted to speeding and to having excess alcohol levels, and only through prosecution and heavy fines or suspended licences will the message of road safety be delivered. In Britain further encouragement for the wearing of bright protective clothing may also help reduce the number of serious injuries; this is now compulsory in many European nations. Finally, manufacturers should be compelled to incorporate improved safety designs similar to those enforced by Californian regulations,³ and the motorcycle "lighting-up law" (front and rear lights on at all times) should be enacted. Californian records indicate that although their motorcycle population increased by 33%, fatal and serious accidents increased by less than 6% as a result of these measures.

While the principles of freedom of choice are important, the current trend of increasing motorcycle accidents must be diminished.

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¹ Andrew, T, and Milne, D, *Injury*. In press.

² Department of Transport, *Road Accidents Statistics*, Circular 4/26, 1976.

³ Bieber, R, *Californian Highway Patrol Report*, 1977.

Severe hyponatraemia in hospital inpatients

SIR,—Drs S J Iqbal and P J Ojwang (3 March, p 618) continue to take us to task for having put diuretic-induced hyponatraemia under a "depletional" heading.

We can only reiterate that we ourselves pointed out uncertainties about the pathogenesis of diuretic-induced hyponatraemia in our original paper (4 November 1978, p 1251). As we found that no urinary biochemical measurements distinguish groups of patients otherwise easily distinguished on clinical and radiological grounds, we would prefer to rely on the latter in an emergency. Hence, although we do not feel that our "objectives about patient management" are really different from those of Drs Iqbal and Ojwang, we must beg leave to differ on how to achieve them.

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Brain failure in private and public life

SIR,—Dr William Gooddy's lecture on brain failure in private and public life (3 March, p 591) will be of great interest to those who, like myself, are approaching completion of the average life span. Few will quarrel with his main theses—that brain failure is common and has many causes and is (for those escaping other causes of death) ultimately inevitable, that it is more dangerous to the community when it occurs in an influential person, and that it should be prevented if possible. But his list of symptoms and signs of brain failure calls for comment.

Such symptoms and signs may indeed be indicators of commencing brain failure, but surely many of them are no more than evidences of temporary inefficiency of brain function. Incompetence over familiar tasks, for instance, and transient loss of concentration are common enough at all ages, and surely may be no more than signs of fatigue—due, for example, to lack of sleep, a prolonged spell of enforced concentration, or anxiety from some unrelated cause. I am sure that I cannot be alone in having frequently experienced some symptom or sign such as Dr Gooddy has instanced and inwardly lamented, "I am growing old"—only to recall with a relieved start that I had just that symptom as a child or as a student. I think that the point is worth making, because if we accepted Dr Gooddy's list as indicative of brain failure I suspect that we would most of us sink into a state of apprehension and depression, which would perhaps be conducive to accelerated brain failure. Granted that Dr Gooddy referred to

his signs and symptoms as "intermittent," saying that the more frequently they occur the more one must be concerned about them; but my own advice to anybody feeling such concern would be to try the effect of a holiday.

Dr Gooddy suggests compulsory retirement for politicians and other leaders and decision makers at an earlier rather than a later age to prevent the serious consequences of their brain failure. I think I would rather see a system that debars the elderly in influential positions from decision making while retaining them in an advisory capacity so that their experience can be utilised.

LIONEL BACON

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SIR,—Dr W Gooddy in his article (3 March, p 591) fails to make it clear what he means by brain failure. The term was originally taken to mean, and is still used to describe, syndromes characterised by impaired social functioning due to an inability to learn, because of a decline of intellect associated with impaired memory. This clinical picture is seen in both acute and chronic organic psychiatric syndromes, but not in neurosis, depression, psychopathy, or functional psychosis, all of which have different treatments and prognoses. Dr Gooddy, however, seems to indicate that he considers them to be causes of brain failure.

He also states that normal aging ultimately gives rise to brain failure. Society is protected for the most part from people becoming incompetent owing to the failure of the aging brain by compulsory retirement. Compulsory retirement at a fixed age is a crude way of assessing whether a person is fitted to a particular post and is very unfair on the individual whose mental ability is quite adequate, despite his age. Dr Gooddy complains that people in public life often escape compulsory retirement and that society should be protected from their failing brains, and, to such ends, he advocates investigating the brains of the members of the House of Commons and others, using computerised axial tomography. Unfortunately, he does not say to what degree changes shown by such a scan would reflect an impairment of mental ability. If this knowledge is not forthcoming, this method could prove as arbitrary and unfair as compulsory retirement at a fixed age.

Society can probably best guard against unsuitable and incompetent people holding public office, not by invoking medical investigations and opinions, which would be unacceptable to many people, but by devising rules such that people could be easily relieved of public posts if found wanting by their peers.

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Whooping-cough vaccination

SIR,—I feel I must take issue with Dr Alastair G Ironside (3 March, p 619), whose argument seems to be that in whooping cough herd immunity is irrelevant to the vulnerable pre-vaccination babies and that prophylactic erythromycin for two weeks is a practical alternative.

He bases his opinion on an unspecified comparison of infant mortality between two "outbreaks," one in a "well-vaccinated" population and the other in an "unvaccinated"

one. I feel that this is such an important argument that such opinions must be backed by facts and figures or at least a reference. Those of us, as GPs left with the task of advising our new parents about the best course to take, need to be very sure of our facts. This is an area where "maybe" won't do and I feel it is quite wrong to ask the parents to decide unless they too are in full possession of the facts. So perhaps Dr Ironside would support his opinion, and I for one will revise my policy if he can.

Treating at-risk contacts with erythromycin may well be feasible for a physician's child but how does Dr Ironside think we can get our parents to treat a well child for two weeks with an antibiotic customarily given six-hourly, when it is widely accepted in general practice that it is difficult enough to get them to complete a five-day course for an ill child? Surely, inefficient as it is, a vaccination programme is more likely to succeed—given that we can prove that vaccination protects more than it injures and then present the case simply and with one voice to the public.

DAVID TURNER

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SIR,—Dr A G Ironside (3 March, p 619), while acknowledging that there are no controlled trials available, recommends the use of erythromycin for preventing whooping cough in young household contacts of cases.

Your readers may be interested to know that my college is currently undertaking a controlled, double-blind trial of this procedure. The study is being conducted by the college's Epidemic Observation Unit, which is based in the University of Surrey and is financed by the Medical Research Council.

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Difficulties in diagnosing meningococcal meningitis

SIR,—It is surprising that in their short report "Difficulties in diagnosing meningococcal meningitis in children" Drs Oliver R C Smales and Nicholas Rutter (3 March, p 588) do not refer to immunological methods of establishing the diagnosis of meningococcal infection. It is known that counter-current immunoelectrophoresis (CIE) on cerebrospinal fluid (CSF) is superior to Gram staining in establishing the diagnosis of meningococcal infection and has the advantages that it is (a) rapid, (b) simple, (c) less affected by prior antibiotic therapy, and it enables the organism to be grouped.¹

Used in conjunction with Gram staining and culture the method increases the number of positive diagnoses made. Moreover, antigen can be detected more often in serum than organisms by blood culture. In particular, in one study of 14 patients with acute meningococcaemia (children with the clinical picture of meningococcal meningococcaemia but with no clinical or laboratory evidence of meningitis) antigen was detected in every patient while blood culture was positive in six out of 11 patients tested.²

Finally, patients with group A meningococcal meningitis in whom antigen was detected in blood had a worse prognosis and higher