

pleted at the last outpatient visit. They receive a standard intramuscular injection of midazolam 15-30 minutes before the operation, which, with its combination of anxiolysis, sedation, hypnosis, and amnesia, renders the patient amenable to surgery. In theatre adequate local anaesthesia is achieved using lignocaine as a gel, spray, or injection; this technique is known as sedoanalgesia.^{1,2} More recently the advent of the specific benzodiazepine antagonist flumazenil has allowed 38 out of a series of 46 patients to be ready for discharge within 15 minutes of their return to the ward.³ The significantly shorter recovery period also has benefits in terms of increased patient cooperation and reduced demand on postoperative nursing care both in theatre and on the ward.

One bed can then be used twice in a half day session. Using this technique hospitals without a dedicated day case unit can provide appropriate facilities in a conventional ward at little, if any, extra cost to the health service. If surgical beds are to be used in this way wards must be appropriately designed. Attractive day room facilities need to be provided and inpatients encouraged to use these. The overall result is to increase patient turnover and release hospital resources without compromising patient services or affecting elective inpatient admissions.

BRIAN BIRCH
KEN M ANSON
ELIZABETH CLIFFORD
RONALD A MILLER

Departments of Minimally Invasive Surgery,
Royal Northern Hospital and
Institute of Urology,
London

- 1 Miller RA, Coptcoat MJ, Parry J, Dawkins G, Wickham JEA. The integrated cystoscope. An alternative to conventional and fiberoptic cystoscopy. *Br J Urol* 1987;60:128-31.
- 2 Birch BRP, Anson KM, Parry J, Bell J, Miller RA. Sedoanalgesia—radical change in urological practice. *Br J Urol* (in press).
- 3 Birch BRP, Anson KM, Clifford E, Miller RA. The impact of flumazenil on day case surgery. *Lancet* (in press).

No fault compensation

With reference to the debate on no fault compensation in the editorial by Dr Richard Smith (15 October, p 935) and the news item by Ms Clare Dyer (15 October, p 939) we would like to draw attention to our recent study of the effects of participation in litigation on the late symptom rate in patients with minor head injuries. A previous study showed that 14.5% of 131 patients with minor head injuries (few of whom participated in litigation) continued to complain of symptoms a year after their accident.¹

A more recent study was of 44 patients with similar head injuries, all of whom undertook litigation.² In terms of length of post-traumatic amnesia, frequency of headache on the second day, and frequency of abnormal neurological signs on the second day the two groups were indistinguishable. The mean time from accident to settlement was 22 months, and one year after settlement 34% of these patients continued to complain of symptoms. Over 82% of patients had contacted their solicitors within two months of their accident.

At the time of the accident our two groups seemed similar, yet a year after settlement—on average about three years after the accident—the patients participating in litigation had a symptom rate 2.3 times that of the general series one year after the accident. The experience of litigation seems to increase the disability and prevent the normal resolution of symptoms. How long this effect continues we do not know, but it is possible that it is life long. Maybe this effect is particularly noticeable in patients with concussion, but it would not be surprising to find a similar effect in patients with back injuries, neck injuries, or any other injury.

It is ironic that the legislation created to compensate patients should have the effect of increasing their suffering. It would be most interesting to know whether participating in a no fault claim affects the final symptom rates of injured patients. The same psychological mechanism seems to operate not only in patients going before the courts but also in those appealing to tribunals in relation to social security grants.

WILLIAM RUTHERFORD
CHARLES R A FEE

Belfast BT9 5PH

- 1 Rutherford WH, Merrett JD, McDonald JR. Symptoms a one year following concussion from minor head injuries. *Injury* 1978;10:225-30.
- 2 Fee CRA, Rutherford WH. A study of the effect of legal settlement on post-concussion symptoms. *Arch Emerg Med* 1988;5:12-7.

The course of untreated epilepsy

The pattern of recurrence of epileptic seizures in untreated epilepsy is a subject of considerable interest, yet data concerning this are sparse. In their retrospective study of patients referred to hospital with untreated early epilepsy, Dr R D C Elwes and others (15 October, p 948) found that the intervals between successive seizures shortened and postulated that the recurrence of seizures might be an accelerating process in the early stages of untreated epilepsy. The authors did not, however, consider a possible case selection bias, which in itself might well explain the findings.

If seizures recur at increasing frequency a patient is more likely to be referred to a neurological clinic than if this is not the case; thus patients will present to the clinic exactly because seizure frequency is increasing. Of course, the only satisfactory way to study patterns of recurrence is to look prospectively at a cohort of new cases, preferably from a community base, and this has been achieved in the cohort of the national general practice study of epilepsy. Here a much more varied picture of recurrence is obtained, with decreasing and increasing interseizure intervals, both within individual patients and in the population in general (Y Hart *et al*, Association of British Neurologists meeting, 1988). The findings from the national general practice study of epilepsy, which is a prospective study in an unselected group of patients, are thus somewhat different from those of Dr Elwes and colleagues. Furthermore, if an accelerating process at the onset of epilepsy is to be postulated the data from the study of Dr Elwes and colleagues suggest that this process operates over a period of weeks in some cases and over years in others. It is difficult to see what physiological basis could be invoked to explain this.

As has been discussed elsewhere,^{1,2} such data concerned with the early patterns of epilepsy are important for the light they might shed on the role of anticonvulsant drug treatment in early epilepsy. The traditional role ascribed to anticonvulsant drugs is that they suppress seizures. It has been more recently suggested that if epilepsy is a process that evolves in its early stages into a chronic condition the early suppression of seizures by treatment might prevent this evolution.^{1,2} One way to test this proposition would be to compare the patterns of epilepsy in untreated and treated populations. Only one large untreated population has been studied: 886 patients in a prevalence survey in rural highland Ecuador (International Community Based Epilepsy Research Group, 13th Brazilian congress of neurology, 1988). In this investigation the early pattern of untreated epilepsy was similar to that seen in surveys of the treated condition.^{1,2}

A prospective study is, however, necessary to settle this point conclusively in which patients are randomised to early or delayed treatment after the

onset of treatment and in which the subsequent patterns of seizures and prognosis are monitored. If the long term pattern of seizure recurrence and prognosis was better in the group receiving early treatment, this would have important implications for our current approach to early treatment. This proposal was the subject of an open debate at the meeting of the Association of British Neurologists in 1984 and was met with enthusiasm.³ Such a study would be, as Dr Elwes and colleagues suggest, of the greatest importance to our understanding of the nature of epilepsy and the role of treatment.

SIMON SHORVON

University Department of Clinical Neurology,
Institute of Neurology,
London WC1N 3BG

- 1 Shorvon SD. The temporal aspects of prognosis in epilepsy. *J Neurol Neurosurg Psychiatry* 1984;47:1157-65.
- 2 Reynolds EH, Elwes RDC, Shorvon SD. Why does epilepsy become intractable? *Lancet* 1983;ii:952-4.
- 3 Shorvon SD. Do anticonvulsants influence the natural history of epilepsy? In: Warlow C, Garfield J, eds. *More dilemmas in the management of the neurological patient*. London: Churchill Livingstone, 1987: 8-13.
- 4 Goodridge DMG, Shorvon SD. Epileptic seizures in a population of 6000. II. Treatment and prognosis. *Br Med J* 1983;287: 645-7.
- 5 Shorvon SD, Espir MLE, Steiner TJ, Dellaportas CI, Rose FC. Is there a place for placebo controlled trials of antiepileptic drugs? *Br Med J* 1985;291:1328-9.

Anyone for tetanus?

Dr J Fair (15 October, p 980) advocates an opportunistic approach to tetanus immunisation in general practice. Our own practice policy in the past five years has been to recommend primary immunisation in infancy followed by a preschool booster and revaccination every 10 years, this interval being reduced to five years when there has been a dirty wound.

Patients requiring immunisation are identified opportunistically during the course of consultations and are advised to see the practice nurse. The clerical staff ensure that the immunisation is entered on to the patient's medical summary card.

Each year one of our practice clerks draws a random 10% sample from the age-sex register. The notes of these patients are examined for a dated record of various screening and preventive health data, including tetanus and polio immunisation. The table shows the percentage of male and female patients aged 35-70 years with a record of tetanus and polio reimmunisation in the preceding 10 years. These results show that the rate of

Percentage of medical notes sampled during 1984-8 with record of tetanus and polio immunisations in the previous 10 years

	1984 (n=342)	1985 (n=356)	1986 (n=375)	1987 (n=395)	1988 (n=408)
Tetanus	35	46	53	57	60
Polio	12	17	18	17	20

recording tetanus immunisation steadily increased over the period of five years studied while the recording of polio immunisation remained relatively static.

Several factors are probably responsible for the improvement in our performance. The clear record of immunisation state in the notes and the system established to ensure that these records remain up to date and accurate are obviously important. The regular audit gives clear feedback to the doctors and staff and provides encouragement that their effort is producing results. Although a similar system is used to monitor polio immunisations, there is no real agreement about the need for routine immunisations and it seems that little change has occurred. Despite an appre-