after the onset of the stroke: in our study the mean interval between the ictus and arriving in hospital was 5½ hours.

Dr J W Norris (6 January, p 56) questions the validity of clinical evaluation at one year but our article makes clear that we also assessed the patients at 10 days and at three months. We found no significant difference in morbidity and mortality at these intervals.

To Dr F Clifford Rose and his colleagues (6 January, p 55) we would reiterate that the purpose of our study was to determine whether unselected patients with stroke would benefit from dexamethasone since the previous literature is inconclusive on this point. We agree that further studies are needed to see if a subgroup of such patients will benefit from steroids, but this requires the use of CAT-scanning, which is not available to physicians in district general hospitals, where the majority of stroke victims present.

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* *Dr Mulley and his colleagues have made an important point about "Condensed Reports," which are a compromise between authors and editor enabling articles to be published for which we would not otherwise have the space. In future, we shall routinely ask these authors to comment before publication on letters to the Editor about their articles.—ED, *BMJ*.

Premenstrual tension syndrome

SIR,—Although many claims have been made for progesterone deficiency in the pathogenesis of the premenstrual syndrome, evidence is in fact lacking. In your recent leading article (27 January, p 212) two studies were cited. In one only 30% of patients were shown to have lower than average progesterone levels.¹ Of this small number 70% were effectively treated in an uncontrolled study of dydrogesterone. In this study and that of Backstrom² the onset of symptoms was found to precede the changes in progesterone secretion, suggesting some other agent to be causative in this syndrome. Moreover, if progesterone deficiency, or a decrease in the progesterone-oestrogen ratio, were responsible for the syndrome symptoms would be expected to occur during the preovulatory rather than the premenstrual phase.

The administration of progesterone, however, may be expected to relieve symptoms by virtue of its natriuretic action and its central nervous depressant action. Even so, there is not yet a double-blind controlled study to support the effectiveness of the drug despite enthusiastic claims.³ Other studies, in fact, have suggested that progesterone excess is responsible for the syndrome. This is a more logical hypothesis. Gillman showed that the administration of progesterone actually gave rise to premenstrual symptoms.⁴ In a recent study in Nottingham⁵ higher levels of progesterone were shown in symptomatic subjects during the postovulatory phase of the cycle: the difference preceded the onset of symptoms. The levels of prolactin and aldosterone were similar in symptomatic and controlled subjects. Even so, spironolactone reduced psychological symptoms and

reduced weight in more than 80% of subjects in a double-blind crossover trial.

It is unlikely that the syndrome is due to a single hormonal change. The combined effects of the many hormones (perhaps through shifts in neuronal electrolyte state) should be considered. It is probable that the high levels of progesterone following ovulation give rise to a diuresis and natriuresis. This is followed by a phase of a salt and water retention as the aldosterone becomes secondarily raised. This flux in electrolyte state is coincident with the onset of psychological symptoms, and possibly causative. Depending on the individual aldosterone response, there may be a return to the original sodium and fluid state or it may go beyond this to cause retention and oedema. This would account for the variable findings of previous workers, showing that weight increase and fluid retention are not universally associated with mood change.

Complete ablation of the menstrual cycle using a oestrogen-progesterone combination may improve symptoms in certain patients, though symptoms are made worse in many, especially during the phase following norethisterone withdrawal.

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¹ Munday, M, *Current Medical Research and Opinion* 1977, 4, suppl 4, p 16.

² Backstrom, T, and Carlstensen, H, *Journal of Steroid Biochemistry*, 1974, 5, 257.

³ Dalton, K, *The Premenstrual Syndrome and Progesterone Therapy*. London, Heinemann Year Book Medical Publishers, 1977.

⁴ Gillman, J, *Journal of Endocrinology and Metabolism*, 1942, 2, 157.

⁵ O'Brien, P M S, et al, *British Journal of Obstetrics and Gynaecology*, in press.

Epilepsy and learning

SIR,—Your leading article (3 March, p 576) usefully drew attention to an important aspect of the management of children with fits. However, your statement that "sodium valproate is the first choice in new patients" is more categorical than seems justified on present evidence—apart from taking no account of the type of fits being treated.

There is no doubt that sodium valproate is a very useful new anticonvulsant, but it has been in widespread use in Britain for only a few years. Reynolds¹ has pointed out the long delay which may occur between the introduction of an anticonvulsant and the recognition of all its long-term unwanted effects. Your editorial implies that sodium valproate is less likely to cause school problems than phenytoin; but you quote no evidence to support this view, and you admit that evidence about long-term effects of sodium valproate on behaviour is scanty. A trial comparing learning performance in matched epileptic children taking phenytoin, sodium valproate, and carbamazepine (which also deserves consideration) is needed before such a recommendation can be made.

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¹ Reynolds, E M, *Lancet*, 1978, 2, 721.

SIR,—The British Epilepsy Association was pleased to see in the conclusion to your leading article (3 March, p 576) the sentence "Epilepsy is not just fits."

One of the things epilepsy may also repre-

sent is the need for specialised educational help. It is with this in mind that we wish to publicise more widely the establishment of a new school for children with epilepsy, which will take its first pupils in September. It is Mossbrook School, Sheffield, which will accommodate about 35 pupils with epilepsy on a residential basis. The age range will be primary and middle school and the ability range "dull to normal," with epilepsy as the principal disability. It is envisaged that Mossbrook School will be a "feeder" school for the David Lewis School, Cheshire, which caters for older pupils with epilepsy.

Doctors can help the association and the Department of Education and Science to judge the need for this new facility and identify children likely to benefit from its existence. We would be very pleased to hear from any doctors, especially paediatricians, in the Sheffield area—or elsewhere—who could give a rough estimate of the numbers of children known to be in need of a special school because of a primary disability of epilepsy. Numbers only are needed at this stage, and confidentiality will be absolutely respected.

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Glossopharyngeal neuralgia with syncope

SIR,—Drs R R Jacobson and R W Ross Russell report relief with carbamazepine in the rare combination of glossopharyngeal neuralgia, arrhythmia, and syncope (10 February, p 379). Unfortunately, this drug may lose its effect, as in our patient.¹

A woman who had repeated attacks of pain, bradycardia, and syncope responded at first to carbamazepine 200 mg, twice daily, but then stopped her treatment after three months. When her symptoms recurred with great frequency and intensity 16 months later both carbamazepine and atropine were ineffective. Finally, in January 1975 the right glossopharyngeal nerve was excised, with lasting relief; and at review four years later she was entirely free from symptoms. Thus surgery may be curative in this uncommon, bizarre, and disabling condition when medical treatment has failed.

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¹ Taylor, P H, et al, *Journal of Laryngology and Otology*, 1977, 91, 859.

Priorities in road accidents

SIR,—Dr J C Allen in his letter (24 February, p 548) is mistaken in interpreting silence for apathy. There has, after all, been very little recent correspondence in your journal, or any other scientific journal for that matter, on the flat earth theory because most sensible people have long ago realised that this theory is untenable.

Dr Allen, of course, is perfectly entitled to exercise his personal liberty when driving a car with regard to the wearing of a seat belt, just as I am sure he drives on the right-hand side of the road in England (and on the left-hand side in France) and, of course, drives through all red traffic lights, particularly when a juggernaut is crossing on the green. What