Devonshire Colic

SIR,—The report of a case of lead poisoning from home-made cider manufactured in Surrey (11 January, p. 98) is interesting. Here in Devon, the home of cider making, we have eradicated the disease these hundred years. But it used to be so common that it was known as the Devonshire colic. It was just over 200 years ago that Sir George Baker read his classic paper on the *Cause of the Endemical colic of Devonshire* to the College of Physicians, and had it printed and sent down into Devon, "with a particular view to giving to the inhabitants of the county of Devon the earliest intimation of their danger; in order that they may take the proper steps to preserve their health, and to secure the value of their property."

Things move slowly in these parts, and it took a hundred years to get the message over to all the farmers and stop them mending their presses with lead. It was done, however. The lesson to be learnt from the case at Guildford is that history repeats itself in medicine as in all other things.—I am, etc.,

R. M. S. MCCONAGHEY.

Dartmouth,
Devon.

REFERENCE

- ¹ McConaghey, R. M. S., *Med. Hist.*, 1967, 11, 345.

Elderly in Hospital

SIR,—The article by Dr. R. W. Parnell and others, "Changing Use of Hospital Beds by the Elderly" (21 December, p. 763) focuses attention on a serious aspect of social medicine. It is also likely that their account of conditions in the Birmingham region applies to the country generally.

The steady increase in our aged and infirm, which is both numerical and proportional, is placing an ever-growing burden on medical resources, including what are known as welfare facilities, but Parnell and his collaborators have shown that in the Birmingham region, far from expanding, geriatric beds have decreased in number in the years from 1961 to 1967, and that their turnover has gone down appreciably too. Hitherto disaster has not overtaken us because the acute medical and psychiatric sectors to which large numbers of elderly people, predominantly females, are being directed, have managed to speed up discharges of all types, and also in a small measure because there has been a very modest contribution from the slight growth in the number of welfare places provided by local authorities. Those who practise acute hospital medicine and surgery, or psychiatry, have responded to the challenge by running ever faster, and it is no exaggeration to say that a major function of some of them when going round their wards is to find patients for early discharge. But there is a limit to what the acute side can do, and the time may come, even where there is still a willingness to put up extra beds, when it will grind to a standstill.

On the geriatric side, in contrast, the old overcrowding has been greatly diminished by marked reduction of bed complements, and this, coupled with new geriatric units built to high specification, is inevitably proving an attraction to stay put in places where conditions are often as good as, or even better than,

in welfare homes, and where additionally the patient is not likely to be placed on the transfer list because of incontinence.

Many of the aged continue to cling to independence even when they are clearly in need of institutional care, and fortunately there is still a tremendous filial and other affection for old people sometimes amounting to obsessional devotion. But who is to blame busy folk, some of them not even relatives, when they experience a sense of relief once a failing old person for whom they cared hitherto is admitted to a comfortable place? This is not an advocacy to go back to former conditions, which Sheldon¹ pungently stigmatized as providing no more than "human warehouses," but an attempt to look at the problem squarely and to ask where the present trend is taking us. The community must realize that more twilight care calls both for greater capital expenditure and for a larger number of able-bodied helpers possessed of a high degree of selflessness, and while this is obviously a long way off one wonders whether it was a good plan to create a separate specialty of geriatrics. Most of us, except for paediatricians, now have to deal with a large proportion of old people, and in that sense reintegration of geriatrics into the main stream of medicine could lead to a better global appreciation of the problem and to a more equitable distribution of a burden weighing so heavily on a section which nowadays often merits the title of "acute" only by courtesy.—I am, etc.,

A. M. NUSSEY.

Selly Oak Hospital,
Birmingham.

REFERENCE

- ¹ Sheldon, J. H., *Report to the Birmingham Regional Hospital Board on geriatric services*, 1961. Birmingham.

Referral of Mentally Subnormal Patients to Hospital

SIR,—A study of patients referred to hospitals for the mentally subnormal provides useful information about the demands made on these hospitals, and about the number of problems with which they may be expected to cope in a given period.

The Subregional Admission Bureau 3 of the Leeds Regional Hospital Board serves a population of 840,986. The numbers of patients referred to the bureau during two periods of 12 months are related to the population in the Table below.

Area	Population	No. of Patients Referred		Referral per 10,000 of Population	
		1966	1967	1966	1967
County boroughs	391,841	70	78	1.8	1.9
Municipal boroughs	175,288	29	32	1.7	1.8
Urban districts	217,304	24	21	1.1	0.9
Rural districts	56,553	2	4	0.4	0.8
Total	840,986	125	135	Overall rates 1.5	1.6

Each referral represented a problem for which a local health authority or a family doctor sought help from the hospital service. Patients referred for short-term care under

the provisions of Circular 5/52¹ were not included.

During the two periods slightly more male than female patients were referred. Approximately 50% of all the patients were under 16 years of age, 40% were under 12 years. In terms of intelligence quotients, subnormal (I.Q. 55 to 70) and severely subnormal (I.Q. below 55) patients were referred in nearly equal proportions. Just over 50% of the patients referred were admitted to hospital, and one-third of these admissions were on a long-term basis. Sixty per cent. of the referrals presented problems of behaviour and social adjustment. One in ten patients required nursing care. The others came for accommodation or advice. Fifteen per cent. of the referrals had previously been inpatients or outpatients at hospitals for the mentally subnormal.

The similarity in the pattern of referrals during the two periods suggests that the number of mentally subnormal people in an area who are likely to need help from the hospital service during a certain period is a predictable figure.—I am, etc.,

D. A. SPENCER.

Westwood Hospital,
Bradford 6, Yorks.

REFERENCE

- ¹ Ministry of Health Circular 5/52, 1952.

Amantadine Hydrochloride and the Elderly

SIR,—In the last five years there have been a number of reports on the value of amantadine hydrochloride in preventing infection with type A strains of influenza virus. Opinions have varied considerably as to its value in man, and the position was thoroughly reviewed by Sabin,¹ who concluded that further carefully controlled field-trials were needed.

Last winter a trial of the drug was carried out on geriatric patients in an acute ward, a rehabilitation ward, and three long-stay wards. The drug was given from 24 December 1967 to 31 January 1968 in a dose of 100 mg. twice daily. Cases of laboratory confirmed influenza A2 occurred in the hospital between 27 December 1967 and 13 January 1968. On three of the wards a double-blind system was used, amantadine and a placebo being given in identical capsules. On the remaining two wards the same dose of active drug was given in a syrup to 12 patients, the remaining 28 patients being untreated. A total of 70 patients received the active drug. The mean age of these patients was 77 years and the mean duration of the drug treatment was 25 days. No undesirable side-effects were noted. During the period of the trial all the cases of clinical influenza except one occurred on the rehabilitation ward, where the double-blind system was in use. In this ward influenza was diagnosed clinically in 11 of 29 patients receiving the placebo and in six of 25 patients receiving amantadine. Laboratory tests confirmed the diagnosis in the placebo group, but in the amantadine group one case diagnosed as clinical influenza was not confirmed by the laboratory and a further two patients appeared to have had subclinical influenza.

This trial showed that amantadine hydrochloride can be given to incapacitated old people without significant side-effects. The results are not statistically significant but suggest that the drug may have had a prophylactic value. Further studies are proposed

using larger numbers of patients, and with comprehensive laboratory coverage.

My thanks are due to Dr. P. J. Sequeira and Dr. J. Tobin for the virus studies, Dr. E. Busill Jones for clinical help, and Dr. A. W. Galbraith, of Geigy (U.K.) Limited Pharmaceuticals Division, for supplying the drug and placebo.

—I am, etc.,

J. T. LEEMING.

Department of Geriatric Medicine,
Withington Hospital,
Manchester 20.

REFERENCE

- ¹ Sabin, A. B., *J. Amer. med. Ass.*, 1967, 200, 943.

Plasminogen-activator-producing Tumour

SIR,—The identification by Dr. J. F. Davidson and others (11 January, p. 88) of a plasminogen-activator-producing tumour is fascinating. However, on the evidence produced I am doubtful about two of the conclusions.

There is no evidence that the tumour was rapidly growing—that is, multiplying, extending, and invading during the time that it was producing plasminogen-activator. The proximal extension of the swelling revealed only serosanguineous material which most likely reflects an accumulation of tumour fluid. It is conceivable, and perhaps likely, if one preserves the view that tumours may require a fibrin network as a matrix for growth, that this secondary tumour with its demonstrated thromboplastic activity grew rapidly first and then produced plasminogen-activator.

It cannot be concluded that a rare tumour of lung showed pathological plasminogen-activator production. This property can only be ascribed to the peripheral secondary carcinoma, presumably arising from a lung primary. No assessment is described of the lung primary's activity, and it may be inferred that the primary did not in fact produce plasminogen-activator, for, although haemorrhagic, it did not bleed. Equally, the other secondary tumours, similarly haemorrhagic, did not bleed.

It would seem worth while to comment that lung tissue is known to contain substantial amounts of tissue plasminogen-activator.¹ Malignant cells arising from the lung may therefore have a potential for producing large quantities of plasminogen-activator. The rarity in this report may be the circumstances under which a secondary from a giant-cell carcinoma of lung showed such an activity.

—I am, etc.,

Beaconsfield, Bucks.

A. J. JOUHAR.

REFERENCE

- ¹ von Kaulla, K. N., *Chemistry of Thrombolysis: Human Fibrinolytic Enzymes*, 1963. Springfield, Illinois.

Treatment and Prevention of Poisoning

SIR,—I was interested to read your leading article (28 December, p. 787) concerning the treatment and prevention of poisoning.

Approximately 75% of adults who have ingested poison present in hospital within six hours.¹ The same percentage of children present within two hours. If we subtract the length of time an ambulance takes to bring the patient to hospital then the earliest time

that treatment may be undertaken is even shorter. An important early stage in the treatment of poisoning is getting the poison out.² Karlsson and Norén³ have successfully used dilute solutions of copper sulphate as an emetic in poisoned children. Ninety-eight per cent. of 100 children vomited within 14 minutes. Twenty-eight per cent. vomited twice. They found copper sulphate safe and more reliable than ipecacuanha.

In most British hospitals it is the custom for the nursing staff to perform lavage.¹ Inducing emesis in a conscious patient is probably a less hazardous procedure. About 20% of adults are admitted to hospital unconscious; children are rarely unconscious on admission. If suitable packs of dilute copper sulphate solution were carried as part of the standard equipment in ambulances, these could be administered to co-operative conscious patients by ambulance personnel, as soon as the patient was collected. With this arrangement, by the time the patients arrived at hospital they would probably have vomited. It would be necessary to carry a suitable receptacle in the ambulance.

With the increasing number of cases of ingested poison I wonder will the day come when as well as the obstetric flying squad and coronary ambulance we may have the "overdose" ambulance? Or will we eventually evolve a system where there is a fleet of multipurpose ambulances equipped to start the early treatment of patients suffering from any acute medical emergency endangering life?—I am, etc.,

MICHAEL BURKE.

Gateshead,
Co. Durham.

REFERENCES

- ¹ Burke, M., *Practitioner*, 1968, 201, 786.
² Matthew, H., Mackintosh, T. F., Tompsett, S. L., and Cameron, J. C., *Brit. med. J.*, 1966, 1, 1333.
³ Karlsson, B., and Norén, L., *Acta paediat. scand.*, 1965, 54, 331.

Cerebral Haemodynamics and Metabolism in Hypnosis

SIR,—We have read with interest the articles on the value of the use of hypnosis in medicine and on the neurophysiological interpretations of the hypnotic state (12 October, pp. 67 and 71).

We have carried out a study of cerebral haemodynamics and metabolism in five normal subjects in deep hypnotic trance with analgesia and amnesia at the arousal. The study included the determination of cerebral blood flow, cerebrovascular resistances, and cerebral metabolic rate of oxygen, according to the methods previously described.¹ In comparison with a group of normal but alert subjects it was found that the hypnotic state does not cause any modification of the examined parameters (see Table). However, we

Cerebral Haemodynamics and Metabolism in Normal Subjects (Mean values $\pm$ S.D.)

	No. of Cases	Cerebral Blood Flow (ml./100 g. Tissue/min.)	Cerebrovascular Resistances (mm. Hg./ml./100 g./min.)	Cerebral Metabolic Rate of O ₂ (ml./100 g. Tissue/min.)
Alert subjects	6	54.9 $\pm$ 10.8	1.90 $\pm$ 0.49	3.68 $\pm$ 0.77
Hypnotized subjects	5	51.0 $\pm$ 4.7	2.08 $\pm$ 0.31	3.57 $\pm$ 0.59

wish to stress the fact that during the hypnotic trance the values of the standard deviation for each of the above-mentioned parameters were clearly below the levels of the normal and alert subjects.

We think that the difference which resulted between the hypnotized and the alert subjects may be due to a state of anxiety and fear caused by the method of examination used; as in fact this state was present only in the alert subjects, even if clinically not evident.

This work is part of a wider investigation, and a full report is in preparation.

—We are, etc.,

A. T. MAIOLO.

G. BIANCHI PORRO.

F. GRANONE.

Istituto di Patologia Medica
e Metodologia Clinica (II),
Milan University, Italy.

REFERENCE

- ¹ Della Porta, P., Maiolo, A. T., Negri, V. U., and Rossella, E., *Metabolism*, 1964, 13, 131.

C.S.F. Rhinorrhoea

SIR,—Your leading article on C.S.F. rhinorrhoea (18 February, p. 137) contains the following: "... Galen thought that the C.S.F. was formed by the brain, stored in the ventricles, and normally excreted through the nose."

It is now generally accepted that the C.S.F. was never described in antiquity and in fact the first certain reference to it was made by Berengario da Carpi as late as 1521. The first clear description of it was given by another Italian anatomist, Massa, 15 years later.¹ Galen was in fact referring to the animal spirits or vapours of the soul, which were thought to be formed in the vascular network said to be present in man at the base of the brain—the *rete mirabile*—but found in fact only in ungulates. The resulting waste products were excreted through the pituitary fossa and the olfactory plate if fluid, and, if gaseous, through the cranial sutures. There is, however, no suggestion whatever that the former may have been C.S.F.

I am sure that you would wish to avoid inaccuracies in scientific data submitted to your journal, and I see no reason why historical information should not be equally precise.

—I am, etc.,

EDWIN CLARKE.

Sub-Department of the History
of Medicine,
University College,
London W.C.1.

REFERENCE

- ¹ Clarke, E., and O'Malley, C. D., *The Human Brain and Spinal Cord*. University of California Press, Berkeley, California, 1968.

SIR,—The leading article on C.S.F. rhinorrhoea (18 January, p. 137) was very interesting because it reminded the readers of an unusual clinical problem. We have much to learn about the anatomy of the roof of the nose, as well as the abnormalities. A patient of mine suffering from spontaneous C.S.F. rhinorrhoea was found to have a congenital fistula between his subarachnoid space and the roof of one of his frontal sinuses. The concept of a focal atrophy of the cribriform plate is also interesting. It would explain why a patient develops meningitis after removal of