next door, whose serum was found to be positive in the dye test at a titre of 1/256. Although further work is needed to substantiate this link in human infections, it indicates that epidemiological work along these lines may well be rewarding.

We wish to thank Drs. J. B. Sayer and D. J. Michael for the specimens of serum from the cat we sent to us by Mr. J. C. Wooton, M.R.C.V.S.

—We are, etc.

D. G. FLECK
B. S. CHESSUM
M. PERKINS

Public Health Laboratory,
St. George’s Hospital,
London S.W.1

Contaminated Drip Fluid

Sir,—Recent events involving intravenous fluids have prompted considerable comment in the scientific and popular press, with specific criticisms of autolaves, solution containers, and quality control procedures.1 However, any improvement in manufacturing techniques, although welcome, must be accompanied by investigations on a much wider front into the whole practice of intravenous therapy, and this is the purpose which I was trying to make in my recent Questions to Sir Keith Joseph when he was making his statements in the House of Commons (see 18 March, p. 759). The responsibility that intravenous therapy remains a safe and effective technique rests with all the professional groups involved—the medical staff, the nursing service, and the pharmacist.

It is impractical to expect the doctor who prescribes this treatment fully to appreciate the chemical pharmacology and incompatibilities of all drugs. Literature on the stability of drugs and the addition of supplementary medication to blood or infusion fluids is often contradictory. Tetracycline alone is incompatible with over 50 other common chemicals, and antihistamines are routinely added to blood packs. The recommended frequency of changing the container set or the infusion set varies from “with every bottle” to “after 48 hours,” and the medical student receives little instruction on these points. In a recent case I had to deal with I turned to my notice 13 different bottles were administered through the same giving set. Not surprisingly, this has become infected and there was an adverse, luckily mild, reaction.

Nursing staff, who invariably perform the last quality check, are increasingly expected to make complicated pharmaceutical calculations and reconstitute drugs for mixing with intravenous fluids on non-stereile wards, again without formal training or education. The pharmacist, for too long merely a dispenser, has the appropriate training and qualifications to provide all information and advice on drug interactions, aseptic technique, and bioavailability. He must, therefore, be encouraged to extend his responsibilities outside the pharmacy, provide a 24-hour service, and become an active member of the health team, the rest of whom, in their turn, must be encouraged to respect his advice.

Now that over 17,500,000 units of intravenous fluid are given to patients annually, the time is opportune to re-examine habits which for too long have been allowed to evolve in a haphazard manner. With support from the teaching hospitals, N.H.S. administrators, and the medical and nursing professional bodies the responsibilities and rules for trouble-free intravenous administration technique must be clearly defined. A circular from the Department of Health and guidance from the defence societies would help to achieve this end.—I am, etc.,

TOM STUTTAFORD
House of Commons,
London S.W.1

2 Sayer, M. J., *Veterinary Record, 1972, 84, 712.

Herpes Simplex and Temporal Lobe Epilepsy

Sir,—The discussion on the causes of temporal lobe epilepsy in the interesting paper by Mr. Murray A. Falconer (10 June, p. 631) revealed that herpes simplex infection had probably not been considered as a possible cause of this condition.

Many recent studies have now shown that herpes simplex infection is apparently the commonest cause of encephalitis in older children and adults, the usual histological picture being an acute necrotizing encephalitis.1 It appears that this acute presentation is uncommon in young children. Thus, in our own laboratory during the 10-year period 1962-71, a firm diagnosis of herpes encephalitis was made in 20 patients in the west of Scotland on the basis of histological evidence of encephalitis along with isolation of virus from brain and/or serological findings indicative of current herpes simplex infection. Only one of these 20 was under 10 years old, and his illness differed from the others in having subacute onset at the age of 3 years followed by slow deterioration and death when 6 years old. In contrast, all the older children and adults had an acute severe illness; 12 of these 19 died, all in the acute phase of illness.

The possible importance of herpes simplex infection as a cause of severe convulsions in infancy later leading to temporal lobe epilepsy has not, however, been adequately ascertained, because brain biopsy would of course not be carried out on such infants. However, a rising serum antibody titre for herpes simplex in such patients would give a firm indication of a current infection. I urge that paired sera for this investigation should be collected from all infants with severe convulsions so that the possible role of herpes simplex infection as an aetiological factor in temporal lobe epilepsy may be determined. Since antibody responses in infants are frequently slow the interval between the sera should be three to six weeks.—I am, etc.,

CONSTANCE A. C. ROSS
Regional Virus Laboratory,
Ruchill Hospital,
Glasgow


Aetiology of Varicosis

Sir,—I was impressed with Mr. D. P. Burkit’s paper (3 June, p. 556) on the relationship of Western society’s low residue diet and varicose veins, haemorrhoids, and deep vein thrombosis.

I would like to give emphasis to a different aspect of this problem. A major factor limiting appetite is gastric distension, which in Western diet does not achieve until a large number of calories have been ingested. With lack of deliberate self-control, obesity is now causing a progressive decline in health in economically deprived communities. This obesity does not develop without inactivity, and the proportion of people in Westernized society in sedentary occupations is very different from that in African society.

This inactivity allows venous pooling and distension in the legs causing incompetency of the valves, which is then considerably aggravated by straining at stool. Venous flow in the legs is against considerable gravity, and the bumping assistance of the muscles is needed to maintain a satisfactory rate of flow. Sluggish bowel movement and constipation occur in the generally inactive so that the sedentary person will do more straining at stool.

The postulation of the weight of the colon as the main cause of deep vein thrombosis is no longer tenable. The colon is a heavier content, larger volume, and is a bigger structure altogether, as shown by its tendency to volvulus. Thus there will be more compression of the deep veins in the colon. Thus, the threat to the vein is before operation. The lean, fit African is at considerably less risk than the obese, unfit European.—I am, etc.,

A. A. R. GOSSAGE
Westminster Hospital,
London S.W.1

Treating Incontinence Electrically

Sir,—Your leading article “Treating Incontinence Electrically” (17 June, p. 670) presented a fair review of one of the methods of electrical treatment at present available but it does not adequately show how the techniques, highlighted the disabling gulf that is apparent between those who have recently started using new electronic gadgets and those who have been treating incontinence electrically for over a century—namely, the physiotherapists.

If continuous electrical stimulation is to have any permanent place in the therapy of incontinence, it must be shown either to have an objective effect on the sphincter mechanisms justifying its use, which it does not,1 or to be effective in controlling types of incontinence for which no simpler method of treatment is available. Neither of these criteria is satisfied in respect of treatment of stress incontinence. Jones and Kegal2 reported a 43% cure rate by exercise alone, Tannock reports a 55% success using faradic stimulation as an adjunct to physiotherapy, and Moore and Schofield3 report 33% success in patients reviewed one year after 30 treatments with powerful faradic stimulation under anaesthesia. We have found a 50% cure rate in selected cases using a method of powerful faradic stimulation under anaesthesia followed by physiotherapeutic instruction augmented by the use of intermittent stimulation when neces-

BRITISH MEDICAL JOURNAL 8 JULY 1972