SIR,—Miss Christine McArdle and others (6 December, p 568) discuss their findings but leave the reader to draw his own conclusions. The most obvious of these may even help to point the way to a remedy.

(1) The geriatric department, with its closed beds, does not have a share proportionate to its needs of the human resource—staff. Recruitment should be encouraged through financial inducements, high-class facilities, and education. The department concerned also does not enjoy its fair share of the financial resources as the weekly costs given clearly show.

(2) It may well be a shortage of suitable housing and domiciliary supports rather than of institutional care (together with inappropriate use of the latter facility by able-minded and able-bodied elderly) which is causing the chain reaction of blocked beds described.

(3) It is not clear which of the 11 patients described should ever have been admitted in the first place. They all had social danger signals which would have warned any geriatrician that they would be easier to admit than to discharge. If the geriatric department is combined with general medicine, or if it has the facilities to take most admissions of the elderly sick direct, the geriatrician is in a position to prevent hospital admission in those many cases where it is not in fact needed. Even if medical treatment is required it may be possible to deliver it on a day-hospital basis. The harm that hospitals can do to the elderly is illustrated by the sequence of disasters which befell these frail old people during their prolonged admissions.

(4) Perhaps instead of relying on the over-stretched geriatric department the authors should have developed their own geriatric expertise at pre-admission vetting, prevention of deterioration in hospital, and engineering discharge from hospital. If insufficient doctors and nurses embrace the speciality of geriatrics it will become increasingly important for general practitioners and consultant physicians to spend part of their training in a department of geriatric medicine and leave it equipped to shoulder the burden themselves.

N K CONI

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SIR,—Although reports prepared by the NHS Hospital Advisory Service are not for publication, the paper by Miss Christine McArdle and others (6 December, p 568) is of such importance that I obtained permission to quote from such a report. It reads as follows:

"The team was informed that there is a high proportion of elderly patients either awaiting transfer to geriatric wards or to welfare homes. It is possible that the apparent shortage of geriatric beds is due to over-provision of medical beds which perhaps need redesignating as geriatric. From the statistics it seems that 25% could well be in this category. Advice: The number of patients over 65 occupying beds in medical wards for over three months should be examined. Consideration should then be given

to deciding whether there should be some redistribution of beds to the geriatric units."

STEPHEN SZANTO

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Shortage of organs for transplantation

SIR,—Eight months have passed since the publication of the British Transplantation Society's report on "The Shortage of Organs for Transplantation—A Document for Discussion." During this period many individuals have expressed their views in the medical and lay press, on radio and television, and in private correspondence to members of our society. Some points raised in the document have been criticised, but for the most part comments have been favourable; yet the serious shortage of kidneys for transplantation persists and owing to the new financial restrictions the plight of patients requiring kidney grafts is worsening. Less funds are available for dialysis and most hospital dialysis places are full. Facilities for home dialysis are limited and many patients requiring treatment have nowhere to turn for help. In view of the seriousness of the situation the British Transplantation Society at a recent meeting decided unanimously to draw your readers' attention to the following points.

(1) The guidance circular to NHS authorities on the interpretation and implementation of the Human Tissue Act 1961 is a helpful document and it is now less urgent to press for the changes in the law recommended in the BTS report.

(2) We intend to urge the Department of Health and Social Security to launch the promised survey on the public's attitude to transplanting of organs and to set up a voluntary register for those who would not wish their organs to be used on any account. The automatic use of such a register would provide an additional safeguard that must surely be welcomed by the public.

(3) Greater efforts should be made to explain the current results of organ transplantation to doctors and to the general public and more encouragement given to the carrying of donor cards. In order to ensure that organ donation after death is widely discussed and considered it would be helpful if questions on this subject were included in the basic information sheet filled in by, or on behalf of, patients attending hospital as well as on driving licences. It is hoped that films and posters will in time provide more effective publicity.

(4) We should aim at the appointment of a liaison officer within each region to explain the need for, and the objectives and results of, transplantation to the doctors, nurses, and administrators in hospitals and to encourage organ donation, especially in intensive care units. The public should be made fully aware of the options available to patients with terminal renal failure. Thus, in addition to dialysis and transplantation of kidneys from dead donors, kidneys can also be donated by living blood relatives. Grafts from well-matched sibling donors, for example, usually have an excellent prognosis.

(5) We should like to see the number of patients waiting for kidney transplantation in the United Kingdom published each week in the medical press.

In the BTS document (copies of which are still available from Mr R A Sells, Renal Transplant Unit, Liverpool Royal Infirmary, Pembroke Place, Liverpool L3 5PU) a code of practice was suggested which included safeguards for potential donors and their families so that an acceptable procedure would be followed in all cases and errors in the diagnosis of brain death could not be made. Acceptance and utilisation of this code of practice by transplantation centres, together with the suggestions made above, should help to increase the supply of donor kidneys for transplantation.

We hope that the supply of kidneys will improve when hospital doctors are made fully aware of the situation. With this in mind we intend to publish in the near future an assessment of the results achieved at present with kidney transplantation.

R Y CALNE
L BRENT
R A SELLS

on behalf of the British Transplantation Society

University Department of Surgery,
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Cambridge

Renal transplantation

SIR,—Dr D O Oliver and Mr P J Morris (29 November, p 518), to support their allegation that I am guilty of presumption and assumption in not allowing relations to be approached for permission to remove organs for transplantation, use the doubtful arguments of anecdote and analogy. I could counter the former, with its extract from a letter they received from grateful relations, with a most distressing account of the anguish of the widowed mother of an adolescent girl when asked for her daughter's kidneys, and at their own hospital. The analogy of requesting a necropsy is equally unconvincing as when we wish for such an examination the patient has usually been ill for some time and the relations will have begun to accept their approaching loss, whereas kidneys are usually of value only when their owner has suddenly died from brain haemorrhage or trauma. The coroner usually orders a post-mortem examination.

Your correspondents also appear to ignore the morbid feelings of guilt frequently experienced by those bereaved. Permitting or refusing the removal of organs may cause much soul-searching later, especially when the victim is being kept "alive" on a ventilator until consent has been extracted and, incidentally, consent to "switch off."

But your correspondents also ignore my objection that organs could even be removed, under the Human Tissue Act of 1961 and its interpretation by the DHSS, without consent of relations if they were unavailable for any reason. If the value of donor cards is so limited a donor register should be compiled in spite of the financial cost, unless principle is to be sacrificed to expediency.

JOHN ANDREW

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"Normal" solutions

SIR,—In *The Times* of 28 November 1975 (p 6) there was a report of an inquest on a patient who died from the effects of

enteral administration of hypertonic saline. Apparently the surgeon wished to use physiological saline (so-called 0.9% w/v) but prescribed "normal saline"; so the pharmacist made up normal saline (58.5 g/l), which is six times as strong, and this was given to the patient.

This regrettable accident reinforces the need to abandon the use of "normal" (and of %) in medicine and in chemistry to describe the concentration of a solution; this must be specified in appropriate SI units except for substances such as insulin where arbitrary units are still necessary. So physiological saline is 150 mmol/l (strictly 154) or 9 g/l, and chemically normal saline is 1 mol/l. "Isotonic saline" is an acceptable alternative name for the former. Regrettably in Britain both Boots (Polyfusor) and the *British Pharmaceutical Codex* maintain the dangerous "normal" name.

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Salt overdosage

SIR,—Salt overdosage in adults is extremely rare, and conclusions about treatment will inevitably be open to debate. The fact that only two of the patients reported in the literature have survived would suggest that conventional treatment, which recommends a slow reduction in serum osmolality, is ineffective. Of those referred to by Dr R A Goodbody and others (29 November, p 517) Capper's case is in fact a report of my patient, and Schatz's case is difficult to assess as accurate estimations of serum osmolality were not available in 1937.

It is difficult within the confines of a short report to do more than state the facts of the case. However, I attempted to emphasise that the treatment of my patient involved a rapid reduction in serum osmolality and to explain why, in the light of published animal experimentation, this might theoretically be successful provided treatment was started early enough. Dr Carol Fitzpatrick (29 November, p 517) suggests that convulsions in my patient were due to cerebral oedema. In fact I wrote (15 November, p 386), "there is an . . . increase in CSF volume, and this, with brain cell overhydration, explains the abnormal lumbar puncture results in our patient." I had thought that brain cell overhydration and cerebral oedema were synonymous. The important point is that treatment was started too late. The fact that cerebral oedema developed implies that the brain cells were already hyperosmolar, owing either to an increase in intracellular sodium or to the formation of idiogenic osmoles as described by McDowell.¹ Treatment, to be successful, should be started before the situation arises.

R C M MCGOURAN

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¹ McDowell, M E, Wolf, A V, and Steel, A, *American Journal of Physiology*, 1955, 180, 545.

Activated charcoal in treatment of poisoning

SIR,—We read with interest your recent leading article on childhood poisoning (29 November, p 483) and are in agreement

with the opinions it contains. We note, however, that you make no mention of the role of activated charcoal. Although this material has been recommended as part of the initial treatment of poisoned patients¹⁻³ and there is both in-vitro⁴ and in-vivo evidence in animals,⁵ we have been unable to find any reports of its efficacy in the treatment of poisoned patients.

We are currently undertaking a study on the role of activated charcoal in the initial treatment of poisoned patients and we would therefore appreciate hearing from any of your readers who have had personal experience in this field, especially with objective findings.

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GLYN N VOLANSNational Poisons Information Service,
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London SE14

¹ Holt, L E, and Holz, P H, *Journal of Pediatrics*, 1963, 63, 306.

² *British Medical Journal*, 1972, 3, 487.

³ Corby, D G, and Decker, W J, *Pediatrics*, 1974, 54, 324.

⁴ Decker, W J, Combs, H F, and Corby, D G, *Toxicology and Applied Pharmacology*, 1968, 13, 454.

⁵ Lipscomb, D J, and Widdop, B, *Archives of Toxicology*, 1975, 34, 37.

Volunteers and the aftermath of stroke

SIR,—I greatly admire the work of speech therapists and have worked happily and fruitfully with them now for 2½ years in the Volunteer Stroke Scheme. We hope to extend this splendid co-operation in the future. Therefore I have no heart to enter into any argument about the few points Miss Margaret Edwards raises in her letter (22 November, p 460).

Mildly, I would simply say a few words. Volunteers should be untrained specifically so that they work on the ordinary human-fellowship level and do not fall into the old trap of a little learning proving dangerous. In this way the work of professional and amateur can complement each other, with speech therapists advising the volunteer, as already happens within this scheme.

If there is any "magic" in untrained volunteers working with stroke patients, it is only the power of an actively caring community. Therefore please let no one fear we are usurping or competing with a professional function. These very hard-hit patients and their families need both expert professional treatment and amateur help in the home and community.

V EATON GRIFFITH

Great Missenden, Bucks

C-Film as a contraceptive

SIR,—Drs N Raabe and O Frankman (1 November, p 286) imply that the reason for the high failure rate in the Family Planning Association's trial of C-Film was poor patient instructions.

We too are surprised at the difference between our trial results and those obtained by Drs Raabe and Frankman, but we want to point out that, besides receiving detailed verbal and written instructions on the use

of C-Film, our patients were given a demonstration on how to insert the film.

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W BOUNDSFamily Planning Association,
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Disposal of disposable colostomy appliances

SIR,—In 1971 we published the results of a survey we had conducted into the problems of patients with permanent colostomies following resection of the rectum for cancer (14 August 1971, p 413). We then noted that 48% of the patients reviewed were using disposable appliances and many of these patients complained of difficulties in disposing of the appliances after use. Recently we have conducted a further study, this time of patients here in the Cleveland area. We find that now some 92% of colostomy patients are using disposable one-piece plastic appliances and many of them are having increasing difficulties in getting rid of the used appliances. Refuse collectors are reluctant to take fouled appliances away and indeed many patients are too embarrassed to use dustbins for this purpose. The full plastic appliances are difficult to burn, so that patients are increasingly resorting to a policy of puncturing or cutting the appliance to make it sink and then flushing it down the toilet.

However, this is not the end of the story. These appliances are virtually indestructible and when flushed into the local sewers they pass through the system intact and end up in the North Sea. Anyone walking along the beaches of North Yorkshire and Cleveland can now count many indestructible plastic stoma appliances with their contents almost intact at the high tide mark. Surely this is not the ideal place for us to dump these sequelae of modern surgical technology?

These used appliances represent both an aesthetic and a health hazard on our seashores, but they also represent the failure of many local authorities to provide the adequate disposal facilities which many stoma patients require in order to enable them to dispose of their excreta in a humane and socially acceptable way.

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Cleveland

Venous thromboembolism and anticoagulants in pregnancy

SIR,—In your leading article on this subject (22 November, p 421) emphasis is naturally first given to pulmonary embolism. However, I was sorry to see that no mention was made of the appalling morbidity which affects women who suffer deep vein thrombosis during pregnancy or the puerperium—namely, the subsequent development of the postphlebotic limb syndrome.

The diagnosis and treatment of deep vein thrombosis is of primary importance in the prevention of pulmonary embolism. The prevention of the development of a deep vein thrombosis is essential to spare the patient years of suffering from oedema, pain, eczema, and ulceration and the likely development of a subsequent deep vein throm-