the fact that death is usually due to acute arrhythmia rather than pump failure points to (fresh) ischaemia as the cause. Lowering of blood pressure may be the actual mechanism responsible for initiating this. However, increased blood viscosity and platelet adhesiveness could well raise the threshold of blood pressure which is operative.

K G GREEN

ICI Pharmaceuticals Division,
Macclesfield, Cheshire

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Preventive genetic registers

SIR,—It was with great interest that I read the leading article (27 January, p 215) on registers for the prevention of genetic disease. You are clearly anxious that such a register should have an acceptable image, so that it will be widely used. I agree that such a register could be a valuable aid in reducing suffering associated with genetic disease, but feel that if suffering is to be genuinely reduced, rather than changed, certain questions must be taken into consideration.

You point out that discovering that one carries such a gene is distressing and that support should be available. The painful ramifications of discovering such a fact before or after one gets married, or of discovering, after one has had a handicapped child exactly which parent "caused" the disease are indeed distressing.

Not every carrier of genetic disease is destined to produce affected children, especially in a society where families are small; so a fair amount of this suffering would be needless, as also the suffering associated with having some healthy, and wanted, boy children aborted. I would like to think that the process suggested would not be initiated unless there was clear evidence that support was available to the person in question, or he or she had asked for it.

The other question concerns the freedom of the parents to decide whether or not to have a child, or an abortion. "There but for the grace of God go I" is not a phrase that comes easily to the mind of the common man. Already parents of handicapped children find themselves isolated from a rather critical society. This can only get worse if it becomes generally known that they could have found out and had the child aborted. It is one thing to worry about having to look after a handicapped child but quite another matter to discover that it is "me and him" against the rest of society, as so often happens. So people are being forced by social pressure to opt for sexing and abortion, while society leaves them to take the responsibility.

Finally, taking up the point that the frequency of these genes in the population would increase, I must ask what you mean by prevention. I thought that it had to do with the elimination of the cause of the disease, in this case a gene. Some responsible and intelligent

adults, faced with accurate information about their carrier status and appreciating the problems of carriers as well as affected children, will limit their families accordingly. Others, having had an affected child, feel little inclination to have more of the same. If nothing else were done, the gene frequency would decrease, and the small number of affected children born should be accepted by all as an inevitable, unalterable fact of life. What seems to be suggested here is that we solve our immediate problems regarding the care of children handicapped by hereditary disease by, quite literally, passing them on to our children.

T VAN DEN BERG

London N6

Severe hyponatraemia in hospital inpatients

SIR,—Dr P G E Kennedy and others (13 January, p 122), in replying to correspondence about their paper (4 November 1978, p 1251), criticise our letter of 9 December (p 1640). We gave three references¹⁻³ which cited evidence for water intoxication on the basis of appropriate biochemical tests. We feel it may be appropriate for us to quote from one of these references.³ "With euvoalaemia, hyponatraemia and hypertonic urine, inappropriate anti-diuretic hormone excess was diagnosed. The patient's fluids were restricted, but after 24 hours without improvement 5% saline and frusemide were given. This therapy resulted in dramatic improvement. Upon correction of the hyponatraemia the patient's electroencephalogram reverted to normal. Follow up one year later revealed a functional, active female with no neurological symptoms or signs." Dr Kennedy and his colleagues feel that management of this patient "may possibly have been a disadvantage." Clearly our objectives about patient management are different from theirs.

Kennedy *et al* in their paper of 4 November placed their diuretic-treated group of patients into the "depletional" group of hyponatraemia, but now in their letter of 13 January suggest that this may be "dilutional." They have no evidence to substantiate their placing this group of patients in either depletional or dilutional categories. They either disregard other mechanisms suggested (Dr C T G Flear *et al*, 9 December, p 1640) or do not consider other pathogenic mechanisms which may be involved.⁴

It has been suggested that serum sodium concentration is routinely measured in almost every hospital patient, being of value in only a minute proportion of these cases.⁵ It is not surprising therefore that hyponatraemia has been associated with a wide variety of clinical conditions. This is often difficult to interpret because in many instances it is multifactorial, and indeed the pathogenic mechanisms involved are not yet fully agreed on. We feel that this is often an epiphenomenon in otherwise ill patients. It is fortunate, however, that in many of these cases specific therapeutic intervention is rarely required. But when primary sodium and water disturbances do lead to encephalopathy then therapeutic measures may be undertaken only following appropriate biochemical tests on blood and urine.

From their selected group of hyponatraemic patients Kennedy *et al* still cannot justify their final conclusion that "Analysis of blood and

urine was of no value in distinguishing the different diagnostic groups in an emergency."

S JAVED IQBAL
P J OJWANG

Department of Biochemical Medicine,
Ninewells Hospital,
Dundee

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Doctors, physiotherapists, and placebo pharmacology

SIR,—I appreciate the critical interest in my paper (23-30 December, p 1761). Some correspondents (3 February, p 341) wondered whether our seminar was very local and atypical of physiotherapists generally. The members came from all over London—all except two from different hospitals. I ask only the scientific status of travellers' tales for our findings, pending more careful and extensive explorations. We are convening another seminar with a different leader and recruits would be welcome. Inquiries should be sent to me please.

The paper was exceedingly condensed and meant chiefly to awaken doctors to the way they use physiotherapists. It would require a book to do justice to the subject and to the questions raised in letters. The book is written and awaits an imaginative publisher out to lose money.

S BOURNE

Tavistock Clinic,
London NW3

Cimetidine and duodenal ulcer

SIR,—We are appalled by the suggestion of Dr V W M Drury (10 February, p 410) that cimetidine should be used as a diagnostic rather than a therapeutic drug in the management of duodenal ulcer disease and symptomatic reflux oesophagitis. Many reports have shown that it is virtually impossible to diagnose accurately the cause of upper abdominal pain from the patient's history and physical signs, and cimetidine is not in any way a specific test, relieving as it does symptoms caused by duodenal ulcer, duodenitis, gastric ulcer, gastritis, and peptic oesophagitis. In addition, any form of treatment may have a placebo effect on abdominal pain, at least in the short term.

Much more dangerously, a number of cases have been reported¹⁻⁴ when carcinomatous or lymphomatous gastric ulceration has partially or totally healed endoscopically with complete symptomatic relief during cimetidine treatment, with consequent delay in appropriate surgical management. A patient whom we have recently seen serves to emphasise this point.

A 35-year-old man developed dyspeptic symptoms with epigastric pain as the principal complaint. Over 18 months he had three separate month-long courses of cimetidine with the first two providing complete symptomatic relief. He was investigated when the third course failed to relieve symptoms and was found to have a gastric lymphoma requiring extensive surgery and radiotherapy.

Unfortunately the course that Dr Drury has advocated is already being widely followed