nancies at 16-18 weeks' gestation should be done routinely.

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¹ Beard RW, Steer PJ. *Br Med J* 1977;iii:516-7.
² Anonymous. *Br Med J* 1976;ii:729-30.

Idiopathic oedema

SIR,—Dr G MacGregor responds to a query on idiopathic oedema (26 June, p 1937) with recommendations about the management of a patient whose oedema is related to the use of diuretics. Many cases of idiopathic oedema, however, do not fall into this category.

In this practice in the last six months I have identified 10 patients, all women (age range 19 to 55 years), suffering from idiopathic oedema. Only one patient seems to fit into the diuretic-use class, while the other nine were consistent in having a long history of inflammatory disease of the urinary tract with renal pain and tenderness. Three of these patients had been given diuretics for symptomatic treatment. Despite their chronic and troublesome urinary symptoms, they did not usually have significant bacteriuria. Indeed, this group of nine patients had had 45 recorded urinalyses between them, and only two showed significant bacteriuria.

If your inquirer's patient falls into this class of idiopathic oedema, I would suggest that a full urological examination should be undertaken, with the hope that a remediable surgical condition might be brought to light. Urethral stenosis should be specifically looked for. Even in the absence of significant bacteriuria, it is worthwhile trying in succession the usual urinary antibacterials in usual doses and then if necessary low-dose long-term cotrimoxazole or nitrofurantoin. The degree of oedema and other symptoms in these cases is closely related to one's success in controlling the renal symptoms.

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Anxiety caused by a short-life hypnotic

SIR,—On 27 March, (p 942) Mr K Morgan and I briefly reported that 21 middle-aged poor sleepers became on average steadily more anxious when taking triazolam 0.5 mg nightly, the change being significant by the third week. Our report has been doggedly assailed by Group Captain A N Nicholson and his colleagues (12 June, p 1785, and 17 July, p 215). They ingeniously propose that poor sleepers given placebos might rate themselves steadily more anxious. No supporting evidence is offered. Yet my colleagues and I had reported on 100 middle-aged poor sleepers who took "sleeping pills" for 32 weeks (20 March, p 860). Twenty-five people actually got placebos throughout, and with no effect on daily self-rated anxiety.

On 10 July (p 99) Group Captain Nicholson and Mr M B Spencer then took to task Dr H Petrusson and Professor M H Lader on the grounds that when assessing benzodiazepine effects the latter authors had neglected adequately to take account of the benefits of practice upon task performance.¹ It had been

in the week prior to the sending of the first letter by Group Captain Nicholson and colleagues that I had had occasion elsewhere to criticise the design of some research by Group Captain Nicholson because of, among other things, the very fault he sees in Petrusson and Lader's paper. It was in the same week too that BBC Television had been preparing a programme critical of triazolam. I made a recording for the BBC, and so did triazolam's champions. The Food and Drug Administration, I understood, were soon to consider the manufacturers' formulation of triazolam in a 0.5 mg dose for use in the USA.

Time will reveal whether others confirm what Mr Morgan and I described. Already, however, there is a report showing that triazolam 0.5 mg nightly for a single week makes people abnormally alert by day compared with placebo intake.² Enhanced anxiety would readily explain the overalertness.

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¹ Petrusson H, Lader MH. *Br Med J* 1981;283:643-5.
² Dement W, Seidel W, Carskadon M. *Sleep* 1982;5: S28-S45.

*.*This correspondence is now closed—ED,
BMJ.

Cardiac arrhythmias in the elderly

SIR,—Recent discussion about cardiac arrhythmias in the elderly by Drs G S Rai and I M Wadiwala (19 June, p 1877) has raised a number of interesting points. Many studies have shown that transient cerebral ischaemic episodes could be caused by bradyarrhythmias,^{1,2} tachyarrhythmias,²⁻⁴ or both.⁵⁻⁸ In these studies, however, the arrhythmias that gave rise to symptoms were comparatively severe. In our own studies we have taken bradycardias of less than 40/min and tachycardias of greater than 140/min for at least three seconds. The vast majority of our symptomatic patients had arrhythmias well outside these limits. In our experience bradyarrhythmias (two-thirds) are more likely to cause symptoms than tachyarrhythmias (one-third). In a recent paper Rai⁹ compares all abnormalities on 24-hour tapes in both symptomatic and asymptomatic groups—for example, occasional ectopic beats, which were between 25% and 30% of the arrhythmias in each group. We would agree that minor abnormalities are common in virtually all elderly patients. Profound bradycardia or tachycardia is, however, significantly more common in symptomatic as compared with asymptomatic patients.^{6,7}

It is very difficult in elderly patients, particularly when the patients are not being observed during the 24-hour recordings, to relate arrhythmias to symptoms. The patients who have severe arrhythmias, particularly those leading to unconsciousness or falls, may have retrograde amnesia for the event. There may be no warning associated with the episodes: they therefore do not push the event button on the recorder, and in our experience are extremely poor at reporting events. We have shown, using telemetry and an arrhythmia monitor with alarm and signal storage device with automatic rapid electrocardiograph writer, that it is possible with inpatients to relate arrhythmias

to symptoms. This technique is too costly and time consuming to be applicable in the majority of patients with transient symptoms, particularly if infrequent.

The vital question requiring investigation therefore is what sort of arrhythmias, and of what severity, have a high chance of being responsible for the transient cerebral phenomena of which the patients complain?

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¹ McAllen PM, Marshall J. *Lancet* 1973;ii:1212-4.
² Abdon NJ, Malmcrona R. *Acta Med Scand* 1975; 198:455-61.
³ Barnes AR. *Am J Med Sci* 1926;171:489-95.
⁴ Walter PF, Reid SD, Wegner NK. *Ann Int Med* 1970;72:471-4.
⁵ Van Durme JP. *Am Heart J* 1975;89:538-54.
⁶ Goldberg AD, Raftery EB, Cashman PMM. *Br Med J* 1975;iv:569-70.
⁷ Levin EB. *J Am Geriatr Soc* 1976;24:516-21.
⁸ McCarthy ST, Wollner L. *Lancet* 1977;ii:202-3.
⁹ McCarthy ST, Wollner L. *Royal Society Medicine International Congress and Symposium Series* 1981; 44:25-8.
¹⁰ Rai GS. *Age Ageing* 1982;11:113-5.

Haemofiltration for profound dialysis-induced hypotension: removal of sodium and water without blood-pressure change

SIR,—We read with interest the paper by Dr Alex M Davison and others (10 July, p 87) reporting the successful alleviation of intradialytic cramps, angina, and hypotension by haemofiltration. This, the first paper on haemofiltration to be published from the UK, is important as it could be a trend setter for the future. For this reason we cannot allow it to pass without some critical comment of the authors' interpretation of their therapeutic success.

Hypotension, muscle cramps, and even angina are not uncommon symptoms experienced during haemodialysis, and it is generally accepted, as it is by the authors, that hypovolaemia is an important but not exclusive cause. Fluid removal is an important objective of haemodialysis and is achieved by ultrafiltration. Surprisingly little attention has, however, been given to careful monitoring of ultrafiltration rates during conventional haemodialysis; sequential ultrafiltration-haemodialysis; and bicarbonate dialysis. This is exemplified by the paper of Dr Davison and others, which gives no precise details while using techniques which cannot possibly operate as they imply. Thus the theory of sequential ultrafiltration-dialysis is to remove solute and water initially by convection and subsequently to dialyse with zero ultrafiltration and thus zero fluid removal. They report the use of a Gambro 1.36 m² dialyser for this procedure, failing to note that it is impossible to dialyse without ultrafiltration with a flat-plate dialyser (which has "floppy" membranes), particularly with this surface area and membrane porosity. Their claim for sequential ultrafiltration and dialysis with zero ultrafiltration is therefore untenable without supporting evidence. Similarly, the use of the Redy system with a large surface area dialyser means that there was unmonitored obligatory ultrafiltration during bicarbonate haemodialysis. We submit therefore that during each of the dialysis procedures described fluid was being removed from these patients at unknown rates which could have been excessive.

A critical difference introduced by haemofiltration is that because of the large volumes (more than 20 l) of fluid removed during this procedure, the rates of fluid removal and re-infusion must be carefully monitored. Net fluid removal therefore takes place in a "linear" manner

throughout the procedure. We suggest that it is this fact rather than haemofiltration itself which may be the key to their success.

We have recently had a 57-year-old patient comparable to the two described by Davison and others in that he experienced precipitous hypotension and angina during routine acetate haemodialysis. A dramatic improvement occurred when he was dialysed against bicarbonate-buffered dialysate. Ultrafiltration rates had, however, been carefully controlled by regular weighing and adjustment of transmembrane pressure during the first bicarbonate dialysis. Noting this, we carried out a limited single-blind study of acetate versus bicarbonate dialysis, obsessively monitoring fluid removal rates. We confirmed that his symptoms related directly to high rates of fluid removal during haemodialysis and not to the type of buffer used. This patient now pays close attention to his fluid removal rates and is asymptomatic on acetate haemodialysis.

Control of ultrafiltration rates is at present a very labour intensive exercise requiring obsessional attention to sequential weighing during dialysis. Although long overdue, machines which monitor ultrafiltration rates automatically and continuously are now available. The availability of such equipment means that for the first time precise monitoring of fluid removal rates will be possible. We submit that this will allow critical appraisal of the effects of fluid removal on the incidence of hypotension, cramps, etc during dialysis.

In conclusion, we would suggest that what Dr Davison and others are reporting is not some special advantage of haemofiltration but a demonstration that careful and meticulous monitoring of fluid removal rates can eliminate the symptomatic consequences of uncontrolled ultrafiltration. Haemofiltration is expensive and should not be entertained for the wrong reasons. Conventional haemodialysis with proper control of fluid removal may be just as effective and is likely to be much cheaper.

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Electronic bed wetting alarm and toilet trainer

SIR,—I read with interest the report on the use of this new device for the treatment of enuresis (3 July, p 22). I have been using it in an enuresis clinic now for eight months and can confirm its effectiveness, convenience, and acceptability to the patient.

I would like to point out that the quoted success rate for use of buzzers of over 80% by Meadow¹ was achieved with regular supervision and support. It is quite possible that this success rate does not occur with buzzers issued without this help—this is our own experience. The time taken to achieve dryness, up to eight months, does suggest the need for some encouragement. A regular follow-up is necessary to be able to evaluate problems and identify failures. The alarm is unacceptable to some older boys who realise that the pads are also used as sanitary towels.

Enuresis alarms are sometimes requested and given to young children, which they find frightening or which may fail to wake them. This increases the sense of failure and makes it more difficult to present an alarm as a solution later on. Guidance about when to use an alarm is necessary to prevent these problems occurring.

Although physical disease is uncommon in cases of enuresis, it should be excluded as conditions causing enuresis may affect the

health of the child. It is also important to reassure the family that there is no organic disease. There are often considerable emotional problems—anxiety, a sense of failure, and poor relationships—which need help by explanation and support.

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¹ Meadow R. *Br Med J* 1977;ii:1073-5.

Severe hypoglycaemia due to combined use of parenteral nutrition and renal dialysis

SIR,—We read with interest the paper on "Severe hypoglycaemia due to combined use of parenteral nutrition and renal dialysis," (3 July, p 9). We would like to congratulate the authors on the successful outcome of their difficult case. We have not encountered this problem in acute renal failure using 500 to 750 ml of 50% dextrose solution daily mixed with an appropriate amount of soluble insulin. When the infusion is continued during dialysis we deliver it distal to the dialyser. In addition our haemodialysis fluid contains 11.1 mmol/l (200 mg%) dextrose. Did the authors infuse their dextrose solution proximal to the dialyser?

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*.*We sent this letter to the authors, one of whom replies below.—Ed, *BMJ*.

SIR,—In reply to the points made by Dr R Ahmad and Dr H J Goldsmith, it has never been our policy to deliver parenteral nutrition solution during haemodialysis since a substantial wastage of dextrose and amino-acid by diffusion into the dialysis fluid has been noted. We would agree with the insinuation that the hypoglycaemic episode could have been avoided had dextrose been present in the dialysing fluid. At the time of the hypoglycaemic incident described haemodialysis fluid in Aberdeen contained no dextrose, but recently it has become a routine additive.

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The health visitor and prevention

SIR,—Shirley Goodwin in her defence of the role of the health visitor (17 July, p 182) points to the assessment and screening of young mothers and their infants; the absence of mention of postnatal depression indicates health visitors' lack of concern with psychiatric disorder.

This matter was recently again brought to my attention when I was asked to see a woman two months after the birth of her second child. I had first treated the patient three years previously when after the birth of her first child she developed a puerperal depression of sufficient severity as to require electric convulsion treatment. She told me that although the health visitor knew of her previous psychiatric illness no questions had been asked about her mental health following the birth of her second child.

Although anecdotal, this experience underlines the statement made by an Edinburgh group of research workers that postnatal depression, although common and very disruptive to the health of the patient and all her family, is widely ignored by midwives, general practitioners, and health visitors.¹ The Edinburgh group also point out that it must be the task of psychiatrists to improve this situation.

On 20 to 23 July the inaugural meeting of the Marcé Society took place in London. This society has been formed to promote the study of pregnancy-related emotional and psychiatric disorder. It is to be hoped that it will not confine its role to discussion and debate of research findings but will also give clear guidance to all who work in the maternity services.

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Response of patients to upper gastrointestinal endoscopy: effect of inherent personality traits and premedication with diazepam

SIR,—The report by Mr M J Webberley and Professor A Cuschieri (24 July, p 251) sets out to examine the relation between neuroticism and the need for what they call premedication for upper gastrointestinal endoscopy. Their conclusions are unlikely to surprise any practising endoscopists, but the design of the study was so muddled as to make even these statements of dubious value. It is important to distinguish clearly between premedication and sedation for endoscopic and other potentially unpleasant investigations and treatments. Premedication describes the use of drug treatment given some minutes or hours before the procedure, while it is sedation that is achieved by the use of intravenous diazepam given at the time of endoscopy. Since this distinction is not made, the time relation between so-called premedication and the procedure is unknown and comments about the need for "premedication" are of little practical value.

I have studied patients' reactions to endoscopy in an open-access general practitioner endoscopy unit. Using a premedication of 2.5 to 5 mg of lorazepam given 90 minutes before the procedure, pharyngeal anaesthesia and sedation with intravenous Diazemuls (diazepam emulsion) of 10 to 60 mg immediately before intubation with a Fujinon FG-QBF instrument, I have recorded patients' recollection and appreciation of the discomfort of the procedure and their willingness to undergo it a second time.

In 80 consecutive endoscopies the examination could not be performed in three patients who despite large doses of intravenous diazepam would not tolerate the presence of the instrument. Only two of the remaining 77 patients who were submitted to endoscopy had any accurate recollection of the procedure despite the fact that several patients appeared during endoscopy to be sufficiently interested to want to look down the gastroscope. None of these 77 patients complained that the procedure was unpleasant, and none of them when asked said they would object to its repetition.

The aims of premedication and sedation in