effect and actively search for it, particularly as acceptable alternative hypotensive agents are available. It must be borne in mind that in Sainsbury's 1967 inquiry into consummated suicide 28% of the patients had been receiving hypotensive agents, including methyl dopa.³ Therefore a previous history of mental depression must continue to be accepted as a contraindication to the exhibition of methyl dopa.^{3,7}

It is interesting to note that in the clinicopathological conference reported in the same issue (1 September, p. 480) depression as a side effect of methyl dopa was not considered, though the patient became depressed while on methyl dopa. Senile melancholia is a "common early manifestation of lurking neoplasia," but it would have been reasonable to exclude methyl dopa, if not as the cause, at least as a precipitating or exacerbating agent.—I am, etc.,

D. PARIENTE

Napsbury Hospital,
nr. St. Albans, Herts

¹ Beck, A. T., *Depression*. London, Staples Press, 1967.

² Goldberg, D. P., *The Detection of Psychiatric Illness by Questionnaire*. London, Oxford University Press, 1972.

³ Slater, E., and Roth, M., *Clinical Psychiatry*, 3rd edn. London, Baillière, Tindall and Cassell, 1969.

⁴ Meyers, F. H., Jawetz, E., and Goldfein, A., *Review of Medical Pharmacology*, 3rd edn. Los Angeles, California, Lange Medical Publications, 1972.

⁵ *The Pharmacological Basis of Therapeutics*, ed. L. S. Goodman and A. Gilman, 4th edn. New York, Macmillan, 1970.

⁶ *Adverse Drug Reaction Bulletin*, 1968, nos. 8-13, p. 21 (reprinted); 1969, nos. 14-19, p. 42 (reprinted); August 1972, no. 35; June 1973, no. 40.

⁷ *Martindale's Extra Pharmacopoeia*, 26th edn. London, Pharmaceutical Press, 1972.

⁸ *Side Effects of Drugs*, vol. 6, ed. L. Meyler and A. Herxheimer. Amsterdam, Excerpta Medica Foundation, 1968.

Treatment of the "Irremediable" Elderly Patient

SIR,—I would like to add one more item to Dr. Bernard Isaacs's (8 September, p. 526) list of investigations which no elderly person should be denied—a hearing test by voice and audiometer. I believe that no assessment of the elderly patient, whether by a general practitioner or a consultant geriatrician, is complete unless this is done. Hearing loss in the elderly is exceedingly common, remediable, and frequently overlooked. The elderly person is not only more confused by problems of communication but also less able to co-operate with those who are responsible for his medical or social care.—I am, etc.,

R. BEAVER

Romford, Essex

F.D.P. Levels in Different Types of Intravascular Haemolysis

SIR,—The findings reported by Dr. S. D. Slater and others (1 September, p. 471) are not open to such simple interpretation as the authors imply, though one cannot at this stage deny that their ultimate conclusion is correct—namely, that fibrinogen-fibrin degradation product (F.D.P.) levels are raised in microangiopathic haemolytic anaemia but not when there is haemolysis due to a prosthetic valve. Two points cannot be ignored: the first that in microangiopathic haemolytic

anaemia there is inevitably impairment of renal function so that, in fact, some elevation of the F.D.P. level will be due to poor renal excretion of F.D.P., and secondly, that in any haemolytic anaemia of long standing reticuloendothelial hyperplasia may account for removal of fibrin by an alternative route.

In order to prove that microangiopathic haemolytic anaemia is associated with increased production of F.D.P., radiofibrinogen catabolism studies must be performed.¹ I think it is important to emphasize that fibrin can persist in vessels only when fibrinolysis is impaired as a result of prior damage to vascular endothelium (usually by immunological mechanisms). What is required is a study of fibrinolysis in microangiopathic haemolytic anaemia as compared with other types of intravascular haemolysis.—I am, etc.,

E. N. WARDLE

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Royal Victoria Infirmary,
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¹ Wardle, E. N., *Quarterly Journal of Medicine*, 1973, 42, 205.

Late Advertising of Hospital Posts

SIR,—In view of the recent correspondence in your columns about junior medical staff appointments in hospital, the following might be of interest.

Recently, a senior house officer post in our hospital group was advertised. Four applicants were asked to attend for interview, of whom not one turned up on the day, and none of whom either wrote or telephoned to say that he would not be attending. Comment is superfluous.—I am, etc.,

T. D. CULBERT

Manchester

Ileostomy and Colostomy

SIR,—A recently published news item on "Ileostomy and Colostomy" caught my eye, having had the latter condition for the past 12 years. On duly obtaining a copy of the booklet on colostomy¹ to which the news item drew attention I was quite astonished to find that the sole method recommended for controlling disposal of the excreta was the use of various forms of disposable plastic pouches.

Upon two occasions in the 12 years, because of two sharp attacks of enteritis, have I had to resort to such fussy and unpleasant methods; otherwise I have managed with a simple dressing pad maintained in position during the day by a simple belt (lightweight Aertex type in warm weather) with a zipped panel for ease of access, and a roll-on elasticized belt for nightwear. I am fully active and travel considerably on my professional duties but, like the ulcerative colitis patient, I do attempt to maintain a geographical knowledge of available toilet facilities in the vicinity of my peregrinations. Material for a spare pad is carried as a "first field dressing" in hip or poacher's pocket and with this can be incorporated a prepared stick-on pouch for complete ease of mind in the potentially difficult situation.

To refrain from mentioning this simple method, which must be in common usage, in a booklet entitled "The Care of Your

Colostomy" seems quite incredible and implies a life-time of unnecessary burden upon the unfortunate patient who is so advised.—I am, etc.,

R. L. MACPHERSON

Crowborough, Sussex

¹ Goligher, J. C., and Pollard, M., *The Care of Your Colostomy*, 2nd edn. London, Baillière Tindall, 1973.

Sick Sinus Syndrome

SIR,—A recent timely leading article on the sick sinus syndrome (23 June, p. 677) contains the observation that "symptomatic sinus node disease... implies disease of the conducting tissue beyond the sinus node." This contention cannot go unchallenged.

Electrophysiological studies of the sinoatrial node in man have not yet proved possible as adequate recording of sinoatrial nodal action potentials is not satisfactory unless the node itself is impaled.¹ Therefore the primary generator function of the P cells of the sinoatrial node and the existence of exit and/or entrance blockade between the P cells, transitional cells, and working myocardial cells which make up the sinoatrial node² can at present only be inferred in man. Major changes in heart rate are produced by suppression of one pacemaker site within the sinoatrial node and dominance of another.³ The complex interplay demonstrated in animals between the structures which compose the sinoatrial node suggest a converse aetiological hypothesis in this entity to that stated in your leading article.—I am, etc.,

J. H. HORGAN

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¹ Ferrer, M. I., *Circulation*, 1973, 67, 635.

² James, T. N., Sherf, L., Fine, G., and Morales, A. R., *Circulation*, 1966, 34, 139.

³ Hoffman, B. F., and Crane, P. F., *Electrophysiology of the Heart*, p. 127. New York, McGraw-Hill, 1960.

Antibiotics and Endotoxic Shock

SIR,—The letter from Professor A. Z. Shafei and Mr. W. S. Luka (7 July, p. 50) reporting the effectiveness of doxycycline, a bacteriostatic antibiotic, in the treatment of enteric fever and similar reports from Egypt on co-trimoxazole¹ provide practical confirmation of the views expressed many years ago by Reilly and his colleagues² at the Claude Bernard Hospital in Paris. They suggested that the initial failure to reduce the overall mortality from enteric fever following the introduction of chloramphenicol was due to the practice of beginning treatment with a "loading dose," which, by its very effectiveness in destroying typhoid bacilli, released a dose of endotoxin which, added to that already circulating in the blood stream, could prove fatal. He confirmed his thesis in a series of carefully conducted experiments on laboratory animals and at the same time showed that pretreatment with chlorpromazine in a dosage of 1mg/kg body weight effectively protected animals against the endotoxin released from typhoid bacilli destroyed by chloramphenicol.

Similar reasoning could be applied to the case of fatal endotoxic shock originating in the biliary tract following transhepatic cholangiography reported by Mr. M. R. B.

Keighley and others (21 July, p. 147). In this case a patient showing the clinical features of endotoxic shock had a positive blood culture for *Escherichia coli* which became sterile following vigorous antibiotic therapy, but with no apparent clinical improvement. Was this therefore an example of wholesale destruction of Gram-negative bacilli causing a fatal increase of blood endotoxin in a patient already in endotoxic shock? There is some agreement³ that, though antibiotics have reduced mortality from septic shock arising from Gram-positive organisms, the mortality from Gram-negative shock remains at 50%. Perhaps some improvement could follow a more subtle approach to treatment of endotoxic shock by confining antibiotic therapy to bacteriostatic agents until the vasospasm which is such a prominent feature has been brought under control by vasodilator and intravenous therapy, using either massive doses of cortisone or small doses of chlorpromazine.—I am, etc.,

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London W.6

- ¹ Andrews, H., personal communication.
- ² Reilly, J., Compagnon, A., Tournier, P., and Buit, H. du., *Annales de Médecine*, 1954, 55, 5.
- ³ Spink, W. W., in *Septic Shock in Man*, ed. S. G. Hershey, L. R. M. del Guercio, and R. McConn. Boston, Little Brown, 1971.

Symptomatic Hypomagnesaemia after Parathyroidectomy

SIR,—Dr. C. T. A. Jones and his colleagues (18 August, p. 391) again draw attention to the rare occurrence of symptomatic hypomagnesaemia following parathyroidectomy for primary hyperparathyroidism with bone disease. Moderate but less sustained hypomagnesaemia is also frequent following parathyroidectomy in patients without overt bone disease. The hypomagnesaemia in this group of patients appears to parallel the degree of postoperative hypoparathyroidism.¹ Thus two factors may contribute to postparathyroidectomy hypomagnesaemia—remineralization of bone and transient hypoparathyroidism.

It is now well recognized that hypokalaemia and hyponatraemia do not necessarily reflect potassium and sodium deficiency. Equally, it may well be incorrect to use the terms hypomagnesaemia and magnesium deficiency interchangeably.² Since the body content of magnesium is unlikely to change significantly within a few days of parathyroidectomy, symptoms developing at this time are probably due to hypomagnesaemia rather than magnesium deficiency.

The mechanism of hypocalcaemia secondary to hypomagnesaemia is controversial, and unfortunately the data of Dr. Jones and his colleagues do not shed much light on this problem. Though the serum parathyroid hormone level (3.3 µg/ml, was well above normal at a time when the plasma levels of both calcium and magnesium were depressed postoperatively, it may not be justifiable to conclude that the hypomagnesaemia was the cause of the apparent refractoriness to parathyroid hormone. At this time, in the presence of actively remineralizing bone, hypocalcaemia and a raised parathyroid hormone level might be anticipated regardless of the patient's magnesium status. It would be of particular

interest to document the parathyroid hormone response to magnesium administration in this situation.—I am, etc.,

R. A. L. SUTTON

Whittington Hospital,
London N.19

- ¹ Sutton, R. A. L., D.M. (Oxford) Thesis, 1973.
- ² Sutton, R. A. L., *Journal of the Royal College of Physicians of London*, 1967/1968, 2, 358.

Femoral Artery Complications after Diagnostic Procedures

SIR,—Dr. T. N. Cowie (15 September, p. 588) has rightly stressed the importance of the site of puncture in performing percutaneous femoral artery catheterization. In a study of the effect of the site of puncture¹ we found that when the puncture site was within 0.5 cm of Poupart's ligament significant haemorrhage occurred in 13 of 16 punctures. No haemorrhage was found in 14 punctures made 2 cm or more below the ligament and it was negligible in the remaining two. The explanation of this difference in the incidence of haemorrhage is thought to be, firstly, the greater ease of control of the site when the puncture is made in the femoral canal, and secondly, the greater obliquity of the perforation of the artery when the skin perforation is lower in the thigh.

In controlling haemorrhage following the withdrawal of the catheter the incidence of thrombosis is reduced if the pressure on the artery is sufficient to stop bleeding but not so great as to occlude it. "The minimum pressure necessary to control haemorrhage" should be used.²

Our observations support those of Dr. John Bouhoutsos and Mr. Tom Norris (18 August, p. 396) and those of Dr. Cowie. The common practice of perforating the skin over the site of maximal arterial pulsation is a very bad one.—I am, etc.,

D. VEREL

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Northern General Hospital,
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- ¹ Verel, D., and Rickards, D. F., *Clinical Radiology* 1973, 24, 62.
- ² Verel, D., and Grainger, R. G., *Cardiac Catheterization and Angiography*, 2nd edn. Edinburgh, Churchill Livingstone. In press.

Detection of Hypertension in Childhood

SIR,—While reflecting, perhaps, that a diuretic may still be useful in the care of rheumatic heart disease, although it can scarcely be expected to have much effect on a tight mitral valve, we can all share some of Dr. J. F. Gordon's misgivings (15 September, p. 591) about "symptomatic treatment". But in applying this term to the management of essential hypertension in adolescents he reveals a formidable misapprehension of the manner in which such hypertension presents in the young. Not once in a hundred cases is it likely to have been suggested by any kind of symptom. Indeed, it is for this reason that treatment can offer no immediate benefit. Nor is the nebulous promise of a better and a longer life likely to appear very exciting to a vigorous young man of 20 who can scarcely be expected to appreciate that today's pills may well protect him in 30 years' time from the hazards of an alleged disorder that had never, until he learned of it, caused him a moment's discomfort.

But if we look at the whole development of hypertensive disability and death we can see how its course, whatever its aetiology, has been transformed, except in the important matter of occlusive complication,¹ by modern hypotensive therapy. Certainly it has to be admitted that the "complex morbid process", in Dr. Gordon's words, of secondary hypertensive vascular damage "cannot be totally avoided or healed". It is something, nevertheless, that such treatment commonly adds many years to life at every age for which it has so far been possible to make a valid appraisal. Surely, therefore, we can be forgiven for hoping that the same methods applied to the same condition may eventually prove to be of some value, despite obvious drawbacks concerning their application, in adolescents and even in children.—I am, etc.,

I. MCD. G. STEWART.

Victoria Hospital,
Blackpool

- ¹ Stewart, I. McD. G., *Lancet*, 1971, 2, 355.

Polyvinyl Chloride T-tubes

SIR,—I was interested to read the letter from Mr. D. J. Bouchier-Hayes (8 September, p. 543) on the subject of polyvinyl chloride (PVC) T-tubes and, in particular, the use of Portex tubes for biliary intubation.

Our own findings are very much in line with those reported—that is, that PVC tubes generally are not suitable for use because of their failure to promote a fistulous track and also because of the associated difficulty in their removal after 10 days. The latter fault is attributable to the "leaching out" of plasticizer from the tube by the action of body fluids and is a gradual process depending upon time and, we believe, individual patients. We have had reports on the one hand complaining of difficulty after only five days and on the other of trouble-free procedures after 10 days.

Our tubes have been described as "too inert" for this procedure, and some users have preferred the reaction they obtained from rubber tubes. It is ironic in this situation that your correspondent should have gone on to consider the aspects of toxicity, since it was work on this subject—undertaken several years ago now—which enabled us to produce such "inert" materials and which now appear to be unsuitable for T-tube manufacture. Though many people continue to use our PVC tubes, technical considerations point to further work being necessary in material formulation, and until this has been undertaken we have taken the decision to cease production of these tubes.

Finally, I would applaud Mr. Bouchier-Hayes's contention concerning the matching of standards to end use. Much useful work has been and continues to be done, and British Standards Committee SGMH/18 is particularly concerned at present with cardiovascular and neurosurgical implants. I might, perhaps, point out that tracheal stenosis is more popularly believed to be associated with high intra-cuff pressures and not the leaching of constituent materials, and our own work supports this view.—I am, etc.,

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