subsequently decreasing the dose according to the clinical response to achieve a maintenance level sufficient to suppress the signs of disease activity (usually 5-15 mg daily). If the response in the first 3-4 weeks is satisfactory we often then begin alternate-day rather than daily treatment. If there is no marked improvement in clinical signs or in the level of serum creatine kinase activity after two months of treatment with high doses of prednisone, then we add azathioprine 2.5-3 mg/kg per day in divided doses, adjusting the dose to lower the total lymphocyte count to about $1.0 \times 10^9/l$ (1000/mm³). In a few cases it is necessary to maintain high doses of both drugs for up to six months before significant improvement is obtained, though most patients respond much more rapidly. After two years we attempt to tail off the treatment very gradually indeed, following the clinical state and the serum creatine kinase activity. If after any reduction there is evidence of recrudescence of disease activity higher dose levels are reinstated; slow withdrawal is again attempted every year until the disease has burned itself out.

W G BRADLEY
JOHN N WALTON

Regional Neurological Centre,
Newcastle General Hospital,
Newcastle upon Tyne

- ¹ De Vere, R, and Bradley, W G, *Brain*, 1975, **98**, 637.
² Benson, M D, and Aldo, M A, *Archives of Internal Medicine*, 1973, **132**, 547.
³ Metzger, A L, et al, *Annals of Internal Medicine*, 1974, **81**, 182.

Routine preoperative chest radiography

SIR,—Mr A M Rees and his colleagues (29 May, p 1333) make a strong case for re-examining the usefulness of preoperative chest radiography. It is worth bearing in mind, however, that, of all the *post-operative* chest complications, embolism is probably the commonest and can be very difficult to diagnose. The clinical signs may be equivocal and the lung scan ambiguous. A recent preoperative radiograph of the chest is then of great help in assessing minimal and often subtle postoperative changes, enabling a firm diagnosis to be made and anticoagulant treatment started. This applies to young as well as to older patients.

GORDON EVISON

Bath, Avon

Treatment of metabolic alkalosis

SIR,—Dr S E Williams (15 May, p 1189) describes a treatment for metabolic alkalosis that involves cannulation of a central vein and infusion of dilute hydrochloric acid. There is a simpler and no less physiological method that is illustrated by the following case.

A 55-year-old man was admitted in oliguric hypovolaemic renal failure (plasma creatinine 640 mol/l (7.25 mg/100 ml)) and with a metabolic alkalosis (Cl 60 mmol/l; HC03 54 mmol/l). He was confused and agitated, with frequent involuntary jerking of his limbs. Vigorous fluid replacement was undertaken, plasma and normal saline with potassium supplements being used. Despite restoration of blood volume and correction of other electrolyte levels the serum chloride remained low (65 mmol/l at 24 h). The neuromuscular irritability persisted and he continued to be disorientated. A rectal infusion of 2 l of 5% calcium chloride was given over six hours. During this time he became

rational, the twitching subsided, and the serum chloride rose to 90 mmol/l. Subsequent investigation showed a carcinomatous obstruction and a bypass operation was done.

Continuous rectal infusion (proctoclysis) was introduced by J B Murphy in 1908, but its use has declined with the development of intravenous techniques. It is particularly suitable for treating hypochlorhaemia because differential absorption of chloride ion occurs across the colonic wall, with little retention of fixed base.¹ The infusion is easily set up and supervised by nursing staff, is not hazardous, a sepsis is superfluous, and isotonic fluids are not required. What more could one ask for?

I am grateful to Dr A M Davison, St James's Hospital, Leeds, for permission to report this case.

TIMOTHY CHAMBERS

Derbyshire Children's Hospital,
Derby

- ¹ Parsons, F M, Powell, F J N, and Pyrah, L N, *Lancet*, 1952, **2**, 599.

Prostaglandins in depression

SIR,—The report by Drs Georgia Nikitopoulou and J L Crammer (29 May, p 1311) that changes in body temperature occur during the depressive phase of manic depression, if confirmed, is of great interest. There is a distinct possibility that changes in cerebral prostaglandin (PG) levels may explain changes in temperature regulation and in neuronal noradrenaline and serotonin levels in depression.

PGs of the E series increase temperature by an effect on the hypothalamus.^{1,2} Thus a change in temperature regulation may indicate a change in hypothalamic PGE₂ content or altered hypothalamic response to PGE₂. PGE₂,³ and possibly PGF₂α are involved in the control of noradrenaline efflux from sympathetic nerves, and PGE₂ has recently been shown to inhibit noradrenaline and serotonin release from central neurones in the rat.⁵ Some time ago I suggested that prostaglandins might play a part in premenstrual depression.⁶ There is some evidence that prolactin may be involved in premenstrual depression⁷ and that some effects of prolactin may be mediated by PGF₂α.⁸ May I urge those with research facilities to investigate the role of prostaglandins in depression?

G M CRAIG

London SW16

- ¹ Vane, J R, *Nature New Biology*, 1971, **231**, 232.
² Stitt, J T, *Journal of Physiology*, 1973, **232**, 163.
³ Hedqvist, P, *Acta Physiologica Scandinavica*, 1970, suppl 345.
⁴ Brody, M J, and Kadowitz, P J, *Federation Proceedings*, 1974, **33**, 48.
⁵ Masek, K, and Kadlec, O, in *Advances in Prostaglandin and Thromboxane Research*, ed B Samuelsson and R Paoletti. New York, Raven Press, 1976.
⁶ Craig, G M, *Postgraduate Medical Journal*, 1975, **51**, 74.
⁷ Horrobin, D F, et al, *Postgraduate Medical Journal*, 1976, **52**, suppl 2, p 80.
⁸ Rillema, J A, *Nature*, 1975, **253**, 466.

Erectile impotence

SIR,—Your leading article on this subject (29 May, p 1298) overlooks a very important aspect of the problem. While it must be accepted that the entrenched and consolidated case of erectile dysfunction is often resistant to treatment, every case of impotence passes through a mild and usually readily reversible

stage. Unfortunately this stage is rarely presented to the general practitioner unless he consciously searches for it. The majority of doctors are disinclined to uncover a condition which they feel incompetent to treat. The nub of the problem is therefore inadequate medical education in the field of sexual dysfunction.

My involvement in this field is at several levels. Firstly, as a general practitioner I am aware of the need to be sensitised to the hint, however gentle or disguised, of sexual anxiety. I know from long experience that the chance of successful treatment at this time is very high. One needs to take a little time and trouble in sorting out the ramifications of the disability and not to rush in with a prescription for behavioural tasks. It is as easy to prescribe so-called Masters and Johnson's therapy as it is to write a prescription for drugs. Both can be very effective at the right time. Both can be harmful if carried out before listening, before understanding, before interpreting.

My second hat is worn at my weekly psychosexual problems clinic at the Newcastle General Hospital. Here I am being consulted by patients referred by general practitioners, gynaecologists, family planning doctors, physicians, etc. My success rate is lower in this setting and yet I know this is not because the patients are suffering from a more intractable form of dysfunction. It is only too obvious that many of them are images of the patients relatively easily treated in general practice but now at a more advanced stage of the condition.

And so my third hat is an educational one, both at an undergraduate level (where the new curriculum at Newcastle will contain significantly more teaching in the area of sexual dysfunction and at postgraduate level) where a group of about 40 doctors is involved in a two-year course on managing psychosexual problems. In both cases the emphasis is on early detection and comprehensive diagnosis.

ROLAND FREEDMAN

Newcastle upon Tyne

Cervical smears

SIR,—The article by Mr G Brindle and others (15 May, p 1196) on the selection of women for uterine cervical smears is timely.

In this region, out of 41 863 women examined for the first time under 25 years of age, only 3 per 1000 were found to have carcinoma-in-situ and there were only two cases of microinvasion. Occasional clinical cases have occurred in this age group, but the incidence is very low compared with that of the older age groups. The majority of the cases detected were in women attending ante- or post-natal clinics. The detection rate at ante-natal clinics was three times higher than at postnatal clinics. The high-risk women default from postnatal clinics.

The number of smears obtained from this under-25 age group increased threefold between 1966 and 1974, largely because of smears from family planning clinics. With the co-operation of the FP doctors smears are now taken only before a woman starts to take the contraceptive pill or has an intrauterine device fitted. Repeat smears are taken according to the normal routine.

To concentrate screening on the 40-year age group, where the yield is highest, would be ideal, but it is difficult to reach all of this group for the first time. The fact that this age group

was systematically covered largely accounts for the fall now occurring in the number of cases of cervical cancer in Aberdeen. In the interests of economy, and in the light of our knowledge of the high-risk groups, should the taking of smears not become part of all routine antenatal care? The majority of cases would then be detected before the high-risk patient had finished childbearing. Twenty years later a fall in the incidence of the disease could be predicted, a fall which will never happen if only the well women offering themselves for screening and rescreening are covered.

J ELIZABETH MACGREGOR

Cytology Unit,
University Department of Pathology,
Aberdeen

Psychological sequelae of therapeutic abortion

SIR,—While I agree with the general tone of your leading article on this subject (22 May, p 1239), your statement that "comparisons between those aborted and those refused have shown little difference" needs clarification. The studies you quote in fact show quite serious sequelae in those refused, even though these are presumably subjects thought sufficiently healthy to be able to cope with their pregnancy. Combining the figures of Pare and Raven,¹ Clark *et al.*,² and Hamill and Ingram,³ 285 out of the sample of 597 were refused termination. Of those refused, 103 aborted (36%) and only 115 finally kept their baby (40%). Of 73 women who continued their pregnancy, Pare and Raven found that at follow-up 34% still regretted that termination had not been performed, while Clark *et al.* found that 7 out of 93 women who had been refused termination were mentally worse at follow-up compared with only one out of 111 whose pregnancy had been terminated.

It should be borne in mind that these figures are likely to under-estimate morbidity, since those who dropped out of follow-up are likely to have been the more unstable and these were almost entirely in the refusal group. Thus it is important that fear of psychological as opposed to physical sequelae should not restrict referral for abortion on psychological grounds.

J KELLETT

Department of Psychiatry,
St George's Hospital Medical School,
London SW17

¹ Pare, C M B, and Raven, H, *Lancet*, 1970, **1**, 635.

² Clark, M, *et al.*, *Lancet*, 1968, **2**, 501.

³ Hamill, E, and Ingram, I M, *British Medical Journal*, 1974, **1**, 229.

Effects of legal termination on subsequent pregnancy

SIR,—Mr J A Richardson and Professor G Dixon (29 May, p 1303) state that some patients referred to them from pregnancy advisory centres ask that their general practitioners should not be informed of their referral. They believe that "it seems reasonable to assume that these patients will not admit their termination during a future pregnancy."

As medical officers in the pregnancy advisory service from which these patients will have been referred we would like to make three points. (1) A patient's request that her GP should not be informed is infrequent and is not accorded to lightly. (2) All patients are told the

risks of termination to subsequent pregnancies and if it is agreed that the GP is not to be informed the importance of telling a subsequent obstetrician is stressed. (3) Patients who request that their GP should not be informed about termination sometimes make the request not because they wish to withhold the information from their doctor but because they fear that the information will become available to secretaries and receptionists.

We feel that there is no evidence that these patients will withhold the information from an obstetrician during a subsequent planned pregnancy.

RUTH E COLES
BERYL TULLY

Brook Advisory Centre (Avon),
Bristol

Flupenthixol for depression

SIR,—The letters from Drs J M Kellett and J P R Young (5 June, p 1405) highlighted fundamental differences in the models of depressive illness that are in current use.

I suggest that the presence or absence of "biological symptoms" in a patient complaining of depression is only one of many factors to be considered when making the diagnosis. Many patients with clearcut manic and depressive episodes, which make the diagnosis beyond reasonable doubt, do not show the biological disturbances of the classic syndrome of endogenous depression. In addition, many patients who are "dissatisfied with life" have "biological" complaints such as loss of libido or appetite.

Like Dr Kellett, I would like to know if flupenthixol is a useful alternative to amitriptyline for those patients who make a specific response to tricyclic antidepressants.

J H DOWSON

Seymour Clinic,
Swindon

Methysergide ineffective in spasticity

SIR,—Recent observations^{1 2} have suggested that L-5-hydroxytryptamine (5-HT) is a neurotransmitter in man. It seemed possible that spasticity could be due to pathological over-activity in neuronal systems using 5-HT as a transmitter. Since methysergide is a 5-HT antagonist a small open trial was conducted to assess whether this drug would reduce spasticity.

Informed consent was obtained from a small number of patients suffering from spasticity in the legs, due to various pathological processes, which had not responded to therapy with conventional agents. Spasticity was assessed by clinical examination at the knee joint and of gait. (In view of the negative results in this pilot study plans to measure spasticity quantitatively were abandoned.) Methysergide was given orally in an arbitrary dosage of 1 mg thrice daily for three weeks. No patient was taking other drugs known to affect

tone during this period. The patients had been selected carefully to ensure that there had been a fairly constant degree of spasticity for several months before the trial. This was therefore an uncontrolled trial.

The results are shown in the accompanying table. It can be seen that methysergide in the oral dosage used here had no significant effect on spasticity and did not benefit the patients. No side effects were encountered. Methysergide is therefore no substitute for the drugs currently available for the treatment of spasticity. One has to admit that this was a very small trial and that there was a rather varied pathology present. In view of the negative findings it would seem unlikely that the spasticity was due to an over-active 5-HT system, although this conclusion is certainly open to doubt.

G M YUILL

Department of Neurology,
North Manchester General Hospital,
Manchester

¹ Lhermitte, F, Marteau, R, and Degos, C F, *Revue Neurologique*, 1972, **126**, 107.

² Van Woert, M H, and Vimalah, S, *Neurology*, 1975, **25**, 135.

Homoeopathy

SIR,—Your issue of 15 May (p 1217) contained a review of Dr Margery Blackie's recent book, *The Patient, Not the Cure*.

The reviewer, trained presumably as an objective scientist, states: "The book makes it quite clear what rubbish homoeopathy is intellectually." This observation is made without any apparent clinical knowledge or experience of the discipline and so is surely a complete denial of objectivity. How can the reviewer explain away the physical benefits for patients in the five hospitals in Britain where homoeopathy is practised and the availability of its materia medica on prescription from general practitioners using homoeopathy within the NHS?

The increasing interest among veterinary colleagues is apparent in their membership of the Faculty of Homoeopathy. Farmers are very practical people; when their sick animals are improved and cured (as does happen) by homoeopathy, would your reviewer explain this to the farmer as being due to some charisma of the veterinary practitioner over the animal—or some mystical means of preparation of the medicine?

C K ELLIOTT

Royal London Homoeopathic Hospital,
London WC1

Oral lesions in tuberculosis

SIR,—I read with interest the case report by Mr P G McAndrew and others (29 May, p 1320) and would like to emphasise a number of points.

Although it is now a much less common disease in Britain, patients are still presenting with tuberculosis in late stages.¹ The lesions are now less easily recognised as they can mimic

Patient	Age (yrs)	Diagnosis	Features	Result of therapy
1	59	Multiple sclerosis	Spastic paraparesis	Doubtful benefit
2	53	"	"	No change
3	71	Cervical spondylosis	"	No change
4	32	Jamaican neuropathy	"	No change
5	69	Cervical spondylosis	"	No change
6	67	Cerebrovascular disease	Left hemiparesis	No change