and wasted the time and energy of those who have sat on the appropriate committees.

The appointment of consultants within the NHS has always been done by very responsible committees containing representatives of all interests and with outside observers. No doubt the occasional mistake has been made but on the whole the appointments committees have done their work well and efficiently. I know that the EEC suggests the need for some sort of specialist registration, but surely the appointment of a consultant under the NHS can be made the equivalent of specialist registration without the need for some lower grade of registration which does not carry consultant rank.

The establishment of training programmes has been an additional millstone round the neck of our young doctors for which the medical profession must be held responsible—we created it and should now abolish it.

S OLEESKY

Manchester Royal Infirmary,
Manchester

Megaloblastic anaemia associated with sulphasalazine treatment

SIR,—We were interested in the comments of Dr M C Bateson (16 July, p 190) on our report of a case of megaloblastic anaemia associated with sulphasalazine treatment (25 June, p 1638). We are, however, unable to accept his two criticisms.

Although the microbiological serum folate assay is invalidated by some antibacterial agents, we have not been able to find any evidence that this applies to sulphonamides. The two references quoted by Dr Bateson^{1,2} also do not refer to invalidation of the assay by sulphonamides. The first does not mention such interference at all and the second describes depression of serum folate by co-trimoxazole due to interference with the microbiological assay but shows that this is due to the trimethoprim component. This is supported by Streeter *et al.*,³ who showed that co-trimoxazole interfered with the assay but that sulphadimidine and sulphafurazole did not. Sulphasalazine contains sulphapyridine but no other antibacterial agent.

Dr Bateson's second point was that our patient might well have suffered from pernicious anaemia and not from folate deficiency. However, the serum vitamin B₁₂ level (200 ng/l) was not in the pernicious anaemia range. Moreover the Schilling test was normal and no antiparietal cell or anti-intrinsic factor antibodies were found. To date the patient, after cessation of treatment with sulphasalazine and folate repletion, remains well with a haemoglobin concentration of 13.6 g/dl and with no neurological complications. Therefore we still maintain that folate deficiency induced by treatment with sulphasalazine was the most likely cause of his short-lived megaloblastic anaemia.

R SCHNEIDER

St Margaret's Hospital,
Birmingham

L BEELEY

Department of Therapeutics and
Clinical Pharmacology,
University of Birmingham

¹ Herxheimer, A, *Journal of Antimicrobial Therapy*, 1975, 1, 346.

² Bateson, M C, Hayes, J P L A, and Pendharkar, P, *Lancet*, 1976, 2, 339.

³ Streeter, A M, Shum, H Y, and O'Neill, B J, *Medical Journal of Australia*, 1970, 1, 900.

Management of the elderly agitated demented patient

SIR,—Dr G Silverman's letter (30 July, p 318) is a useful contribution to this most common problem in hospital and domiciliary geriatric practice.

Before embarking upon powerful drug therapy it is, of course, necessary to exclude physical causes of restlessness. Pain is, in my experience, poorly located by the demented. A quiet demented can go wild owing to a scybalous rectal impaction. I have also seen a screaming demented cured by the removal of a foreign body from the ball of the foot. I have seen fissure in ano and myxoedema madness present in a similar fashion.

In this hospital we find that this group of patients, whom we sometimes call the "wild wanderers," respond best to a combination of haloperidol and lorazepam. These two drugs together appear to be synergistic and in relatively small doses, such as 3 mg haloperidol and 1 mg lorazepam thrice daily, usually control the wildest wanderer.

This combination in larger doses converts the patient to a state of immobility almost statue-like by inducing Parkinsonism, which controls the wandering but interferes with food ingestion. This type of drug-induced Parkinsonism is remarkable for its rapid reversibility, provided the larger dose is reduced promptly. Withdrawing the drugs results in almost complete reversal of the Parkinson state within 48 h. We normally give this combination of drugs with small amounts of benzhexol. It can thus be seen that this combination of drugs constitutes a safe and useful tool for the control of the elderly agitated demented.

W FINE

DAVID J WALKER

Newsham General Hospital,
Liverpool

Acute suppurative thyroiditis caused by *Pseudomonas aeruginosa*

SIR,—With reference to the recent report by Drs F Saksouk and I S Salti (2 July, p 23), of a case of acute suppurative thyroiditis caused by *Escherichia coli* we wish to report a case of acute thyroiditis caused by another Gram-negative bacillus—namely, *Pseudomonas aeruginosa*.

A 77-year-old woman with no previous history of thyroid disease was admitted with a 14-day history of sudden painful swelling of the left thyroid lobe associated with redness of the overlying skin, fluctuation, and fever of 39°C. There was a firm, fluctuating, tender mass 6.5 × 6.0 cm in the region of the left thyroid lobe with no lymphadenopathy in the neck. A sodium pertechnetate scan revealed the affected area to be "cold"; the uptake in the right thyroid lobe was normal. The pulse rate of the patient was 80/min, her leucocyte count 15.1 × 10⁹/l (15 100/mm³), and her erythrocyte sedimentation rate 119 mm in the first hour. Serum thyroxine, measured by radioimmunoassay, was 70 nmol/l (5.4 µg/100 ml) (normal range 52–181 nmol/l (4–14 µg/100 ml)) and the response (measured by radioimmunoassay) to 200 µg of thyrotrophin-releasing hormone intravenously was normal. Urine analysis showed bacteriuria and urine culture yielded a significant bacteriuria with *E coli* and *Proteus vulgaris*. Blood cultures were negative. Radiography of the neck showed the trachea to be shifted to the right but otherwise intact. Incision of the swollen area yielded grey-yellow pus which on culture grew *Pseudomonas aeruginosa*. Cytological examination of a preliminary thin-needle aspirate showed

necrotic cells and no signs of malignancy. Appropriate antibiotic therapy with penicillin led to rapid recovery. At the time of discharge from hospital nine days later the affected thyroid region was painless.

The case reported here differs in two respects from the patient described by Drs Saksouk and Salti. (1) We could not find the source of infection; this is very often the case, as shown in the recent review by Volpé,¹ and therefore hematogenous infection has to be assumed in spite of negative blood cultures. (2) The affected thyroid area was "cold" in sodium pertechnetate scanning, a frequent finding in acute suppurative thyroiditis; however, it cannot be excluded that thyroiditis occurred here in a predamaged area (cold nodule). Apart from these two minor differences our case is very similar to that of Drs Saksouk and Salti, showing Gram-negative bacilli to be a possible and maybe not so rare cause of acute suppurative thyroiditis.

We thank Dr Depisch for surgical incision of the affected thyroid area.

M WEISSEL

A WOLF

W LINKESCH

Department of Nuclear Medicine,
Second Medical University Clinic,
Vienna, Austria

¹ Volpé, R, *Pharmacology and Therapeutics*, part C, 1976, 1, 171.

Prolonged action of intramuscular naloxone

SIR,—In part II of their article on the effects of naloxone on pethidine-induced neonatal depression Dr P C Wiener and others (23 July, p 228) report a prolonged duration of action (48 h) of naloxone administered in a large intramuscular dose when compared to a smaller umbilical vein dose, and attribute this to increased milk consumption speeding up pethidine excretion. We wish to offer an alternative explanation for the longer duration of action of intramuscular naloxone.

Absorption from an intramuscular injection is highly variable and depends on a number of factors¹: the drug's lipid/water solubility at physiological pH, the concentration of the injected solution, the characteristics of the injection vehicle, the surface area of the drug available for diffusion, and the blood flow to the injection site. These factors may have played a role in forming a functional depot of naloxone which provided a "continuous infusion" of antagonist to counteract a steadily declining agonist load.

M A McGUIGAN

A A MITCHELL

Clinical Pharmacology Unit,
Children's Hospital Medical Center,
Boston, Massachusetts

¹ Greenblatt, D J, and Koch-Weser, J, *New England Journal of Medicine*, 1976, 295, 542.

Management of vesicoureteric reflux in children

SIR,—Dr David Edwards and his colleagues (30 July, p 285) have suggested that cystoscopic appearance is of less importance in determining the management of children with vesicoureteric reflux than the observation of normal renal growth without scarring. In my experience with over 200 children suffering