screening for amoebiasis in patients from endemic areas who may require systemic therapy with corticosteroids. The difficulties in screening such patients, especially those who are asymptomatic, have been emphasised recently.¹ This man's serology was positive for *E histolytica* just four days after the onset of symptoms of perforation, implying an immune response which antedated the acute event. We therefore suggest that screening of both faeces and blood for evidence of amoebiasis is desirable in this group of patients.

A J GIJSBERS JOHN A MILLAR
K O'SULLIVAN N M THOMSON
JOHN P DOWLING D SCOTT

Prince Henry's Hospital,
Melbourne,
Australia

¹ Krogstad, D J, Spencer, H C, jun, and Healy, G R,
New England Journal of Medicine, 1978, **298**, 262.

Homes for tuberculous homeless alcoholics

SIR,—It was a relief, for once, to see your publication drawing attention to the plight of the single homeless. All too often they are callously treated, or ignored altogether. Take, for instance, the Housing (Homeless Persons) Act of 1977, under which they are not considered a priority, and therefore are entitled only to "advice" (sic).

Your leading article (21 October, p 1107) notes the difficulties of men discharged to common lodging houses where heavy drinking is prevalent and inmates are obliged to walk the streets for much of the day. Voluntary organisations such as the Cyrenians are setting up small projects where these men may live together in a "family" (and dry) environment—or at least trying to. The Cyrenians and other groups are continually being frustrated in their attempts to help the single homeless by the refusal of local councils to grant planning permission. Exeter and Cardiff City Councils are two recent examples of apparently caring groups whose caring stops at the single homeless person. I'm glad that the *BMJ* is not another.

STEPHEN GLASCOE

General Practice Unit,
Welsh National School of Medicine,
Cardiff

Salicylate poisoning in dermatological therapy

SIR,—We would like to report a case of salicylate poisoning from the percutaneous absorption of salicylic acid. A boy aged 12 years was admitted to the paediatric unit of this hospital on 15 September because of severe ichthyosis and asthma. On this occasion he was admitted because of exacerbation of his dermatitis of two weeks' duration. On admission he was started on salicylic acid, 2% in simple cream, applied to all areas of the body twice daily. On the third day in hospital it was increased to 5%, and on the fifth day to 10% concentration. He developed symptoms of salicylate toxicity three days after starting the 10% salicylic acid. The plasma salicylate level was 3.3 mmol/l (46.0 mg/100 ml). The salicylate therapy was immediately stopped and he was started on intravenous fluids and bicarbonate, and complete clinical and biochemical recovery was obtained within 48 hours of the diagnosis being made and

salicylate therapy being stopped. We suggest, therefore, that salicylic acid may cause systemic poisoning when applied to large areas of the skin and that this possibility should be kept in mind when treating cutaneous disorders. As far as we can ascertain, the British medical literature contains no description of poisoning attributed to salicylic acid used on skin. We wonder whether others have seen similar cases.

JOHN B ASPINALL
K M GOEL

Southern General Hospital,
Glasgow

The telephone in general practice

SIR,—In a leading article on this subject (21 October, p 1106) you suggest fuller use of the telephone for consultation. Might I suggest that one reason why this is avoided is the doctor's fear of overuse by the patient, particularly the neurotic patient. In a study of 143 patients after myocardial infarction for the purpose of evaluating rehabilitative methods, essential clinic or home visit appointments were made following hospital discharge and patients knew clearly when these would be. The telephone number of the clinic was given to the patient and his wife for interim direct contact with the doctor or nurse, but the telephone was used infrequently and at no time unnecessarily. Patients admitted that the knowledge that direct contact was available was often sufficient in itself to relieve anxiety.

LORNA D NAISMITH

Coronary Rehabilitation Clinic,
Southern General Hospital,
Glasgow

Current vital statistics

SIR,—Dr A M Adelstein in his article "Current vital statistics: methods and interpretation" (7 October, p 983) notes the paucity of international data relating stillbirths and infant mortality to birth weight. He has a table which shows, by birth weight, neonatal death rates for England and early neonatal rates for Sweden, but he also states that no more comparable statistics are available. This is not strictly true, because early neonatal mortality rates are available for both England and Sweden and neonatal rates also are available for Denmark and Poland.

International comparisons of mortality among low-birth-weight infants (<2500 g)

	England and Wales ¹	Mortality rate			
		Sweden ²	Denmark ³	Poland ⁴	
1974					
Stillbirth	95.6	83.7	52.0		
Perinatal	180.1	178.0	128.6		
Early neonatal	93.4	103.0	80.8		
Neonatal	101.4	Not available	91.7		
1975					
Stillbirth	87.2	Not yet available		68.2	
Perinatal	170.4			222.2	
Early neonatal	91.2			165.2	
Neonatal	98.6			190.1	
1976					
Stillbirth	85.3	Not yet available		65.9	
Perinatal	156.6			213.6	
Early neonatal	77.9			166.8	
Neonatal	86.5			192.4	

*Stillbirth and perinatal rates per 1000 total births; early neonatal and neonatal rates per 1000 live births.

¹ DHSS Annual Returns LHS 27/1.
² Statistiska Meddelanden Series HS.

³ Medicinsk Fødselsstatistik.

⁴ Rocznik Demograficzny.

The table below indicates some comparisons that are possible from routinely published data, but it is most important that the data be interpreted with caution because of international differences in definition and customary practice in birth and death registration. This applies particularly to infants of very low birth weight.

P O D PHAROAH

Department of Community
Health,
London School of Hygiene and
Tropical Medicine,
London WC1

Side effects of colapsase

SIR,—We have recently treated a patient with the regimen of sequential colapsase (asparaginase) and high-dose methotrexate for refractory acute leukaemia, as reported by Boh-Seng Yap and others (16 September, p 791). We encountered complications which are not mentioned in their report, but which have appeared in previous publications on the use of colapsase and should be borne in mind when using this regimen.

The patient was a 30-year-old Caucasian male with acute lymphatic leukaemia who first presented in October 1976 and was admitted on 4 October 1978, having relapsed for the third time. There were 89% lymphoblasts in the bone marrow. At the time of admission investigations revealed the following: haemoglobin 11.1 g/dl, white cell count $103.4 \times 10^9/l$ (blasts 60%, smear cells 22%), platelets $103 \times 10^9/l$, sodium 140 mmol(mEq)/l, potassium 4.1 mmol(mEq)/l, bicarbonate 29 mmol(mEq)/l, urea 3.8 mmol/l (22.9 mg/100 ml), creatinine 125 $\mu\text{mol/l}$ (1.4 mg/100 ml), urate 0.88 mmol/l (14.8 mg/100 ml). There was no glycosuria.

On 4 October he was started on allopurinol 300 mg a day; and on 6 October he was given methotrexate, 100 mg intravenously, followed three hours later by colapsase derived from *Escherichia coli* (Crasnitin), at a dose of 40 000 units intravenously. There was little initial reaction to the treatment but throughout the following night he vomited persistently, had diarrhoea, and became dyspnoeic and oliguric. On examination he was dehydrated and had Kussmaul respiration. The results of our investigations on 8 October were: haemoglobin 8.4 g/dl, white cell count $68 \times 10^9/l$, platelets $27 \times 10^9/l$, sodium 117 mmol(mEq)/l, potassium 8.9 mmol(mEq)/l, bicarbonate 13 mmol(mEq)/l, urea 42 mmol/l (253 mg/100 ml), creatinine 710 $\mu\text{mol/l}$ (8.03 mg/100 ml), glucose 42.6 mmol/l (768 mg/100 ml). He was treated with continuous infusion of soluble insulin, intermittent intravenous sodium bicarbonate, rehydration, and blood transfusion. On 10 October sodium was 131 mmol/l(mEq)/l, potassium 5.0 mmol(mEq)/l,

bicarbonate 14.7 mmol(mEq)/l, urea 53.0 mmol/l (319 mg/100 ml), glucose 13.0 mmol/l (234 mg/100 ml), urate 2.02 mmol/l (33.9 mg/100 ml). The patient became febrile, with consolidation at the left base on chest x-ray, and he was treated with antibiotics. On 11 October the haemoglobin had fallen again, to 7.9 g/dl, as a result of severe gastrointestinal bleeding; the white cell count was $0.9 \times 10^9/l$, platelets less than $5 \times 10^9/l$, sodium 139 mmol(mEq)/l, potassium 3.9 mmol(mEq)/l, bicarbonate 18.0 mmol(mEq)/l, urea 71.4 mmol/l (430 mg/100 ml). Despite continued insulin infusion, antibiotics, and transfusion of blood and platelets, the patient's condition deteriorated; he developed extreme dyspnoea and stridor, and died on the morning of 12 October. Permission for necropsy was not granted.

There was evidence in this case of a massive cell kill, as shown by the rapid development of severe pancytopenia and hyperuricaemia. The latter was no doubt partly the cause of the acute renal failure. However, azotaemia is also reported as a side effect of colapsase.¹ The acute onset of severe diabetic ketoacidosis was likely to be another toxic effect of colapsase. Yap *et al* mentioned the occurrence of transient hyperglycaemia in one of their patients but renal failure in none. Five of their patients died between three and 10 days from the start of treatment, apparently from complications of previous treatment. As no further information is given, one wonders whether similar side effects of colapsase could have contributed to the deaths of these patients.

Colapsase is known to produce a wide range of toxic side effects, even in low dosage.² These are usually attributed to contaminants, such as foreign protein and bacterial endotoxin. Of 105 children with acute lymphatic leukaemia given IU/kg/day, four developed pancreatitis (all died) and four hyperglycaemia (without pancreatitis—one died).³ The drug inhibits the synthesis of certain specific proteins, including albumin, clotting factors, and insulin.⁴

There was no evidence of abnormal pancreatic or renal function in our patient before the cytotoxic treatment was commenced. Serum amylase was 55 Somogyi units/100 ml two days after colapsase and 362 SU/ml (normal 200 SU/ml) four days afterwards. This argues for the toxic effect in this case being predominantly on the endocrine function of the pancreas, owing to decreased synthesis of insulin. Our experience suggested that monitoring blood glucose, ensuring maintenance of hydration, and prevention of acidosis are particularly important following commencement of this regimen in patients with acute leukaemia in relapse.

GEOFFREY SUMMERFIELD
D SWIRSKY

Department of Haematology,
University of Liverpool

¹ Wintrobe, M M, *et al*, *Clinical Haematology*, 1974, 2, 791.

² Ohnuma, T, *et al*, *Cancer Research*, 1970, 30, 2297.

³ Land, V J, *et al*, *Cancer*, 1972, 30, 339.

⁴ Goodman, L S, and Gilman, A (editors), *The Pharmacological Basis of Therapeutics*, p 1293. New York, Macmillan Publishing Company, 1975.

Antibiotics for cough and purulent sputum

SIR,—During the winter of 1977-8 we repeated in a somewhat simplified form the randomised controlled trial of antibiotics in patients with cough and purulent sputum as described by Dr N C H Stott and Dr R R West in your journal.¹ In a group of 207 otherwise healthy people with these symptoms they found no difference in the duration of cough, purulent

sputum production, feeling "off colour," or time off work when treated by either doxycycline or placebo. Their total practice population at risk was approximately 18 000 (personal communication), the duration of the trial was two years, and 76% of episodes occurred from October to March. The symptom complex which was studied therefore had an "incidence" of 7.6 per 1000 during the winter period.

In our study, which was intended to last for eight winter months in a total practice population of 80 850, we found to our great surprise in six months no more than 33 patients, which meant an incidence of 0.82, almost 10 times fewer than expected. This was so demoralising for our 25 participating general practitioners that we decided to stop the study, which was to have assembled 300 patients. We concluded that there must be some systematic bias responsible for the difference in incidence found, as it is hard to believe that the symptom complex of cough and purulent sputum production, in otherwise healthy people with no abnormal auscultatory signs in the chest, occurs more frequently in the UK than in our country. We think that the difference was most likely due to a difference in consulting rate for people with this "disease" and not to a difference in frequency of diagnosing it, as the latter would almost certainly have led to sizable differences between the participating doctors, which in fact were not found. The difference in consulting rate could probably be caused by a different system of health education or by a different way of qualifying for sick-benefits.

In the group of 33 patients which we did find, no difference could be discerned between doxycycline and placebo treatment. The numbers, however, were too small to draw definite conclusions.

S THOMAS

Secretary of Research Committee

The Netherlands College of General Practitioners,
Utrecht

¹ Stott, N C H, and West, R R, *British Medical Journal*, 1976, 2, 556-559.

Acetylcholine in myasthenia gravis

SIR,—The findings of Dr M E Seybold and others (14 October, p 1051) underline the multifactorial image of myasthenia gravis. Under the heading of neurophysiological variables as contributing to the symptomatology, other than anti-acetylcholine receptor antibody, it is well to remember the clear findings of Torda and Wolff¹ and Trethewie and Wright.² The former paper demonstrated inhibition of synthesis of acetylcholine (ACh) by plasma in myasthenia gravis, and the latter inhibition of synthesis of ACh by thymus in myasthenia gravis while normal thymus enhanced synthesis. These phenomena clearly explain the decay in performance with progression of the day as the content of the motor end-plate in ACh will fall during the day from defective synthesis. So important is synthesis of ACh that when the cervical sympathetic is stimulated continually more ACh is released from the superior cervical ganglion than is contained initially.

E R TRETHEWIE

Department of Physiology,
University of Melbourne,
Parkville, Victoria,
Australia

¹ Torda, C, and Wolff, H B, *Journal of Clinical Investigation*, 1944, 23, 649.

² Trethewie, E R, and Wright, R D, *Australia and New Zealand Journal of Surgery*, 1944, 13, 244.

BMA as a trade union

SIR,—Your leading article "Powars, Iros, *et al*" (28 October, p 1180) contains a signal error which ought not to be perpetuated. I refer to your statement that the BMA has been a registered trade union since 1971.

The facts are that the Conservative Government's Industrial Relations Act 1971 was repealed by the Labour Government on 31 July 1974 in its notorious Trade Union and Labour Relations Act, sponsored by Michael Foot among others, wherein sections 30 (1) and (2) compulsorily converted the medical profession into trade unionists.

The Association did not become a registered trade union until 9 October 1974.

J B WRATHALL ROWE

Tunbridge Wells, Kent

* * Dr Wrathall Rowe is right in saying that the BMA registered as a trade union under the 1974 Act. In 1971 the BMA was entered on the special register set up under the Conservative Government's Industrial Relations Act. This Act required unions to register in order to obtain the protection of the law in carrying out approved union activities. As a result of the BMA's initiative the Government amended the legislation to allow for a register for representative professional organisations like the BMA which had a trade union function but whose charter or articles precluded them from becoming trade unions. Inclusion on this special register enabled the BMA legally to continue to represent the profession and negotiate on its behalf on terms and conditions of service (11 December 1971, p 69). In 1974 the Labour Government's Trade Union and Labour Relations Act replaced the Industrial Relations Act and the special register ceased to exist. The BMA then registered as a trade union under the second Act (5 October 1974, p 57).—Ed, *BMJ*.

Honorary registrar posts in the NHS

SIR,—At the meeting of the Hospital Junior Staffs Committee on 5 October (21 October, p 1173) a call was made for honorary NHS posts at registrar and senior registrar level to be brought within the remit of the Central Manpower Committee so that effective control can be established over the number and content of these posts. This should be backed by those with concern for improvement of staff structures within NHS hospitals.

It is absurd that further distortions of training structures can be induced by universities solving their local problems; and it is wrong that NHS-trained doctors in competition with those from an academic background for an NHS post may find that the clinical experience provided by the preceding NHS and academic posts are equated when the clinical component of the latter may have been minimal.

It is to be hoped that this HJSC policy will rapidly become that of the BMA and find implementation.

TOM MCFARLANE

Manchester

Clinical medical officers and school problems

SIR,—All clinical medical officers in the field should welcome Dr Shelagh M Tyrrell's letter