antigenic concentrations of plasma anti-proteases, as protease-antiprotease complexes with no functional activity are still detected immunochemically. Of particular relevance to the above mentioned article were the observations of Teger-Nilsson,⁷ who found that functional antiprotease activities in patients with acute venous thrombosis were normal on the day of diagnosis and that elevated activities were found three and four days after the diagnosis. Another point to be considered is the possible role of platelet antiproteases released during thrombus formation. Platelets contain inhibitors of fibrinolysis,⁸ which would certainly hinder thrombus resolution.

We would like to suggest that chromogenic substrate assays for the estimation of functional antiprotease activities should be included in any protocol for studies on the various plasma protease systems. These assays, which are simple and rapid to perform, give a better indication of the inhibitor status than immunochemical determinations.

MICHAEL J GALLIMORE
ANSGAR O AASEN
E AMUNDSEN

Institute for Surgical Research,
Rikshospitalet,
Oslo, Norway

- ¹ Amundsen, E, *et al*, *Microvascular Research*, in press.
- ² Aasen, A O, *et al*, *Microvascular Research*, in press.
- ³ Amundsen, E, Svendsen, L, and Vefling, A, *IVth International Congress on Thrombosis and Haemostasis*, Vienna, 1973 abstract.
- ⁴ Gallimore, M J, *et al*, *Thrombosis Research*, 1979, **14**, 51.
- ⁵ Gallimore, M J, *et al*, *Thrombosis and Haemostasis*, in press.
- ⁶ Lilleaasen, P, *Scandinavian Journal of Thoracic and Cardiovascular Surgery*, 1977, **11**, 97.
- ⁷ Teger-Nilsson, A-C, in *Chromogenic Peptide Substrates, Chemistry and Clinical Usage*, ed M F Scully and V V Kakkar, p 269. Edinburgh, Churchill Livingstone, 1979.
- ⁸ Crawford, G P M, in *Haemostasis: Biochemistry, Physiology and Pathology*, ed D Ogston and B Bennett, p 342. London, J Wiley and Sons, 1977.

Mistaken prognosis

SIR,—During my morning surgery session an 82-year-old man mentioned that he had been born by caesarean section on 20 March 1897. The consensus of the five doctors attending the birth was that he would not survive for more than 24 hours. He was subsequently told that his was only the second caesarean section recorded in this country at which both mother and child survived. I suspect he must now be the oldest surviving baby delivered in this country by caesarean section and is a living reminder of the unreliability of the art of prognosis.

M BLACKMORE

West Moors, Dorset BH22 0JN

"Run for fun"—and health

SIR,—Dr T J Bassler's report of four cases of heat stroke during a "run for fun" (20 January, p 197) should not discourage those who hope to use running for risk-factor modification. As Dr Bassler points out, his cases span 11 years and four continents.

We have provided medical support for local races attracting thousands of participants and estimate that the incidence of heat illness averages 1 per thousand during events of 10 km or longer. However, all runners benefit from endurance events if we only concern ourselves with their serum lipids.

Anyone who doubts this is invited to repeat

the following simple study. (1) Obtain samples for total cholesterol and high-density lipoproteins (HDL) from middle-aged marathon runners. (2) Have subjects run 20 km or longer at their usual training pace. (3) Repeat lipid studies immediately. The nine men we studied showed total cholesterol increases averaging 7% while HDL increased 17%. These levels remained elevated until a large meal was consumed.

We suggest that long-distance running acutely elevates HDL levels in all runners, and that this leads to a chronic elevation of HDL—a powerful protection against coronary heart disease. The protective value of HDL has already been observed.¹ The small risk of heat stroke can be avoided if runners are given ample fluids and simple explanations of the hazards.

BEN ROSIN

Torrance Memorial Hospital,
Torrance,
California 90509, USA

- ¹ Kannel, W B, Castelli, W P, and Gordon, T, *Annals of Internal Medicine*, 1979, **90**, 85.

Dialysis for psoriasis

SIR,—Dr S M Breathnach and others have described (27 January, p 236) a case in which psoriasis developed during maintenance haemodialysis and therefore they "counsel caution against optimistic expectations of dramatic benefit from dialysis in patients with psoriasis."

After using peritoneal dialysis 32 hours once a week for 10 weeks in the treatment of severe disabling psoriasis in three patients with normal kidney function, we can report that a substantial improvement was achieved. However, the effect was relatively short lived, lasting about two months in all three patients. The search for a mechanism which can explain the effect of dialysis on psoriasis indicates that a "psoriasis factor" may exist (possibly a mediator of an immunological mechanism) and that this "factor" is dialysable by peritoneal dialysis. In view of these preliminary (as yet unpublished) data we are of the opinion that the psoriatic lesions of the patient described by Breathnach *et al* may well respond to chronic repeated peritoneal dialysis.

We agree with the author that we should not be too optimistic in our expectations of a dramatic, long-lasting benefit. Nevertheless, it is felt that it is important to carry on research in this field with the aim of clarifying the still unknown aetiology of this common disabling skin disorder.

J HALEVY
S HALEVY
E FEUERMAN
J B ROSENFELD

Beilinson Medical Center,
Tel Aviv University Medical School,
Tel Aviv, Israel

Fifty years of penicillin

SIR,—I recently enjoyed reading your leading article "Fifty years of penicillin" (28 April, p 1101) and would like to comment on one minor aspect of it.

Some of the Wright-Fleming Institute's vaccines were distributed for many years by Parke Davis and Co, perhaps a unique example of co-operation between a pharmaceutical organisation and an academic institute. The last of these vaccines continued to be marketed until only two years ago in the form of catarrh

vaccine (at one time there was even a "public schools'" version, which was extra potent).

Whether the vaccine is of dubious value I am not sure, for there were many protests from physicians when commercial marketing was discontinued. Moreover, there were sufficient numbers who thought it of value for its private manufacture to be continued by the Charterhouse Rheumatism Clinic.

NIGEL WALSH

Madison, New Jersey 07940,
USA

Sacroiliac strain

SIR,—Dr R T D Fitzgerald's assertion (12 May, p 1285) that sacroiliac strain is a rare condition seems to be based on his own definition of the sacroiliac joint as consisting of the parts of the sacrum and ilium which are in apposition. The fact is that the term "sacroiliac joint" comprises not only joint surfaces, capsule, and fibres joining the edges of the bony joint but also the dorsal sacroiliac ligament.

This complex of fibres overlies the interosseous ligaments. It consists of several weak fasciculi, which arise above from the intermediate and below from the lateral crests of the sacrum and pass with varying degrees of obliquity to the posterior superior iliac spine and inner lip of the dorsal part of the iliac crest. Also included are the long and short posterior sacroiliac ligaments. Some fibres of the sacroiliac joint merge with the sacrotuberous and sacrospinous ligaments.¹ There can be strain or even rupture of some of the superficial fibres. These lesions are painful and tender and are the "tender spots" referred to in my letter (21 April, p 1085). Tears in ligaments may occur at either end or at the middle of a ligament irrespective of the cause of strain. They are commonly treated with injections of corticosteroids.²

A double-blind trial in progress at Oldchurch Hospital is designed to test the hypothesis that injections of triamcinolone acetonide or methyl prednisolone acetate cure low backache in a significant number of cases. The treatment is based on accurate localisation of tender spots at the sacroiliac joint as defined.³ I see no reason why the diagnosis should not be "sacroiliac strain."

JACK BOURNE

Back Pain Clinic,
Oldchurch Hospital,
Romford, Essex

- ¹ Warwick, R, and Williams, P L (editors), *Gray's Anatomy*, 35th edn, p 443. London, Longmans, 1973.
- ² Watson-Jones, R, *Fractures and Joint Injuries*, 5th edn, ed Wilson, J N, p 52. Edinburgh, Churchill Livingstone, 1976.
- ³ Bourne, I H J, *Practitioner*, May 1979.

The "drug lunch"

SIR,—Over the past decade there has been an expansion in pharmaceutical companies' promotional work in hospitals. It is now commonplace for a film or tape-slide to be shown and the audience subsequently to be entertained to a meal. Such meetings occur almost weekly in this hospital.

We have kept records of eight consecutive Monday lunch-time meetings during the last few months of 1978, when 10 out of 27 members of the junior medical staff attended five or more meetings. Doctors who attended less frequently were not included in this analysis.

In January 1979 the 10 subjects were given a list which contained the names of the eight drugs mentioned at the promotional lunches paired with a compound having a similar trade name or a similar pharmacological action. The subjects were asked to identify the drug which had been promoted.

The average attendance of the 10 subjects was 6.4 meetings. They were able to recall correctly only 3.1 of the drugs they had seen promoted. The number of drugs omitted was therefore 3.3. However, they were incorrect on 2.2 occasions (drugs mistakenly thought to have been discussed). Thus the subjects studied had forgotten more drugs than they had remembered (even when confronted by the names), and a third of the drugs marked had not been promoted. If these results are a measure of advertising success then we suggest that this type of promotion has severe limitations.

The sale of a drug is the criterion of success. The chief pharmacist did not note an increase in prescriptions following any of the eight meetings. Each lunch cost the promoting company £110. It may be that intangibles such as the maintenance of friendly relations between the companies and the profession is value for money. But £880 appears to have purchased little in our hospital. Such a sum would be about three months' salary for a junior research technician or would buy or aid purchase of laboratory apparatus. Would this be better value for money?

JANET BUCK
ROGER GABRIEL

St Charles's Hospital,
London W10 6DZ

Coronary artery spasm

SIR,—Your interesting leading article (14 April, p 969) prompts me to remind readers of the value of the Müller manoeuvre to relieve this potentially dangerous condition.

In this method the patient is persuaded to attempt to inhale with the nose and mouth closed, thereby creating a partial vacuum in the mouth and in the lungs around the heart. Under such conditions blood is drawn into the coronary arteries against the spasm and chemical conditions creating the spasm may be swept away. A simpler instruction is to bid the patient to suck his finger hard, for if the glottis remains open then "when you suck your finger you suck your heart just as hard."

If confirmation for such a procedure is needed let mouth suction be applied to an area of the skin of the hand which has been blanched by a small injection of adrenalin. At 60 mm Hg suction the area is seen to flush as the arterioles are opened and normal circulation to be restored in a few minutes in an area which would otherwise remain vasoconstricted for some 20 minutes. Measurements on a patient performing the Müller manoeuvre during cardiac catheterisation show an increase in coronary flow transiently, but of course no increase in cardiac output, since the heart must work (contract) against the suction pressure.¹

As a general practitioner called only too frequently to patients with severe angina and sometimes collapsed with apparent infarct, I can state that in about 50% of cases symptoms are immediately relieved by this technique. The suction need only be maintained for two or three seconds, and may be repeated as circumstances dictate.

If these observations are substantiated by others it then follows that the exercise could

be performed for a few seconds a day as a prophylactic regimen. The suction should not be maintained for longer than a few seconds at a time, since distension of the atria is to be avoided.

I am given to understand, although I cannot confirm it, that the method has been used in Germany, and in the past in Scotland, and favourable claims have been made for it. It would be profitable to hear from physicians who have tried using the Müller technique for the relief of coronary spasm or angina.

C N SMYTH

Ashford, Kent TN23 1QG

¹ Smyth, C N, *Lancet*, 1969, 2, 657.

Unprocessed bran causing intestinal obstruction

SIR,—The possibility that there is a critical amount of bran that should be ingested each day in the treatment of the fibre deficiency diseases has been raised by the report of Drs J Y Kang and Dr W F Doe (12 May, p 1249) showing that excessive unprocessed bran may cause intestinal obstruction. Patients often complain of abdominal cramps when first treated with bran, and the type of bran dosage and regularity of ingestion have to be altered.

My recent surgical experience in Bihar State, North India, suggested that large-bowel obstruction, predominantly due to sigmoid volvulus, was caused by an excessively high-fibre diet. The Biharis ate one large meal a day composed primarily of unpolished rice and vegetables. Patients presenting with volvulus rarely complained of constipation, but often gave a history suggestive of acute or chronic volvulus. The twisted colon at operation was always free of faeces.

All patients requiring unprocessed bran should be warned against excessive administration.

JOHN RENNIE

Professorial Department of Surgery,
Charing Cross Hospital,
London W6 8RF

New approach to treatment of recent stroke?

SIR,—With respect we would refer to the letter by Dr G D Perkin (12 May, p 1283) in which he criticises this company's recent promotional literature on the use of our product Praxilene for acute stroke illness.

Dr Perkin's examination of our literature must obviously have been of a cursory and perfunctory nature before writing to you. While the brochure in question does include descriptions of two patients admitted to the stroke unit in Sheffield, we were careful to include the dates of admission and discharge so that there could not possibly be any confusion in the minds of readers—making it clear that the two patients described did not form any part of the double-blind clinical trial reported by Dr A K Admani (16 December, p 1678) but merely provided a visually interesting feature of the brochure, in the same way that we illustrate empty beds on the last page. The precise dates given for the two patients illustrated are clearly shown in the brochure as: admitted 21 September 1978, discharged November 1978; admitted 18 September 1978, discharged 14 November 1978. It can be quite readily seen that these

dates were quite some time after the stated period of the trial, 16 months from June 1976. A simple calculation by Dr Perkin would have readily demonstrated this fact.

Dr Perkin compounds his confusion in the last paragraph of his letter by referring to a letter published in the *BMJ* (10 February, p 412) from his hospital criticising Dr Admani's work, maintaining that we did not understand or had not considered the merits of that criticism. Examination of the brochure clearly shows the date of printing to be January 1979.

In view of the frivolous criticism of this company made by Dr Perkin we would not be out of order in expecting an apology.

D R GIFFORD

Lipha Pharmaceuticals Limited,
West Drayton, Middx UB7 7LD

Genitofemoral neuropathy

SIR,—Dr M D O'Brien described (21 April, p 1052) an interesting case of the effect of pressure on the femoral branch of the genitofemoral nerve. He stated, as is often taught in anatomy textbooks, that the genital branch of this nerve enters the inguinal canal through the deep inguinal ring.

However, the genital branch, which supplies the cremaster muscle and the skin of the groin and scrotum, accompanied by the cremaster artery and veins, is observed at operations for inguinal hernia to enter the inguinal canal not through the deep inguinal ring but through the posterior inguinal wall about 1 cm medial to the ring at the upper border of the iliopubic tract (the deep femoral arch).¹ The genital branch and cremaster vessels are thus free from injury when the ring is repaired for oblique inguinal hernia. In repair of direct inguinal hernia which takes place medial to the ring the nerve and vessels are in danger of injury by needle puncture or compression by tight sutures. It is often of value to excise a full length of the nerve and vessels to obtain a clear field for this operation.

W J LYTLE

Sheffield S10 3LS

¹ Lytle, W J, *Annals of the Royal College of Surgeons of England*, 1951, 9, 245.

Overseas aid—urban hospitals or primary care?

SIR,—Dr A W Williams (12 May, p 1286) stresses the need for Third World countries to integrate preventive and curative medicine in their health services. No one could possibly disagree. However, the problem that most such countries face is that between 60% and 80% of their health budget is already spent on hospital services, often to the detriment of prevention and primary care.

Large referral hospitals in cities are often equipped with most of the technology of western medicine, while dispensaries and health centres run out of chloroquine and isoniazid. In theory, the large hospitals act as referral centres for the surrounding population, but the lack of facilities for transferring patients makes such a system difficult to operate in practice. Of the patients admitted to the main referral hospital in Dar-es-Salaam, Tanzania, 96% come from within the city boundaries. Referral hospitals often act as training centres for medical auxiliaries, but is it not more appropriate to train health workers