this association is not clear. The disturbance does not appear to be due to infection or plasma fibrinogen changes as patients with an infection (G, J, M, and P) showed short lysis times, nor did the plasma fibrinogen levels change significantly with changes in lysis time or the occurrence of crises. Bed rest or hospitalization factors did not cause the changes, since, if these were operative, prolonged lysis times would be expected in most hospitalized patients.

TABLE II.—Lysis Time (Hours) in Control Patients

Patient	Diagnosis	Days of Admission		
		1	2	3
E	Rheumatic arthritis ..	3.3	10.8	7.2
F	Iron deficiency anaemia ..	24.0	19.3	16.0
G	Infective ulcers of toes ..	0.8	6.1	4.5
H	Iron deficiency anaemia ..	1.3	5.0	2.9
J	Pyogenic abscess of anterior abdominal wall ..	5.0	4.5	4.5
K	Pain in the neck, cause uncertain ..	24.0	19.1	—
L	Food poisoning ..	4.1	2.1	2.8
M	Lobar pneumonia ..	12.9	5.5	5.0
N	Acute falciparum malaria ..	5.0	3.3	5.1
P	Bronchopneumonia (non-tubercular) ..	4.3	1.7	—

The fibrinolytic disturbance could be the result or a contributing cause of thrombotic crises. In view of the latter possibility, further studies to elucidate the nature of the association and a trial of fibrinolytic therapy—for example, with a combination of phenformin and ethyloestradiol³ in the prevention of crises appear indicated.

I am grateful to Professor B. M. Laurance, Professor A. G. Shaper, and Dr. D. M. Macintosh for their advice, and to Mrs. I. Patel for plasma fibrinogen estimations. The work was carried out under a grant from the Medical Research Council.

—I am, etc.,

AZHAR MAHMOOD.

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Hiatus Hernia

SIR,—Your leading article on hiatus hernia (21 September, p. 691) and subsequent letters (12 October, p. 119) prompt me to make certain comments.

Your concluding paragraph stating that "Only a more troubled minority find their way there [to the hospital], and only a small number of these will ever require operative treatment" is a very fair statement. Why then do many surgeons feel that more cases should be operated upon? I am quite sure this is due to a misunderstanding of the basic facts. The symptoms of hiatal hernia depend upon the presence, or absence, of a functioning inferior oesophageal sphincter. In both cases primary conservative treatment often causes the symptoms to abate. If this treatment fails then the operative procedure must vary; in those with a sphincter reduction of the hernia and crural herniorrhaphy is all that is necessary, whereas in those without a functioning sphincter another procedure—

my own preference is for the Nissen's fundoplication—may be necessary.

In spite of these provisos there is still a very high postoperative incidence of recurrent symptoms, hiatal hernia, or both after prolonged follow-up, and then we are back to the preoperative status. In fact reflux is not as "virulent" a condition as has been made out in the past. What is refluxed is also not important, but what is important is the sensitivity of the mucosa. Stricture incidence is, likewise, much lower than is indicated in the literature. Many cases which have been diagnosed as strictures are really spasms of the oesophagus and are relieved by antispasmodics.

In essence, therefore, I feel that the majority of those hiatus-hernia cases referred to hospital should be treated conservatively, and only a very small percentage, because of associated disease or because of absolute failure of conservative treatment, should be subjected to surgery, with the proviso that one must be careful about the final prognosis.

—I am, etc.,

W. SILBER.

Oesophageal Clinic,
Department of Surgery,
Groote Schuur Hospital,
Cape Town, South Africa.

Treatment of Skin Fissures

SIR,—In winter many older people suffer from painful fissures of the skin at the tips of the fingers and thumbs. In my experience the only certain cure is a thick application of a liquid cement, such as Durofix. When it is first applied it tends to sting, but only for a few minutes. It is allowed to dry. If necessary it must be renewed to keep the firm coat in place for at least five days. It stands washing and all ordinary use. I have never had to use it for longer than five days, but there would be no harm in doing so if the fissures were still present.

To prevent recurrence patients should be warned against using strong detergents without wearing rubber gloves.—I am, etc.,

H. C. M. WALTON.

Beck Laboratory,
Swansea Hospital,
Swansea, Glamorgan.

Tests for Hearing

SIR,—I entirely agree with Mr. R. J. Sellick's remarks in his letter (14 December, p. 706). Not infrequently children are referred to the ear, nose, and throat department at Great Ormond Street with school-clinic audiograms depicting hearing loss, but caused in actual fact by cerumen occluding the aural canals.

It is a waste of everyone's time to perform audiometry without a previous aural examination to exclude meatal obstruction.—I am, etc.,

London W.1.

H. S. SHARP.

E.C.G. in Diagnosis

SIR,—Dr. David Short in his well-documented paper (14 December, p. 673) rightly draws attention to the limitations of the electrocardiogram in the diagnosis of acute myocardial infarction. I would, however, disagree with his implied conclusion that an E.C.G. service for general practi-

tioners is undesirable. It is, after all, part of a doctor's training to assess and correlate x-ray, pathological, and other reports and sometimes, in the light of clinical findings, to disregard some of these reports and give due weight to others. It is not considered necessary in every case for a pathologist or radiologist to examine a patient in order that a diagnosis be arrived at.

A competent general practitioner, suspecting a myocardial disorder, should often himself be capable of "critical evaluation of history and clinical findings"; he may not necessarily be in need of consultant's advice but he should not, I submit, be denied the help of an E.C.G. report where this can be arranged.—I am, etc.,

St. Albans,
Herts.

J. HORTON.

Keloids

SIR,—I was interested to read your leading article on keloids (5 October, p. 3). As you so rightly emphasize, they are common in races with pigmented skin, and by and large people with pigmented skins do not live within easy reach of departments of radiotherapy.

Massive keloids in rural Nigeria are not uncommon. One aspect of the condition is seldom mentioned in the literature. The proliferating mass of collagen overgrows cutaneous hair, and eventually the tumour becomes a warren of pilonidal abscesses, constantly discharging rancid pus. The commonest site for such lesions, in my experience, is in the front of the neck. The results of treating the lesions without radiotherapy are appalling. But it is difficult to do nothing when a near-frantic patient pleads to have an offensive non-malignant tumour removed from right under his nose.

The lot of the tropical surgeon, like that of the policeman, is not a happy one.—I am, etc.,

Lautoka Hospital,
Lautoka, Fiji.

G. HOLMES.

Intravenous Penicillin

SIR,—We have read with interest the paper by Dr. F. P. Brunner and Dr. P. G. Frick on electrolyte imbalance during therapy with "massive" intravenous penicillin (30 November, p. 550), and would like to make the following comments.

The authors have made the point that a hyperosmolar infusion leading to water depletion was the cause of hypernatraemia. On one occasion we have experienced a similar complication, but this is easily prevented. It is worth notice that the method and vehicle of penicillin administration may be important. When patients were given their penicillin dissolved in 200 ml. of 5% dextrose administered 3- or 4-hourly through a continuously running physiological saline infusion hyponatraemia was often present.

We have also noted low serum-potassium values usually accompanied by low blood-urea levels and have ascribed this to urinary potassium loss. Although Brunner and Frick measured the urinary potassium they make no comment on urine volumes, and this could explain their rather low serum-potassium

concentrations. In our experience patients receiving 100 mega units of penicillin daily in 1.5 litres of infusion have daily urine volumes of about 2 litres. It may be that other alterations in renal function, as mentioned by Brunner and Frick, contributed to hypokalaemia in their patients.

Having tried a number of methods we now use a continuous infusion with three half-litres of 0.18% saline, to which is added penicillin G in quantities of 30, 40, 30 mega units, dividing each ration approximately equally between the sodium and potassium salt. This gives an infusion solution of approximately 280 mOs/litre. We have no difficulty in obtaining potassium penicillin, and indeed alterations to the plasma sodium and potassium levels can be induced by varying the amount of the appropriate penicillin salt. Using this method, we have treated patients for up to three months with daily infusions of 100 mega units of penicillin without electrolyte imbalance, neurotoxicity, marked changes in serum osmolality, or indeed haemolysis.² "Massive" intravenous penicillin therapy is useful and safe, provided it is realized that as well as a large dose of penicillin the patient will be receiving a load of water, electrolyte, and possibly other solute such as glucose.—We are, etc.,

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S. E. J. YOUNG.

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Training of Surgeons

SIR,—Mr. Neville Stidolph proposes a training system for surgeons which is tied to the present requirement of about 100 new consultant surgeons per year (9 November, p. 379). Of all British candidates setting out on a surgical career only 140, which is 12% of the original field, will attain an English Fellowship each year. Thus after six years of training even those relatively few who have successfully gained a Fellowship are not assured of a consultancy. This situation, he says, "is manifestly unjust." It is therefore proposed not to increase the number of consultants required each year to 140 but to cut down the number of candidates who will successfully achieve a Fellowship to 100.

The proposals outlined by Mr. Stidolph are presumably of a long-term character. As such it is strange to realize that his entire proposal rests upon the assumption that Britain should, would, and could employ overseas graduates to fill 75% of the registrar posts in surgery indefinitely. Is it really feasible to plan the long-term reorganization of surgical training and staffing upon such an assumption?

At the second Commonwealth Medical Conference held last September the Indian delegation, in answer to a questionnaire, stated that,

- (a) Provision of undergraduate medical education abroad for the various categories of professional staff in health services is not necessary.
- (b) For postgraduate or postbasic level also it is in general not necessary except in specialized branches.¹

The Indian delegation also stated that "there are places for 6,000 postgraduates a year in medical institutions in India."² Considering that the number of medical graduates was about 7,600 (1967) this would, therefore, indicate no shortage of postgraduate places in India. In addition, the Pakistani delegation³ stated that, "Their own needs [in regard to training facilities] . . . were now limited, to a large extent, to certain more sophisticated specialties."

The statements cited above are in contradiction to the assertion that "the developing countries need and will need for many years the facilities for postgraduate and specialist training which exist . . . in the U.K." If India and Pakistan do not require the postgraduate facilities available in Britain, why then should their graduates continue to come here? The advantages to an individual doctor from India or Pakistan who achieves an English Fellowship are obvious. However, from Mr. Stidolph's figures we can see that only 6% of the overseas doctors who make the attempt do manage to achieve a Fellowship in the Royal College of Surgeons. The situation is then that large numbers of overseas doctors come to Britain to train for higher qualifications which few will achieve. Mr. Stidolph does not produce any evidence that the men coming here are "the outstanding products of their universities" who were "selected to be the future consultants" and teachers in their own countries. The truth is that we know very little about what happens to overseas doctors after having trained in Britain.

Mr. Stidolph warns that Russia, Germany, and the United States of America provide funds and scholarships to draw overseas doctors to their countries. So that if we in Britain "do not recognize our obligation to cater for their needs the graduates will go elsewhere." At one and the same time Britain can fulfil her obligations to the Commonwealth, and keep her hospitals staffed, and the Royal College of Surgeons will be able to control more carefully than ever those who are permitted entry.

There is no avoiding the fact that Britain needs more British doctors, which in turn means that a training and hospital staffing structure is required which will be based upon the work needs of hospitals being filled by British doctors. This is possible only if all doctors in training can reasonably expect to become recognized specialists (with appropriate rewards) as proposed by the Royal Commission on Medical Education.

Such changes are also likely to act as a major deterrent to emigrating doctors, the major part of whom leave this country because of the frustrations they experience in trying to find permanent positions in the hospital service. If Mr. Stidolph's proposals are acted upon they will add these frustrations, and thus to the volume of emigration; but then if 75% of the junior hospital staff are to be drawn from abroad perhaps it will not matter.—I am, etc.,

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Alcohol and Drugs

SIR,—General practitioners received last month a circular from the Committee on Safety of Drugs, accompanied by a letter from the Medical Assessor. This latter concerns the interaction between alcohol and drugs, and what advice should be given to patients on this matter. Though I agree with most of what is said, I feel I must challenge the statement embodied in the last sentence, "a commonsense rule, when you prescribe any drug affecting the central nervous system, is to warn the patient not to take alcohol whilst under treatment."

It seems to me this is a statement typical of someone who is not in active medical practice. It ought to be obvious that a complete ban on consumption of alcohol while taking such drugs is most impractical. Does the Medical Assessor not realize that there are very many people who are on regular doses of drugs affecting the central nervous system, and very many of these naturally enough wish to drink alcohol. To tell them not to do so is anything but common sense and is the sort of advice that will be simply ignored to the detriment of both patient and doctor-patient relationship.—I am, etc.,

Armley, Leeds.

G. E. PHILIP.

Fruzemide for Cardiac Failure in Infancy

SIR,—Dr. K. A. Harrison (12 October, p. 84) has reported the use of ethacrynic acid for blood transfusions in 30 cases of severe anaemia of pregnancy. I would like to report the use of the diuretic frusemide in a premature infant with cardiac failure due to coarctation of the aorta who required a blood transfusion for severe anaemia.

A twin, of 32 weeks' gestation, birth-weight 2 lb. 12 oz. (1.2 kg.) was noted to have a systolic murmur and absent femoral pulses on initial examination; blood pressure in the right arm was 65 mm., right leg 45 mm. systolic by the flush method. He developed cardiac failure at the age of 6 weeks, which responded to treatment with digoxin. By the age of 9 weeks his haemoglobin had fallen to 49%, pulse 200 per minute, respiratory rate 80 per minute, and his liver was enlarged 1½ fingerbreadths. In order to avoid an exchange transfusion and to save the saphenous veins for subsequent cardiac catheterization he was treated with frusemide 5 mg. intravenously followed by 60 ml. of packed cells over the next 20 hours. During this period the pulse rate fell progressively to 120 per minute, and the respiratory rate fell to 70 per minute. A month later he had gained 28 oz. (0.8 kg.) in weight, and had no signs of cardiac failure. His haemoglobin was 101%.

I suggest that a powerful diuretic such as frusemide or ethacrynic acid is useful in the management of cardiac failure due to anaemia in the neonatal period.—I am, etc.,

Radcliffe Infirmary, DOUGLAS PICKERING.
Oxford.

Insanity and Tumours

SIR,—We read with interest the report by Dr. R. Hunter and his colleagues (6 July, p. 9) of three cases of frontal meningiomas presenting psychiatrically. We report below the features of one such patient who came under our care recently.

A 44-year-old English woman was referred to the neurosurgical unit of the University College