Correspondence

Letters to the Editor should not exceed 500 words.

University Clinical Teachers

SIR,—A meeting of the senior academic staff holding honorary consultant posts was recently held at this Institute to discuss the present situation as regards our terms of service (27 August, *Supplement*, p. 116). I have been asked to convey the disquiet we feel at the present situation, and to request that further representations be made on our behalf to the University Grants Committee and the Minister of Education.

We recognize that we are a very small section of the medical profession as a whole, but it is no exaggeration to say that upon us the standards of British academic medicine, both in its teaching and research aspects, very largely depend. Our contributions to medical knowledge are, perhaps, one of the most important factors in the maintenance of that high prestige that British medical research currently enjoys internationally. One result of this prestige is the increasing drain from our ranks to senior research and teaching posts overseas.

By any yardstick of professional merit and ability one may care to choose—whether possession of higher qualifications, publications, contributions to international meetings, or the standard of clinical teaching and care found in our teaching hospitals—we believe that we do not compare unfavourably with our colleagues in the Health Service. Yet we find ourselves penalized in terms of salary by amounts ranging from £500 to £1,000 per annum because we are employed by a university and work in a teaching-hospital setting. We regard this situation as quite irrational and completely indefensible.

All of us on this Committee, which comprises all the staff of this Institute affected, would be most grateful if a further representation could be made to the University Grants Committee and the Minister on our behalf; this would help to rectify a matter which is causing deep disquiet and one which has been outstanding too long.—I am, etc.,

RICHARD P. MICHAEL,

Chairman,
Senior Medical Teachers and Research
Staff Committee.

Institute of Psychiatry,
University of London.

SIR,—The recent action of the Government in freezing university clinical teachers' salaries and deciding that any increase arrived at in the period of salary restraint shall be judged by the prevailing increase norm is a reversal of the formerly avowed practice of adjusting our salaries with the changes in the N.H.S. scales.

This is a critical point in the careers of clinical university teachers. They must decide whether to bear the conditions imposed upon them with fortitude, or seek every opportunity to leave the university for the Health Service. We should not be expected to make this decision without Sir John Wolfenden (27 August, *Suppl.* p. 116) telling us what were the proposals regarding the salary structure for clinical teachers decided upon by the University Grants Committee, although frustrated, as it happens, by national events.—I am, etc.,

Welsh National School
of Medicine,
Cardiff.

J. G. LEOPOLD.

Sir Harold Gillies

SIR,—At the recent annual meeting in Bristol of the British Association of Plastic Surgeons I was given permission by the President, Mr. Geoffrey Fitzgibbon, himself an old Gillies' man, to ask for a pause in the meeting, at which I was reading a paper, to commemorate Sir Harold Gillies. I commented that it was 50 years almost to the day since plastic surgery was born in England. It was born as part of the preparations of the R.A.M.C. for the Somme. Its birth was almost entirely the work of Sir Harold Gillies working under his consultant, Sir William Arbuthnot-Lane. Its effect on morale throughout the Army was widespread and entirely beneficial. For the first time the Army knew that something was being done to return men to civilian life whatever their facial disfigurement after a wound of the face.

This remarkable man, who had no orthodox training in plastic surgery, in a period of about five years established the principles and practice of the repair of

mutilations of the face and lost features, including the major tissue transfers by tube pedicle and those repairs needing an epithelial inlay.

His work in the second world war was almost as monumental, although he was by then 70 or over. In addition to being a great operator, he was also a great clinical teacher of the Edwardian Bart's school. At one time most of the heads of major plastic departments in the English-speaking world, from America to South Africa to Australia and New Zealand, were his pupils, appointed because they were so. Indeed, I pleaded that most of us present in Bristol at the 1966 meeting could be fairly described as first, second, or third generation Gillies' pupils. The distinction of his early pupils has probably not been surpassed. I refer to Professor Kilner, Sir Archibald McIndoe, and Mr. Mowlem.

It is also fair to say that he was probably the most versatile man in athletics in medicine. He was captain of the school

cricket XI at Wanganui, New Zealand; in the Cambridge boat later; and a Cambridge golf Blue, who still later played golf for England. He was a really good motorist in the true English sense. As a painter he more than once sold 50% of his paintings from the wall when he held exhibitions. As a surgeon, however, he was the main contributor to the history of plastic surgery at the end of the first world war and again during the second world war. He was one of the first two New Zealanders to date of native birth and primary education to reach the international stage. The other was Ernest Rutherford, whose contribution to world history was in the opposite direction to that of Gillies; if possible, more massive.

The pause for silence at the end of the meeting of the British Association of Plastic Surgeons in 1966 acknowledged the contribution which we all felt we owed this great and very remarkable man.—I am, etc.,

London W.1.

PATRICK CLARKSON.

Megaloblastic Anaemia and Methotrexate Therapy

SIR,—The description of megaloblastic anaemia during methotrexate therapy by Dr. Peter Borrie and Dr. P. A. Clark (28 May, p. 1339) is relevant to our experience with long-term continuous intravenous infusion of drugs for cancer of the lung. One patient, currently under treatment, has developed severe anaemia with a megaloblastic bone-marrow following the intravenous administration of 5-fluorouracil, 32,600 mg. during 241 days, and of methotrexate, 90 mg. during 55 days, consecutively. The case details are briefly as follows.

A man aged 57 years complained of lassitude of two months' duration. He was found to have a normoblastic anaemia and a chronic peptic ulcer. A routine chest radiograph revealed a tumour of the upper lobe of the right lung. At thoracotomy, following correction of the anaemia, the tumour proved to be unresectable and it was decided to treat the patient by regional infusion chemotherapy. A fine Teflon catheter was passed into the superior vena cava via the cephalic vein in the right delto-pectoral groove and infusion of 5-fluorouracil was commenced by a small portable clockwork apparatus.¹ The infusion continued satisfactorily for 241 days, when methotrexate was started instead of 5-fluorouracil because the chest radiograph showed an increase in the size of the tumour. During the following 55 days the patient's general condition deteriorated and the haemoglobin fell from 14.6 to 5.4 g./100 ml. At this point the W.B.C. was 4,500/c.mm. and platelets 110,000/c.mm. Marrow puncture revealed megaloblastic erythropoiesis, though there was an interesting absence of any hyperplastic element. A Figlu test suggested folic acid deficiency, but the serum folate was 8 µg. per ml. The serum vitamin B₁₂ was 30 µg. per ml. Two Schilling tests for vitamin B₁₂ absorption gave a urine recovery of 8.8 and 9.1% when the oral dose was given alone. This was augmented to 12.8% by addition of hog intrinsic factor. Liver function tests were normal. Red cell survival using chromium-51 gave a

chromium half-life of 25 days, and no excess accumulation was observed in liver, spleen, or lung. Methotrexate was discontinued. Subsequently the haemoglobin rose to 8.0 g./100 ml., but it has not risen further.

The occurrence of megaloblasts in the bone-marrow immediately following short courses of methotrexate in high dosage during one week or so is well documented,^{2,3} and it is reasonable to expect a similar effect from prolonged courses in low dosage, as reported by Ryan *et al.*⁴ and by Borrie and Clark. In our patient the megaloblastic anaemia appeared to develop during the 55-day course of treatment. The development of megaloblastic anaemia over this period of time is not remarkable, but the fall of 9.2 g./100 ml. is strikingly severe. The ultimate critical assessment in the present instance is not clear. The vitamin B₁₂ and folate data could be accepted as compatible with Addisonian pernicious anaemia, although the vitamin B₁₂ absorption rarely exceeds 7% in this condition. However, we feel that the appearance of the megaloblastic anaemia was related to the administration of the anti-metabolites and that the absence of erythroid hyperplasia and the incomplete haemoglobin response to vitamin B₁₂ favour a toxic suppression of normal erythropoiesis.

In this patient the prolonged course of 5-fluorouracil may have adversely affected erythropoietic maturation or may have rendered erythroid precursors more susceptible to the action of methotrexate, but no description of such an anti-erythroid effect of 5-fluorouracil has been found in a search of recent literature. An accurate measure of the functional reserves of erythropoiesis would aid this form of therapy. However, alert supervision should avoid complications, especially if it is realized that erythropoiesis, as well as leucopoiesis and platelet production, may be significantly and specifically depressed by these anti-metabolites.—We are, etc.,

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MARY D. SMITH.

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Royal Infirmary, J. HUTCHISON.
Glasgow.

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- Watkins, E., jun., *New Engl. J. Med.*, 1963, **269**, 850.
- Rose, D. P., Bond, M. R., and Evans, C., *Brit. J. Cancer*, 1965, **19**, 126.
- Kundel, D. W., and Nies, B. A., *Amer. J. clin. Path.*, 1965, **44**, 146.
- Ryan, T. J., Vickers, H. R., Salem, S. N., Callender, S. T., and Badenoch, J., *Brit. J. Derm.*, 1964, **76**, 555.

Sympathectomy and Claudication

SIR,—For those who do not use ergometric means for assessing the disability imposed by intermittent claudication, it is gratifying to note that Mr. K. A. Myers and Professor W. T. Irvine (9 April, p. 879) regarded the patient's assessment of walking distance as a reasonable index of response to treatment. It is, however, disappointing to read your leading article (16 April, p. 931) which suggests that sympathectomy gives virtually no benefit to the patient complaining only of intermittent claudication, when Myers and Irvine quote cases who obtained immediate striking improvement. Rose and Zaheer (18 June, p. 1538) correctly stress the point that

many patients are unsuitable for reconstructive surgery and it would be wrong to deny these patients the benefit which might be derived from lumbar sympathectomy.

Considerable confusion in assessing the effects of sympathectomy on intermittent claudication is due to insufficient recognition of the fact that claudication is a symptom and not a disease. It is caused by inadequate blood-flow to active muscle due to arterial occlusion or narrowing, which may be unilateral or bilateral, single or multiple, and which may occur at all levels of the arterial tree. Each arterial lesion has its own pattern of collateral circulation, whose efficiency varies according to the site of the lesion and the age of the patient. Accordingly, some lesions respond well to sympathectomy, others do not, and younger patients respond better than the elderly.

In 1961 we presented a survey of the response of different groups of lesions to chemical sympathectomy,¹ and further observation has amplified these findings. Aorto-iliac lesions in general do not respond well, but a unilateral common iliac occlusion with an excellent internal iliac collateral circulation across the midline may respond dramatically. Short adductor and proximal superficial femoral occlusions generally give an excellent response, whereas popliteal and tibial occlusions give a poor response. This would explain the poor results obtained by Myers and Irvine in cases rejected for arterial surgery because of poor run-off. One type of popliteal occlusion which gives an excellent response to sympathectomy is the low popliteal occlusion where the occlusion lies below the sural outflow, a type of case in which surgery is not possible. Because the response to sympathectomy varies in the different lesions, it is unrealistic to assess results in a polyglot group of cases.

Perhaps the most convincing demonstration of the value of sympathectomy lies in the response of certain patients with bilateral occlusion and unilateral symptoms. Treatment of the affected leg by sympathectomy often leads to a reversal of symptoms, and subsequent treatment of the originally symptom-free leg may lead to a second reversal of symptoms restoring the original symptom pattern, but with a marked overall gain in walking ability.—We are, etc.,

Royal Infirmary,
Glasgow C.4.

WILLIAM REID.
J. K. WATT.

REFERENCE

- Reid, W., Watt, J. K., and Gray, T. G., *Scot. med. J.*, 1961, **6**, 228.

Favism from Pollen

SIR,—In 1961 Dr. Worssam and I¹ reported to you a case of favism in an Englishwoman. She has been kept under frequent observation since then through the Diabetic Clinic, which she regularly attends. She has carefully avoided eating broad beans (*Vicia faba*) and the drugs about which we had warned her. She has remained free of symptoms, except on the following occasions.

In September 1962 she was given, inadvertently, paracetamol, and she felt faint and became pale, but had no other symptoms. In 1964 she complained of headache, nausea, and diarrhoea after being near flowering broad bean plants. Later that summer she

handled intact pods, and was in the house while the beans were cooked; she then developed slight jaundice and passed dark urine.

Since then she has avoided all contact with these plants, and remained well. But she now reports that on 25 June 1966 she sat talking in a friend's garden for about one hour. Behind them was a rose hedge, and, on leaving, she discovered a bed of broad beans in flower behind the roses and about one yard from her seat. She was careful to avoid any closer contact with them. Four hours later she developed a headache and felt sick. After another eight hours she had become so faint that she could not raise her head from the pillow, and she had become jaundiced. She began vomiting and her urine became dark brown. She recognized these familiar symptoms but did not send for her doctor, as it was a Sunday. She remained in bed for three days and did not feel fit until seven days after the onset.

This was a typical attack of favism, produced by inhalation of pollen only. One might call it a case of "Bagdad Spring Anaemia," arising in an English garden.—I am, etc.,

H. S. BRODRIBB.

Royal East Sussex Hospital,
Hastings.

REFERENCE

- Brodrigg, H. S., and Worssam, A. R. H., *Brit. med. J.*, 1961, **1**, 1367.

Encephalopathy and Fatty Degeneration of Viscera

SIR,—I was interested in the article from New Zealand on the syndrome of encephalopathy and fatty degeneration of the liver in children (16 July, p. 135). In the last few months we have had two such cases.

The first, a girl 4 years old, had a history of a 'flu-like illness for four days which improved, but gave way to vomiting, increasing restlessness, and ultimate lapse into coma. On examination she had markedly acidotic breathing, a bicarbonate of 15 mEq/l., and a slightly enlarged liver. A blood sugar was 45 mg./100 ml., but there was no response to intravenous glucose. She steadily deteriorated and in spite of vigorous treatment died within less than 24 hours after admission.

The second case was a girl 3½ years old who had an intermittent history of coryzal-like illness for two weeks. She had had some sort of convulsive episode and lapsed into unconsciousness, and was admitted to hospital on the same day. On examination she was deeply unconscious, had an enlarged liver, and her blood sugar was found to be 40 mg./100 ml. This did not improve on intravenous glucose and she died less than 12 hours after admission. Apart from the low blood sugar and bicarbonate the investigations were negative. Numerous virus specimens were taken from both cases, all of which were unhelpful.

At post-mortem both children had enlarged livers, the first weighed 700 g. and the second 450 g. Both organs showed gross fatty infiltration. The brains of both children were extremely swollen, but there was no evidence of meningitis.

These two cases both seem to bear close similarities to the cases described from New Zealand: the aetiology seems to be equally obscure.—I am, etc.,

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