their experience of the acid barium swallow in 350 patients; the test was negative in only 9% of the patients who had heartburn or regurgitation. In the study reported by Dr. Sladen and his colleagues the acid perfusion test was negative in 5 out of 19 patients with typical symptoms of oesophagitis, and it may well be that the more cumbersome acid perfusion test has little or no advantage over a carefully conducted acid barium swallow, which takes only 10 minutes at the end of a barium-meal examination. A direct comparison between these two techniques would be valuable. The retrospective use of routine radiographs in this study was disappointing and the incidence of radiological reflux given is meaningless without more details. The prone or semiprone position quoted (but not necessarily used on all these patients) will demonstrate hiatus hernia readily, especially if a bolster is used, but since air and not barium lies against the cardia in this position it is not the most sensitive method of eliciting reflux. The use of radiology in endoscopic trials demands the active involvement of a radiologist from the start so that the x-ray examination may be tailored to answer the specific diagnostic questions relevant to the trial. Moreover, in one paper comparing endoscopy and radiology in the postoperative stomach using retrospective analysis of routine barium meals⁴ 10 out of 22 erroneous reports were corrected on review of the films by radiologists interested in gastrointestinal disease.

In the future, if the indications for radiology and endoscopy are to be accurately defined and both techniques used to maximum advantage it will be necessary to have much closer co-operation between endoscopists and radiologists in planning studies like the one reported.—I am, etc.,

GILES W. STEVENSON

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- 1 Kobayashi, S., and Kasugai, T., *American Journal of Digestive Diseases*, 1974, 19, 345.
- 2 Donner, M., et al., *Radiology*, 1966, 87, 220.
- 3 McCall, I., Davies, E. R., and Delahunty, J. E., *British Journal of Radiology*, 1973, 46, 578.
- 4 Cotton, P., et al., *British Journal of Surgery*, 1973, 60, 629.

Epipodophyllotoxin VP 16213 in Acute Non-lymphoblastic Leukaemia

SIR,—It has recently been reported that the bone marrow of people with acute non-lymphoblastic leukaemia may contain a meaningful number of monocytoid precursor cells.¹ We have documented a significant response to epipodophyllotoxin VP 16213 in 47% of our patients with extensive diffuse histiocytic lymphoma,² while it has been reported that four out of eight patients with acute monocytoid leukaemia experienced complete remission with administration of this agent.³

Earlier personal experience in treating individuals with acute non-lymphoblastic leukaemia using rubidomycin and cytosine arabinoside established that, when induction of remission was achieved, an average of four courses was required. In each course a single injection of rubidomycin (1.5 mg/kg body weight) and five daily intravenous injections of cytosine arabinoside (2.0 mg/kg) were administered. This was followed by a rest period of five days,

after which the course was repeated unless the patient had entered remission.⁴

Results in two patients with leukaemia suggested a possible role for epipodophyllotoxin in the induction regimen. These particular cases are of interest since both received the induction regimen described above and went on to develop peripheral pancytopenia accompanied by the persistence of marrow disease. Significantly, whereas typical myeloblasts had initially dominated the picture, the primitive cells were now more obviously monocytoid. The addition of epipodophyllotoxin at this time resulted in complete morphological clearing of the marrow and the return of the peripheral blood count to normal.

In a pilot study 16 patients have been treated with a continuous infusion of cytosine arabinoside in a dosage of 2.0 mg/kg body weight every 24 hours and have received simultaneously a daily intravenous injection of 60 mg/m² epipodophyllotoxin and 40 mg/m² adriamycin on day 6. Of these patients, eight (50%) failed to respond, and as seven of this group died within two weeks they are difficult to evaluate. The remaining eight (50%) achieved complete remission—two within three courses, a further two within two courses, and the remaining four following only a single course. It is this reduction in the time needed to obtain remission that is of interest.

Though these results are entirely preliminary and based on a very small number of observations with only short follow-up, they are reported in order to draw attention to the possible value of adding epipodophyllotoxin to the induction regimens of patients with acute non-lymphoblastic leukaemia. A controlled prospective trial is now in progress to try to confirm these early data and to define statistically the incidence and duration of complete remission that may attend the use of this regimen. We would be interested to hear of other experiences with similar programmes.—We are, etc.,

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We thank Sandoz Ltd., for supplying the epipodophyllotoxin VP 16213.

- 1 Glick, A. D., and Horn, R. G., *British Journal of Haematology*, 1974, 28, 395.
- 2 Jacobs, P., King, H. S., and Sealy, R., *South African Journal of Medicine*. In press.
- 3 European Organization for Research in the Treatment of Cancer, *British Medical Journal*, 1973, 3, 199.
- 4 Crowther, D., et al., *British Medical Journal*, 1973, 1, 131.

Economies in the N.H.S.

SIR,—There is much interest in the costs of providing a health service and in how economies can be made without reducing standards. Dr. H. P. Hughes (5 October, p. 41) and Dr. M. C. Connell (2 November, p. 291) raised the question of unnecessary x-ray examinations in casualty departments, and Dr. J. L. Taylor (16 November, p. 406) emphasized the need for an adequate history in deciding whether to request an x-ray.

During five weeks in June and July 1966, while working as a casualty officer in a general hospital in an industrial town, I sent 401 patients for radiography to exclude fractures or dislocations. Sixteen of them had more than one injury, so a total of 421 injured parts were x-rayed. I made a note of whether I thought on clinical grounds that there was a bone injury. My diagnosis was later related to the radiological diagnosis. The 421 injuries fell into three groups: clinically negative, 181 (43%); clinically doubtful, 191 (45%); and clinically positive, 49 (12%).

Each of these groups was subdivided according to the x-ray results, assessed by the casualty officer's interpretation at the time and the radiologist's report afterwards. The casualty officer's and the radiologist's independent initial interpretations differed in 31 cases (7%). Of the 181 injuries in the clinically negative group 152 (85%) were radiologically negative, 11 (6%) were radiologically doubtful, and 18 (10%) were radiologically positive. Of the 191 injuries in the clinically doubtful group 111 (58%) were radiologically negative, 15 (8%) were radiologically doubtful, and 65 (34%) were radiologically positive. Of the 49 injuries in the clinically positive group 4 (8%) were radiologically negative, five (10%) were radiologically doubtful, and 40 (82%) were radiologically positive. Of the 421 injuries x-rayed 101 were in children under 14 years old. These gave very similar results when analysed separately.

The cases of special interest are those which were clinically negative but x-ray showed some bone injury. These numbered 18, which is 10% of the clinically negative group and 4% of the total. Of these 18 seven were in children. None of the injuries was such as would have caused danger or serious disability if undetected.

The x-ray results were also analysed according to whether the patient had come directly to the casualty department (197), had been referred by a nurse or doctor (99), or had been referred by a nurse or doctor with specific mention or strong implication in the referral letter of a need for x-ray examination (125). On analysis by x-ray results these three groups gave remarkably similar results, and the lack of any difference between the direct attenders and those referred with a specific suggestion of x-ray examination was unexpected and interesting.

These figures from nine years ago suggest that x-ray examinations were being done unnecessarily. The recent correspondence in your columns suggests that this may still be the case.—I am, etc.,

FRANK STEWART

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Visual Evoked Potentials and Transient Ischaemic Attacks

SIR,—The letter from Dr. L. Bergström and others (11 January, p. 93) is of considerable interest to us. We have just completed a series of recordings of both somatosensory and visual evoked potentials from 200 consecutive patients admitted to the neurological or neurosurgical unit for investigation of a suspected intracranial lesion and from 50 "normal" subjects. Though the analysis of the results is not complete, we

already have a strong impression that cortical evoked potentials are much more susceptible to ischaemic change than the E.E.G. We are of the opinion that, with proper safeguards against the changes in evoked potential amplitude and form due to changes in conscious level, the evoked potential may be a valuable tool in differentiating between ischaemic and expanding lesions. Though not identical, the criteria for abnormality used by Dr. Bergström and his colleagues are generally similar to ours. In particular it is essential not to give significance to amplitude asymmetries in which the lesser potential is not less than 50% of the greater, as asymmetries of less than this are relatively common even in the control group.

An interesting observation was made in only three cases in our series (subdural haematoma, convexity meningioma, and intracerebral secondary deposit) in which the return of the somatosensory evoked potential to a greatly increased and abnormally high amplitude followed surgical removal of the lesion. The homologous potential remained unaltered and in two of the cases the abnormally large potentials gradually returned to a more normal amplitude over a period of about six weeks.

Details of these cases and the results of the study will be published in full when our analysis is complete.—We are, etc.,

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Advertising of Preregistration Posts

SIR,—May I, as a final year student to whom the matter is of some interest, make some comments about the advertising of preregistration house officer posts?

There is a great variety of information given; of the 15 advertisements for preregistration house surgeons (excluding locums) in a recent issue of the *B.M.J.*, only four stated whether married accommodation was available or not, two mentioned the number of beds concerned, two spoke of the activities of postgraduate centres, and only one stated the number of fellow house

surgeons, thus giving an indication of the duty rota. I believe points like these are of great importance to the would-be applicant. I would also suggest that an informative advertisement recommends both the hospital and the job to the potential candidate, just as a well-presented applicant will recommend him to his prospective employers.—I am, etc.,

CHARLES CAMPTAN-SMITH

Edinburgh

Displacement of a Pacemaker

SIR,—In January 1973 a man aged 64 came to see me complaining of jerking movements of the right leg which had started the day before. The jerking was rhythmical and consisted of clonic spasm of the adductor muscles of the right thigh. These contractions came at the rate of 70 per minute and were synchronous with the pulse and heart beat. Change of position affected the condition; when he lay down the contractions stopped; they started again when he sat up; leaning back stopped them; leaning forwards started them again. It was obvious that there was some abnormal stimulus of the obturator nerve (L2, 3, and 4) so an x-ray of the lumbar spine was done and this revealed the cause.

The patient had been to me a year before with a history of Stokes-Adams attacks, and an E.C.G. showed atrioventricular block with Wenckebach periods. He had gone to London, where a demand pacemaker had been fitted in December 1972 and this had functioned well till 29 January. The spasms started on the next day. The x-ray showed a long wire lying to the right side of the spine down as far as the body of L4. This was the pacemaker, which had become dislodged and was stimulating the obturator nerve roots at the rate of 70 per minute. The patient had to return to London to have the pacemaker, which had slipped down into the inferior vena cava, repositioned in the right ventricle.

I have never heard of a similar case, but it is possible that mishaps of this sort have occurred before.—I am, etc.,

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Consultant Representation

SIR,—Mr. P. R. J. Vickers (1 February, p. 276) touches on a subject which is causing increasing anxiety in the profession. He is quite right to suspect that Council's third report on the constitution of the Association (28 December, p. 777) will do nothing to improve matters.

I wonder if he recalls that at the 1974 Annual Representative Meeting, contrary to the recommendation of the Chairman of the Central Committee for Hospital Medical Services, the Representative Body resolved: "that this Meeting would welcome the speedy introduction of local representation of consultants along similar lines to those existing in general practice" (20 July 1974, p. 207). The strength of general practitioner representation lies essentially in local medical committees which are elected

by and from all G.P.s in each N.H.S. area. These committees maintain G.P. representation on the district and area medical committees of the N.H.S. and directly elect their own representatives to the Annual Conference of Local Medical Committees, which defines broad outlines of policy for the General Medical Services Committee. The bulk of the G.M.S.C. is elected by local medical committees grouped on a regional basis for the purpose. Each local medical committee member has a vote.

Thus G.P.s enjoy a particularly democratic arrangement for their representation involving both distillation upwards and accountability downwards. If consultants endorsed similar arrangements they could more easily determine their local N.H.S. representation, their policy at and repre-

sentatives to an annual conference and their choice of the most suitable from among themselves to represent them on the C.C.H.M.S. The chief reason for the existence and relative success of the Hospital Consultants and Specialists Association would then disappear.—I am, etc.,

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Representative, West Herts Division, B.M.A.
Harpenden, Herts

Time to See Patients

SIR,—In early March it will be the tenth anniversary of the "Charter for the Family Doctor Service." It is interesting to have another look at this document to see some of the things which our leaders at that time considered so necessary for the revival and continued prosperity of family medicine.

The first essential laid down was that there should be adequate time for a doctor to deal with each patient. This was to be achieved by the gradual reduction of average list size to between 1500 and 2000 patients without financial loss to the doctors. It was considered also, those 10 years ago, that in order to make general practice financially attractive a capitation fee of £1.80 was necessary. Ten years later we have barely achieved this figure, which at today's value would be about £4, and made no progress whatsoever towards reduction in list size. In fact, as all of us in general practice well know, as the years have gone by the pressure of public demand has increased. It is, indeed, a sad reflection on the success of our leadership that so little has been achieved in 10 years on these two vital matters.

It is therefore most interesting that probably the most important effect of the consultants' work-to-contract has been to restore to many of those worthy people a sense of professional dignity. For the first time for many years (and probably, for some of them, for the first time ever) they have been able to carry out the job for which they have trained in a proper way with adequate time to deal with their patients and free from the pressure of numbers. They have discovered the reality of leisure time and relaxation. Some of them have told me personally that whatever happens they will not allow themselves to return to the pressures to which they were previously subjected.

I earnestly hope that this dramatic lesson will not be lost upon family doctors and their leaders. There is no earthly reason why we also should not insist that we should be able to carry out our professional work in a peaceful and dignified manner. If the tide of public demand cannot be stemmed, and no Government appears willing to try to stem it, then the profession must stand united and make it crystal clear to the Government that consultants and family doctors cannot and will not continue to work under these pressures and that the only solution is the provision of far more finance, so that many more doctors can be persuaded not to emigrate, hospitals be fully staffed, and list sizes drastically reduced.—I am, etc.,

J. M. LONDON

Redditch

1 *British Medical Journal Supplement*, 1965, 1, 89.