digitalization, during which they used an arbitrary fixed dosage schedule. They also give no information on the severity of the cardiac failure in their series of 43 children and the only comment on the clinical response is that "no toxic symptoms were noted on this regimen, and heart rate and failure were well controlled."

Digoxin was administered to all their patients by mouth as an elixir. Are they suggesting that intramuscular digoxin is unnecessary in cardiac failure or is the implication that in all their patients the failure was mild enough to permit oral therapy?

If the authors could provide the supplementary data on the clinical aspects of their cases, this would help considerably in the evaluation of their suggested dosage regimen.—I am, etc.,

VICTOR DUBOWITZ

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Hammer and Eye

SIR,—In relation to the correspondence on the subject of intraocular foreign bodies, the following case may indicate some further facets of the caution which is essential in the handling of these problems.

A young man attended with a history of a hammer and chisel injury and a perforating corneal wound near the periphery at eight o'clock. There was a hole in the iris and peripheral lens damage, and on inspection of the eye with an ophthalmoscope a shining metallic foreign body was clearly visible in the anterior vitreous. Nonetheless, an x-ray was taken and revealed an intraocular foreign body. Localization of this, however, disclosed that it was far away from the foreign body which could be seen. Neither was it visible ophthalmoscopically, being situated behind the lens opacities. Despite very close examination of the x-ray plates the visible foreign body could be detected only with the eye of faith. Only one entrance wound was found.

It seems clear that a fissured foreign body entered the eye and the relative masses of its two portions resulted in their separation inside the tissues. It hardly needs to be stressed that it is quite conceivable that without adequate investigation only one might have been removed at operation. Both foreign bodies were removed magnetically by the posterior route and the eventual outcome for the eye after the traumatic cataract had been dealt with was reasonably satisfactory.

The importance of avoiding all and any preconceptions and assumptions when dealing with these cases cannot be overstated.—I am, etc.,

M. J. GILKES

Sussex Eye Hospital,
Brighton

Relation between Serum Cholesterol and Haemoglobin Values

SIR,—We wish to add our experience to the data published by Professors L. E. Böttiger and L. A. Carlson (23 September, p. 731). According to their observations there is a more or less constant positive correlation between the level of cholesterol and the haemoglobin concentration in the blood of healthy non-anaemic subjects, a finding

similar to those previously reported by others.^{1,2}

We have collected data from patients with anaemia or polycythaemia due to various clinical conditions. Good positive correlations between the haemoglobin and cholesterol values were found in chronic myeloid leukaemia and multiple myeloma. This was not the case, however, in Hodgkin's disease,

chronic lymphoid leukaemia (fig. 1), and acute leukaemia; most of these patients had fairly low blood cholesterol levels in spite of varying haemoglobin levels.

Surprisingly enough, a negative correlation seems to be present in another myeloproliferative process, polycythaemia vera, in which the serum cholesterol, initially low, rises towards the normal level as the haemoglobin concentration is reduced as a result of adequate treatment (fig. 2).

Our own experience supports the finding of Professors Böttiger and Carlson that in normal subjects the blood cholesterol and haemoglobin levels run parallel to each other. However, this does not always seem to be the case in pathological conditions. Our detailed results will be published elsewhere.—We are, etc.,

MARIANNA BOGA
P. A. SZEMERE

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¹ Rifkind, B. M., and Gale, M., *Lancet*, 1967, 2, 640.

² Evans, J. G., and Prior, I. A. M., *Lancet*, 1967, 2, 1362.

Obstetric Prevention of Mental Retardation

SIR,—There can be little disagreement with the general theme of Professor Philip Rhodes's article (17 February, p. 399) on the benefits of obstetric detection and prevention of those pregnancies likely, or more likely than usual, to result in the birth of

a mentally handicapped child. It appears to me, however, that many questions are left unanswered, particularly with regard to the "policy" as described at St. Thomas's Hospital.

While the criteria for detecting the potentially small-for-dates baby were those well accepted, we are not told at what stage induction was performed, what complications, particularly in terms of prematurity, resulted, and by what criteria the babies thus produced were judged to be likely to have become small for dates. Had the criteria of the control group—i.e., two standard deviations below the mean—been used then presumably these babies would not have qualified, as the whole purpose of the exercise was to avoid such babies.

It is also not clearly established in the article that smallness for dates per se is a cause of mental retardation—excluding those infants who suffer some degree of hypoglycaemia, which is well known both as a cause of retardation and as a complication in the small-for-dates baby. Might it not be that the improvement in mental performance in the series resulted not from the early obstetric management but from improvements in the detection and treatment of neonatal hypoglycaemia over the past five years?—I am, etc.,

J. C. SYMONS

Jenny Lind Hospital,
Norwich

Longevity of Women G.P.s

SIR,—Dr. R. A. Keable-Elliott, speaking at a meeting of the General Medical Services Committee on 15 February (*Supplement*, 3 March, p. 64) is reported to have "pointed out that it was in fact the lady doctors in pension schemes who had exploited the males over the years rather than the other way round. The expectation of a woman was so much greater than that of the male . . . [and] they drew benefit for a longer period." Whereas this is true of women in general, I doubt if it is true of women doctors. It is certainly not true of men and women doctors whose obituary notices appear in the *B.M.J.* In recent years I have made an analysis of the age of death of male and female doctors and in various categories of doctors. For instance, in 1968 there were obituary notices in the *B.M.J.* of 422 doctors, 389 male and 33 female. The average age at death of the men was 69 and that of the women 65. There were 158 general practitioners; the average age at death of the 144 men was 70 and that of the 14 women 62.

I am well aware that these figures are not necessarily statistically significant, but at the very least they throw some doubt on the statement that women doctors in active medical practice live longer than their male counterparts.—I am, etc.,

J. G. DENHOLM

Witham, Essex

Radiography of Potentially Pregnant Females

SIR,—In your issue of 18 November 1972 (p. 422) you published a letter from us relating to the radiography of potentially pregnant females. For those attempting to cope with

this problem we have collected the following information.

In November 1972, 5,165 patients were sent for a radiological examination at the Radcliffe Infirmary; 2,158 were females, and 181 of these who were between the ages of 15 and 45 years had examinations of the abdomen and pelvic regions. At the Nuffield Orthopaedic Centre for the same month the total was 1,321 patients; 702 were females and 87 of these between the ages of 15 and 45 had examinations of the abdomen and pelvis. Very few of these examinations were for emergencies or accidents. About one-third of those at the Radcliffe Infirmary were gastrointestinal investigations. About half the examinations at the Nuffield Orthopaedic Centre were follow-up studies of patients with congenital dislocation of the hips or scoliosis.

With the collaboration of two assistants we carried out an inquiry among 50 professional women and 50 chest clinic patients who had not reached the menopause. They were asked to answer the question, "Have you recently incurred a risk of pregnancy?" Care was taken to ensure privacy and anonymity, but note was taken of any objections. Only two persons refused to answer. Of these 100 women, 80 stated that they had run no risk.

If the 10-day rule had been in operation in these departments 268 patients would have required special booking. On the basis of our inquiry it would appear that this number could have been substantially reduced to approximately 53 patients, with consequent saving in time for patient and doctor. In practice this means that about one patient per outpatient clinic would require special attention, which should not prove an arduous task for the referring doctor. A further reduction could be achieved if general practitioners would instruct patients to refrain from incurring a risk of pregnancy before attendance at an outpatient clinic.

The scheme which was outlined in our letter has now been tried for five weeks at the orthopaedic hospital without any difficulty being experienced. Since then we have formulated a policy to cover special cases—namely, children between the age of puberty and 16 years (a very small category) and patients who have language difficulties or whose mental capacity is too low to comprehend the problem. For these persons we think that the examination is best performed during the menstrual period. Arrangements should be made by a nurse, who would try to ensure that the booking is made for a time when the menstrual flow is likely to be minimal.

During the past five months we have had numerous discussions with many colleagues. We remain convinced that our scheme is the simplest solution to the problem. We emphasize the saving of time to all concerned.—We are, etc.,

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F. H. KEMP

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New Ideas on Vitamin D

SIR,—I read with interest your recent leading article on vitamin D (17 March, p. 629). The rate of advance in this area is extremely

rapid and appears to have overtaken you in at least one respect.

The idea that thyroparathyroidectomized animals cannot synthesize 1, 25-dihydroxy-cholecalciferol is no longer tenable.^{1,2} If this view was ever strictly held by Professor DeLuca I do not believe he would support it now, as judged by his recent review contributed to the 9th European Symposium on Calcified Tissues in October 1972.³ A more detailed analysis of the present state of knowledge in this field has recently been published.⁴—I am, etc.,

IAIN MACINTYRE

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London W.12

- 1 Galante, L., Colston, K., and MacIntyre, I., *Clinical Science*, 1973, **44**, 3p.
- 2 Galante, L., Colston, K. W., Evans, I. M. A., MacAuley, S. J., and MacIntyre, I., *Proceedings of the 9th European Symposium on Calcified Tissues, Baden, Australia*. In press.
- 3 DeLuca, H. F., *Proceedings of the 9th European Symposium on Calcified Tissues, Baden, Austria*. In press.
- 4 MacIntyre, I., *New England Journal of Medicine*, 1973, **288**, 471.

Transient Paraplegia due to Dissecting Aortic Aneurysm

SIR,—We wish to report an unusual instance of transient paraplegia due to a dissecting aneurysm of the aorta.

A 52-year-old man presented in September 1971 with sudden excruciating chest pain radiating into the back and abdomen. This was associated with numbness and paraesthesiae in the feet, ascending to the umbilicus, and complete paralysis of his lower limbs. There was increased muscle tone, sustained clonus at the left knee and ankle, and brisk lower limb reflexes with extensor plantar responses. Light touch and pinprick sensation was diminished below the 10th dorsal segment. He had a regular pulse of 80/min, equal femoral pulses, and no cardiac bruits; his blood pressure was 110/70 mm Hg. The initial episode of chest pain suggested a dissecting aortic aneurysm, despite lack of other signs and normal x-rays of the chest and abdomen. He had a past history of periodic periumbilical pain radiating to the chest and abdomen in 1953, when his blood pressure was 165/120 mm Hg.

The following morning he was pain-free, his legs moved normally, and the abnormal neurological signs had completely resolved. Nineteen hours after the onset of his paraplegia he suffered cardiac arrest and died. Necropsy showed a dissecting aneurysm of the aorta, a double slit extending from the ascending aorta to the level of the diaphragm. The aneurysm had ruptured proximally, producing a haemopericardium. No deformity or thrombosis of the intercostal vessels was noted, and the spinal cord was macroscopically normal. The heart weighed 360 g, with a little left ventricular hypertrophy. There was no evidence of generalized atheroma, and all other organs, including the brain, were normal.

Partial recovery of paraplegia was described in three cases by Tuohy *et al.*,¹ and Moersch and Sayre² postulated this possibility in the event of stretching of the intercostal vessels. Rogers³ described a case presenting with a flaccid paresis of the legs in which the left leg subsequently improved but the right remained paralysed.

Previous reports refer to tearing and occlusion of the intercostal vessels in dissection, but the mechanism in our patient remains conjectural. The intercostal vessels were clearly patent, and ischaemia presumably resulted from either stretching or spasm.

We are indebted to Dr. J. R. Hearnshaw for permission to report this case and to Dr. E. M. Ward for the postmortem studies.
—We are, etc.,

IAN M. STEWART
PAUL A. H. MILLAC

Leicester Royal Infirmary

- 1 Tuohy, E. L., Boman, P. G., and Berdez, G. L., *American Heart Journal*, 1941, **22**, 305.
- 2 Moersch, F. P., and Sayre, G. P., *Journal of the American Medical Association*, 1950, **144**, 1141.
- 3 Rogers, H., *American Heart Journal*, 1939, **18**, 67.

Screening for Cervical Carcinoma

SIR,—Like Dr. R. A. A. R. Lawrence (24 February, p. 492) I am puzzled by the latest instruction from the Department of Health and Social Security that colleagues in practice will be paid if they take cytology tests from women under 35 only if they have had three or more children. In a pilot study made in November in Birmingham with the Women's National Cancer Control Campaign a caravan was situated in our busy shopping centre, the Bull Ring. A total of 1,500 volunteers took a test and their ages are of interest; 17% were under 35, and of the first six with positive cytology three were under 35. The latest D.H.S.S. edict would have excluded them from taking a test.

I am writing in the hope that family doctors will not be held back by any instruction from the D.H.S.S., and will offer the test to every woman at risk in their practice. The important test is the first test.—I am, etc.,

H. C. McLAREN

Birmingham Maternity Hospital,
Edgbaston, Birmingham

Coxsackie B Virus and Diabetes

SIR,—Further to the letters from Dr. D. R. Hadden and others (23 December, p. 729) and Drs. D. R. Gamble and K. W. Taylor (3 February, p. 289) we too are investigating the possible role of Coxsackie B viral infections as an aetiological agent in diabetes mellitus. We are engaged in a study of serum neutralization tests against Coxsackie B viruses in newly diagnosed diabetic patients in relation to insulin secretion and other indices of their diabetic state.

We have recently made inquiries from their general practitioners into the development of diabetes in 24 patients diagnosed as having had Coxsackie B2 or B4 viral infections in 1968-72. No patient or any member of their families has developed clinical diabetes mellitus since the infection was diagnosed. These findings, of course, do not exclude Coxsackie B viral infections as an aetiological agent in diabetes, but would suggest that if there is any association this must be in the nature of an abnormal or delayed response to such infection.

We would agree with Drs. Taylor and Gamble that the results so far available should not deter the further exploration of this relationship. We would like to thank all our colleagues who have helped in our study so far.—We are, etc.,

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M. H. HAMBLING

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