the consultant should have the final say over who gets his job, but I feel he has a duty, having agreed to participate in the matching plan, to see all the students interested in his job before making his choice. If the number of consultants breaking the rules like this were to increase, then the whole scheme would break down.

Obviously there are advantages of the scheme which make it preferable to the previous state of affairs, such as the rules about no student holding more than one teaching hospital post and all jobs starting on standardized dates. However, the deficiencies mentioned above, must, I feel, be corrected if it is to be fair.—I am, etc.,

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Infectious Mononucleosis

SIR,—It was perhaps inevitable that Dr. H. G. Penman, a clinical pathologist who is joint editor of an excellent book on infectious mononucleosis,1 should find much to criticize (2 June, p. 546) in my short article on this disorder (12 May, p. 350).

Much of the criticism is to do with the omission from my article of many aspects of infectious mononucleosis which Dr. Penman obviously feels should have been included. I should like to make it clear that I was requested by the Editor of the B.M.7. to write an article giving stress to advice on the diagnosis and management of infectious mononucleosis as it presents to the general practitioner, with particular mention of the role of antibiotics in treatment. My selection from the vast amount of information available on this disorder was in accord with this brief.

The article was written several months ago, when most of the data concerning the role of the Epstein-Barr (E.B.) virus in infectious mononucleosis was derived from serological studies. I admit to being sceptical of interpretation from serological studies in patients with a condition in which a wide variety of antibodies to human, animal, bacterial, and viral antigens have been described, and this scepticism accounted for my statement that "more research is needed to define the exact role, if any, of this organism in the causation of infectious mononucleosis." The more recent studies on isolation of E.B. virus from throat washings of patients with infectious mononucleosis^{2 3} are much more convincing and I would certainly now acknowledge a definite role for this virus. I am, however, still hesitant about accepting the unequivocal view that E.B. virus is "without doubt the cause of infectious mononucleosis."4

As Dr. Penman states, infectious mononucleosis has been notifiable in some areas for several years, though it is not a nationally notifiable disease. The figures I gave for incidence in my article (2-6 per 10,000 each year) take into consideration the findings from local notification and, in fact, are the same as those quoted in the book in infectious mononucleosis edited by Dr. Penman (p. 67). In my experience, as in that of others, the preponderance of infectious mononucleosis in females in the 15-20-year age group mentioned by Dr. Penman is balanced by male preponderance in the 20-25-year age group.

The persistence of atypical cells in in-

fectious mononucleosis for longer than two weeks is, I would agree, an important diagnostic point, but in general practice it is much less easy to collect and transport serial specimens of blood for laboratory examination, so I stressed numbers rather than duration in my article. Discussion on seronegative cases or timing of laboratory tests in relation to duration of illness would have further lengthened an article already over the 2,000 words requested by the Editor.

I did not feel that a discussion of the I/i blood group system and its relevance to infectious mononucleosis (anti-i would appear to be the commonest cause of the haemolytic anaemia which rarely complicates this condition) was appropriate for inclusion in this particular article.

Perhaps I should have mentioned the rapid slide "monospot test" as an alternative to the standard Paul-Bunnell-Davidsohn test, as many laboratories appear to have forsaken the latter in favour of the former, but my own opinion is that the monospot test is less specific than the standard test, false positives being not uncommon. I also feel more secure in a positive titre of at least 1/40 in the Paul-Bunnell-Davidsohn test though, as Dr. Penman suggests, this may be unnecessary.

The incidence of clinically obvious jaundice in my experience is about 8% but most such patients are only mildly jaundiced. I have not myself gained the impression of an increased incidence of rashes in jaundiced patients though both jaundice and rash occur together in the same patient on occasions.

Though depletion of cellular marrow elements is extremely rare in infectious mononucleosis, I am sure Dr. Penman will not deny that it occurs.5—I am, etc.,

H. PULLEN

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5 Worlledge, S. M., and Dacie, J. V., in Infectious Mononucleosis, ed. R. L. Carter, and H. G. Penman. Oxford, Blackwell, 1969.

Euglycaemic Diabetic Ketoacidosis

SIR,—In identifying a group of young diabetics presenting in ketoacidosis without significant hyperglycaemia, Dr. J. F. Munro and his colleagues (9 June, p. 578) have enhanced the panorama of diabetic metabolic upsets. With the exception of vomiting, however, there was difficulty in explaining the

In our experience such patients are characteristically voungsters with good renal func-tion and in some we have identified a massive urinary loss of sugar and a greater tendency to a low renal threshold to glucose than in others. Since ketoacidosis is generally regarded as the metabolic outcome of excessive gluconeogenesis coupled with increased fatty acid release, it seems difficult to postulate that the relative euglycaemia is due to a lesser glucose formation in such cases. A greater urinary loss of glucose seems to us more likely. Whether this is a consequence of increased growth hormone secretion affecting renal function, related to

the enhanced clearance reported in early diabetic renal involvement,1 or simply represents one end of the spectrum in terms of the renal threshold to glucose, remains to be determined. Whatever the explanation, perhaps the clue lies in the suggestion by Dr. Munro and his colleagues that there is an ability to grow out of the tendency.—We are,

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W. S. T. THOMSON

Biochemistry Department, Southern General Hospital,

1 Ditzel, J., and Schwartz, M., Lancet, 1967, 1, 276.

Remission of Hyperthyroidism

SIR,—The remission of hyperthyroidism in five of the cases treated by Dr. D. G. McLarty and his colleagues (12 May, p. 332), was interesting and presumably spontaneous, since propranolol did not alter the thyroid function. Carbimazole treatment may accelerate the remission, however, in some cases.1 Why certain cases remit while others need orthodox treatment is perplexing. Is the immunity more transient and less active, perhaps, in cases which remit? Two of the five cases which recovered without treatment had unilateral proptosis, and another showed periorbital puffiness. These facts may hide an important clue.

Lymphocyte sensitization to thyroglobulin (and to long-acting thyroid stimulator) was demonstrated in both normal subjects, and occurs in patients with Graves's disease.2 Winand and Mahieu³ were recently able to separate two types of hyperthyroidism by a leucocyte migration test, using thyroid and retrobulbar extracts. They found positive tests in nine out of 10 cases with progressive exophthalmos, and also in six out of 10 cases without proptosis.4 None of 109 positive patients given azathioprine with the antithyroid drugs developed exophthalmos.8 Early immunosuppression thus seemed to prevent the eye signs, which otherwise would have been expected in about 40% of cases.

Malignant exophthalmos probably consists of more than periorbital oedema, lymphorrhages, and fibrosis, complicating overaction of the thyroid.5 Biopsy of an external orbital muscle is rarely possible, however, in this condition, and necessarily the histological changes are advanced even when this is done. For obvious reasons a muscle biopsy was not obtained in a patient reported in 1972 with hyperthyroidism, asvmmetric proptosis, and myasthenia gravis.6 The woman at this stage had a negative Kveim test, though her lymphocytes showed strong sensitization in vitro.

Sarcoidosis may be far more common than is realized,7 and nine cases of sarcoid exophthalmos were already recorded six years ago.8 The "granulomatous exophthalmos" occasionally described.9 may therefore be simply sarcoidosis. Sarcoid hyperthyroidism10 is now being diagnosed more often, in children11 12 as well as in adults. 13 14 In one case the hyperthyroidism resolved spontaneously in five months10 and in another it remitted after 10 mg of prednisone was given daily for eight months.15 Possibly a number of patients with progressive exophthalmos may have undiagnosed subclinical sarcoidosis. The occurrence of unilateral and euthyroid

cases and the eventual improvement in the eye signs could both be explained in this way, as the granulomas healed .- I am, etc.,

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Sharing the Burden of Certification

SIR.—One of the infuriations of general practice is the task of certification. All too often a patient attends solely to obtain a National Insurance certificate with the words, "The hospital told me to get it from you." In some cases the patient, no doubt, forgot to ask at the hospital. This problem might be eased if hospital doctors asked whether a certificate was needed and if the patient was warned on registering to request one if required.

In certain cases, however, consultants and others refuse to be involved in certification. I think they defend this lack of action on the grounds that it keeps the G.P. informed and involved. In fact it does nothing to inform him, and is his involvement to be characterized by such an idiot task? This week I have had to issue a certificate to a man convalescent from a myocardial infarct who attends hospital monthly and last attended two days before seeing me. The consultant there declined to give him a certificate, referring him to me, but no recent letter from the hospital is available to me to indicate how long the consultant (who is at present managing the medical aspects of the case) wishes him to be off work.

I am sure G.P.s are happy to issue interim certificates for hospital patients, but hospitals should take their sensible share of this work, or they should ensure that the family doctor receives information on patients much more regularly than he does at present.-I am,

C. REISNER

London N.5

Comparison of Co-trimoxazole and Chloramphenicol in Enteric Fever

SIR,—Schragg and Rubridge¹ reported high treatment failure and persisting carrier rates in enteric fever patients treated with cotrimoxazole (trimethoprim and sulphamethoxazole). Others, however, have shown co-trimoxazole to be a promising alternative to chloramphenicol.²⁴ Our study, involving 72 acute cases of typhoid (54) and para-

typhoid fever (18), supports the latter appraisal.

Study patients were admitted to the Abbassia Fever Hospital during the period 1970-2. Criteria for inclusion in the study were either positive blood culture for typhoid or paratyphoid bacillus (58 cases) or positive stool culture with significant Widal titre (14 cases). The study patients were assigned to drug groups in a rotational non-selective manner. Co-trimoxazole was administered in doses of 10 mg/kg body weight daily to 41 patients and chloramphenicol in doses of 50 mg/kg daily to 31. Antibacterial therapy was initiated two days after admission and terminated seven days after defervescence. Patients stayed in the hospital for an average of two months and were followed up in the outpatient clinic for six months. aetiology, age, and sex distribution and duration of illness before treatment in the two groups were generally comparable.

Patients in the co-trimoxazole showed a striking and rapid clinical response within 96 hours despite the presence of fever; two-thirds of the patients showed rapid clinical response within 48 hours. The clinical response in the chloramphenicol group was slower and less dramatic, half of the patients showing satisfactory clinical response within five days, 40% within seven days, and the rest within 10 days. The average number of days required for the patients to become afebrile was 5.5 days in the co-trimoxazole group and 4.5 days in the chloramphenicol group; there was one transient carrier in the former group, and one bacteriological failure, four relapses, and one transient carrier in the latter.

Considering that 40 of the 41 patients treated with co-trimoxazole responded, that only a small number relapsed, and that the average time required for defervescence was only slightly greater than in the chloramphenicol group, co-trimoxazole appears to be as effective in enteric fever therapy as chloramphenicol.-We are, etc.,

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KURT SORENSEN JOHN SIPPEL

U.S. Naval Medical Research Unit No. 3, Abbassia.

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Heartburn of Pregnancy

SIR,—Your leading article on this subject (19 May, p. 378) failed to stress what we considered to be the real point of our paper1 -that incompetence of the pyloric sphincter allows reflux of bile which in turn causes heartburn by irritating the lower end of the oesophagus. You did briefly touch upon this, but then dismissed it, going on to talk about 'antacid preparations that float on the surface of the gastric contents" etc.

If reflux of bile is the cause of pregnancy heartburn, then antacids are very unlikely to improve matters. We are currently trying to cure this often very upsetting symptom

with an acid mixture, and will report in due course.—I am, etc.,

R. D. ATLAY

Mill Road Maternity Hospital,

Atlay, R. D., Gillison, E. W., and Horton, A. L., Journal of Obstetrics and Gynaecology of the British Commonwealth, 1973, 80, 63.

Vocational Training and the R.C.G.P.

SIR,—There is no doubt that the Royal College of General Practitioners has done admirable work in pioneering vocational training for general practice, though some doubt may be expressed as to the validity of the excessively introspective methods at present in vogue in that college (for example, the use of "role play" and other techniques). One might be excused for concluding that sociological and environmental medicine had been invented by the R.C.G.P. What is, however, much more disturbing is the nearmonopoly position now being reached by this particular group of doctors, so that G.P.s ready and willing to teach are being subtly constrained to attend Governmentsponsored courses heavily dominated by the ideas of the R.C.G.P. Before long it may well be impossible for any doctor to be accepted as a teacher of undergraduates unless he himself is a M.R.C.G.P. and has attended courses guided by the college.

Is this not to make the R.C.G.P. equivalent in its power over G.P.s to the Royal Colleges of Physicians with regard to medical specialists and the Royal Colleges of Surgeons with regard to surgeons? The latter colleges are statutorily recognized as specialists' colleges with monopolist rights over the appointments of specialists. I find it difficult to see how general practice, by its very nature, can ever be a specialty on the same terms as those represented by the other royal colleges. I believe I am not alone in viewing with disquiet the way in which the R.C.G.P. is deploying an increasingly powerful position and not only in the field vocational training. "Must be an M.R.C.G.P." is a label one would not like to see attached to advertisements for the best G.P. jobs.

That the R.C.G.P. is doing a great deal of good for general practice is beyond dispute. That it should dominate it is another matter. Such a trend would in my view be detrimental to that variety of skills and methods which family doctoring embodies and lead to an unhealthy stratification along certain narrow and preconceived lines. It should be resisted.—I am, etc.,

S. L. HENDERSON SMITH

Huddersfield

Significance of Milk pH in Newborn Babies

SIR,-Dr. W. A. Cox and others (5 May, p. 301) have contested our finding that cow's milk is bacteriostatic for Escherichia coliwhen titrated to pH 7.40 (2 December 1972, p. 515) and we have been obliged to repeat our study.

The following milks were selected for trial: Carnation evaporated milk (strength 1/2), Similac, and Cow and Gate. A 20-ml sample of each milk was titrated to pH 7.20 and pH 7.40 by the addition of 4.2% sodium bicarbonate. An equal quantity of sterile