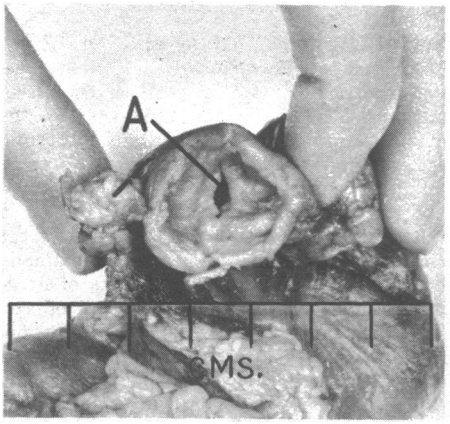

basal duodenal disease and pyloric channel disease may lead to pyloric reflux. The deformed fibrotic pyloric opening in advanced pyloric channel disease is shown in the Fig. —I am, etc.,

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Chlamydia in Chronic Prostatitis

SIR,—As you pointed out (1 July, p. 1), it is rarely possible to trace the causative agent of chronic prostatitis. Lately TRIC agent has been suspected as a fairly common cause of non-specific genital infections.[1-2] We studied sera from 79 untreated patients with chronic or subchronic prostatitis and 72 age-matched registered male blood donors for complement-fixing antibodies to chlamydia. It is known that an antibody response to infections with chlamydia may be detected by complement fixation tests to shared group antigens. We used a psittacosis antigen (Wellcome). Complement-fixing antibodies in a titre of at least 1:5 were found in 33% of the patients with prostatitis but in only two of the blood donors (see Table)

Cultures of urethral swabs and of expressed prostatic and seminal fluids from the patients with prostatitis almost always gave growth only of such bacteria as normally constitute the flora in the distal urethra. None grew gonococci, nor did cultures of rectal swabs. But immunofluorescent studies of seminal smears suggested infection with gonococci in five of the cases. In a few cases it seemed that *Candida albicans, Corynebacterium vaginalis*, mycoplasmas, *Trichomonas vaginalis*, or a virus might be the causal agent.

Treatment with metacycline proved more successful ($P < 0.1$) in the patients with complement-fixing antibodies to chlamydia than in those without, as judged from the relief of symptoms. Chlamydia infections may be treated with antibiotics such as tetracyclines, but recent work suggests that such treatment may not be so effective as supposed.[3]—We are, etc.,

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1 Jones, B. R., *British Journal of Venereal Diseases*, 1972, **48**, 13.
2 Treharne, J. D., Davey, S. J., Gray, S. J., and Jones, B. R., *British Journal of Venereal Diseases*, 1972, **48**, 18.
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Group	No. of Subjects	Complement-fixing Antibody Titres					
		1/<5	1/5	1/10	1/20	1/40	1/80
Prostatitis	79	53	3	12	6	4	1
Controls	72	70	—	1	1	—	—

Rosette Inhibition Test and Renal Transplantation

SIR,—Despite the detailed report of the method employed by Mr. A. Munro and others (31 July, 1971, p. 271) to assay rosette inhibition, many difficulties may be encountered before reproducible results are obtained. This is to be expected in a test whose mechanism is ill-understood, and a recent report on the influence of physical factors on rosette inhibition[1] serves to emphasize these difficulties. Once reproducible results are obtained, however, in a test that utilizes 10 serial dilutions a shift of two or more dilutions from examination to examination should be regarded as significant.

Our group has found that unimmunosuppressed subjects exhibit a mean inhibitory concentration (M.I.C.) of antilymphocyte globulin between 1:16,000 and 1:32,000. Well suppressed transplant patients have a M.I.C. of about 1:128,000. We note that 24-48 hours before rejection may be diagnosed clinically the patient's M.I.C. sinks to 1:4,000-1:8,000. That is four to five dilution steps difference from "suppressed" to "unsuppressed." We believe that once a patient has been given the immunosuppressive drugs referred to a "normal" level is meaningless. The change in M.I.C. from a level indicating "immunosuppression" to one, two or more dilution steps lower, however, is important.

Our results with the rosette inhibition test seem to confirm the findings of Bewick's group. We are impressed by the early warning of impending rejection that the test appears to give.—We are, etc.,

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1 Morton, H., and Clunie, G. J. A., *Transplantation*, 1972, **14**, 211.

Diagnosis of Renal Agenesis

SIR,—Drs. N. C. De and J. R. Harper (16 September, p. 696) draw attention to the problem of resuscitation in infants subsequently found to have severe renal anomalies. With improvements in care the perinatal mortality and morbidity directly attributable to obstetric causes has declined and the recognition of infants with external manifestations of severe renal malformations assumes greater significance. We also have encountered instances where intensive resuscitative measures have been applied for considerable periods to such infants who had no hope of survival. Diagnosis is not easy, especially when pressures from labour confuse the characteristic facial appearances in the early neonatal period. Also somewhat similar features can be seen associated with the leaking liquor syndrome.[1] These infants, like renal agenetics, have pulmonary hypoplasia and consequently present problems in resuscitation, but it is important to distinguish them as they may be saved.

Many other factors besides the facial appearance should be considered. Help may be obtained from a careful obstetric history. In infants with severe renal malformations the presence of bilateral talipes and spade-like hands may be of assistance in diagnosis.[2] Birth weight tends to be low in renal agenesis but not in cases of severe renal cystic dysplasia or of congenital urinary tract obstruction such as urethral atresia or stenosis. Another factor which can prove of great value in diagnosis is macroscopic examination of the placenta, which in most cases of oligohydramnios associated with failure of fetal micturition will reveal the presence of amnion nodosum.[3,4] Amnion nodosum may be present in association with the leaking liquor syndrome but is much less common in this condition.

Over-emphasis tends to be placed on the facial appearance of infants with severe renal malformations without due consideration of all the other features. Nevertheless, diagnosis will in a few instances present difficulties and resuscitative measures should be undertaken in doubtful cases lest a normal infant affected only by prolonged leakage of liquor be allowed to die.—We are, etc.,

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1 Bain, A. D., Smith, I. I., and Gauld, I. K., *British Medical Journal*, 1964, **2**, 598.
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Immunological Responses in Pregnancy

SIR,—In their paper demonstrating depression of cell-mediated immunity during pregnancy, Dr. Ronald Finn and others (15 July, p. 150) predict that the function of the lymphocytes in the bursa-derived system would not be reduced and might even be increased during pregnancy. They refer to the work of Woodrow and others,[2] who found no reduction of humoral antibody production in pregnant rabbits.

We have examined the effect of pregnancy on insulin-binding antibodies present in the serum of insulin-treated patients. In all patients studied insulin antibody levels fell as pregnancy progressed so that by the third

trimester low levels were found. The Table compares the maximum binding capacity (S) for insulin in 20 pregnant patients in the third trimester with that in 22 non-pregnant patients of similar age and duration of insulin treatment. The effect is significant at $P < 0.0003$ (χ^2 test).

Maximum Binding Capacity (U/L)	Pregnant Patients (Third Trimester)	Non-pregnant Women (Aged under 40)
>2·5 ..	0	3
0·25-2·5 ..	1	8
<0·25 ..	19	11

This finding suggests that in human pregnancy the production of humoral antibodies to antigens unrelated to the fetus is also depressed. A detailed description of this work is in preparation.—We are, etc.,

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1 Woodrow, J. C., Elson, C. J., and Donohoe, W. T. A., *Nature*, 1971, **233**, 62.

Respiratory Distress Syndrome

SIR,—In referring to the stable-foam test devised by Clements *et al.*[1] to provide a rapid semiquantitative measurement of fetal pulmonary surfactant in amniotic fluid, your leading article on respiratory distress syndrome (7 October, p. 2) noted that these workers reported good correlation between the foam test and the lecithin/sphingomyelin ratio. As this comparison was made in only 13 amniotic fluid samples your readers may be interested in similar comparisons made by us in 137 samples.

In our series the foam test was clearly positive (at 1/2 dilution) in 76 samples, in 73 of which the ratio was also in the "safe" zone (>2.0) with intermediate ratios (1.5-2.0) in the other 3 cases. A clearly positive foam test would therefore seem always to indicate adequate surface activity in the fetal lungs. On the other hand, 20 out of 45 clearly negative foam tests were also associated with safe ratios, and we understand that other centres share this experience of a high incidence of false-negative results. Ten clearly negative foam tests were associated with dangerously low ratios (<1.5) and the remaining 15 were associated with intermediate ratios. So far we have performed foam tests on only 36 amniotic fluids obtained within less than 24 hours before delivery; four such tests were clearly negative, but two of them were associated with safe ratios and all four babies were free from respiratory difficulty.

The foam test should therefore be regarded as a possible simple screening method, and either the lecithin/sphingomylin ratio or the lecithin concentration should be determined when it is not clearly positive. When measured on thin-layer chromatograms (rather than by densitometry) the ratio test is relatively simple and does not require expensive equipment, a batch of fluids can easily be tested simultaneously, and samples can be posted in to a central laboratory (whereas the more complex estimation of lecithin concentration must be made on either fresh or immediately deep-frozen samples).

A further point to be clarified concerns our reported findings in pregnancies complicated by diabetes or severe rhesus incompatibility.[2] Serial tests showed that the expected terminal rise in the lecithin/sphingomyelin ratio fails to occur in a proportion of patients in both these catagories, but normal trends were observed in the remainder (and this continues to be our experience).—We are, etc.,

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1 Clements, J. A., *et al.*, *New England Journal of Medicine*, 1972, **286**, 1077.
2 Whitfield, C. R., Chan, W. H., Sproule, W. B., and Stewart, A. D., *British Medical Journal*, 1972, **2**, 85.

Gas Gangrene and Hyperbaric Oxygen

Sir,—Your leading article on gas gangrene and Hyperbaric Oxygen (23 September p. 715) is welcome in supporting and publicizing the great advance in the management of this rare and terrifying disease.

No one who has seen a patient toxic with gas gangrene improve with one or two hyperbaric oxygen exposures[1-3] can doubt its value. With the cessation of alpha-toxin production the general condition improves so that the surgeon may wait for elective surgery for the excision of sloughs rather than perform emergency and mutilating surgery, sacrificing tissue unnecessarily in a toxic and deteriorating patient. It is beyond doubt that the mortality rate has been notably reduced and that hyperbaric oxygen is the most effective treatment for gas gangrene at present available.

The advantages of a large chamber with continuous nursing may seem attractive but it is not essential. In our small unit at Heatherwood Hospital we have managed 30 patients with gas gangrene without significant nursing problems and a mortality of less than 10%. Indeed, the advantages may lie with the small unit not only in terms of cost, ease of administration, and lack of risks to staff from pressure but also because the large unit, if it is used realistically, may have a research programme that would compete with clinical use.

It cannot be emphasized enough that if hyperbaric oxygen is used it must be used promptly. This requires many chambers in a country as large as Britain, not just two as you suggest. Provisional arrangements to transfer the patient to the nearest unit should be made on suspicion of gas gangrene. There are already over 20 small units in Britain, and every surgeon would be wise to know where his nearest unit is.—We are, etc.,

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1 Boerema, I., and Brummelkamp, T. H., *Nederlands Tijdschrift voor Geneeskunde*, 1960, **104**, 2549.
2 Colwill, M. R., and Maudsley, R. H., *Journal of Bone and Joint Surgery*, 1968, **50B**, 732.
3 Slack, W. K., Hanson, G. C., and Chew, H. E. R. *British Journal of Surgery*, 1969, **56**, 505.

Uganda Asians

SIR,—I was interested to read Dr. F. C. Harris's letter (21 October, p. 178) advocating laboratory screening of Ugandan Asian refugees. I am the doctor responsible for the medical arrangements at Stradishall camp, Suffolk, and would like to make the three following points.

Firstly, refugees receive on admission a full clinical examination and an *x*-ray of the chest, the only exceptions to radiography being women in the first 16 weeks of pregnancy and children under 13 years of age, the latter being offered B.C.G. vaccination. Both during this screening procedure and during the refugees' subsequent stay in the camp we have found no overt signs of exotic or tropical disease, though we had expected to do so. We have also taken faeces specimens from intending food handlers, and the results so far available have shown no pathogenic organisms or parasites. In addition, the sera of intending food handlers at another camp have been examined for salmonella agglutinins, when the results suggested that the majority of the group investigated had not experienced infection with the organisms causing enteric fever.

Secondly, it is incorrect to describe the camp as a holding one, though it is true that the stay of some of the refugees is longer than expected. We are receiving small numbers daily and received a further 135 refugees on 22 October. By 23 October we had admitted 2,661 and no fewer than 1,295 had left the camp. There is thus a continual turnover.

My third point is logistic. The task of collecting faecal specimens and blood films from all the refugees is quite beyond the resources at my disposal. We are a relatively small health authority and the work at the camp has placed very great strains on our staff, despite generous help from outside doctors and nurses. Staff fatigue has indeed been one of our greatest problems.—I am, etc.,

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Research into Alcoholism

SIR,—Dr. Ann L. Owen (Points from Letters, 2 September, p. 594) would be interested to know that the Medical Council on Alcoholism, founded in 1967 and now with a widely-spread membership throughout the United Kingdom and an affiliation with the International Council on Alcohol and Addictions, has been supporting research projects on alcoholism for the last four years and has several further projects under consideration. The council has promoted symposia for general practitioners and hospital registrars and has a library and information service for professional and lay workers in the field. It is a charitable organization and has subcommittees which meet regularly and are concerned with research, education, and occupational health—all, of course, in the field of alcoholism.

In the last year a film has been produced for showing to general practitioners and a collection of papers written by experts on all aspects of alcoholism was published in the form of a loose-leaf folder in July. Apart