thyroid stimulating hormone receptor remained detectable for up to six months in the HLA-DR2 positive group compared with two months in the other group. The association between HLA-CW7 and relapse reported by Dr de Bruin and others is of interest since this antigen is in linkage disequilibrium with HLA-DR2. The statistical analysis of our data, like that in their paper, is not corrected for the number of observations and must therefore be interpreted with caution.

The pathognomonic feature of Graves' disease is the presence of stimulatory antibodies to the thyroid stimulating hormone receptor. Such antibodies were detected in only 57% of the series reported by Dr de Bruin's team. The diagnosis of Graves' disease by scintiscanning and, more particularly, by goitre palpation is notoriously unreliable. Clinical and immunological heterogeneity is well recognised in patients with thyrotoxicosis and a diffuse goitre,[2,3] but the precise diagnosis in patients without thyroid stimulating hormone receptor antibodies is not always clear. Genetic studies in Graves' disease must be combined with sensitive and specific assays for thyroid stimulators. Even if HLA typing was of clinical relevance it remains a demanding and unwieldy technique. The statistical significance of observations will be ensured only by large multicentre studies. These may avoid the sort of controversy which has surrounded studies of the relation between the HLA-DR3 phenotype and thyrotoxic relapse.

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1 Kendall-Taylor P. Are antithyroid drugs immunosuppressive? *Br Med J* 1984;**288**:509-10.
2 Schleusener H, Schernthaner G, Mayr WR, *et al*. HLA-DR3 and HLA-DR5 associated thyrotoxicosis—two different types of toxic diffuse goitre. *J Clin Endocrinol Metab* 1983;**56**:781-5.
3 Stenszky V, Balazs CS, Kozma L, Rochlitz SZ, Beur JC, Farid NR. Identification of subsets of Graves' disease by cluster analysis. *Clin Endocrinol* 1983;**18**:335-45.

Gas gangrene

SIR,—Dr C R Kirk and others (30 April, p 1236) describe a boy, alleged to have had a previous allergic reaction to amoxycillin, who presented with gas gangrene after trauma and was treated with a regimen which included metronidazole.

There is little experience of treating gas gangrene with metronidazole as penicillin is the established treatment and the condition is uncommon in civilian life. The only comparative trial of which I am aware was done in mice, and metronidazole proved to be superior to penicillin in preventing gas gangrene caused by *Clostridium perfringens*, but only when given in high doses.[1]

The authors should give the doses of the antibiotics used as failure of the regimen which included metronidazole could be due to inadequate dosage. It would be interesting to know the minimum inhibitory concentrations of the antibiotics used and whether antagonism between metronidazole and the other two antibiotics was excluded. The authors should not say that "the boy made a dramatic recovery when penicillin was used," because he was actually given amoxycillin and clavulanic acid. According to data from the United Kingdom Anaerobe Reference Unit 5% of *Cl perfringens* isolates were resistant to penicillin whereas all were sensitive to amoxycillin and clavulanic acid and to metronidazole.[2]

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1 Stevens DL, Maier KA, Laine BM, Mitten JE. Comparison of clindamycin, rifampicin, tetracycline, metronidazole, and penicillin for efficacy in prevention of experimental gas gangrene due to Clostridium perfringens. *J Infect Dis* 1987; **155**:220-8.
2 Brazier JS, Levett PN, Stannard AJ, Phillips KD, Willis AT. Antibiotic susceptibility of clinical isolates of clostridia. *J Antimicrob Chemother* 1985;**15**:181-5.

AUTHORS' REPLY,—Dr Giuseppe E Bignardi raises some interesting points. The *Clostridium perfringens* organism isolated was sensitive to all the antibiotics given and also to benzylpenicillin. Antagonism between metronidazole, cefuroxime, and trimethoprim has not to our knowledge been described, and there is no pharmacological reason to suspect it.

The antibiotics were given intravenously in the recommended doses—erythromycin 50 mg/kg/24 h, cefuroxime 100 mg/kg/24 h, trimethoprim 6 mg/kg/24 h, metronidazole 22·5 mg/kg/24 h, and the combination of amoxycillin and clavulanic acid 90 mg/kg/24 h. The British National Formulary regards the combination of amoxycillin and clavulanic acid as a broad spectrum penicillinase resistant penicillin.[1]

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1 British Medical Association. *British National Formulary Number 12*. London: British Medical Association, 1986:193-4.

Blood glucose test strips

SIR,—We welcome the availability of blood glucose test strips on prescription from 1 June but would like to insert a word of caution about their wider use. We have surveyed the use of these strips over 12 months for diabetic patients attending outpatients or admitted to hospital in Newham. During the year we organised a teaching programme for diabetics, nurses, and junior doctors about the use of the strips. The results highlight several shortcomings which have financial implications and practical relevance.

In the original survey (April 1987) we found that outpatient prescribing of glucose strips was usually appropriate. Strips were usually prescribed for insulin dependent diabetics, but a few non-insulin dependent diabetics also received strips if it was considered that they might require a change to insulin treatment. Most of these patients used the strips as advised and brought record diaries to the clinic for inspection. The survey confirmed that the doctors and specialist nurses always inspected the diaries and adjusted the doses of insulin if indicated. It was disappointing, however, that 40% of diabetics forgot their diaries more than once, but, despite this, they were issued with additional strips. In these patients the glycated haemoglobin concentrations rarely matched the glucose results recalled by the patient.

The use of strips in the hospitals was far less satisfactory. In April 1987 strips were used for all diabetics irrespective of treatment, with their fingers being pricked between one and 24 times daily at varying intervals. Some nurses inadvertently used an incorrect procedure for reading the strips. The most worrying finding was that, although the results were well documented on a board at the foot of the bed, it was uncommon for action to be taken by doctors unless the patient was treated by a variable rate intravenous insulin infusion. On many occasions patients treated by tablets had unsatisfactory readings for several days without any change of treatment.

Because of these findings we arranged an education programme for diabetics, nurses, and doctors on the use of glucose test strips. This included ward teaching, study days, and a poster campaign. The follow up survey in April 1988 showed a more satisfactory situation with an increasing knowledge of the use of strips and a reduction in the numbers used, particularly on the medical wards. Nevertheless, the results still emphasise the advantages of regularising the timing of monitoring and a need for doctors to act on the results. Furthermore, they again show the limited use of glucose strips for non-insulin dependent diabetics.

Our survey confirms an ever increasing dependence on blood glucose strip monitoring for diabetics and an essential need for a teaching programme about their use in hospital and the community. We have achieved some success with a poster campaign, copies of which are available from PK. We suggest that careful consideration be given to the potential benefits of monitoring for an individual, followed by an explanatory discussion before a prescription for the strips is written.

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Learning from the Americans

SIR,—The leader by Ms Jane Smith (7 May, p 1280) tends to reinforce the natural parochiality of British medicine. Having practised for four years in the United States I can assert that we have a great deal to learn from the Americans and probably from other countries also.

One thing that British medicine can learn is respect for the patient, who in Britain is kept waiting and ill informed far too often. Another lesson is that decisions about the limits of health care should be taken by society not by unelected officials and doctors. The level of public debate about transplant procedures, life support, experimental surgery, and consent in Britain is pitiful compared with that in the United States. Raising the level of such debate does not mean that it must be settled by law courts in an adversarial system.

A final thing that can be learnt is to preserve an open mind regarding alternative systems of health delivery. Openness to alternatives is all too often construed as opposition to the NHS.

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Psychiatric illness among British Afro-Caribbeans

SIR,—The letter from Drs Gabrielle Milner and G Hayes (7 May, p 1333) commenting on our leading article (2 April, p 950) is, to put it mildly, extraordinary. The issue of psychiatric treatment has been a major one for the black community for several years and has generated nearly 50 academic papers. They now tell us on the basis of "preliminary impressions" that alarm is raised needlessly. What figures enable them to say that "Afro-Caribbeans do not receive more antipsychotic drugs than other groups and may in fact receive less"?

We are interested to learn that the diagnosis of cannabis psychosis is no longer used at their hospital, where only two years ago it was applied to no less than 27% of young Afro-Caribbean men.[1,2]