here. Not only does insulin treatment present problems, but most patients also have considerable emotional problems related to chronic ill-health, fear of dying, loss of employment, inability to keep up at school, conflict with the family, and so on. Although brittle diabetes unresponsive to continuous subcutanecus insulin infusion is rare, we feel that it is a definite and important entity with enormous impact on the life of the patient and on health service resources. Study of its pathophysiological basis may also help us understand the lesser degrees of unexplained instability which trouble many insulin-dependent diabetics.

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Impact of maternal serum alpha-fetoprotein screening on antenatal diagnosis

SIR,—With reference to the paper by Dr David J H Brock (31 July, p 365) on the impact of maternal serum alpha-fetoprotein screening on antenatal diagnosis, I wish to make the following points:

Firstly, only 10% of mothers who underwent amniocentesis because a raised maternal serum alpha-fetoprotein concentration had been discovered had a spina bifida pregnancy. In other words, 90% of amniocentesis tests were unnecessary as the fetal loss and serious morbidity after amniocentesis is at least 2%.[1] Dr Brock makes no mention of the perfectly normal fetuses that must have been aborted in his series. Secondly, even after amniocentesis, three of the pregnancies aborted were not spina bifidas, which represented a false-positive rate of approximately 5%. Thirdly, what Dr David Brock fails to mention is that half of all spina bifida pregnancies are stillborn and a further half die in the first month of life and any "success" that a maternal serum alpha-fetoprotein concentration screening programme produces has to be judged in the light of these facts.[1] Finally, the whole question of antenatal screening invokes great anxiety in mothers and I simply do not believe that the results that he has reported justify the wholesale anxiety that is caused by offering routine antenatal screening. In my own practice, where I have carefully counselled all pregnant women at an early stage of pregnancy, well below half wish to proceed with routine antenatal screening for serum alpha-fetoprotein concentration. In the opinion of my patients the results of the screening programme are simply not worth the increased risk of losing a normal pregnancy.

In summary, therefore, I think that Dr Brock's conclusion that his figures constitute a strong case for the continuation of an alpha-fetoprotein screening programme is totally false. What he has done is looked at the abnormal fetuses that have been terminated and sought to justify the screening programme from these results. If all patients entering a casualty department had laparotomies to see whether they had ruptured spleens without doubt some ruptured spleens would be diagnosed earlier but at tremendous cost and suffering. In my opinion this is what is occurring with routine antenatal screening, and for Dr Brock to try to extrapolate from his results that it is worth while continuing with this screening is totally false.

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ZX81 epilepsy—a case for lumping

SIR,—The rapid multiplication of species from the genus "space invader epilepsy"[1] is getting out of hand. We believe that all these entities should be lumped together with photoconvulsive epilepsy, rather than split into many syndromes, each with the rubric of the particular piece of electronic hardware that precipitates the seizure. The following case of a seizure induced by a home computer illustrates our point.

A 15-year-old boy was referred to the neurological clinic because of a seizure while playing with a microcomputer which was on display in a shop. He had been programming the computer, a Sinclair ZX81, without ill effect but when he set the program to run using the fast compute mode (which generates a flashing irregular zig-zag pattern across the screen during the computation), he began to feel dizzy, then, according to the witness, abruptly lost consciousness and fell to the ground, with twitching of all four limbs. He regained consciousness after a few minutes, but felt nauseated and had a headache; he had not bitten his tongue or been incontinent of urine.

He had been admitted to hospital 14 months earlier after a blackout while playing football. In that attack he had experienced a similar kind of dizziness, followed by abrupt loss of consciousness, and twitching of his arms and legs. He became conscious again after some 30 minutes; at the hospital no abnormal neurological signs were found. An electroencephalogram recorded a few days later showed a photoconvulsive response to photic stimulation. The event was therefore diagnosed as a probable seizure, and no treatment was given. He remained well with no further attacks until his recent computer-induced seizure, and he had played space invaders without ill effect. He had not, however, used this particular computer before.

We think that this case should be lumped with space invader epilepsy and electronic space war video game epilepsy (12 June, p 1751) and be classified as photoconvulsive epilepsy rather than be split off into the new nosological entity of ZX81 epilepsy. This, we hope, will stem the flood of specific epilepsies that could be described if each piece of electronic hardware on the market now or in the future had a form of epilepsy named after it.

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Manpower proposals

SIR,—I have voted against in the ballot on the manpower initiative of the CCHMS. This is not because I regard the Short proposals as satisfactory—indeed, if they were implemented in full they would be disastrous. The proposals of the CCHMS are a little better in that they will ameliorate but not solve the manpower problem.

There is no doubt to my mind that the manpower problem will be solved only if two things are accepted: firstly, that there is a service requirement for junior staff; and, secondly, that there must be two career grades of hospital doctors with full clinical responsibility.

At SHO level it should be accepted that time should be spent in a job with primary service commitments. There is a large service commitment in the present SHO posts. It is not unreasonable to ask doctors who have been recently trained, largely at the public's expense, and who are paid a full salary to commit some of their time to wholly service posts. The serious consequences of a post not being approved for training result in low standards of approval. The acceptance of a period in service posts would remove the disastrous effect of non-approval of their posts for training purposes on the affected hospitals and their services. This would enable more realistic assessment of those posts that are indeed worthy of the title of training post.

I sympathise with the CCHMS's proposals about senior registrars but would like to see one grade at the registrar level which would include the present registrar grade and the lower half of the present senior registrar grade.

At senior level there should be two grades of hospital doctor. Clinical responsibility would be taken at specialist level, a grade through which all doctors would pass. They would work entirely in hospital and be responsible for inpatient and outpatient care which requires technical skill rather than consultant opinion and be fully clinically responsible for their patients in the same way as general practitioners are. Recruitment of consultants would be from this grade. They would perform a consultant function to their specialist and general practitioner colleagues and to the health authorities. Only by competition to attainment to this grade will standards be maintained.

It is essential in a competitive structure in a profession that not everyone reaches the top but equally that those who fail to do so have a satisfactory career. Those of us who have been on appointment committees sometimes see people who are medically adequately trained but probably lack the ability, drive, or the will to perform the non-clinical tasks expected of a consultant or director of department. There is no place for these doctors to go now in the absence of another career grade, particularly as it is no longer practicable for them to transfer easily into general practice with its strict training requirements.

Those in the specialist grade would have to be prepared to do more cover, which would mean immediate cover though not necessarily living in. Older specialists who did not make the consultant level would be able to transfer to service appointments—for example, specialist clinics—which would not require the same acute cover as when they were