HIV infected subject has many advocates in Western communities. The situation is, however, clearly different in countries where the risk of the vaccinable disease is not only high but also carries a high morbidity and mortality. Moreover the complete or partial cessation of the World Health Organisation (WHO) extended programme for immunisation because of fears of vaccinating HIV infected children would be disastrous for many countries. We did not emphasise the difference between asymptomatic HIV positive children and those with AIDS or AIDS related complex, as we had already made the point that the distinction is more difficult to make in children.

At a recent WHO meeting (11–13 August 1987) attended by AGD these issues were reviewed. There is a vast and increasing number of reports that suggest that activating or stimulating T cells in vitro may lead to increased replication of HIV. Although many aspects of HIV infection in vitro can readily be extrapolated in vivo, all the available evidence (much of it unpublished) suggests that multiple vaccinations of HIV infected children do not appear to be detrimental although it is likely that HIV infected children only respond to neoantigens before they become symptomatic. A full review of these data by WHO advisers supports the use of antigens in HIV infected individuals in those countries where the target diseases of the extended programme for immunisation remain important causes of morbidity and mortality. No distinction was drawn between asymptomatic children and those with clinical AIDS, reflecting the overwhelming importance of continued vaccination programmes in these communities.

The antigens recommended for the extended programme for immunisation include the live viruses vaccines—measles and polio, the toxoids—diphtheria, tetanus, and pertussis (DTP), and BCG. The inactivated polio vaccine is preferable to the oral preparation where possible, although the oral preparation is far cheaper and more widely available. All vaccines should be given to all children as early in life as possible in countries where HIV is endemic, especially as screening of all children may be impractical before vaccination. In areas, however, in which tuberculosis is uncommon BCG may be withheld from those children known to be HIV seropositive and should definitely not be given to those with AIDS or AIDS related complex.

We thank the above correspondents for pointing out that the word ‘never’ was inappropriate in the absence of a more detailed discussion.

Reference

Aetiology of growth hormone deficiency

Sir,

We were interested in the report by Herber and Kay on the aetiology of growth hormone deficiency.1 We have recently reported a small study that in part addresses the pathogenesis of hypothalamopituitary damage due to birth injury and hypoxia.2

We studied 26 consecutive children with newly diagnosed idiopathic growth hormone deficiency. Twelve children had perinatal problems that we believe either led to or reflected trauma, hypoxia or ischaemia. Of these 12 children, 11 had an empty sella turcica on high resolution computed tomograms of the hypothalmopituitary region. We found a highly significant association between an empty sella turcica and such perinatal problems and between a full sella turcica and no such problems. In addition, an empty sella turcica was significantly more likely to be associated with multiple pituitary hormone deficiencies and a full sella turcica with isolated growth hormone deficiency.

Although our sample size was smaller than that of Herber and Kay, we were able to obtain details of perinatal events directly from our subjects’ parents and from their case notes. We believe our results indicate that (idiopathic) growth hormone deficiency may be precipitated by events around birth compromising the blood supply to the pituitary gland and resulting in the empty sella turcica on computed tomograms.

References

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Sir,

We read with great interest the paper by Herber and Kay.1 We are, however, surprised by the conclusion that the strong relation noted between traumatic deliveries and subsequent growth hormone deficiency no longer exists in the United Kingdom.

We recently analysed some perinatal risk factors in 177 patients in Belgium with growth hormone deficiency.2 We found that the frequency of non-cephalic fetal presentation was about eight times higher in patients with growth hormone deficiency (31%) than in the control population (4%). The difference is highly significant ($X^2=47; p<0.001$).

Herber and Kay were unable to examine breech deliveries separately. We therefore suggest that due to this limitation in their study they are unable to draw conclusions about traumatic delivery and subsequent growth hormone deficiency. In our study all children with breech
Correspondence

presentation were delivered vaginally and spontaneously, suggesting a pituitary insult during vaginal delivery. Isolated growth hormone deficiency was also often found in association with induction of labour. These data and those reported elsewhere indicate that even a mild birth trauma may result in growth hormone deficiency.3 4

We therefore stress that non-cephalic presentations are definitely an important risk factor for the subsequent development of growth hormone deficiency. Postnatal growth should be monitored carefully in these infants in order to detect early growth impairment due to growth hormone deficiency.

References

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Sir,

We read with interest the paper of Herber and Kay1 about the perinatal risk factors for the development of growth hormone deficiency.

We report a study of 99 children (72 boys and 27 girls) admitted to our clinics with growth hormone deficiency. The mean (SD) age of boys was 11.5 (4.1) years and that of girls 11.7 (4.7). The ratio of boys to girls was 2:6:1, similar to that reported by Rona and Tanner.2 In our study the percentage of premature deliveries was higher than that in the general population (p<0.01), confirming the observation of Herber and Kay. We did not, however, find a significant difference between the gestational ages of boys and girls. As previously reported, we found a high percentage of breech deliveries (39%).3 The mean birth weight of children delivered at term was 3310 g (0-65) for boys and 3070 g (0-60) for girls. Compared with national data, girls were significantly lighter (p<0.01), and boys had a mean birth weight within the normal range.

In conclusion, our experience in an Italian cohort partly confirms and adds further evidence to the findings obtained by Herber and Kay in the United Kingdom.

References

Psychological adjustment and diabetic control

Sir,

I was interested to read the evidence presented by Fonagy et al suggesting that indications of psychological disturbance in diabetic children and their parents predicted lower concentrations of glycosylated haemoglobin in the children’s blood.1

We published a study last year2 in which we similarly showed that contrary to expectation and popular dogma diabetic children who seemed potentially depressed and had low self esteem had better glycaemic control as reflected by the concentration of glycosylated haemoglobin. Apart from the central finding that poorer psychological indices are associated with better glycaemic control, there are two other similarities between the studies. Specific symptoms of emotional compared with behavioural disturbance correlate better with low glycosylated haemoglobin concentrations. We also noted an external locus of control in this subgroup of children (a person with an ‘external’ locus of control believes that his own actions have little effect on his destiny, and that other people or other forces control what happens to him). Fonagy et al showed that diabetic children who were perceived as being less independent and less responsible for their own treatment had better glycaemic control.

The clinical lessons from these studies, however, are difficult to decipher. I am sure one should still strive for excellent biochemical control on the one hand and good diabetic adjustment (the psychosocial condition of the child) on the other and not assume that the two objectives are mutually exclusive. Perhaps those who seem to achieve good biochemical control should be assessed in terms of emotional well being and happiness and given appropriate psychological support and advice, and one should intensify efforts to improve the techniques of the happy well adjusted diabetic who has a high glycosylated haemoglobin concentration. I am, however, doubtful whether there will be a pronounced improvement in the management of diabetic children until the physical means of treatment are not dependent on such a high and unnatural degree of compliance.

References