either before or during the period of immunosuppression does not necessarily confer protection. This is illustrated by two of our patients.

Case reports

Case 1. A boy, aged 3 years 5 months, first presented with a history of a progressive petechial rash. Physical examination showed pallor, bruising, and hepatosplenomegaly. A bone marrow aspirate confirmed a diagnosis of acute lymphoblastic leukaemia. We were unable to obtain a history of chickenpox infection and viral titres were negative for varicella zoster virus. He was started on chemotherapy. After 18 months of treatment he was admitted with shingles affecting the ophthalmic division of the right fifth cranial nerve. He had a full course of acyclovir and recovered well. The titre for varicella zoster was less than 16. He was then restarted on maintenance chemotherapy but returned four months later with a severe illness associated with a typical chickenpox rash. He was again treated with acyclovir, and at the end of this illness his varicella zoster titre had risen to 128.

Case 2. A 4 year old boy presented with a short history of bruising, pallor, and lethargy. A diagnosis was made of acute lymphoblastic leukaemia. He had had a chickenpox illness during the first year of life and shingles six weeks before the onset of his acute leukaemia. Physical examination showed scarring in the right lumbar region consistent with shingles. Varicella zoster titre was negative. He was started on chemotherapy but had a relapse of his leukaemia two and a half years later. At this time his varicella zoster titre was 1 in 16. He was restarted on chemotherapy and three months later developed chickenpox with a typical rash which was managed successfully with acyclovir. He developed another mild bout of chickenpox two and a half years later, six months after completing chemotherapy.

These two patients illustrate the problems associated with varicella zoster infections and the difficulty in assessing immune state. It is therefore necessary to be vigilant and protect immunosuppressed chickenpox contacts with zoster immunoglobulin even in the presence of a history of exposure.

Reference


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Conductive education for motor disorders

Sir,

As a research orientated physician and the father of a baby with cerebral palsy I would like to comment on the recent controversy about conductive education, which you have recently highlighted in your journal. 1 2 Dr Beach suggests that the parents of children who are severely handicapped or who are making only slow progress are drawn towards such ‘alternative forms of treatment’ because of suggestions by ‘family and friends, professionals, parents’ groups, or by the media’. 3 In some instances this may well be true, but I suspect that most parents do so, at least in part, because they have come to realise that their children’s future is being compromised by the sad limitations of our health service. Should parents really be expected to accept one or two hours physiotherapy per week (in some instances not even that) as being sufficient for their children? What would you do? No parent would dispute Dr Beach when he suggests that ‘teams of dedicated professionals’ look after their children. 4 The rub is that there are simply not enough of them to go around! While there are justifiable doubts about the value of conductive education, I fear that there can be no doubt that the British system of care for children with cerebral palsy is grossly underfunded, and I cannot

The highly talented child

Sir,

I was most interested to read the article by Dr Lask, but wish to take issue with him on one point. In the first paragraph he comments ‘a 12 year old studying for an honours degree at Oxford University is clearly misplaced.’ I fear that Dr Lask is falling into the trap of confusing gifted and highly gifted children. I agree that, if a child has an IQ of ‘only’ 140 or 150, she would be misplaced at such an institution at such an age. Many researchers have found, however, that the highly gifted, that is with an IQ of 170 and over, are peculiarly handicapped in the true meaning of the word: they have learning and social difficulties and are children with special educational needs.

In a famous experiment at Harvard, several children with exceptionally high IQs were admitted as young as 12, and in the report following their graduation the principal, Professor Eliot, stated that these students had shown fewer psychological problems, been happier, studied better and more effectively, and shown just as good results in their examinations as the ordinary students. He felt that the experiment had been a great success.

In the Stanford University’s Longitudinal Studies of Giftedness it was clear that if a gifted child was allowed full freedom to progress at his or her own rate he or she achieved their full potential and there were no psychological ‘hang-ups’ to sort out later. It has also become clear that, contrary to popular misconception, the highly gifted do not burn themselves out early, but continue to show superior mental powers right through into old age—as, indeed, one would expect.

Reference


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understand why the paediatricians and therapists who work in this field have put up with this for so long.

What then of conductive education? As a physician I suppose I should await the results of controlled clinical trials comparing this form of treatment with conventional treatment. As a parent, however, I cannot afford to wait, and I have therefore asked for my child to be assessed at the Peto Institute. If conductive education turns out to be of no benefit I will have lost comparatively little by taking him there. On the other hand, if conductive education proves to be far superior to our conventional approach to treatment, I feel I will have enhanced my son’s quality of life by taking him to Hungary. The risk of not opting for conductive education at this time is, for me, too great to take.

I commend Mr Sutton and his colleagues at the Foundation for Conductive Education in their attempts to assess this form of treatment for motor disorders in a scientific way, and feel that this work is so important that it should be funded by central government and not left to the efforts of exasperated parents’ groups and to charities. While these studies go on it is also important that funds be made available to improve existing services for children with cerebral palsy; they deserve more than we currently provide for them.

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Conductive education

Sir.

I have read with great interest the articles on conductive education.1 2 It is widely accepted that there are variations in the availability of paediatric physiotherapy in this country and the methods of treatment. No far sighted physiotherapist would be dismissive of progress in any child nor would wish to diminish parents’ hopes without being unrealistic. It remains to be seen whether it is possible to transpose totally a philosophy from one culture to another.

Mr Sutton ends his article with a quote from Measure for Measure: Claudio states ‘The miserable hath no other medicine . . . . ’ I add the Duke’s reply:3

Happy thou art not;
For what thou hast, forget’st. Thou are not certain.

References


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Hyperkalaemia, cardiac arrhythmias, and cerebral lesions in high risk neonates

Sir.

The recent report by Shortland et al on the association between hyperkalaemia and cardiac arrhythmias in premature neonates is interesting but the proposed observations it reports are not substantiated.1 Bold statements about ‘supraventricular tachycardia’ and ‘bradycardia’ are unsupported and are contrary to experimental and previous clinical experience.

The authors have provided no evidence to support their diagnosis of ‘supraventricular tachycardia.’ They need to disprove an alternative interpretation that they were observing sinus tachycardia secondary to systemic hypotension and that intravenous calcium infusion raised the blood pressure, and only indirectly reduced the heart rate.

All cases of supraventricular tachycardia have an identifiable underlying mechanism. Although this can be detailed precisely by invasive electrophysiological study, it may also be predicted fairly accurately from a careful analysis of the electrocardiograms. Particular attention is paid to the atrial rate, the P wave morphology, the QRS morphology and the relationship between P waves and QRS complexes and valuable additional information may be obtained if the onset and termination of tachycardia are recorded. The response to therapeutic manoeuvres may also provide an insight to the type of tachycardia. All episodes of bradycardia also have an identifiable mechanism. This may be slowing of sinus rhythm, or failure of sinus rhythm with a nodal or ventricular escape rhythm, or atrioventricular block. All of these have been reported in association with hyperkalaemia but bradycardias are also very common in sick premature neonates and are then of great independent significance.

The experimental and clinical effects of hyperkalaemia on cardiac rhythm are well described. The raised serum potassium concentration reduces the resting transmembrane potential and thereby slows conduction. Although ‘excitability’ may theoretically be increased, in practice this is not observed but, rather, automaticity is decreased as a result of depression of spontaneous diastolic depolarisation. Hyperkalaemia may produce a variety of arrhythmias and conduction disturbances. Those which have been described are varying degrees of atrioventricular block and interventricular conduction delay producing a type of bundle branch block. Supraventricular tachycardia has not been reported and would not be expected. The neonate with tachycardia reported by Cohen et al had an atrial rate of...

References

Conductive education for motor disorders.

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Updated information and services can be found at:
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