

least 1973,<sup>3</sup> but there is no evidence that many have taken up the challenge.

Such tests at school entry may help, but almost certainly have to be repeated at intervals to ensure that all affected children have indeed been identified and to assess the progress of those who have been. As Bax and Whitmore point out,<sup>4</sup> much can be done to help children with specific learning disabilities with the skills of special teachers, speech therapists, physiotherapists, and occupational therapists—but not until they have been identified. Initially, for example at school entry, it is not necessary to label those children with minor degrees of disability, but to alert the teacher to the possibility of a child having difficulties, and asking for a referral if this does happen. Those working in this field are likely to be well aware of the unhappiness and emotional complications that can ensue if learning difficulties are not identified, and the effect these have on the child and often on the family as well. These disturbances can be just as profound as those resulting from missing more obvious physical disabilities.

The argument that children with developmental disorders can be identified by various individuals rather than by surveillance can adversely affect some children at particular risk, including inner city children, those from single parent families, and those from ethnic minorities. Unfortunately not all parents are observant or particularly interested in their child's progress at school, and teachers have many problems these days, not least the deficiencies of staffing and constant changes in staff. A survey is being carried out in Macclesfield infant and primary schools to find out teachers' views on the school entry examination, and it is hoped to publish this at a later date, but it is already apparent that teachers welcome any information on factors that may interfere with a child's progress in class.

The comment by Colver that it is better to concentrate on examining all children rather than those who happen to come to the clinic is not clear.<sup>5</sup> How can *all* children be included when experience suggests that this is impossible, especially for those most in need.

There can be no controversy about the need for more research into the value of procedures employed to identify developmental disorders and into ways of helping affected children. Until more information is available, however, it does not seem justifiable to suggest abolishing such routine tests and risking making the lot of these children even worse than it is at present. Rather should the evidence of the need for change be produced first of all. Bax and Whitmore<sup>4</sup> quote Drillin and Drummond who suggest that there are many unidentified children who need help. It may be that when all those involved are better trained routine surveillance will not be needed, but that is many years ahead and until then it should not be abolished. Leaving such surveillance to be done in a very unstructured way when the child is being seen for some other reason seems very inadequate for such an important matter. Emphasis should be on identifying children at risk so that they are not blamed for lack of effort when they have a real disability, and so that they can be given help and understanding. Methods should be constantly evaluated and reviewed, but lack of proof of efficacy is not an excuse for doing nothing.

N GORDON  
3 Styal Road,  
Wilmslow,  
Cheshire SK9 4AE

- 1 Hall DMB, ed. *Health for all children*. Oxford: Oxford Medical Publications, 1989.
- 2 Wilson JA. Health for all children. *Arch Dis Child* 1990;65:142.
- 3 Bax M, Whitmore K. Neurodevelopmental screening in the school-entrant medical examination. *Lancet* 1973;ii:368-70.
- 4 Bax MCO, Whitmore K. Health for all children. *Arch Dis Child* 1990;65:141-2.
- 5 Colver A. Health for all children. *Arch Dis Child* 1990;65:142.

#### Marrow aspiration from small infants

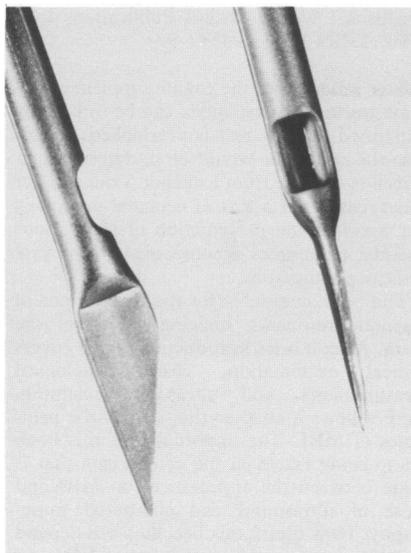
SIR,—Obtaining adequate marrow aspirates from very small infants is complicated by the lack of a suitable small aspiration needle. The most cellular marrow is obtained from the posterior iliac crest and for this the infant can be securely held in the lumbar puncture position by a single assistant. Because of the small size of the newborn ilium, the recommended aspiration site for children under 1 year old is from the tibia,<sup>1</sup> but in inexperienced hands this site may fail to yield an adequate sample. The standard paediatric Sala needle is too large to enter easily the marrow space of the infant posterior iliac crest and its size and weight make it cumbersome when aspirating from the tibia. Short lumbar puncture needles are an alternative for aspirating from either site, but they lack rigidity and tend to become blocked by bone fragments.

I have recently found that Becton Dickinson 'No-Kor Admix' needles provide an ideal alternative. The needle (available in 18 and 16 gauge) is designed to penetrate the rubber bung when reconstituting vials of lyophilised pharmaceuticals. It has a scalpel point slightly wider than the rigid shaft, which allows easy penetration and prevents a core of rubber (or bone) from entering the side facing orifice.

The 18 gauge, 1.5" needle pictured allows reliable and easy aspiration of cellular marrow particles from the posterior iliac crest of the smallest infants.

R CARR  
University Department of Haematology,  
Duncan Building,  
Royal Liverpool Hospital,  
Prescot Street,  
PO Box 147,  
Liverpool L69 3BX

- 1 Emery JL. The technique of bone marrow aspiration in children. *J Clin Pathol* 1957;10:339-41.



Cutting point and side facing orifice of an 18 gauge 'No-Kor Admix' needle (magnified  $\times 12$ ).

#### Cryptosporidiosis and acute leukaemia

SIR,—Drs Foot, Oakhill, and Mott describe the difficulty in managing leukaemic children who have intestinal cryptosporidiosis as a complication.<sup>1</sup> I would like to report a case of a child suffering from a severe immunological defect whose intestinal cryptosporidiosis appeared to respond favourably to treatment with pooled bovine colostrum and a commercially available oral immunoglobulin preparation. I believe that such treatment may prove useful in the management of children with a variety of immunological deficits complicated by intestinal cryptosporidiosis.

#### Case report

A white boy, aged 3.3 years, presented with a two year history of poor weight gain and persistent diarrhoea. He was passing watery stools up to 15 times daily, vomiting several times daily, and was anorectic. There was no personal history of respiratory infections nor family history of any immunological deficit or recurrent infections. On examination his weight was 9.18 kg (2 kg below the 3rd percentile) and height 87 cm (2 cm below the 3rd percentile). There was considerable buttock wasting and abdominal distention, but no organomegaly. On investigation his haemoglobin concentration was 99 g/l and leucocytes  $11.8 \times 10^9/l$  with normal differential count; serum IgG concentration was 9.6 g/l and IgM 1.3 g/l. IgA concentrations in serum and duodenal and nasopharyngeal aspirates were undetectable. B cell responses to pokeweed mitogen were normal but there were very diminished responses to phytohaemagglutinins, Con A and OKT 3, which were compatible with a T cell function defect. His T4/T8 ratio was normal, as were complement concentrations, HIV screen, and natural killer assay. A normal thymic shadow was present on chest radiography. A duodenal biopsy specimen showed normal villus architecture, but infiltration with extensive intracellular and intraluminal cryptosporidia; he was also noted to have severe oesophageal candidiasis. A cervical lymph node biopsy specimen showed normal architecture with reactive hyperplasia. Numerous oocysts of cryptosporidia were recovered from stools.

He was treated with oral spiramycin and nystatin but remained unwell with severe diarrhoea. After two weeks he received oral nystatin and also pooled bovine colostrum 100 ml three times a day in the form of a milk shake. The colostrum was obtained within 12 hours of calving and was pasteurised at 57°C for 10 minutes before being deep frozen in one litre aliquots. Each donation was tested for leucocyte concentration and coliform count. Within two weeks there was a noticeable improvement. The vomiting ceased and stool frequency diminished to once daily. He also started to gain weight. He remained well for seven months receiving colostrum treatment alone. During this time cryptosporidia oocysts were recovered from the stools on one occasion only, testing being performed weekly, on average. At six months logistical problems with the supply of colostrum mounted, and therefore he was started on a preparation of active immunoglobulins, commercially available for use as animal feed. This preparation is promoted for the prevention of diarrhoeal diseases, including cryptosporidiosis, in newborn farm animals. Unfortunately, he received this for only four months, at which time he became increasingly reluctant to drink the