Sixty children aged 8 to 11 years in Belfast (Lancet 2000;355:537–41) had reading delay and moved their outstretched arms or lost their balance when their heads were turned with their eyes closed. In a randomised trial, a programme of voluntary movements intended to replicate those of the asymmetrical tonic neck reflex and other primitive reflexes reduced the limb and balance response to head turning and apparently improved the children’s reading skills in comparison with control groups. It’s difficult to argue with success, but Lucina has difficulty in imagining the mechanisms by which such a movement programme might affect reading ability.

A 10 week programme of moderate exercise and dieting (New England Journal of Medicine 2000;342:449–53) brought about weight loss of about 4.9 kg in overweight mothers in North Carolina whose babies were 4 weeks old at the start of the programme. There was no significant effect on the growth in weight or length of the babies compared with those of control mothers.

Women with high plasma phenylalanine concentrations should aim to achieve metabolic control before pregnancy, or as early as possible during pregnancy. A study of the 253 children of 205 such mothers had normal plasma phenylalanine concentrations was 107.

In two areas of Los Angeles, paramedics used bag and mask ventilation on odd days and endotracheal intubation (after initial bag and mask) on even days (Journal of the American Medical Association 2000;283:756–62) has shown a fall in cognitive functioning with increasing delay in achieving metabolic control in pregnancy. Mean cognitive index score at age 4 years was 99 with metabolic control (plasma phenylalanine 605 μmol/l or less) before pregnancy, 89 with metabolic control at weeks 0 to 10 of pregnancy, 84 at weeks 10 to 20, and 71 if the plasma phenylalanine was never controlled or only controlled after week 20. The mean score of children whose mothers had normal plasma phenylalanine concentrations was 107.

In a US multicentre trial (New England Journal of Medicine 2000;342:763–9) 51 of 69 patients with polyarticular juvenile chronic arthritis who had not responded to methotrexate treatment responded to open label etanercept (a tumour necrosis factor receptor blocking protein). These 51 were then randomised to etanercept or placebo for another four months and relapse occurred in 21 of 26 in the placebo group and 7 of 25 in the etanercept group. The treatment was well tolerated.

In young women in Minnesota with bulimia nervosa (Lancet 2000;355:792–7) ondansetron halved the rate of bulimic/vomiting episodes (from 13/week to 6.5/week). It is postulated that the effect was mediated via a reduction in vagal afferent activity. Whether they felt better for it is not stated.

A trial in South Africa (Lancet 2000;355:798–803) has shown that repeat measles vaccination of schoolchildren using an aerosol delivered via a nebuliser is effective and practicable. The Edmonston-Zagreb, vaccine retained its potency on nebulisation. The method avoids the risks of injection in developing countries and could help to achieve measles eradication.

Invasive pneumococcal disease preferentially affects young children and the elderly but a US/Canadian study of non-elderly adults (New England Journal of Medicine 2000;342:681–9) has re-emphasised the effect of smoking. In this population, the adjusted population attributable risk for invasive pneumococcal disease was 51% for cigarette smoking and 17% for passive smoking.

In 44 centres throughout Europe between 1989 and 1994, the age and sex standardised incidence of childhood (<15 years) diabetes averaged about 12 cases/100 000 population years (Lancet 2000;355:873–6) but it varied from 3.2–40.2 cases/100 000/year. There was a trend to high rates in north and north west Europe and low rates in the south and south east. The incidence in English centres averaged about 16/100 000/year. Some countries showed little change over the period of study but the average annual rate of increase in incidence was 3.4%. The increase was faster in younger children (6.3% for the under 5s, 3.1% for 5–9 year olds, and 2.4% for 10–14 year olds.

Laboratory work in Spain (Nature Medicine 2000;6:313–9) has suggested that cannabis might have a role in the treatment of gliomas. Tumours were generated in rodent brains by injecting glioma cells into the brain or subcutaneously. When the tumours were established, cannabinoid was injected into the tumour. The tumour was eradicated in a third of the animals and survival was prolonged in another third. The drug is thought to act via a pathway involving increased production of ceramide.

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