



Periconceptional folate supplementation reduces the risk of neural tube defect in a dose-dependent way in women without clinical folate deficiency. A possible explanation for the dissociation between therapeutic effect and clinical deficiency is provided by work in New York (*New England Journal of Medicine* 2004;**350**:134–42; see also perspective article, *ibid*: 101–3). They tested serum from 12 women whose current or previous pregnancy had been complicated by neural tube defect in the fetus and 20 controls who had had only normal pregnancies. They found autoantibodies against human placental folate receptors in the sera of nine of the 12 study subjects and two of the 20 controls. The antibodies blocked cellular uptake of folate and bound to folate receptors on placental membrane cells and on cultured human cells. More work is needed to establish the clinical importance of this finding.

In the November 2003 issue of *Archives Lucina* commented on a reported family link between neural tube defects or isolated hydrocephalus and Down's syndrome. Now a large study in 10 countries of South America (*British Medical Journal* 2004;**328**:84–7) has not shown a link. The study included a total of 1 583 838 live births and stillbirths with 2421 cases of neural tube defect, 952 of hydrocephalus, and 3095 of Down's syndrome. There was no excess of Down's syndrome in pregnancies prior to the birth of a child with neural tube defect or hydrocephalus and no excess of neural tube defect or hydrocephalus prior to Down's syndrome.

Fears that variant Creutzfeldt-Jakob disease in children might be misdiagnosed as Alpers' syndrome seem to have been unfounded. In the British Paediatric Surveillance Unit progressive intellectual and neurological deterioration (PIND) study (*Journal of Neurology, Neurosurgery, and Psychiatry* 2004;**75**:910–3) 1244 children were reported over a period of 5 years and 8 months. A diagnosis of Alpers' syndrome had been mooted in 11 cases. The expert group's diagnoses for these 11 cases were Alpers' syndrome (2), mitochondrial encephalomyelopathy (3), HIV encephalopathy (1), neuronal ceroid lipofuscinosis (1), and undiagnosed neurodegenerative disorder (4).

Rates of squint surgery in UK children have been falling over the past 30 years or more. In Scotland between 1986 and 2001 (*British Journal of Ophthalmology* 2004;**88**:

509–11) the number of operations for all types of squint fell by 58% and there were 63% fewer operations for convergent squint (esotropia). Similar changes occurred in Tayside where comprehensive pre-school visual screening has been done since 1975 and is therefore unlikely to explain the more recent drop in surgery rates. Neither has there been a recent fall in the incidence of esotropia; it did not change between 1986 and 1996. The most likely reason for the sharp fall in squint surgery since 1986 appears to be a recent move to full hypermetropic spectacle correction. Until recently partial visual correction has been advocated on the grounds that full correction, ascertained by cycloplegic retinoscopy, might produce a short term reduction in visual acuity and might hinder the normalisation of vision. Now it seems that full refractive correction leads to the development of binocular vision and stable ocular alignment. So giving children better specs saves them from the scalpel. Wonderful.

In India it is widely believed that tobacco is good for the teeth. The manufacture of toothpastes and toothpowders containing tobacco is illegal but they are still made and readily available. A survey of 13–15 year old schoolchildren in 14 states (*British Medical Journal* 2004;**328**:323–4) has shown that about a third of them used one of these dental products. Among the 14 states the proportion varied from 6% to 68% with little difference between girls and boys. Analysis of five toothpowders that did not list tobacco as an ingredient showed a tobacco content of 9.3–248 mg per gram of toothpowder. The use of these dental preparations may lead to the use of other forms of tobacco.

Surveys have shown that around 20% of 10 or 11 years olds and more than half of 15 or 16 year old girls have an inadequate breakfast; either no breakfast at all, just a drink, or items such as crisps or chocolates (National Children's Bureau. Highlight no 206, March 2004). Missing breakfast has been shown to be associated with poor school performance. School breakfast clubs may aim to provide for nutritional, educational, social, and/or child-care needs. In 1999/2000 the UK Department of health allocated funding to 253 breakfast clubs in a pilot scheme. Teachers found the clubs worthwhile and improvements in staff-pupil relationships and in pupils' self esteem and sense of independence were noted. The cost of providing a breakfast club has been put at between £9000 and £10 000 over 2 years. There is

also a National School Fruit Scheme that aims to provide a free piece of fruit for all children in infants' schools.

Children with severe malaria may have retinal changes such as opacification or whitening of the macula or fovea, vessel changes, haemorrhages, or papilloedema but malaria is not recognised as a cause of poor vision. In Malawi (*British Journal of Ophthalmology* 2004;**88**:321–4) 96 of 142 survivors of severe malaria (median age 3 years 4 months) were followed up 4 weeks after hospital discharge. Thirty-one of the 96 had had macular whitening during the acute illness but follow up visual acuity was not affected by the presence or absence of this acute phase finding. Six children with cerebral malaria were left with cortical blindness and other neurological damage. Impaired vision after severe malaria is due to cortical damage; macular whitening in the acute stage does not affect later visual acuity.

The Liverpool epidemic strain (LES) of *Pseudomonas aeruginosa* was first described in 1996 and is now found in patients in cystic fibrosis clinics throughout the UK. Data from the Liverpool clinic (*Thorax* 2004;**59**:334–6) have shown that chronic infection with this strain is associated with a worse prognosis than chronic infection with unique strains. Two groups, each of 12 patients, were matched in 1998 for age, spirometric values, and nutrition and followed to 2002. In one group the patients were chronically infected with LES and the other group were LES negative but infected with unique strains. The LES group did significantly worse as regards lung function and nutritional state. All 17 patients in the clinic who died during 1998–2002 were LES positive. Patients with epidemic strains of *P aeruginosa* need to be segregated from other cystic fibrosis patients. (Epidemic strains may superinfect patients already infected with other strains.) Detection of epidemic strains can only be done by genotyping and a rapid method of typing LES from sputum has been described.

Adenoidectomy as the first surgical treatment for recurrent acute otitis media in young children does not prevent further recurrences. In Finland (*British Medical Journal* 2004;**328**:487–90) 180 children aged 10 months to 2 years were randomised to adenoidectomy, long-term sulfamethoxazole, or placebo. There were no significant differences in outcome between the three groups at 6 months or at 2 years.