# LUCINA

In a prospective community cohort study in Finland (*New England Journal of Medicine* 1998;**338**:1715–22) 220 children with epilepsy were followed up for 30 years. Forty four died, most of whom (39) had continued to have seizures which, in 33, were remote symptomatic (resulting from chronic brain injury). Of the survivors, 64% had been seizure free for five years or more and almost half (47%) had stopped antiepileptic drug treatment. They were, however, more likely than people without epilepsy to be unemployed, unmarried, and childless, even in the absence of neurological impairment.

*Data from the British Births Survey (now called the Child Health and Education Study) of children born in one week in April 1970 (*New England Journal of Medicine *1998;**338**:1723–8) have confirmed the benign nature of febrile convulsions. Neither simple nor complex nor repeated febrile convulsions were followed by detectable impairment of school progress, intelligence, or behaviour at the age of 10.*

Flucloxacillin treatment of children with eczema and *Staphylococcus aureus* colonisation (but not infection) produces no clinical benefit and promotes the emergence of methicillin resistant organisms (*British Journal of Dermatology* 1998;**138**:1022–9). Four weeks of treatment reduced colonisation but the staphylococci tended to return within two weeks of stopping treatment. Similarly the methicillin-resistant staphylococci (cultured from five of 25 children after starting treatment) were again replaced by methicillin-sensitive organisms once treatment was stopped.

*The approximately 2:1 dose effectiveness of inhaled fluticasone compared with beclomethasone seems to be maintained at high doses in children (*Thorax *1998;**53**:656–61). In Australian children with severe asthma fluticasone propionate 750 µg/day proved as effective as beclomethasone dipropionate 1500 µg/day. The two treatments were associated with similar evidence of mild adrenal suppression but that might have been due to present or previous use of systemic steroids, previous use of inhaled steroid, or the asthma itself, rather than the trial treatment.*

With the use of *Haemophilus influenzae* type b conjugate vaccine *H influenzae* bacteraemia is now rare in the USA. In Boston, Massachusetts (*Archives of Pediatrics and Adolescent Medicine* 1998;**152**:624–8) about 12 000 of 200 000 children attending the emergency department were febrile but not ill-looking. Blood cultures from some 9500 of them produced a pathogen in 149 cases (1.6%) of which 92% were pneumococci. The rest were *Salmonella* species (5%), meningococcus (1%), group A streptococci (1%), and group B streptococci (1%). A total white cell count of $15 \times 10^9$ or more was associated with a 5% risk of bacteraemia which itself is associated with a 3–6% risk of meningitis.

*Poor prognostic signs when a sacrococcygeal tumour is diagnosed on antenatal ultrasound scan are a completely solid tumour and the development of polyhydramios (*Journal of Pediatric Surgery *1998;**33**:899–903). Of 21 cases in Montreal, four died in utero, three perinatally, and two at 6 months and 5 years. Three babies had a completely solid tumour; two of them died in utero and one at six months. Polyhydramnios (four women) invariably heralded premature labour and three of the four babies died either in utero (two) or perinatally (one) . All of the three perinatal deaths in the series were the result of exsanguination after rupture of the tumour.*

The antegrade continence enema procedure consists of creating an abdominal stoma, using either the appendix or the caecum, to allow antegrade enemas to be given. In Liverpool the procedure was used for 40 children with faecal incontinence; 27 with spinal dysraphism and the rest with anorectal malformation, hypoganglionosis, Hirschsprung's disease, or anorectal sphincter trauma (*British Journal of Surgery* 1998;**85**:980–2). Four children had the procedure reversed. The remaining 36 all reported improved quality of life and 28 became continent. Results were less favourable in wheelchair bound children with spinal dysraphism but half (7/14) of them achieved continence. The authors emphasise the importance of assessing sphincter function and the aetiology of the incontinence before operation.

*Primary school children, but not those in secondary school, in Nottinghamshire were more prone to eczema if they lived in an area supplied with hard water (*Lancet *1998;**352**:527–31). Why that should be so has no obvious explanation. The main theories proposed are that either calcium and magnesium (the main causes of water hardness) are skin irritants or the extra soap needed with hard water could have something to do with it.*

The importance of handwashing using soap is dramatically illustrated by an observation in a refugee camp in Malawi (*International Journal of Epidemiology* 1998;**27**:520–4). Surveyed households had soap on only about 40% of survey days but on those days the risk of a diarrhoeal episode fell by 27%. The finding appeared to be resistant to correction for potential confounding factors.

*When measles vaccination began many mothers had had measles and their infants received high antibody levels transplacentally. Now that most mothers have been vaccinated their infants receive fewer antibodies and the protective effect is shorter lasting. In California (*Journal of the American Medical Association *1998;**280**:527–32) maternal antibody was detected in 12 of 23 six month old children, seven of 20 nine month olds, and none of 22 12 month olds. Protective antibody titres (1:120 or more on modified plaque reduction neutralisation assay) were achieved by 43% of infants vaccinated at 6 months, 85% of those vaccinated at 9 months, and 95% at 12 months. Only 36% of infants who had no maternal antibody before vaccination at 6 months but all of those with no maternal antibody before vaccination at 9 or 12 months, developed protective antibody titres. Cellular and cytokine responses were independent of age. It seems that the poor humoral response to measles vaccine in 6 month olds is a reflection of immunological immaturity and not simply the result of the presence of maternal antibody. It is not known what degree of protection would be provided by the good cellular response in the younger infants. More information is needed about the likely effect of any reduction in the recommended age of measles vaccination.*