



In Australia (*Journal of Medical Genetics* 2003;**40**:e15 ) a 10 year old boy with moderate intellectual impairment and severe problems with impulse control was found to have a pericentric inversion of chromosome 3 (46N inv (3) (p14q21). The same inversion was found in 10 other family members. The inversion was associated with intellectual impairment and impulsive behaviour. One child had been treated for attention deficit hyperactivity disorder.

Infants of mothers with gestational diabetes may be at increased risk of the oculo-auriculo-vertebral sequence of anomalies (OAVS). Data from a Spanish birth defects registry showed a 2.3-fold increase in risk in infants of mothers with gestational diabetes but no increased risk for the infants of mothers with diabetes diagnosed before pregnancy. In Los Angeles (*Journal of Pediatrics* 2002;**141**:611–7) 30 infants of diabetic mothers had dysplastic ears or features of OAVS. Half of these had hemifacial microsomia, 14 had hearing loss, 11 had heart defects, 10 had facial palsy, and 10 had vertebral anomalies. Other associated defects included renal anomalies, limb defects, Di George sequence, and imperforate anus.

Lymphocytic myocarditis occurs more often in children than in adults. Viruses known to cause it include enterovirus, adenovirus, mumps virus, influenza virus, and human immunodeficiency virus. Parvovirus myocarditis has been described in only a few reports. In Stockholm (*Clinical Infectious Diseases* 2002;**35**:1027–31) an 11-month old girl presented with severe respiratory distress and died 3 hours after admission to hospital. Parvovirus DNA was found by PCR analysis in heart, lungs, liver, kidneys, and spleen, and electron microscopy showed parvovirus-like particles in the myocardium. Serology for parvovirus B19 was positive for IgG but not IgM antibodies suggesting the possibility of chronic infection. The clinical diagnosis had been acute asthma.

In Leeds (*British Journal of Psychiatry* 2002;**181**:526–30) 99 of 201 children and 130 of 255 adults who underwent appendicectomy had a normal appendix. Over at least 15 years of follow up those who had a normal appendix removed were significantly more likely than those who had an inflamed appendix removed to reattend hospital for any reason. In particular, self-harm and attendance at psychiatric clinics were more common in this group. Patients who present with symptoms of acute appendicitis but have a normal appendix may have psychosocial problems that are often ignored.

A 9-year-old girl in New York (*Archives of Pediatrics and Adolescent Medicine* 2002;**156**:1091–3) was thought to be a victim of child abuse but turned out to have berloque dermatitis. This condition is produced in susceptible people when perfumes containing bergamot oil or a psoralen are applied to the skin and the skin is then exposed to sunlight. It is characterised by erythema at the site of application followed by hyperpigmentation. In severe cases there is a bullous reaction. This girl presented with blisters on the right side of her face and the left side of her neck that over a few days left an erythematous, desquamating area on the cheek and linear hyperpigmentation on the left cheek and neck. She had applied a perfume to these areas before spending a day at the beach.

Emergency treatment for severe malnutrition during famine is usually given in inpatient therapeutic feeding centres but the establishment of these centres may be delayed and difficult and many severely malnourished people may miss out. In Ethiopia in 2000–2001 an outpatient therapeutic feeding programme was established at ten sites (*Lancet* 2002;**360**:1824–30 see also commentary, *ibid*: 1800–1). Data from 170 children (aged 6–120 months) showed that the results exceeded internationally accepted minimal standards for recovery (85%), with relatively few defaulters (5%) but rates of weight gain were below the recommended minimal standards. It is concluded that outpatient care could provide a complementary treatment strategy.

Echinocandins such as caspofungin, micafungin, and anidulafungin are antifungal agents that act by inhibiting 1, 3-beta-glucan synthesis in the fungal cell wall. The fact that mammals do not synthesise 1, 3-beta-glucans may explain the relative lack of toxicity of these drugs. A multinational study in adults (*New England Journal of Medicine* 2002;**347**:2020–9), see also editorial, *ibid*: 2070–2) has shown that caspofungin is at least as effective as amphotericin B in the treatment of invasive candidiasis and associated with fewer adverse events. Further studies in adults and children are needed to establish the place of the echinocandins in the treatment of invasive fungal infections.

Involvement of the temporomandibular joints is common in juvenile idiopathic arthritis (JIA) but symptoms may be minimal or absent. Diagnosis is often delayed and mandibular growth may be impaired. In Rotterdam (*Annals of the Rheumatic Diseases* 2003;**62**:366–7) a girl developed polyarticu-

lar JIA at the age of 7 years and at the age of 11 years tomography of the temporomandibular joints showed severe destruction of both condylar heads which had been normal two months previously. She had complained of only mild symptoms (pain on opening her mouth, impaired bite, clicking in the left temporomandibular joint) in the last month. Treatment (intraarticular steroid, antirheumatic drugs, or splintage) is not of proved benefit.

There seems to be something different about the vascular proliferation in retinopathy of prematurity (ROP). Researchers in America (*British Journal of Ophthalmology* 2003;**87**:275–8) examined the intraretinal and preretinal neovasculation of the eye of a child with stage 3 ROP who had died at the age of 4 months. They found positive immunoreactivity for the blood-tissue barrier associated glucose transporter GLUT1 but negative immunoreactivity for the Lewis Y antigen. Diabetic retinopathy is negative for both these antigens but childhood haemangiomas (and the placental vasculature) are positive for both. A unifying hypothesis appears, at present, to be elusive.

Parental smoking is harmful to children and the risk is greater for children who are  $\alpha_1$  antitrypsin heterozygotes. In Italy (*Thorax* 2003;**58**:237–41) 61 of 997 schoolchildren aged 11–13 years were found to be Pi heterozygotes (mostly Pi MS). Overall, there was no difference in lung function between heterozygotes and normal (Pi M) homozygotes. Children whose parents smoked tended to have reduced lung function, the reduction being significantly greater in heterozygotes than in Pi M homozygotes.

A 4-year old girl in Italy (*Lancet* 2003;**361**:140–2) had Ewing's sarcoma involving the left femur down to its midshaft. Surgeons avoided amputation by removing the proximal part of her left fibula complete with its vasculature, inserting it into a femoral allograft, and placing the head of the fibula into the acetabulum, attaching the allograft to the patient's own lower femur after removing the diseased proximal femur. Over the next 52 months the new fibulacum-femoral-head underwent considerable hypertrophy and the child was able to swim, ride an exercise cycle, and walk around the house without crutches. The surgeons are optimistic about further improvement.