LUCINA

There have been about 20 studies of analgesia for neonatal circumcision over the last two decades. Now a study in Canada (New England Journal of Medicine 1997;336:1197-201) has shown a 2.5% lidocaine, 2.5% prilocaine cream (Emla cream) to be effective. In 59 babies randomised to this cream or placebo the analgesic cream was associated with up to 50% less facial activity at various points in the procedure and a significant reduction in time spent crying. There were no observed adverse effects and in particular the cream did not give rise to methaemoglobinemia. Nevertheless Lucina just wonders how many adults would volunteer for circumcision under Emla cream analogy.

Some 98% of all deaths in childhood occur in developing countries with pneumonia, diarrhoea, perinatal disorders, and measles being the chief causes (Lancet 1997;349:1269-76). The probability of dying in childhood is about 1% in industrialised countries and 22% in the developing world. In sub-Saharan Africa over half of all deaths are of children under 5.

Twenty presented with acute watery diarrhoea and four of those had abdominal colic lasting for up to four weeks after the diarrhoea stopped. Four children had chronic diarrhoea lasting from three weeks to five months. Eighty per cent of the infections occurred during the summer months. Antibiotic treatment was not effective and six isolates were multiple antibiotic resistant.

Two anaesthetists in the south of England have reviewed the history of methods of calculating drug doses for children (British Journal of Anaesthesia 1997;78:601-5). They refer to at least eight eponymous formulas, all based on age, body weight, or surface area, and propose their own method which gives doses as a percentage of adult dose and results in doses very near to those derived from surface area for children weighing more than 30 kg and progressively lesser doses for those under 30 kg. Their ‘Salisbury rule’ is: percentage of adult dose = for children under 30 kg, weight (kg) × 2; for children over 30 kg, weight (kg) + 30 (‘under 30 double it, over 30 add 30’). They claim that the rule works well in anaesthetic practice. How well it would work for non-anaesthetic drugs seems untested.

In Vietnam there are 500 rabies deaths each year and some 250 000 people are treated after being bitten. Now researchers there have performed a small randomised trial showing that giving purified Vero cell rabies vaccine to infants at 2 and 4 months along with routine diphtheria, tetanus, pertussis, and polio immunisation at 2, 3, and 4 months produced satisfactory antibody responses and no serious adverse reactions (Lancet 1997;349:1663-5). Treatment after exposure becomes much simpler if the patient has already been vaccinated and routine vaccination of infants in hyperendemic areas seems a future possibility. Nevertheless other measures such as control of animal reservoirs and postexposure vaccination will remain essential.

Patients with chronic idiopathic thrombocytopenic purpura who respond poorly to intravenous immunoglobulin will probably respond poorly to splenectomy (New England Journal of Medicine 1997;336:1494-8). In Canada 30 patients (nine children) were followed up after operation. All nine patients who had responded poorly to intravenous immunoglobulin before surgery also had a poor platelet response to splenectomy. Nineteen of the 21 who had had good responses to immunoglobulin did well after splenectomy. Intravenous immunoglobulin probably acts by blocking splenic macrophage receptors and, in that respect, represents a ‘medical splenectomy’.

Professor Heinz Prechtl and his collaborators classify the generalised movements of normal babies as writhing movements in the first 6 weeks, changing between 6 and 9 weeks to fidgety movements which last to between 14 and 20 weeks of age. In premature babies the same sequence occurs according to age corrected for gestation. Assessment of 130 babies at five centres in Austria, Germany, Italy, and the Netherlands (Lancet 1997;349:1361-3) showed that absent or abnormal fidgety movements were predictive of neurological abnormality by the age of 2. Some 96% (67/70) of babies with normal fidgety movements were neurologically normal on follow up compared with 5% (3/60) of those who had no fidgety movements or abnormal ones. Fidgety movement assessment had greater predictive value than ultrasound scanning.

Enteroaggregative Escherichia coli is defined by its characteristic pattern on tissue culture cells but in practice is more easily identified using a polymerase chain reaction probe. It has been described as a cause of childhood diarrhoea in developing countries and isolated cases have been reported in Europe. Now it has been found in children with diarrhoea in Germany (Lancet 1997;349:1660-2). The organism was isolated from 16 of 798 (2%) children admitted to hospital with diarrhoea but from none of 580 without diarrhoea. Nine of the 16 children were under 18 months old and four had been in a developing country.

About 10% of children presenting to a dermatology clinic in Paris with cutaneous haemangiomas had severe lesions needing treatment (Pediatric Dermatology 1997;14:173-9). Some 11% had visceral lesions and 7% had congenital anomalies. First line treatment was with oral prednisone or betamethasone but only 27% responded well. Other treatments included intravenous steroid, interferon injections, surgery, and pulsed laser. Children with the Kasabach-Merritt syndrome were excluded from the series because their lesions are now thought not to be true haemangiomas but either kaposiform haemangioendotheliomas or tufted angiomas, associated with dermal lymphatic clefts.

In some areas of Africa malaria prevention, which is likely to be only partially effective, could lead to an increase in cases of cerebral malaria. Data from five areas in Kenya and The Gambia (Lancet 1997;349:1650-4) have shown that the risk of severe childhood malaria is highest in those areas with moderate transmission rates and lower in areas with high transmission rates. Presumably children in high transmission areas have greater immunity. This does not mean abandoning attempts at malaria control but does show a need for caution and careful monitoring in areas of high endemicity.

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