Non specific effects of immunisation

There is no doubt about the global impact of immunisation in terms of reduced disease prevalence, morbidity and lives saved. All clinicians recognise this with more than 2 million deaths saved every year worldwide. There is however continuing debate about side effects. Aaby et al report an increase in childhood mortality between 2-6 months following DTP immunisation at 2 months in girls. This data is from an observational study within a randomised trial (BCG at birth, Guinea Bissau). In the accompanying editorial Pollard discusses non specific side effects of vaccination speculating on causation and calls for randomised controlled trials to investigate these phenomena further and advocates these effects are seen in the context of the highly successful global immunisation programme. See pages 685 and 677

School children’s backpacks and back pain

The issue of the weight of the school backpack is I am sure a familiar one to all parents and seems a continuing issue despite much of learning being electronic rather than text book based. Rodríguez-Oviedo and colleagues report a cross sectional study across eleven schools in Northern Spain (1403 children, age 12-17) and found that 61.4% and 18.1% of participants carried loads exceeding 10 and 15% of their body weights respectively (recommendation is not to carry greater than 10%). 30% reported back pain for more than 15 days in the last 12 months. Carrying heavier loads was associated with an increased risk of back pain (OR 1.50 CI 1.06 to 2.12) and back pathology. This warrants further study particularly as back pain in childhood is presumably a risk factor for back pathology in later life and we could therefore potentially impact on it. See page 730

Sudden unexplained death in childhood

Sudden unexplained death in childhood (SUDC) is rare outside infancy. Like sudden infant death syndrome (SIDS) it is a diagnosis of exclusion only made after a thorough case investigation including review of the history and circumstances of death and post mortem. McGarvey et al report all cases of sudden unexplained death in children <5 years in Ireland over a 14 year period. Deaths in children aged 1-4 years (n = 44) were significantly less common than SIDS (543). All of the 44 deaths occurred during sleep with more than 2/3 found prone; 52% had been unwell in the previous 48 hours with 38% having seen their GP. Bed sharing and smoking were less prevalent than in the SIDS cases with the majority being solitary sleepers. Of some interest there was an increased prevalence over time unlike SIDS where the numbers declined consistent with international trends and there may therefore be significant differences in risk factors at different ages. The report highlights the need for standardisation of definitions, protocols and procedures for investigating and reporting sudden unexpected deaths in childhood and highlights the importance of this phenomena in the older child. See page 692.

Spinal tuberculosis

The importance of spinal tuberculosis is highlighted by Eisen et al in a report of 21 cases seen at their institution over a 15 year period. Presenting features included back pain, systemic disturbance, deformity and neurological deficits. Tuberculin skin testing was positive in 90%, with 67% being culture positive. All had abnormal MRI scans. Treatment was required for greater than 12 months in 6/21. Most responded well to therapy, 7/21 required surgical intervention. Of note 4 had a previous diagnosis of TB, 10 had previously received BCG vaccine and 11 were contacts of known TB. The authors highlight the difficulties in diagnosis and treatment and advise a low threshold for consideration in children presenting with back pain and systemic disturbance particularly where there is a history of TB, TB contact or travel abroad to an endemic area. See page 724

Pyloric stenosis a 100 years after Ramstedt

The first definitive report of pyloric stenosis (now idiopathic hypertrophic pyloric stenosis) was by Hirschprung in 1888 and included an infant born at term who started vomiting at 10 days, the vomiting persisted with weight loss and died at 30 days. Post mortem showed hypertrophy of the pyloric canal. The first pyloromyotomy was performed by Ramstedt in 1911. In this issue, Georgoula et al look at pyloric stenosis in the 100 years since reflecting on advances in aetiology, pathophysiology, diagnosis and management of this still common condition which is very rewarding to diagnose and treat in the 21st century. See page 741

Towards evidence based medicine for paediatricians

Archimedes, a regular feature in this journal assists practising clinicians by providing ‘evidence based’ answers to common clinical questions at the forefront of clinical practice. These ‘mini’ reviewers are popular and practical with a clinical bottom line which is based on the best available data. This month’s topics are “How effective is domperidone at reducing symptoms of gastrooesophageal reflux in infants?”, “Should stimulants be administered to manage difficulties with attention, hyperactivity and impulsivity following paediatric acquired brain injury?”, “Chloral hydrate or midazolam: which is better for sedating children for painless diagnostic imaging?”

Bob Phillips the series editor in his introduction to these three excellent articles discusses the Archimedes format, instructions for authors and invites readers to submit questions. See pages 750

This month in E&P

In the excellent series ‘Interpretations’ Tinnion et al outline how to use (and interpret) alkaline phosphatase in neonatology through a series of practical and focused questions relating to the assessment, management and follow up of metabolic bone disease of prematurity. There are some multiple choice questions to test you at the end! This is in addition to helpful best practice reviews on the management of sexually transmitted disease, cerebral palsy and substance misuse.