PARENTAL PRESENCE DURING CARDIOPULMONARY RESUSCITATION

There is an international recommendation for parental presence during cardiopulmonary resuscitation although this is not universal. Tripon and colleagues explore the experience, opinions and moral positions of French emergency physicians (n=550) who had taken a course on parental presence during CPR and compared it with the responses of nurses on their team by questionnaire. The response rate was 29% for physicians, 53% from nurses. 52% had experienced parental presence during resuscitation, at the physicians wish in only 6% of cases. Of note only 17% of respondents favoured parental presence (27% of physicians, 12% of nurses). The reasons against parental presence were psychological trauma for the parents, risk of interference with medical care and care team stress. The authors conclude this reflects medical paternalism. It is an interesting paper to read and reflect on. In the USA and UK medical professionals are reported to be more accepting of parental presence. In an accompanying editorial Howard Bauchner argues that this should be the case – parental presence during cardiopulmonary resuscitation – uncommon, but yet necessary. See pages 310 and 305.

EPIDEMIOLOGY, AETIOLOGY AND MANAGEMENT OF VISUAL IMPAIRMENT IN CHILDREN

It is estimated that 19 million of the world’s children are visually impaired, while 1.4 million are blind. In the UK the annual cumulative incidence of severe visual impairment/blindness is 6/10,000 at age 15 (4/10,000 in the first year of life) with an increase in the numbers of children registered as blind over the last 20 years. In a comprehensive review Selebo and colleagues discuss the current epidemiology, aetiology and management. The definitions are discussed in detail. The commonest causes of blindness worldwide are retinal disorders, glaucoma, corneal scarring (primarily due to vitamin A deficiency), cataract and cerebral. In higher income countries severe visual impairment/blindness most commonly occurs as part of a neurological or cerebral disorder affecting the visual system due to ischaemic, developmental or unknown insults. The increase in preterm birth and increased survival of children with neurological or neurodevelopmental disorders are important factors. The management strategies are discussed from the perspective of primary prevention – preventing the insult, secondary prevention – early detection of visual impairment and tertiary prevention – managing the child with established visual loss. The sections are detailed and helpful. The authors rightly conclude that paediatricians and other paediatric professionals have a key role in the early detection and multidisciplinary management to minimise the impact of visual impairment in childhood. See page 375.

FIREARM INJURIES IN THE USA

Firearm injuries are an important cause of morbidity and mortality in the paediatric population. Srinivasam and colleagues report the recent epidemiology in the USA by analysis of data from the National Hospital Ambulatory Medical Care Survey (2001–10, data on 0–19 year olds). The average annual incidence of firearm injuries was 19,897 (23.0 per 100,000), 10% under age 12 years. 64% of injuries were unintentional. Fatality rate was 2% (0.4 per 100,000). Injuries were more common in males (odds ratio 10.2, confidence interval 5.1–20.5), black children and adolescents (odds ratio 3.2, confidence interval 1.5–6.7) and adolescents (odds ratio 16.6, confidence interval 6.3–44.8). The high unintentional rate is highlighted in the discussion with emphasis on safe storage, education and perhaps consideration of change in the gun laws which has been effective in reducing firearm injuries in other countries. See page 331.

RISK OF ADHD IN CHILDREN WITH FEBRILE SEIZURES

Febrile seizures are common in children (2–5%) and therefore commonly seen. In general for ‘simple’ rather than ‘complex’ the long term outcome is good. Ku and colleagues report the long term risk of ADHD in children who had had at least one febrile seizure using a large cohort (1081 children) with controls – 4 per case – matched for age, sex, urbanisation level and parent’s occupation. At follow up (11 years) the overall ADHD rate was 1.66 (confidence interval 1.27–2.18) times greater in the febrile seizures group than the control group. Risk factors included multiple febrile seizures, urbanisation and male sex. Clearly febrile seizures, especially if recurrent are one of the many risk factors for Attention Deficit Hyperactivity Disorder. See page 322.

PRETERM BIRTH AND SUBSEQUENT INSULIN SENSITIVITY

It is well known that the incidence of preterm birth is increasing worldwide. It is also well known that being born small for gestational age increases the risk of later metabolic disease. There is speculation that preterm birth may disrupt the nutritional programming ‘window’. Tinnion and colleagues report a systematic review which examines whether infants born pre term are at increased risk of insulin sensitivity (as a marker of the metabolic syndrome) and as a secondary outcome whether there is a difference between those born small for gestational age and those born appropriate for gestational age. The authors identified and reviewed 26 publications representing 20 cohorts, 16 with a term cohort. There was considerable heterogeneity with the methodologies which precluded meta-analysis. The complexities are covered in detail in the paper. In infancy and early childhood there was a measurable association between insulin sensitivity and pre-term birth. In later childhood and adulthood the strength of the association reduces and current body composition (reflexing lifestyle and diet) becomes the variable most strongly associated with insulin sensitivity. No conclusion was able to be drawn regarding the impact of being born pre term and small for gestational age. The authors conclude that although this data doesn’t help with the difficult question of how to best feed the pre term infant it does suggest that, like infants born at term, avoidance of ‘obesogenic’ lifestyle factors long term are crucial factors in optimising health outcomes long term. See page 362.

IN E&P THIS MONTH

I would like to highlight a helpful ‘How to use’ paper on the paediatric ECG. This is practical and informative – one to read and then have available when presented with the abnormal ECG. The other article I would like to highlight is an excellent review on Epigenetics – a novel concept with exciting prospects for paediatric research.