Highlights from this issue

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HEAD INJURIES FROM FALLS IN CHILDREN LESS THAN 6 YEARS OF AGE

Falls are a common mechanism in children admitted to hospital with head injury. In this issue Burrows *et al* review the outcome in 1775 children admitted (median age 18/12, 55% boys). Most (87%) had a normal GCS. 342 had a CT head scan of which 110 were abnormal. 58 had an isolated skull fracture, 47 had intracranial injury (23 had an associated skull fracture). Falls from standing were the most common mechanism. Risk factors for skull fracture/intracranial injury were fall from the persons arms, mean age 1 year, odds ratio 6.94 (95% CI 3–54 to 13.6); fall from a building eg window or attic, mean age 3 years, OR 6.84 (95% CI 2.65 to 17.6); fall from an infant or child product, mean age 21 months 2.75 (1.36 to 5.65). There is more data in the paper—particularly figures one and two. These are useful data which will help inform guidance for imaging, child protection discussions and health promotion initiatives. ***See page 1032***

WHAT THE GENERAL PAEDIATRICIAN NEEDS TO KNOW ABOUT EARLY LIFE PROGRAMMING

This is an important update and Editor's choice this month. Early life programming is the process by which early life events can impact on health throughout the whole life course. The epidemiology is well established with low birth weight increasing the risk of cardiovascular disease, stroke, the metabolic syndrome and osteoporosis in later life. The authors discuss the evidence and the many factors that can impact on this including pre pregnancy, antenatal and postnatal factors. While epidemiological evidence for this has been available for decades only in recent years have the mechanisms, in particular epigenetic modifications, for this process begun to be elucidated and the authors discuss this including how effects may be transmitted across generations. An understanding of early life programming and its consequences is of clear importance for paediatricians who are ideally placed to identify those most at risk of later disease and to facilitate the development and implementation of interventions to potentially modify that risk. ***See page 1058***

PREVALENCE, REPAIRS AND COMPLICATIONS OF HYPOSPADIAS

Hypospadias, one of the most common congenital abnormalities in boys, is characterized by an abnormal ventral opening of the urethral meatus between the distal glans of the penis and perineum. In this issue Schneuer *et al* review the recent epidemiology, management and complications (3186 boys, 2001–10, 35.1 per 10 000 live births). Proportion of anterior, middle, proximal and unspecified were 41.3%, 26.2%, 5.8% and 26.8% respectively. Surgical procedures were performed in 1945 (61%) with 1718 primary repairs. Complications (13%) included urethral fistula, urethral diverticulum, meatal stenosis or stricture and infection. Proximal cases were at highest risk. More than 50% of complications occurred more than 12 months after surgery. Age at primary repair did not impact on outcome although the international consensus is that surgery should occur between 6 and 18 months. The authors review their data in the light of other publications of the epidemiology and highlight the importance of long term follow up. ***See page 1038***

HOW DANGEROUS CAN A TOY BE: THE MAGNETIC EFFECT

During the last decade there has been a significant increase in the number of magnetic toys available for children. In this issue Shalaby reports a case of multiple (>60) magnet ingestion from one toy with the 12 year old girl presenting with a generalized peritonitis and requiring an emergency laparotomy where she was found to have multiple bowel perforations and fistula. The pathophysiology is that two or more magnets can attract each other across the bowel wall resulting in pressure necrosis, perforation and fistula formation. The authors review practical issues—recognition, diagnosis, management—and call for increased public awareness of the serious and potentially life threatening effect of ingesting these 'attractive looking' toys. The hazards of button battery ingestion are discussed in an accompanying editorial which calls for public health action and a national helpline to deal with these issues more effectively in the acute setting. ***See page 1049***

NOT ENOUGH SALT IN MAINTENANCE FLUIDS!

In an excellent leading article this month Colin Powell discusses this important issue providing the background and evidence—in essence use isotonic fluids in most clinical situations to avoid promoting hyponatraemia. It is an essential read for anyone who prescribes fluids and reflects the changing evidence base and practice over the last 25 years. ***See page 1013***

IN FETAL AND NEONATAL THIS MONTH

Outcome of Infants with Apgar score of zero at 10 minutes

Expert guidance suggests it is reasonable to cease resuscitation of an asphyxiated infant who does not achieve a heartbeat at 10 minutes. In fetal and neonatal this month Shah *et al* report the Western Australia experience—infants with an apgar score of zero at 10 minutes admitted to the Neonatal Intensive care unit. Data was by retrospective chart review; 2007–13, 13 infants, >35 weeks. Eight died before discharge. Of the five survivors, one had normal Griffith's score of 103 at one year of age, one had normal Bayley cognitive composite score of 110 at two years of age, but needed hearing aids, and two had normal Bayley cognitive composite scores of 100 at two years. Only one had severe spastic quadriplegia. In effect 4/13 had a good outcome, at least short term. The authors argue that outcome is not universally bad highlighting recent advances in neonatal care and the advent of therapeutic hypothermia as potential contributing factors. There are other similar data sets cited in the discussion. Should the expert guidance be revised? These issues are discussed further in an accompanying leading article from Dominic Wilkinson and Ben Stenson …. Don't stop now? How long should resuscitation continue at birth in the absence of a detectable heart beat. The article has a helpful summary box suggesting in most circumstances, resuscitation at birth should continue until 20 minutes in the absence of a clinically detectable heart-beat and that in the face of uncertainty about whether resuscitation should be discontinued, clinicians should err on the side of providing longer resuscitation, with later consideration of withdrawal of treatment if the clinical course indicates that the prognosis is poor.