

Highlights from this issue

R Mark Beattie, *Editor-in-Chief*

FACTORS AFFECTING THE OUTCOME OF SNAKE ENVENOMATION

Globally 421 000 envenomings and 20 000 deaths occur each year due to snake bites with the highest numbers in South Asia, Southeast Asia and sub Saharan Africa. Use of a tourniquet and prompt administration of antivenom are factors that impact on outcome. Sankar and colleagues evaluate the clinical outcome and factors affecting it in a cohort referred to a tertiary centre in India (n=110, all had confirmed snake bites). Most of the bites occurred at night. The species of snake was identified in 81 (saw scaled viper, Russell's viper, Krait and Cobra). All were treated according to the WHO guidelines (2005). Common complications included respiratory failure (n=35) and renal failure (n=25) with 21 requiring dialysis. 14/110 died and 13/110 suffered major sequelae (skin graft, amputation). 44 had allergic reactions to the snake antivenom. Poor prognostic factors included younger age at presentation, anaemia (Hb<10 g/dL) at admission and distance walked after the bite (>1 km). The authors emphasise the need for early referral and prompt treatment, presumably as part of an accessible network, in order to better treat and improve the outcome of these common and potentially fatal bites. *See page 596*

LEARNING (AND REMEMBERING) AFTER A NEWBORN LIFE SUPPORT COURSE

Resuscitation courses are held in many countries to train health care professionals in adult, paediatric and neonatal resuscitation attempting to standardise clinical practise, minimise error and decrease patient morbidity and mortality. How long do we retain the skills learnt? Mosley and colleagues investigate whether airway management and non-invasive ventilatory skills are retained after attendance at a neonatal life support course using the NLS 'airway testing sheet'. 67 candidates were assessed at 3–5 months: 26 (39%) passed first time, 34 (51%) on re-test and seven failed. At 12–14 months 43 were retested 19 (44%) passed on first attempt, 22 (51%) on re-test and two failed. Success was more likely in candidates who attended more than five 'real life' resuscitations per month. This data does suggest that skills when tested in a simulated scenario deteriorate within a few months. However as the authors point out (and is

discussed in the accompanying editorial with the provocative title—Can I still resuscitate a baby?), it is not known whether deteriorating 'tested' skills correlate with deterioration of skills in clinical practice. The opportunity to put learnt skills to use soon after acquisition and to continue to use those skills is clearly important. *See pages 582 and 572*

GETTING CARDIAC MASSAGE RIGHT

Morbidity and mortality remain high following infant cardiac arrest and optimal cardiopulmonary resuscitation is therefore imperative. Martin and colleagues compare two thumb and two finger chest compression performed by APLS instructors on an instrumented infant CPR manikin with international recommendations. Compression depth, release force, compression rate and duty cycles were recorded. The majority of compressions failed to comply with targets (both techniques)—the data is in the paper. This is of interest and suggests compliance of APLS instructors with current international recommendations during simulated infant CPR is poor. The implications are less clear and discussed in the accompanying editorial the most obvious question being the extent to which it matters if the chest compressions are slightly too fast, not deep enough or in the wrong ratio. Clearly the international guidance should reflect best practice and we should at least attempt to adhere to it. *See pages 576 and 571*

FREE VITAMINS IN ENGLAND

The current UK recommendations are that pregnant and breast feeding women and young children (normally after age 6 months) should take vitamin supplements including A, C, D. In the UK free vitamins should be available to low income pregnant women and new mothers and young children through the healthy start scheme. It is well known that uptake is poor. Jessiman and colleagues investigate the potential reasons for this in a qualitative study across 13 primary care trusts interviewing 15 healthy start coordinators, 50 front line health and children's professionals and 107 parents. Vitamin uptake was low at all potential sites (less than 10% of eligible beneficiaries). Reasons for poor uptake identified included poor accessibility of vitamins, poor promotion of the

scheme, lack of awareness of eligibility, and low motivation to take the vitamins supplied. This has serious health care implications. The authors discuss universal provision with improved training of health care professionals (and presumably thereby parents) as a potential strategy to improve availability, compliance and the health of our mothers, infants and young children. *See page 587*

NEURODEGENERATIVE DISORDERS AND METABOLIC DISEASE

Most genetic causes of neurodegenerative disorders in childhood are due to neuro-metabolic diseases including aminoacidopathies, creatine disorders, mitochondrial cytopathies, peroxisomal disorders and lysosomal disorders. Presentation is often with non specific problems including epilepsy, developmental delay, autism, dystonia and ataxia. The investigation can be quite complex. Germaine Pierre presents a practical approach to the investigation and management at different ages and particularly where therapeutic options are available. The author emphasises that the clinical presentation may not be distinctive in the neonate and early infancy, that neurometabolic disease may progress slowly and mimic cerebral palsy and that metabolic disorders should always be considered particularly when there is a complex clinical picture of severe neurological and non-neurological features. The review gives the reader excellent up to date guidance to help assess, diagnose and manage these complex children. *See page 618*

IN E&P THIS MONTH

This month sees the launch of a new series—Research in practice (or science for busy clinicians) which aims to update the reader on common, important and interesting research topics. I am grateful to Professor Neena Modi, Dr Bob Phillips and Dr Ian Wacogne for their collective hard work getting this series off the ground.

There are also articles in the excellent Interpretations series including how to use the neonatal neurological examination and how to use transcutaneous bilirubinometry, a challenging dermatophile, a 15 min consultation on the large head, a pharmacy update on how long to treat infections for and a clear and focused guideline review on psychosis and schizophrenia.