Highlights from this issue

Nick Brown, *Global Health Editor*

The old aphorism of 'time not standing still' could be very reasonably applied to this month's erudite selection of original research and review articles. These choices (unapologetically) reflect my global health bias but also that of the enjoyment of finding papers that are both thought provocative and that enable us to look at the world through different lenses.

VIRAL HAEMORRAGIC FEVERS

The ebola virus disease (EVD) outbreak in West Africa last year made headlines globally and was appalling in its death toll and the helplessness felt. It has taught us two things. The first of these was that the global infrastructure is ill-equipped for outbreaks of viral haemorrhagic fevers (VHF) in terms of primary and secondary prevention let alone treatment. The second is that, in an era of dense intercontinental travel, complacency about infection risk in high income countries is at least irrational if not dangerous. Ebola is one of the filovirus family, which in turn is one of four groups of human haemorrhagic fever groups (also including flavi, bunya and arena viruses). Though there has been some progress in specific antivirals and yellow fever, at least is vaccine preventable, the treatment of all fulminant disease in all groups, frustratingly, remains largely supportive. Jethro Herberg's pragmatic paper is important as it is surely only a matter of time before another VHF outbreak reaches epidemic proportions. ***See page 461***

CMV-RELATED HEARING LOSS

Though there are regional variations, congenital cytomegalovirus (CMV) affects approximately 7/1000 babies worldwide. Of those with symptomatic infection (any CNS involvement) up to one third develop sensorineural hearing loss (SNHL). Of the remainder without symptoms a further 12 % are at risk of SNHL. The treatment of congenital CMV infection was long controversial but, now the benefits are clearer in the presence of sensorineural hearing loss (SNHL), attention has moved to duration and route of delivery . This question is being addressed by a large multinational trial, but, until the results are available, any new information is to be welcomed. Bilavsky's series from Israel provides more evidence for reversibility of SNHL particularly at the milder end of the spectrum by the use of ganciclovir or valganciclovir . ***See page 433***

THROMBOEMBOLISM

Our adult colleagues are far more used to identifying and managing thromboembolic episodes, but, children are not immune. The data from Biss and colleagues, collected over six years from eight UK tertiary centres is a study that for size is unlikely to be superseded for some time and reminds us of the high risk groups: relative immobility, cancer and post-surgery. These demand a high level of suspicion and early discussion with a haematologist where thrombosis is suspected. Of those with unprovoked episodes several proved to have venous malformations or pro-thrombotic tendencies which could perhaps have been anticipated. Is it stretching the point too far to suggest that an estimate of 'thrombotic risk' should be part of the assessment for any acute admission at least for children over 10-years-old? You decide. ***See page 427***

NEONATAL RESUSCITATION

Though the Millennium Development Goal (MDG) era witnessed a reduction in overall under 5-year-old mortality by almost 50% in low and middle income countries (LMICs) the changes were almost entirely the result in improvements in rates in the post-neonatal age group. Perinatal mortality, frustratingly, remained almost static and a recurring theme in the WHO and UNICEF reports has been the lack of a trained birth attendant. The Helping Babies Breathe (HBB) programme established by the American Academy of Pediatrics is a simple but potentially ground breaking basic neonatal resuscitation training package adaptable for any LMIC population in which out of hospital deliveries are common. Arabi and colleagues tested the programme in a group of 71 largely functionally illiterate rural Sudanese village midwives (VMWs). Before their HBB training, 42% of 71 VMWs stimulated the non-breathing manikin by holding it by the legs and either stimulated/slapped or shook it, while only 25% gave mouth-to-mouth. After training the percentage of VMWs providing effective resuscitation within the Golden Minute increased from 37.3% to 72.3% ($p<0.005$), a difference sustained up to a year beyond training. While this doesn't solve all the issues around perinatal mortality, similar training should surely now be provided in all such settings. ***See page 439***

INFLAMMATORY BOWEL DISEASE

Though most general paediatricians have a degree of theoretical familiarity with inflammatory bowel disease (IBD), many of us will recall children in whom the diagnosis was not immediately obvious, perhaps delayed and early treatment uncoordinated. The incidence (though rising) remains too low for the management to be second nature to non-gastroenterologists and opinion on optimum management continues to evolve. For these reasons, the two excellent review pieces on Crohns and ulcerative colitis by Richard Russell and colleagues on the BSPGHAN group should be essential reading for anyone not managing IBD on a daily basis. ***See pages 469 and 475***

ACUTE LYMPHOBLASTIC LEUKAEMIA

Let's end on a positive. We've all seen cases of anthracycline induced cardiomyopathy or other late treatment-related complications, but, oncologists have long been cautious about being falsely reassured by the presence of minimal residual (bone marrow) disease (MRD) in acute lymphoblastic leukaemia after induction. Bartram's large UK series from UKALL 97, however, suggests that the grounds for optimism in the presence of MRD are well founded. In their cohort, 53% achieved MRD at 28 days and, of these, 91% had an event free survival to 10 years with 97% survival. Their results suggest that this group really do behave differently and can perhaps be treated with gentler regimes thereby avoiding the considerable long-term risks inherent to more aggressive chemotherapy, not to mention duration of treatment-related hospitalisation and family stress. ***See page 449***