Highlights from this issue

Nick Brown, *Editor in Chief*

EVOLVING…

I've always had a fear (and I accept it might be irrational) of becoming fixed in any set way of thinking, the 'that's how it's done' stance. Practices from 25 years ago, are now looked at (affectionately) as historical fascinomas and the same will be true of what we do now. We do our best in the confines of the present, our immediate philosophical environment, but, we embrace new evidence, adapt accordingly… and evolve.

In a metaphorical (and in one case literal) sense this month's issue, as well as seeing the return of the full Drugs and Therapeutics section, provides several case studies in evolution.

GAZE ANALYSIS

Clinical practice like any other science is enhanced by absorbing ideas from other specialties. The aviation industry, so often the progenitor of novel ideas, is now influencing medicine with yet another, gaze analysis. The technique, taught to trainee pilots, the central premise of which is that assessment can be improved by training to 'look' the way experts do, is the subject of an original research piece and editorial this month. In McNaughten and colleagues' study, my editor's choice, trainees' gaze patterns were compared with those of PICU consultants. They found that the latter had greater fixation (visits) rates and dwell times (duration of fixation) on the patients themselves (the chest and airway in particular) than their less experienced counterparts and were less focused on monitor parameters. This suggests that some aspects of traditional resuscitation training need to be rethought and perhaps retaught. ***See pages 1146 and 1098.***

GLOBAL CHILD HEALTH: TREATING TUBERCULOSIS IN MALNUTRITION

Tuberculosis (TB) is, even when straightforward, complicated to treat. There are so many factors to take into account including: compliance, contact tracing, drug resistance and co-infection. Given that most children globally with TB live in areas with a high undernutrition burden, consideration of the pharmacokinetics and pharmacodynamics of standard drugs are additional important factors. Oshikoya's erudite explanation of these factors in the Global Health Section helps demystify the area. Though there is drug to drug variability, the authors conclude the safest approach is to reduce the dose according to the degree of undernutrition and to increase once recovery has started and infer that these calculations need to be incorporated into standard guidance such as the WHO flow charts. ***See page 1101.***

MANAGEMENT OF SUSPECTED MENINGITIS

As a result of routine pneumococcal, haemophilus B and meningococcal B vaccination in the UK, bacterial meningitis is becoming rarer and was supplanted numerically some time ago by enteroviral infection. That should not mean, however, that the eye is taken off the ball in children admitted with typical symptoms. Ramasamy and colleagues assessed time to administration of antibiotics and lumbar puncture in 388 children in three tertiary hospitals and found median times of 3.1 and 4.8 hours from initial assessment respectively. What do we take from this? I think there are three lessons. First, in the case of genuine bacterial infections where delay influences outcome, that this is too slow. This probably reflects the machinations and (stretched) staffing of overburdened paediatric emergency departments, assessment units and wards. It might also be compounded by the fact that trainees are less confident at undertaking LPs in the post vaccine era. In the past, a typical on call night would have involved 2–3 LPs independently every night, but might now be no more than 1 a month. Second the CSF itself is underused diagnostically. PCR is a highly sensitive tool in ruling out bacterial and ruling in enteroviral infection. A positive in the latter test, of course, means cessation of antibiotic treatment and, clinical stability otherwise providing, an early discharge. Finally, there is no mention of concurrent steroid treatment which suggests that it has yet to become part of automatic treatment. In short, the study flags a number of 'could do better' areas which Lissauer's very pragmatic trainee viewpoint editorial also identifies. ***See pages 1114 and 1097.***

PREDICTING (EVEN PREVENTING) RESPIRATORY ADMISSIONS IN CEREBRAL PALSY

Are the frequent often prolonged episodes of respiratory-illness-associated admission in children with complicated cerebral palsy preventable?

Blackmore and colleagues' cohort study in Western Australia provides some clues: in their group of 482 children and young people aged 1 to 26 years, 55 were admitted at least once over the 3 year study period. The (non-modifiable) grade of cerebral palsy (by GMFCS) was the strongest individual predictor, but they identified several potentially modifiable factors within this group: presence of GO reflux (IRR 3, 95% CI 1.5 to 6.2), oromotor dysfunction (IRR 6.4, 2.9 to 14.2) and regular snoring, a marker of upper airway obstruction (IRR 3.7, 1.8 to 7.9). These areas, therefore, should form the focus of any routine follow-up check in children with CP and suggest that speech and language expertise could be used better. ***See page 1119.***

OPIATE ANALGESIA

In the wake of a number of serious adverse events in babies whose mothers were taking codeine for analgesia, the main regulatory bodies (FDA, EMA and MHRA) advised against its use in breastfeeding mothers and post tonsillectomy. Though there are genetically higher risk groups (for example, those with the CYP2D6 genotype) there is no facility to universally screen for these and attention and concern shifted to other opiates. Palmer reviews of the literature and metabolism of tramadol an excellent analgesic which has itself come under scrutiny. The paper concludes that appropriate use is not only safe, but prevents the alternatives, a switch to other opioids or the early cessation of breastfeeding as a result of inadequate pain control. ***See page 1110.***

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