Highlights from this issue

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Neonatal collapse

In November we published a paper on early neonatal sudden unexpected deaths[1] that made reference to the anticipated publication of the British Paediatric Survey Unit (BPSU) study on unexpected collapses in neonates. We now have this report. Becher *et al* present the BPSU data, accompanied by both an editorial and a letter. Intriguingly, the size of the birth cohorts in each paper was very similar (828 648 and 858 466, respectively), the main differences being that Leow collated data from a relatively small area over 25 years, while Becher used the whole of the UK and Eire over 13 months; and Becher's data were on the first 12 h while Leow looked at the first week. These rare but important events need careful investigation as detailed in the guidance from the British Association for Perinatal Medicine in March 2011: 'Guidelines for the Investigation of Newborn Infants who suffer a Sudden and Unexpected Postnatal Collapse In the First Week of Life'.[2] ***See page F30***

Resuscitation or stabilisation?

The distinction between 'resuscitation' and 'stabilisation' is for me one of the crucial concepts to be formalised in the new 2010 Resuscitation Council guidelines, reviewed by Wyllie in a leading article. The concept of stabilisation reflects the reality that most term and many preterm babies need only a minimum of intervention, the goal of which is to enable them to make a successful transition to extra-uterine life without becoming cold, hypoxic or infected. Indeed the history of 'resuscitation' guidelines has been one of the progressive recognition that for many babies, less is more. We have stopped doing a number of things that seemed sensible at the time, but had no evidence base, such as trying to prevent babies breathing when there was meconium around, giving 100% concentration oxygen to everyone and intubating the trachea, when mask ventilation would have been just as effective. If the explanatory notes on page 124 of the Resuscitation Council Guidelines were learnt by heart by everyone who has hands-on care of the newborn, babies' experiences of entry into the world would be greatly improved. ***See page F4***

Postoperative analgesia

Tramadol is theoretically an attractive analgesic for use in the neonate, even though there is not yet much known about its pharmacological behaviour in term and preterm babies. So the publication of a randomised controlled trial of tramadol versus fentanyl for postoperative analgesia is of interest, even though Alencar *et al* did not find any evidence of superiority in relation to efficacy, or secondary parameters such as enteral feeding. It was not the 'cleanest' trial, as some babies given intraoperative opiates were included, and the definition of surgical severity (major and minor) was not made using the only validated scale of the severity of neonatal surgical procedures.[3] On the other hand, the results are probably quite generalisable. ***See page F24***

Chorioamnionitis and BPD

A year ago we published a paper from London in which no association could be shown between maternal chorioamnionitis and subsequent lung function, including bronchopulmonary dysplasia (BPD), in a cohort of 120 infants of <32 weeks' gestation at birth.[4] Hartling *et al* have undertaken a substantial systematic review and meta-analysis of 59 studies, showing that any independent effect of chorioamnionitis on BPD must be small, and that even the pooled adjusted OR of 1.58 they found is probably an exaggeration because of publication bias. So it looks likely that in the modern world, where the majority of women in preterm labour get antenatal steroids and surfactant use is widespread, ascending infection may provoke labour and cause fetal infection, but does not necessarily further compromise neonatal outcome among survivors. ***See page F8***

Tying the duct

The Glasgow experience of ligating the patent arterial duct is reported in this issue. Heuchan *et al* found follow-up information on a series of 125 babies over 7 years, confirming that the procedure carried a low mortality and that the deaths were largely due to the comorbidities common in very preterm babies, mostly BPD. Other morbidities reflected the likelihood that babies coming to duct ligation have self-selected as being particularly ill in a variety of ways. The fact that not having been given cyclo-oxygenase inhibitors was a risk factor for a worse outcome probably reflected the same issue, that babies who had contra-indications to indometacin or ibuprofen were probably the sickest of the sick. Two questions arise. First, it would be interesting to pool results like these across several different paediatric cardiac centres, but it is a bad time to call for this in the UK since the centres are about to be reconfigured. The second is to consider the outcomes by geographical location: was there a higher rate of ligation in the neonatal population being looked after close to Glasgow, and if so, what were the outcomes for comparable neonates looked after at more distant facilities? ***See page F39***

REFERENCES

1. **Leow JY**, Ward Platt M. Sudden, unexpected and unexplained early neonatal deaths in the North of England. *Arch Dis Child Fetal Neonatal Ed* 2011;**96**:F440–2.
2. British Association for Perinatal Medicine. Guidelines for the Investigation of Newborn Infants who suffer a Sudden and Unexpected Postnatal Collapse in the First Week of Life. London: BAPM, 2011.
3. **Anand KJ**, Aynsley-Green A. Measuring the severity of surgical stress in newborn infants. *J Pediatr Surg* 1988;**23**:297–305.
4. **Prendergast M**, May C, Broughton S, *et al*. Chorioamnionitis, lung function and bronchopulmonary dysplasia in prematurely born infants. *Arch Dis Child Fetal Neonatal Ed* 2011;**96**:F270–4.