Highlights from this issue

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UNINTENDED CONSEQUENCES OF CPAP

No matter how good or effective it is, almost every treatment or therapy has its complications and its unintended consequences. As some treatments are ineffective, some patients are exposed only to the possibility of harm without any prospect of benefit. Yet other treatments are demonstrably good for certain populations, but may be useless or even harmful when their benefit is assumed for other populations. Late in the 20th Century we discovered that when prone sleeping, safe and effective for preterm babies, was extrapolated to infants, it was occasionally lethal; but many babies had to die before this brutal fact was discovered. Hishikawa and colleagues bring to our attention some undesirable consequences of the use of continuous positive airway pressure for term babies in the delivery room: an uncomfortably high rate of pneumothoraces. In a linked editorial, Poets explores these issues further. In an era when we have moved away from an emphasis on intubating the poorly responsive infant, unnecessary and possibly harmful interventions may be creeping in again by the back door. ***See pages F382 and F378***

FEEDING AND MECONIUM

In many maternity services it is custom and practice that whenever a baby is born with meconium stained liquor, that baby is given a gastric lavage through a nasogastric tube. Many years ago when I first witnessed this I was told that it was to prevent aspiration of meconium from regurgitated gastric contents. The modern justification is to prevent feed intolerance. But does it work? Deshmukh and colleagues found 6 randomised controlled trials that were suitable for meta-analysis, two of which had over 500 participants. As so often with meta-analyses, you will see when you read the paper that it is the weakest (most potentially biased) study that pushes the pooled odds ratio in favour of the practice, and if in spite of this you buy into the suggestion that gastric lavage 'works', my back-of-envelope calculation of the number needed to treat is about 32. If you were such a baby, what would you think of the idea of being given a stomach washout when you stood less than a 1 in 30 chance of gaining any benefit? The authors point out that an adequately powered RCT to answer the question once and for all would need around 3000 babies randomised, so it would not be cheap. How much do we want to know the precise answer? On the data we have, it's justifiable to leave the poor baby alone. ***See page F394***

WORRYING ABOUT BLOOD PRESSURE

The problem of what low blood pressure is, and whether it should be treated, will never go away because it is the wrong question. The real question, 'Is this baby achieving adequate oxygen delivery to all organs and tissues?' is almost impossible to answer with precision, and blood pressure is just one component of the answer. We are left, pragmatically, with two different questions: 'In this baby, is there a level of blood pressure below which there is a realistic chance of harm?' and 'Is there a level of blood pressure above which I can be fairly certain that all organs are getting properly perfused?' Faust and colleagues try to answer the first of these pragmatic questions, while in an accompanying editorial, Dempsey expands the issue into the equally important area of intervention: what is the best agent for increasing blood pressure, and if it is used, does it improve outcome? Dempsey makes it very clear that, important though all these questions are, undertaking high quality randomised controlled trials to answer any of them is fiendishly difficult. ***See pages F388 and F380***

CANDIDA, AND THE BEST OF ALL POSSIBLE WORLDS

Readers of this journal will either hail from a neonatal service in which candida prophylaxis is used, or not. Those who do will probably not have come across candida infection for some years, so the review by Manzoni and colleagues will be of limited relevance. For those who do not, the main thrust of the review is the importance of using routine candida prophylaxis for high risk babies, and in addition the evidence for treatment options for babies with invasive disease is nicely reviewed. Candida prophylaxis really is one of the most effective and worthwhile interventions for the smallest, most preterm babies with central venous access; there is little doubt that everyone should be doing it. ***See page F454***

SOCIAL INEQUALITY AND CONGENITAL ANOMALY

That there is a large effect of deprivation on mortality from congenital anomalies has been known for some time. Less has been known about the nuances of the pathway from antenatal detection to choice about termination, to delivery and to neonatal mortality. In an ingenious study, Smith and colleagues have used data from the East Midlands and South Yorkshire Congenital Anomalies Register (EMSYCAR) to demonstrate that while there is no social class gradient in the detection of serious congenital anomalies, such a gradient is evident for the detection of Down syndrome. There is then a considerable gradient between deprived and affluent parents in relation to the decision to terminate the pregnancy or not, and the combination of these factors results in a disproportionate burden of disability among babies from more deprived households. Just in case you are not aware, the existing congenital anomaly registers have been amalgamated into the National Congenital Anomaly and Rare Diseases Registration Service (NCARDRS), run by Public Health England. Congenital anomalies are still the leading cause of death in term babies; more research is constantly needed if the burden of these diseases is to be lightened. ***See page F400***