Highlights from this issue

Martin Ward Platt, Deputy Editor

Normal blood pressure. . .

One day we may abandon measuring blood pressure in favour of direct ascertainment of brain perfusion or oxygenation. Until that day arrives, we will need to interpret measurements of blood pressure while knowing that it does not reflect more important parameters such as cardiac output. As long as we do this, we will need thresholds at which we treat babies' hypotension, and one way of establishing these thresholds is to try to relate early blood pressure to later neurodevelopmental status. As Logan et al point out, the existing literature is contradictory on the relationship between blood pressure measured in early life and later neurodevelopmental outcome, but the authors fail to show any convincing relationship between hypotension and subsequent developmental delay in their large study. They speculate on possible reasons for this, including the unpalatable possibility that we call babies 'hypotensive' at levels of blood pressure that are not harmful and then expose them to therapies that might be. Readers with long memories and an interest in this topic will remember that, in a cohort of babies born at <32 weeks, with 100% ascertainment of neurodevelopmental status at 2 years' corrected age, of those babies who were developmentally normal at 2 years, only 3% had systolic (not mean) blood pressures at 4-24 h of age that were less than their gestational age in weeks. 1 See page F321

Normal oxygen saturation. . .

For both blood pressure and oxygen saturation, it's easy to confuse 'normal' with 'appropriate', 'expected' or 'safe': when we say 'normal' we may mean any of these, or else we might mean something statistical like being within 95% CI or 2 SD. With measurements as dynamic as

oxygen saturation, we are also referring to another property, namely the way in which babies' saturations can change (dip) over time. So it is good to be able to carry two papers that address this dynamic state of affairs, one about term infants over the first 5 days (Pablo *et al*) and one about healthy preterm infants (Harigopal *et al*). Rather different methods of analysis and data presentation have been used by each research group and I am sure that readers will form their own opinions about which of these is more useful: I would welcome an e-letter debate. *See pages F335* and *F339*

Normal babies?

Parents are acutely aware that having an extremely preterm baby carries with it not only a substantial risk of death, but also of disability. Having said that, we also know that parents distinguish sharply between what we term mild or moderate impairments, and severe disability - at its crudest, not walking or not talking. So the question as to whether there is a trade-off between increased survival and increased severe disability at the extreme of prematurity is important for everyone. Rattihalli et al have shown that in one English region with a very high level of ascertainment of outcomes on a population basis, survival at less than 26 weeks has substantially improved over 10 years, accompanied paradoxically by both an increase in the proportion of babies with severe disability, and those without. To put it another way, among the 'extra' survivors of better perinatal and intensive care, there were disproportionately more severely disabled ones. Accompanying this important paper we have an editorial by Zeitlin and Ancel that unpicks the implications of this work in more detail.

See pages F329 and F314

'Failing' on CPAP

The management of very preterm babies who start promisingly on their continuous positive airway pressure (CPAP), then look increasingly distressed with clear deterioration over the next few hours, is a frequent problem. It is not one for which the existing randomised trials of early CPAP provide much help in terms of strategy. So it is welcome to have some observational data on the issue from Fuchs et al, who suggest that on the whole babies <29 weeks may do better if intervention is relatively early (based on an FiO₂ threshold at 0.35), so that intubating and giving rescue surfactant is not unduly delayed. This paper shows up the limitations of the existing randomised trials and is a strong argument for further trials to test prospectively strategies such as this. See page F343

Fat, fluid, faeces, flatus. . . and fetus

The medical students' mnemonic of explanations for abdominal distension also reminds us that maternal fatness and fetal outcomes are closely linked: this is one of the less well-publicised consequences of the obesity epidemic. In a timely review, Vasudevan *et al* unpick in unflinching detail the litany of ills that fatness imparts to mother and baby. I urge you not only to read it carefully, but to use the information at any opportunity to get the message across to young women, commissioners of services and the media. *See page F378*

REFERENCE

 Systolic blood pressure in babies of less than 32 weeks gestation in the first year of life. Northern Neonatal Nursing Initiative. Arch Dis Child Fetal Neonatal Ed. 1999:80:F38–42.