

Highlights from this issue

Martin Ward Platt, *Deputy Editor*

THE THRESHOLD OF VIABILITY

What is the real threshold of viability? Seaton *et al* report mortality in a large population over 20 years for babies of less than 26 weeks. They show how survival has improved for babies of 24 weeks and above, but in some respects the group of greatest interest was those babies of 23 weeks, since no baby of 22 weeks survived. The increase in survival rates at 23 weeks was not statistically significant, but Seaton *et al* show that in recent years these babies have tended to live longer and now consume significant resources. They also raise the issue as to whether present models of neonatal care are appropriate for babies of 23 weeks: would it make better sense to centralise their care into the largest facilities where expertise in the management of such immature babies can be concentrated, rather than the present model that distributes the babies around many units? *See page F15*

THE PROBIOTIC DEBATE

It is becoming more and more difficult to avoid the conclusion that routine administration of probiotics will be the next step forward in reducing rates of necrotising enterocolitis, and perhaps infection related mortality, in neonatal intensive care. The randomised controlled trial reported by Fernández-Carrocera *et al*, though not large (150 subjects), found a significant reduction in the composite outcome of death or necrotising enterocolitis, though not for either outcome by itself. Given the strength of the existing systematic reviews and meta-analyses, do we need any more placebo controlled trials? *See page F5*

RECTUM OR AXILLA?

The National Institute for Health and Clinical Excellence (NICE) guidance CG

47, Feverish illness in children, makes the following unqualified statement in relation to oral and rectal temperature measurement: 'The oral and rectal routes should not routinely be used to measure the body temperature of children aged 0–5 years'. The axillary site is recommended. But no thought was given to the problem of hypothermia in general, nor to the situation of induced neonatal hypothermia in particular, and the NICE statement was based on Delphi evidence rather than empirical science. So it is important that Jacobs *et al* have reported in this issue that we should not rely on axillary temperature measurement in babies undergoing therapeutic hypothermia. We should only measure rectal temperature. *See page F54*

WHAT'S THE RIGHT RATIO?

The International Liaison Committee on Resuscitation (ILCOR) was formed over 20 years ago (1992), and has been a catalyst in the development of a more rigorous evidence base for cardiopulmonary resuscitation in all age groups. The evidence base is expanded further by a study of the ratio of compressions to ventilations for neonatal resuscitation. Perlman and colleagues used a manikin study, and the clear outcome was that in terms of quality of compression and ventilation, the ratio of 3:1 was superior to both 5:1 and 15:2. This evidence will feed into ILCOR guidelines and will be of interest to all local providers of neonatal resuscitation. *See page F42*

WHICH SODIUM IS THE RIGHT ANSWER?

Continuing the theme of papers with direct practical application to neonatal care, King *et al* have examined the vexed issue of sodium measurements. I'm sure I am not the only doctor to have looked at

discrepant values obtained from the gas analyser and from the laboratory, and wondered which to believe. King *et al* make a persuasive case that the values from the ion-selective electrode in the gas analyser best reflect blood sodium activity as experienced by the cell membranes in preterm babies, largely because babies have relatively low concentrations of plasma proteins. Sending a sample to the lab because we don't like the look of the gas analyser value will always make us feel better when the lab returns a higher value—but that is not necessarily the best thing for the baby. *See page F74*

END OF LIFE CARE

The two papers on end of life care that we carry in this edition should perhaps also be read in conjunction with a recent anonymous *BMJ* Personal View.¹ Caeymaex *et al*, from France, highlight the fact that one of the pivotal domains that impacts on the long term outcome for bereaved parents is their perception of their role in decision making. Those who felt they had more truly participated in shared decision making appeared to have greater resolution of their grief. This is an important concept that can directly influence practice. The companion paper from Hellman and colleagues (Canada), addresses the parental perspective on withdrawing basic care (artificial nutrition and hydration—not intensive care) within what appears to be a shared decision making model. The conclusion is that with the right support framework, this can be an appropriate approach to palliation under certain circumstances. *See page F21 and F26*

REFERENCE

- 1 Anon. How it feels to withdraw feeding from newborn babies. *BMJ* 2012;345:e7319.