



Highlights from this issue

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COMPARE AND CONTRAST: FRANCE, SWITZERLAND AND HOLLAND

This month we have papers from three different countries, each addressing separate but related aspects of management and survival of extremely preterm babies, together with an Editorial. Reading these papers together illuminates some of the fundamental difficulties in modern neonatal care: the counselling of parents where extremely preterm or 'perivable' delivery appears likely, the nature of the care given in the delivery room, and the underlying factors that modulate both the conversations with the parents and the nature of the care given. The main underlying factor is the likely survival and probability of disability in very preterm infants, which influences both parental attitude and physician behaviour, but may not be based on the most up to date information. Perlberg *et al*, reporting from the French Epipage-2 study, found that although many factors other than gestational age relate to outcomes, in reality it was gestational age that overwhelmingly determined delivery room management. It is well known that attitudes to extremely preterm birth have changed substantially in Holland over recent years, and this change is unpicked by Zegers *et al*. They make a persuasive case that guidelines followed practice, rather than the other way round. Chen *et al* report the experience in Switzerland since 2000 which largely parallels the Dutch situation: although they report a broader cohort of all babies born under 32 weeks the data for extremely premature babies is easily gleaned, and readers will doubtless be eager to compare and draw their own conclusions. *See pages F384, F391 and F377*

PDA—DOES IT MATTER?

When putting together the highlights for each edition it is difficult to avoid papers on patent arterial ducts. True to form we have two in this issue. Mirza *et al* report an observational study in which no difference in rates of intraventricular haemorrhage was found according to the timing of administration of indomethacin, but

babies given indomethacin earlier had lower rates for needing medical or surgical treatment for an open duct. In a review, El-Khuffash *et al* mull over the changes in PDA management not just over the last 10 years as their title suggests, but over the last 30 years, which gives a better perspective on the problem. The sad truth is that there is no hard, randomised controlled trial evidence to prove either that a PDA ever needs treatment, or that there is some sub-group of babies with persistent and apparently symptomatic PDA who can benefit from treatment. Secure in our ignorance, any approach to treatment, including no intervention, can be justified from the published observational papers. *See pages F418 and F474*

HIGH FLOW

As Brett Manley wrote in a previous issue of FNN 'nasal high-flow (nHF) use in neonatology is "going viral"'. If the treatment is going viral, there is a parallel epidemic of papers about it. Never behind the curve, the journal has three papers for you which will perhaps give a boost to the viral spread. The course of the epidemic of humidified high flow use in Australia and New Zealand is reported by Roberts *et al*, and these countries are probably representative of trends worldwide. On a more specific note, Shetty *et al* report on the work of breathing for infants either on nasal continuous positive airway pressure or nasal cannula high flow. They found no difference, but the nCPAP was delivered by one of two models of SLE ventilator, so whether they would have got the same null result had the comparison been with nCPAP delivered by a flow driver system must remain conjectural. In a separate paper, Shetty *et al* report a before-and-after study relating to the introduction of the high-flow system as an adjunct to weaning respiratory support in babies with bronchopulmonary dysplasia. They found an association between the introduction of the high flow system and the earlier establishment of oral feeding. *See pages F401, F404 and F408*

CMV IN EARLY PREGNANCY

Cytomegalovirus infection in early pregnancy is generally thought to presage a

poor fetal and neonatal outcome. However there is considerable variation in the extent to which fetuses can be seen on ultrasound examination to be affected by CMV infection. Amir *et al* ascertained nearly 100 babies who were known to have both CMV infection in the first or second trimester, and relatively normal ultrasound appearances. Generally the outcomes for these babies were good, though over half of them were treated with an antiviral agent, and there was inconsistent follow up. Such a study needs to be repeated in a cohort identified prospectively and managed according to a standardised protocol. CMV is a common infection but managing women with evidence of infection early in pregnancy is a continuing obstetric challenge. *See page F428*

BACK OR SIDE?

Earlier this year ADC carried a paper titled 'Recovery position significantly associated with a reduced admission rate of children with loss of consciousness'¹ and indeed the side, or 'recovery' position is standard teaching in basic life support. So it is legitimate to ask whether the traditional practice of managing preterm babies immediately after birth in a supine position is necessarily optimal. Stenke *et al* have partially addressed this: they report a randomised controlled trial in which oxygen saturation (by pulse oximetry) at 5 minutes of age was the outcome measure, and it was the same in both groups. So it looks as if there may not be any respiratory advantage of one position over the other, but one wonders whether alternative metrics (cardiac output, or measures of agitation or discomfort) might be significantly influenced by being on the back or the side. *See page F397*

REFERENCE

- 1 Julliard S, Desmarest M, Gonzalez L, *et al*. Recovery position significantly associated with a reduced admission rate of children with loss of consciousness. *Arch Dis Child* 2016;101: 521–6.