

Highlights from this issue

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INFANT FEEDING

There is a strong theme of infant feeding running through this issue, with a leading article, a review and three original research reports. I am tempted to call it a digest. Evidence from Cochrane reviews about infant feeding is presented by the SIFT (Speed of Increasing Feeds Trial) Investigator Group. The focus of the article is whether different approaches to the timing of onset and rate of advance of feeding influence the incidence of necrotising enterocolitis and late onset sepsis in preterm infants. The evidence is weak and the article is intended to highlight this in advance of the SIFT trial. SIFT aims to recruit 2500 very preterm or very low birthweight infants in the UK and Ireland to have their enteral feeds advanced at different rates. With a large sample there will be power to consider a range of important outcomes as well as determining the overall effect on survival and later disability. The trial will run in parallel with The ELFIN (Enteral Lactoferrin in Neonates) trial of lactoferrin supplementation for the prevention of late-onset infection in the same patient group. *See page F470*

An overview of the evidence for the use of maternal expressed breast milk (MEBM) and donor expressed breast milk (DEBM) is given by Menon and Williams. As well as summarising the widely acknowledged and substantial benefits of human milk feeding they highlight some of the uncertainties. A particular area of uncertainty and variation in practice is in the use of DEBM. This is largely gathered from mothers of term infants and is different in composition from the milk of mothers who have delivered preterm infants. The evidence base for the use of DEBM is not as strong as that for MEBM and there is widespread variation in practice. Pasteurisation and storage affect the composition and nutrient content can be well below the requirements of preterm infants. More research is required to inform practice (*see page F559*). Cooper

and colleagues measured the macronutrient content of DEBM. They found the overall energy content to be good, but individual donations varied widely in their protein content and this was often quite low. In the UK, to enable traceability of exposure, donor milk is not pooled, so individual infants could be affected by variation in nutritional quality. They make the case for routine nutritional analysis of DEBM aliquots to better enable nutritional management. *See page F539*

Flaherman and colleagues highlight the potential use of day one weight loss as an early predictor of later excessive weight loss in breastfeeding newborns. They found that 29% of infants who lost 5% or more of their birth weight in the first 24 h went on to lose 10% or more in the subsequent days. With <5% weight loss in the first 24 h the risk of later excessive weight loss was 8%. Early weight loss might therefore identify mothers and infants who could benefit from additional support. However, it is important to note that that most infants at risk of excess weight loss would not be identifiable using this approach and the authors have not studied the overall effect on feeding of close monitoring of early weight patterns. *See page F488*

Alves and colleagues provide a systematic review of publications about parental views on factors that hinder or help their milk supply when their infant is in a neonatal intensive care unit. According to parents' perspectives, successful breast milk supply depends on coherent and accurate knowledge about its techniques and benefits, reinforcement of mothers' motivation and alignment between neonatal unit routines and parents' needs. *See page F511*

DEVELOPMENTAL OUTCOME

Evaluation of later outcome is an essential component of neonatal research trials that has produced findings that have sometimes radically altered the assessments of

risks and benefits that would have been made without it. As we collaborate more and more effectively in conducting large randomised trials the logistic challenge of delivering detailed outcome assessments to an ever enlarging number of infants has grown. Assessments made in routine clinical practice do not presently deliver the information required. Neil Marlow gives a detailed overview of the subject and calls for a national strategy for delivering the assessments. *See page F554*

Data from the EPIPAGE (Etude Epidemiologique sur les Petits Ages Gestationnels) cohort study of very preterm infants is used to compare the outcomes of very preterm singletons and twins by the EPIPAGE Investigator group. Although twins had higher mortality risk there was little difference between singleton and twin survivors in their later neurodevelopment. *See page F480*

PATENT DUCTUS ARTERIOSUS

Sellmer and colleagues report on the outcomes of a group of preterm infants who were selectively screened for a patent ductus arteriosus (PDA) on day 3 of life. In infants born before 28 week's gestation a PDA was associated with a threefold increase in risk of death or severe morbidity. A large duct was also associated with a risk of intraventricular haemorrhage and bronchopulmonary dysplasia. The association of PDA with risk of adverse outcome is well known. The ducts in this group of patients were treated, so this study does not provide evidence that treating ducts at this time-point would improve outcome—it may even suggest that treatment at this time is ineffective in modifying outcomes other than duct patency (page reference). We still need to collaborate to conduct trials which compare early duct targeted PDA treatment with expectant management and resist the temptation to treat outside of protocol if we are to work this out.