



Highlights from this issue

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SIZE MATTERS

Not every speciality in medicine can demonstrate a clear relationship between the size or throughput of a service, and the quality of the outcome. But in neonatal medicine there has been increasing evidence from around the world that larger neonatal services have better outcomes. So what about England—is there any reason to think that we might be different? Marlow and colleagues, reporting their analysis of the EPICure2 data, now give us a definitive answer: England is not different. In fact there is a consistent gradient in favour of lower gestational age specific mortality between smaller units (with the highest), small regional centres, and large regional centres (with the lowest). Importantly, EPICure2 examined the whole maternity pathway, so the findings relate to the outcomes of fetuses alive at the onset of labour, not just those live-born babies who made it into intensive care. Maternity networks, specialist commissioners, and neonatal networks all need to ponder the implications of these findings, which are clear: optimisation of the place of care of those mothers threatening to deliver the most immature babies, and caring for the babies themselves in large units, is potentially the fastest and most certain way to drive down perinatal and infant mortality in England, and in the UK. *See page F181* and our ADC podcast. In this podcast I interview the first author of the paper, Professor Neil Marlow.

THE SNIP

No, not fancy molecular biology, but very much the issue of the moment for breastfeeding mothers and the midwives trying to help them to get breastfeeding established. When things don't go smoothly, is the problem one of anxiety, poor technique, or the tongue-tie? Right now the tongue-tie is a popular culprit, and the answer is The Snip. The problem is that the issue is a bit more complicated than that, and at risk of pouring petrol on

the bonfire we publish both a randomised trial of frenotomy by Emond and colleagues, and a thoughtful accompanying editorial by Anne Lawson. The trial showed a mixed picture in that frenotomy made no objective difference to the quality of breastfeeding, but it did seem to result in an improvement in maternal self-efficacy such that it reduced rates of discontinuation of breastfeeding at 5 days postnatally. Infants seem to tolerate their snip very well, so it seems a relatively harmless intervention, but the trial begs the question as to whether dividing a baby's lingual frenulum is necessarily the best, or the only way to improve maternal self-efficacy and 5-day breastfeeding rates. *See pages F189 and F178*

EYES RIGHT

Getting retinopathy screening right should be one of the most straightforward components of good neonatal care. The group 'at risk' is well defined (though the curious choice of weight criterion in the 2008 guidance (<1501g), when 'very low birth weight' is <1500g, has never been satisfactorily explained), as is the appropriate post-menstrual age at first screen. Yet, as the data from the National Neonatal Audit Programme (Wong and colleagues) show, the timing of screening appears to go awry in a significant proportion of cases. Worryingly, but in line with the EPICure2 mortality data, the smallest units appeared to do worst, suggesting that morbidity as well as mortality might be reduced by centralising neonatal intensive care in fewer, larger units. And there seems to be an association between later screening and the likelihood of needing treatment for retinopathy, perhaps suggesting that it is all too easy to delay screening in the smallest, sickest babies. These data should be read as a wake-up call to the neonatal community to get their act together. Managing the simple but important things should not be a major challenge. Everyone should get the eyes right. *See page F196*

EARS RIGHT

The biggest single step forward in managing congenital sensorineural deafness in the last 25 years in the UK has been the introduction of the newborn hearing screening programme. Neonatal detection now leads to early intervention with hearing and communication aids, and this has transformed the outlook for infants with this condition. Now it looks as if the next leap forward is about to happen: an important proportion of babies who are screen-positive for hearing impairment turn out to be positive for cytomegalovirus (CMV), and evidence is accumulating that these babies can be successfully treated with valganciclovir both to prevent further hearing loss and in some cases actually to improve auditory function. The contribution of Williams and colleagues is to show that targeted salivary CMV screening is the best and most acceptable means to identify babies with congenital CMV, to demonstrate that it can be successfully embedded in the newborn hearing screening programme, and to suggest the numbers that would need to be treated following their identification. *See page F230*

MEASURING FATNESS

'Fatness' is easy to see, and can be quantified using various measures such as body mass index (BMI) or ponderal index (PI); traditionally BMI has been preferred in children and adults but PI in babies. But do either of these really measure, or even relate to, percent fat mass (adiposity)? De Cunto and colleagues report the use of air displacement plethysmography (ADP) as a reference measure to assess whether either BMI or PI are good surrogates for adiposity in newborn babies. It turns out that although both correlate with adiposity (as expected), BMI correlates the best; but even then the scatter is so wide that a BMI z-score of 0 is compatible with percent fat mass anywhere between 2% and 17%—more than an 8-fold difference. So looking fat is not the same as being fat—at least in babies. *See page F238*