

Checking normal babies: NICE work or redundant ritual?

The NICE guidance on postnatal care, especially with regard to neonatal care, was greeted with some surprise by many paediatricians so we felt the subject deserved closer scrutiny and perhaps an alternative view. Even more recently the UK Newborn Screening Programme Centre has started to take an interest in the neonatal examination, so Green and Oddie's review could not be more timely. Readers may be interested in their assessment of the use of pulse oximetry—should it be routine, or reserved for babies with heart murmurs? They also point out that even the individual components of the examination are not good “screening tests” in any rigorous sense of the word, but that the examination as a whole has a value that goes beyond hips, heart and eyes. So it's a qualified thumbs up, so long as we don't pretend it can do things that it can't. *See page F389*

Putting the tension back in oxygenation

Those of us brought up on transcutaneous oxygen monitoring (TcPO₂), in the days before the universal adoption of pulse oximetry, have noticed the different behaviours among doctors and nurses that the use of each of these modalities generates. It is not just about the babies, it is about the adjustments to the oxygen dial that are made in response to the information. And since the saturations and transcutaneous tensions are obtained in radically different ways, it is of considerable interest to try to understand this better since it may bear on the question of how best to reduce the incidence of retinopathy. Quine and Stenson's randomised controlled trial addresses the short-term outcome of variability in oxygenation: they found that variability was more pronounced when monitoring relied on pulse oximetry rather than TcPO₂ monitoring. Poets and Bassler, in their linked perspective, point out that we need to look at end points (such as retinopathy) before the saturation

monitors are consigned to the bin of outmoded equipment; however, astute observers will notice that the BOOST II trial (comparing different oxygen saturation targets, with retinopathy as an important outcome variable) costs a lot of money and is a huge multi-centre enterprise. Quine and Stenson did their informative study on a shoestring in their own unit. *See pages F330 and F347*

Does a bigger head hold a better brain?

Head growth usually means brain growth, but quantity is not the same as quality: in the end, it will take longer-term follow-up data than just one year to answer the question that Tan and Cooke posed in their randomised controlled trial of hyper-alimentation for preterm babies. As others have found, it is really, really difficult to feed seriously preterm babies adequately in their first month, and deficits tend to be cumulative. They found that better nourished babies do seem to have better head and brain growth, even though there were no group differences in head circumference, brain size or developmental outcome between the two arms of the study. Sadly, the power of their trial was severely limited by the loss of half the subjects from follow up. *See pages F337 and F342*

The non-smoking, smoke exposed fetus

There are many reasons to welcome the smoking bans now mandated in many countries. Here's another. The interesting thing about Leonardi-Bee's paper is that the magnitude of the effect of environmental tobacco smoke on the fetus of a non-smoking mother is surprisingly large when compared with that of having a smoking mother—an average loss of 33 g birth weight instead of 200 g. This seems to be a consequence of the fact that sidestream smoke contains more toxins even though it is more dilute than directly inhaled smoke, so that in terms of population attributable damage, the fetuses of non-smokers as a group have at least as much to gain by the ban as the

fetuses of smokers. Such a shame that the authors did not present data on head circumference. Perhaps that will be the subject of a different paper. *See page F351*

Measuring the milk

One of the many disadvantages of being a tiny premature baby is that you get force fed. Even if you are lucky enough to get your mother's milk, you can't co-regulate your intake with her in a normal way, and you can end up seriously short-changed nutritionally. How can we help? Some knowledge of the fat and protein content of a mother's milk should in principle be an advantage, since milk that is dilute can be fortified, but to do this we need an easy-to-use method for evaluating milk quality in the nursery itself. Corvaglia *et al* report the use of near-infrared reflectance as just such a simple tool for this purpose, and compare it with the standard laboratory methods for estimating fat and protein. This looks like a really useful step forwards, but we now need to be able to show that the combination of measurement, and fortification if needed, is actually superior to seeing if a baby grows with the milk provided, and fortifying the milk empirically if she doesn't. *See page F372*

Stool-gazing in the newborn

Sometimes the simplest ideas are the best. Everyone talks about “delayed passage of meconium”, but no one knows exactly what they mean because we didn't know what is normal—until now. Bekkali *et al* have done a great service by simply describing the time to first passage of meconium and analysing it by gestation. That prematurity is associated with delay in the first passage of meconium is no surprise, nor that morphine slows it too (also described by Menon *et al* in this edition). What did surprise me was that almost a fifth of term babies first passed meconium later than 48 hours, so that this degree of delay is hardly abnormal. And I was also surprised by the clearly J-shaped relation between gestational age and mean time to pass meconium. *See page F376*