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SIZE AND GROWTH

In the May edition we carried an important paper, and a perspective, calling into question the validity of birth weight centiles because they are becoming less and less representative of fetal growth. Since birth weight in relation to gestation, and the subsequent growth of the premature infant, lie right at the core of neonatal care, it is ironic that the tools for defining these essential parameters should themselves be a matter for such controversy and debate. In this edition Figueras *et al* have taken a different approach to correcting for the inadequacies of birth weight for gestation by customising birth weight standards to identify infants at particular risk. Obstetricians have been keen on this approach for some time, but I suspect that fetal growth standards may prove the better reference in the long term.
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MILK – AGAIN

Again in the May edition, milk banks were the subject of a paper and a perspective. This month, Jones and Spencer look closely at the provision of human milk at the more basic level of supporting the lactation of individual mothers. Their paper does not deal with the issues of whether breast milk is superior to formula for premature babies, or whether milk banks should once again be promoted for the benefit of all babies: instead it is about how lactation can be sustained in the face of the stresses and anxieties that mothers face after giving birth to tiny babies, and this requires an intensely practical and individualised approach.
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DUCTS THAT WON'T GO AWAY

We didn't cover this in May, but patent arterial ducts seem to have been a recurring theme over the past couple of years at least. This month we have two contributions, focusing on conservative management and catheter closure respectively. Vanhaesebrouck *et al* report on 10 babies of <30 weeks' gestation with a patent duct in whom both medical and surgical closure were avoided by a combination of ventilatory strategies and fluid restriction. This looks superficially attractive, but one wonders just how generalisable the results on 10 babies might be with respect to a larger population. There is also the problem that restriction of fluids almost always implies the simultaneous restriction of energy, nitrogen, calcium and phosphate. Since we know that preterm babies have enough difficulties avoiding serious nutritional deficits even without intentional fluid restriction, this option might not be as attractive as it sounds. On the other hand, delaying ductal closure until the baby is big enough to undergo a catheter procedure might have some merit so long as the procedure can be done on relatively small babies. The smallest baby whose duct was closed by Roberts *et al* using a catheter procedure was 1600 g, which I find quite impressive. What we need now are some well-constructed randomised trials of different strategies for duct closure – including conservative management.
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SEEING AND THINKING

Adverse ophthalmic outcomes are an important source of disability, and this month we carry two papers examining population-based ophthalmic outcomes of British infants <1701 g (Stephenson *et al*) and Swedish infants <1500 g (Hellgren *et al*), both assessed in their teenage years. Unfortunately the participation rates were low in both studies, so ascertaining the true rates of adverse outcomes was problematic; furthermore, by defining the cohorts by weight rather than maturity, there were disproportionate numbers of very small but relatively mature babies in both populations. But getting very long-term outcome information of any kind is a major achievement; and even though neonatal care has changed dramatically since these children were babies, we should not be too complacent in believing that everything is necessarily much better these days. Todd *et al*, in a paper from Australia, find that retinopathy is back on the increase again. Both Stephenson and Hellgren used a wide variety of visual function testing, and both related their findings to intellectual ability. A high proportion of subjects in both studies had a significant visual disability, and there was a clear relationship between reduced cognitive ability and adverse visual function.
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CORD GASES: CAN YOU TRUST THEM?

Answer: only if you know how long after birth they were drawn. In addressing the issue of the effect of delayed measurement on the acid-base values in cord and placental blood, Lynn and Beeby have undertaken one of the largest studies of its kind. The message I take from their paper is that unless the timing of the sample is recorded, so that it can be related to the time of birth, abnormal (acidotic) values are virtually uninterpretable. I have no idea how long the delay might be between birth and cord gas analysis in my own hospital, but it looks like a good subject for an audit.
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