ADOLESCENCE AS A NEONATAL “SPECIAL INTEREST”

Perhaps an oxymoron, or perhaps a reminder of our hope that most of our high risk survivors will grow up into normal children, normal adolescents, and normal adults. Not every journal would have published a paper on outcomes in adolescence in a neonatal section, but the notion sits easily with the idea that as neonatologists we should retain insight into, and carry responsibility for the later consequences of our actions. Indeed there is now an expanding literature on teenage outcomes of infants born prematurely or with very low birthweight. So what does this ELGA (extremely low gestational age: less than 29 weeks) paper add to our knowledge? First, that on a population basis, ELGA survivors from the mid 1980s are mostly doing well in their teenage years—but not quite as well as their peers, and perhaps sub-optimally in domains that could impact on their future performance in the workplace. Second, that the Standardised Assessment Tasks (SATs) can be a useful outcome measure with implications for others conducting follow up studies. The main problem with these fascinating data is the extent to which the survivors from that era are representative of contemporary babies: how will the ELGA survivors from the turn of the century fare?

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BRACHIAL PALSY IS STILL WITH US . . .

Remaining with the theme of outcomes, we also need to be concerned about the fate of babies who frequently have little to mark them out as being “at risk”, who are commonly born at term, but who suffer brachial palsy. On the basis of the data presented by Evans-Jones et al, the birth prevalence of this condition has scarcely changed over the last quarter century. Furthermore, around 1 in 5000 babies in the UK and Eire will have a brachial palsy that will not fully recover by 6 months of age, and as yet there is no good evidence base determining how best to treat these infants. Very appropriately the authors call for a randomised controlled trial of interventions, but will the plastic surgery community take up the gauntlet?

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. . . AND SO IS MENINGITIS

The overall birth prevalence of neonatal meningitis appears to be exactly half that of brachial palsy according to the figures reviewed by Heath et al, so perhaps it is twice as hard to conduct comparative trials of antibiotic treatment. But the main difference is that any such trials would need to be done by those of us in paediatrics, and we cannot pass the buck to colleagues in another specialty. Just to complicate things further, we have to distinguish between the two most important sets of organisms, group B streptococci and Gram negative bacilli; and if we are to use disability as well as death as an end point, we must look to the paper by Stevens et al who provide a detailed insight into this important outcome. These data make depressing reading, and since the authors were not able to ascertain outcomes on all the survivors from the 1985–87 cohort their figures probably underestimate the rates of disability. A fifth of the survivors had outcomes that were graded moderate or severe, and a substantial proportion of the rest had IQ results suggesting significant intellectual impairment. It does not seem intuitively likely that faster diagnosis or better antibiotics will make much impact on the outcome of this disease, and Heath et al rightly emphasise the potential for innovations in prevention rather than in management.

See p 173 and 179

RETINOPATHY: CAN WE SCREEN MORE SELECTIVELY?

Retinopathy of prematurity is common, but progressive severe retinopathy justifying laser or cryotherapy is relatively rare. Doing the screening examination does not seem especially pleasant for the baby, and can occasionally be hazardous. All these considerations put pressure on us to ensure that screening is appropriately targeted, and the evolution of neonatal intensive care may mean that this target slowly shifts with time. So it is important to re-evaluate our approach and with this in mind we reproduce the abstract of a paper from the British Journal of Ophthalmology (full text available online) that few of us will have seen when it was first published. By modifying their criteria for selecting babies from those ≤32 weeks to ≤31 weeks of gestation at birth, Larson and Holmström spared 50 infants a year from being screened while continuing to detect all severe disease; and they argue that birth weight need not be part of the criteria, which would have the virtue of simplifying guidelines for referral and reducing confusion among doctors and nurses. The main potential difficulty is that of extrapolating these Swedish findings to other settings, but perhaps we should all look critically at our recent ophthalmic data and evaluate the guidelines we each use.

See p 172 and www.archdischild.com

THE FUTURE OF IMAGING IN THE NICU

For two decades, ultrasound at the side of incubator or crib has been the mainstay of neonatal cerebral imaging. During this time we have witnessed the rise and fall of intracranial haemorrhage, and we have become increasingly disenchanted with the limitations of ultrasound, for we cannot see, with decent sensitivity, many of the important lesions (posterior fossa bleeding, parenchymal ischaemic damage) that impact on clinical decisions and help to inform parents about outcomes. At the same time, cerebral magnetic resonance imaging (MRI) has gradually replaced computerised tomography for many indications in childhood. So it is good to see some data from Sheffield comparing conventional ultrasound with “mini-MRI” in a manner that allows us to evaluate costs as well as images and information. The cerebral ultrasound examination is clearly not dead yet, but maybe there is writing on the wall.

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