Highlights from this issue

Robert Scott-Jupp, Acting Editor-in-Chief

Born a bit too early...

The long-term problems faced by very preterm survivors have been well documented in this and other journals, but what about the much greater number born between 32 and 36 weeks? Most now have few neonatal problems, and we assume that they will continue to do well, but two papers in this issue challenge that assumption.

Potijk *et al* from the Netherlands used a well-validated tool, the Child Behaviour Checklist, to compare rates of behavioural and emotional problems in children born between 32 and 35 weeks with term controls. They found small but significant differences in a number of areas, with the moderately preterm children reporting more emotional problems and somatising symptoms. They also found some interesting gender differences.

Meanwhile, Peacock *et al* used data from the Avon Longitudinal study to look at school performance in children born between 32 and 36 weeks. They used the results of the standardised tests done by all English schoolchildren around age 6, again compared to term controls, and found that the moderately preterm children did significantly worse.

Both groups made strenuous efforts to allow for confounding factors – for example, maternal age, social class, family size, ethnicity etc – in their multivariate analysis, but nonetheless highly significant differences remained.

Interpreting these studies is difficult: what is cause and what is effect? Are these children doing worse because of whatever it was in utero that caused them to be born early, or is it an effect of prematurity *per se*, with its physical and emotional aftermath? In the Dutch study, the data were derived entirely from parental questionnaires, with no professional assessment: is there something about having a premature baby that makes a mother more likely to report emotional problems in the child, even when none exist?

Obviously more work is needed, but perhaps obstetricians should now think

carefully when faced with demands from pregnant women to deliver before 36 weeks for marginal reasons. At the very least, we can say that these children are an easily targetable group for careful surveillance as they approach school age. *See pages 112 and 118.*

Born a bit too big...

At the other end of the scale, To et al from Ontario add to the fascinating but confusing debate on the relationship between birth weight and the later occurrence of respiratory disease. We all know that low birth-weight babies are more likely to develop wheeze, but a number of studies have suggested that higher birth-weight babies may also be at increased risk. This study finds that, at least for their definition of asthma up to age 6 years, babies born >4.5 kg are at less risk than normal birth-weight babies, with the possible exception of the tiny number weighing >6.5 kg at birth. Again, it is impossible to allow for all potential confounding factors. See page 169.

Encephalitis and what causes it

Clara Thompson *et al* have provided a thoroughly helpful article, which serves both as a literature review and a practical guideline to diagnosis and management of encephalitis, giving us pragmatic advice where no hard evidence exists. Although uncommon, it always produces diagnostic difficulties and dilemmas over management. This seems to be an area neglected by the main UK guideline-generators such as National Institute for Clinical Excellence and Scottish Intercollegiate Guidelines Network.

The commonest identifiable cause in most studies is herpes simplex virus (HSV). Ward *et al* from the British Paediatric Surveillance Unit present findings from a 3-year UK survey of serious neurological disease started in 1998, which identified 19 children shown to have HSV. Eleven had encephalitis by

their strict definition. None died, but 14/19 had long-term neurological sequelae, with the youngest doing worse.

We might hope that if it was repeated now, with the benefit of the guidance in Thompson's review, outcomes would be better. *See pages 150 and 162.*

You can't assess dehydration by looking

Deciding on fluid replacement in diabetic ketoacidosis (DKA) is always difficult: too little fluid may delay recovery, too much risks cerebral oedema. I have always felt that our clinical assessment of hydration status by 'eyeballing' the child is notoriously unreliable, and a paper by Sottosanti et al from London. Ontario appears to confirm this. They simply used weight criteria to quantify hydration after recovery, and found no correlation with either clinical signs or biochemical criteria on admission. They suggest a cautious rehydration regime in all patients, however 'dry' they look.

Although there are special considerations in DKA around tissue turgor, etc, I suspect that we are equally wrong in our assessments of other forms of dehydration. *See page 96.*

Can 'nothing' do anything?

I attended a British Medical Association debate on homeopathy last year, when highly polarised views were expressed on this most popular form of Complementary Medicine: some doctors dismissed it as worse than witchcraft, while the homeopaths picketing the venue denounced all conventional medicines as 'poisons'. Mich Lajeunesse in his thoughtful review brings some sanity to the argument about homeopathy in children. He describes the techniques of preparing remedies - most are so dilute that they contain no active molecules at all – and argues that there may be some benefits to health services in using a safe 'placebo' for non-serious symptoms. See