Fantoms

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Birth outcomes by delivery mode

A paper by Liston *et al* and an accompanying perspective by Pasupathy and Smith deal with the complexity of ascertaining the relative risks of different choices of mode of delivery for term infants. By interrogating a database of more than 140 thousand births Liston *et al* had statistical power to examine even quite rare outcomes. Respiratory distress syndrome and transient tachypnoea of the newborn were increased amongst infants delivered by caesarean section without labour. Minor (cephalhaematoma) and major (facial nerve palsy, Erb's palsy, phrenic nerve palsy, Klumpke's palsy, spinal cord trauma, traumatic intracranial haemorrhage or grade III or IV intraventricular haemorrhage) birth trauma were much less common with caesarean delivery. ***See pages F174 and F176***

Lessons from continuous EEG recordings in infants with neonatal encephalopathy

Murray *et al* performed continuous early video EEG recording in a series of newborn infants at risk for neonatal encephalopathy. Measurements of blood lactate and acid base balance were made within 30 minutes of birth. Total seizure burden was determined. Initial blood gases and lactate measurements did not differ between infants with normal/mildly abnormal, moderately abnormal, severely abnormal or inactive EEGs. Time to normal lactate varied with EEG grade and correlated with total seizure burden. In an accompanying paper by the same group, seizures identified by continuous video EEG recording were compared with those that were recognised clinically by the staff caring for the infants. Of 526 electrographic seizures, 179 (34%) had identifiable clinical features on a simultaneous video recording and 48 (9%) were recognised clinically and documented by the medical and nursing staff. This documentation of the possible magnitude of the gap between EEG and clinical seizures is welcome. Persistently elevated lactate may provide a pointer to unrecognised seizures in infants at risk who are not having continuous EEG recordings. ***See pages F183 and F187***

Outcomes after antenatal diagnosis

Rasiah *et al* describe the outcomes of 79 cases where hypoplastic left heart syndrome was identified antenatally by ultrasound scan. Termination of pregnancy was chosen by 20 couples and a further four infants were stillborn. Two couples were lost to follow up. Ten liveborn infants were not considered for surgery according to the parental wishes and a further six died before surgery. Six had an alternative diagnosis. Surgery was ultimately performed on 31 infants and 20 are alive to date. As with so many antenatally-diagnosed malformations the prognosis depends critically on where in this continuum the patient is at the time of asking as well as on what decisions are made. Everest *et al* describe a case series of pregnancies complicated by prolonged premature rupture of the membranes. Similar observations applied, with the outcomes affected by the duration of latency between membrane rupture and delivery as well as by parent and clinician decision making. It is helpful to see these two complete case series described with all of the pregnancy and neonatal outcomes. ***See pages F192 and F207***

The influence of very preterm births on mortality statistics

Comparing the outcomes of different health systems is never straightforward. Field *et al* provide data from the Trent Health Region of the United Kingdom, comparing them with data from New South Wales and the Australian Capital Territory (NSW/ACT). The proportion of live-births at 22 to 31 weeks of gestation in Trent (13.47 per 1000 livebirths) was around 25% higher than in NSW/ACT (10.82/1000) and a higher proportion of the Trent infants were admitted to a neonatal unit. Unadjusted mortality rates after admission were similar. The cause for the higher preterm delivery rates in the UK is not known. From this comparison it appears that part of the difference in outcome statistics between the systems is attributable to Australian units being more selective in terms of the proportion of very preterm infants admitted for neonatal care. ***See page F212***