Ben Stenson, *Associate editor*

MORE VITAMIN K

If you had a pound for every minute that you have spent speaking to parents about vitamin K you could probably retire. Don't let that deter you from reading an excellent review of vitamin K in the newborn. Dr Hey takes us from the beginning of the story to the present day and updates us with the most recently available information, including the two related papers in this issue. von Kries *et al* did not find the mixed micellular vitamin K preparation to be more efficacious than an earlier, less expensive preparation used for oral prophylaxis. Of 29 cases of late vitamin K deficiency bleeding (day 8 to week 12), 28 infants were exclusively breast-fed and 21 had cholestasis. Pereira *et al* investigated the absorption of mixed micellular vitamin K after oral administration in infants with cholestasis and found it to be very poor, suggesting that this group of infants will continue to be at risk of late bleeding with current oral prophylaxis regimens.

See pp 80, 109, and 113

PARTIAL PRESSURE

Oxygen administration via nasal cannulae is often the next step after weaning from continuous positive airway pressure. Frey and Shann remind us that, depending on the site and calibre of the cannulae and the gas flow rate, the efficacy of nasal oxygen administration may be partly attributable to the surprisingly high levels of positive end expiratory pressure that can be generated. They review the various methods of administering oxygen to spontaneously breathing infants.

See p 84

www.archdischild.com

NURSE STAFFING AND RISK OF MORTALITY IN NEONATAL INTENSIVE CARE

An analysis of risk of mortality amongst 692 very low birthweight infants (VLBW) admitted to an Australian neonatal unit showed mortality risk to be lower when infant/staff ratio's during the first 72 hours after admission were higher. The differences persisted after adjustment for disease severity (clinical risk index for babies (CRIB) score) and unit workload. It is unclear why outcomes were better when there were less nurses per baby. Other studies have tended to show the opposite relationship. Excited managers should note that an important source of possible bias in this retrospective study is that the number of nurses per infant was based on the total number of nurses and infants of all birth weights in the nursery during the days following admission. The nurse to infant allocation specifically for the VLBW infants was not recorded and nor was the skill mix of the staff. As the authors conclude, a prospective study looking at individual nursing workloads and actual staffing resources allocated to the study infants may clarify the issue.

See p 94

NEONATAL MURMURS

Although ANNP's have been giving them close competition of late, senior house officers (SHOs) can still provide an excellent clinical service in between their natural breaks. Few hospitals are able to provide an echocardiographic diagnosis before discharge home for asymptomatic newborn infants with a murmur that has been detected during the routine neonatal examination. Over two years, Farrer and Rennie audited the performance of 30 neonatal SHOs in a tertiary teaching hospital at assessing the significance of cardiac murmurs in the newborn period. None of the 100 infants discharged home with non-urgent outpatient appointments presented with illness. Of the 12 infants referred urgently for assessment 11 had structural heart disease. No asymptomatic baby had an electrocardiogram or chest *x* ray. There were no cases of obstruction of the left outflow tract during the study period.

See p 147

STOOL ANALYSIS

Analysis of meconium can provide an estimate of antenatal exposure to illicit drugs during the second and third trimesters, but the test is only available for a few days after birth. In contrast, hair analysis gives a measure of drug exposure during the last trimester that can remain positive for up to 3 months. Meconium analysis picks up more cases overall but hair analysis identifies some infants whose meconium is negative. Meconium may less useful in determining exocrine pancreatic function. Levels of faecal elastase are low until day three in term infants and until two weeks in preterm infants.

See pp 98 and 106