# Fantoms

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# ORGANISATION OF NEONATAL SERVICES

Data from the Trent Neonatal Survey show that inappropriate neonatal transfers have remained frequent during the 10 years since 1995. Transfers were considered inappropriate if to obtain care an infant required to be transferred out of a tertiary centre or to be transferred from a district general hospital to another hospital beyond their nearest referral centre. They accounted for more than 20% of transfers overall and show no sign of decreasing over time with reorganisation of services. This may be due in part to the steady rise in neonatal intensive care activity during the same time period. Serial census data from the Neonatal Transfer Service for London, Kent, Surrey and Sussex show rising neonatal transfer activity. During the same time period there has been a rise in requests for antenatal transfer but a fall in the number of antenatal transfers carried out, raising the possibility that improved neonatal transport services may conceal a problem in coordination of obstetric care too. Collectively these two reports suggests that there is still a long way to go in matching resources to demand for neonatal intensive care services in the UK. Gorm Greisen's commentary provides an international perspective.

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## **MILK BANKS**

In the UK there are presently 17 milk banks providing pasteurised donor breast milk to infants cared for in 50 to 60 neonatal units. Boyd *et al* provide a systematic review of trials and observational studies of the use of donor milk in preterm and low birthweight infants. The headline figure is impressive—a relative risk of 0.21 (95% CI 0.06 to 0.76) for the development of NEC. The data suggest that the number needed to treat to prevent a case of NEC may be around

18.5. However, the authors rightly advise caution since the findings are based on a total of 13 cases of NEC in 268 infants. Rees *et al* provide a systematic review of evidence associating NEC with long-term neurodevelopmental outcome. They found a relative risk for neurodevelopmental impairment associated with NEC of 1.6 (95% CI 1.3 to 2.0) and with Bell's stage III or surgical NEC of 2.3 (95%CI 1.5 to 3.6). The existing UK milk banks collectively process around 5000 litres of donated breast milk per year. This is enough to feed more than 1000 VLBW infants for their first 2 weeks of life. If banks are to flourish and become more widespread there is a need for the existing supplies to be used for prospective research studies to provide a stronger evidence base.

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### PERINATAL LESSONS

Peter Dunn continues his series of perinatal lessons from the past with the life of Arvo Ylppö, pioneer of Finnish paediatrics. According to another source, during his time at the Kaiserin Auguste Victoria Haus in Berlin Ylppö often carried a canary cock on his shaven head. Now that would impress the juniors!.

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### **HEARTS**

There is a lot of interesting cardiology in this month's issue. Roberts et al describe a series of 10 preterm infants with persisting arterial ducts who underwent cardiac catheterisation with the intention of achieving a device closure. At the time of the procedure the infants weighed 1600-2650 g. One was ventilated and four were CPAP dependent. All were considered to have symptomatic ducts. Closure was successful in 9/10 cases without serious complications. The procedure appears to represent a possible alternative to late surgical closure. However, as with late surgical closure, it was difficult to determine in the short term whether or not duct closure improved the clinical condition of the infants. Valmari reviews the evidence evaluating pulse oximetry as a screening tool for congenital heart disease. The test has a low cost and performs better than clinical examination. The effect of the test on outcome is unknown and its value in populations with a high rate of detailed antenatal scanning is uncertain. It appears that infants with undiagnosed pulmonary atresia are unlikely to benefit from pulse oximetry screening. A case series by Tzifa et al shows that infants with this condition present with clinical cyanosis very early after birth at a time when stabilising them is usually still straightforward.

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### **POST-MORTEM MRI**

Hagmann *et al* describe a small series of infants with congenital renal abnormalities who underwent post-mortem MRI examinations as well as pathological examinations. The findings suggest that MRI may produce valuable information and may therefore have a role in cases where consent for autopsy cannot be obtained or access to specialist perinatal pathology is limited.

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### REFERENCE

 Obladen M. History of surfactant research. In: Robertson B, Van Golde KMG, Batenburg JJ, eds. Pulmonary Surfactant. From molecular biology to clinical practice. Elsevier, Amsterdam, 1992.