Prevention of postnatal cytomegalovirus infection in preterm infants

Preterm infants can acquire cytomegalovirus (CMV) from the breast milk of their CMV seropositive mothers. Postnatal CMV infection may be asymptomatic, but infants may develop pneumonitis, or sepsis syndrome. Hamprecht et al. recently studied the transmission of cytomegalovirus from CMV seropositive mothers to preterm infants who were exposed to maternal breast milk. Some 96% of seropositive breastfeeding mothers had selective re-activation of CMV in their breast milk with an incidence of acquired CMV infection in the neonatal unit of 22%. This rate of CMV acquisition in the neonatal unit appeared to be high in comparison with the experience of our own unit, which takes preventive measures against CMV.

We therefore performed a prospective study from 1 July 1999 to 30 June 2000. All infants born to mothers who booked at St George's Hospital at less than 32 weeks gestation and who were admitted to the neonatal unit were included. CMV seronegative and leucodepleted blood products are used routinely for transfusions. All banked expressed breast milk is treated by pasteurisation and stored at −20°C before use whenever possible. The value of the study would be enhanced by including parallel data on the weights of the umbilical cords.

We measured the weight of the umbilical cord of 96 consecutive healthy term (37–40 weeks) infants soon after birth. The length and weight of the cord excluding the first 5 cm from the infant's abdomen was measured after it had been emptied of blood by manual squeezing. Table 1 shows the results.

Mean (SE) weights of umbilical cord, placenta, and the infant were 41.4 (1.7), 590.1 (12.4), and 3445 (42.9) g respectively. There was a significant positive correlation between cord weight and length and placental weight and birth weight.

This is the first known study to measure umbilical cord weight and examine its correlation with placental and birth weight. It supports the common observation that the appearance of the umbilical cord is proportional to the baby's size at birth. Total cord weight is dependent on cord length, which in turn is greatly influenced by fetal movements. The value of the study would be enhanced by including parallel data on the weight of the cord per unit of its length.

S Bolisetty, T H G Koh, S Hammond, K Panaretto, J Whitehall
Department of Neonatology,昆士兰医院
Women, Townsville, Queensland 4817, Australia
Correspondence to: Dr Bolisetty, Alice Springs Hospital, PO Box 2234, Alice Springs, NT 0871, Australia; sreibit75@hotmail.com

References