

A Comparison of the Short-term Morbidity and Mortality Between Late Preterm and Term Newborns

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Abstract

Introduction: Late preterm babies are defined as those born between 34 to 36 completed weeks. There has been a recent increased awareness that this group of babies has a higher incidence of morbidity as compared to term babies. The aim of this study was to evaluate the short-term morbidities occurring in this group of babies managed in the neonatal unit at Singapore General Hospital (SGH). **Materials and Methods:** A retrospective study was done of babies managed in the neonatal unit at SGH from January 2005 to December 2008. Maternal, perinatal and neonatal data were obtained from the departmental database. The outcomes of late preterm infants were compared with term infants. **Results:** A total of 6826 babies were admitted. Ten percent (681 out of 6826) of babies were late preterm babies, making up 63% (681 out of 1081) of all preterm babies. Late preterm babies had significantly greater need for resuscitation at birth. They also had statistically significant increased risks of developing hyaline membrane disease (2.5% vs 0.1%), transient tachypnoea of the newborn (TTN) (8.1% vs 1.7%), pneumonia (7.0% vs 2.8%), patent ductus arteriosus (PDA) (4.3% vs 1.1%), hypotension (0.7% vs 0%), apnoea (3.7% vs 0%), gastrointestinal (GI) bleeding (1.5% vs 0.3%), polycythaemia (2.2% vs 1.0%), anaemia (3.4% vs 1.2%), thrombocytopenia (3.2% vs 0.6%), hypoglycaemia (6.6% vs 1.7%), neonatal jaundice requiring phototherapy (41.1% vs 12.2%) and sepsis (1.7% vs 0.6%). **Conclusion:** Late preterm infants are indeed a vulnerable group of infants with significant morbidities that need to be addressed and treated. Despite their relatively large size and being almost term, the understanding that late preterm infants are not similar to term infants is important to both obstetricians and neonatologists.

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