

OUTCOME OF VERY LOW BIRTH WEIGHT INFANTS IN SONGKLANAGARIND HOSPITAL

Ruangnapa K^a, Chanvitan P^a, Janjindamai W^a, Dissaneevate S^a

^aDepartment of Pediatrics, Faculty of Medicine, Prince of Songkla University, Hat Yai, Songkhla, Thailand

Objectives: To study mortality, morbidity and selected outcome variables of very low birth weight (VLBW) infants in Songklanagarind Hospital.

Method: A retrospective study of the outcome of VLBW infants admitted to the NICU of our hospital between January 2003 and December 2006 and followed up at the High-risk Newborn Clinic after discharge.

Results: One hundred seventy eight VLBW infants (86 males and 92 females) were enrolled. The mean (\pm SD) birth weight and gestational age were 1,123 \pm 273 g and 29 \pm 3 weeks, respectively. Forty-two infants (23.6%) were referred from other hospitals. The three most common morbidities were respiratory distress syndrome (64%), hyperbilirubinemia (64%) and apnea of prematurity (42%). The mortality rate was 27%. Perinatal risk factors of mortality were extremely low birth weight (<1,000 g) (p <0.01), congenital anomalies (p <0.01), Apgar score at 1 minute \leq 5 (p <0.01) and required FiO₂ >0.4 at admission (p =0.04). Among the selected outcomes of survivors (N=130) evaluated at discharge, bronchopulmonary dysplasia was the most common major morbidity (23.8%) and one-fifth of those infants still required oxygen. The rest morbidities were retinopathy of prematurity stage 3 (9.2%) and intraventricular hemorrhage grade III-IV (1.5%). For long-term sensorineural sequelae (N=110), visual impairment and cerebral palsy were encountered in 4.5% and 3.6%, respectively.

Conclusion: The mortality rate of VLBW infants in Songklanagarind Hospital was greater than developed countries, however, the incidence of cerebral palsy was not more than developed countries and there was no blindness or deafness. The mortality rate was highest in infants BW <1,000 g.

Keywords: *very low birth weight infants, outcome, mortality*