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Perinatal Factors and Neonatal Outcome of Very Low Birth Weight and Extremely Premature Babies at KAUH

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Aim: The study was conducted at King Abdulaziz University Hospital (KAUH) over ten years period to evaluate the neonatal mortality and morbidity of very low birth weight (VLBW) and very preterm infants and to look at the incidence of cerebral palsy in the surviving infants.

Methods: A retrospective chart review of mother and babies with VLBW (≥ 500 gms and ≤ 1500 gms) and a gestational age <32 weeks delivered at KAUH between August 1996 to the end of July 1996 was done. The review looked at maternal characteristics and complications during pregnancy, neonatal mortality and morbidity and follow up of surviving infants. A comparison was made between those born with a gestational age of 22-26 weeks (group A) and 27-31 weeks (group B).

Results: Ninety-two VLBW were evaluated. The incidence of VLBW babies at KAUH was 0.52%. The neonatal mortality was 23.8% while the early neonatal mortality was 22.8%. There was no significant difference in maternal characteristics and complications between the two groups A & B. The early neonatal mortality of group A (75%) was significantly higher than group B (13.7%), while the immediate neonatal complications including hyperbilirubinemia, respiratory distress syndrome (RDS), neonatal sepsis, electrotype and pH disturbances were significantly higher for group B babies than group A.

Bronchopulmonary dysplasia (BPD) and intraventricular haemorrhage (IVH) were not significantly different between the 2 groups. Among 64 survivors, thirty were followed for at least 12 months and of these, 7 infants (23.33%) had cerebral palsy (CP) and two (4%) had minor deficits.

Conclusion: VLBW and very premature babies are a major cause of neonatal mortality and morbidity. The incidence of cerebral palsy and minor deficits at our institution is comparable to that quoted in other literature.