

NEONATAL HYPOTHERMIA IN TROPICAL COUNTRIES

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Background: Hypothermia is a major factor in the morbidity and mortality of low birth weight and premature infants. Previous studies have reported for every 1°C decrease in admission temperature the odds of late onset sepsis increase by 11% and the risk of death increases by 28%. Moderate and severe hypothermia is associated with a higher risk of grade 3–4 intraventricular hemorrhage in infants weighing less than 1500g. Hypothermia is also associated with increased risk of respiratory distress syndrome, hypoglycaemia and acid-base derangements.

Method: We carried out a retrospective audit of 50 consecutive premature or low birth weight babies admitted to our neonatal unit at Kiwoko hospital, Uganda. Data regarding gestational age, birth weight, temperature on admission and temperature one hour after admission, hypoglycaemia at admission, need for CPAP, sepsis and clinical outcome were collected from medical records and analysed.

Results: 30 babies were admitted from labour ward or theatre and 20 from outside the hospital. Admission weight ranged from 0.81kg to 2.29kg. Median gestational age was 34/40. Admission temperature ranged from 32.1-37.2 with a mean of 35.5. 82% of babies had an admission temperature of less than 36.5. 80% had a normal temperature one hour after admission to NICU. 100% of babies with a low blood sugar on admission were also hypothermic and 100% of hypothermic babies also had a low blood sugar.

Conclusions: Over 80% of babies admitted to NICU were cold. Hypothermia was closely associated with hypoglycaemia. Simple measures, such as drying and wrapping babies in warm towels, putting on a hat and eliminating transfer delays in transfer to NICU are likely to improve hypothermia rates and therefore improve clinical outcome.