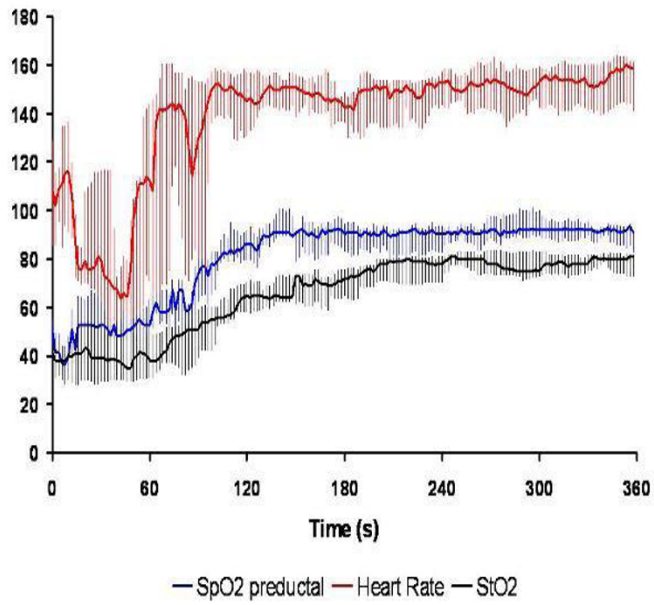
readings and was increased to 1.0 if heart rate did not increase within one minute. Thereafter, infants were supported with nasal IMV.

Results: Heart rate, preductal SpO_2, StO_2 during the first 6 minutes of life are given in the graph (medians, lower and upper quartiles).



[Figure]

Conclusions: StO_2 monitoring is feasible in VLBWI immediately after delivery. StO_2 values are lower immediately after delivery as compared to reference values obtained from healthy full-term newborn infants (Fauchere et al. J. Pediatr 2010) and remain low for the first minute of life to raise slowly with increasing heart rate.

348

CLINICAL COURSE AND PROGNOSIS AT ONE YEAR OF 1043 INFANTS BORN BEFORE 31 WEEKS AND DISCHARGED IN KANGAROO POSITION

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Objective: Evaluate clinical course and prognosis at one year of a cohort of preterm infants cared in our ambulatory KMC program.

Design: Prospective cohort of 1043 preterm infants < 31 weeks of GA at birth discharged in kangaroo position with periodical follow-up until 12 months corrected age to determine survival, growth, development and morbidity.

Results: 6889 infants were admitted to KMC program between 2002 and 2009. 1043 of them were < 31 weeks of GA at birth. 83% had completed follow up at one year. Overall mortality was 2,3%, with 70% of deaths occurring between discharge and 3 months. Nearly half of infants (47%) were readmitted at least once. Main cause of readmittion before 40 weeks GA was anemia (56,6%) and before 3 months was respiratory infection (95,8%). Breastfeeding was a success, with 23.6% receiving exclusive breastfeeding and 75% mixed feeding reaching term. Average weight, length and head circumference were 8.285g, 70.9 and 45cm at one year of corrected age. Retinopathy was detected in 23,7% and blindness in 0,4%. Diagnosis of cerebral palsy at one year was 5,5%. Mean developmental coefficient at 12 months was 97.

Conclusions: Results highlight the importance of high quality follow-up programs to decrease morbidity, mortality and to overcome disabilities and neurological impairments that may respond to early intervention during first year of life of premature infants. Follow up beyond one year is recommended, as long-term complications of prematurity may not become evident until school age.

349

HYPOXIA AND REOXYGENATION INDUCE ALTERATIONS IN WHOLE GENOME EXPRESSION IN LUNG TISSUE OF THE NEWBORN MOUSE

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Background and aims: Perinatal asphyxia is associated with hypoxia-reoxygenation injury. Supplementary oxygen use influences both morbidity and mortality.

To study whole genome expression alterations induced by supplementary oxygen in vulnerable tissues in a newborn mouse model of hypoxia and reoxygenation.