

## KANGAROO CARE FOR PRETERM INFANTS IN THE DELIVERY ROOM



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### SUMMARY

**Background:** WHO recommends early skin-to-skin contact (Kangaroo Care/KC) between mother and the newborn after delivery. The two first hour post partum is described as a particularly sensitive period, which may affect the child's future behaviour and physiology, bonding between mother and child and breastfeeding. However, KC after delivery is not routinely used in preterm infants. As the first hospital in Norway to introduce KC to preterm infants in the delivery room, we studied feasibility and safety in a cohort of infants born at gestational ages 320-346.

**Objectives:** To assess feasibility and safety of KC in the delivery room in preterm infants born at 32 to 34 weeks of gestation.

**Material and Methods:** Prospective observational feasibility study. Infants born at 32 to 34 weeks of gestation by vaginal delivery and without prenatally diagnosed malformations were included. A paediatric resident and a neonatal nurse were present at all deliveries. The infants were placed skin-to-skin on the mother's chest after a quick assessment and monitored for oxygen saturation, heart rate, respiratory rate and temperature. The infant would remain in KC position as long as possible and up to 120 min. A feeding tube was inserted and donor breast milk was given within the first hour. Primary outcomes were duration of KC, adverse events during KC, hypoglycaemia, hypothermia, and breast feeding at discharge.

**Preliminary results for the first 19 infants:** Mean duration of KC was 95 min. Reasons for discontinuation of KC were grunting and tachypnea. Median (range) body temperature on arrival in the nursery was 36.8 (36,0-37,2), and median (range) blood-glucose was 3,0 (1,7-4,8). Seventeen of 19 preterm infants in the KC-group were breastfed at discharge, and median (range) post menstrual age at discharge was 36,1 (34,5-37,4). At the beginning of the study period temperature was measured axillary. Practice was changed to rectal measurement after one infant was diagnosed with anal atresia after arrival in the nursery at two hours of life.

**Conclusion:** KC in the delivery room for preterm infants born at 32 to 34 weeks is feasible and safe.

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