## # OP24

EFFECT OF KANGAR OO MOTHER CARE (KM C) IN C OMPARISON WITH C ONVENTIONAL METHOD OF CAR E (CMC) ON GR OWTH AND BR EAST FEEDING IN V ERY LOW BIRTH W EIGHT (VLBW) INFANTS AT 40 W EEKS OF G ESTATIONAL AG E: A RAND OM IZED C ONTROLLED TRIAL

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## Background:

There is insufficient data on the effect of Kangaroo Mother Care (KMC)on growth, acceptability and long-term outcomes in very low birth weight (VLBW) infants. This study was intended to determine if use of KMC for stable VLBW infants is an effective alternative to conventional methods of care in the hospital.

## Objective:

To study the effect of Kangaroo Mother Care (KMC) in comparison with conventional method of care (CMC) on growth and breast feeding in very low birth weight (VLBW) infants at 40 weeks of postmenstrual age(PMA).

## Design/Methods:

Design : Open label randomized controlled trial.

Methods : Inborn singleton, VLBW (birth weight <1500gms) infants tolerating spoon feeds of 150ml/kg/ day and hemodynamically stable were randomized to KMC or Conventional Method of Care (CMC). Infants in KMC group were shifted to a special ward, subjected to skin to skin contact for a minimum of 8 hours per day till discharge from the hospital and were supervised by a trained nurse. Infants in CMC were managed in the neonatal unit under radiant warmer/incubator, supervised by a team of doctors and nurses and mother was involved in routine care activities till discharge from the hospital. Feeding by expressed breast milk,

adlibitum, was encouraged in both the groups. Discharge to home happened, when the infant weighed >1300 g, had weight gain > 10g/day for 3 consecutive days and mother was confident in day to day care of the baby.

#### Outcomes :

Growth and Breastfeeding rate at 40 weeks of PMA.

## Results:

One hundred and forty infants were enrolled in the study (KMC n=71 and CMC n=69). Average weight gain per day post randomization (20.2 g vs. 17.6gm, p=0.08), weight (2449gm vs. 2532gm, p-0.30), length (46.5cm vs.47.4cm, p-0.08) and occipito frontal circumference (33.0 vs.33.3, p-0.21)

# # OP24

and breast feeding rate (85.9% vs. 87.0%) at 40 weeks of PMA were similar in KMC and CMC groups. Post randomization rates of sepsis, hypothermia, apnea and hypoglycemia and age at discharge were comparable. NICU stay decreased by 11.5 days for the infants in the KMC group (p-0.56).

## C onclusions:

KMC was as effective as CMC for stable VLBW infants in terms of growth and breastfeeding rates at 40 weeks of PMA. Kangaroo care could save 12 days of NICU stay for these infants.

