

P 46. KANGAROO MOTHER CARE AND GROWTH IN HIGH RISK LOW BIRTH WEIGHT BABIES

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Background: Kangaroo Mother Care (KMC) is a unique method for caring for low birth weight infants(LBWI) and is useful for stable LBWI below 2000g. **Aims:** To study the growth pattern in babies who received 24 hrs KMC and compare the growth pattern with babies receiving shorter duration of KMC.

Materials and Methods: A prospective follow-up study of 269 babies was conducted from December 2004 to May 2005 to study the effect of kangaroo mother care duration on the growth pattern in high risk low birth weight babies.

Results: i) Weight: The overall weight gain was 20.3g/day. The weight gain in <1500g group was 17.42g/day. The weight gain in ≥ 20 hr KMC group was 20.37g/day. There was a progressive increment in weight gain /kg/day with increase in duration of KMC and statistical significant difference in wt gain/kg/day was noted between ≥ 20 hrs KMC group when compared with 7

– 12 hrs KMC group. With increasing hours of KMC weight gain improved. **ii) Weight at CDOB:**

On an average, Pre term baby reached 2417 ± 446.7 g at CDOB; ≥ 20 hrs KMC group had reached the maximum weight at CDOB 2437 ± 443.27 g compared to other KMC groups. **iii)**

Length The increment in length/week for preterm babies was 0.62cms/week & that of term SGA babies was 0.74cms/week. The overall gain in length /week was 0.65cms/week.. The increment in length was maximum in ≥ 20 hrs KMC group & it was 0.68 ± 0.26 cms/week. **iv) Head**

Circumference: The mean HC at CDOB for PT babies was 32.78 cm & that of term SGA babies was 38.38cm. The increment in HC was maximum in ≥ 20 hrs group & it was 0.665 ± 0.18 cm/week. There was progressive increment in head circumference with all KMC group > 6

hrs. **v) Chest circumference:** The overall gain in CC was 0.80cm / week. The increment in CC was maximum in ≥ 20 hr KMC group & it was 0.89 ± 0.39 cm/week. **vi) Mid-arm Circumference**

The increment in MAC was maximum in ≥ 20 hr KMC group & it was 0.375 ± 0.14 cm/week. KMC ≥ 20 hrs revealed a MAC of 9.16 ± 0.98 cm & MAC/HC ratio of 0.276 at CDOB which was in the normal range, thereby proving that babies who received >20 hrs were normal in nutrition. The HC/CC was >1, which was normal in all groups.

Conclusions: KMC ≥ 20 hrs ensured adequate growth in terms of weight, Ponderal Index, length, head circumference, chest circumference, mid arm circumference, MAC/HC, HC/CC ratios. **Keywords:** KMC and Growth, KMC duration.