

## CLINICAL COURSE AND PROGNOSIS AT ONE YEAR OF 1646 COLOMBIAN INFANTS BORN BEFORE 31 WEEKS AND DISCHARGED HOME IN KANGAROO POSITION .

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### Objective:

To evaluate clinical course and prognosis at one year of a cohort of 1646 preterm infants  $\leq 30$  weeks of gestational age at birth (GA), cared in our ambulatory KMC program between 2002 and 2012.

### Patients and design:

Prospective cohort of 1646 preterm infants (GA  $\leq 30$  weeks at birth) discharged home in kangaroo position KP with periodical follow-up until 12 months corrected age to determine survival, growth, development and morbidity.

### Intervention:

1) Continuous KP (skin-to-skin contact 24 hours), 2) Exclusive breastfeeding whenever possible and 3) Early discharge in KP with close monitoring and follow-up

### Results:

12564 eligible infants ( $\leq 37$  weeks of gestational age or weight  $\leq 2000$  at birth) were admitted to the ambulatory KMC program. 1646 of them were less than 31 weeks of GA at birth. Birthweight were  $\leq 1500$ g in 88,8% of the infants and for 32,0% was under 1000g. Post-natal age at entry was between 1-15 days for 1,8%, 15-30 days for 11,2% and more than 1 month for 87,0% of infants. 75,1% were NICU graduates, 34,2% of them had been ventilated and 0,4% of the received CPAP ventilation. 78,8% were oxygen-dependent at entry, 39,9% were diagnosed with BPD and 24,8% had intraventricular hemorrhage. 30,1% had history of nosocomial infection at entry. Lost to follow up was 18,9% from entry into KMC to one year of corrected age. Overall mortality in the cohort was 2,1% up to one year of corrected age, with 1,4% of deaths occurring between discharge and 3 months. 38,9% of infants were readmitted at least once. Main causes of readmission before 40 weeks GA were anemia (39,3%) and the main cause of readmission before 3 months was acute respiratory infection (46,0%). 24,9% received exclusive breastfeeding up to term, 14,7% up to three months, and 8,3% up to 6 months. Average weight, length and head circumference were 2893g, 46,2cm, 34,5cm at term and 8.337g, 71 and 45,3cm at one year of corrected age. Retinopathy was detected in 21,7% laser surgery in 4,6% and blindness in 0,2%. Mild auditive impairment in 2,9% and severe in 1,4%. Diagnosis of cerebral palsy at one year was 6,0%. Mean developmental coefficient at 6 months was 96,2 and at 12 months was 105 (Griffiths + Bailey test).

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Conclusions:

These results highlight the importance of a high quality follow-up program as KMCP to decrease morbidity, mortality and to overcome minor disabilities and mild to moderate neurological impairments that may respond to early intervention during their first year of life of premature infants. Follow up beyond one year of corrected age and monitoring is recommended, as long-term complications of prematurity cannot be predicted, and may not become evident until school age.

