

## **Pioneer inclusion of a father in the Kangaroo method at the Northern Maternal Hospital**

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### **ABSTRACT**

We present the clinical case of a preterm twin birth, in which both newborn girls had low birth weight (<1200 g) and required admission to the neonatal intensive care unit. Following initial stabilization, the skin-to-skin method (or kangaroo mother method) was applied with the active participation of both parents. In an unprecedented event at the institution and in Santiago de Cuba province, the father took on the role of full-time kangaroo caregiver, this being the first documented case in the region with such paternal involvement. The clinical evolution of both infants was favorable and comparable, with no differences in weight gain or physiological response to skin-to-skin contact with either father or mother. The father's active participation helped ensure exclusive breastfeeding, reduce maternal stress, and optimize early emotional bonding. This case represents a significant experience in the humanization of neonatal care, highlighting the importance of paternal participation in the hospital environment and in the early development of the newborn.

**Keywords:** skin-to-skin contact; breastfeeding; kangaroo mother method; neonatology; kangaroo father; prematurity.

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## **Introduction**

The kangaroo mother method, first implemented in 1978 in Bogotá, Colombia, has become established as an effective, low-cost, high-impact strategy for the care of premature or low birth weight neonates. This comprehensive approach includes skin-to-skin contact, breastfeeding, and close clinical follow-up, and has demonstrated physiological, behavioral, and emotional benefits for both newborns and their caregivers.<sup>(1,2)</sup>

Although traditionally centered on the mother figure, recent years have seen increased recognition of the father's participation as an active caregiver, promoting a more equitable model of family involvement. Recent studies show that paternal involvement in the kangaroo mother method improves neonatal outcomes, strengthens early bonding, and alleviates the mother's emotional burden.<sup>(3,4)</sup>

However, effective paternal participation remains uncommon in many health services, and its scientific documentation is scarce, especially in Latin American contexts.

## **Objective**

To present an unprecedented clinical case of full paternal participation in the skin-to-skin method in a Cuban neonatology unit, highlighting its feasibility, clinical benefits, and value as a replicable experience in similar settings.

## **Clinical Case**

We report the case of a preterm twin birth by emergency cesarean section at 32 weeks of gestation, motivated by severe preeclampsia. The newborns were female, of mixed skin color, daughters of a 29-year-old mother and a 33-year-old father, both state sector workers.

Newborn A: Apgar 2/3/7, weight 1190 g.

Newborn B: Apgar 3/4/7, weight 1180 g.

Both were admitted to the neonatal intensive care unit and required immediate mechanical ventilation. Once stabilized, the kangaroo method was initiated with the mother, even while they maintained non-invasive respiratory support.<sup>(5)</sup> Subsequently, the kangaroo method was also facilitated with the father, after a comprehensive psychosocial evaluation and obtaining his informed consent.

At seven days of life, with weights of 1060 g and 1055 g respectively, both infants were transferred along with their parents to an exclusive cubicle for the skin-to-skin method. The father participated full-time as a kangaroo caregiver, and caregiving was distributed equitably with the mother.

During the stay, no significant differences were observed in weight gain between the two newborns, nor in their clinical evolution. The father's active participation facilitated exclusive breastfeeding, reduced the maternal emotional burden, and fostered a more positive and stable environment.<sup>(6)</sup>

Both neonates were discharged at 48 days of life, weighing 2600 g and 2570 g, in optimal clinical condition.



**Fig.1.** Participación del padre como cuidador canguro

## Discussion

The kangaroo mother method has been widely validated as an effective strategy to improve the prognosis of premature neonates, both in hospital and community settings. Physiological benefits include cardiorespiratory stabilization, thermal regulation, stress reduction, and improved neurodevelopment, as well as strengthening the emotional bond with caregivers.<sup>(2,4,7)</sup>

Although historically focused on the mother, recognition of paternal participation in this context has gained increasing importance. Recent research indicates that father's participation in skin-to-skin contact generates benefits comparable to those of maternal care, both for the newborn and for family dynamics.<sup>(3,8)</sup>

The present case represents a pioneering experience in Santiago de Cuba province, documenting for the first time complete paternal involvement in a hospital neonatal care setting. The positive clinical outcomes, the absence of differences between the infants regarding weight evolution, and the improvement in family dynamics validate this approach as a safe, replicable, and highly beneficial practice.

Furthermore, this case calls for transforming traditional perinatal care models, promoting co-responsibility in caregiving as a family right and an institutional necessity.<sup>(9)</sup>

## Final Considerations

Active paternal participation in the kangaroo method is a safe, effective, and highly beneficial intervention. This case demonstrates its feasibility and positive impact on both neonatal evolution and family well-being, proposing a model that can be replicated in other neonatology services that promote humanized and family-centered care.

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