

Finger Feeding Technique to Encourage Feeding Transition in Preterm Newborns

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Introduction:

The oral feeding of the preterm may be influenced by innumerable factors, such as physiological and neurological immaturity, respiratory disorders, short alert period, among others.^(1,2) Finger-feeding technique has been suggested as an alternative in the food transition, being used in the routine of various services as a form of sucking and/or complementation training. This technique is also reported as an aid tool for the adequacy of the sucking pattern in newborns with oral dysfunctions, besides being used to evaluate the maturation of the suction reflex, swallowing and coordination between sucking, swallowing and breathing.⁽³⁻⁵⁾

Objective:

To compare the benefits of using the finger feeding technique with non-nutritive sucking in the transition of preterm, with the follow-up of the beginning of oral feeding. **Methods:** Pilot study of a randomized clinical trial, the population composed of preterms without associated comorbidities and absence of neonatal and maternal problems that contraindicated breastfeeding and hospitalized in a Neonatal Intensive Care Unit. This study was approved by the Research Ethics Committee of a hospital in southern Brazil under number 131286/2016. Inclusion criteria were: having gestational age (GA) less than 37 weeks according to the Capurro method; having corrected gestational age (CGA) on the 1st day of intervention less than 37 weeks; parents or legal guardians having signed the Informed Consent Form; release by the Medical Team responsible for Speech-Language Pathology Assessment; absence of neonatal and maternal problems that contraindicate maternal breastfeeding; patient availability of the mother in the Unit, clinical stability (without respiratory support, with hemodynamic stability and absence of apnea crises) and receiving an exclusive enteral diet, through a tube, or associated with parenteral diet. Exclusion criteria: grade I, II, III and IV periintra ventricular hemorrhage; Apgar less than 7 in the 5th minute; genetic syndromes; congenital malformations of the central nervous system, head and neck; heart disease, in addition to meningitis, ongoing respiratory diseases. Patients were randomized into two groups: Finger-Feeding group and Non-Nutritive Suction (NNS) group, in both groups receiving intervention followed by breast-feeding for 5 consecutive days. They were evaluated for performance in breastfeeding, oral performance by level of oral feeding skills⁽⁶⁾ and transitional time until exclusive oral feeding. We used the Pearson's Chi-squared test, Spearman Correlation, "t" test, considering $p < 0.05$.

Results:

Ten participants were evaluated, of these, 5 in each group. In the pre- and post-intervention comparison in the Breastfeeding Evaluation, the item Signs of Mother / Newborn Link, there was a significant difference ($p < 0.05$). Regarding the performance of oral feeding, a shorter time was observed between the transition from the tube to the full oral feeding in the finger technique group ($p = 0.033$), with a significant difference, being a shorter time in the finger feeding group. Regarding the level of oral feeding skills, in the NNS group 60% (3) of the participants are at level 2, and 40% (2) at level 4, which is the most mature level. In the experimental group the result

was inverse, most of the sample was at the most mature level 4, 80% (4), and only one participant (20%) was at level 2, but did not present a statistically significant correlation (Pearson chi-square test).

Conclusion:

The use of the finger feeding technique proved to be more beneficial when compared to non-nutritive sucking in the performance of premature newborns in this pilot study. The technique provided a shorter transitional time from the tube to the full oral route and improved breastfeeding performance in the item Mother /Newborn Signals.

Keywords: preterm; suction; oral feeding.

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