

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 new-borns 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 preterm 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 peri intraventricular 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.

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