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22963 | Breastfeeding and Malocclusions: Characterization of a Pediatric Dentistry Population Enrolled in a Birth Cohort Study

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Background & Aim: Breastfeeding plays an important role in the development of the craniofacial complex (1,2). However, the role of breastfeeding duration, non-nutritive sucking habits, and the timing of solid food introduction on the development of malocclusions is still in debate (2-5). Therefore, this study aimed to investigate these associations in a birth cohort. **Methods:** In the ongoing OralBioBorn birth cohort, occlusion of three-year-old children was assessed in maximum intercuspitation, examining the left and right sides, followed by a frontal assessment. In addition, the information on breastfeeding type and duration, solid food introduction, and non-nutritive sucking habits was collected through a parental questionnaire. **Results:** Preliminary data from 39 children revealed a high prevalence of open bite (33.3%), crossbite (20.5%), and overbite (10.3%). Scissor bite, high/narrow palate, and crowding were observed in only one child each. The relationship between these occlusal characteristics and breastfeeding duration, non-nutritive sucking habits, and solid food introduction will be further explored. **Conclusions:** The preliminary findings suggest that malocclusions are frequent at an early age, reinforcing the need to investigate their potential early-life determinants. Future work will involve a more in-depth analysis of the associations between occlusal development and early feeding practices, considering additional factors such as genetic predisposition and environmental influences. Longitudinal follow-up of this cohort will provide valuable insights into the long-term impact of breastfeeding and oral habits on craniofacial growth, ultimately contributing to early preventive strategies.

Keywords: Malocclusions, breastfeeding, bottle feeding, non-nutritive sucking habits, solid food introduction.

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