

The Effects of Breastfeeding on the Process of Tooth and Jaw's Development

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Abstract

From the nutritional point of view, it has been proven that breast milk has many benefits for the baby, and it is advisable for all mothers to give their baby milk, and if possible do not replace that with the bottle. In other words, we can say that the sucking mechanism used during bottle-feeding is markedly different from that used during breast-feeding. The Federation of Orthodontists of France announced in a report that breastfeeding not only prevents allergies and gastrointestinal infections and overweight, it also promotes the regular growth of the baby's face. Some of the researches prove this hypothesis.

Keywords: Bottle Feeding; Breast Feeding; Sucking Mechanism; Growth of Baby Face; Allergies; Gastro Intestinal Infections; Overweight

Introduction

After birth, the baby learns how to suck on her mother's breast. She instinctively brings forward her lower jaw and tongue; then starts sucking with full power so that all the muscles of her tongue, cheeks, lips, and jaw are involved. In all infants, since jaws are not fully developed at birth, sucking breast milk helps the jaw to grow as well as the teeth in the future [1-3]. Breast-feeding has been indicated as one of the main factors which are responsible for the correct growth and formation of dentofacial structures during the infancy [1-3]. Breastfeeding is a useful action for developing and growing teeth and jaws of infants [1-4]. The mechanism used in for the time of bottle-feeding is markedly different from that used during breast-feeding [5-7]. In the course of sucking mother's milk, more muscles are activated to get milk than to drink milk from the bottles. During this action, the baby inserts more of the nipple into his mouth, consequently, moves the jaw up and down, and sucks the breast with all force to release the milk. To achieve this, the facial and oral muscles of the baby are involved in milking activities. This improves the shape of the jaws, and healthy teeth are expected to be in the correct eruption direction without any deviation and abnormalities [1-4].

The Main Cause of Abnormal Tooth Formation During Infancy

One of the factors leading to abnormal teeth and also leading children to orthodontic or speech therapies [8] is the abnormal

orofacial muscular imbalance pattern of the tongue [9-11] known as tongue thrust. This problem is more common among children who are fed through the bottle and is often not seen among those who are breastfed. In other words, the breast-fed baby has more forceful gums and mandibles to extract the milk from the mother's breast while a baby who is fed with a bottle, does not have to use extra jaws force because by a simple sucking a rapid flow of milk will be obtained. Of course, it should not be taken for granted that all children who use the milk bottle suffer from jaw problems, but it should be remembered that breastfeeding give better evolution to the jaws and teeth than the nourishment from the bottle.

Overview of Some Researches

The early transition from breastfeeding to bottle-feeding may contribute to inadequate mandibular development which can be a dominant and deleterious factor in the development of oculosofacial problems. In this part, we look at some research which may point out this strong hypothesis. Some studies have cited that breastfeeding is a protective factor against malocclusion: Labbok and Hendershot have suggested that increased bottle-feeding duration may contribute to the prevalence of malocclusions [12].

Viggiano et al. and Karjalainen et al. have indicated that breastfeeding can be a positive factor to prevent the development of posterior cross bite in the primary dentition [6,13]. Warren et al.

reported that breastfeeding promotes normal palate development and weakens the formation of a deep and high-arched palate [14]. Several studies agree that bottle-feeding may be responsible for the development of sucking habits which may lead to some forms of malocclusion [6,14,15].

Conclusion

Breastfeeding acts on the process of sucking which are influencing the development of facial bones and muscles. Infants who are breastfed have greater facial muscle activities compare to those who are bottle-fed. In other words, breast feeders present an excellent orofacial muscle work out which helps to develop good their bony jaw structures. Moreover, breastfeeding prevents against orthodontic problems and malocclusions (for instance: overbite, posterior crossbite, tongue thrust, oral habits and etc.) that are cited in some researches.

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