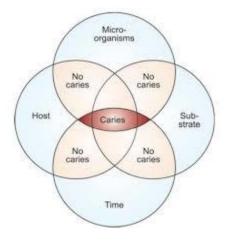
Evidence-based breastfeeding-dental caries assessment Dr. Gina Weissman, DMD, RN, IBCLC



Dental caries is a chronic disease that relates to the modern lifestyle. It is affected by nutrition habits, oral hygiene and oral bacteria composition. Prolonged acidity in oral cavity increases the risk of developing tooth decay.

Numerous opposing opinions are being displayed about the **relation between prolonged and on-demand breastfeeding and the development of ECC.**

Dental organization's statements:

-The canadian dental association (CDA) position statement recognizes that oral hygiene—not breastfeeding—may be the most important factor influencing caries development in infants. The belief that breastfeeding can cause ECC, through either the properties of human milk or the practice of breastfeeding, is not backed by current scientific evidence.

https://www.cda-

adc.ca/en/about/media_room/canadian_dentistry_news/articles/2013/072913.asp

-Eupd recommendations :

Frequent intake of sweet drinks and on demand feeding with sweetened baby bottles should be discouraged, especially at nighttime.

https://www.eapd.eu/uploads/1722F50D file.pdf

-The American Academy of Pediatric Dentistry (Aapd) recommends avoiding Ad libitum breastfeeding after the first primary tooth begins to erupt and other dietary carbohydrates are introduced. The aapd claims that While ECC may not arise from breast milk alone, breastfeeding in combination with other carbohydrates has been found in vitro to be highly cariogenic. Erickson et al. concluded that human breast milk is not cariogenic unless another carbohydrate source is available for bacterial fermentation.

http://www.aapd.org/media/policies_guidelines/p_eccclassifications.pdf http://www.aapd.org/media/policies_guidelines/g_infantoralhealthcare.pdf

Erickson PR, Mazhari E. Investigation of the role of human breast milk in caries development. Pediatr Dent 1999

Current studies:

-Clinical research demonstrate a **protective effect of breastmilk** on dental caries development **up to 12 months** in comparison with other feeding methods. Breast milk contains immunomodulators and microbiome which are necessary for flora's equilibrium.

R Tham,G Bowatte, SC Dharmage, DJ Tan,MXZ Lau, X Dai, KJ Allen, CJ Lodge. Breastfeeding and the risk of dental caries: a systematic review and meta-analysis. Acta Paediatrica.2015;104:62-84

-As for the age range of 13-23 months, no significant correlation was observed between breastfeeding and dental caries.

K.G.Peres, G.G.Nascimento, M.A.Peres, M.N.Mittiny, F.F.Demarco, I.S.Santos, A.Matijasevich, A.J.D.Barros. Impact of Prolonged Breastfeeding on Dental Caries: A Population-Based Birth Cohort Study. Pediatrics.2017(11)

Clinical research did show increased dental caries rate for children above 24 months. However, most studies did not refer to oral hygiene, fluoride exposure and complementary foods.

Updated recommendations:

The increasing awareness to the benefits of breastfeeding has led an incremental rise in toddler breastfeeding. Common recommendations to toddlers who are diagnosed with ECC are dental treatment under general anesthesia and weaning from the breast.

When treating ECC a conservative approach should be considered.

Conservative methods:

- -Frequent follow-ups (including non-restorative dental treatment if needed)
- -OH modification
- -Non cariogenic nutrition
- -Use of topical fluorides
- -In cases of severe ECC one should consider avoiding ad-libitum night breastfeeding.



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