

Opacifiers and it's Recommendations

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Abstract

Pacifiers are the devices which babies can suck on to help them calm down and sooth them when the babies cry, get restless, while they are struggling to sleep. Different types of pacifiers are used according to their need to the babies. Pacifiers are recommended for infants who engage in non nutritive sucking. Dentists understand the oral and perioral effects of pacifiers. Knowledge of current literature may assist dentists with their decisions of whether to recommend or discourage pacifier use in infants.

Keywords: Soothers; Pacifiers

Introduction

A powerful reflex of the infant in the weeks following birth is sucking. Breastfed babies benefit from both the nutrition in mother's milk and the satisfaction of their sucking instinct. Non - Nutritive sucking is a natural reflex for newborn babies [1]. A pacifier (dummy) sucking is one of the most common non-nutritive sucking habits [2,3]. It is a nursing object that has an imperforated nipple. This device is used by many infants to provide a sense of comfort, security and pleasure [4-6].

History

Pacifier were cited for the first time in medical literature in 1473, being described by German physician Bartholomaeus Metlinger, in his book "Kin Derbuchlein" retitled on later editions as "Ein regiment der jungen kinder" (A guide on young children) [3].

Types

Pacifiers consist of Latex/Silicone nipple with the firm plastic shield and handle and are available in different form and sizes:

- Conventional pacifiers [7].
- Functional pacifiers [8].
- Orthodontic pacifier [9].

Recommendations for pacifier use

Sudden infant death syndrome

SIDS is defined as the sudden death of an infant that was unexpectedly history and unexplained by a post mortem examination that includes a case investigation, complete autopsy and examination of death scene [18]. Although the exact mechanism how pacifier use

Age	Potential benefits	Potential complications	Recommendations
Preterm infants	Analgesia Decreased hospital stay, earlier transition to bottle feeding from enteral feeding, improved bottle feeding performance	----	AAP recommends pacifier use in infants up to six months of age to help prevent pain from minor procedures in the emergency department [10]. AAP guideline on breastfeeding does not contradict pacifier use for oral training in preterm infants [11].
Up to six months	Analgesia, Reduced SIDS risk	Early breast weaning	AAP recommends pacifier use in infants up to six months of age for pain relief from minor procedures in the emergency department [10]. AAP suggests offering pacifiers to infants at the onset of sleep to reduce the risk of SIDS [12]. AAP recommends avoiding pacifier use until breastfeeding is well established (usually by one month of age) [11]. AAPFP recommends educating mothers about the effect of pacifier use on breastfeeding in the immediate postpartum period [13].
Six months to two years		Otitis media	AAPFP/AAP joint guidelines recommend reducing or stopping pacifier use in the second six months of life to reduce the risk of otitis media [14]. ICSI recommends avoiding pacifier use after 10 months of age [15].
Two years and older		Dental malocclusion (misalignment of the teeth, such as open bite, crossbite, or overjet)	ADA and AAPD recommend actively discouraging pacifier use after four years of age [16,17].

Table: AAPFP = American Academy of Family Physicians; AAP = American Academy of Pediatrics; AAPD = American Academy of Pediatric Dentistry; ADA = American Dental Association; ICSI = Institute for Clinical Systems Improvement; SIDS = Sudden Infant Death Syndrome.

reduce SIDS rates is not fully understood, it decrease the likelihood of rolling into prone position, increase arousal and maintain airway patency [19].

Adverse effect in over usage of pacifier

- **Acute otitis media:** Acute otitis media is the frequent infection in pediatric age and has been associated with pacifier use [20]. Prolonged and recurrent attacks of AOM may lead to hearing impairment, language delay and cognitive difficulties [21].
- **Dental malocclusion:** Children who used a pacifier for more than 2 years were more likely to develop an anterior open bite [22]. Children who discontinued pacifier sucking by 2 years of age presented a lower prevalence of posterior cross bite (17.2%) than the ones that continued the pacifier sucking until 4 to 6 years of age (27.3%) [23]. 25.5% of the children who used a pacifier for more than 36 months developed posterior cross bite compared to only 15.5% of the children who stopped pacifier sucking before 36 months of age [24].

- **Negative impact on breastfeeding:** Early exposure to pacifier's leads to cessation of exclusive breastfeeding by 3 to 6 months and an end to all breastfeeding by 12 months [25].

Discussion and Conclusion

Pacifiers, also known as soothers, dummies and artificial teats are as rooted in history as they are in controversy. Pacifiers made of clay, silver, pearl or coral, and sugar teats have been described, some dating back to over thousands of years. The pacifiers have multiple beneficial and side effects. Dentist should be aware of these policies and recommendations.

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