

Policy on the Role of Dental Prophylaxis in Pediatric Dentistry

Review Council

Council on Clinical Affairs

Latest Revision

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Purpose

The American Academy of Pediatric Dentistry presents this policy to assist practitioners in determining the indications and methods for dental prophylaxis.

Methods

This policy was originally developed by the Clinical Affairs Committee and adopted in 1986. This document is an update of the previous version, revised in 2012. The revision included a new literature search of databases PubMed®/MEDLINE and Google Scholar using the terms: dental prophylaxis, toothbrushing, professional tooth cleaning, fluoride uptake, and professional dental prophylaxis, limited to children, the last 10 years, and English language. Papers for review were chosen from relevant articles. Expert and/or consensus opinion by experienced researchers and clinicians also was considered.

Background

The term dental prophylaxis encompasses several techniques that are used by dental personnel to professionally remove plaque, stain, and calculus from patients' teeth. Often, the toothbrush coronal polish (i.e., toothbrush and toothpaste) is a procedure that is used to remove plaque from tooth surfaces and demonstrate brushing techniques to caregivers for young children and for patients with special needs who cannot tolerate the use of a rubber cup.¹ The rubber cup coronal polish is a procedure in which a dental polishing paste is applied to tooth surfaces with a rotary rubber cup or rotary bristle brush to remove plaque and stains from teeth.² Dental scaling is a

procedure in which hand or ultrasonic instruments are used to remove calculus and stain. Full mouth debridement may be necessary as a preliminary treatment for those whose medical, psychological, physical, or periodontal condition result in calculus accumulation beyond the scope of routine prophylaxis. These procedures facilitate the clinical examination and introduce dental procedures to the patient. Additionally, the accompanying preventive visit demonstrates proper oral hygiene methods to the patient and/or caregiver. Flossing is an important part of the prophylaxis that removes interproximal and subgingival plaque, aiding in educating the patient and facilitating the oral examination. The benefits of various prophylaxis options are shown in the Table below.

Numerous reports have shown plaque and pellicle are not a barrier to fluoride uptake in enamel and, consequently, there is no evidence of a difference in caries rates or fluoride uptake in subjects who receive rubber cup coronal polish or a toothbrush coronal polish before fluoride treatment.^{3,4}

A patient's risk for caries/periodontal disease, as determined by the patient's dental provider, should help determine the interval of the prophylaxis or periodontal maintenance. An individualized preventive plan increases the probability of good oral health by demonstrating proper oral hygiene methods and techniques. In addition, removing plaque, stain, calculus, and the factors that influence their buildup increases the probability of good oral health. Patients who exhibit higher risk for developing caries and/or periodontal disease should have recall visits at more frequent intervals.^{5,6}

Policy statement

Professional prophylaxis is indicated to:

- Instruct the caregiver and child or adolescent in proper oral hygiene techniques.
- Remove dental plaque, extrinsic stain, and calculus deposits from the teeth.
- Facilitate the examination of hard and soft tissues.
- Introduce dental procedures to the young child and apprehensive patient.

A patient's risk for caries/periodontal disease helps determine the interval for recall. Those who exhibit higher risks should have recall visits more frequently than every six months.

References on next page.

	Plaque removal	Stain removal	Calculus removal	Education of patient/parent	Facilitate examination
Toothbrush	Yes	No	No	Yes	Yes
Rubber cup	Yes	Yes	No	Yes	Yes
Hand instruments	Yes	Yes	Yes	Yes	Yes
Ultrasonic scalers	Yes	Yes	Yes	Yes	Yes
Flossing	Yes	No	No	Yes	Yes

References

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2. Wilkins EM. *Clinical Practice of Dental Hygiene*. 10th ed. Lippincot Williams and Wilkins, Baltimore, Md.; 2009:728-35.
3. Azarpazhooh A, Main PA. Efficacy of dental prophylaxis (rubber cup) for the prevention of caries and gingivitis: A systematic review of literature. *Br Dent J* 2009;207(7):E14; discussion 328-9.
4. Weyant RJ, Tracy SL, Anselmo TT, et al. Topical fluoride for caries prevention: Executive summary of the updated clinical recommendations and supporting systematic review. *J Am Dent Assoc* 2013;144(11):1279-91.
5. Patel S, Bay RC, Glick M. A systematic review of dental recall intervals and incidence of dental caries. *J Am Dent Assoc* 2010;141(5):527-39.
6. American Academy of Pediatric Dentistry. Periodicity of examination, preventive dental services, anticipatory guidance/counseling, and oral treatment for infants, children, and adolescents. *Pediatric Dent* 2017;39(6):188-96.