

Policy on oral habits

Originating Council

Council on Clinical Affairs

Review Council

Council on Clinical Affairs

Adopted

2000

Revised

2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that an infant's, The child's, or adolescent's well-being can be affected by oral habits that may be useful or harmful and encourages health practitioners to take an individualized approach in the management of these habits.

Methodology

This policy was based on a MEDLINE search using the keywords "oral habits", "bruxism", "tongue thrusting" and "self-injurious habits".

Background/literature review

Oral habit behaviors generally include, among others, digit-sucking, pacifier sucking, lip sucking and biting, nail-biting, bruxism, self-injurious habits, mouth breathing and tongue thrust. Non-nutritive sucking behaviors (ie, finger or pacifier sucking) are considered normal in infants and young children and usually are associated with their need to satisfy their the urge for contact and security.

In general, sucking habits in children to the age of 5 are unlikely to cause any long-term problems. Because persistent non-nutritive sucking habits may result in long term problems, professional evaluation has been recommended for children beyond the age of 3 years, with subsequent intervention to cease the habit initiated if indicated.¹

Bruxism, defined as the habitual, nonfunctional forceful contact between occlusal tooth surfaces, can occur while awake or asleep. The etiology is multifactorial and has been reported to include central factors (eg, emotional stress², parasomnias³, traumatic brain

injury⁴, neurologic disabilities⁵) and morphologic factors (eg, malocclusion⁶, muscle recruitment⁷). Reported complications include dental attrition, headaches, temporomandibular joint dysfunction and soreness of the masticatory muscles³. Preliminary evidence suggests that juvenile bruxism is a self-limiting condition that does not progress to adult bruxism⁸. The spectrum of bruxism management ranges from patient/parent education, occlusal splints and psychological techniques to medications^{4,9,10}.

Tongue thrusting, an abnormal tongue position and deviation from the normal swallowing pattern, and mouth breathing may be associated with anterior open bite, abnormal speech and anterior protrusion of the maxillary incisors¹¹. Management may consist of simple habit control, myofunctional therapy, habit appliances, orthodontics and possible surgery^{12,13}.

Self-injurious or self-mutilation behavior, repetitive acts that result in physical damage to the individual, is extremely rare in the normal child¹⁴. However, such behavior has been associated with mental retardation, psychiatric disorders, developmental disabilities and some syndromes¹⁵. The spectrum of treatment options for developmentally disabled individuals include pharmacologic management, behavior modification and physical restraint¹⁵. Reported dental treatment modalities include, among others, lip-bumper and occlusal bite appliances, protective padding and possible extractions¹⁴. Some habits, such as lip-licking and lip-pulling, are relatively benign habits in relation to an effect on the dentition.¹⁴ More severe lip and tongue biting habits may be associated with profound neurodisability due to severe brain damage¹⁶. Management options include monitoring the lesion, odontoplasty, providing a bite-opening appliance or extracting the teeth¹⁶.

~~However, prolonged oral habits may result in deformation of the dentition~~ Oral habits are associated with dentoalveolar and/or skeletal deformation in some patients. The amount of dentoalveolar-skeletal deformation is related to the frequency, duration, direction and intensity of certain habits and should be assessed by the dentist. These changes Changes that can occur to the dentoalveolar structures may include anterior or posterior open bite, interference of normal tooth position and eruption, alteration of bone growth and crossbites. The dentist can provide the patient and parent/guardian with information regarding consequences of a habit. Treatment modalities to control habits may include patient/parent counseling, behavior modification techniques, myofunctional therapy and appliance therapy.

Policy statement

1. The ~~American Academy of Pediatric Dentistry (AAPD)~~ AAPD supports the individualized approach for each child in evaluating oral habits.
2. Where appropriate, the AAPD encourages treatment of oral habits to prevent or intercept possible malocclusion or skeletal dysplasia from occurring.

3. The AAPD supports intervention for bruxism when the habit is of sufficient persistence, duration or intensity to damage the permanent teeth or cause other complications which affect the child's well being.

References

1. Peterson JE, Schneider PE. Oral habits—a behavioral approach. *Dent Clin North Am.* 1991;38:1289-1307. Nowak AJ, Warren JJ. Infant oral health and oral habits. *Pediatr Clin N Am.* 2000;47:1034-1066.
2. Monaco A, Ciammella NM, Marci MC, Pirro R, Giannoni M. The anxiety in bruxer child: a case-control study. *Minerva Stomatol.* 2002;51:247-250.
3. Weideman CL, Bush DL, Yan-Go FL, Clark GT, Gornbein JA. The incidence of parasomnias in child bruxers versus nonbruxers. *Pediatr Dent.* 1996;18:456-460.
4. Ivanhoe CB, Lai JM, Francisco GE. Bruxism after brain injury: successful treatment with botulinum toxin-A. *Arch Phys Med Rehabil.* 1997;78: 1272-1273.
5. Rugh JD, Harlan J. Nocturnal bruxism and temporomandibular disorders. *Adv Neurol.* 1988;49:329-341.
6. Sari S, Sonmez H. The relationship between occlusal factors and bruxism in permanent and mixed dentition in Turkish children. *J Clin Pediatr Dent.* 2001;25:191-194.
7. Negoro T, Briggs J, Plesh O, Nielsen I, McNeill C, Miller AJ. Bruxing patterns in children compared to intercuspal clenching and chewing as assessed with dental models, electromyography, and incisor jaw tracing: preliminary study. *ASDC J Dent Child.* 1998;65:449-458.
8. Kiesser JA, Groeneveld HT. Relationship between juvenile bruxing and craniomandibular dysfunction. *J Oral Rehabil.* 1998;25:662-665.
9. Restrepo CC, Alvarez E, Jaramillo C, Velez C, Valencia I. Effects of psychological techniques on bruxism in children with primary teeth. *J Oral Rehabil.* 2001;28:354-360.
10. Nissani M. A bibliographical survey of bruxism with special emphasis on non-traditional treatment modalities. *J Oral Sci.* 2001;43:73-83.
11. Dean JA, McDonald RE, Avery DA. Managing the developing occlusion. In *Dentistry for the Child and Adolescent, 7th edition.* St. Louis, Mo. CV Mosby and Co. 2000.
12. Ngan P, Fields HW. Open bite: a review of etiology and management. *Pediatr Dent.* 1997;19:91-98.
13. Bigenzahn W, Fischman L, Mayrhofer-Krammel U. Myofunctional therapy in patients with orofacial dysfunctions affecting speech. *Folia Phoniatr.* 1992;44:238-244.

- 108 14. Christensen J, Fields HW Jr, Adair S. Oral habits. In: Pinkham JR, ed. *Pediatric*
109 *Dentistry: Infancy Through Adolescence*. 3rd ed. Philadelphia, Pa: WB Saunders Co;
110 1999:393-401.
- 111 15. Saemundsson SR, Robers MW. Oral self-injurious behavior in the
112 developmentally disabled: review and a case. *ASDC J Dent Child*. 1997;64:205-209.
- 113 16. Millwood J, Fiske J. Lip-biting in patients with profound neurodisability. *Dent*
114 *Update*. 2001;28:105-108.
- 115