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, child's, or adolescent's well-being can be affected by oral habits and encourages health practitioners to take an individualized approach in the management of these habits.

Methods

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

Background

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

Because persistent nonnutritive 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 multifactoral and has been reported to include central factors (eg, emotional stress,² parasomnias,³ traumatic brain injury,⁴ neurologic disabilities⁵) and morphologic factors (eg, malocclusion,⁶ muscle recruitment⁷). Reported complications include dental attrition, headaches, temporomandibular joint dysfunction, and soreness of the masticatory muscles.³ Preliminary evidence suggests that juvenile bruxism is a self-limiting condition that does not progress to adult bruxism.⁸ 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 incisors.¹¹ Management may consist of simple habit control, myofunctional therapy, habit appliances, orthodontics, and possible surgery.^{12,13}

Self-injurious or self-mutilating behavior, repetitive acts that result in physical damage to the individual, is extremely rare in the normal child.¹⁴ However, such behavior has been associated with mental retardation, psychiatric disorders, developmental disabilities, and some syndromes.¹⁵ The spectrum of treatment options for developmentally disabled individuals includes pharmacologic management, behavior modification, and physical restraint.¹⁵ Reported dental treatment modalities include, among others, lip-bumper and occlusal bite appliances, protective padding, and possible extractions.14 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 damage.¹⁶ Management options include monitoring the lesion, odontoplasty, providing a bite-opening appliance, or extracting the teeth.16

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. 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 cross bites. 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 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. 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. Minverva 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.
- 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.
- 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. 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.

- 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 nontraditional treatment modalities. J Oral Sci 2001;43:73-83.
- Dean JA, McDonald RE, Avery DA. Managing the developing occlusion. In: McDonald RE, Avery DA, eds. *Dentistry for the Child and Adolescent.* 7th ed. 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 dysfunstions affecting speech. Folia Phoniatr 1992; 44:238-244.
- Christensen J, Fields HW Jr, Adair S. Oral habits. In: Pinkham JR, Casamassimo PS, Fields HW, McTigue DJ, Nowak A, eds. *Pediatric Dentistry: Infancy Through Adolescence*. 3rd ed. Philadelphia, Pa: WB Saunders Co; 1999:393-401.
- 15. Saemundsson SR, Robers MW. Oral self-injurious behavior in the developmentally disabled: Review and a case. J Dent Child 1997;64:205-209.
- 16. Millwood J, Fiske J. Lip biting in patients with profound neurodisability. Dent Update 2001;28:105-108.

Copyright of Pediatric Dentistry is the property of American Society of Dentistry for Children and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.