

Oral Conditions in Children with Special Needs

A Guide for Health Care Providers

Oral Development

Tooth eruption may be delayed, accelerated, or inconsistent in children with growth disturbances. Gums may appear red or bluish-purple before erupting teeth break through into the mouth.



Eruption depends on genetics, growth of the jaw, muscular action, and other factors. Children with Down syndrome may show delays of up to 2 years. **Offer information about the variability in tooth eruption patterns and refer to an oral health care provider for additional questions.**



Malocclusion, a poor fit between the upper and lower teeth, and crowding of teeth occur frequently in people with developmental disabilities. Muscle dysfunction contributes to malocclusion,

particularly in people with cerebral palsy. Teeth that are crowded or out of alignment are more difficult to keep clean, contributing to periodontal disease and dental caries. **Refer to an orthodontist or pediatric dentist for evaluation and specialized instruction in daily oral hygiene.**

Tooth anomalies are variations in the number, size, and shape of teeth. People with Down syndrome, oral clefts, ectodermal dysplasias, or other conditions may experience congenitally missing, extra, or malformed teeth. **Consult an oral health care provider for dental treatment planning during a child's growing years.**



Developmental defects appear as pits, lines, or discoloration in the teeth. Very high fever or certain medications can disturb tooth formation and defects may result. Many teeth with defects are prone

to dental caries, are difficult to keep clean, and may compromise appearance. **Refer to an oral health care provider for evaluation of treatment options and advice on keeping teeth clean.**

Oral Trauma

Trauma to the face and mouth occur more frequently in people who have intellectual disability, seizures, abnormal protective reflexes, or muscle incoordination. People receiving restorative dental care should be observed closely to prevent chewing on anesthetized areas. **If a tooth is avulsed or broken, take the patient and the tooth to a dentist immediately. Counsel the parent/caregiver on ways to prevent trauma and what to do when it occurs.**



Bruxism



Bruxism, the habitual grinding of teeth, is a common occurrence in people with cerebral palsy or severe intellectual disability. In extreme cases, bruxism leads to tooth abrasion

and flat biting surfaces. **Refer to a dentist for evaluation; behavioral techniques or a bite guard may be recommended.**

Oral Infections

Dental caries, or tooth decay, may be linked to frequent vomiting or gastroesophageal reflux, less than normal amounts of saliva, medications containing sugar, or special diets that require prolonged bottle feeding or snacking. When oral hygiene is poor, the teeth are at increased risk for caries. **Counsel the parent/caregiver on daily oral hygiene to include frequent rinsing with plain water and use of a fluoride-containing toothpaste or mouth rinse. Explain the need for supervising children to avoid swallowing fluoride. Refer to an oral health care provider and/or gastroenterologist for prevention and treatment. Prescribe sugarless medications when available.**



Viral infections are usually due to the herpes simplex virus. Children rarely get herpetic gingivostomatitis or herpes labialis before 6 months of age. Herpetic gingivostomatitis is most common in young

children, but may occur in adolescents and young adults. Viral infections can be painful and are usually accompanied by a fever. **Counsel the parent/caregiver about the infectious nature of the lesions, the need for frequent fluids to prevent dehydration, and methods of symptomatic treatment.**

Early, severe periodontal (gum) disease can occur in children with impaired immune systems or connective tissue disorders and inadequate oral hygiene. Simple gingivitis results from an accumulation of bacterial plaque and presents as red, swollen gums that bleed easily. Periodontitis is more severe and leads to tooth loss if not treated. Professional cleaning by an oral health care provider, systemic antibiotics, and instructions on home care may be needed to stop the infection. **Explain that the parent/caregiver may need to help with daily toothbrushing and flossing and that frequent appointments with an oral health care provider may be necessary.**



Gingival Overgrowth

Gingival overgrowth may be a side effect from medications such as calcium channel blockers, phenytoin sodium, and cyclosporine. Poor oral hygiene aggravates the condition and can lead to superimposed infections. Severe overgrowth can

impair tooth eruption, chewing, and appearance. **Refer to an oral health care provider for prevention and treatment. A preventive regimen of antimicrobial rinses and frequent appointments may be needed. Consider alternative medications if possible.**

Tips for Health Care Providers

- Take time to talk and listen to parents and caregivers.
- Tell parents and caregivers to seek a dental consultation no later than a child's first birthday.
- Seek advice on behavior management techniques; early intervention and familiarization with the dental team may take several visits.
- Evaluate and treat orthodontic problems early to minimize risk of more complicated problems later in life.
- Advise caregivers to avoid serving snacks at bedtime.

Suggested Readings

Section III: Developmental Disabilities. In Batshaw ML, Pellegrino L, Roizen NJ (eds.). *Children With Disabilities* (6th ed.). Baltimore, MD: Paul H. Brookes Publishing Co., 2007.

Health Resources and Services Administration, Maternal and Child Health Bureau. *Children with Special Health Care Needs in Context: A Portrait of States and The Nation 2007*. Retrieved February 4, 2012, at <http://www.mchb.hrsa.gov/nsch/07cshcn/>.

Health Resources and Services Administration, Maternal and Child Health Bureau. *Special Care: An Oral Health Professional's Guide to Serving Young Children with Special Health Care Needs*. 2006. Retrieved February 4, 2012, at <http://www.mchoralhealth.org/SpecialCare/index.htm>.

Weddell JA, Sanders BJ, Jones JE. *Dental Problems of Children with Special Health Care Needs*. IN: Dean JA, Avery DR, and McDonald RE, *McDonald and Avery's Dentistry for the Child and Adolescent* (9th Edition). Maryland Heights, MO: Mosby/Elsevier, 2011. pp 460-486.

Credits

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