Oral Health Fact Sheet for Dental Professionals

Children with Cleft Lip and Palate

Cleft lip is a congenital defect in the upper lip where the maxillary prominence fails to merge with the merged medial nasal prominence; thought to be caused by faulty migration of the mesoderm in the head region. It can include cleft palate that is a congenital fissure of the soft and/or hard palate, due to faulty fusion (ICD 9 code 749)

Prevalence

Less than 1%

Manifestations

Clinical

Multidisciplinary teams are used to address the complex issues that need to be solved for successful habilitation. This fact sheet addresses issues for the dental provider once the child has been discharged from the Maxillofacial team.

- Maxillary hypoplasia
- Aberrant speech patterns
- Emotional and physical distress
- Conductive hearing loss in some children
- Significant and persistent middle-ear infections

Oral

- Congenitally missing teeth
- Supernumerary teeth
- Malformed teeth
- Fistulas may be obturated
- Ectopic eruption of primary maxillary anterior dentition

Other Potential Disorders/Concerns

- Many conditions may have an associated cleft; understanding the condition is critical to dental management of the patient.

Management

Assess

Cleft patients are commonly missing anterior maxillary teeth in the cleft area. Lateral incisors are most common, followed by centrals. If not missing, they may be malformed or malposed.

Medication

Children with clefts may have other conditions for which they need medication, but typically no special medications are taken.

Behavioral

- Children may have hypernasal speech which is difficult to understand as a result of velopharyngeal insufficiency.
- Many young children with clefts will exhibit shy, nervous, or uncooperative behavior. This may have to do with previous hospitalization or frequent hospital visits.

- Bone support for these teeth is generally poor. Teeth that are present may be malformed and prone to caries.
- Parents appreciate education about teeth present or missing, surrounding a cleft. Simple explanations about the variability of teeth at the cleft site may allay concerns.
- Panoramic and/or Occlusal radiographs are indicated to monitor development.
- The majority of children with a cleft palate will require orthodontics. Orthodontic treatment may be required in the primary, mixed, and permanent dentition. Facilitate contact with an orthodontic provider if child has not been evaluated.
- Prosthetic obturation of palatal fistulae may be necessary in some children. Referral to appropriate specialists in cases with velopharyngeal insufficiency is indicated.
- Clefts are often associated with middle ear problems and hearing difficulties.

Dental Treatment and Prevention

- Establish and maintain oral health. Phases of cleft surgery and orthodontic treatment are made less complex and more effective when optimal dental health is maintained. General dental examination, prophylaxis, and restorative treatment is critical.
- Establish appropriate recall schedule to intercept areas of decalcification.
- Coordinate care with cleft team.
- Surgical scarring may limit mobility of maxillary lip and vestibule. Caution is advised when manipulating this area.
- The segment containing the cleft may not be firm. Caution is advised when manipulating this area (extractions, surgery, etc.).
- Emphasis should be placed on brushing the teeth in the cleft region. Parents may be concerned about damaging the area or causing bleeding. They should be shown how to effectively accomplish brushing their child's teeth. A baby size toothbrush or interdental device may be indicated, especially where the lip is tight.
- Early removal of primary teeth in children with a cleft is particularly contraindicated because of possible space loss, especially in the maxillary arch, making orthodontic treatment more difficult.

Look for signs of physical abuse during the examination. Note findings in chart and report any suspected abuse to Child Protective Services, as required by law. Abuse is more common in children with developmental disabilities and often manifests in oral trauma.

Additional information: Special Needs Fact Sheets for Providers and Caregivers

Children with Cleft Lip and Palate continued

References

- Policy on management of patients cleft lip/palate and other craniofacial anomalies. *Pediatr Dent.* 2008-2009;30(7 Suppl):238-9. American Academy on Pediatric Dentistry Clinical Affairs Committee; American Academy on Pediatric Dentistry Council on Clinical Affairs.
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Additional Resources

- NIH Institute for Cleft Lip and Palate
- Special Care: an Oral Health Professionals Guide to Serving Young Children with Special Health Care Needs
- Bright Futures Oral Health Pocket Guide
- American Academy of Pediatric Dentistry: 2011–2012 Definitions, Oral Health Policies and Clinical Guidelines
- MCH Resource Center
- ASTDD-Special Needs
- Block Oral Disease, MA
- NOHIC-NIDCR publications
- Free of charge CDE courses: MCH Oral Health CDE (4 CDE hours); NIDCR CDE (2 CDE hours)

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