

Infant and Toddler Oral Health

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Greater New York Dental Meeting

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Timing of First Visit

- Guidelines of the American Academy of Pediatric Dentistry recommend:
 - An initial oral evaluation should occur within six months of the eruption of the first primary tooth and no later than twelve months of age
 - Revised in 1994

Timing of First Visit

- Dental caries is the single most common chronic childhood disease-5 times more common than asthma and 7 times more common than hay fever
- Over 50 percent of 5 - to 9 -year old children have at least one cavity or filling, and the proportion increases to 78 percent among 17-year olds

Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents

- Based on extensive review of scientific literature and best practices
- Represent consensus of more than 100 multidisciplinary experts: reviewed by over 1000 health professionals
- Developed with support of HRSA's Maternal and Child Health Bureau

Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents

- Make an appointment for the toddler's first dental examination and risk assessment at 12 months

Rationale for First Oral Exam

- Early intervention and risk assessment are essential components in assuring that oral health is an outcome for all children

Risk Assessment

- Provides the dentist the opportunity to tailor periodicity and oral health supervision to the individual's level of risk for specific diseases, conditions, and injuries

Anticipatory Guidance

- Refers to the information provided to the child and family about the child's current oral health and what to expect as the child enters the next developmental phase

Risk Factors for Early Childhood Caries

- Fluoride History
- Dietary Habits
- Sleep time Habits
- Oral Hygiene Habits
- SES
- Special health needs
- History of BBTD
- High Mutans Streptococci count
- Poor family oral health

Risk Factors-
Fluoride History

- Fluoridated community?
- Taking supplements?
- Well water? Fluoride level?
- Fluoride dentifrice?
- Bottled water?

Risk Factors-
Dietary Habits

- Does/did child sleep with a bottle?
- Is/was child breastfed?
- Does child drink from a cup?
- Types, consistency, and frequency of food and liquid intake

Risk Factors-
Sleep time Habits



Risk Factors-
Oral Hygiene

- Nature of care given
- Consistency
- Products used

Risk Factors-
Poor Family Oral Health

- Caries rate of primary caregiver
- Transmission of *S. mutans* from caregiver to child
- Parental Attitude

Risk Factors-
SES

- Striking disparities in dental disease by income
- Poor children suffer twice as much dental caries and their disease is much more likely to be untreated

Risk Factors-
Special Health Needs

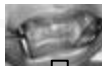
- Special diets
- Medications containing sucrose
- Physical limitations

Anticipatory Guidance-
Topics to Incorporate

- Oral Development
- Oral Hygiene/Health
- Fluoride
- Diet and Nutrition
- Habits
- Injury Prevention

Anticipatory Guidance-
Oral Development

- Teething
 - Drooling, desire to bite or chew, mild pain
 - No evidence of high fever, diarrhea or sleep problems
- Patterns of Eruption
- Occlusion
- Exfoliation



Eruption Patterns of Primary Teeth

- Tooth formation begins at about 7 weeks in utero
- Mineralization at about the 4th month
- Sequence more important than timing
- Symmetrical pattern
- Mandibular teeth erupt first



Upper Teeth		
Central Incisor	Erupt	8-12 mo.
Lateral Incisor	Erupt	9-13 mo.
Canine (Cupid's)	Erupt	16-22 mo.
First Molar	Erupt	13-19 mo.
Second Molar	Erupt	20-30 mo.

Lower Teeth		
Central Incisor	Erupt	7-10 mo.
First Molar	Erupt	12-18 mo.
Canine (Cupid's)	Erupt	17-23 mo.
Lateral Incisor	Erupt	15-19 mo.
Second Molar	Erupt	24-30 mo.

Anticipatory Guidance- Oral Hygiene/Health

- Oral hygiene techniques
- Transmission of microflora to infant
- Use of dentifrice
- Child's role in oral hygiene
- Radiographs and sealants

Toothbrushing

- Should begin with eruption of first tooth
- Position child to assure ease of access and stabilization of head
- Proper size toothbrush
- Technique
- Pea sized amount of toothpaste
- Supervised until about 6 years of age



Anticipatory Guidance- Fluoride

- Assess fluoride status and determine if and what supplementation is needed
- Discuss toxicity and safety

Anticipatory Guidance- Fluoride

Age of Child	Water Fluoride Concentration (parts per million)		
	Less than 0.3	Between 0.3 - 0.6	Greater than 0.6
Birth to 6 months	0	0	0
6 months to 3 years	0.25 mg liquid drops	0	0
3 to 6 years	0.5 mg drops or tablet	0.25 mg	0
6 to 16 years	1.00 mg	0.5 mg	0

Anticipatory Guidance- Diet and Nutrition

- Nursing bottle decay
- Encourage weaning
- Role of sugar in the caries process
- Frequency of carbohydrate intake

Anticipatory Guidance-
Injury Prevention

- Give parents emergency numbers
- Simple instructions in the event of injury
- Electrical cord safety
- Mouthguards

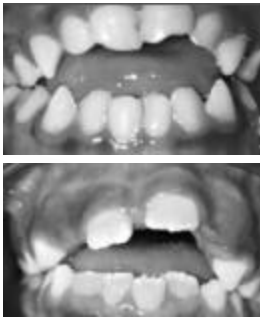
Nonnutritive Sucking Habits

- Normal part of neonatal development
- Arise from rooting and sucking reflexes
- Habit normally ceases between two and four years of age
- Effects on dentition depends on intensity, frequency, and duration of habit
- Success of intervention depends on child's readiness

Pacifier Use and Safety

- AAPD recommends pacifiers only in children that exhibit NNS behavior
- Pacifier should be sturdy, one-piece, flexible
- NEVER attach around child's neck
- Replace when worn
- Don't use sweeteners
- Don't allow child to run or play with pacifier in mouth

Effects of NNS



Lap Examination Procedure

- Dentist and caregiver make a 'cradle' by sitting face to face on chairs and joining knees
- Head in lap of dentist
- Parent supports child

Lap Examination

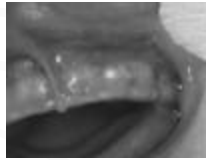


Common Oral Conditions

- Inclusion cysts
- Natal/Neonatal Teeth
- Iron Stain
- Primary Herpetic Gingivostomatitis

Inclusion Cysts

- Epstein's pearls
 - Midpalatal raphe
 - Epithelial remnant
- Bohn's nodules
 - Side of alveolar ridge
 - Mucous gland remnant
- Dental lamina cyst
 - Crest of alveolar ridge
 - Odontogenic epithelial remnant



Natal/Neonatal Teeth

- Natal teeth- present at birth
- Neonatal teeth- erupt shortly after birth
- Most lower incisors
- Most are of normal primary complement
- Due to superficially positioned tooth bud
- Treatment

Natal/Neonatal Tooth



Iron Stain

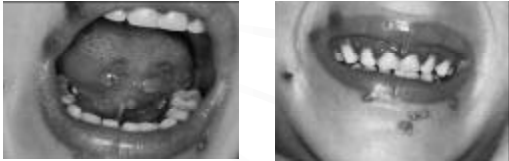
- Extrinsic
- Easily removed



Primary Herpetic Gingivostomatitis

- Usually occurs between 6 months and 6 years of age
- Fever
- Malaise
- Cervical lymphadenopathy
- Gingival erythema
- Fragile vesicles quickly progress to painful ulcers
- Acute phase lasts 7 to 10 days

Primary Herpetic Gingivostomatitis



Primary Herpetic Gingivostomatitis

- Treatment is palliative and supportive
 - Rest, antipyretics, and analgesics
 - Patient is contagious
 - Be aware of dehydration!
 - Palliative mouthrinses
 - Diphenhydramine HCL (12.5/5ml) mixed with Kaopectate (or Maalox)- 50% mixture by volume
 - Local anesthetics (such as viscous lidocaine or dyclonine) are also used-either individually or in previous mixture

Management of Traumatized Primary Teeth

- Keep it simple
- Always consider developing succedaneous tooth and behavior
- Be alert to potential child abuse
- Advise parents of permanent tooth injury possibility

Crown Fractures of Primary Teeth

- Ellis Class I and II
 - No treatment, selective grinding, or composite bandage restoration
- Ellis Class III
 - Pulpotomy, pulpectomy or extraction

Luxation of Primary Teeth

- Extract tooth if
 - buccal plate is fractured
 - Radiographs reveal that primary tooth is impinging on follicle of permanent tooth
- Otherwise, allow to re-erupt or re-align

Avulsion of Primary Teeth

- Don't replace

Root Fracture of Primary Teeth

- If coronal fragment is not excessively mobile-observe
- If coronal fragment is very mobile-extract fragment
- If extraction is treatment of choice-do not attempt to remove apical fragment

Thank You!