PEDIATRIC ORAL HEALTH & ACCESS TO CARE IN RHODE ISLAND

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BACKGROUND

- John Kiang DMD, MA
  - Board Certified Pediatric Dentist
  - Associate Clinical Professor NYU Langone AEPD
    - Focus: Hospital dentistry and cleft and craniofacial anomalies
  - Private Practice in Rhode Island and Massachusetts
  - RI/Hasbro Hospital and UMass Memorial Medical Center Craniofacial Team Pediatric Dentist
  - Past President Rhode Island Dental Association
  - President Rhode Island Oral Health Foundation: Mission of Mercy
  - No Disclosures or Financial Interests

PEDIATRIC DENTISTRY

- Pediatric Dentistry - Pediatric dentistry is an age-defined specialty that provides both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs adults.
  - Source: https://www.aapd.org/globalassets/media/policies_guidelines/i_overview.pdf

AMERICA'S PEDIATRIC DENTISTS
THE BIG AUTHORITY on little teeth

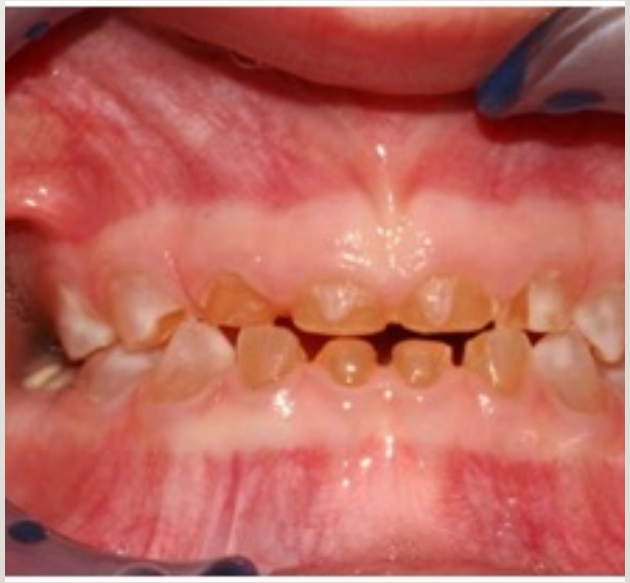
BOARD CERTIFIED
American Board of Pediatric Dentistry

PEDIATRIC DENTAL PATIENTS

- Medically compromised and special needs patients
  - Syndromes (Down, 22q, Williams, Noonan, Apert, etc)
  - Autism Spectrum
  - Immune compromised
  - Bleeding disorders
  - Oncology, transplant patients
  - Cardiac/vascular diseases
  - Uncontrolled seizure disorders, etc
- Children with craniofacial/structural anomalies
  - Genetic disorders, cleft lip and palate, craniofacial anomalies, VPI, sleep apnea
- Healthy patients with significant dental issues

SIGNIFICANT DENTAL ISSUES

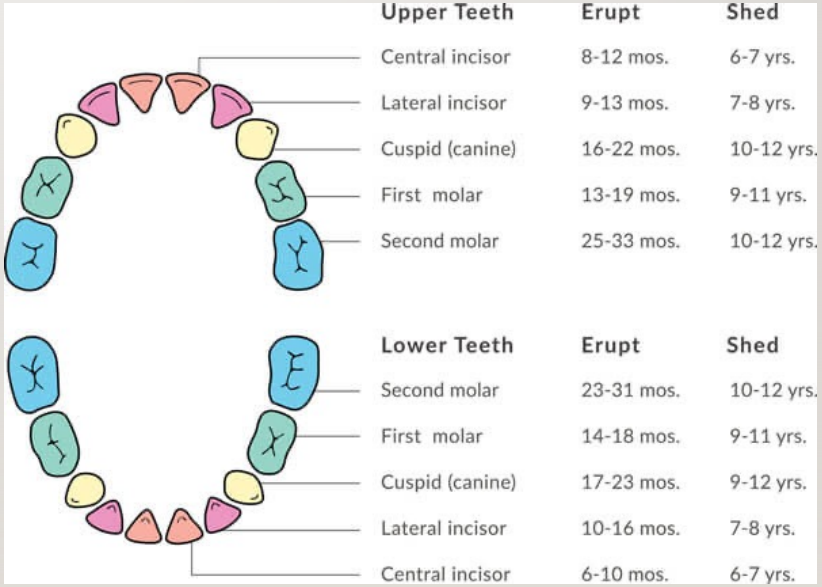
- Urgent, extensive or special oral needs
  - Early childhood caries (ECC)
  - Dental/Periodontal abscesses, facial cellulitis
  - Oral/Dental trauma
  - Oral Surgery needs (surgical extraction, frenectomy, gingivectomy, soft tissue biopsy
  - Unusual/rare dental conditions (amelogenesis imperfecta, dentinogenesis imperfecta, cleidocranial dysostosis, etc)



Dentinogenesis Imperfecta

WHY FIX BABY TEETH—THEY JUST FALL OUT

- Primary teeth are important for:
  - Chewing
  - Speaking
  - Esthetics
  - **Hold space for adult teeth – preventing orthodontic problems**
  - **Gives face shape and form for grown and development**
- If not restored, decay will continue to worsen and eventually lead to pain, discomfort and infection

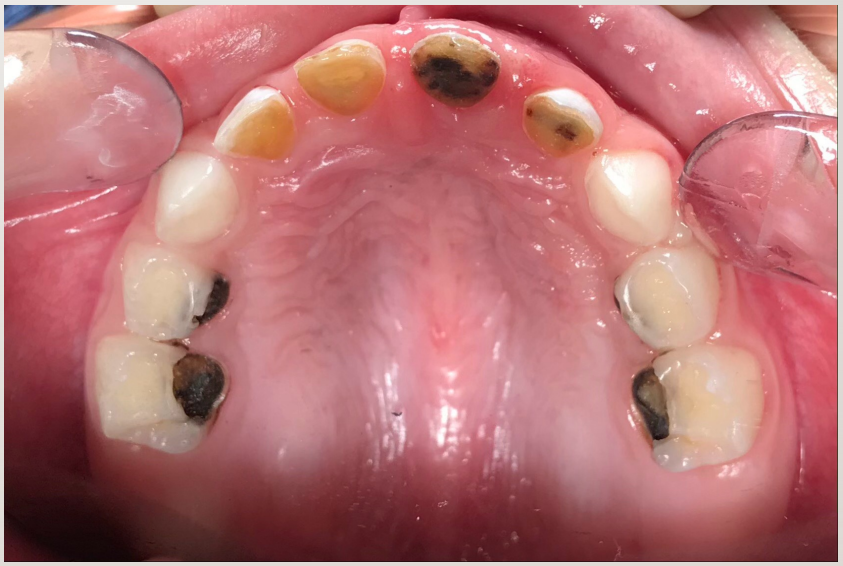


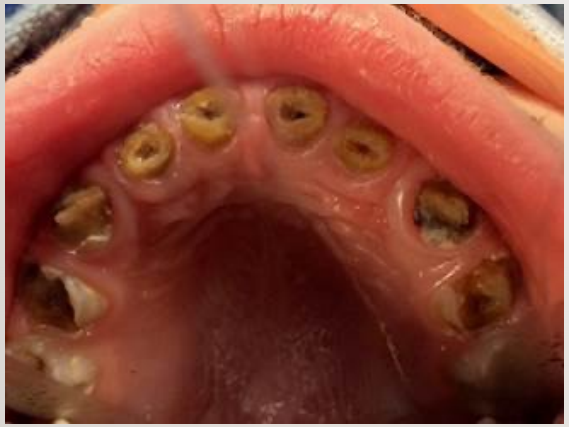
Upper Teeth	Erupt	Shed
Central incisor	8-12 mos.	6-7 yrs.
Lateral incisor	9-13 mos.	7-8 yrs.
Cuspid (canine)	16-22 mos.	10-12 yrs.
First molar	13-19 mos.	9-11 yrs.
Second molar	25-33 mos.	10-12 yrs.

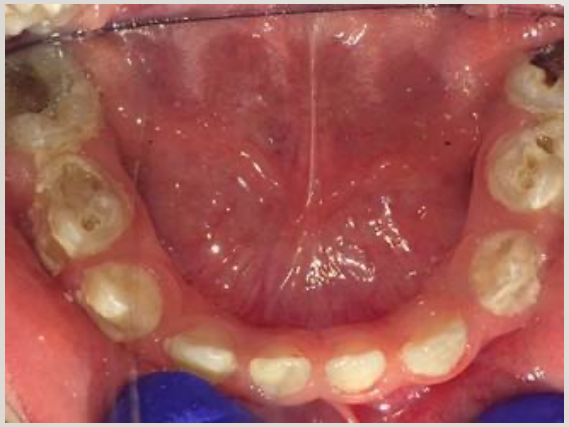
Lower Teeth	Erupt	Shed
Second molar	23-31 mos.	10-12 yrs.
First molar	14-18 mos.	9-11 yrs.
Cuspid (canine)	17-23 mos.	9-12 yrs.
Lateral incisor	10-16 mos.	7-8 yrs.
Central incisor	6-10 mos.	6-7 yrs.

DENTAL CARIES/CAVITIES

- The CDC reports Dental Caries as being the, "most prevalent infectious disease in our nation's children."
- 5X more common than asthma
- Estimated that >40% of children have caries by kindergarten
- Preventable disease – Education is key
- Source: https://www.cdc.gov/oralhealthdata/overview/nohss.html





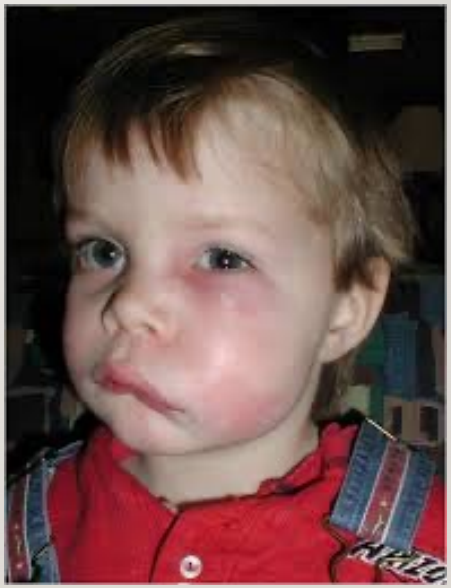


EARLY CHILDHOOD CARIES

- Early Childhood Caries (ECC) – is defined as the presence of one or more decayed (noncavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces in any primary tooth in a child under the age of six.
  - Source: https://www.aapd.org/assets/1/7/d_ecc.pdf
- May be referred to as:
  - Baby bottle decay/Baby bottle mouth
  - Nursing bottle syndrome
  - Rampant caries

WHAT IS THE IMPACT OF ECC ON CHILDS QOL?

- Pre-school children do not necessarily complain of tooth pain
  - They manifest the effects of pain by changing eating and sleeping patterns
- Reported effects of untreated caries include
  - Low percentile weights and failure to thrive
  - Risk of delayed physical growth and development
  - Loss of school days
  - Diminished ability to learn: irritability., inability to concentrate
  - Pain
  - Risk of dental abscess, facial cellulitis, Ludwigs
  - Hospitalizations and emergency room visits
- Sources:
  - Nora et. al. Ped. Dent. Vol.40/No.7 Nov/Dec 2018
  - Fernandes et. al. Ped. Dent. Vol 39/No.2 Mar/Apr 2017

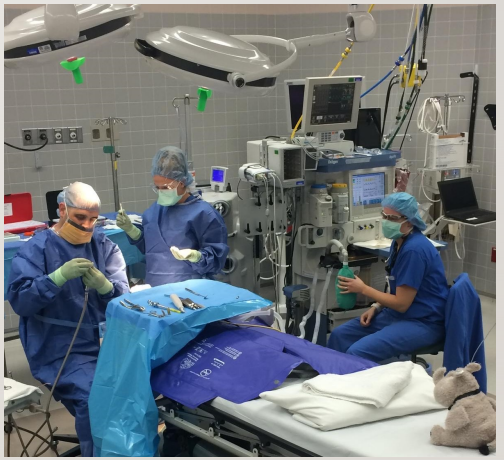


BEHAVIOR MANAGEMENT OPTIONS

- Non-pharmacological techniques
  - Tell-show-do
  - Positive reinforcement
  - Voice control
  - Distraction
  - Medical stabilization
- Nitrous oxide inhalation sedation
- Oral conscious sedation – limited in RI
- Combination of oral and inhalation sedation
- **General Anesthesia**

RATIONALE FOR GENERAL ANESTHESIA

- Goal: Provide safe and comprehensive dental care for the pediatric patient with behavior, medical, or other problems that preclude treatment in the office setting by **eliminating cognitive, sensory and skeletal motor activity in order to facilitate the delivery of quality comprehensive diagnostic, restorative, and other dental service**s
  - Provide safe, efficient, and effective dental care
  - Eliminate anxiety
  - Reduce untoward movement and reaction to dental treatment
  - Aid in treatment of the mentally, physically, or medically compromised
  - Eliminate the patients pain response



INDICATIONS FOR GENERAL ANESTHESIA

- Patients who cannot cooperate due to lack of psychological or emotional maturity and/or mental, physical or medical disability
- For whom local anesthesia is ineffective bc of acute infection, anatomic variations or allergy
- Patients who are moderately to extremely uncooperative and have shown inability to respond to other behavioral guidance techniques (protect developing psyche of child)
- Those are who are verbally uncommunicative bc of psychosocial, medical or cultural situations
- Patients who have extensive orofacial and/or dental trauma
- Patients who require significant restorative/surgical procedures

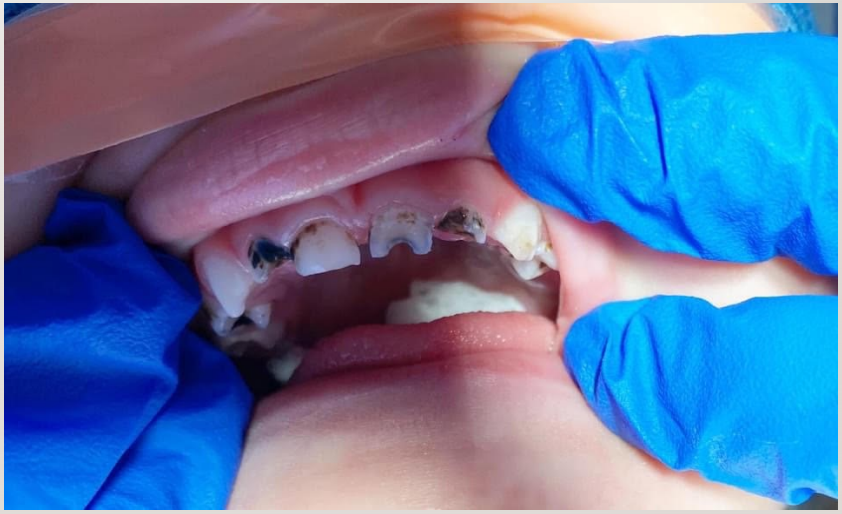
OUT-PATIENT VS. IN-PATIENT

- Out-Patient (surgical center/same day)
  - Healthy Patient: ASAI/II
  - Advantages: More efficient, better tolerated by family, more patient friendly
- In-Patient (hospital setting)
  - ASA III and above
    - Possible overnight admission

Classification	Description
ASA 1	Healthy patients
ASA 2	Mild to moderate systemic disease caused by the surgical condition or by other pathological processes, and medically well controlled
ASA 3	Severe disease process which limits activity but is not incapacitating
ASA 4	Severe incapacitating disease process that is a constant threat to life
ASA 5	Moribund patient not expected to survive 24 hours with or without an operation
ASA 6	Declared brain-dead patient whose organs are being removed for donor purposes

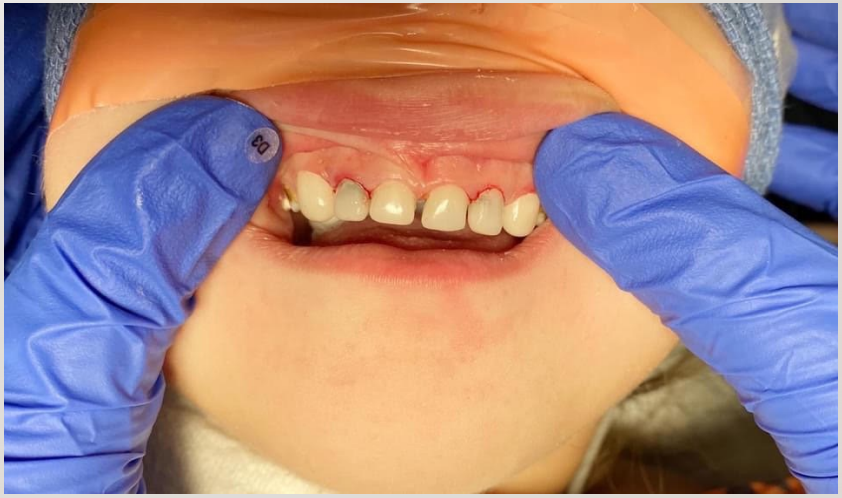
PEDIATRIC DENTISTRY PROCEDURES IN OR: COMPREHENSIVE CARE

- Prevention
  - Cleaning, exam, fluoride tx, sealants
- Radiographs
  - X-rays of teeth
- Restorations
  - Composite restorations (white fillings)
  - Amalgam restorations (silver fillings)
  - Stainless steel crowns
  - Nerve treatments (pulpotomies, pulpectomies, root canal)



PEDIATRIC DENTISTRY PROCEDURES IN OR: COMPREHENSIVE CARE

- Extractions
  - Grossly decayed teeth
  - Extra teeth (supernumerary)
  - Orthodontic
- Space Maintainers
  - Guidance and growth



PEDIATRIC ORAL HEALTH IN RHODE ISLAND

- In 2022, there were 341 children & youth (under the age of 21) were treated for dental issues in the RI emergency departments. An increase from 2021 (288 children).
- In 2022, 58 children & youth were hospitalized with a dental problem diagnosis.
- Between 2019-2022, 21% of RI kindergartners and 24% of third graders had untreated tooth decay
  - Significant health disparities by race/ethnicity and income with Black, Hispanic and low-income children having the highest rates

Source: https://rikidscount.org/wp-content/uploads/2024/05/factbook2024_final-2.pdf

PEDIATRIC ORAL HEALTH IN PROVIDENCE

- Providence School System Dental Screening
  - K-5 annual dental screening, plus once from grades 6-8
- In 2024, 7483 students in the Providence School System screened
  - 1917 students in of dental care (routine care/fillings)
  - 506 students are in need of URGENT care: extreme oral health issues such as pain/swelling
    - In 2023, 3.7% of screened students need Urgent care vs 6.8% in 2024

  Data: Provided by Dr. Gregory Stepka DMD

PEDIATRIC ORAL HEALTH IN RHODE ISLAND

- 12 access points to specialized pediatric dental care in RI (~27 providers)
  - Only 2 locations able to provide hospital services for pediatric patients
- Largest access point: NYU Langone/Providence and Samuels Sinclair Dental Clinic
  - Each are hospital-based with access to OR time
  - Difficulties in referring patients to these centers (no direct referrals)
- Limited oral and inhalation services available
  - Permitting issues for providers/offices

ACCESS TO CARE PROBLEMS IN RI

- Fatima and RI Hospital
  - Only two hospitals located in the northern part of the state providing GA services for dental Tx
  - Fatima: Limited availability as new surgeons from other services doing more "profitable" procedures
  - RI Hosp: will only allows union staff & OR time only available to Samuels doctors
- Newport, Kent Hospital (no longer doing dental services) & South County Hosp. (unable to provide services)
  - Southern RI with no access
  - Kent– lack of equipment
  - Anesthesia reimbursement issues?
  - Not profitable for hospital?
- There are NO in-patient hospital services available pediatric dental patients in RI
  - Patients must be referred out of state

WHAT CAN BE DONE TO IMPROVE ACCESS?

- Utilize existing out-patient surgical centers around the state
- In February 2023 Centers for Medicare & Medicaid Services with the input of ADA, AAPD, & AAOMS created HCPCS code G0330
  - This code allows for surgical centers to bill for dental rehabilitation in the outpatient setting. Historically, only cases completed in the hospital setting were eligible for payment.
- S-2751 sponsored by Senator Dipalma would adjust Medicaid reimbursement for dental procedures performed in ambulatory surgical centers.

RHODE ISLAND CHILDREN'S DENTISTRY

- Quick Look:
  - As of May 1, 2024:
    - 49 Patients awaiting OR treatment
    - 4 month wait if a patient is referred today

Rhode Island
Children's Dentistry

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