Oral Trauma

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Pediatric Dental Trauma

- One out of every two children sustains a dental injury in their childhood.

What Happened!!!!
Understanding the event gives you most the information you need.

Assess Patient for life threatening conditions
- Loss of Orientation
- Loss of Consciousness
- Seizures
- Intracranial bleeding
- Life threatening conditions

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Pediatric Concerns

Age of Child (chronological)
Age of Child (dental)
Address parents – time of incident, date of incident, supervision at time of injury
Loss of Consciousness
Vomiting
New injuries vs. Existing injuries
Inconsistencies in version of event (parent to parent) (time to time)

What can you do????

Limited time and resources in the Emergency Department
Limited access to proper equipment
Lack of proper radiographic imaging
Going beyond scope of “Emergency”

Anatomy of a Tooth

Factors that predispose to dental injury

Malocclusion – Open bite, Deep bite
Sports
Habits – pacifiers, thumb/ finger habit
I don’t see anything?!?!?

Parents can be over anxious
Parents may not be sure anything happened - reports from school camp
Child “twisting” the truth

Hard Tissue Trauma

Trauma?
What warrants trauma?
Sensitivity
“Sharp tooth”

Fracture/ Pulp Exposure
Fracture that involves exposure of interior (nerve) of tooth
Fracture/ Pulp Exposure
- Economic
- Bacterial Contamination/Abscess
- Foreign Body Involvement

Fracture/ Root Fracture
- Positional Root Fracture (Apical, Middle, Coronal 1/3)
- Mobility
- Root Formation

Luxation
- Movement of a tooth away from its normal anatomical position (how it was before injury)

Intrusion
- Did tooth fall out?
Avulsion
Is tooth present?
Assessing root for status of trauma
Examination, tooth
Extraction
Restoration

Splinting
Stabilize tooth/teeth with existing stable dentition

Alveolar Fracture
Incisal appearance of tooth fracture
Same need for repositioning
Difference in way repositioning is performed

Mandibular Fracture
Soft Tissue Injury

Lip Bite
Local Anesthesia – very common

Things to watch for:
- Foreign object (teeth, asphalt, plastics, etc.)
- Depth of laceration
- Width of laceration
- Vermilion border
Tongue Lacerations

Electrical Burns

- Painless
- 7-10 days (eschar sloughs - bleeding)
- Appliance needed - 6 to 12 months
- Antibiotics

Fluoride Varnish

The Why, What, When, and Who

David M. Krol, MD, MPH, FAAP
Chair, AAP Section on Oral Health
Here’s what you need to know

- Dental Caries
  - Infectious disease, diet/flouride mediated (multifactorial)

- Fluoride
  - Prevents enamel demineralization/enhances remineralization

- Fluoride Varnish
  - One evidence-based part of a preventive approach to dental caries

Dental Caries (Tooth Decay)

- Transmissible, diet dependent, fluorid mediated, bacterial disease

- The singular of diabetes is not “diabete”

- Multifactorial diseases require coordination, collaboration

- Largely preventable

How does fluoride work?

1. Promotes enamel remineralization
2. Reduces enamel demineralization
3. Inhibits bacterial metabolism & acid production
What's fluoride varnish?
- Delivery modality for fluoride
- Concentrated fluoride
- Topical
- Off label
- Well tolerated
- Easy to apply
- Safe
- Effective

Who says it's effective?
AAP
- application of FV during an oral screening is of benefit to children...
USPSTF
- FV in children <5 years of age is effective at reducing caries incidence
AHA
- effective in preventing caries in primary & permanent dentition of children & adolescents
AAPD
- efficacious in reducing prevalence of dental caries
Cochrane Collaboration
- substantial caries-inhibiting effect in both permanent & primary teeth

When should I apply and how often?
AAP
- all infants and children at least once every 6 mo & preferably every 3 months, starting when the first tooth erupts & until establishment of a dental home
USPSTF
- primary teeth of all infants and children starting at the age of primary tooth eruption (birth through 5 years)
AAPD
- primary teeth-at least twice a year; permanent teeth-3 or 6 mo intervals

How do I apply?
- Risk assess & screen
- Gloves, gauze, varnish (open)
- Kneel to knee or table
- Paint, not Picasso
- Don't use it all
- Document
- Refer
Payment in NJ

Medicaid benefit
- All children 6 mo-7 yrs; two per year from PCPs

Billing
- United Health Care Community Plan: 99188 DA 25 and V043 31
- Amerigroup: 99188 DA and V043 32
- Horizon NJ Health: 99188 DA an Z411.8 submitted on a medical claim
- Wellcare - 99188 and Z411.8
- Aetna Better Health: 99188 and Z90.12X or Z76.2
- Blue Cross Blue Shield (Commercial) - 99188


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