

Teeth Have Feelings Too: Assessment, preventive measures, treatments and referral resources

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Objectives

The participant will be able to:

1. Demonstrate four aspects of a complete oral examination
2. Identify common oral issues and dental emergencies requiring urgent referral
3. Offer evidence-based treatments appropriate for some identified oral problems
4. Develop a list of three provider resources for dental referral

NOTE: This presentation has photos of the mouth

What does this mean for children in our schools?

Seirawan, H., Faust, S., & Mulligan, R. (2012). The impact of oral health on the academic performance of disadvantaged children. *American journal of public health, 102*(9), 1729-1734.

JADA (2019) Oral health, academic performance, and school absenteeism in children and adolescents

- 34 million school hours lost per year due to dental problems
- Students with toothaches were nearly 4 times more likely to have a low, grade point average
- Parents averaged 2.5 absent days from work or school per year
- Poor oral health creates barriers to academic success – distraction of pain and resulting absenteeism



Dental Caries and Children

- Can be acquired by age 1
- Associated with poor growth
- 1 out of 4 don't smile or laugh
- Treatment often means going to out-patient surgery or the hospital



What's the big deal about cavities?

- #1 Chronic PREVENTABLE Childhood Disease
 - Caries Disease in Children
 - 5 x greater than asthma
 - 7 x greater than seasonal allergies
 - Dental Caries
 - 15% of children and adolescents
 - 25% children living in homes below 100% of the federal poverty threshold

JADA (2019) Oral health, academic performance, and school absenteeism in children and adolescents

4 Ls Oral Exam

- ✓ Lift/Lower the Lips



- ✓ Look at Teeth



- ✓ Lap around the gums and palate



- ✓ Lasso the Tongue





IF YOU ARE PREGNANT
OR THINK YOU MIGHT
BE PREGNANT
PLEASE TELL YOUR
PROVIDER



Lift and Lower the Lips



Lip Licker Dermatitis



- 1. Minimize licking of Lips (very difficult)
- 2. Apply over the counter hydrocortisone ointment to affected areas twice a day
- 3. Apply an ointment or lip balm hourly or with the urge to lick lips

Gingivitis: Precursor to Periodontal Disease

- More common in people with:
 - Poor dental hygiene
 - Diabetes
 - Pregnancy
 - Regular use of recreational drugs
- Management
 - Dental cleaning
 - Brush teeth/gums twice daily



Periodontal Disease

<https://www.wellnessbi dentistry.com/idaho-falls-dental-care-for-children-and-adults/>

- Starts as gingivitis due to plaque build up on teeth
- Plaque irritates the gums allowing bacteria to enter pockets between the teeth and surrounding gums
- Dental cleanings prevent plaque build up that cause gingivitis
- Left untreated, gingivitis can progress to periodontal disease may result in tooth loss later in life





- **Pertinent ROS:**

HEENOT: Denies oral or dental pain – has noticed some gum bleeding with brushing.

- **PE:**

HEENOT: Upper and lower gums swollen and reddened. Plaque noted to upper and lower central incisors and along the gum line. Mandibular molars noted to have several fillings.

Neck / Lymph: Supple, no lymphadenopathy noted.

-
1. **Suggest preventive measures would you encourage?**
 2. **Name possible clinical resources where this student can receive care from a dentist or dental hygienist?**

Look at the
Teeth



What causes a cavity?

DENTAL DECAY PROCESS



**Bacteria /
Germs**

**Food, Drink,
Sugars, Sweets**

**ACID
Produced**



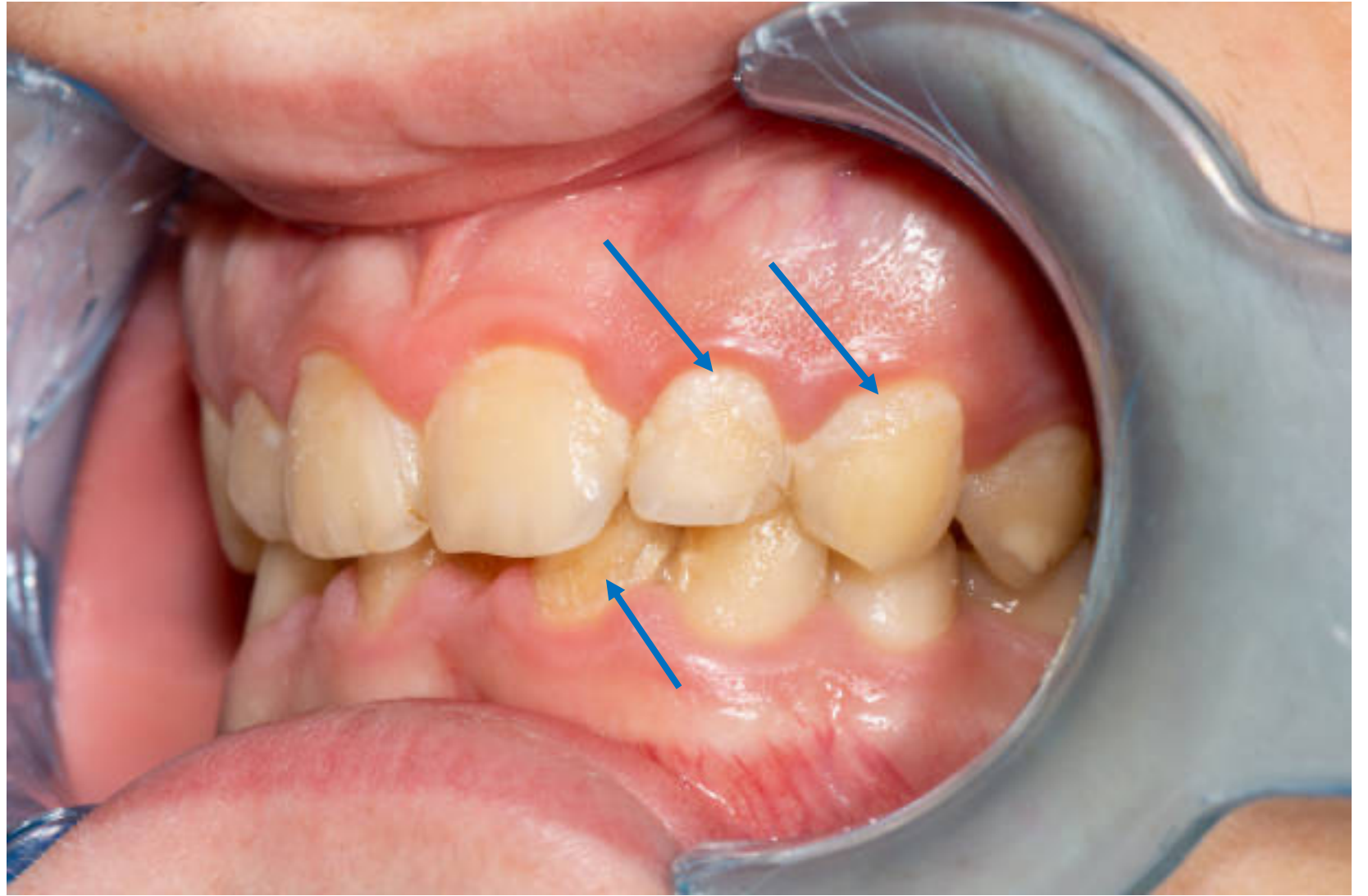
**Healthy
Tooth**

ACID

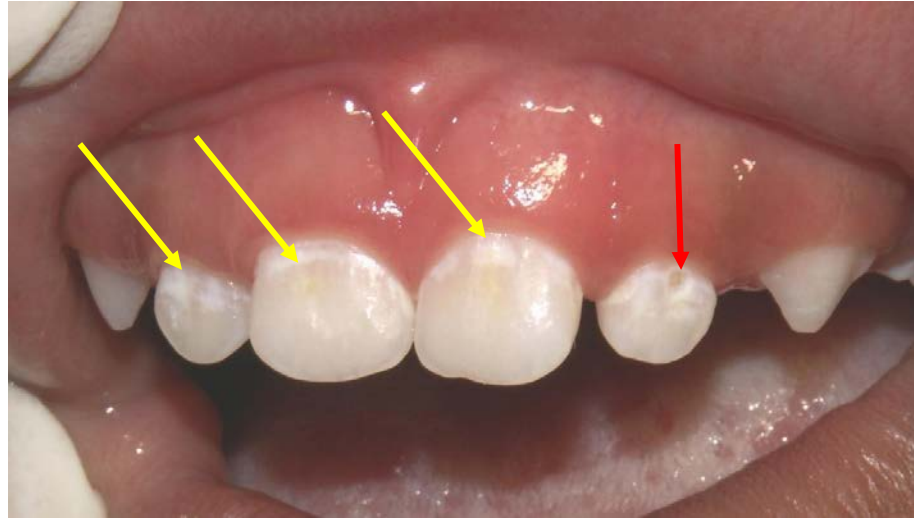
Cavity

Poll Question

Plaque
Harbors
*Streptococcus
mutans*



Stages of tooth decay



Eating and Tooth Enamel

- Oral environment more acidic for digestion
- Normal pH returns in approximately 30 minutes
- Two hours for enamel repair after eating



White Spot Lesions

- Early signs of decay
- Demineralization of the tooth - can be repaired
- Topical fluoride varnish remineralizes and prevents decay



Causes of Fluorosis

- Birth place
- Taking fluoride supplements
- Using fluoridated tooth paste before patient can expectorate.



Pertinent ROS:

General/Constitutional: No fevers

HEENOT: Oral concerns include increased tooth sensitivity over the last year and has stopped eating harder types of food. Denies oral pain or trauma.

PE:

HEENOT: Oral mucosa moist and pink. No oral lesions or exudate. Gingiva are reddened and inflamed. Chalky white lesions on multiple teeth at the dental/gingival margins. No other discoloration of teeth noted.

Neck / Lymph: Supple, no lymphadenopathy noted.



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1. What is your diagnosis?
 2. Suggest an oral plan of care to improve the oral health of this patient.
 3. Name possible clinical resources where this student can receive care from a dentist or dental hygienist?

Lap
around
the palate
and gums



Sexual Activity and Oral Health



- 1988 to 2004 – mouth/throat cancers increased 200%
- Human papillomavirus 16 (HPV-16) most common type
- Oral HPV found in sexually active females though, presence decreases with time
- HPV vaccines significantly reduce risk of developing oral cancers

Schlecht, N. F., Masika, M., Diaz, A., Nucci-Sack, A., Salandy, A., Pickering, S., ... & Burk, R. D. (2019). Risk of oral human papillomavirus infection among sexually active female adolescents receiving the quadrivalent vaccine. *JAMA network open*, 2(10), e1914031-e1914031.

Pertinent ROS:

General/Constitutional: Positive for fevers, lethargy.

HEENOT: Right ear pain, decreased oral intake, has not been able to brush teeth or really look in patient's mouth due to discomfort.

PE:

General survey: Ill appearing, lethargic. Curled up in mother's lap with eyes closed, not interacting with examiner. Will answer questions with prompting from mother.

HEENOT: Visible right orbital and cheek swelling, no redness. Oral mucosa pink but slightly dry, teeth without apparent decay. Right upper gingiva swollen along molars, exquisitely tender with palpation, and with fluctuant mass extending toward the buccal side of the gum end to the gingival-buccal sulcus.

Lymph: Right anterior cervical, tonsillar, and submandibular enlarged, mobile, and tender with palpation.



What is your diagnosis?

Dental Abscess

- Pain
- Sensitivity to temperature & chewing
- Fistula
- Swollen face and neck glands



Abscess Treatments

- Treatment for children > 3 months of age to 40 kg:
 - Amoxicillin 25-45mg/kg/24 hr (BID dosing)

If allergic to penicillins

- Clindamycin 8-20 mg/kg/24hr (TID dosing)
- Dental abscess for children > 40kgs and adults
 - Amoxicillin 500 – 875 mg BID x 10 days or until dental consultation if that occurs sooner
- If allergic to PCN
 - Clindamycin 300mg QID x 10 days or until dental consultation

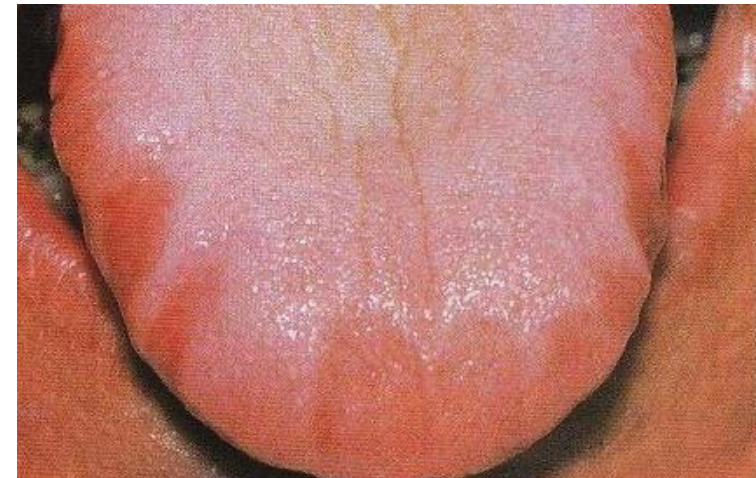
Lasso the Tongue



Normal Anatomy

- Geographic Tongue
 - Patterns change weekly – genetic

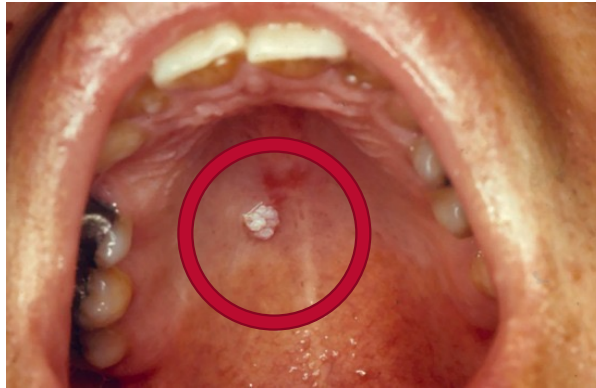
- Scalloped Tongue
 - Tongue too large for mouth – not pathological



Oral STIs

Refer suspicious HPV lesions to Dentist or Oral surgeon

HPV Lesions



Verucca Vulgaris



Condyloma Accuminata



Squamous Papilloma

Syphilis



Betz S. J. (2019). HPV-Related Papillary Lesions of the Oral Mucosa: A Review. *Head and neck pathology*, 13(1), 80–90. <https://doi.org/10.1007/s12105-019-01003-7>

Pertinent ROS:

General/Constitutional: Denies fevers.

Integument: new rash on hands

HEENOT: non-painful lesions on his tongue

PE:

General survey: Well appearing, no acute distress. Answering questions appropriately.

Integument: Scattered red macules on palmar and plantar surfaces of hands and feet.

HEENOT: Oral mucosa moist and oropharynx clear. Dentition intact, good oral hygiene noted. No dental caries or fillings. Indurated, ulcerated nodules scattered on the dorsal side of the tongue, hard in consistency. Not tender to palpation. Bilateral palpable, mobile, painless enlarged submandibular lymph nodes.

GENITOURINARY: Tanner stage IV to V. Penis circumcised, no lesions noted.

- 1. What is your diagnosis?**
- 2. What preventive measures would you encourage for this student?**
- 3. What oral plan of care would you suggest to for this patient?**





Oops! My tooth fell
out...emergent care for
oral trauma

What to do with a knocked-out tooth

- Primary “Baby” Teeth
 - Do not reimplant
 - Cleanse area with water
 - Apply gauze with pressure to stop bleeding
 - Refer to dentist
- Permanent Teeth
 - Hold tooth gently
 - Rinse debris, do NOT scrub
 - Reimplant in dental socket ASAP
 - Immediate transport to dentist

Storage Media for Avulsed Tooth

- Storage media if unable to reimplant
 - COLD MILK
 - HBBS - Hank's Balanced Salt Solution

Do NOT use

- Tap Water
- Dry
- Saline



Poor results



Khinda, V. I., Kaur, G., Brar, G. S., Kallar, S., & Khurana, H. (2017). Clinical and practical implications of storage media used for tooth avulsion. *International journal of clinical pediatric dentistry*, 10(2), 158.

Extraoral Time for Avulsed Tooth

- Shorter time = Better prognosis

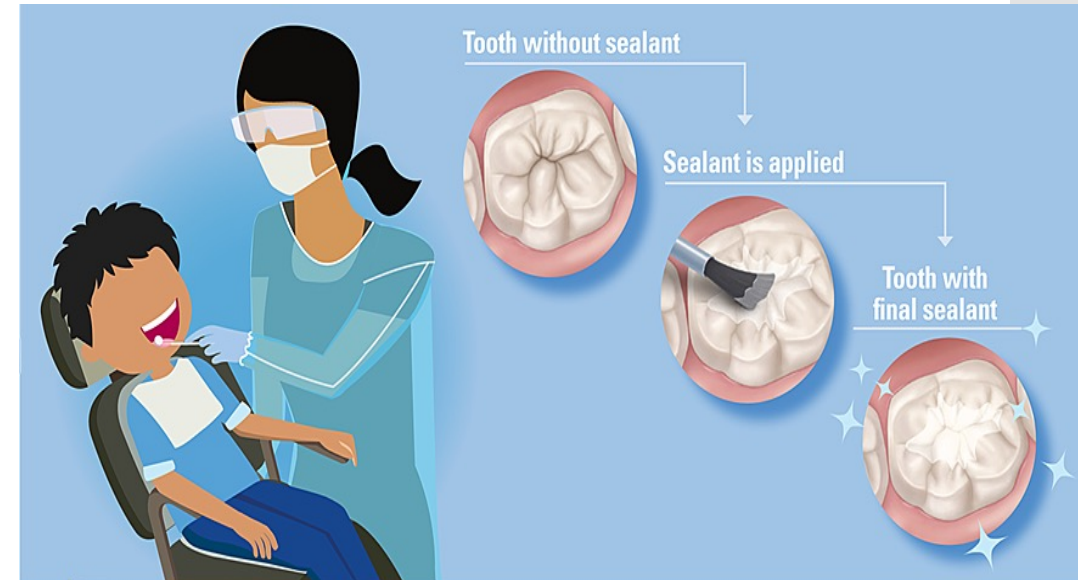
< 30 min → 90% chance of successful reimplantation

> 90 min → 10% chance of successful reimplantation



Dental Sealants

- Prevent cavities for years
- Children without sealants have 3 x more first molar cavities
- Children from low-income families are 20% less likely to have sealants
- Need to target schools with lower income children



Fluoride Varnish



- Safe
- Effective
- Doesn't require a lot of time – easy to apply
- Adheres to the dental enamel forming a depot from which fluoride is slowly released
- A dry tooth surface allows the uptake of the fluoride into the tooth surface
- Saliva sets the varnish
- In many states primary care providers can apply varnish twice a year and bill for reimbursement
- CPT code: 99188 – Document *“Topical application of fluoride varnish by a physician or other qualified health care professional.”*
- Diagnosis code: Z29.3 (*Encounter for prophylactic fluoride administration*).

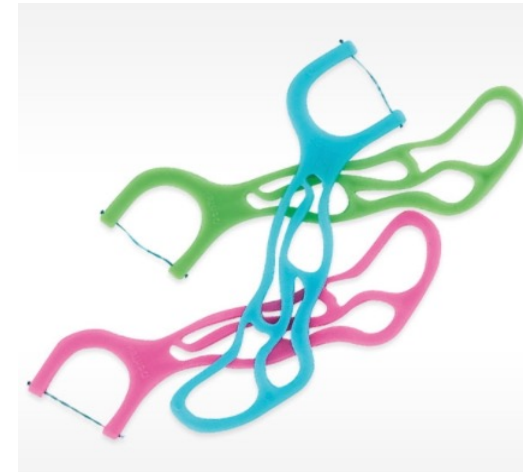


THE POWER OF PREVENTION

Poll Question

Knowledge is
power... for a
lifetime of
good health

- Brush twice a day to keep cavities away
- Use dental floss once a day
- See the dentist every six months for a check up and dental cleaning
- Avoid saliva sharing activities



Oral Health Management

- Drink fluoridated water
- OTC fluoridated toothpaste at least BID
- Fluoridated mouth rinses
- Space food/beverages
- Chew gum with xylitol as first ingredient
 - Chew after meals, at least 5 minutes, 4-5 x a day
 - Avoid use of gum with braces



Diet Recommendations

- Limit starchy foods and sweets to mealtime
 - Starchy includes: potatoes, pasta, bread, tortillas, potato chips, pretzels
 - Sweet includes: juice, milk, cakes, cookies, candies, sodas
- Best snacks between meals
 - Cheese
 - Vegetables
 - Water or unsweetened beverages



FQHC settings

Dental Schools and Residencies

Dental Hygiene schools

Local Dentists

You don't have to brush all of your teeth, **ONLY**
the ones that you want to **KEEP!**

Thank YOU!



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