Oral Lesions and Oral Cancers: Check the Mouth!

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Dr. Cole practices family medicine in Winter Park, Florida. In addition to seeing patients in an outpatient setting, she also provides care at three nursing homes, as well as inpatient care and home visits. Dr. Cole has been teaching for 12 years and is interested in topics including dementia, delirium, polypharmacy, and caregiver burden.

Learning Objectives

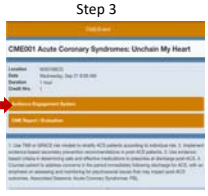
1. Identify patients who are at risk for having inadequate dental care and may need to be examined for oral lesions, especially among pregnant or older patients.
2. Identify red flags, such as oral manifestations (e.g., oral mucosal lesion) that may be manifestations of immunologic diseases, endocrinopathies, hematologic conditions, systemic infections, and nutritional disorders.
3. Follow evidence-based recommendations for diagnosing oral cancer.
4. Develop collaborative care plans for referral and management of patients with oral cancer.

Audience Engagement System

Step 1

Step 2

Step 3



Patients at Risk

- Low economic status
- Children
- Low access to dental care
- Elderly, dementia
- Pregnancy

Oral Problems and Aging

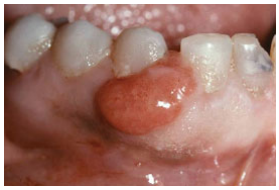
- Older adults, particularly those with dementia, multiple chronic conditions, or low socioeconomic status are at high risk of developing oral problems
- Oral/dental care is often neglected by patients and caregivers when acute problems take priority
- Many dementia patients resist oral care

Pregnancy

- Increased gastric acid exposure eroding enamel
- Carriogenic oral bacteria are often transmitted to infants
  - Xylitol and chlorhexidine

Pregnancy Oral Tumor (pyogenic granuloma)

- 5% of pregnancies
- Caused by increased progesterone and local irritants
- Recede after delivery

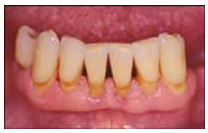


Oral Health

- Dental carries
- Periodontitis and gingivitis
- Benign mucosal lesions
- Tongue conditions
- Oral manifestations of systemic illnesses
- Oral cancers

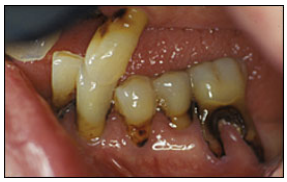
Normal aging mouth

- Darkening/yellowing of teeth due to changes in dentin and enamel
- Decreased sensitivity
- Gingival recession
- Increased xerostomia, often iatrogenic



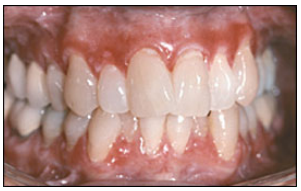
Dental carries

- Elderly have increased risk of root carries in addition to coronal carries
- Treat with removal, dental fillings
- Often progress to pulpitis which may require root canal



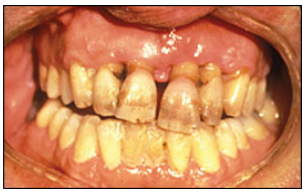
Gingivitis

- Erythema and edema of gingival tissue, which bleeds easily
- Usually due to plaque
  - Bacteria and endotoxins that develop on teeth at gingival margins
- Can be due to trauma or tobacco irritation
- Can be reversed in 2 wks with daily biofilm removal



Periodontitis

- Prolonged gingivitis leads to gingival recession, loss of alveolar bone, and eventual tooth loss
- Associated with cardiovascular disease, worsening diabetes control, poor wound healing, and aspiration pneumonia



Dental Abscess

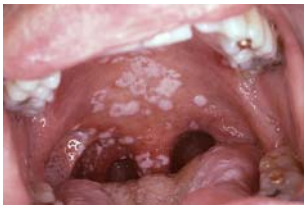
- Presents as a painful swelling of the gingiva/mucosa
- Nearby teeth may be painful and sensitive to chewing
- +/- fever, lymphadenopathy, productive sinus tract fistula
- Treat with incision and drainage and antibiotic therapy

Antibiotics for Oral/Dental Infections

- Chlorhexidine 0.12% oral rinse
- Amoxicillin/clavulanate- for mild case or step-down tx
- PCN + metronidazole
- Clindamycin
- Ampicillin/sulbactam- for abscess

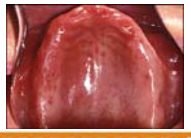
AES Question 1
What is this?

A. Leukoplakia
B. Candidiasis
C. Squamous cell cancer
D. Oral manifestation of Lupus



Candidiasis

- Overgrowth of normal flora due to immunosuppression, antibiotic use, or irritants
- Variable presentation
  - Thrush
  - Denture stomatitis



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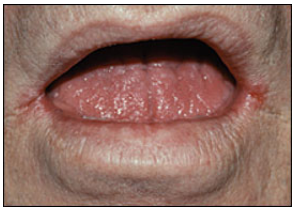
Angular cheilitis

- Usually candida or staph aureus infection
- Less commonly due to nutritional deficiencies, DM2, immunodeficiency, irritant or allergic reactions
- Treat with topical nystatin/triamcinolone



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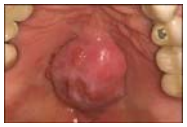
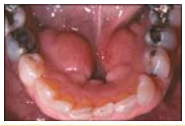
Palatal and Mandibular Tori

- Benign bony protuberances arising from the cortical plate
- Considered developmental abnormalities, although they usually do not appear until adulthood
- Palatal tori: 20-35% of adults
- Mandibular tori: 7-10% of adults





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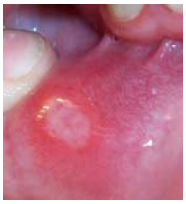
Apthous Ulcers

- "Canker sores"
- Localized, shallow, round to oval ulcers with a grayish base
- Familial tendency, trauma, hormonal factors, and emotional stress
- Treatment: triamcinolone acetonide in Orabase, fluocinonide gel covered by Orabase, and topical analgesics



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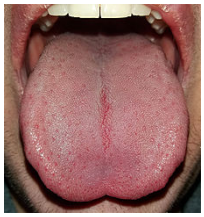
Common Tongue conditions

- Median Rhomboid glossitis
- Atrophic glossitis
- Fissured tongue
- Geographic tongue
- Hairy tongue
- Oral hairy leukoplakia



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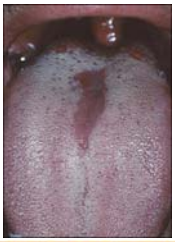
Median Rhomboid glossitis

- Clinical Presentation
  - Smooth, shiny, erythematous, sharply demarcated, rhomboid shaped
  - Usually asymptomatic
- Treatment
  - Topical antifungals



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Atrophic glossitis

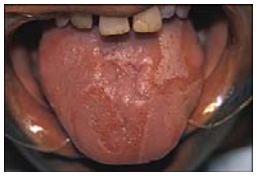
- Clinical presentation
  - Smooth, glossy with red or pink background
  - Caused by atrophy of filiform papillae
- DDx:
  - Nutritional deficiencies (iron, folic acid, B12, riboflavin, niacin)
  - Systemic infection

Fissured tongue

- Clinical presentation
  - Physiologic deepening of normal tongue fissures
  - Associated with aging, Down syndrome, acromegaly, psoriasis, Sjogren syndrome
- Usually asymptomatic

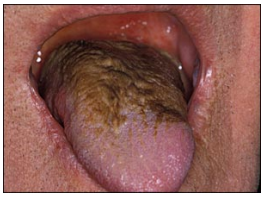
Geographic Tongue/ Benign Migratory Glossitis

- Clinical presentation
  - Areas of papillary atrophy on dorsal tongue – appear smooth, surrounded by raised borders
  - Variable and migratory
- Treatment
  - No tx needed if asymptomatic
  - Topical steroids, antihistamine mouth rinse to treat sensitivity



Hairy Tongue

- Clinical presentation
  - Accumulation of excess keratin on the filiform papillae
  - Coloration from trapping of debris and bacteria
  - Most common in smokers or poor oral hygiene
- Treatment
  - Daily debridement

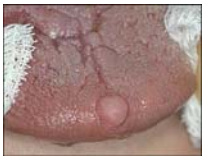


Oral Hairy Leukoplakia

- Clinical presentation
  - White hairy-appearing lesions on lateral tongue
  - Caused by EBV in immunocompromised
- Treatment
  - Antivirals

Traumatic Fibroma

- Accumulation of fibrotic tissue at area of chronic irritation
- Biopsy to differentiate from neoplasm



Lingual Thyroid

- Typically smooth nodular mass of tissue midline posterior dorsal surface of tongue
- Failure of descent during fetal development
- May cause dysphagia
- 70% of affected people have hypothyroidism

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Oral Manifestations of Systemic Illnesses

- Anemia
- Lupus Erythematosus
- Pemphigus vulgaris
- Crohn Disease
- Primary Adrenal Insufficiency (Addison's Disease)
- Diabetes
- Leukemia
- Thrombocytopenia

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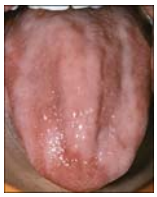
Anemia

- Mucosal pallor
- Atrophic glossitis
- Candidiasis

- May present with burning, pain, tenderness, and erythema



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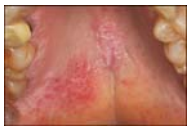
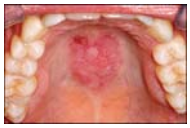
Lupus Erythematosus

- Oral discoid lesion
  - characterized by a well-demarcated zone of erythema, atrophy, or ulceration surrounded by white, radiating striae
- Also can present with honeycomb plaques, keratotic plaques, and erythema
- Purpura, petechiae, or irregularly shaped ulcers





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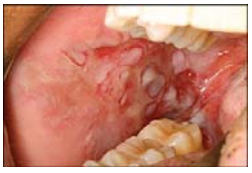
Pemphigus Vulgaris

- Oral lesions are the initial manifestation in 50 to 80% of patients with pemphigus vulgaris
- Painful, diffuse oral ulceration
- Positive Nikolsky sign



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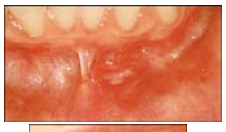
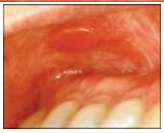
Crohn Disease

- Prevalence of oral lesions in Crohn disease ranges from 0.5 to 20%
- Oral lesions may precede abdominal symptoms and do not necessarily correlate with intestinal disease activity
- Variable lesions:
  - Persistent, firm, and painless swelling
  - Cobblestone appearance of the mucosa
  - Localized mucogingivitis,
  - Deep linear ulceration
  - Secondary fibrosis can produce tissue tags, polyps, or nodules





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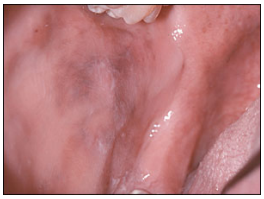
Primary Adrenal Insufficiency (Addison's)

- Hyperpigmentation of the oral mucosa
  - May be first manifestation of Addison's
  - May be due to:
    - ethnic pigmentation
    - tobacco-related pigmentation
    - medication-related pigmentation
    - neurofibromatosis 1
    - McCune-Albright syndrome
    - Peutz-Jeghers syndrome



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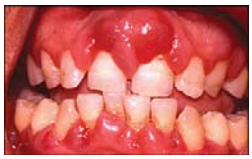
Diabetes

- Strong association between diabetes and periodontal diseases, including gingivitis and periodontitis



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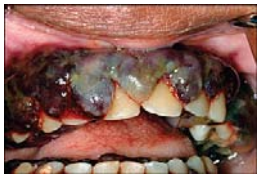
Leukemia

- Mucosal bleeding
- Ulceration
- Petechiae
- Diffuse or localized gingival enlargement
  - acute monocytic leukemia
  - acute myelomonocytic leukemia



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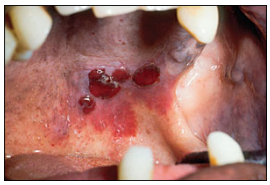
Thrombocytopenia

- Minor trauma (chewing) may cause hemorrhagic lesions
  - Petechiae
  - Purpura
  - Ecchymosis
  - Hemorrhagic bullae
  - Hematoma
  - Bleeding



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AES Question 2
What is the USPSTF rating for screening adults for oral cancer?

A. A
B. B
C. C
D. D
E. I

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USPSTF - Oral Cancer

I: The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for oral cancer in asymptomatic adults. (2013)

In higher-risk populations, may be beneficial

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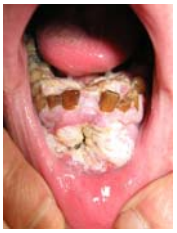
Oral Cancer

- Tobacco and alcohol use are responsible for 75% of oral cancers worldwide
- 9th most common form of cancer
- 1 in 98 persons will be diagnosed with a cancer of the oral cavity and pharynx during his or her lifetime
- 90% are squamous cell, 60% are advanced at time of detection
- Lesions begin as white or red plaques and grow to exophytic mass
- *Biopsy any suspicious lesion persisting longer than 2 wks*



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Oral Cancer and HPV

- HPV is linked to most oropharyngeal cancers in the US
- HPV 16 is most causally linked
- 10% of men, 3.6% of women test positive for HPV in the oral cavity, most will convert to negative within 1 yr
- HPV vaccines are primarily proven to reduce risk of cervical cancer but there is evidence of effectiveness in reducing oral HPV infection

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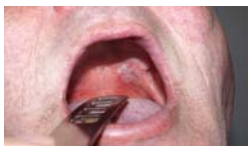
AES Question 3

You see the following on exam of a 70 y/o patient. What should you do?

A. Superficial scrape, send for pathology
B. Brush lesion, send for pathology
C. Reassure
D. Arrange for biopsy



"Orale Leukoplakie" by Klaus D. Peter, Gummersbach, Germany - Own work. Licensed under CC BY 3.0 de via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:Orale_Leukoplakie.jpg#/media/File:Orale_Leukoplakie.jpg

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Leukoplakia

- A white patch or plaque that cannot be characterized clinically
- Pre-malignant lesion
- Rate of progression of up to 17% within a mean period of 7 years after diagnosis

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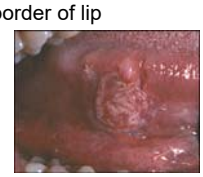
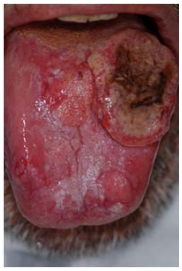
Oral Cancers

- Occur most commonly on the tongue, floor of mouth, or vermillion border of lip





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Best Practice Recommendations: When you find a suspicious lesion

- Most oral biopsies happen in a hospital setting
- Scalpel and punch biopsy techniques
- Close with resorbable sutures
- If suspecting malignancy, include some adjacent normal tissue
- Many general dentists will biopsy an oral lesion, particularly if likely benign

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Questions

Contact info

- Ariel.Cole.MD@FLHOSP.org

Billing & Coding

When services performed in conjunction with:

Office Visit 992xx

Additional tests to confirm or monitor:

Be aware that not all insurance policies covered services submitted with oral health diagnoses. You should verify coverage and financial arrangements prior to delivering services focused on oral health

Interested in More CME on this topic?

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