

# COMMON ORAL PATHOLOGY LESIONS, PREMALIGNANT LESIONS AND ORAL CANCER.

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# Objectives

Review  
and  
recognize

Review and recognize typical clinical characteristics of common oral pathology conditions of soft tissues.

Establish

Establish accurate differential diagnoses for specific common oral lesions

Learn

Learn to recognize and identify worrisome and cancerous lesions of the oral cavity

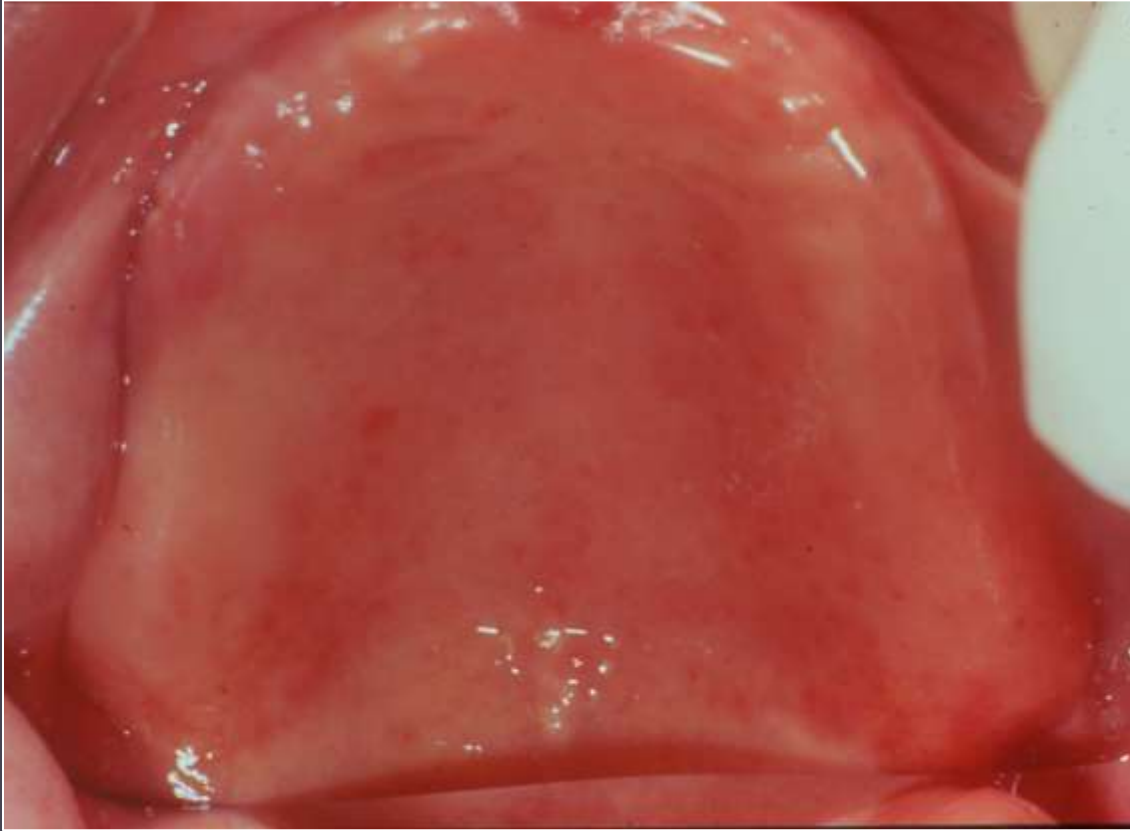


# INFECTIOUS DISEASES

# Pseudomembranous Candidiasis



# Denture Stomatitis



**Erythematous lesion**



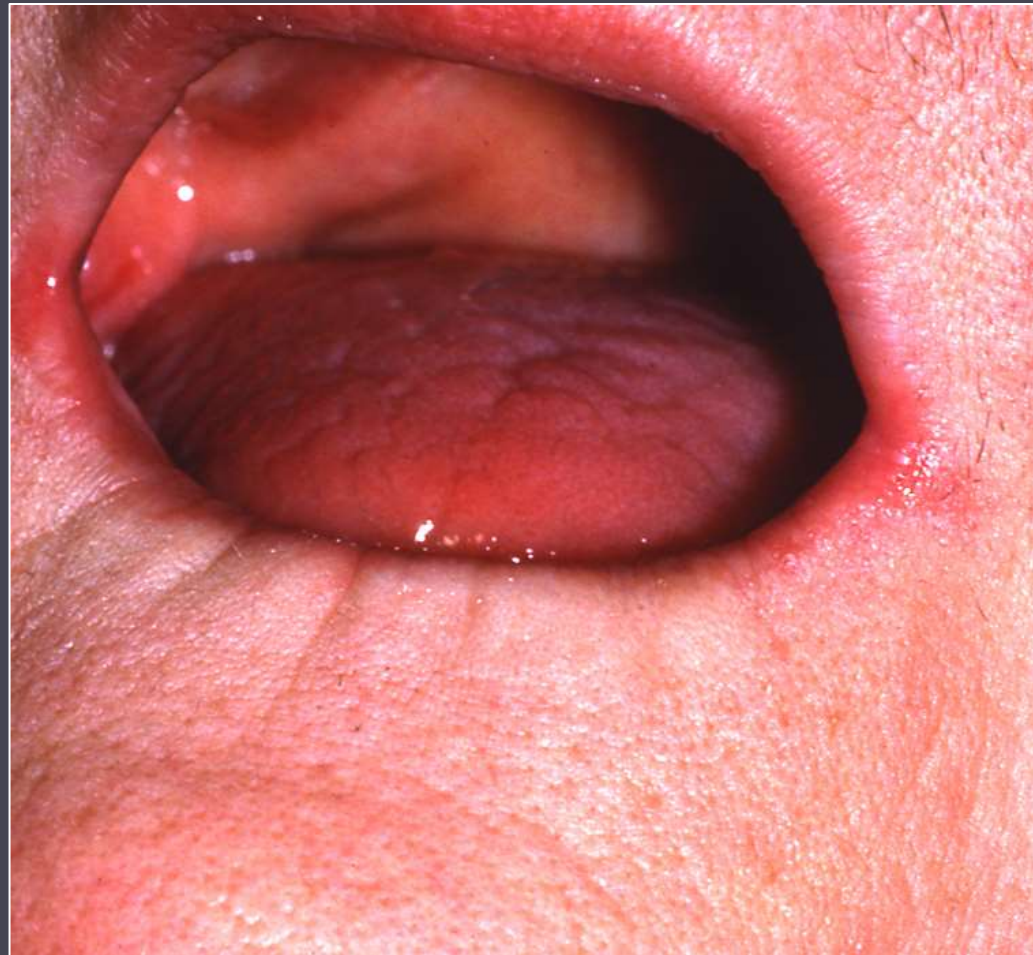
**Papillary and hyperplastic growths**

# Hyperplastic candidiasis



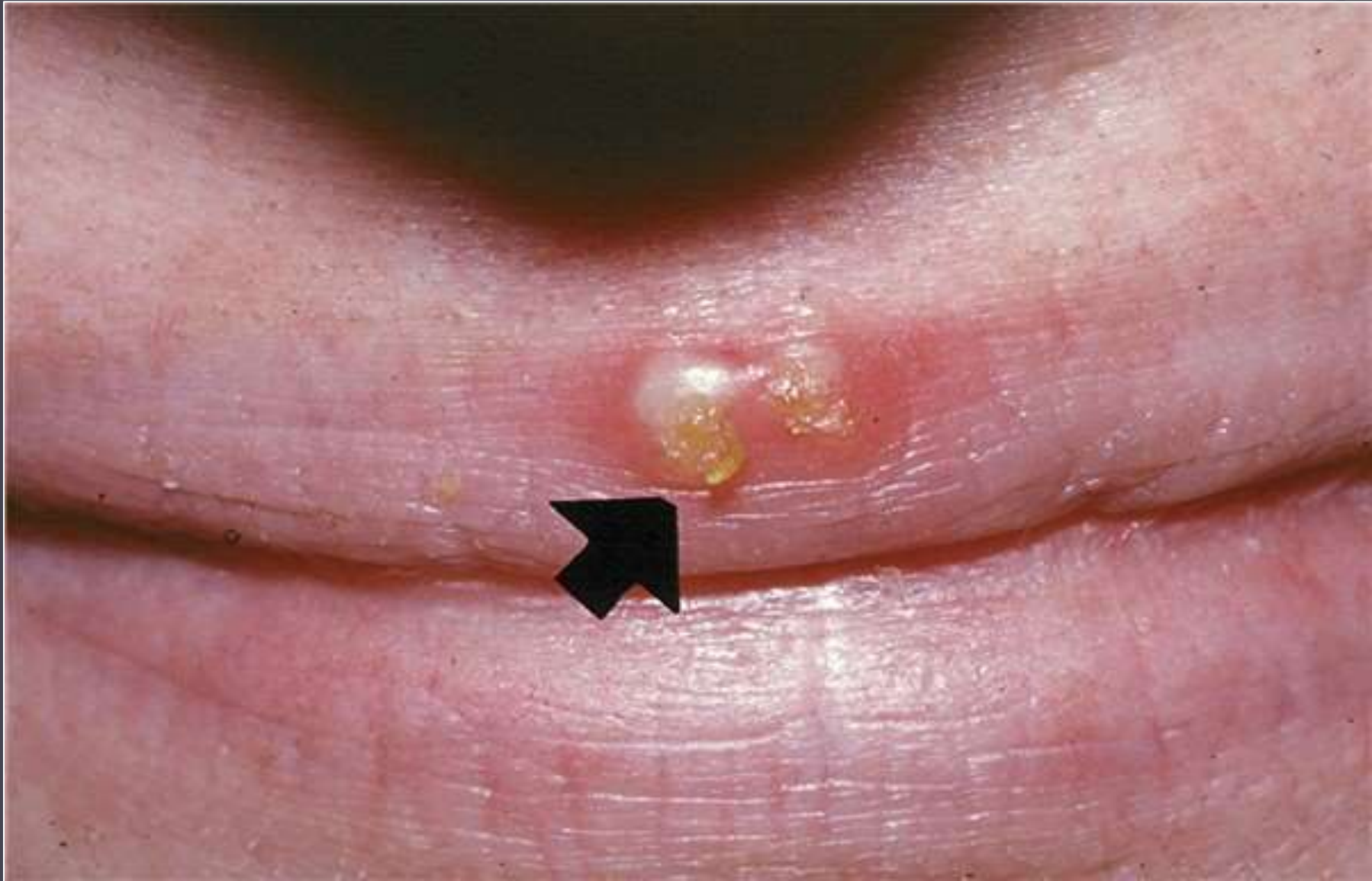
- Thick white plaques which cannot be rubbed off
- Mimic leukoplakia
- Important to biopsy to rule out dysplasia

# Angular Cheilitis





# Herpes Labialis



# Primary Herpes Simplex (HS I)



# Recurrent infection



# Intraoral Herpes



# Acute herpetic gingivostomatitis



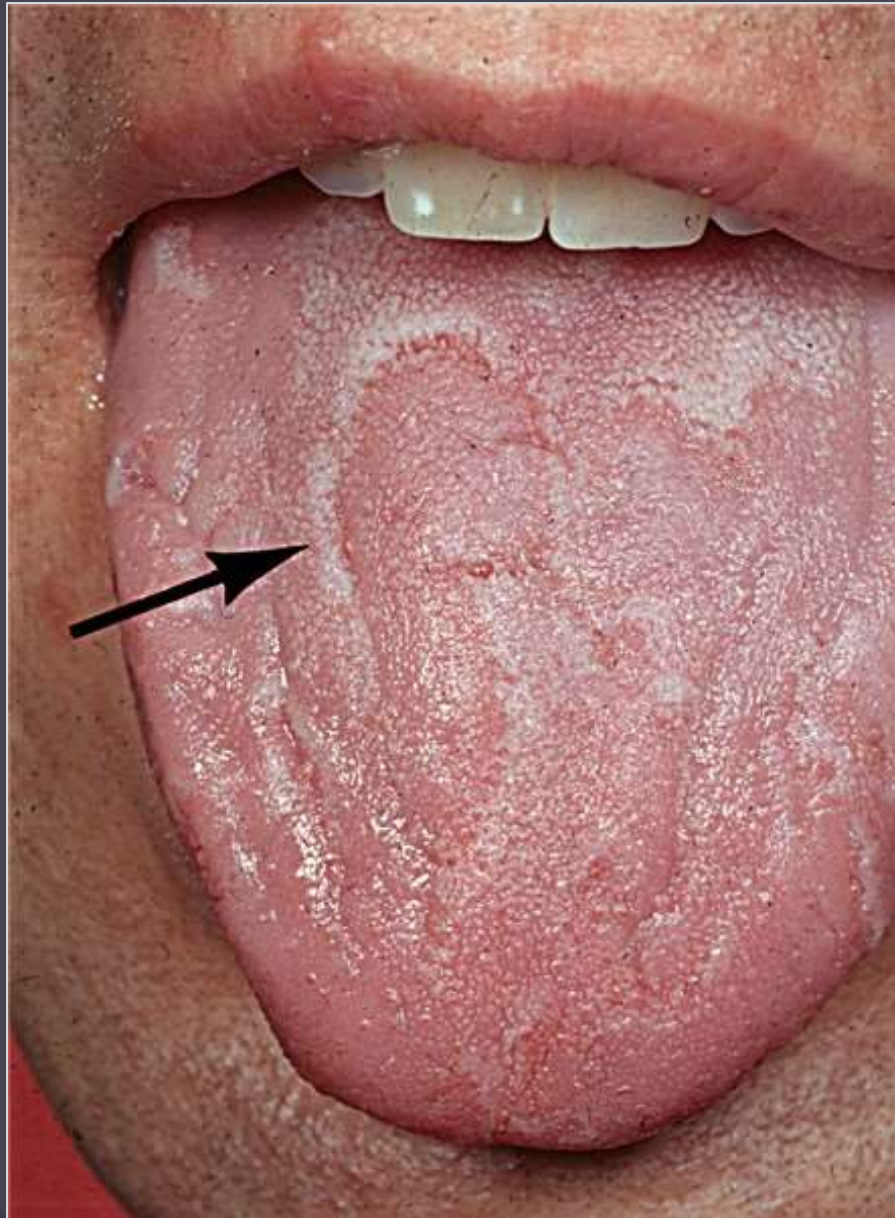
In adults



# SUPERFICIAL MUCOSAL CONDITIONS

# Erythema Migrans







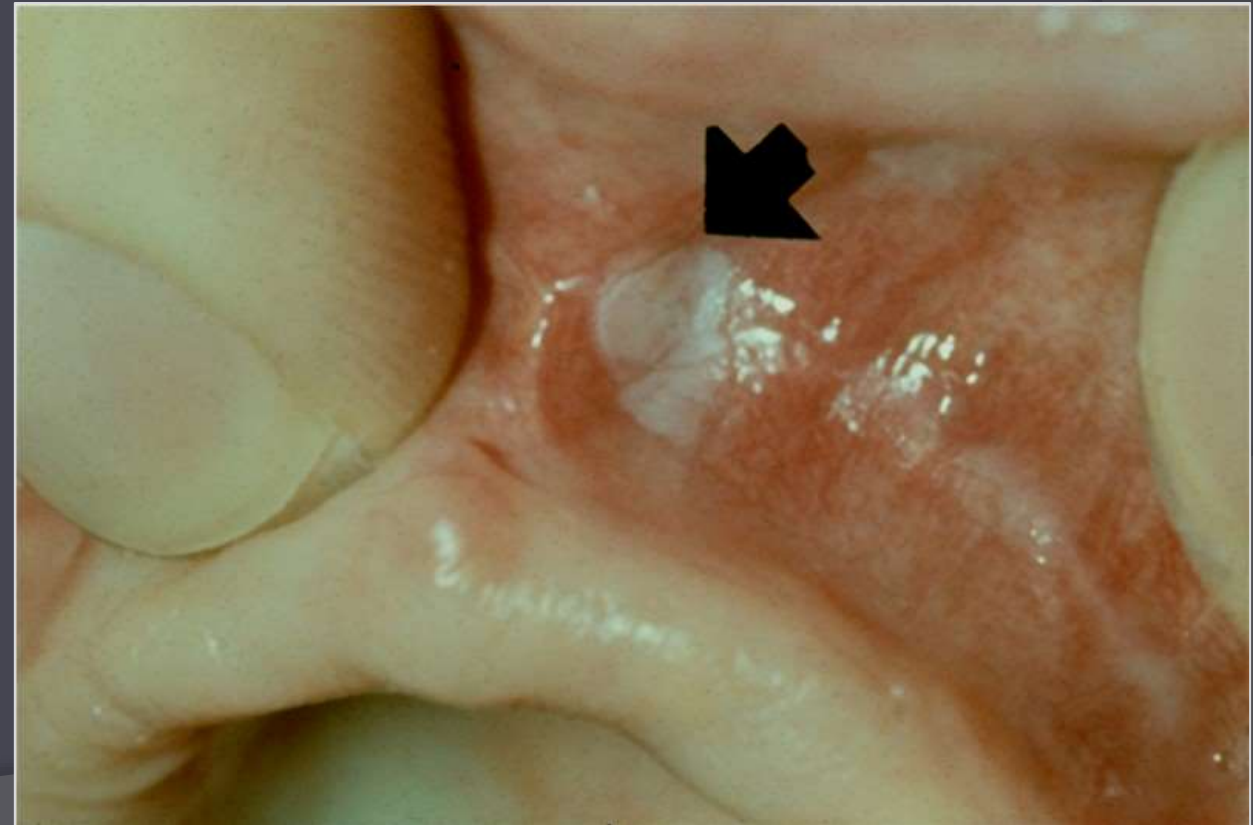
# Fordyce Granules



# Frictional Keratinosis



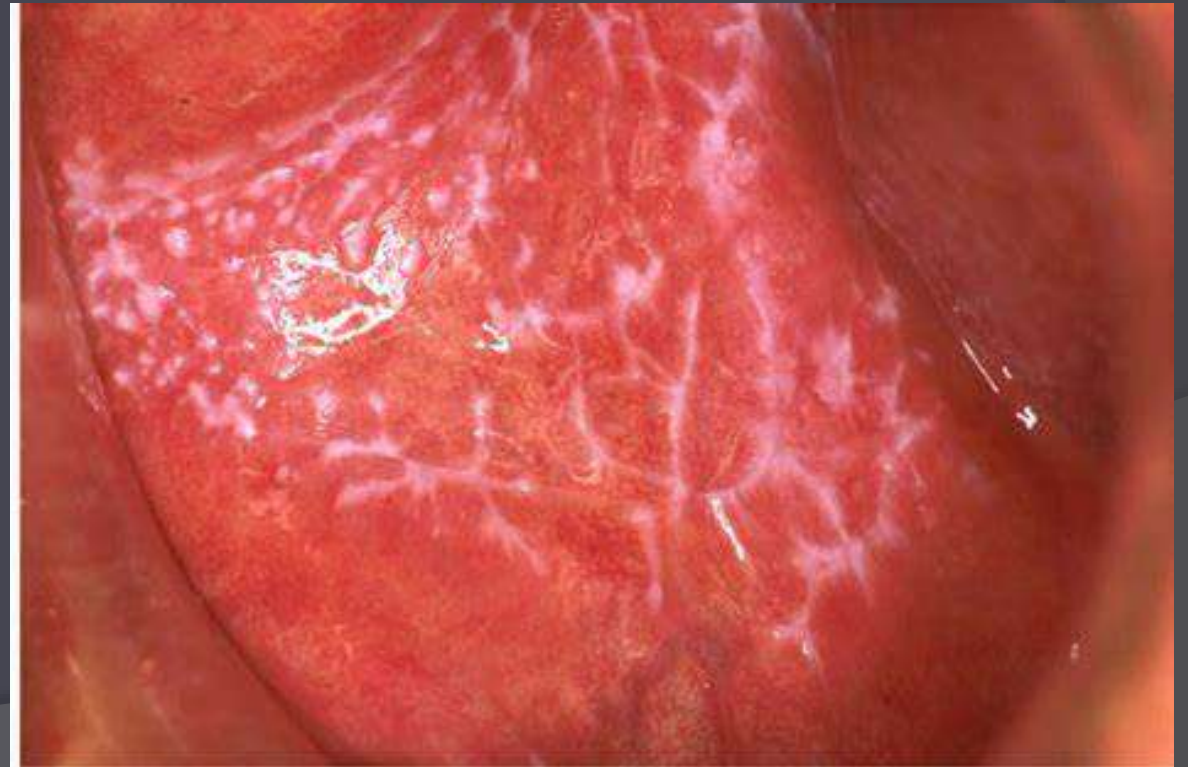
# Frictional Keratosis



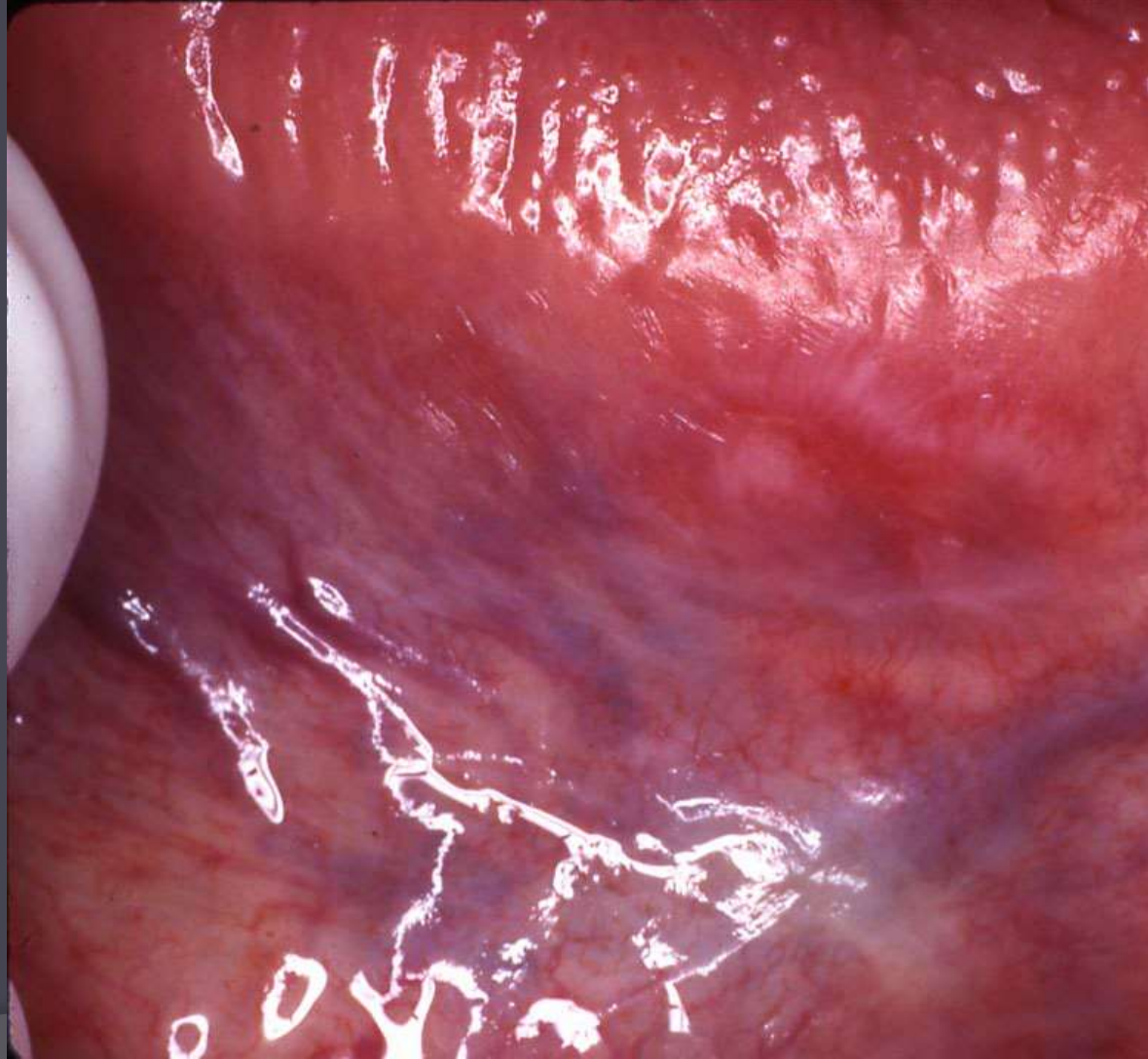
# Lichen planus



# Lichen planus



# Lichenoid Lesions



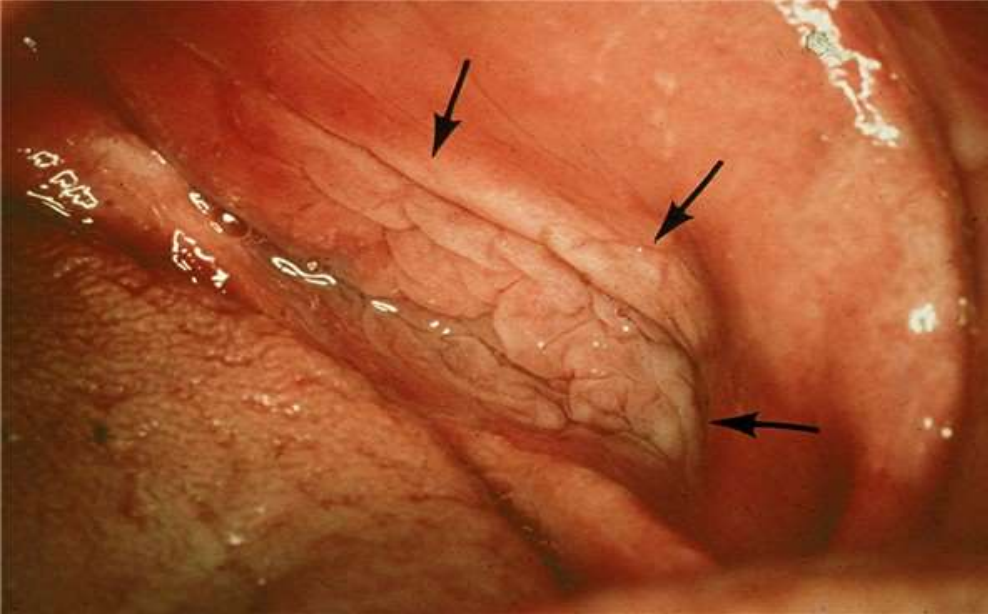


Lichenoid drug reaction to antiretroviral therapy



Lichenoid reaction to mercury in amalgam restoration





# Smokeless Tobacco keratosis

- White or gray plaque involving the mucosa in direct contact with the tobacco product
- Affects 15% of chewing tobacco users and 30% of snuff users
- Lesion develops:
  - Habit duration
  - Brand of tobacco
  - Early onset of use
  - Total hours of daily use
  - Number of sites of placement
- It takes 1-5 years to form
- Regression with cessation



Smokeless Tobacco Keratosis

# Smokeless Tobacco Keratosis

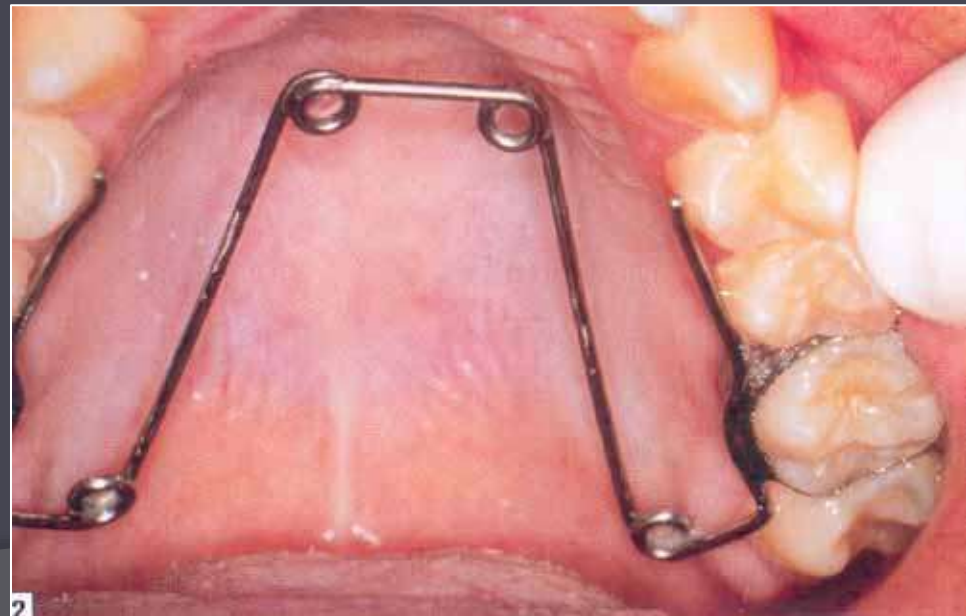


# ULCERATIONS

# Traumatic Ulcers



# Traumatic Ulcers



# Aphthous Stomatitis

# Minor aphthous ulcers





# Major aphthous ulcers



# Herpetiform aphthous ulcers



# SOFT TISSUE MASSES

# Mucocele



**Due to rupture of salivary duct  
Spillage of mucus into the fibrous tissue**



# Mucocele



# Pyogenic Granuloma

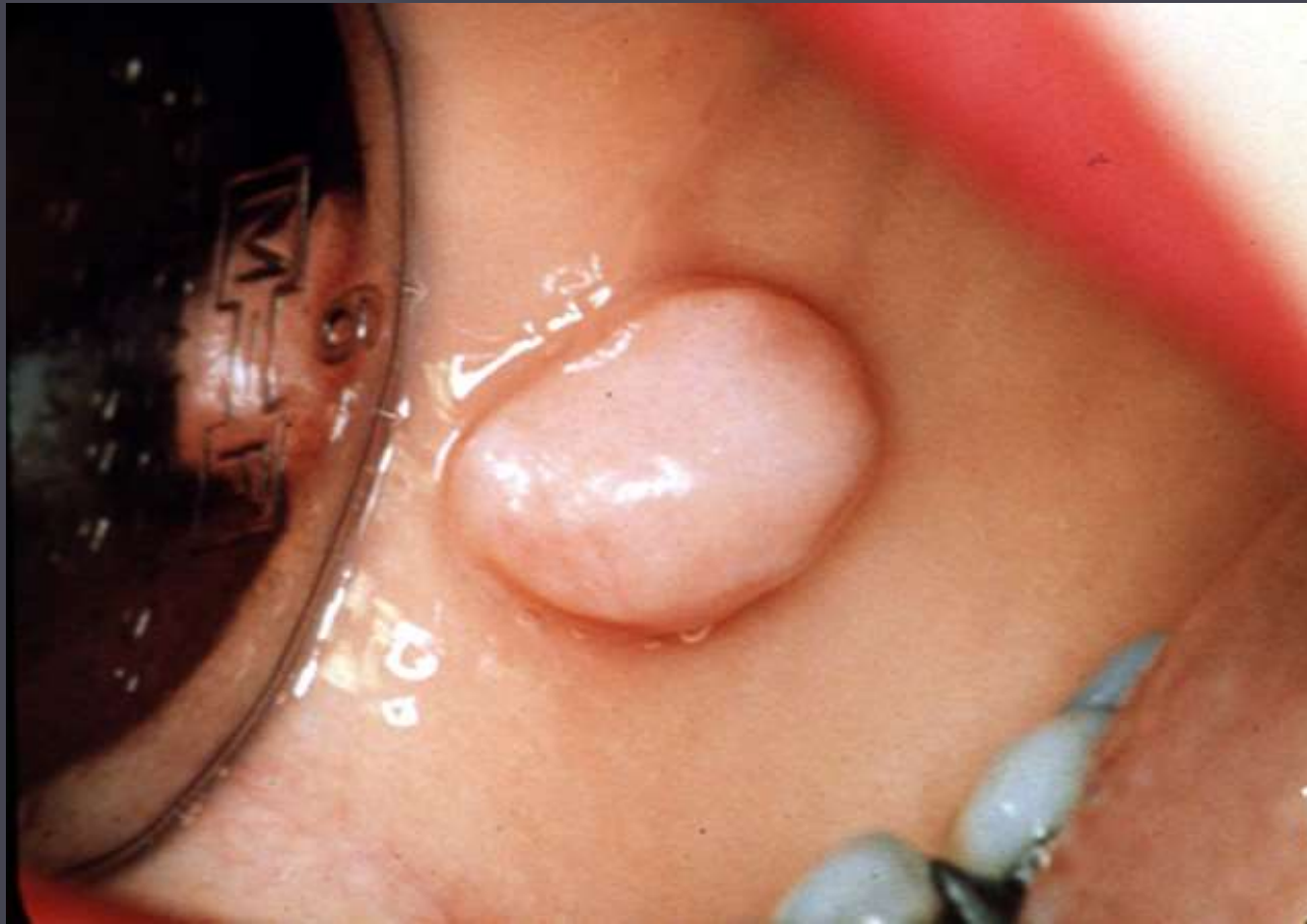


Courtesy Dr. Steven Maller





# Fibroma



# Fibroma



# Epulis Fissuratum





# Squamous papilloma



- Associated with HPV 6,11
- Extremely low virulence and infectivity rate
- 3% of all lesions submitted for biopsy

# Squamous papilloma

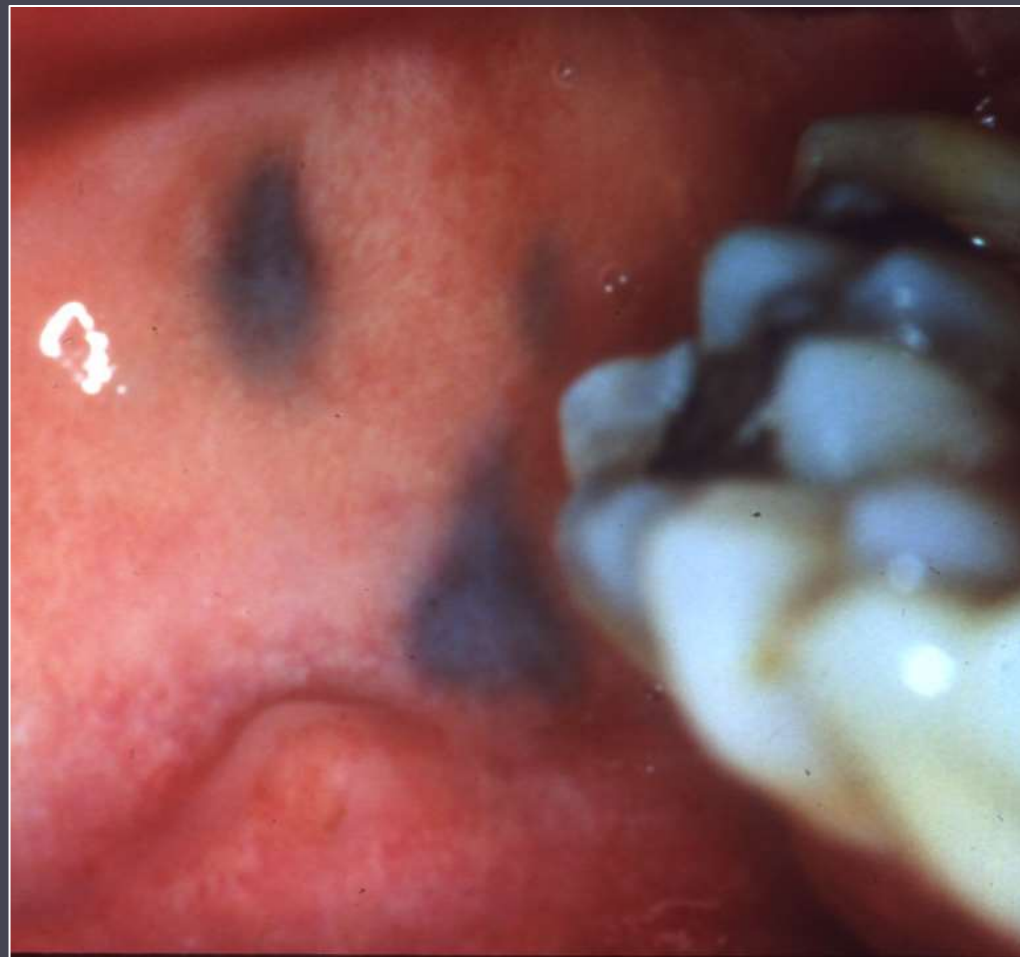




# PIGMENTED LESIONS



# Amalgam Tattoo





# Melanocytic Nevus



# Melanocytic nevi

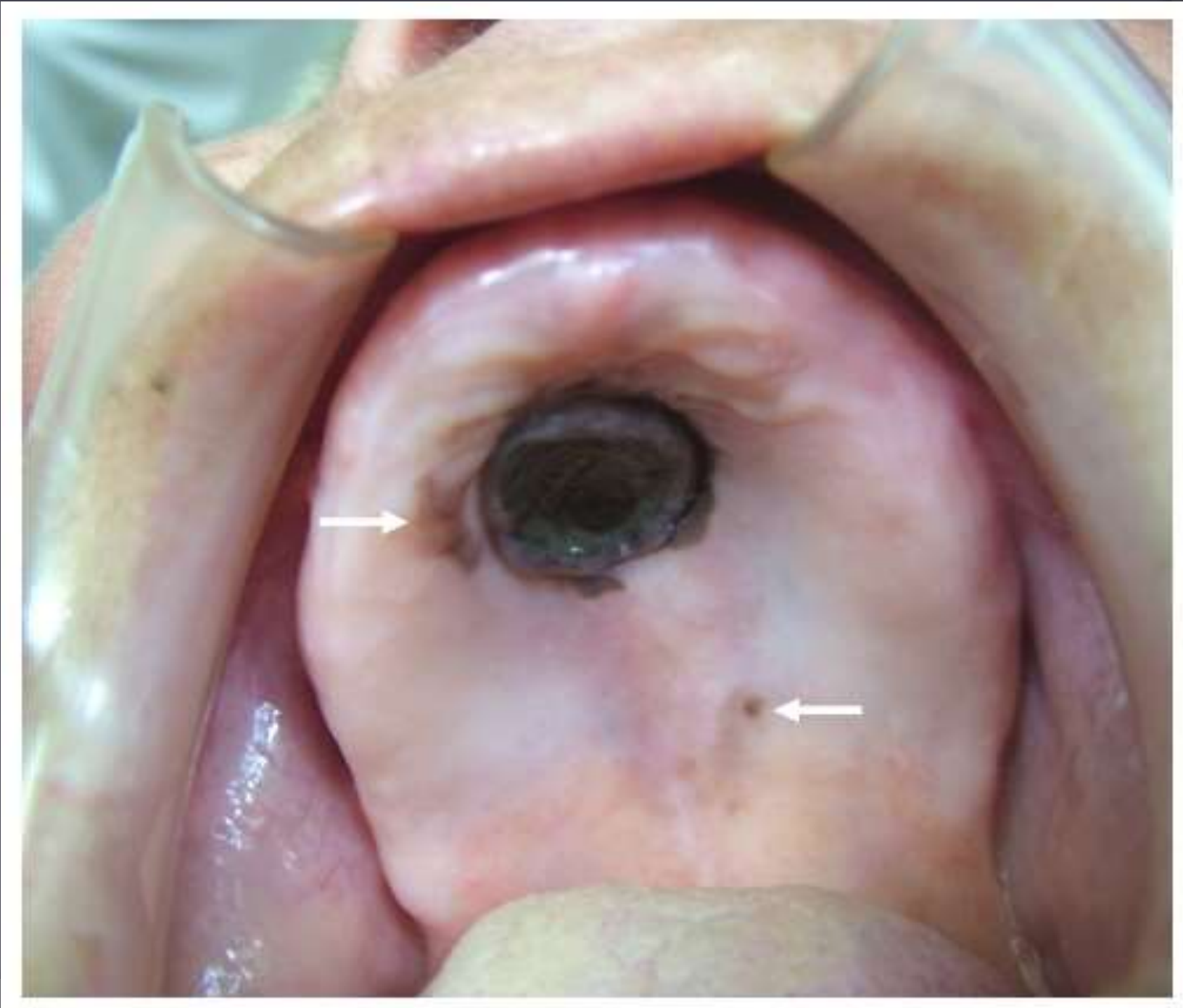


# Melanotic macule

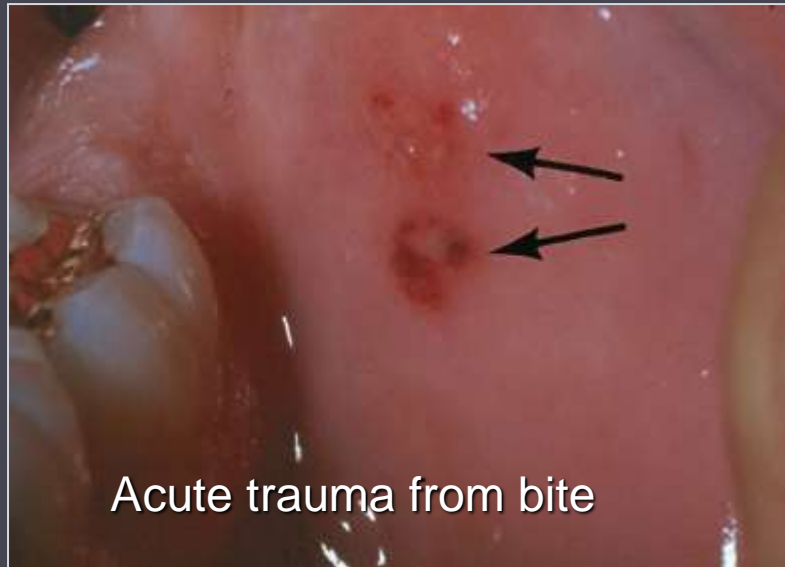


- Brown, rounded, uniformly colored and non-elevated
- If present for less than 1 year, especially in older persons, biopsy should be done to rule out melanoma
- Multiple macules are seen in Peutz-Jeghers 's syndrome and Addison's disease
- Large, less well-defined lesions might represent drug side effect or hormone dysfunction, even lung cancer (producing melanin stimulating hormone).





# Hematomas



Acute trauma from bite



Cough (viral) hematoma



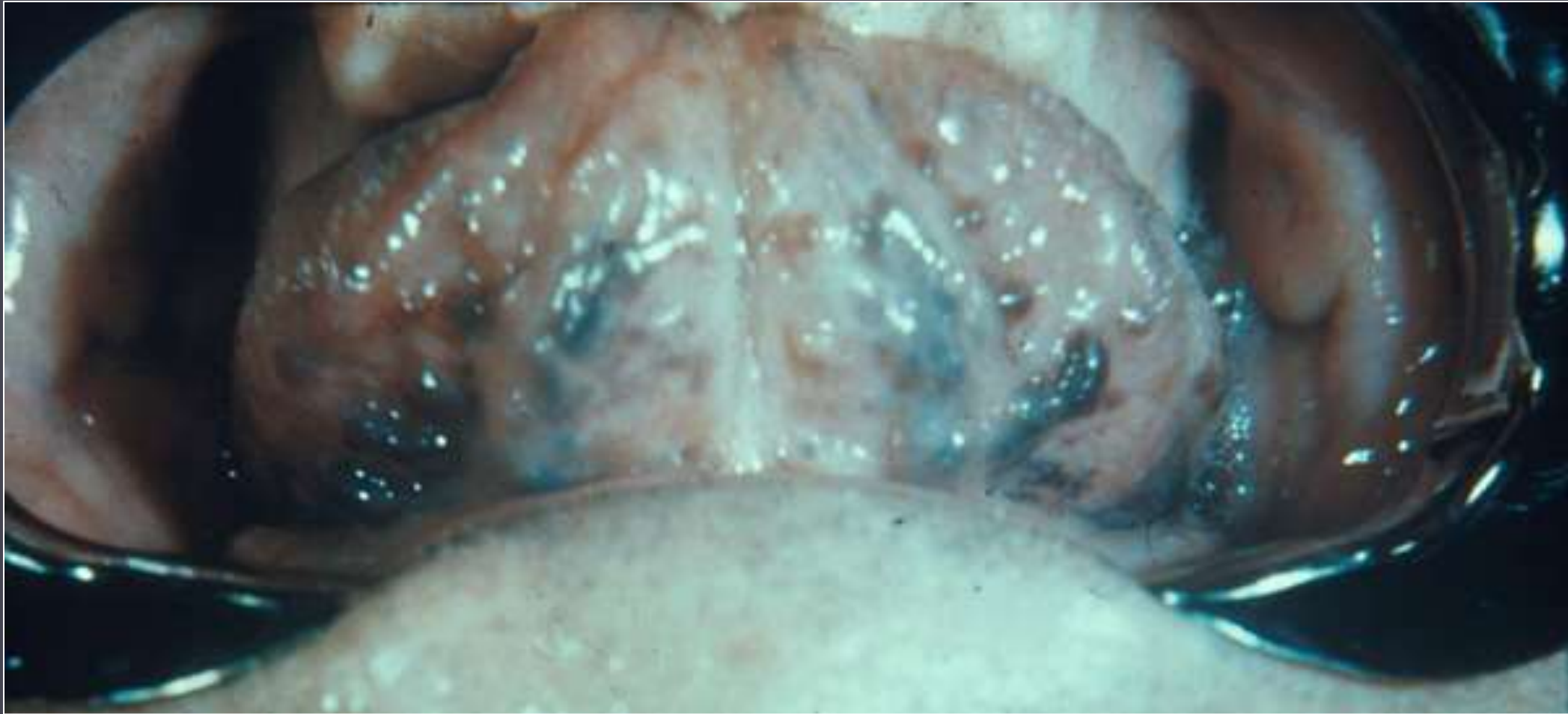
Post-anesthetic hematoma



Fellatio trauma/Ecchymosis



# Varicosities



# PRE-MALIGNANT LESIONS AND ORAL CANCER

# Premalignant lesions

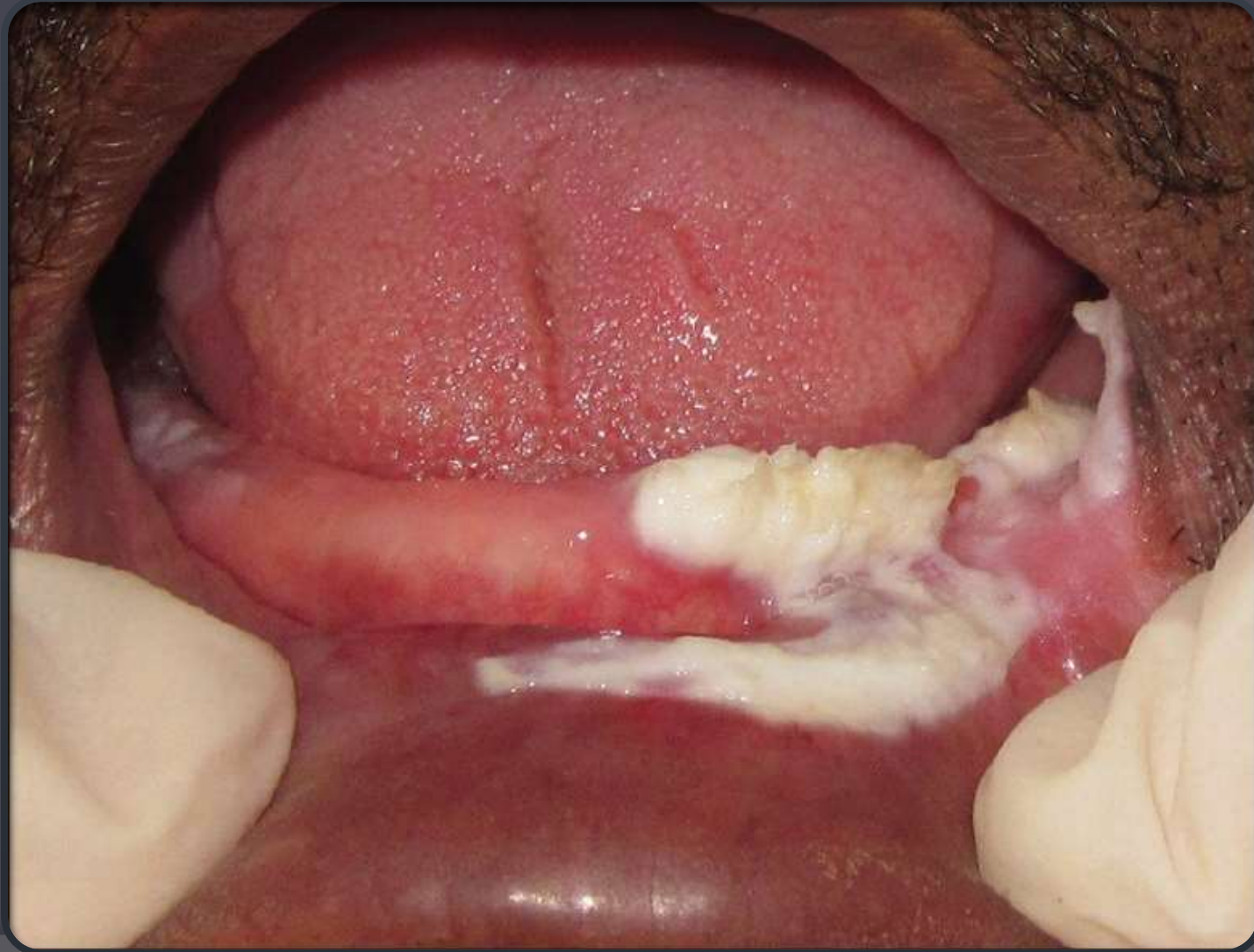
- ◉ Leukoplakia
- ◉ Erythroplakia
- ◉ Erythroleukoplakia

# leukoplakia

- White patch or plaque that cannot be rubbed off, cannot be characterized clinically or histologically as any other disease, and is not associated with any physical or chemical causative agent.
- In practice leukoplakia is used to imply malignant or premalignant change



# Verrucous leukoplakia





# Leukoplakia

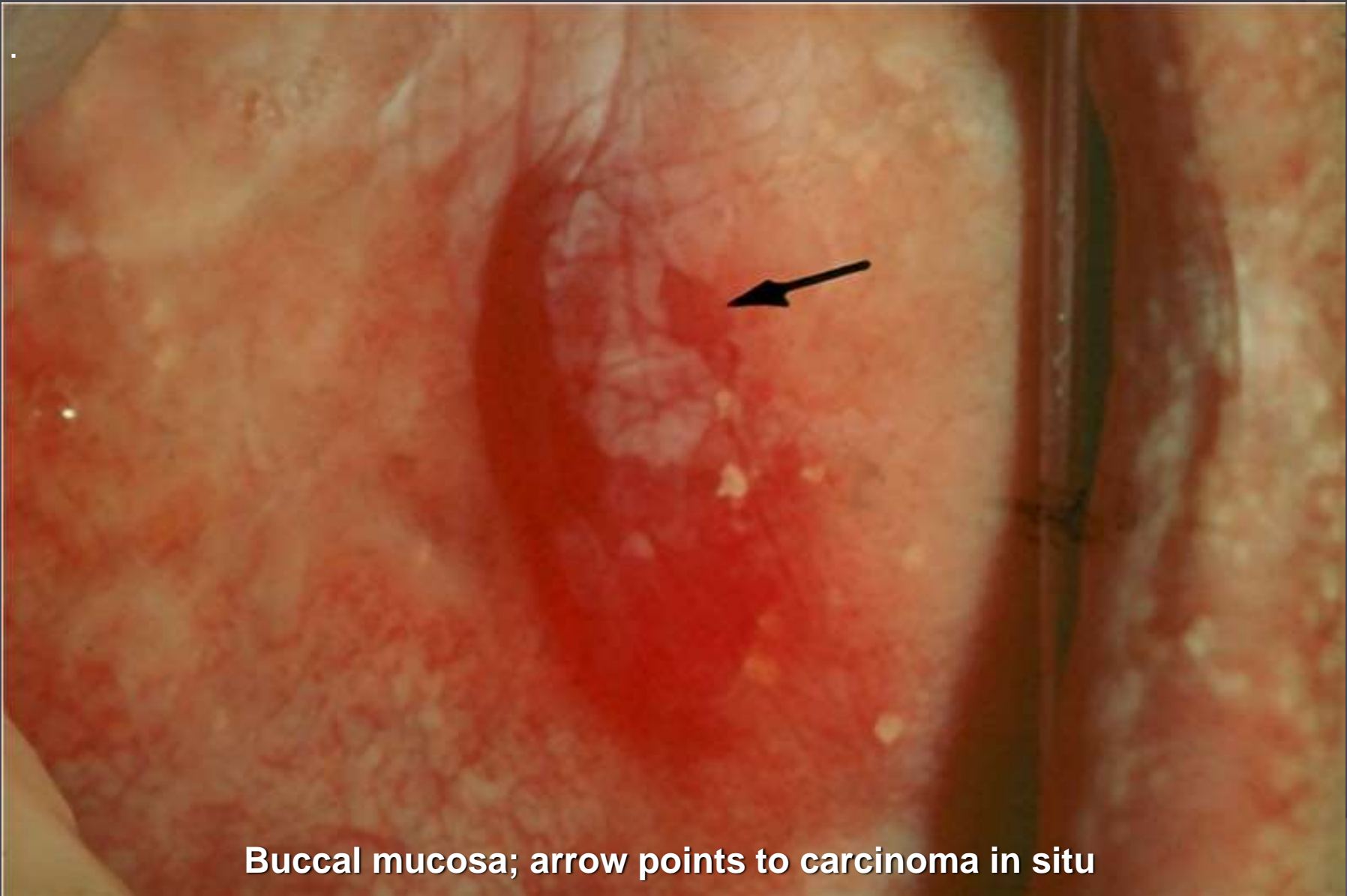




# Erythroplakia

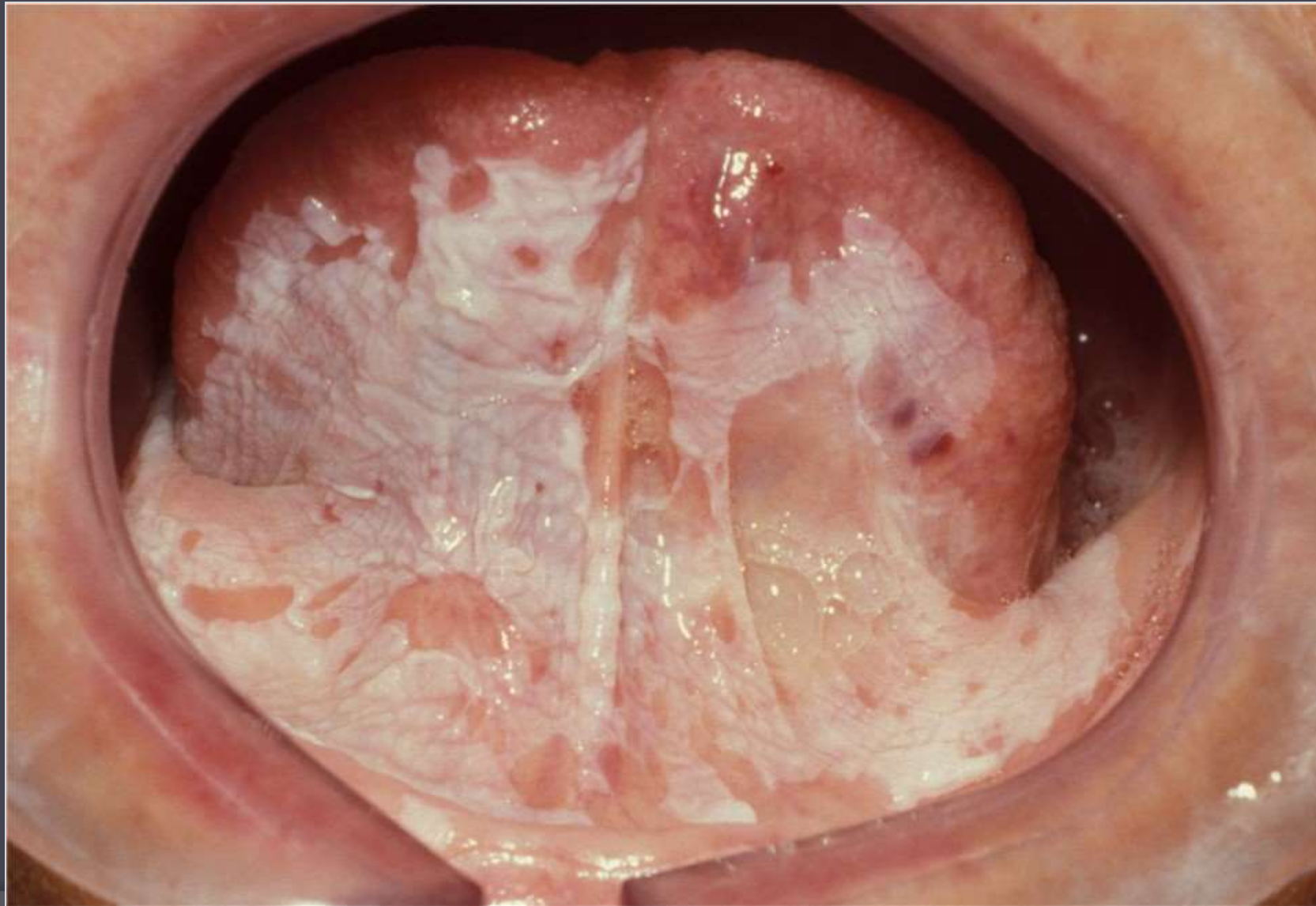


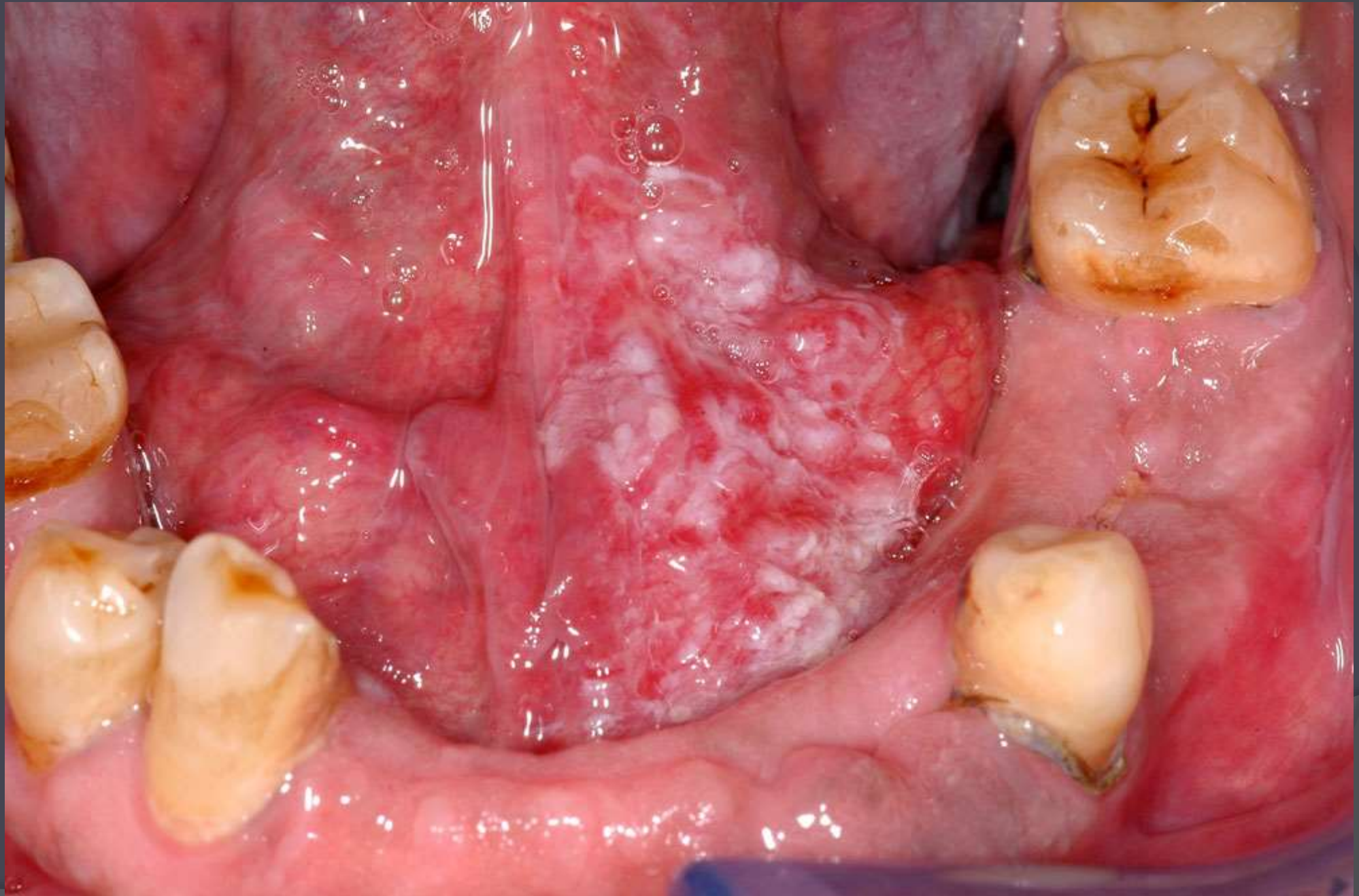


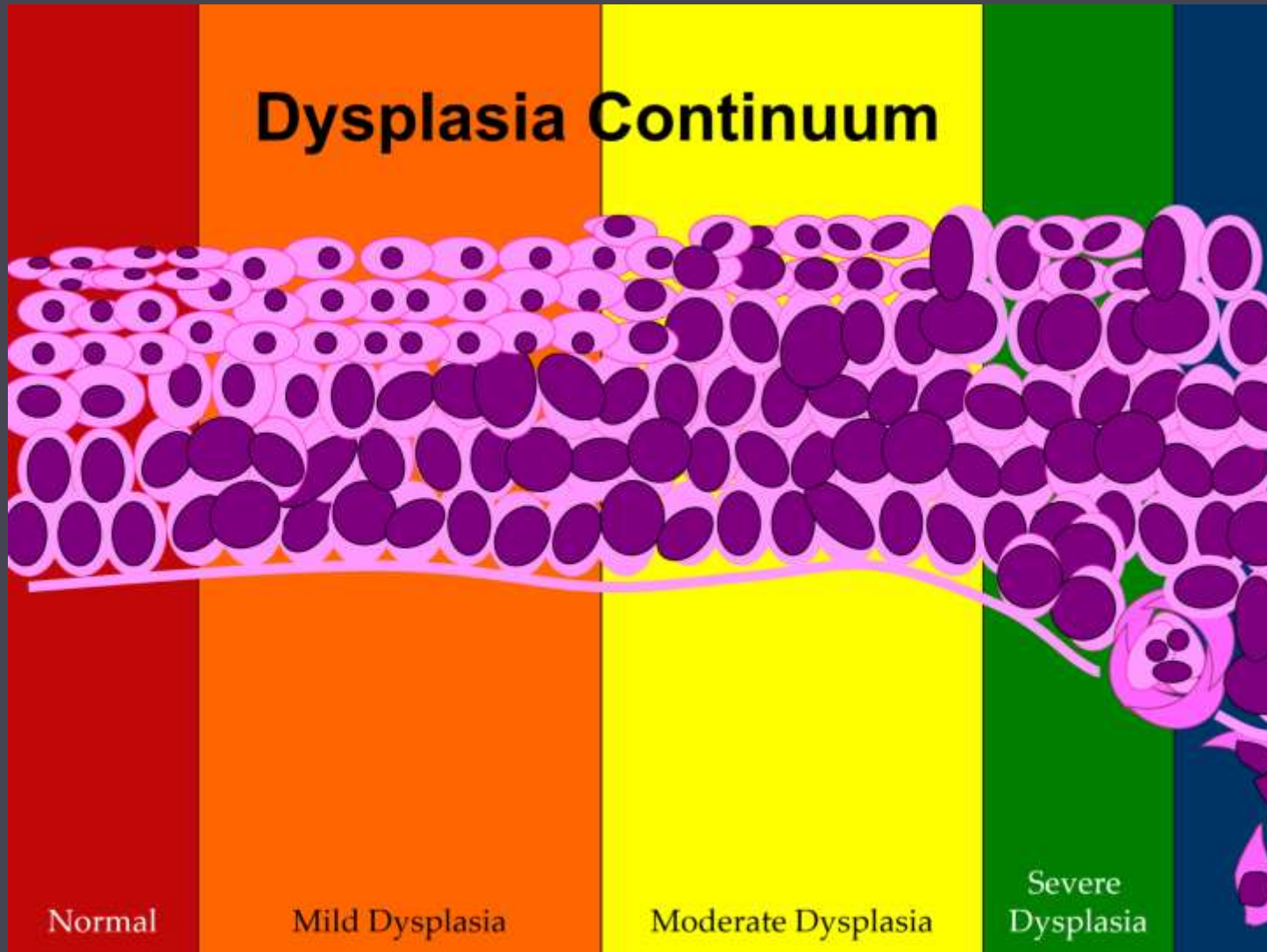


**Buccal mucosa; arrow points to carcinoma in situ**

# Erythroleukoplakia



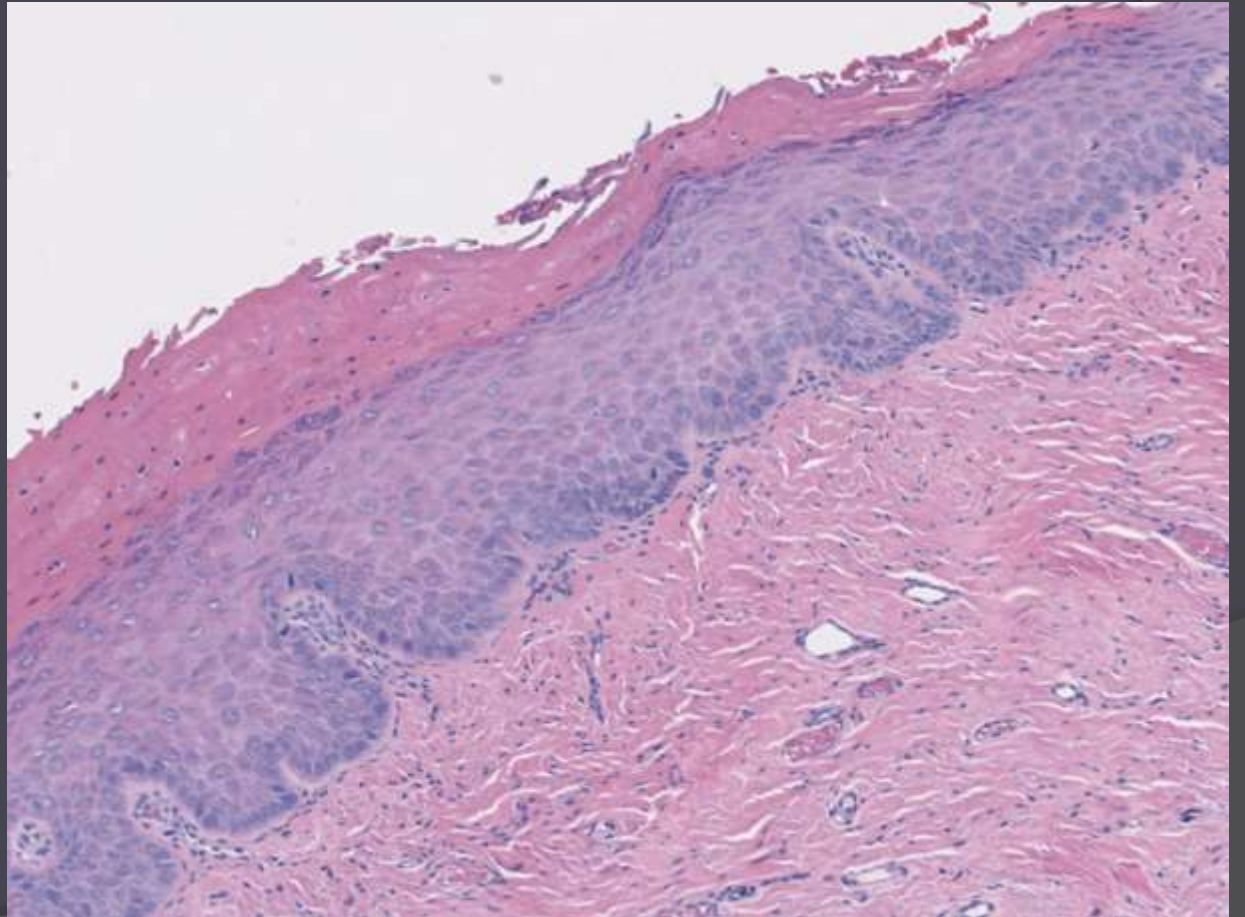




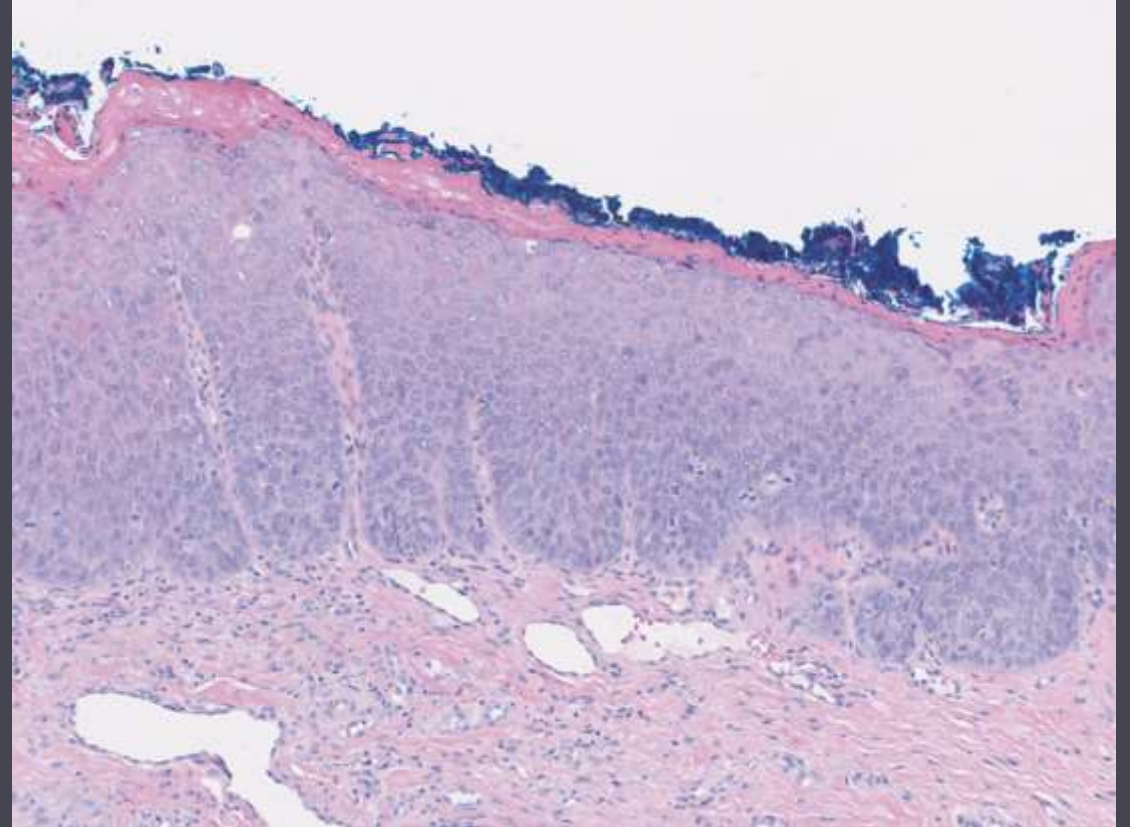
## Oral epithelial dysplasia

- ⊙ High risk sites:
  - Lateral border of tongue
  - Ventral tongue
  - Floor of mouth
  - Soft palate

# Mild Epithelial Dysplasia

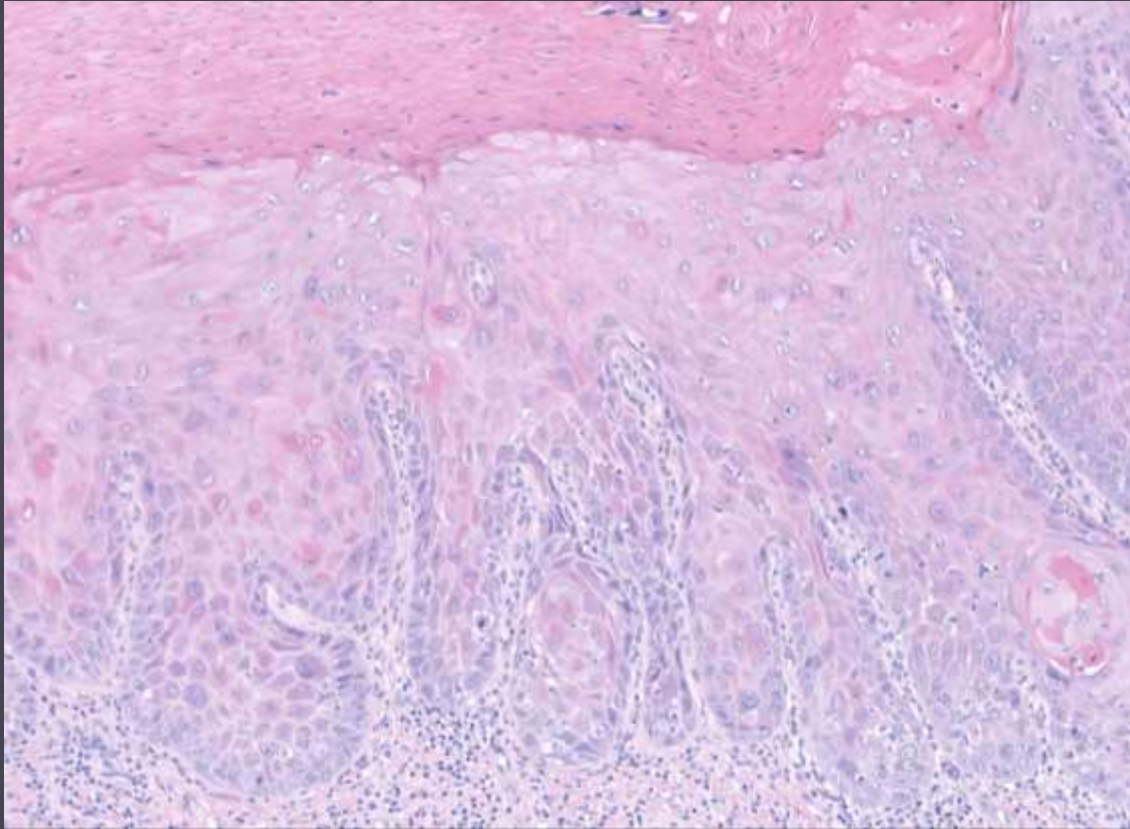


# Moderate epithelial Dysplasia





# Severe Dysplasia



# Oral Cancer

- 54,010 new cases in 2020 in oral cavity and oropharynx
- >80% will be Squamous cell carcinoma
- 63% of all new cases are diagnosed at a late stage
- Lip, gingiva and floor of mouth carcinomas have decreased
- Tongue carcinomas have increased
- **Oropharyngeal carcinoma has increased due to HPV**

American Cancer Society 2021 <https://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/about.html>

# Oral Cancer

## ⦿ Risk Factors

- Cigarette smoking
- Alcohol
- UV light
- HPV 16 and 18
- Fungi
- Nutritional factors



# HPV Positive vs HPV Negative

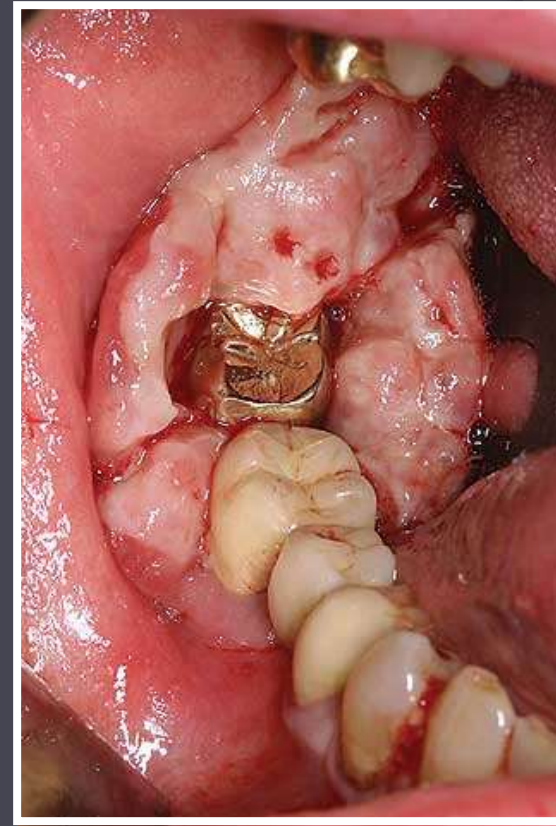
- Younger population
- Males 3:1
- High Socio-economic status, educated
- Sexual behavior, number of sexual partners
- Oropharynx: Base of tongue and tonsils
- Nasopharynx



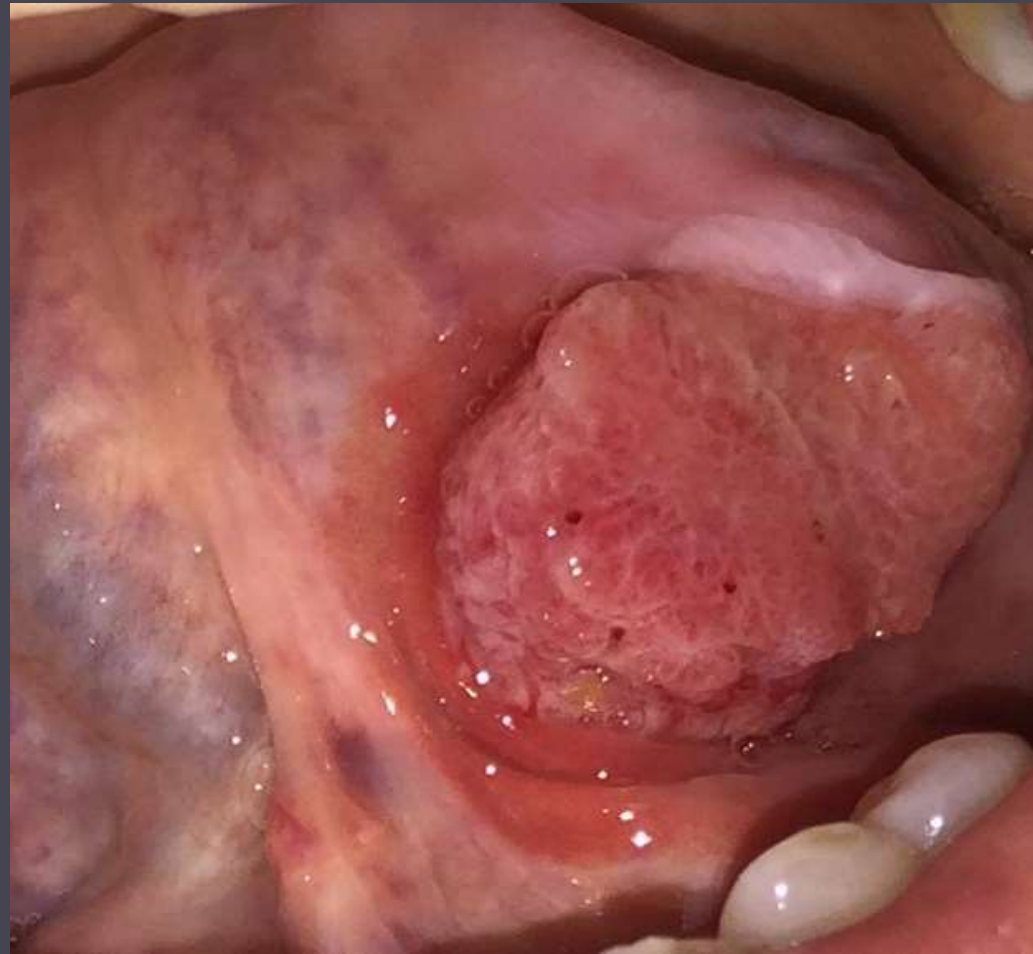
- Older population
- Males 3:1
- Low Socio-economic status
- Smoking and Alcohol main risk factors
- Oral Cavity Proper: lateral and ventral tongue, floor of mouth, gums



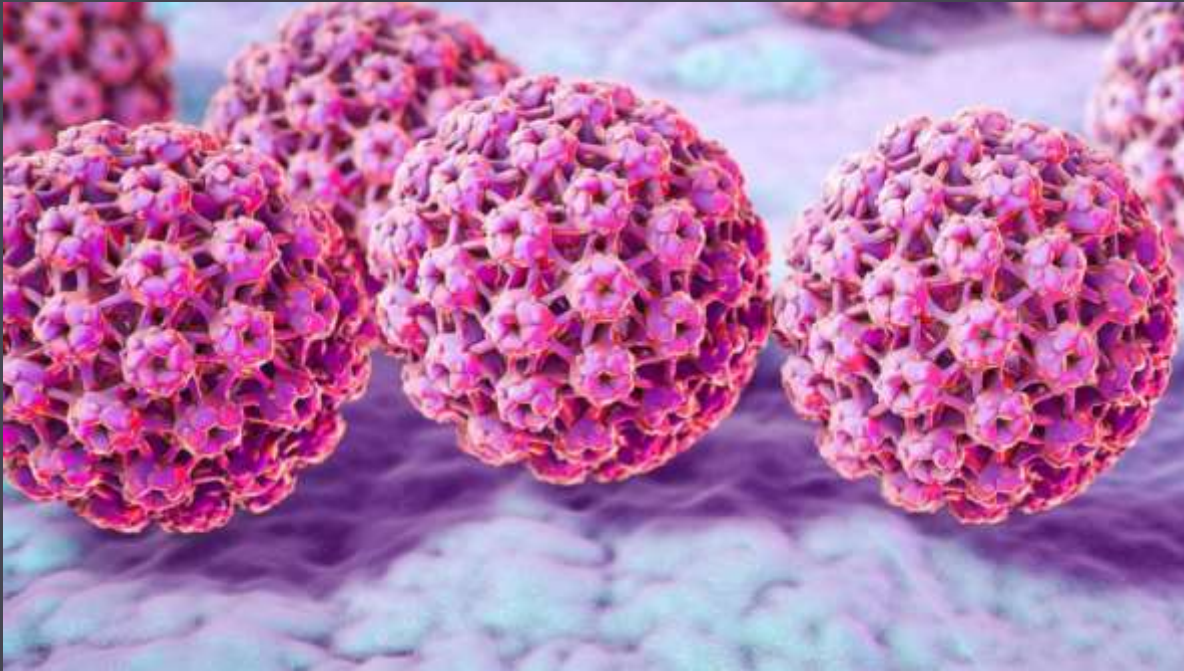
# Hard to miss classic oral cancer:



# Conventional Squamous Cell Carcinoma



# Why is it important to know if these cancers are HPV+?



Better prognosis

Lower risk of death compared to HPV- cancers

Better response to chemotherapy (82% vs 55%)

Better response to chemo-radio (85% vs 57%)

# Symptoms associated with HPV + HNSCC

- ⦿ persistent sore throat
- ⦿ difficulty swallowing
- ⦿ hoarseness
- ⦿ ear pain
- ⦿ enlarged neck lymph nodes









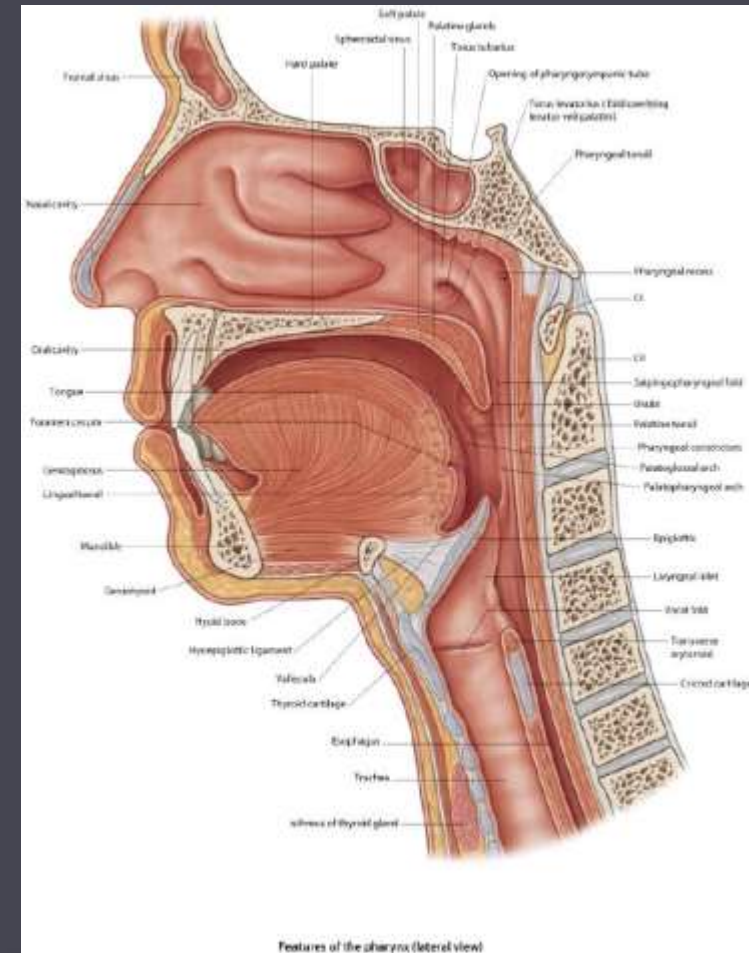




# HPV associated oral cancer

## Location

- Oropharynx 85%
  - Base of tongue
  - Tonsils
- Hypopharynx 1%
- Larynx 3%
- Nasopharynx ?
- Oral Cavity 1-2%



# What to do?

Good observation and clinical exam

Establish differential diagnosis

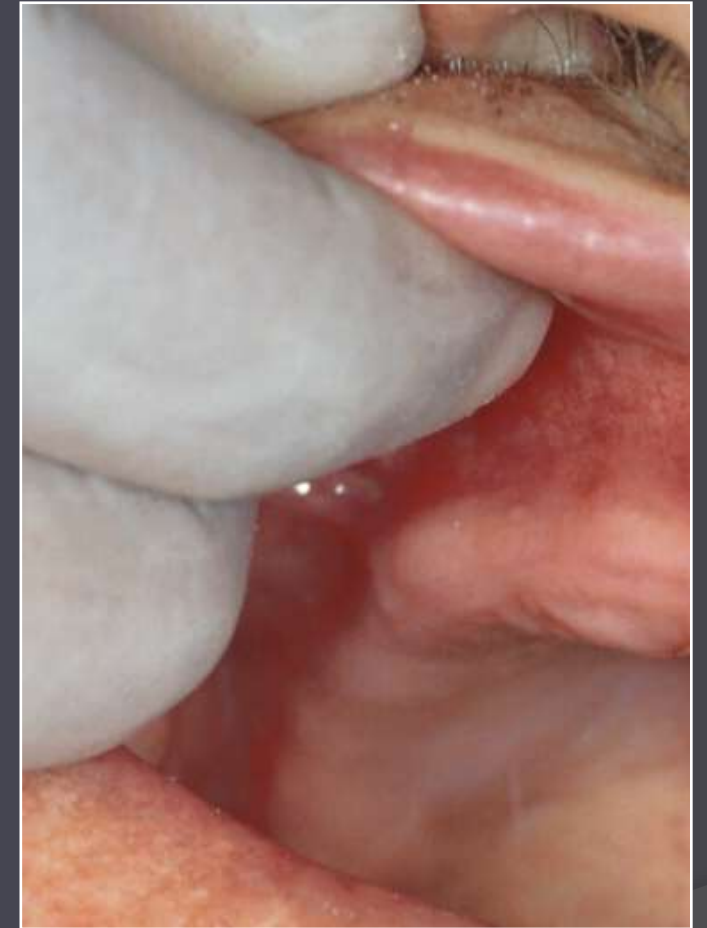
Need for tissue biopsy

Referral to oral surgeon

Talk to patient about his lesion

# Comprehensive Oral Exam for Cancer screening

- Lips and cheeks
- Lateral border of the tongue
- Base of tongue
- Floor of the mouth
- Tonsillar region & soft palate
- Oropharynx
- Neck
- TMJ



**Bidigital**

- Tongue & floor of mouth



*Examine the lateral borders of the tongue*



*Examine the ventral surface of the tongue and the floor of the mouth*



# Examine the oropharynx




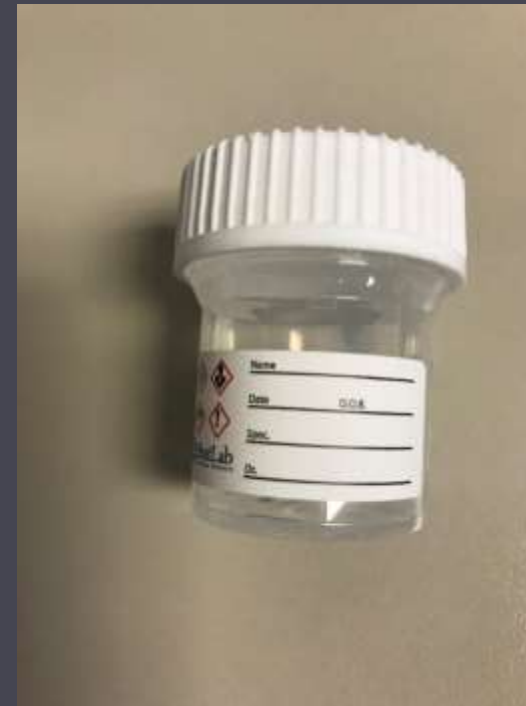
# SCALPEL BIOPSY

- Gold standard in establishing a diagnosis
- For confirmation of mucosal diseases
- To exclude malignancy
- Sampling
- Incisional or excisional



# Biopsy Information

|   |  |  |                         |   |
|---|--|--|-------------------------|---|
| <b>CLINICIAN INFORMATION (REQUIRED)</b>   |  |  <p><b>Oral and Maxillofacial Pathology</b></p> <p>7703 Floyd Curl Drive, MSC 7750<br/>San Antonio, TX 78229-3900</p> <p><b>Anne C. Jones, D.D.S.</b> Phone: 210-567-6599<br/><b>Julliana Robledo, D.D.S.</b> FAX: 210-450-2243</p> | <b>LAB USE ONLY:</b>    |   |
| Clinician Name  |  |  | Accession #:            |   |
| Clinician Address   |  |  | Date:                   |   |
| City/State/Zip  | NPI #  |  |                         |   |
| Clinician Phone   | Clinician FAX  |  |                         |   |
| Clinician E-Mail  |  |  |                         |   |
| <b>PATIENT INFORMATION (REQUIRED)</b>   |  |  |                         |   |
| Patient Name (Last, First, Middle)  |  | Patient SS#  | DOB (M/D/Y)             | Race  |
| Patient Address   |  | City   | State                   | Zip   |
| Collection Date   | Collection Time  | Patient Phone  | Gender                  | <input type="radio"/> M <input type="radio"/> F |
| <b>MEDICAL INSURANCE INFORMATION (REQUIRED) Attach copy of the Medical Insurance Card: Front &amp; Back</b>           |  |  |                         |   |
| Medical Insurance Company Name  |  | Medical Insurance Company Address  |                         |   |
| Certificate Policy #  | Authorization#   | City   | State                   | Zip   |
| Group #   | Insured's Name (Responsible party if patient under 18:*) |  | Insured's DOB (M/D/Y) * |   |
| <b>MEDICARE/MEDICAID INSURANCE INFORMATION (REQUIRED) Attach copy of the Medical Insurance Card: Front &amp; Back</b> |  |  |                         |   |
| Medicare #  |  |  |                         |   |
| Medicaid #  | Insured's Name (Responsible party if patient under 18:*) |  | Insured's DOB (M/D/Y) * |   |



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# To conclude

- ◉ Keep your eyes open for oral lesions
- ◉ Inform your patient
- ◉ Dentists are responsible for the detection of oral cancer
- ◉ A systematic oral examination is the best screening tool for the early detection of cancer
- ◉ When in doubt, call your friendly oral pathologist

# What is your differential diagnosis?

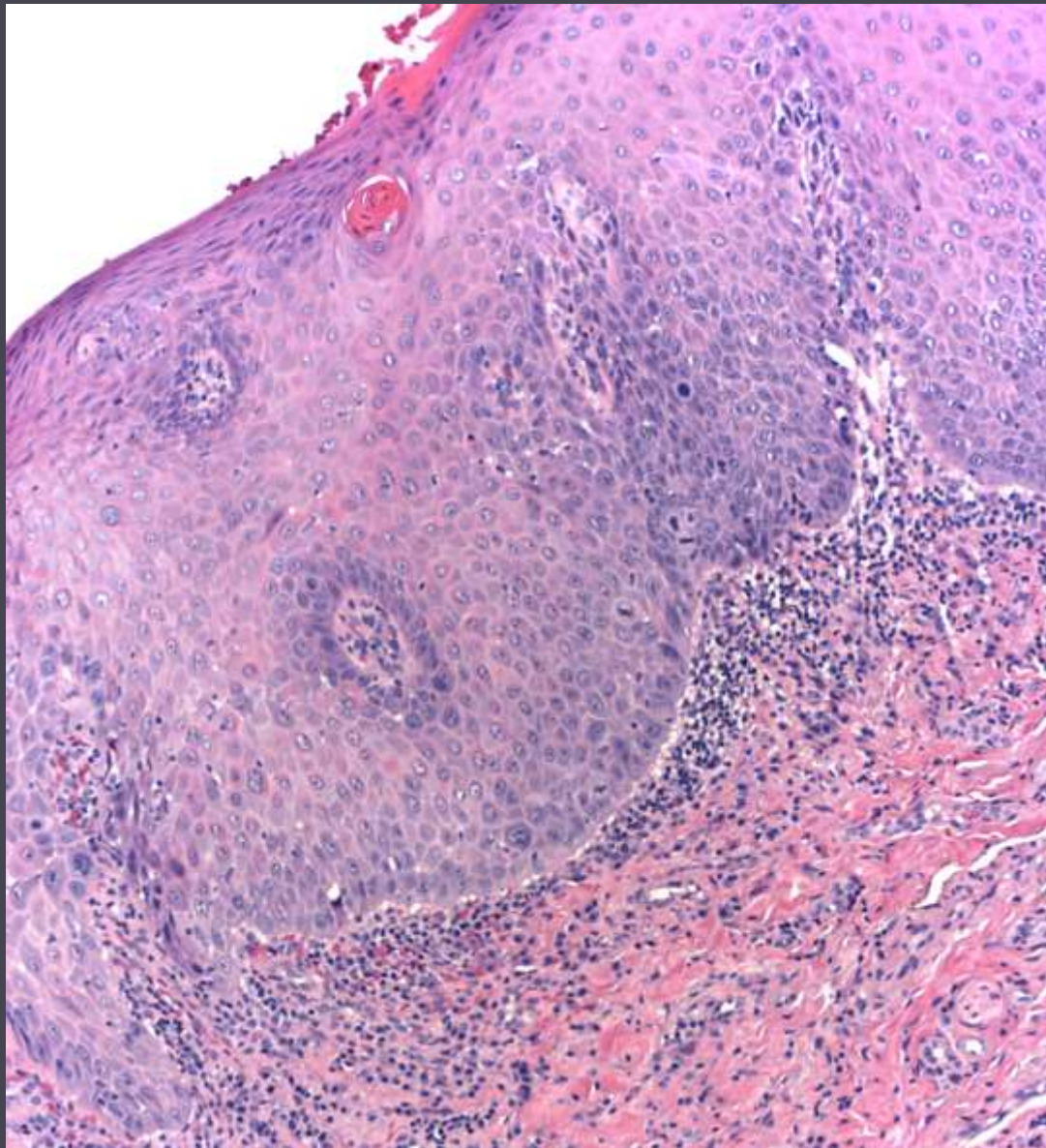


- 28-year-old male with lesion of the anterior mandibular gingiva.

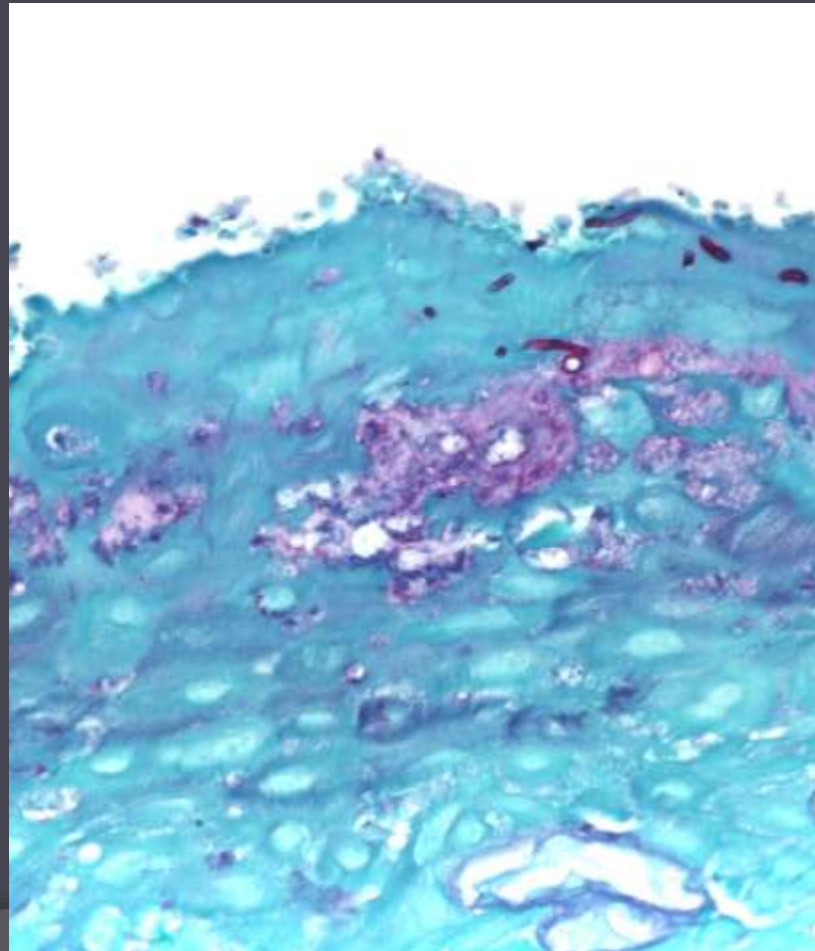
78-year-old male patient with dementia, who presents to the oral surgeon with this lesion on the lateral border of the tongue.



- Is this concerning?
  - Location
  - Aspect
  - Duration
- What do you need to do?



Mild to Moderate Dysplasia



Candidiasis

55-year-old male with pigmented lesion of the FOM. Present for years. Patient is unsure if it has changed.

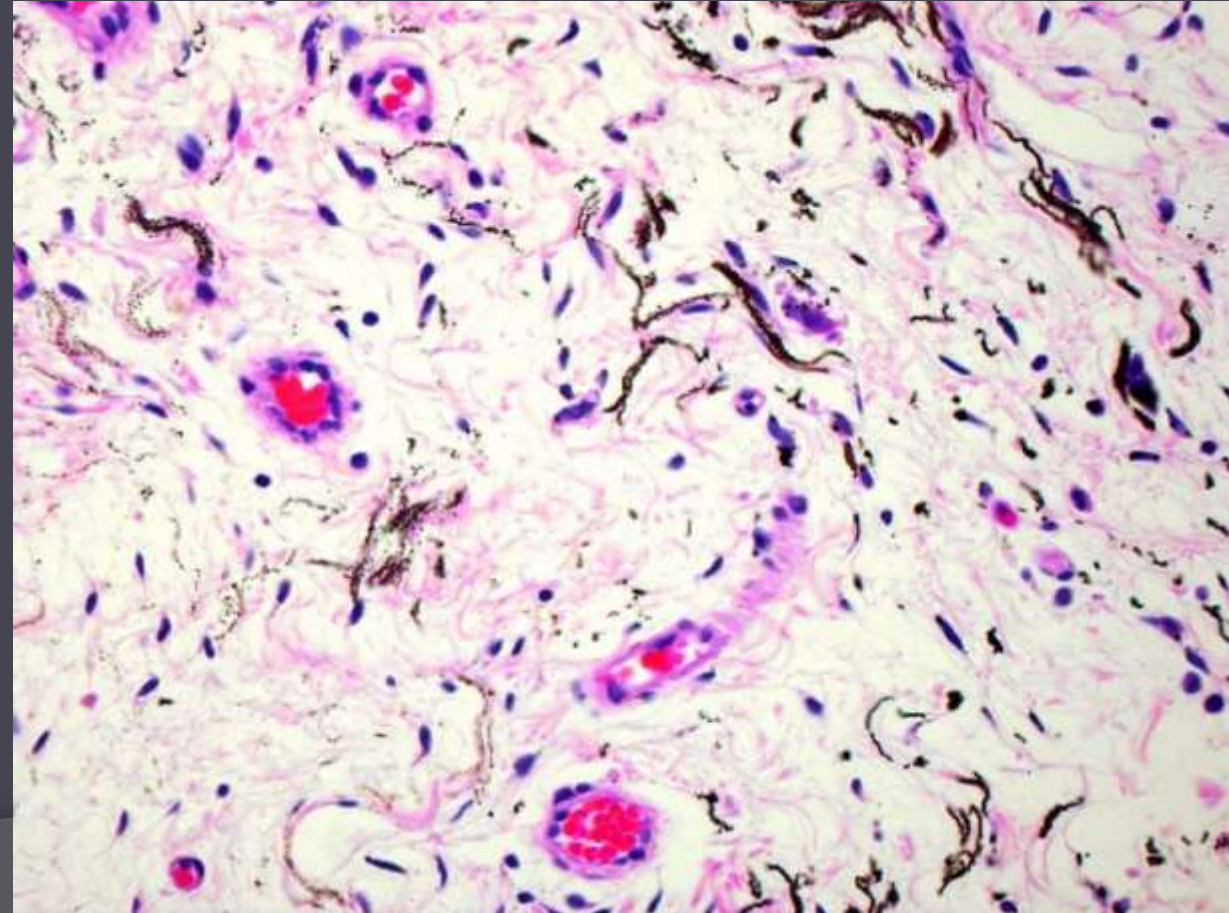
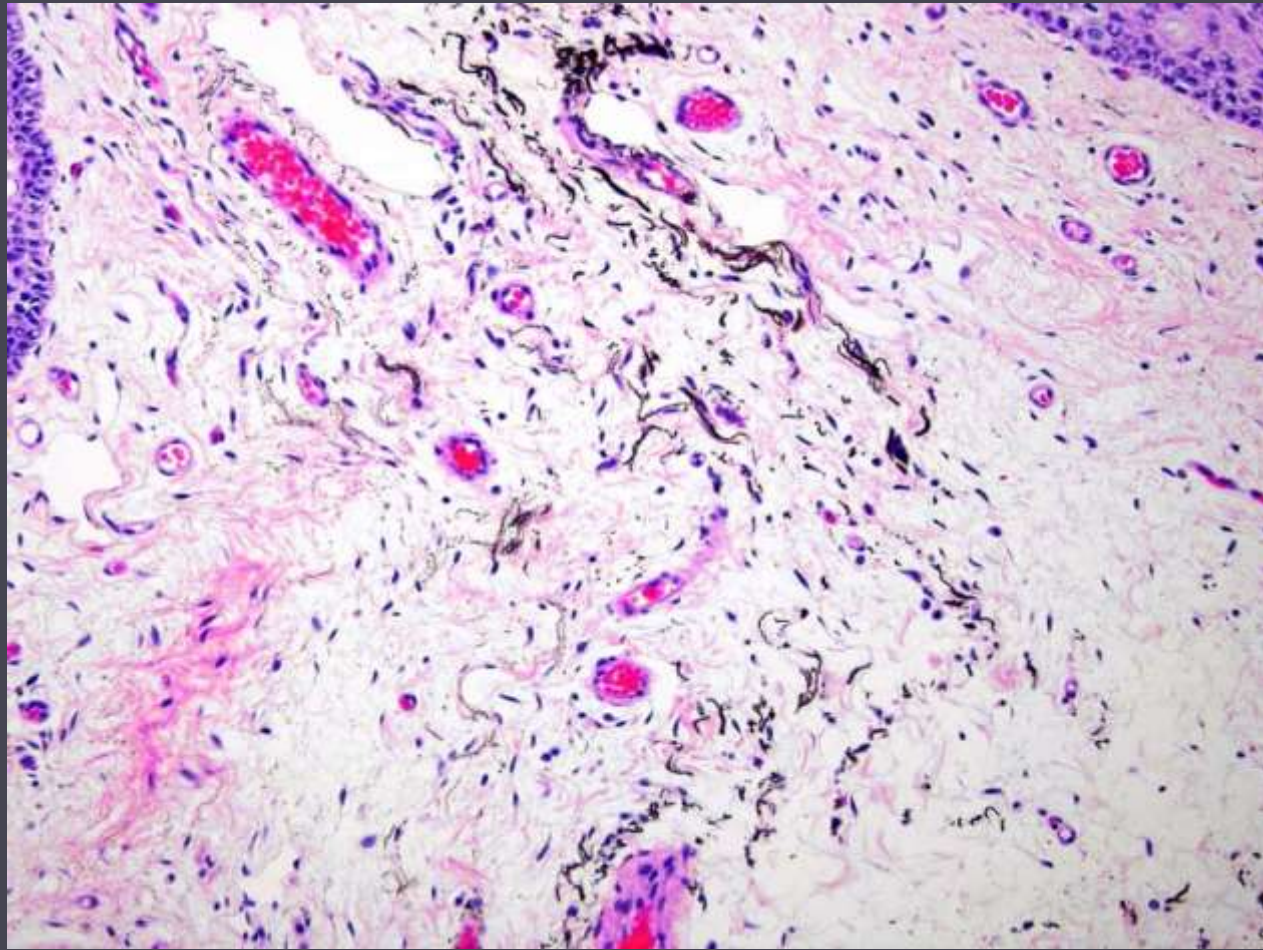
- Describe the lesion.
- What should you do?





Diagnosis:

Amalgam Tattoo



Are you concerned  
about this lesion?

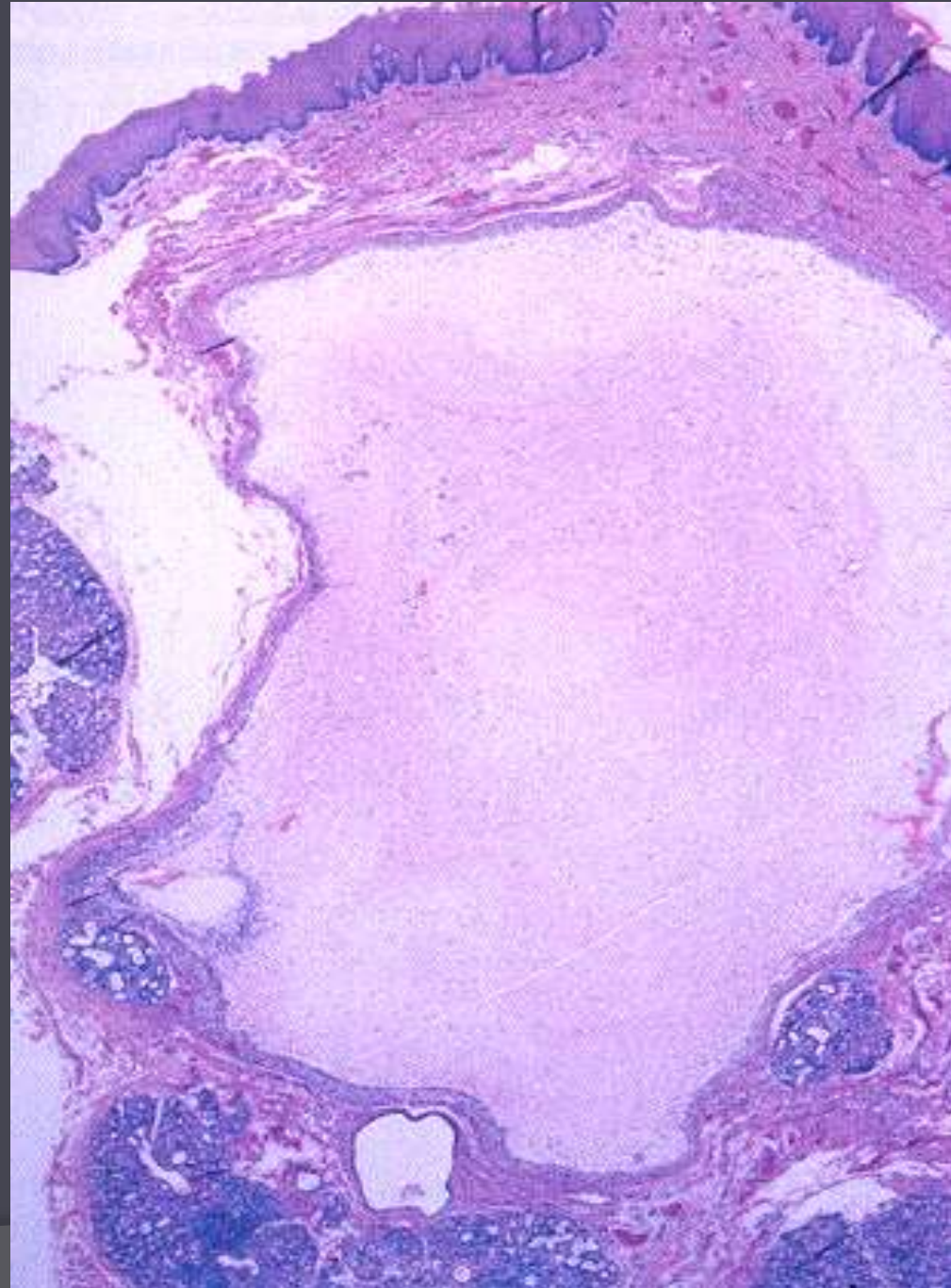


Female patient with dome shaped mass of the lower lip. She says it's asymptomatic, but sometimes bites it. She's had it for about one month.



- What do you think this feels like when palpated?
- Will it go away by itself?
- What should you do?

# Mucocele



# Questions?

