Oral Health Care for People with HIV at Health Centers

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Toolkit

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Comprehensive Oral Health Care for People with HIV

Tyler Sanslow, DMD

TODAY'S DISCUSSION

- Learning Objectives
- Comprehensive HIV Care
- Oral Health & Systemic Health
- Oral Manifestations of HIV
- Oral Health Common Findings
- Application
- References & Resources

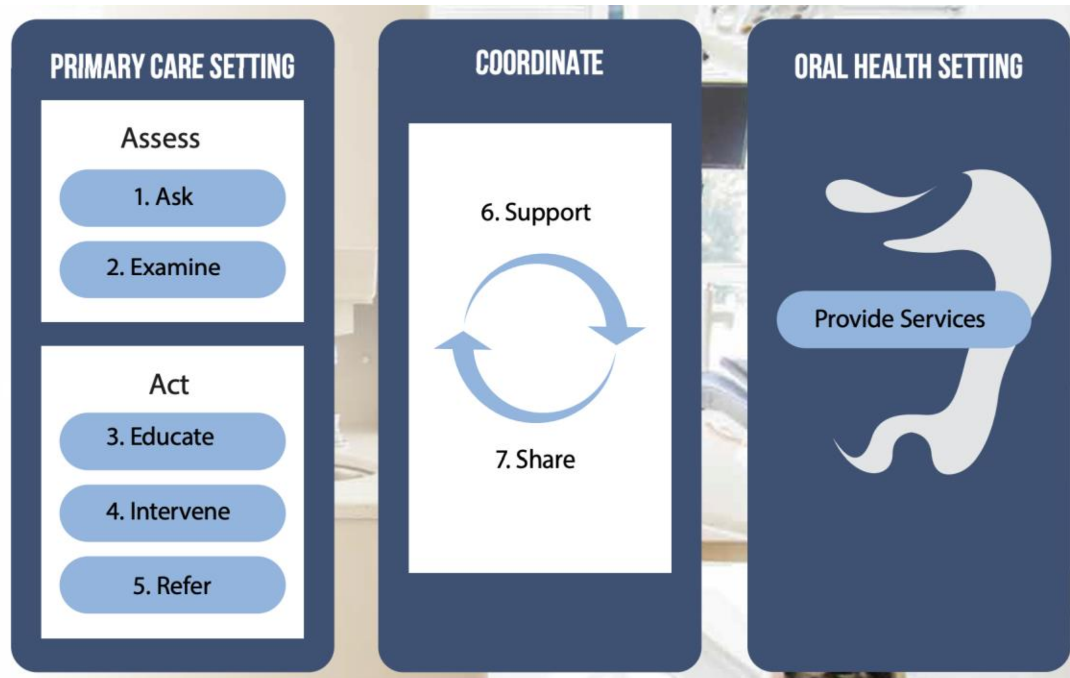
Learning Objectives

1. Identify the unique oral health needs of people with HIV.
2. Explore effective, comprehensive oral health care strategies for people with HIV.
3. Discuss the role of interdisciplinary care in managing oral health of people with HIV.
4. Address barriers to care and enhance access to oral health services for people with HIV.

Integration of Oral Health & Primary Care

- HIV populations lack access to care.
- HIV impacts overall health and quality of life, ability to work, and community engagement.
- Primary care and oral health care are imperative for people with HIV (PWH) because of the risk for oral health problems, (e.g. caries, oral lesions, periodontal disease), which may be exacerbated by HIV treatments.
- Integration of Oral Health & Primary Care Technical Assistance Toolkit

Components of Oral Health & Primary Care Integration



1. **Ask:** Assessment of risk of oral health disease.
2. **Examine**: Oral health examination to identify active disease.
3. **Educate**: Tailored education to improve oral health care literacy.
4. **Intervene**: Primary care interventions to reduce and treat disease.
5. **Refer**: Referral to oral health care provider for more extensive care.
6. **Support**: Patient navigation to improve treatment adherence.
7. **Share:** Data sharing between primary and oral health care settings.

Models for Integration of Care

1. Co-located models   Fenway Health
2. Coordinated but not co-located models
3. Referral-based models

Ask: Assessment of Risk of Oral Health Disease

Primary care can ask about oral health care service use, habits, and conditions:

- Dentist name & contact info.
- Date of last dental visit & cleaning.
- On average, how many days per week do you brush your teeth twice daily for at least two minutes, using fluoride toothpaste, and floss at least once daily?
- On average, how many times daily do you consume sugar (sugary snacks or sugary drinks) between meals?
- Do you drink fluoridated water?
- Has anyone in your immediate family had tooth decay or lost a tooth from decay in the past year?
- Do you commonly experience dry mouth?
- Do you experience tooth pain or bleeding gums when you eat or brush your teeth?

Assessment by Primary Care

Consider patient's medical and social history

- Medication list.
- Smoking and substance use history.
- Other medical issues that may increase risk of oral disease.

Education & Resources for PCPs

- Invite dentists for hands-on demonstration examining teeth & oral cavity
- Integration of Oral Health and Primary Care Techincal Assistance Tool Kit
- Implementing Oral Health Care into HIV Primary Care Settings Training Curriculum
- HIVdent repository for oral health & HIV info
- Summary of Primary Care Clinical Interventions
- Oral Health Fact Sheets
- Smiles for Life Online Training Courses

Exam, Educate, Intervene & Refer

Hard & Soft Tissue Exams

- Be comfortable examining the head, neck, and oral cavity – routine & emergency.
- See if patients wear their dentures and if not, why?

Fluoride Application

- Physicians can apply fluoride varnish to patients >21.
- Training required:
  - Fluoride Varnish Training for Health-Care Professionals
  - Fluoride Varnish in the Non-Dental Setting

Best Practices

- Streamline EHR documentation.
- Equip PCPs with lights and mirrors, e.g. headlamps, mouth mirror.
- Oral health education materials in clinic.
- Refer to dentist *consider care model.*
- Regular/continuous oral health training for primary care.

Coordinate Care

- **Support & Share.**
- Integrate care by supporting patient in appointment adherence and exchanging information between settings.

Coordinate - Support

TOPIC AREA	RESPONSIBILITIES
Referral coordination and management	▸ Matching clients to oral health providers ▸ Scheduling appointments ▸ Sending appointment reminders
Supporting appointment adherence	▸ Financial/insurance enrollment assistance ▸ Arranging transportation to oral health visits ▸ Linking to other support services (e.g., housing, nutritional services, substance use services) ▸ Helping clients overcome fear and anxiety
Appointment follow-up	▸ Following up on missed appointments ▸ Facilitating data sharing between oral health and primary care

Barriers to Oral Health Access

- Lack of dental coverage.
- Limited oral health literacy.
- Lack of transportation.
- Dental fear and anxiety.
- Lack of financial resources and dental coverage.
- HIV stigma and fear of disclosure.
- Mistrust of dentists.
- Mental health.
- Prior avoidance of oral health care.

Coordinate - Support

- Identify an oral health point of contact.
- Build your referral process into your EHR.
- Use multiple reminder methods:
  - e.g., automated calls, personal calls, texts, social media, e-mails, postcards
- Provide transportation support.
- Stress the importance of visit adherence.
- Track adherence of oral health and medical visits in EHR.

Share: What Providers Need to Know

What do dentists need from PCPs?

- Patient health information, medical, and dental history.
- Up-to-date labs.
- Medications.
- Barriers to care (e.g., fear, transportation).
- Medical clearance for dental treatment.

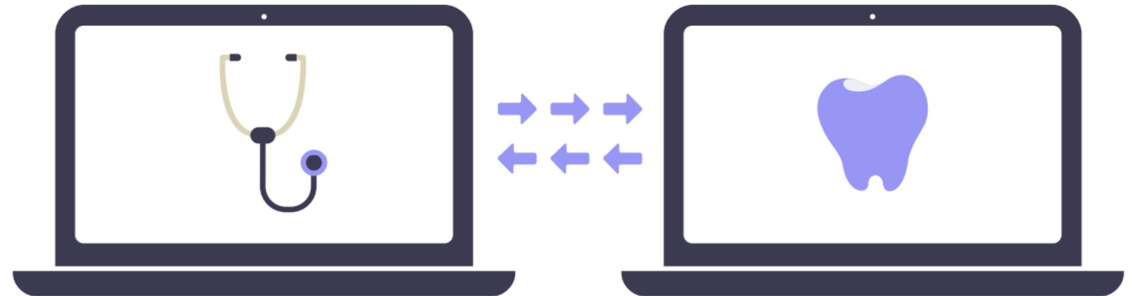
What do PCPs need from dentists?

- Patient's care plan.
- Medications.
- Appointment adherence and follow-up information.
- Risk factors that may impact primary health (e.g. dry mouth, gingivitis, etc.).

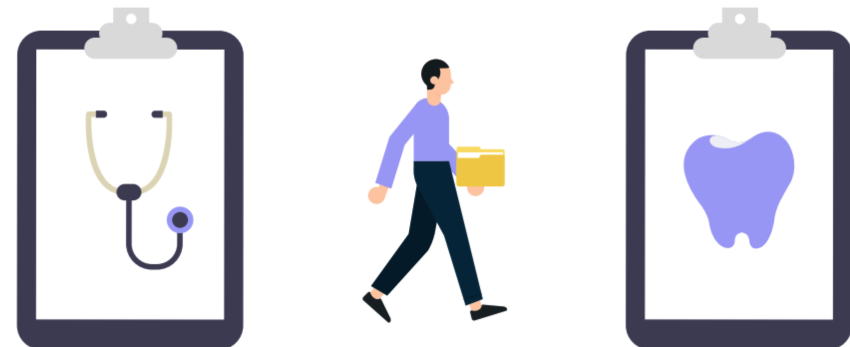
Share Strategies

1. Single System

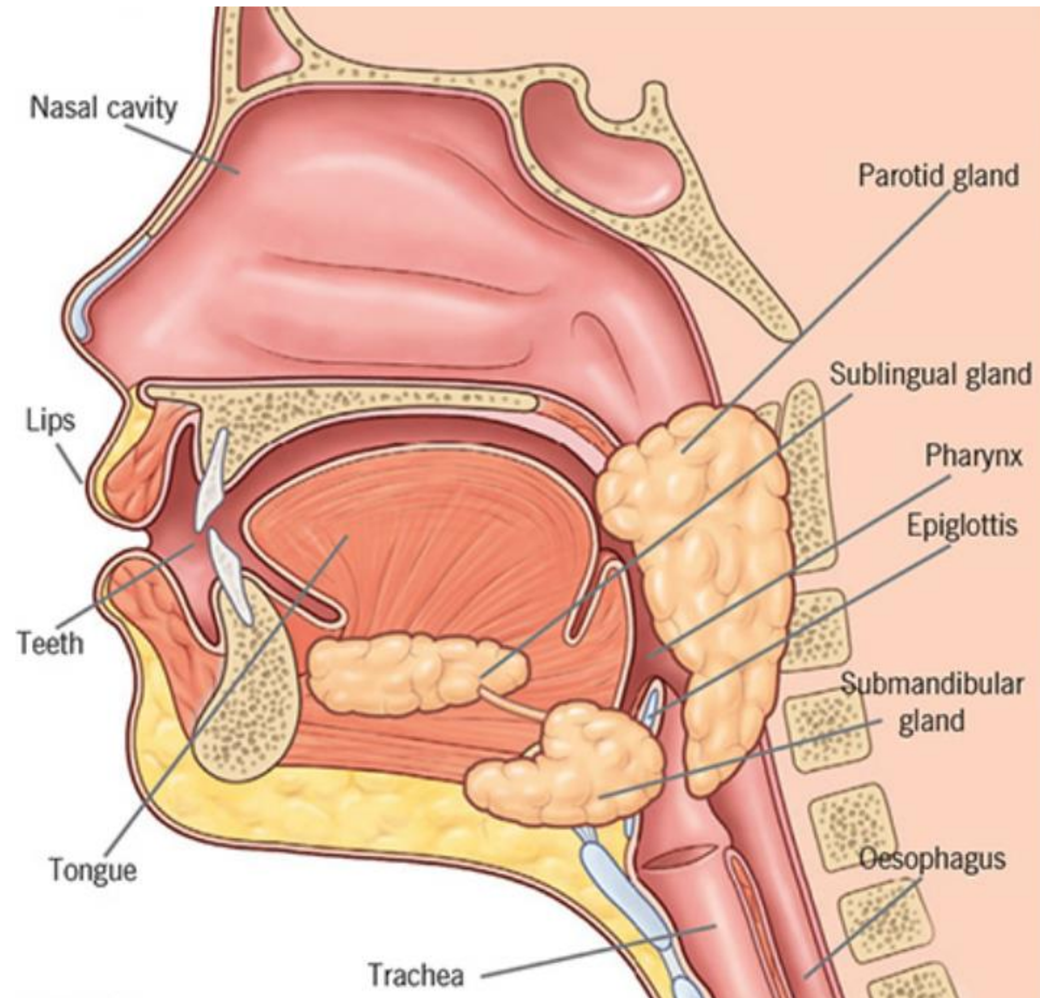
2. Linked



3. Manual



Oral Anatomy



superior lip
Alveolar mucosa
central incisor
lateral incisor
canine
premolars
molars
superior labial frenulum
palatine raphe
palatoglossal arch
palato-pharyngeal arch
hard palate
soft palate
uvula
palatine tonsil
oropharynx
tongue
frenulum linguae
duct of submandibular gland
molars
sublingual papilla
premolars (biscuspids)
gingivae (gums)
canine (cuspid)
lateral incisor
inferior lip
inferior labial frenulum
central incisor
Labial mucosa

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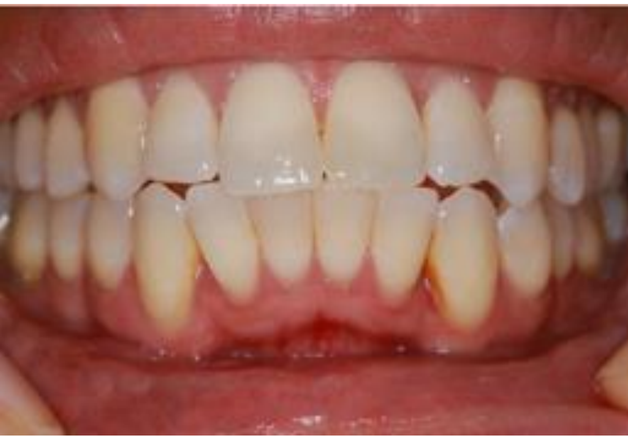
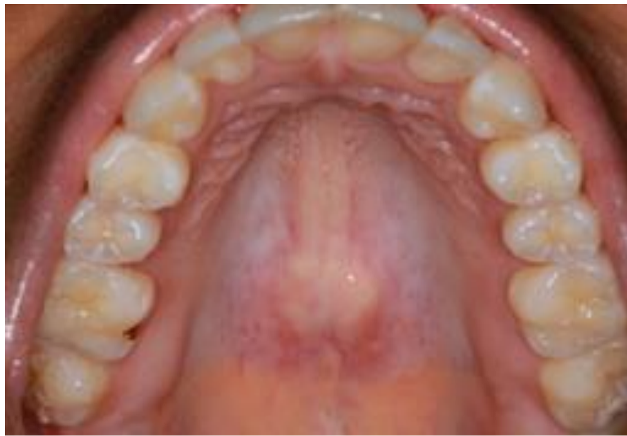
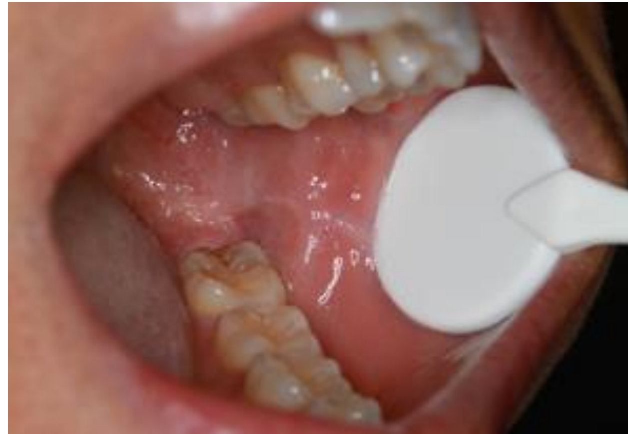
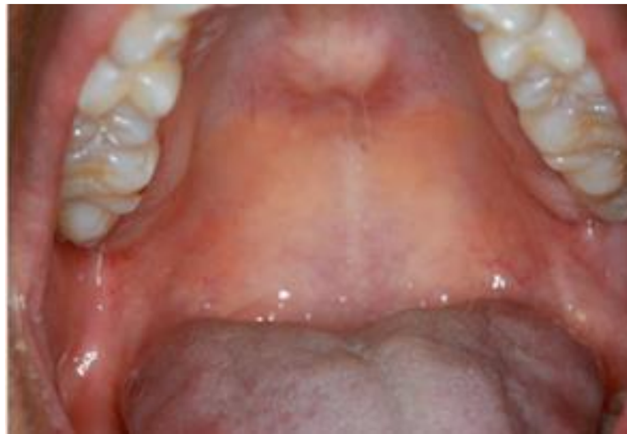
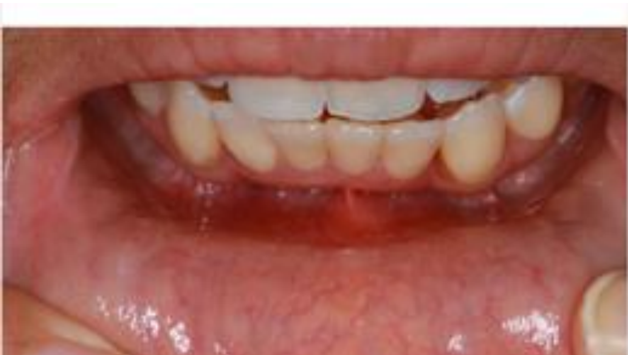
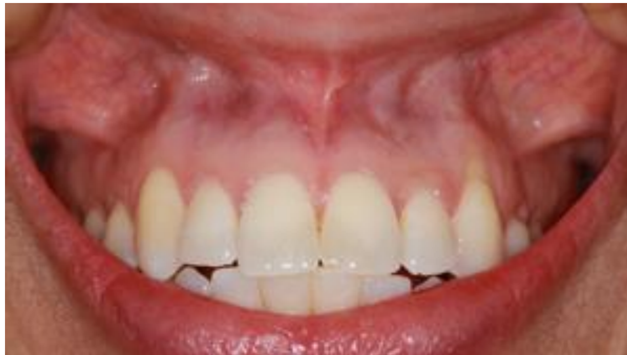
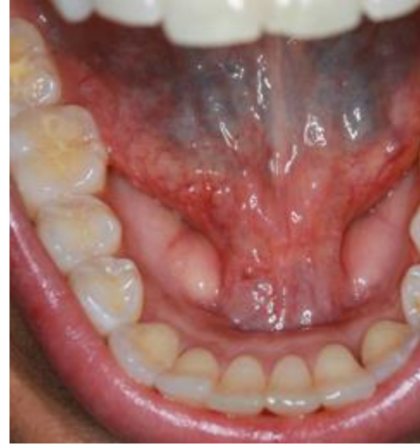
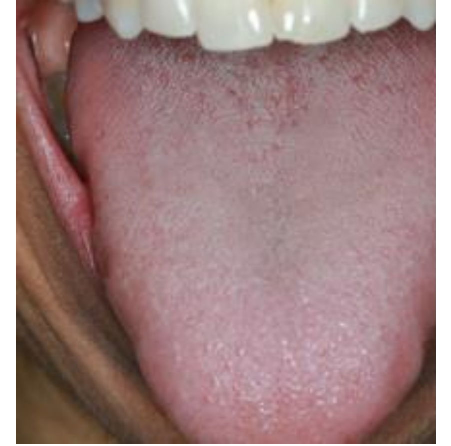







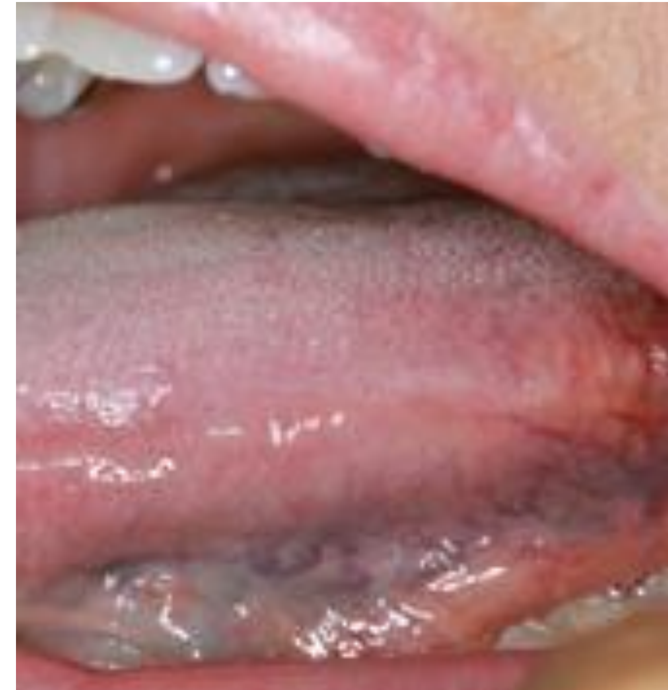
"Normal" Anatomy

- Important to recognize what *normal* or *variations of normal* look like.
- Rule of thumb: If something looks *different* from normal, refer to dental provider.

Continuation of “Normal" Anatomy







Important Lab Values for Dental Tx

Lab Values	Normal Values Male	Normal Values Female	Abnormal Values	Impact on Dental Care	Pre-Med
CD4+ Count	400-1200 cells/mm3	500-1600 cells/mm3	<200 cells/mm3 (AIDS)	<200: refer to physician before dental tx. Goal: >500	none
HIV Viral Load	Undetectable	Undetectable	40-750,000 copies/mL	Goal: <50,000 copies/mL	none
Hemoglobin	14-17 g/dL	12-15 g/dL	M<13, F<12 (anemia)	>7 g/dL: minor surgical, routine care <7 g/dL: med consult	none
Hematocrit	40-52%	35-47%	Anemia if below	Anemia: check other labs	none
WBC Count	4500-10,000 WBC/µL		≤1,000 WBL/µL	Check neutrophil count. Refer to med if ≤1,000 WBL/µL	none
Neutrophil	1500-8000 cells/ mm3		<500 cells/mm3 (neutropenia)	<500 cells/mm3: susceptible to infections. Goal: >1000	Antibiotic prophylaxis
Platelet Count	150-400x10^3 platelets/µL		<50x10^3 platelets/µL (thrombocytopenia)	No invasive if abnormal	none

https://aidsetc.org/sites/default/files/resources_files/SE-AETC%20Oral%20Health%20Brochure-20180301_0.pdf

Overview of HIV Oral Manifestation

- Oral manifestations of HIV infection are often a sign of disease progression.
- Significant decrease in overall prevalence of oral lesions from 47-85% pre-combination antiretroviral therapy (cART) to 32-46% post cART.
- Factors predisposing expression of oral lesions:
  - CD4 < 200 cells/mm3
  - Viral load >3,000 copies/mL
  - Xerostomia (dry mouth)
  - Poor oral hygiene
  - Smoking
- No oral lesion is diagnostic of HIV but may suggest underlying disease.

Oral Manifestations of HIV

- Fungal infections
  - Candidiasis *Most Common*
    - Pseudomembranous
    - Erythematous
    - Angular Cheilitis
- Viral infections
  - Oral Hairy Leukoplakia
  - Herpes Simplex Virus (HSV)
  - Varicella Zoster Virus (VZV)
  - Human Papilloma Virus (HPV)
- Neoplastic lesions
  - Kaposi's Sarcoma
  - Non-Hodgkin's Lymphoma
  - Squamous Cell Carcinoma

- Gingivitis and periodontal disease
  - Linear Gingival Erythema
  - Necrotizing Ulcerative Gingivitis
  - Necrotizing Ulcerative Periodontitis
- Other oral conditions
  - Xerostomia (dry mouth)*
  - Caries (tooth decay)*
  - Aphthous Ulcerations (canker sores)*
  - Swelling of Major Salivary Glands

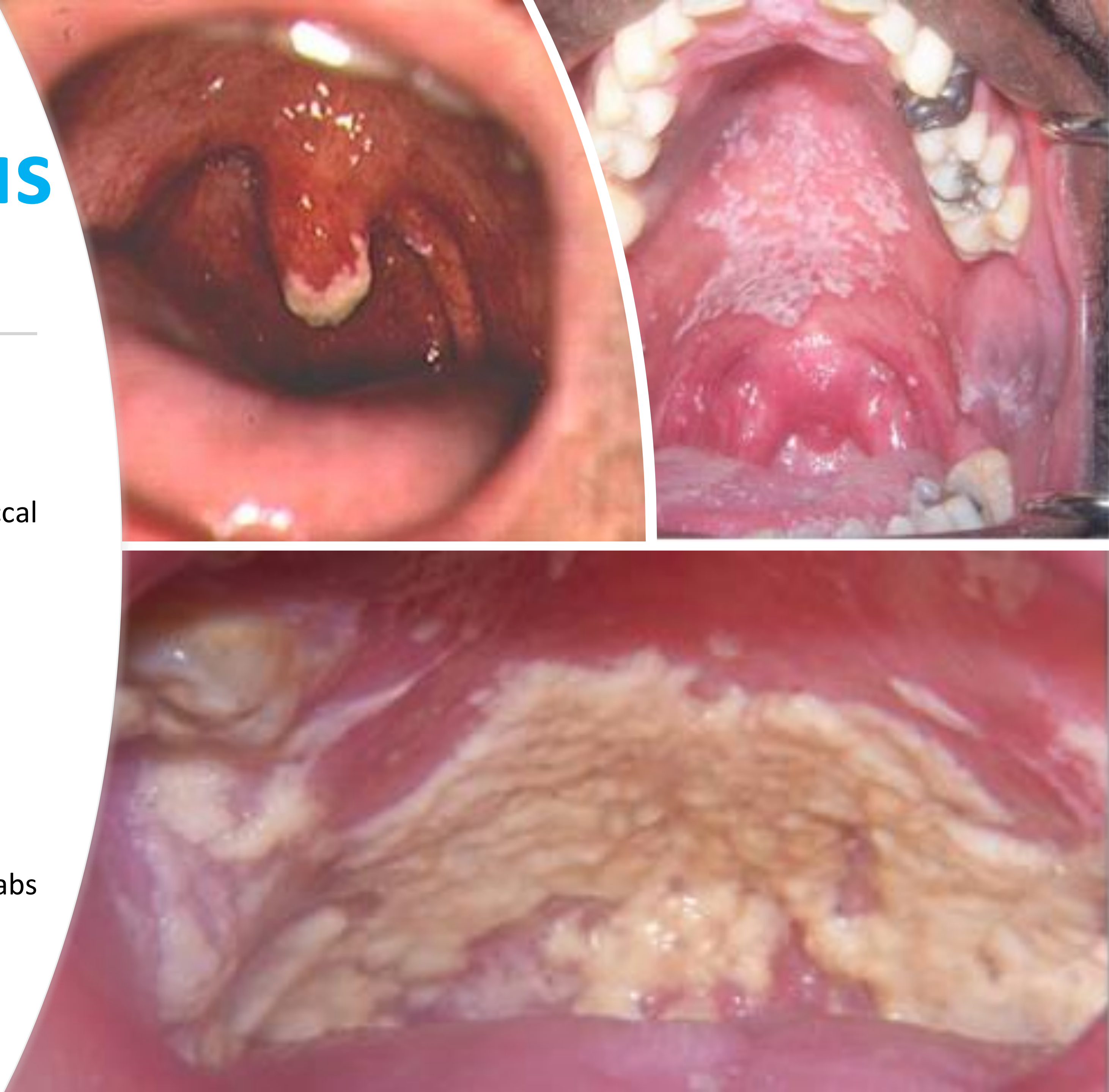
*Common in patients without HIV

FENWAY HEALTH

Attention: following slides contain images that show graphic images of infection progression

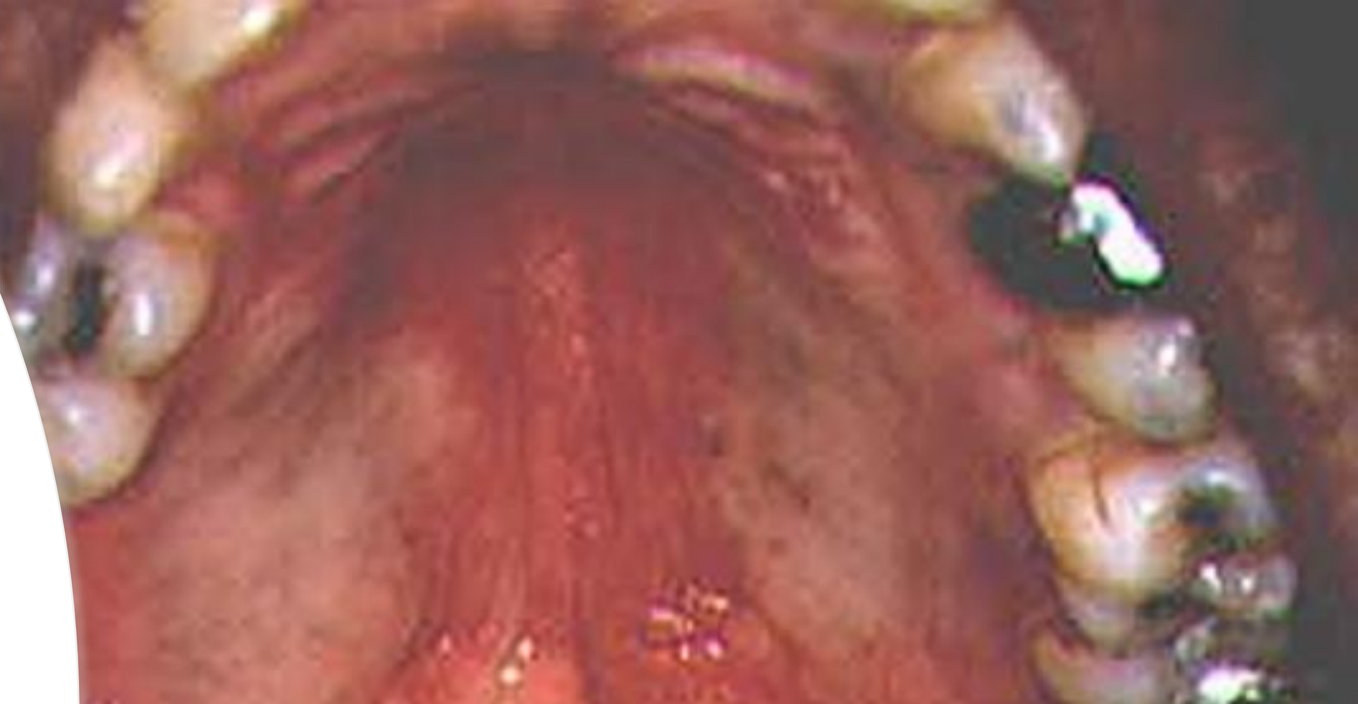
Pseudomembranous Candidiasis

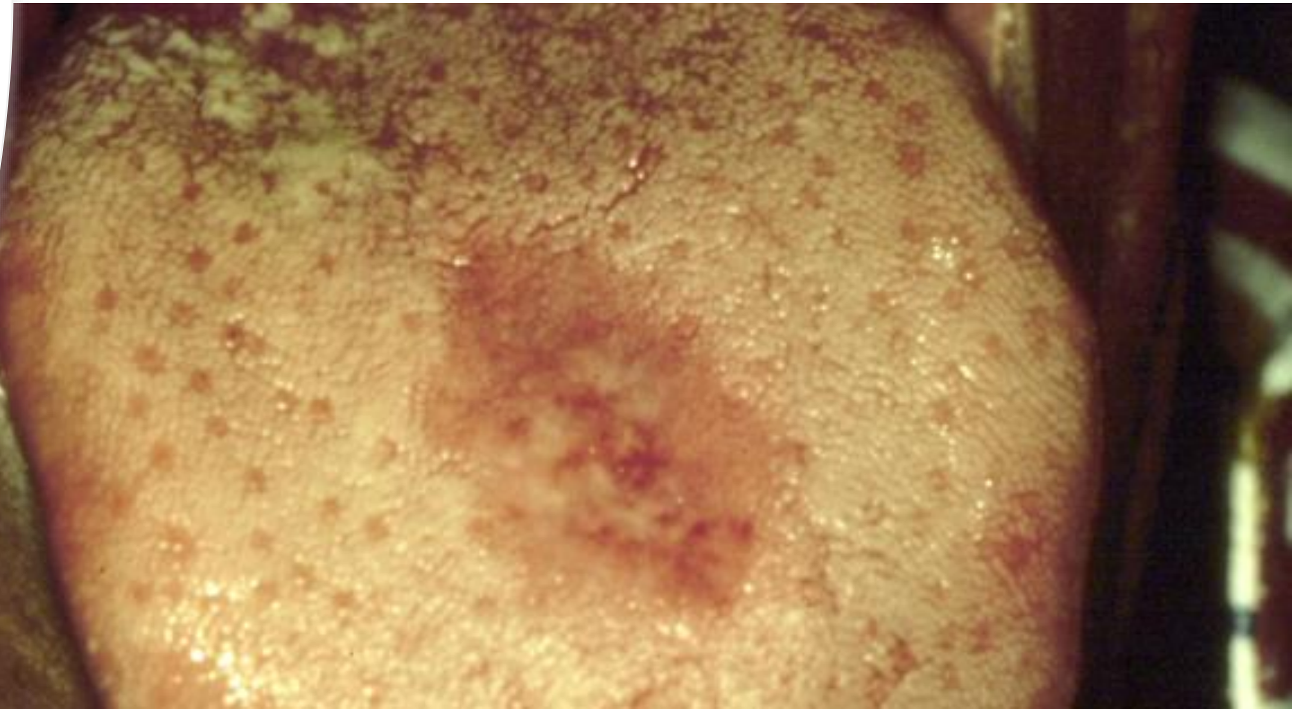
- <u>Appearance:</u> white, off-white, yellow patchy lesion. Lesions will wipe away leaving a red and/or bleeding surface (this is characteristic of this lesion).
- <u>Location:</u> Any oral mucosal surface, e.g., palate, tongue, buccal mucosa; oropharynx and esophagus if not well controlled.
- <u>Treatment (Tx):</u>
  - *Mild to moderate:* Topical antifungals
  - *Moderate to severe:*
    - **Fluconazole 100mg.** Dispense 15 tablets, take 2 tablets on day 1 followed by 1 tab/day X 14 days.
    - For esophageal candidiasis use higher dosage: **Fluconazole 200mg.** Dispense 22 tablets, take 2 tabs for initial dose, then 1 tab/day X 21 days.
    - If patient has dentures prescribe **0.12% Chlorohexidine Gluconate** for patient to soak denture in overnight.



Erythematous Candidiasis

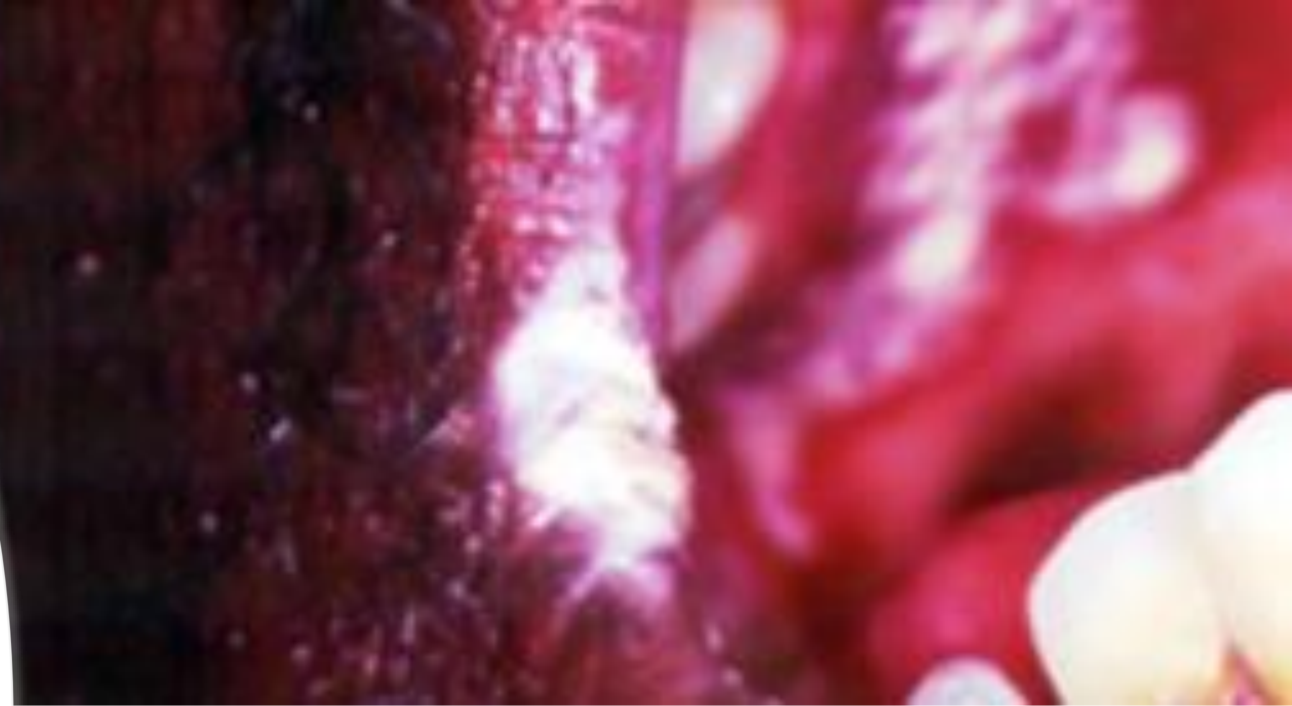
- Appearance: red, flat subtle lesion.
- Location: Anywhere in oral cavity. Most common: Dorsal of tongue, hard, and soft palates.
- Tx: Topical antifungals
    - **Clotrimazole Troches 10mg**. Dispense 70, dissolve one troche in mouth 5x/day for 2 weeks.
    - **Nystatin oral suspension 500,000 U**. Swish 1 teaspoon (5ml) for 2 minutes, QID X 14 days.

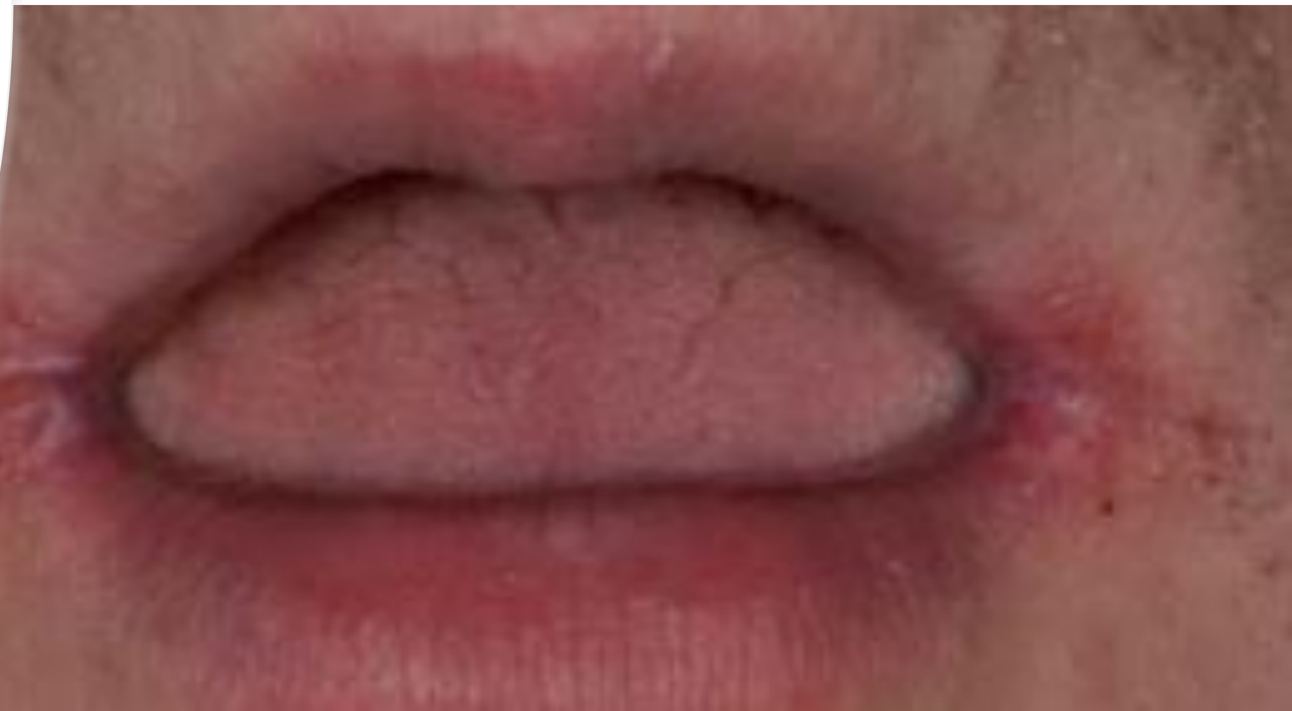




Angular Cheilitis

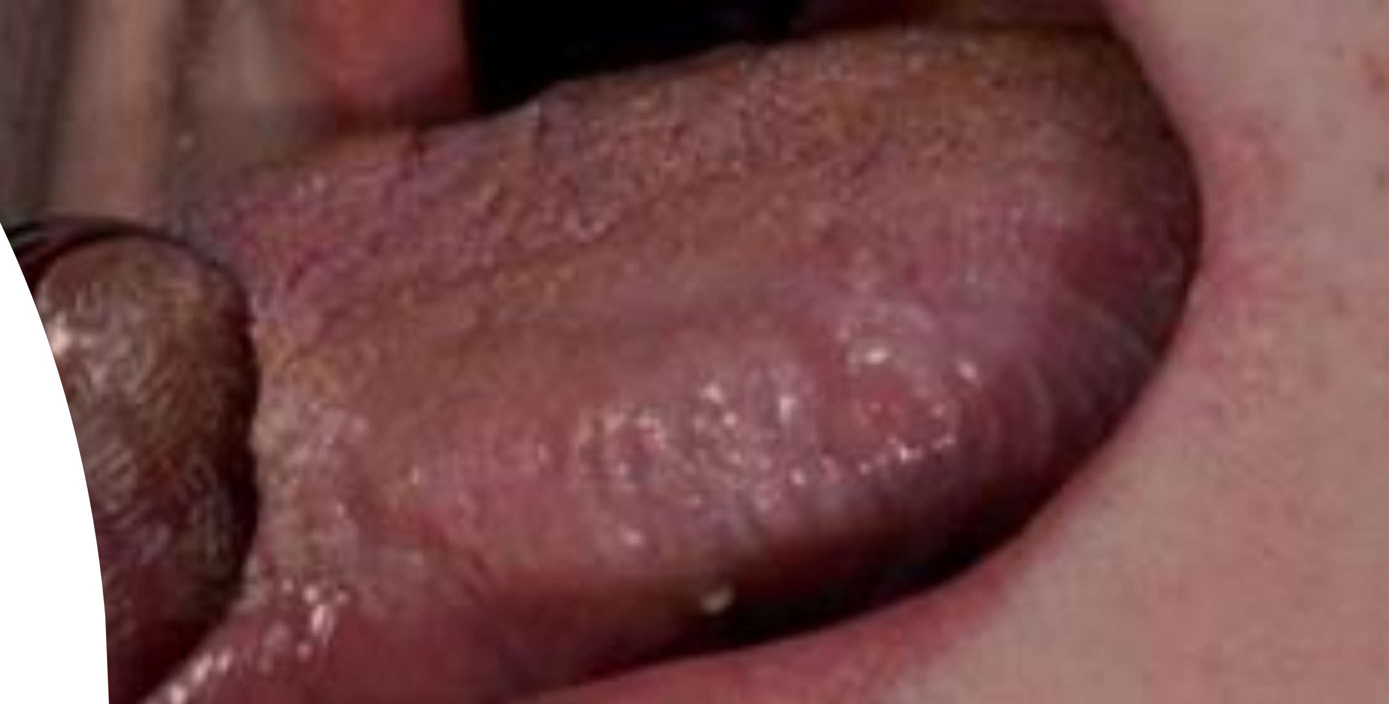
- Appearance: crack or fissure.
- Location: corner of mouth.
- Tx: **Ketoconazole 2% Cream.** Dispense 30 g. Apply 4 times a day for 2 weeks.

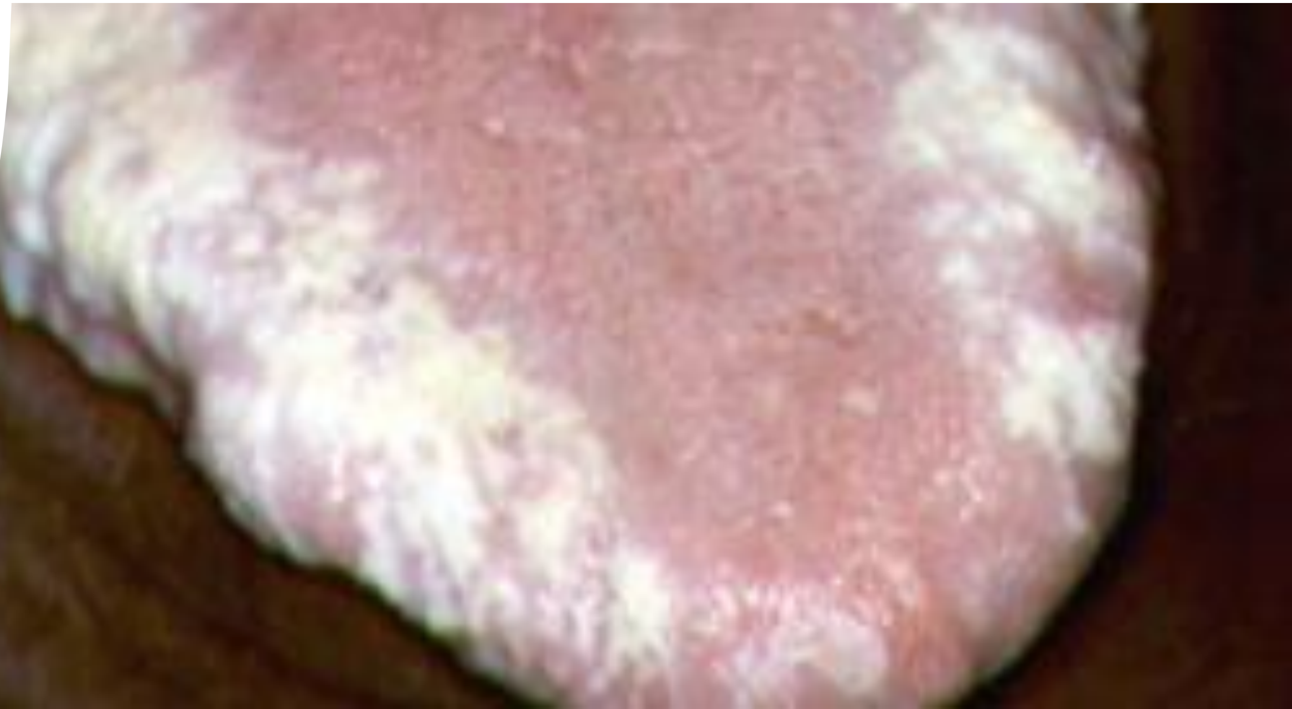




Oral Hairy Leukoplakia

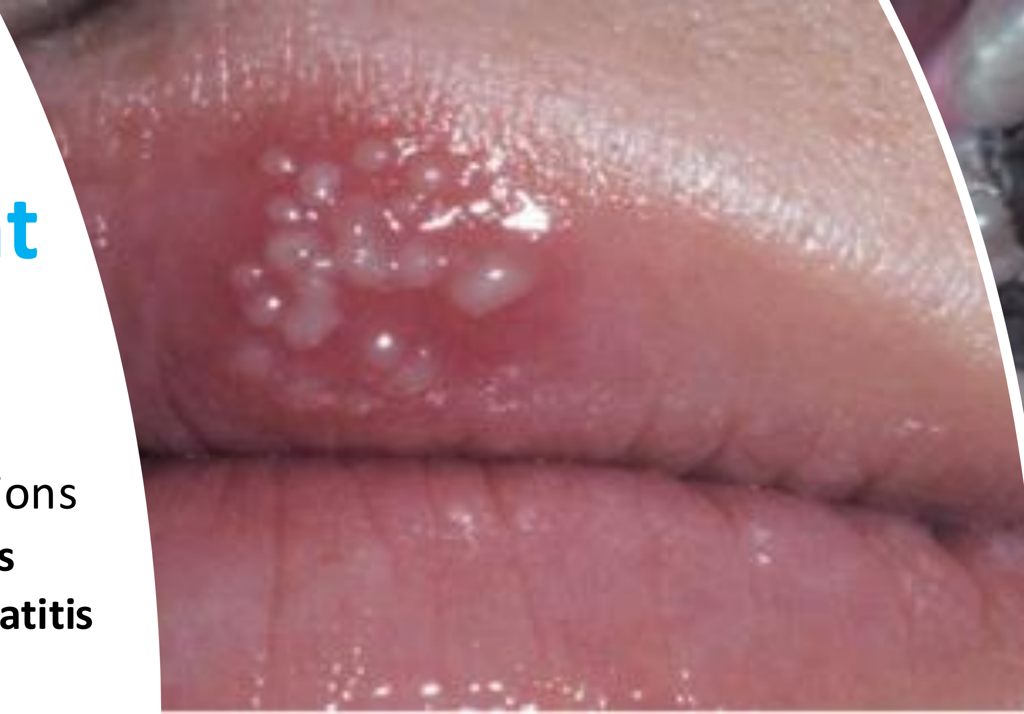
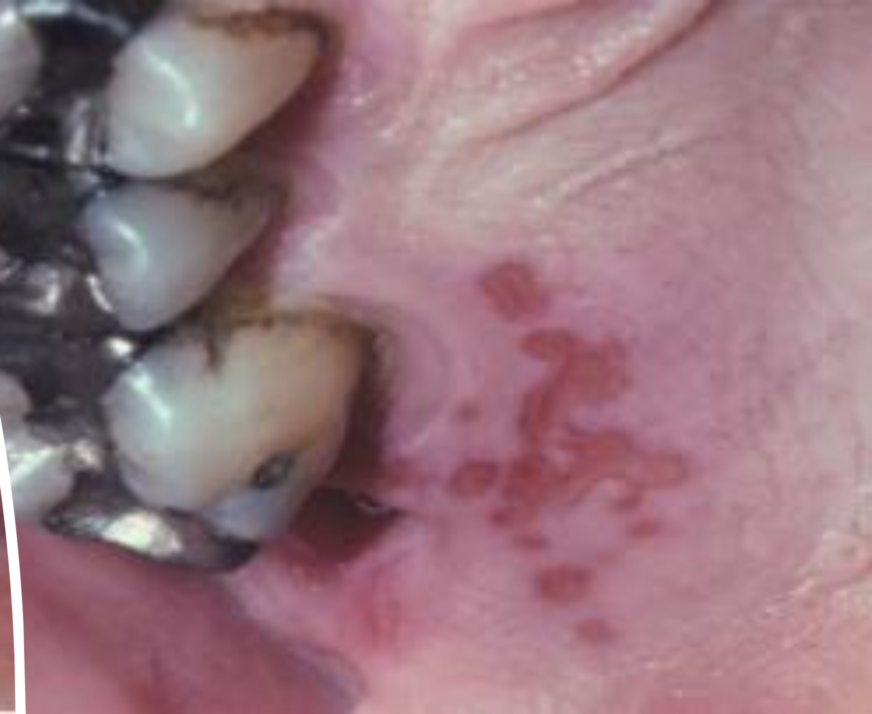
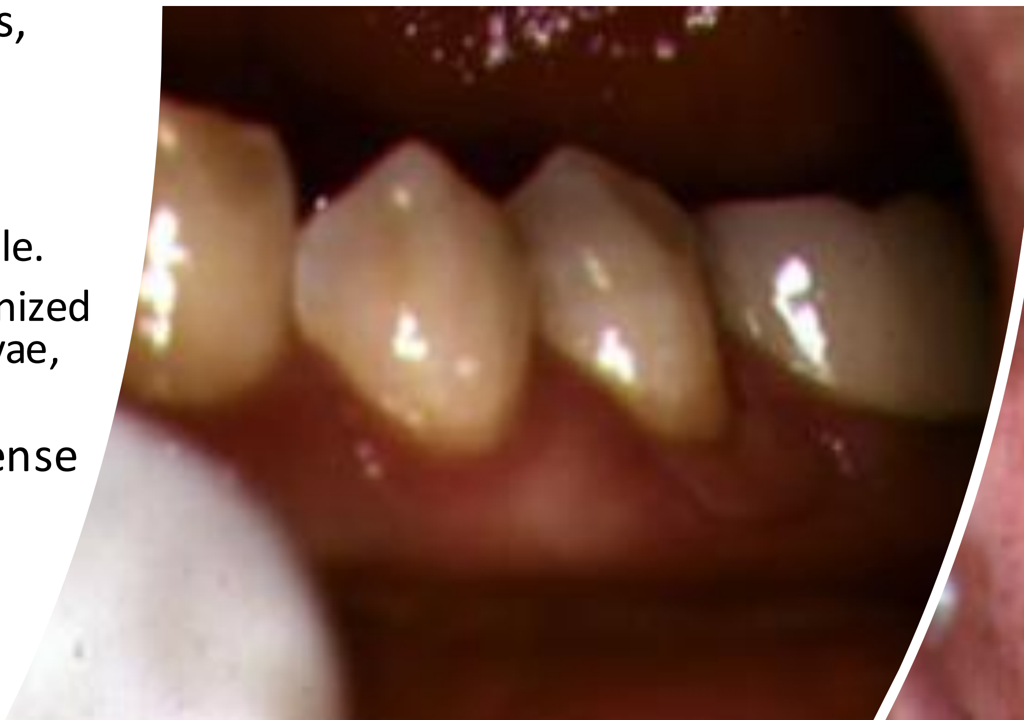
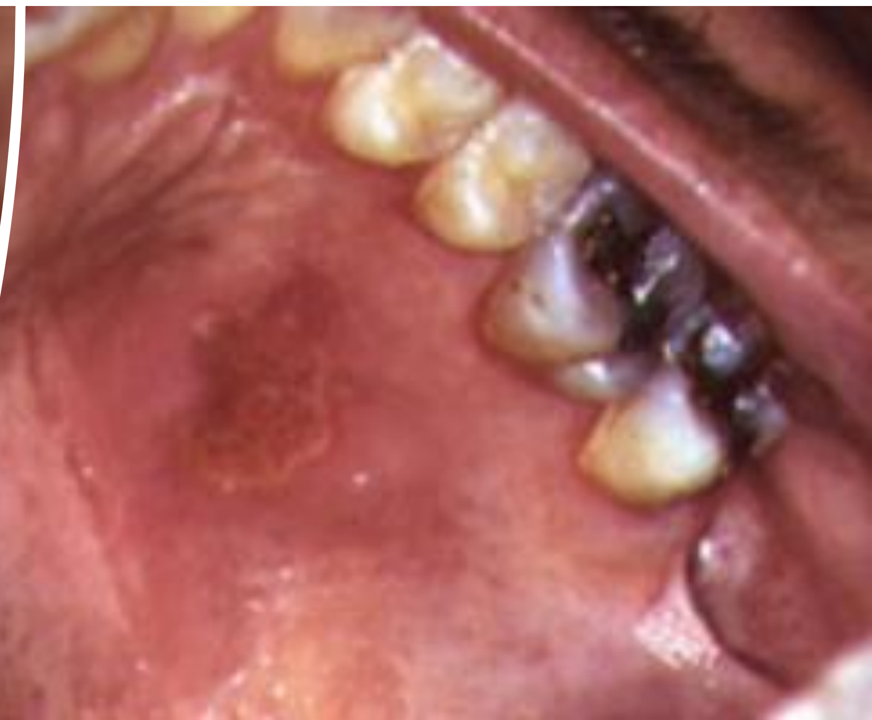
- Appearance: white corrugated lesion, does not wipe away.
- Location: lateral border of tongue.
- Tx: Treatment not required. High-dose **Acyclovir (4 g/day)** may be used for temporary relief.





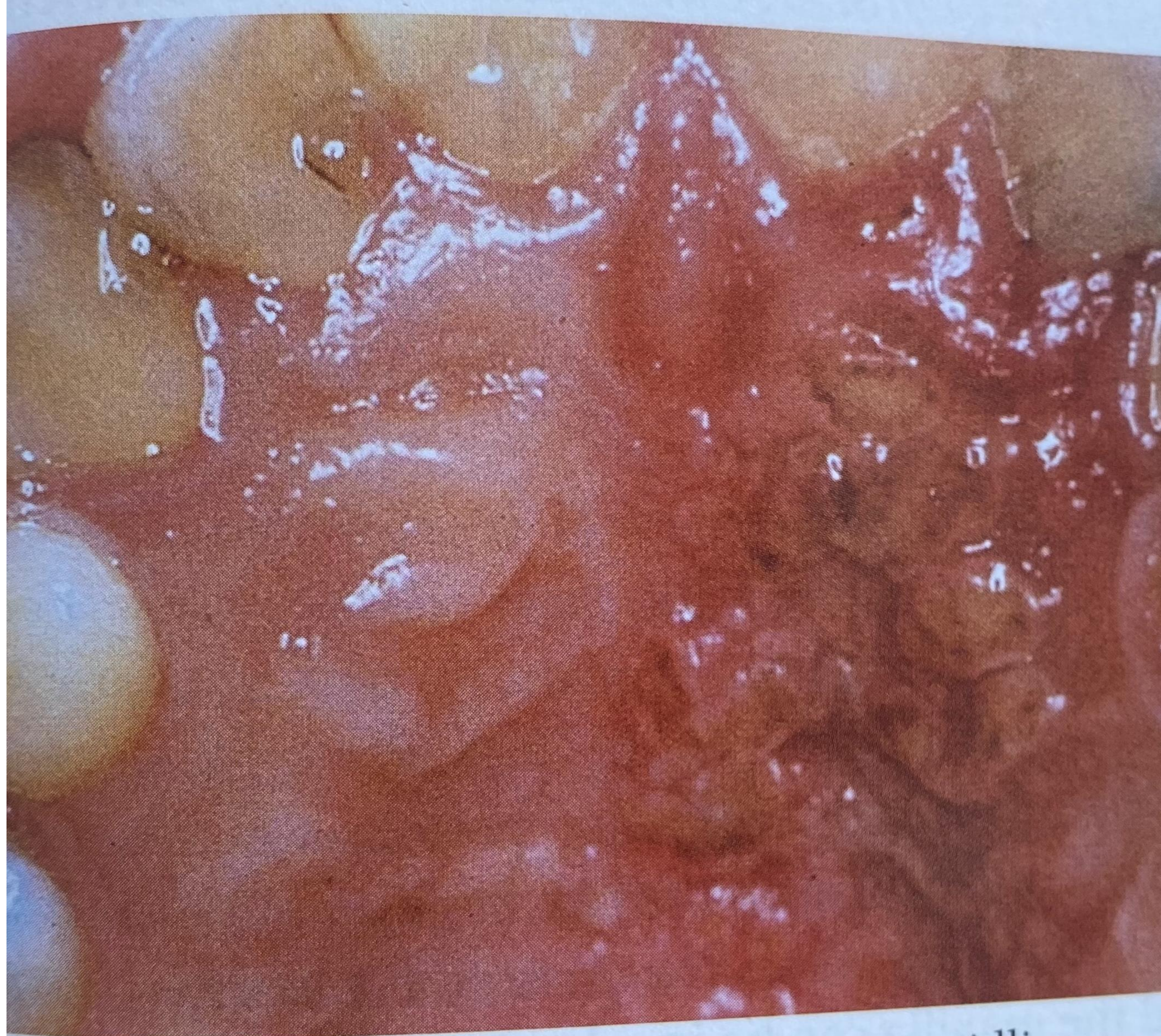
HSV/Recurrent Ulcers

- Primary & Recurrent Infections
  - **Recurrent Herpes Labialis**
  - **Recurrent Herpetic Stomatitis**
- **"Cold Sores"**
- Appearance: yellow vesicles, shallow ulcerations with red halos.
- Location:
  - Primary: fixed or moveable.
  - Recurrent: fixed or keratinized tissue, e.g. attached gingivae, hard palate.
- Tx: **Acyclovir 400 mg.** Dispense 30, 1 tab PO TID for 10 days.
- Resolve 2-3 weeks.

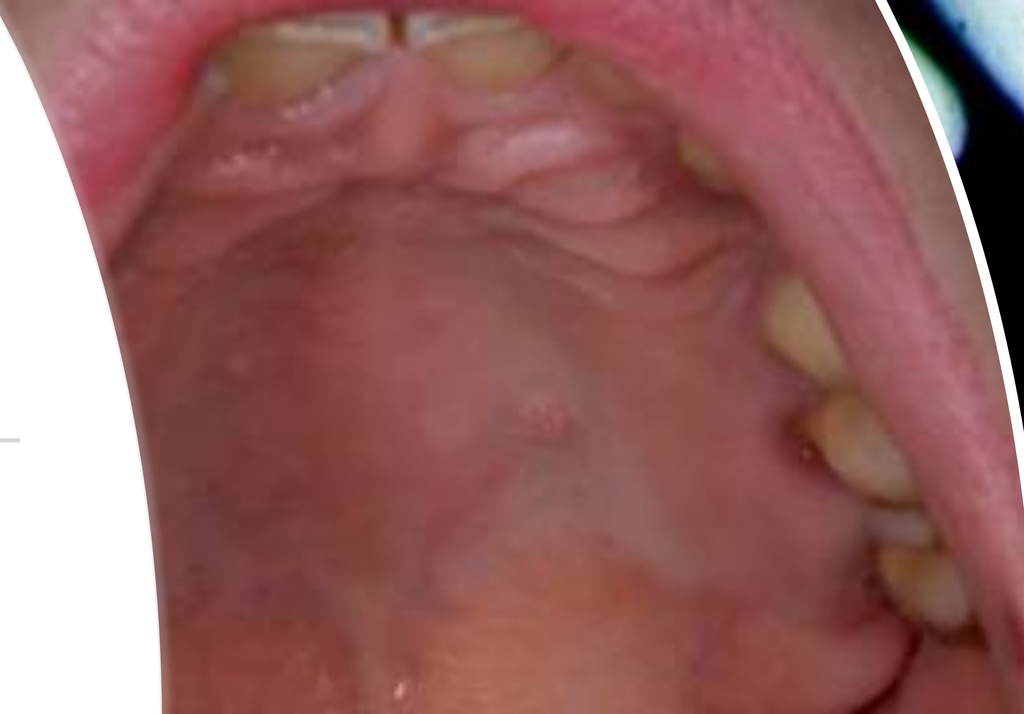
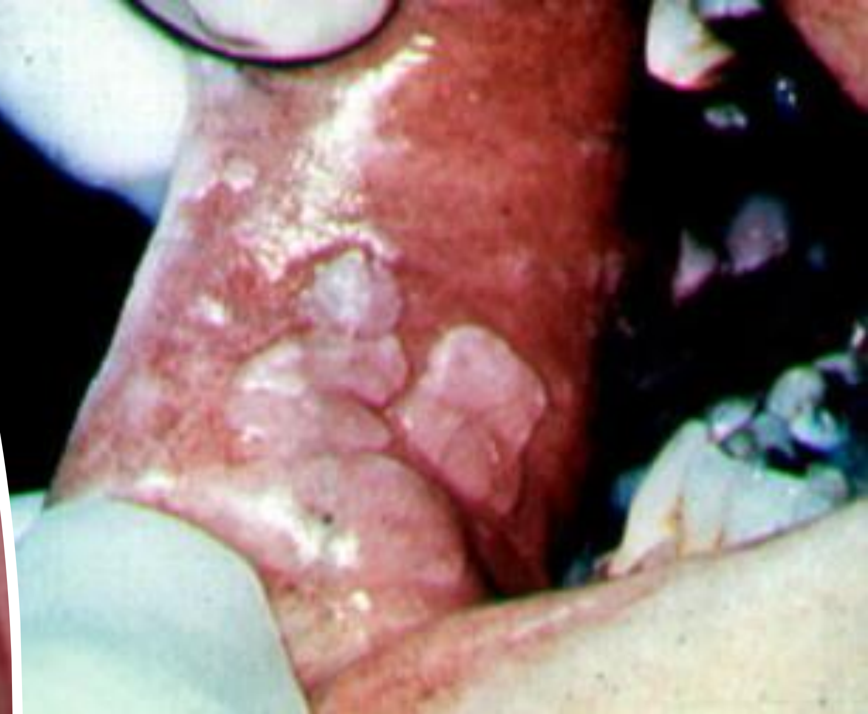
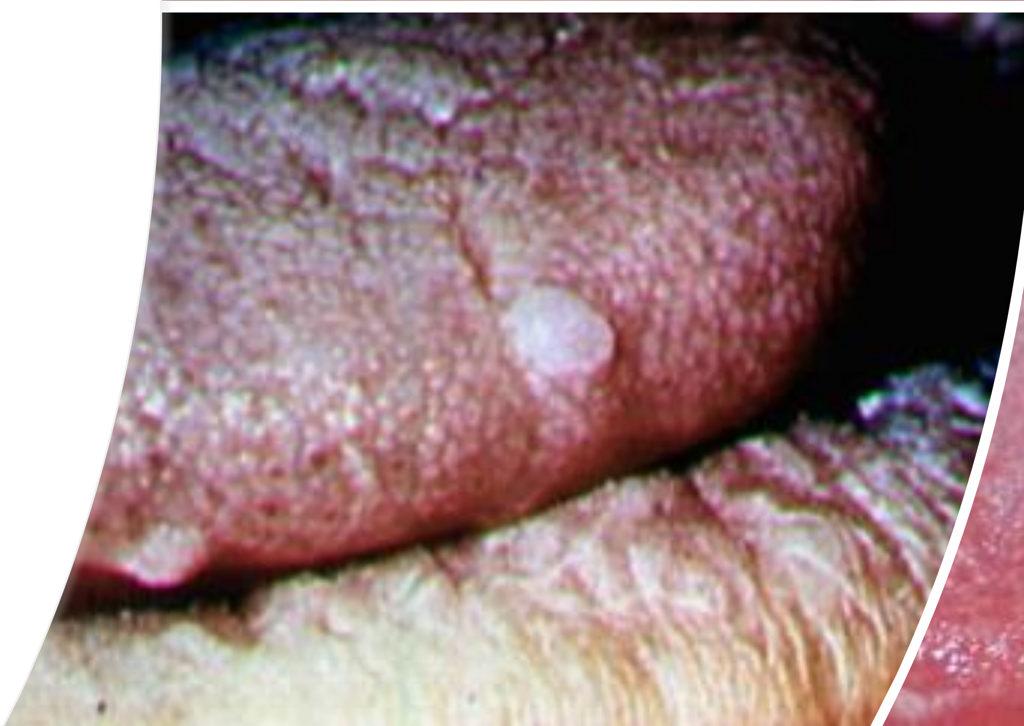
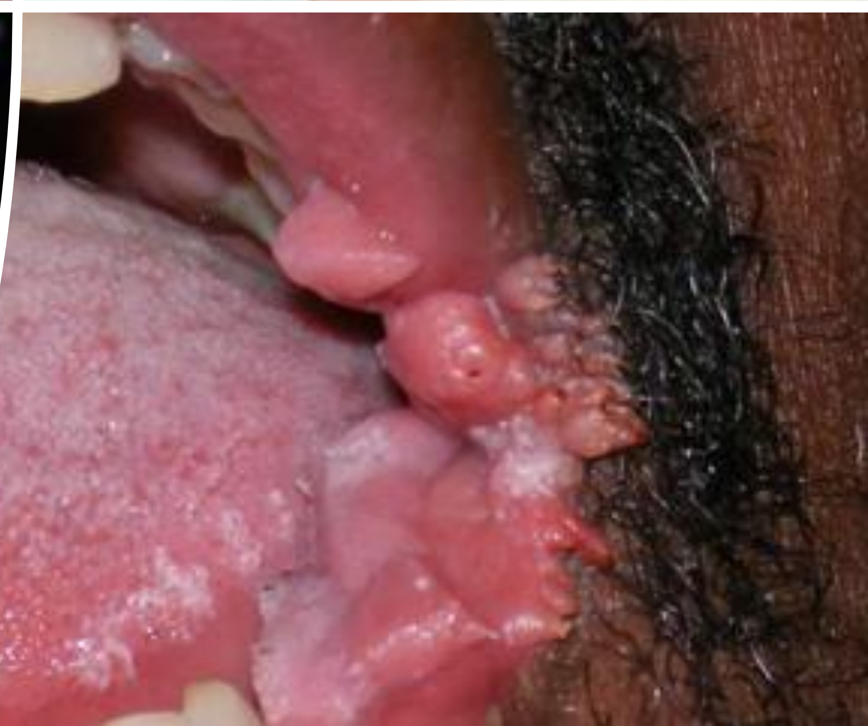
Varicella-Zoster Virus (VZV)

- Herpesvirus- may reactivate in immunocompromised adults to cause **herpes zoster (shingles).**
- <u>Appearance:</u> vesicles, pustules, ulcers.
- <u>Location:</u> Intraoral and/or extraoral; unilateral, extend to midline along dermatome.
- <u>Tx:</u> Valtrex, Antiviral.



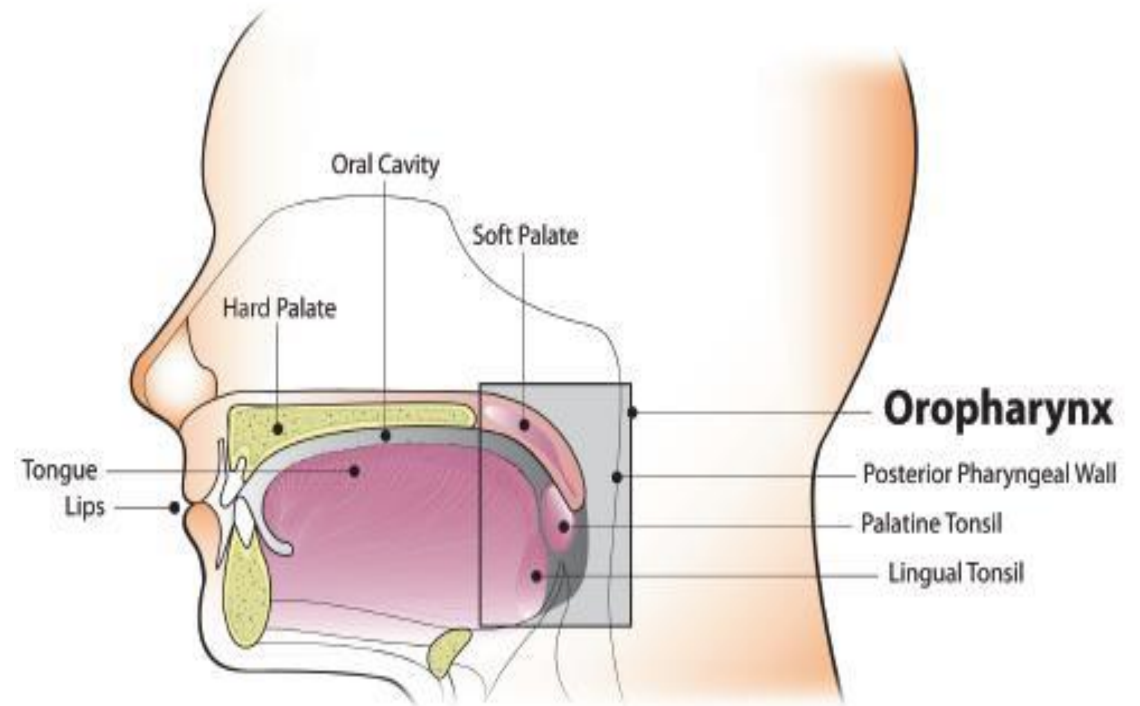
HPV/Oral Warts

- Appearance: papillary lesions, may be white/gray or normal mucosal color.
- Location: anywhere in/around oral cavity.
- Tx: cryotherapy, surgical excision.

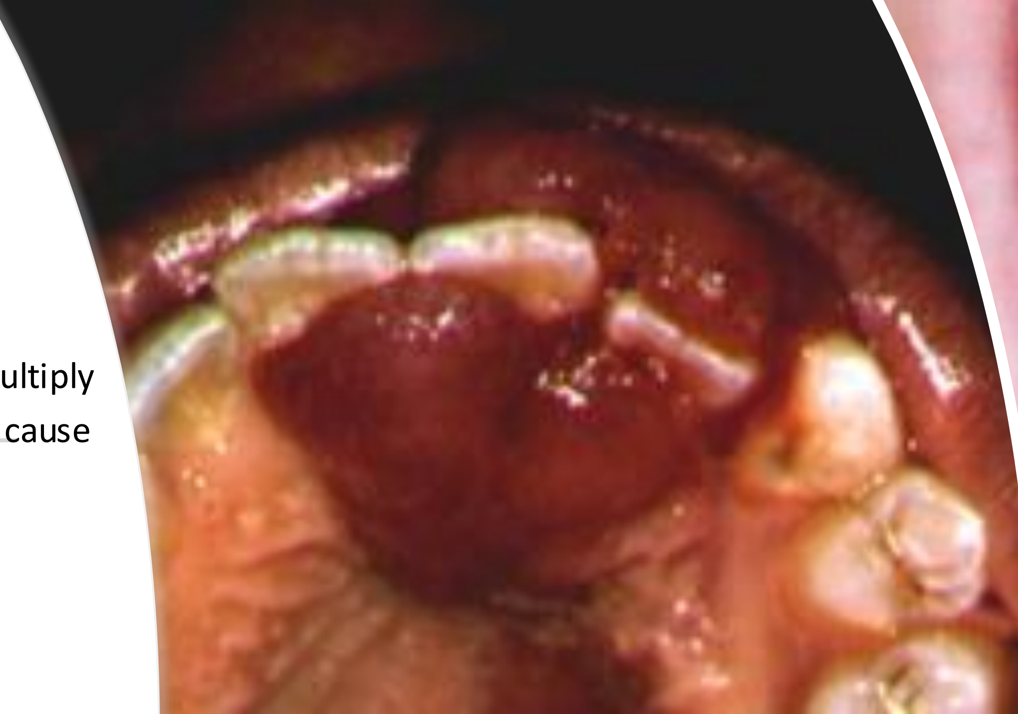
HPV & Oropharyngeal Cancer

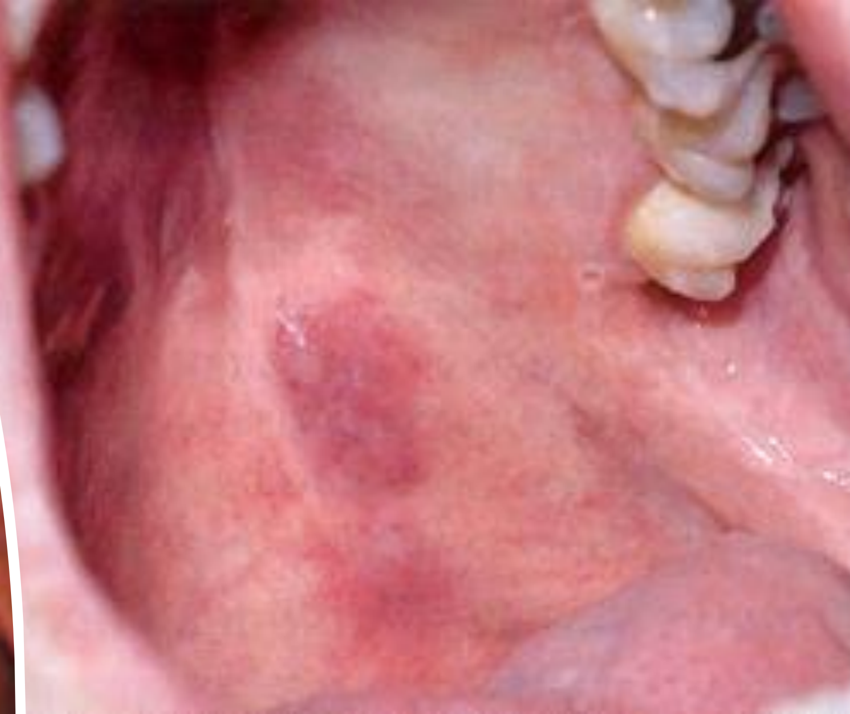
- Most common STI in US -> **HPV.**
- Can cause cancers of *oropharynx* (back of throat, base of tongue, tonsils).
- HPV-16 -> 70% of oropharyngeal cancers in US.
- Usually takes years after infection to cause cancer.
- Symptoms: sore throat, earaches, hoarseness, swollen lymph nodes, pain when swallowing, unexplained weight loss.
- HPV vaccine prevents the strain that causes cancer.

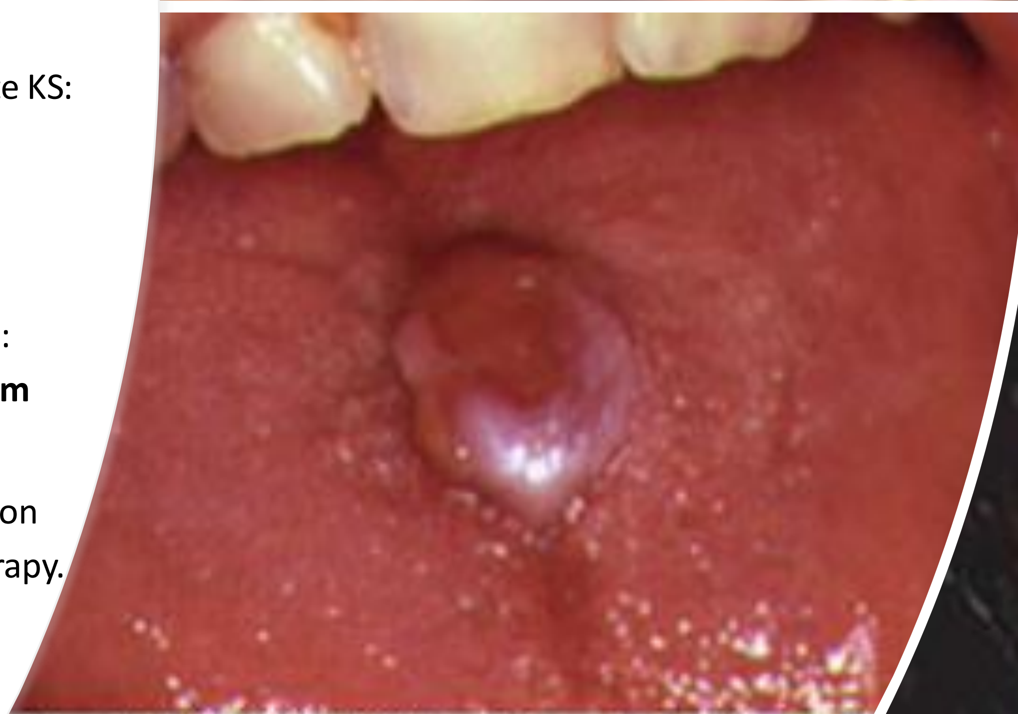


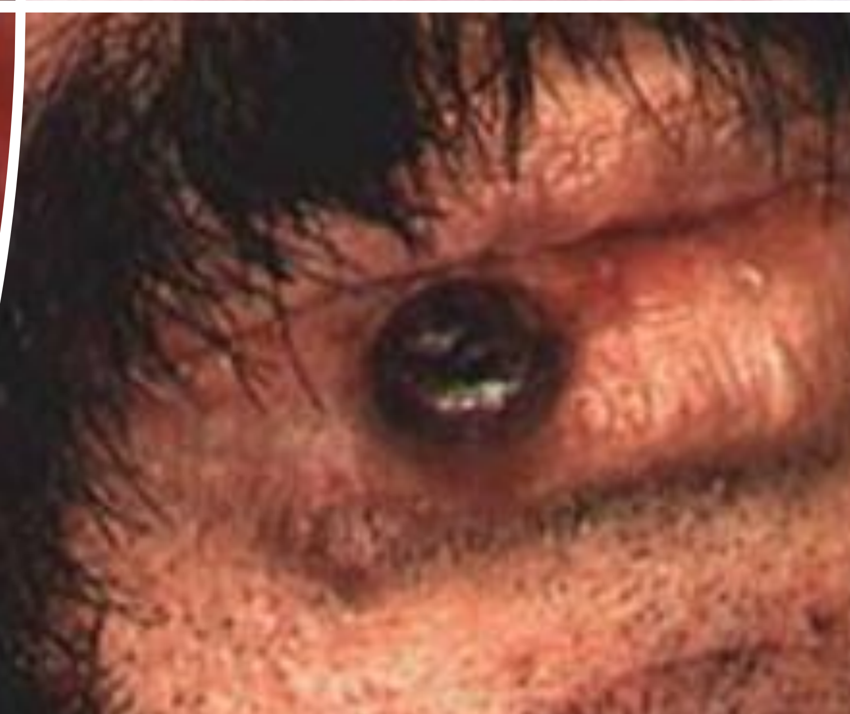
Kaposi's Sarcoma

- Appearance: purple, red-brown, yellow-brown. May grow to considerable size, multiply in advanced AIDS, ulcerate, hemorrhage, cause secondary infection, destroy bone/periodontium.
- Location: Soft tissue, commonly palate, gingiva, mucosa, tongue, lip.
- Tx:
  - Systemic therapy mild to moderate KS: initiation or optimization of ART.
  - Systemic therapy advanced KS: chemotherapy + ART.
  - Local treatment mild to moderate: intralesional **vinblastine** and **sodium tetradecyl sulfate 3%.**
  - Local treatment advanced: radiation therapy (800-2,000 cGy), laser therapy.



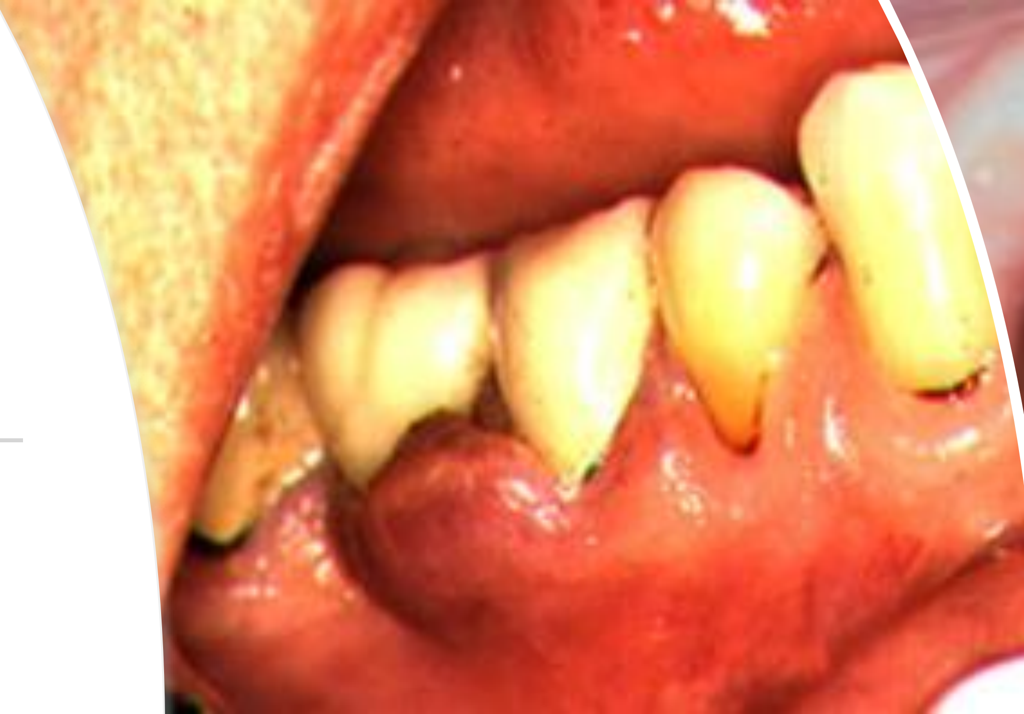
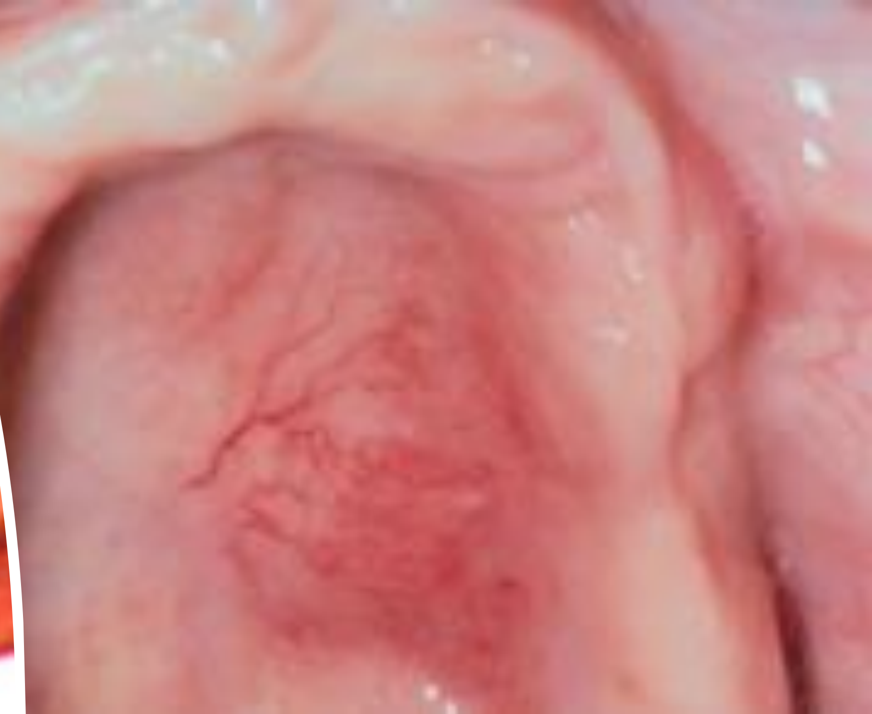
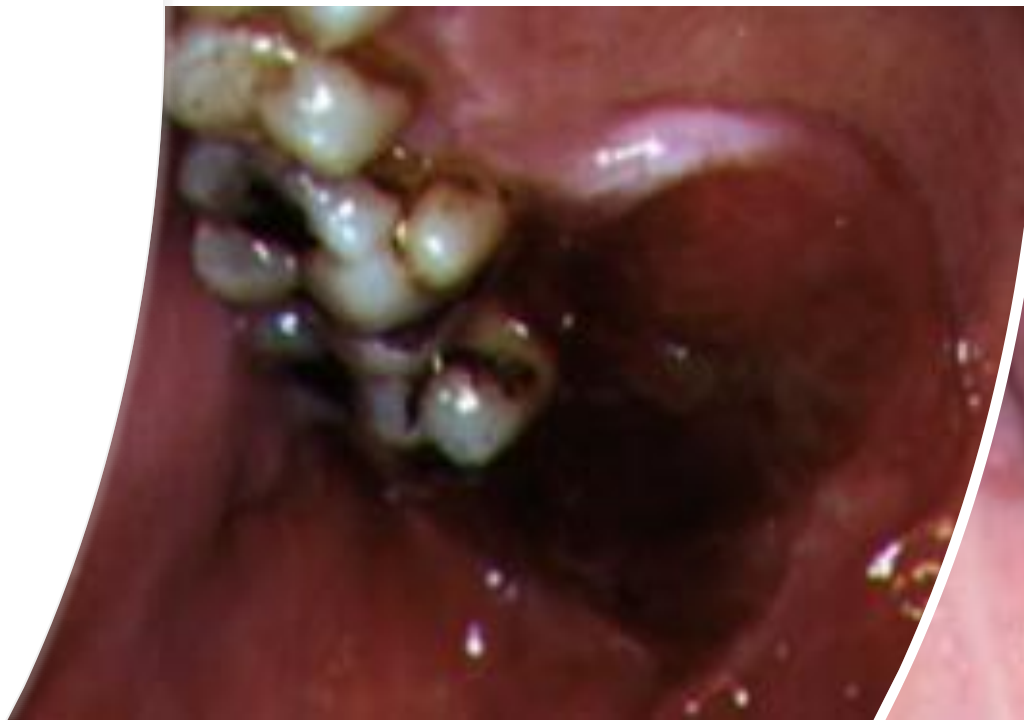
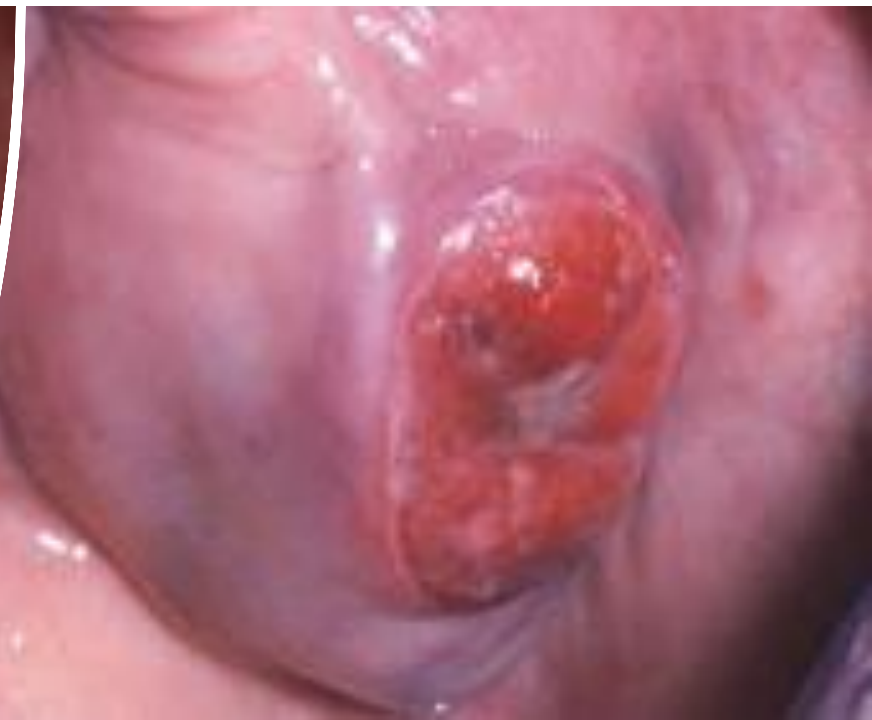






Non-Hodgkin's Lymphoma

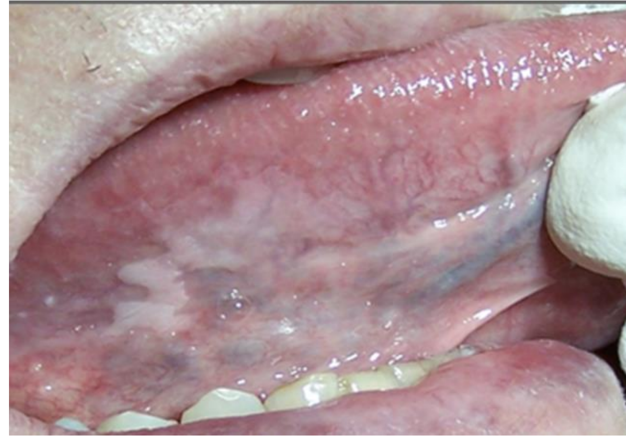
- Appearance: growth and ulceration, may mimic dental infection.
- Location: gingiva, palate, alveolar mucosa.
- Tx: **Acyclovir** inhibits viral DNA synthesis in lytic infection, not latent. Offer oncological treatments like complex cytokine or cytotoxic therapies, however prognosis is poor with mean survival time less than 1 year, despite treatment with multidrug chemotherapy.

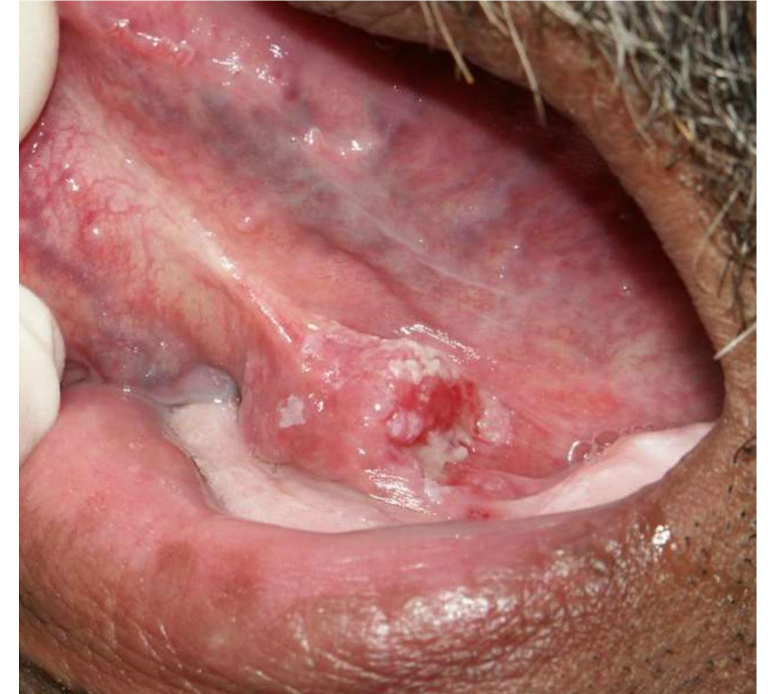





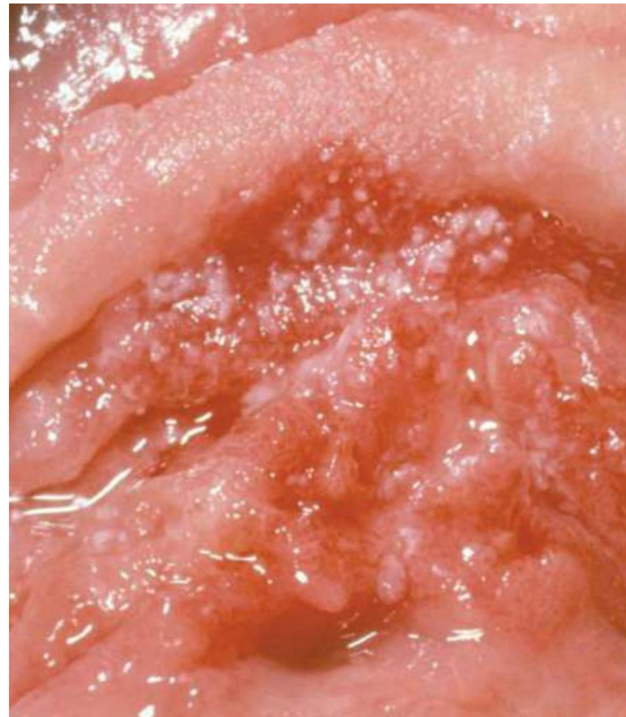
Squamous Cell Carcinoma (SCC)

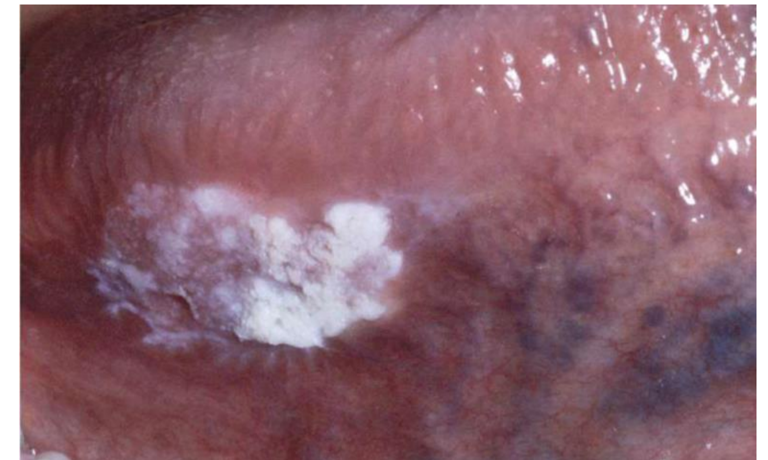
- <u>Appearance:</u> Reddish white or ulcerated lesion.
- <u>Location:</u> posterolateral border of tongue, FOM, Waldeyer's Ring.
- <u>Tx:</u> chemotherapy & radiation.

•Most common oral cancer.



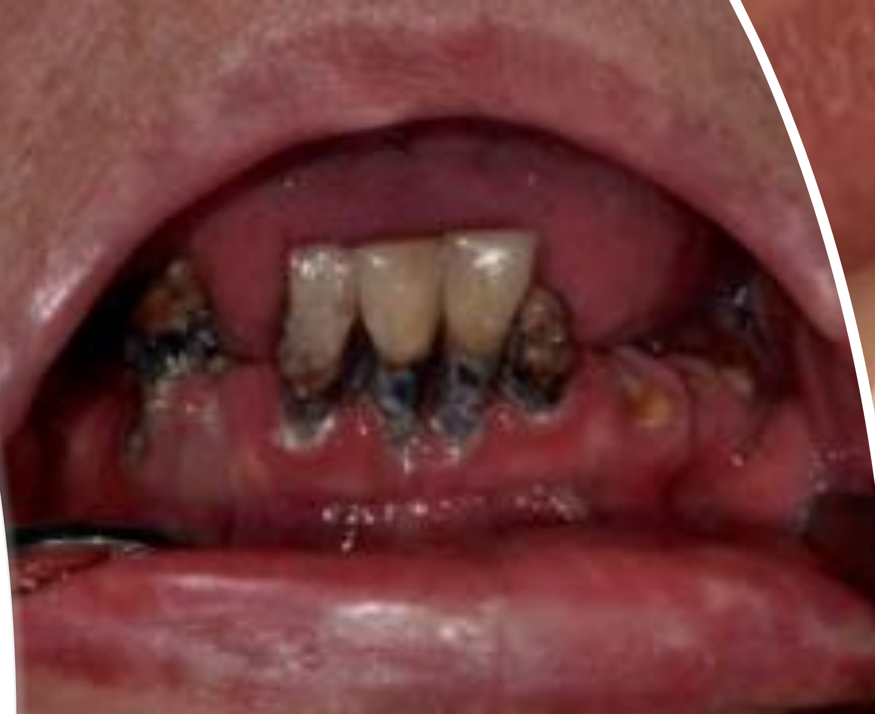
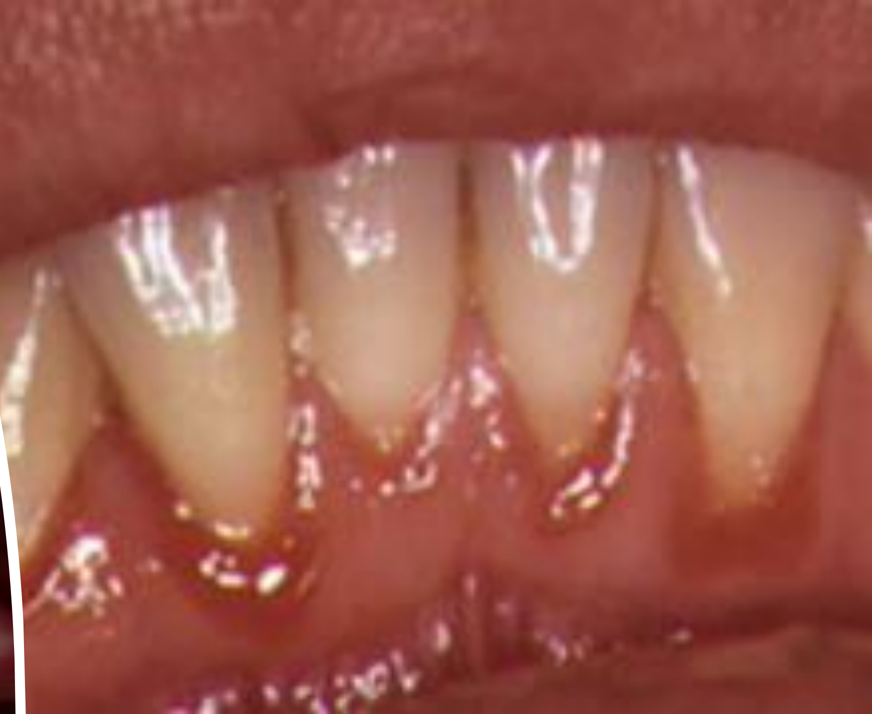
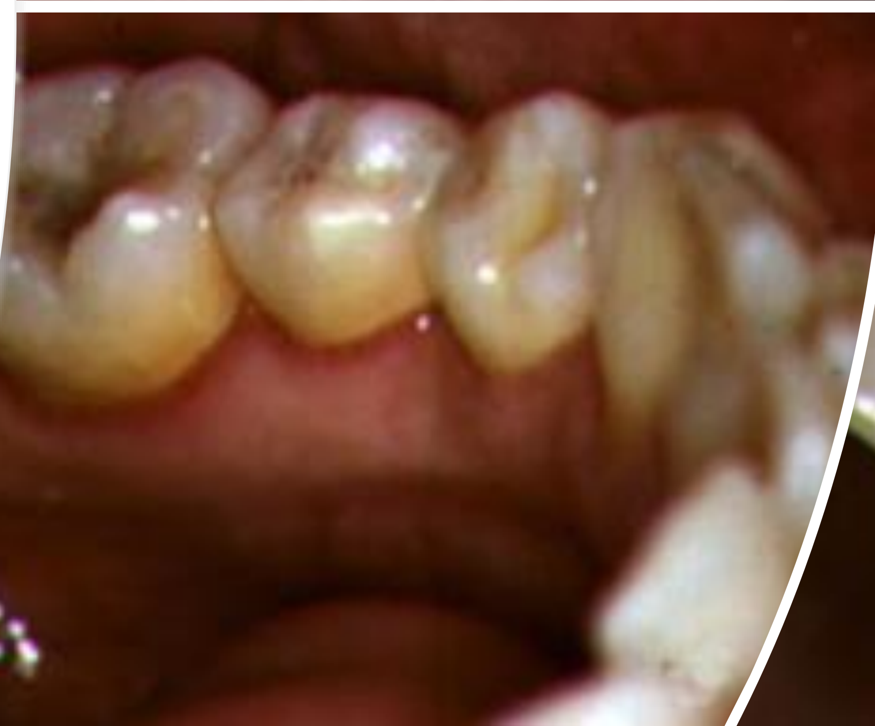
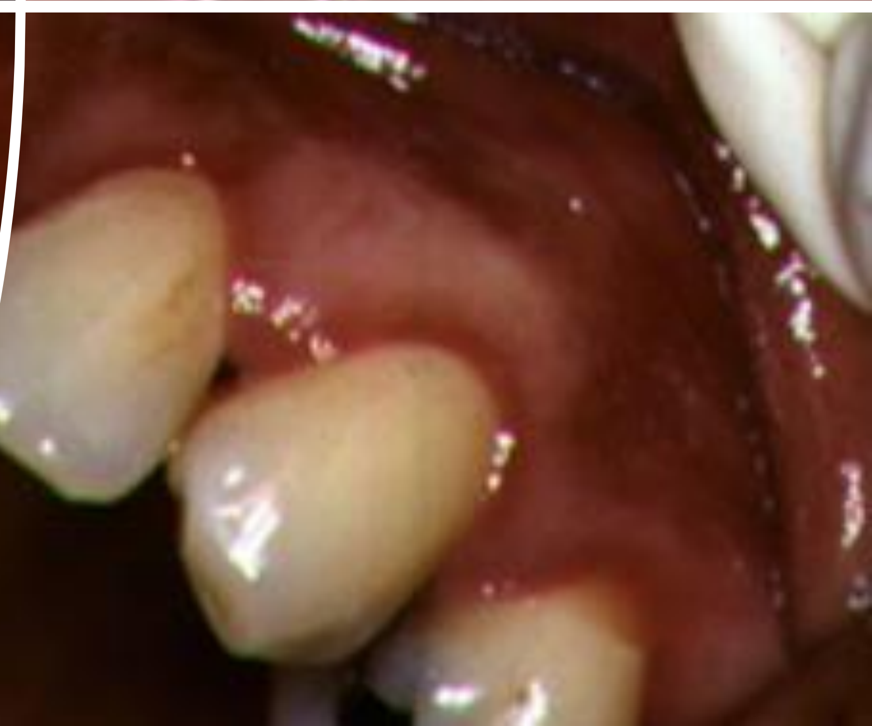






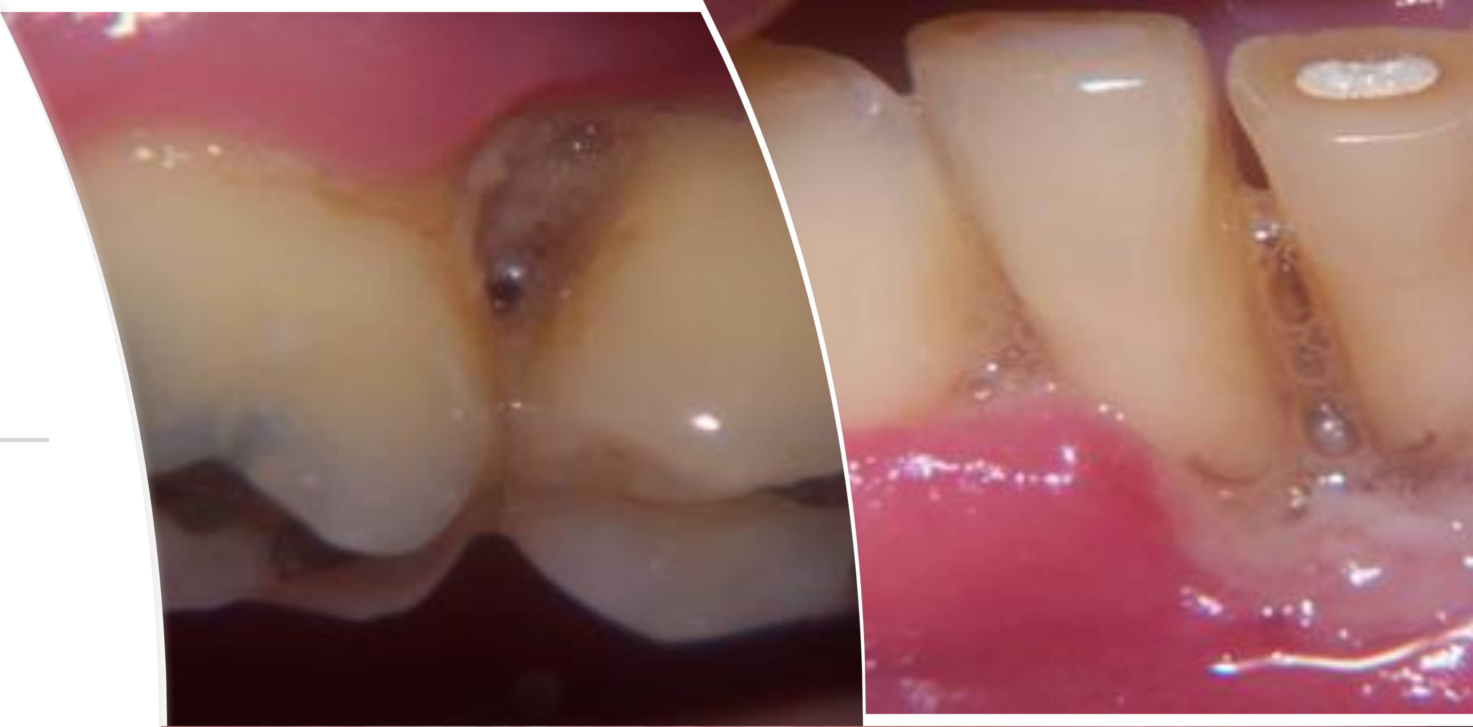
Linear Gingival Erythema

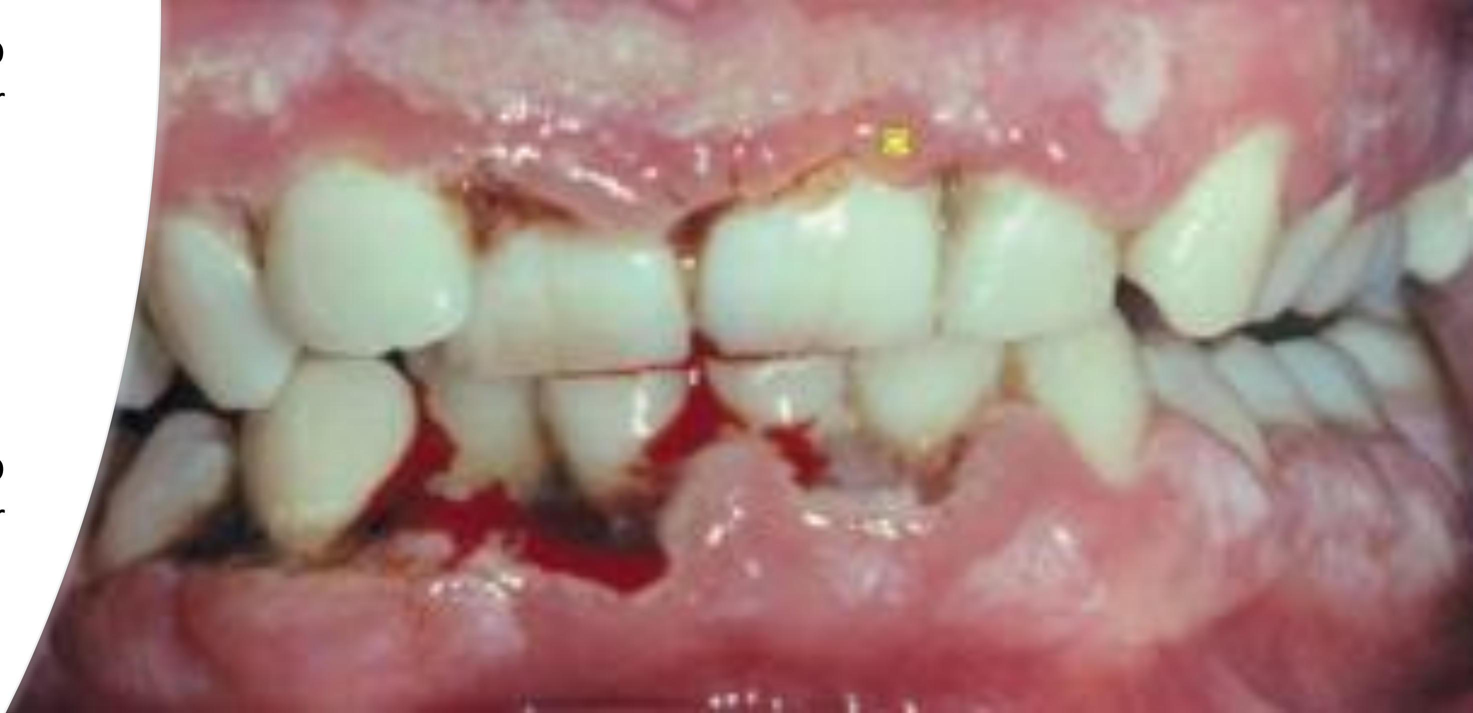
- <u>Appearance:</u> red bands, with or without dental plaque.
- <u>Location:</u> along free gingival margin.
- <u>Tx:</u> Dental prophylaxis (e.g., dental exams or cleaning). Reinforcement of oral hygiene instructions, and use of **0.12% chlorhexidine suspension** 2/day for 2 weeks and local debridement.

Necrotizing Ulcerative Disease

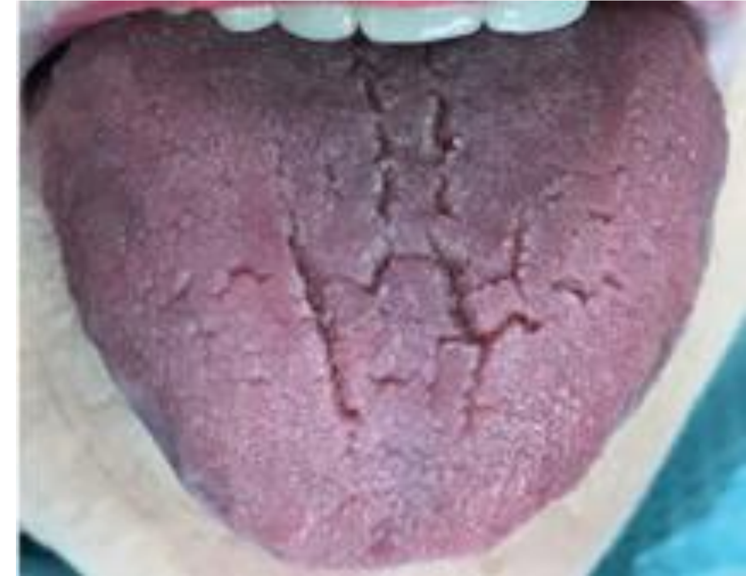
- **Necrotizing ulcerative gingivitis**
  - Appearance: rapid onset, acute painful inflammation, rapid destruction, followed by fever, malaise, lymphadenopathy
  - Location: gingiva, soft tissues
  - Tx: **Augmentin 875 mg.** Dispense 14 tabs, 1 tab PO BID for 7 days. Or **Metronidazole 500 mg.** Dispense 14 tabs, 1 tab PO BID for 7 days. Plus **0.12% Chlorhexidine suspension** twice a day for 2 weeks, **local debridement.**
- **Necrotizing ulcerative periodontitis**
  - Appearance: ulcerated cratered interdental papilla, mobile teeth, fetid odor. May complain of "deep jaw pain", spontaneous bleeding
  - Location: interdental papilla
  - Tx: **Augmentin 875 mg.** Dispense 14 tabs, 1 tab PO BID for 7 days. Or **Metronidazole 500 mg.** Dispense 14 tabs, 1 tab PO BID for 7 days. Plus **0.12% Chlorhexidine suspension** twice a day for 2 weeks, **local debridement.**

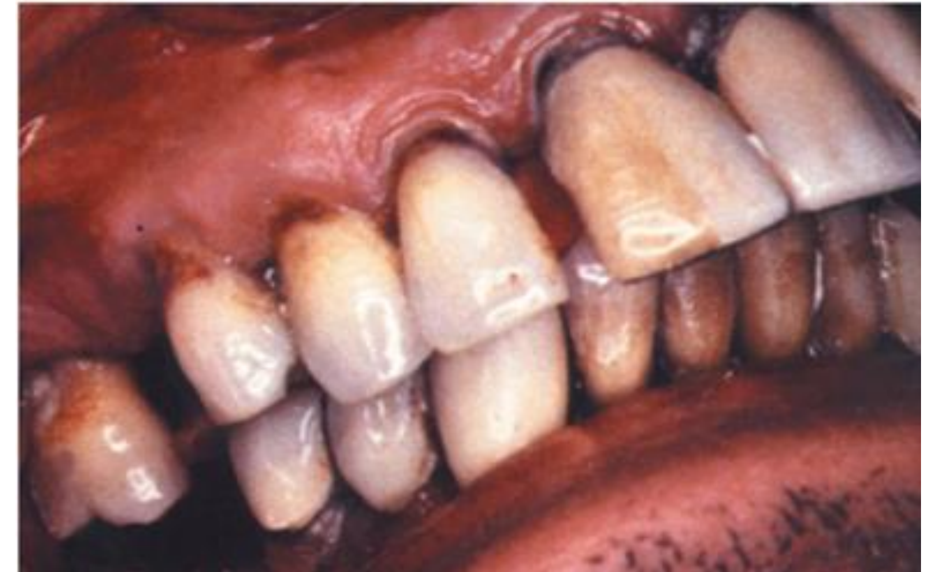




Xerostomia

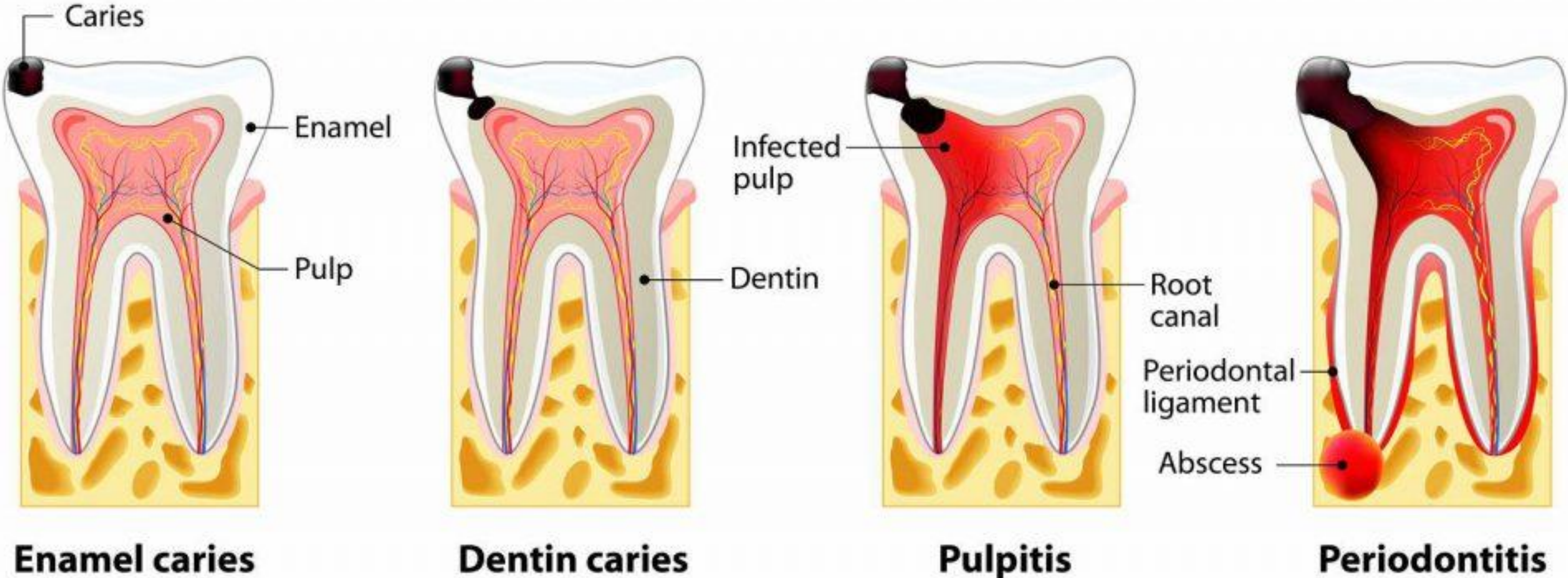
- <u>Effects</u>: caries, rapid dental deterioration, oral candidiasis, mucosal injury, dysphagia, pain reduced oral intake of food.
- <u>Tx</u>:
    - **Pilocarpine 5mg,** disp: 90, take 1 tab tid
    - Oral hygiene should be maintained
    - Xylitol
    - Povidone-iodine 10% (Betadine)





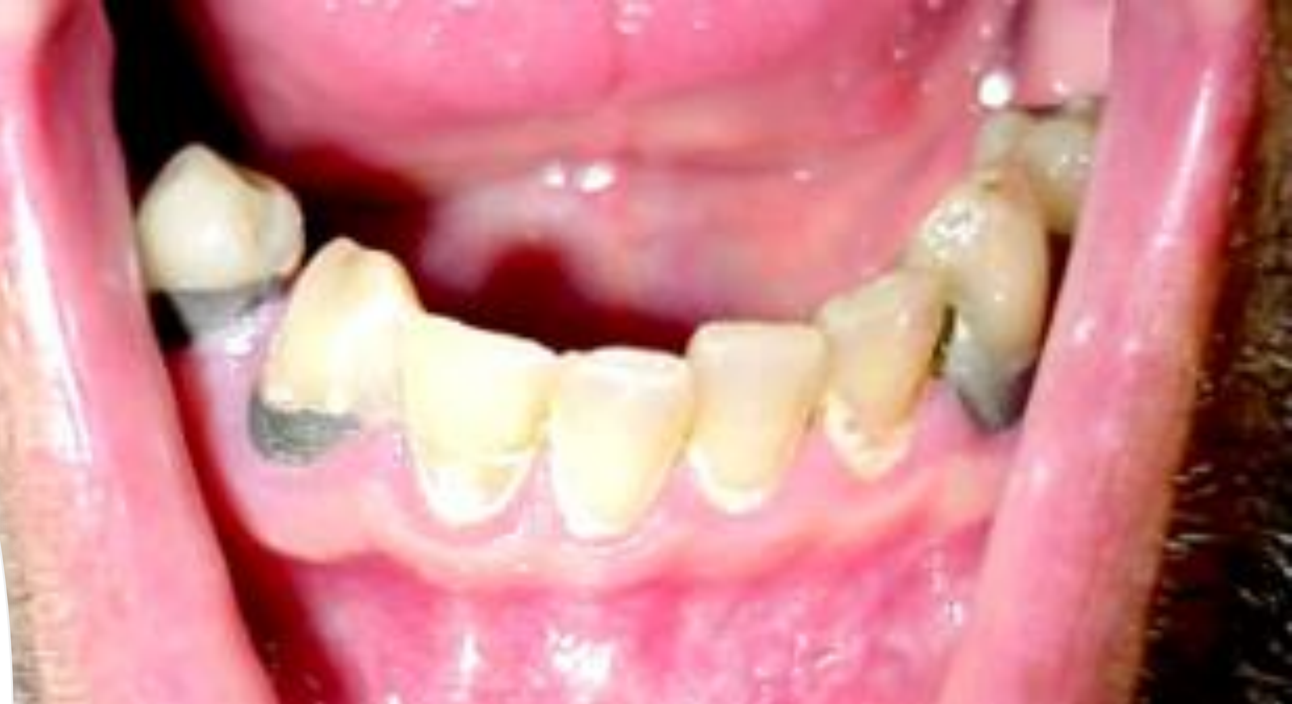
Medications Causing Xerostomia

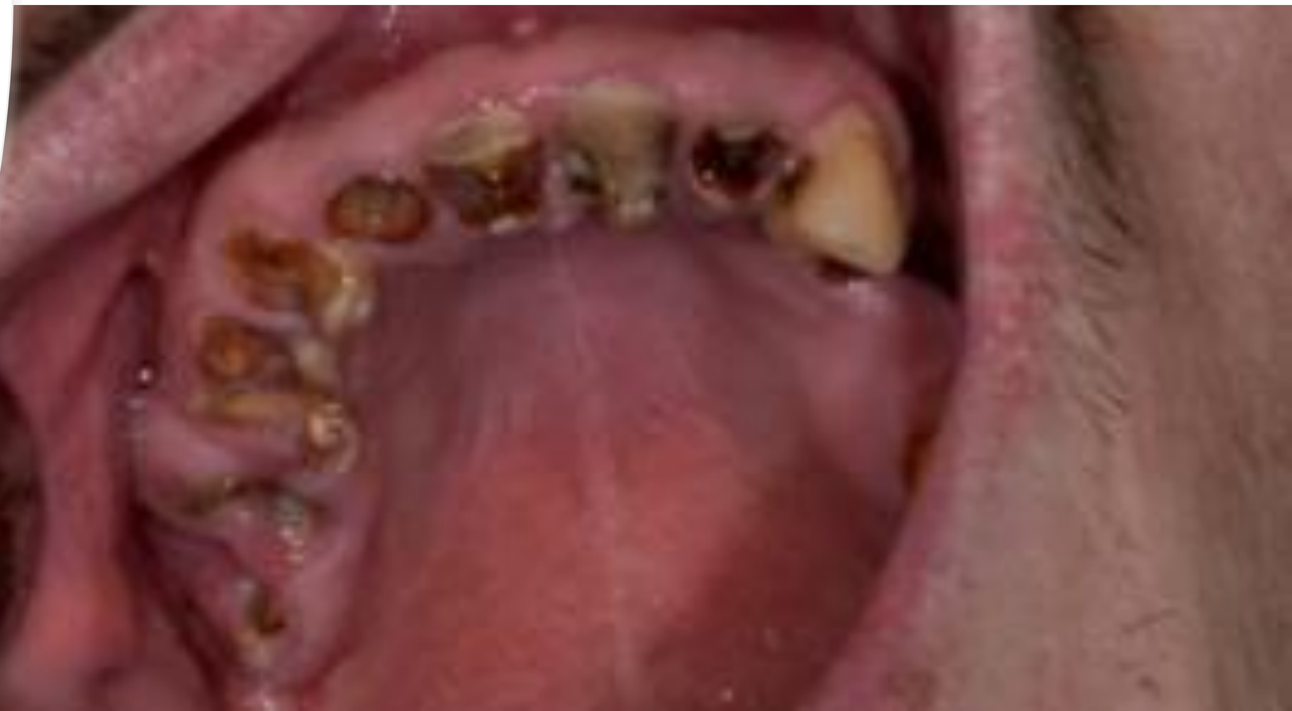
- Antidepressants
- Antihistamines
- Antipsychotics
- Decongestants
- Muscle relaxants
- Appetite suppressants
- Diuretics
- Lung inhalers
- Parkinson's & Alzheimer's meds
- Cancer treatment – chemotherapy & radiation


THE STAGES OF CARIES DEVELOPMENT
Caries
Enamel
Pulp
Dentin
Infected pulp
Root canal
Periodontal ligament
Abscess
Enamel caries
Dentin caries
Pulpitis
Periodontitis

Caries (Decay)

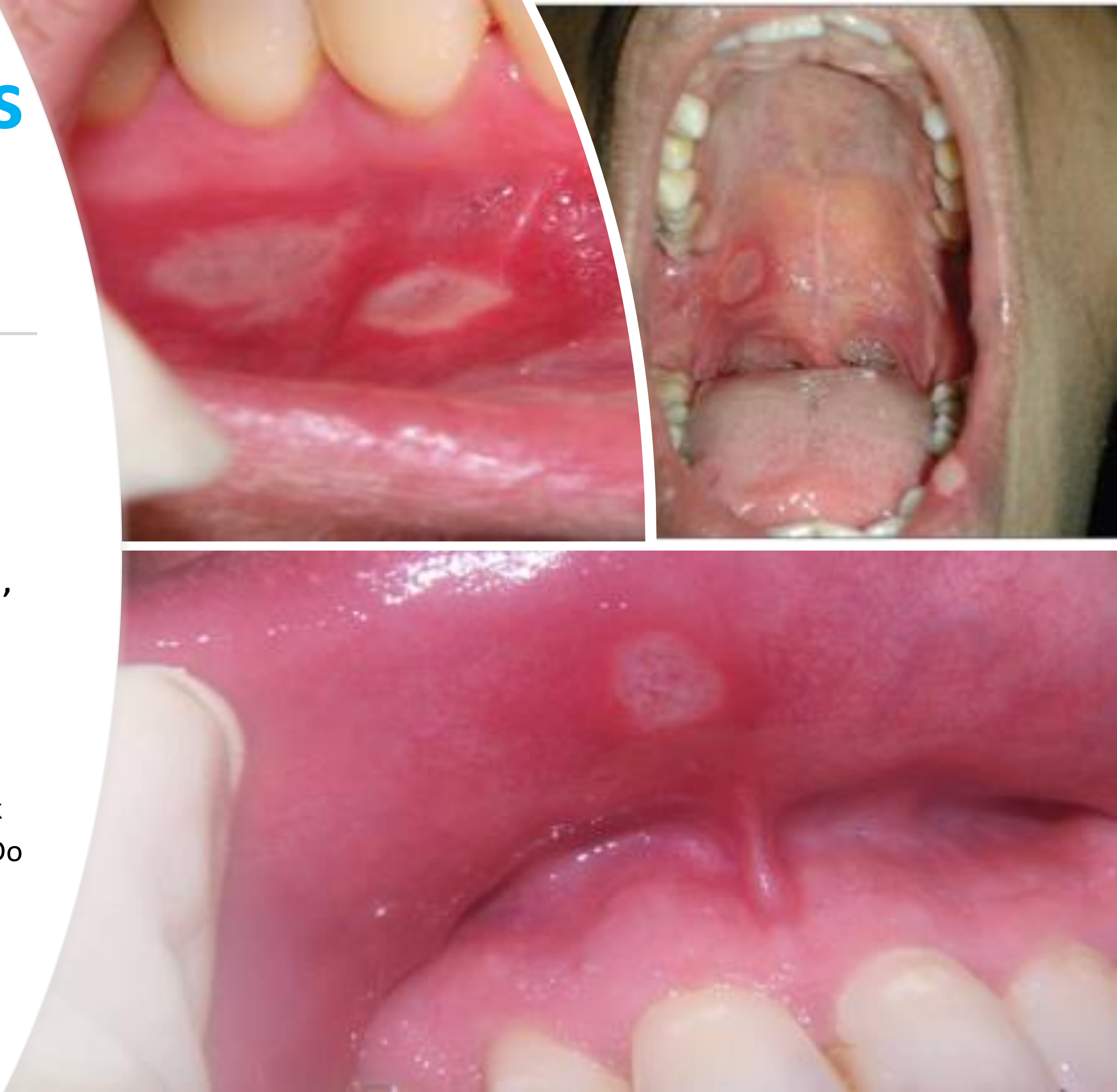
- Appearance: demineralization, hypocalcification prior to gross decay.
- Tx: early white spot lesions may be treated with **1.1% Sodium Fluoride (5,000 ppm),** advanced decay requires mechanical removal of decay with subsequent restorations.

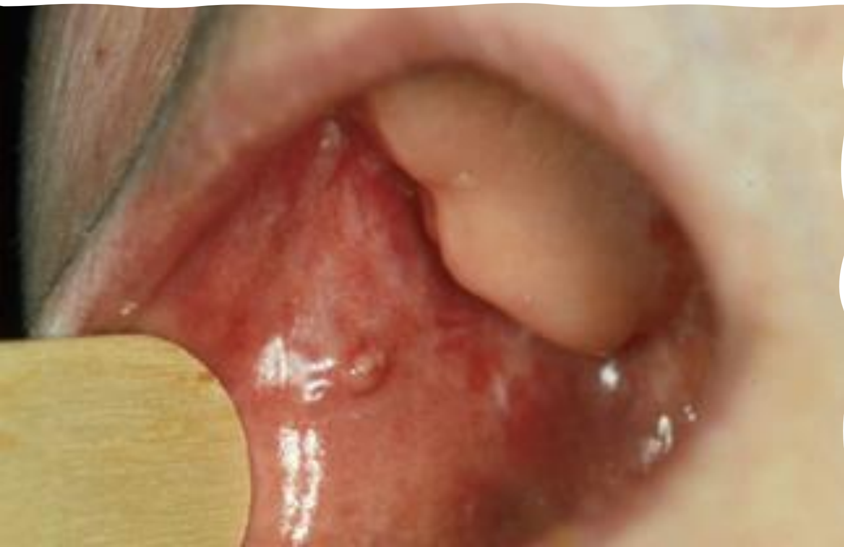




Aphthous Ulcerations (canker sores)

- Appearance: halo inflammation and gray/yellow pseudomembrane.
- Location: moveable (non-keratinized) tissues like buccal mucosa, posterior oropharynx, lingual surface of tongue.
- Minor aphthous ulcer treatment: **Orabase Soothe-N-Seal,** if necessary, **dexamethasone elixir 0.5 mg/5 ml.** Dispense 100 ml, swish with 5 ml for one minute, expectorate. TID until symptoms decrease.
- Major aphthous ulcer treatment: **Geiclair Dose Pack.** Dispense 2 dose packs. Dilute contents of single dose pack into glass with 15 ml water. Rinse 1 minute, expectorate. Do not eat/drink for 1 hour after application. Repeat every 8 hours or as needed.
- Common causes: stress, food allergy.





Swelling of major salivary gland

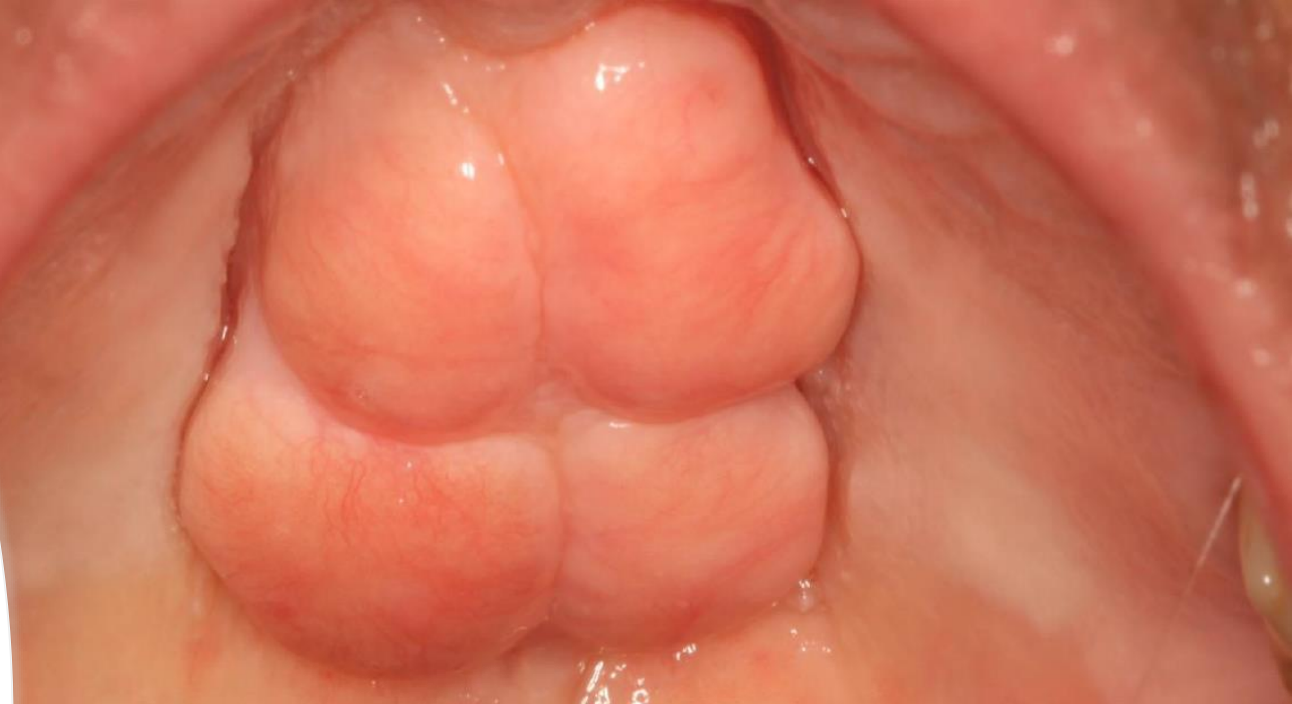
- Appearance: unilateral or bilateral swelling related to diminished flow of secretions. Possible lymphoepithelial infiltration and benign cyst formation.
- Location: typical in tail of parotid gland or less commonly in submandibular gland. Periods of increase or decrease in size. Reduced salivary flow and mouth dryness.
- Tx:
  - Systemic: Adequate ART, systemic corticosteroids.
  - Local: repeated aspiration or rarely radical removal of large cysts; drinking more water, chewing sugar free gum.

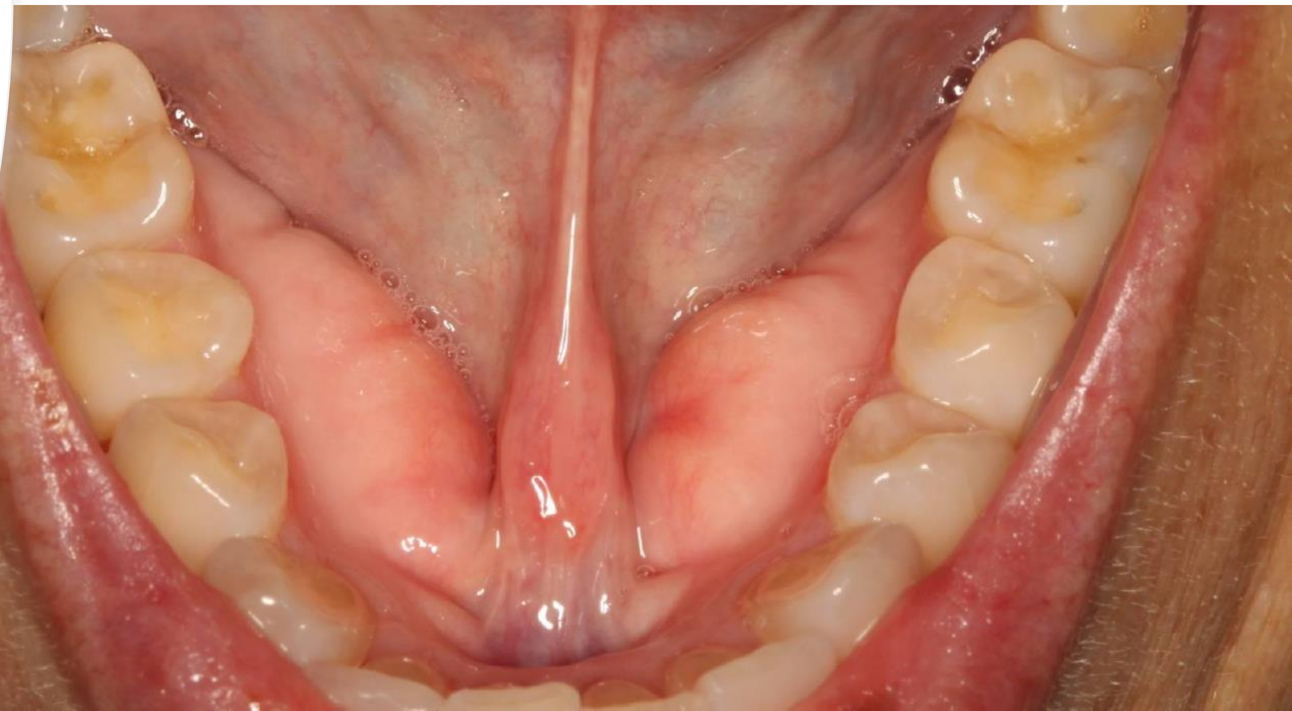
Other Common Oral Findings

- Tori
- Fordyce granules
- Linea alba
- Morsicatio buccarum
- Leukoedema
- Benign migratory glossitis
- Fissured tongue
- Syphilis
- Fibroma
- Fluorosis
- Meth mouth
- Nicotinic stomatitis
- Smoker’s melanosis
- Pericoronitis/operculitis
- Dental infections

Torus/Tori/ Exostoses

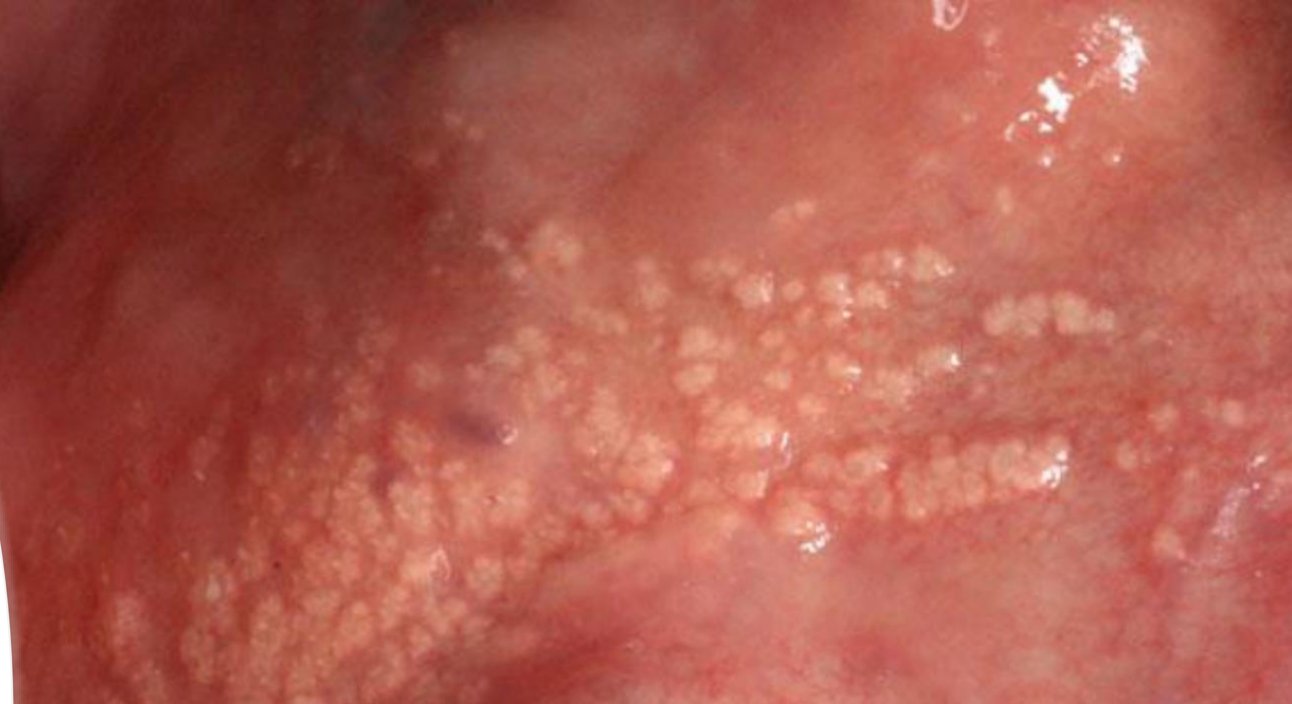
- Palatal Torus
  - Appearance: bony protrusion.
  - Location: midline of hard palate.
- Mandibular Torus
  - Appearance: bony protrusion.
  - Location: mandible lingual to canine/premolars.
- Tx: N/A

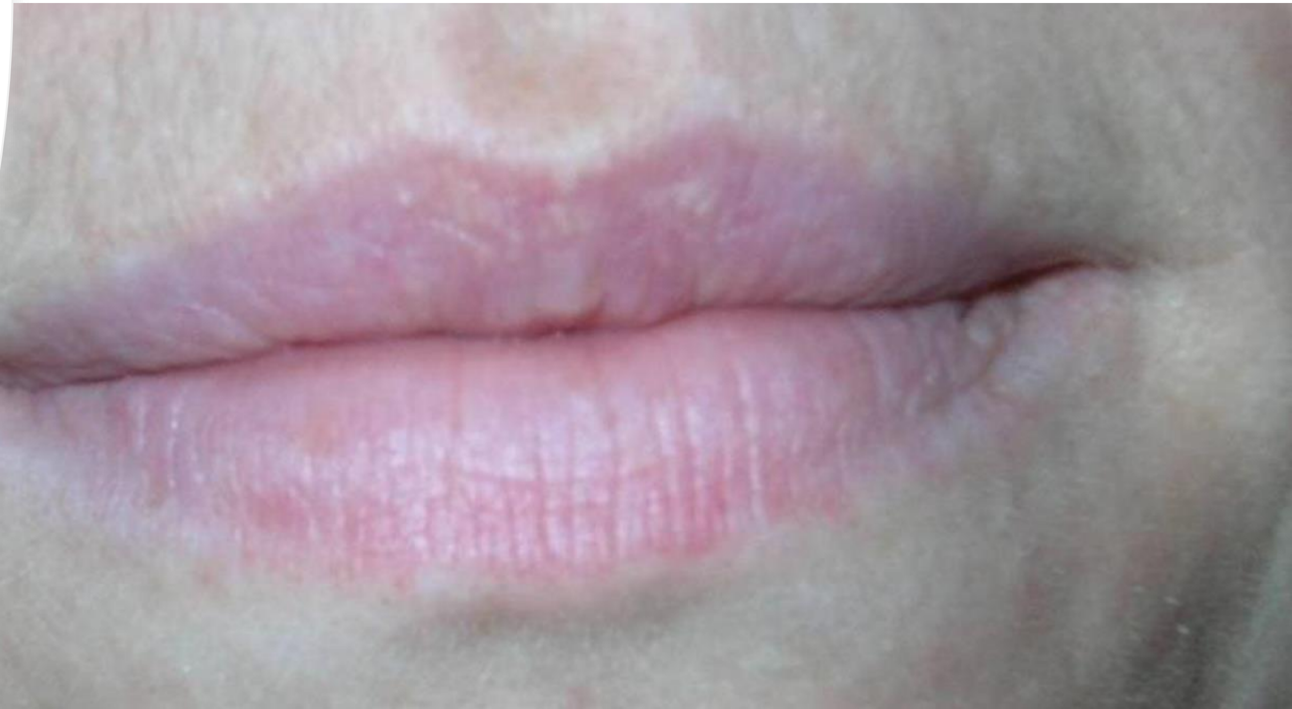




Fordyce Granules

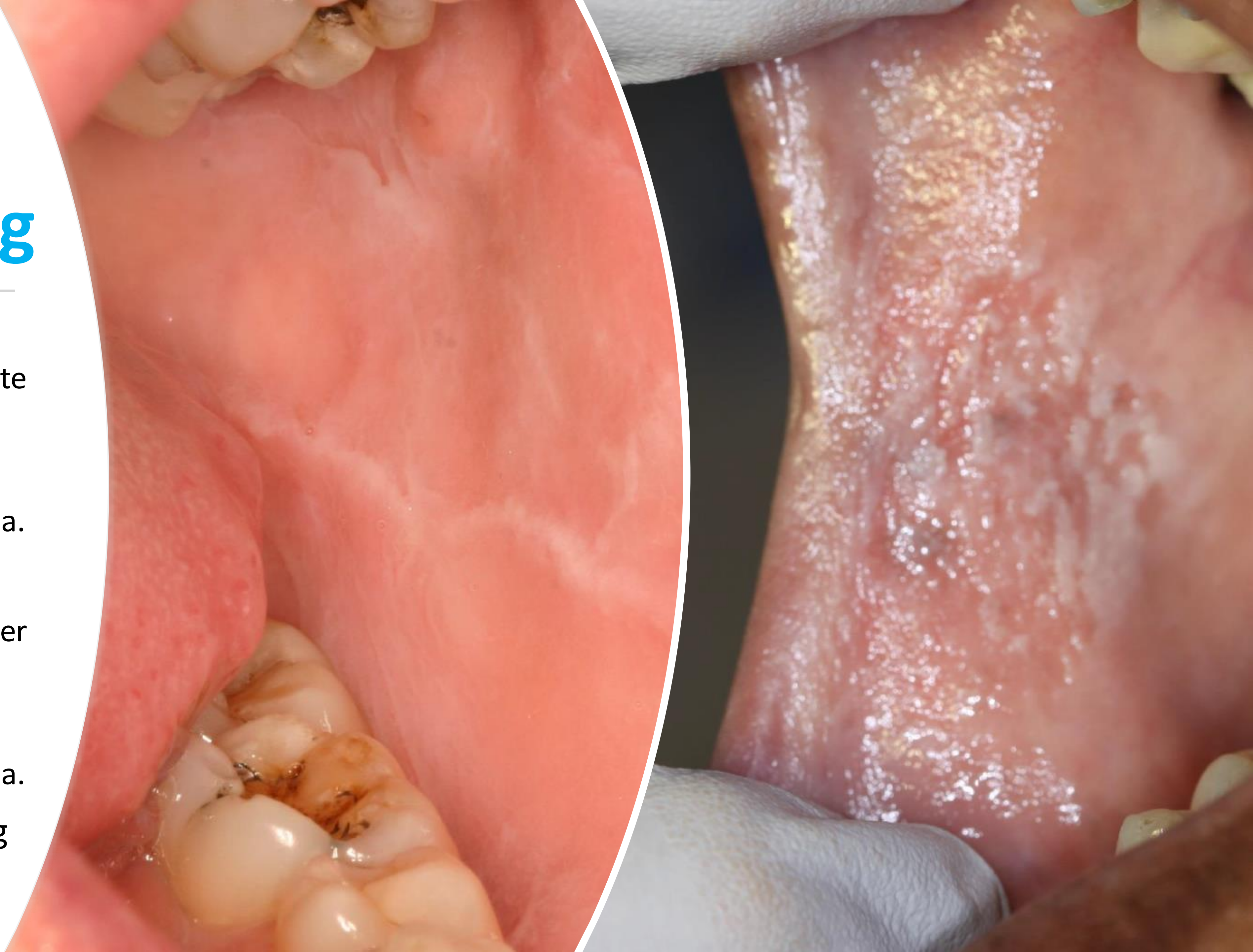
- Appearance: Ectopic sebaceous glands, yellow papules.
- Location: buccal mucosa, lips.
- Tx: N/A





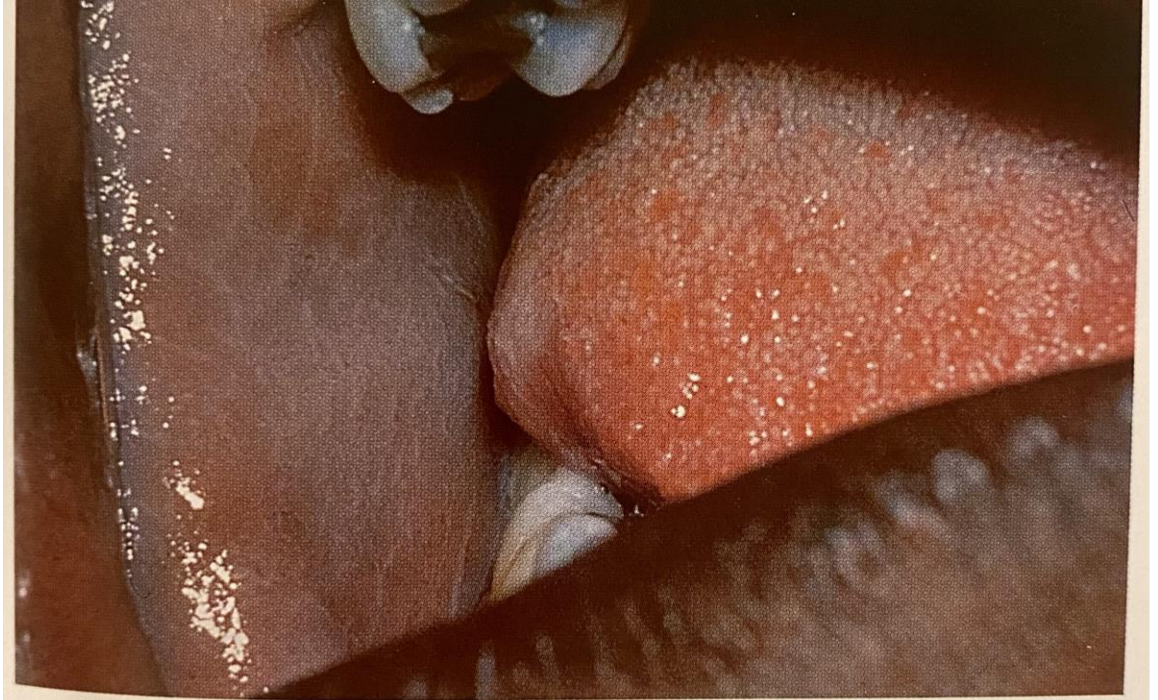
Chronic Cheek Biting

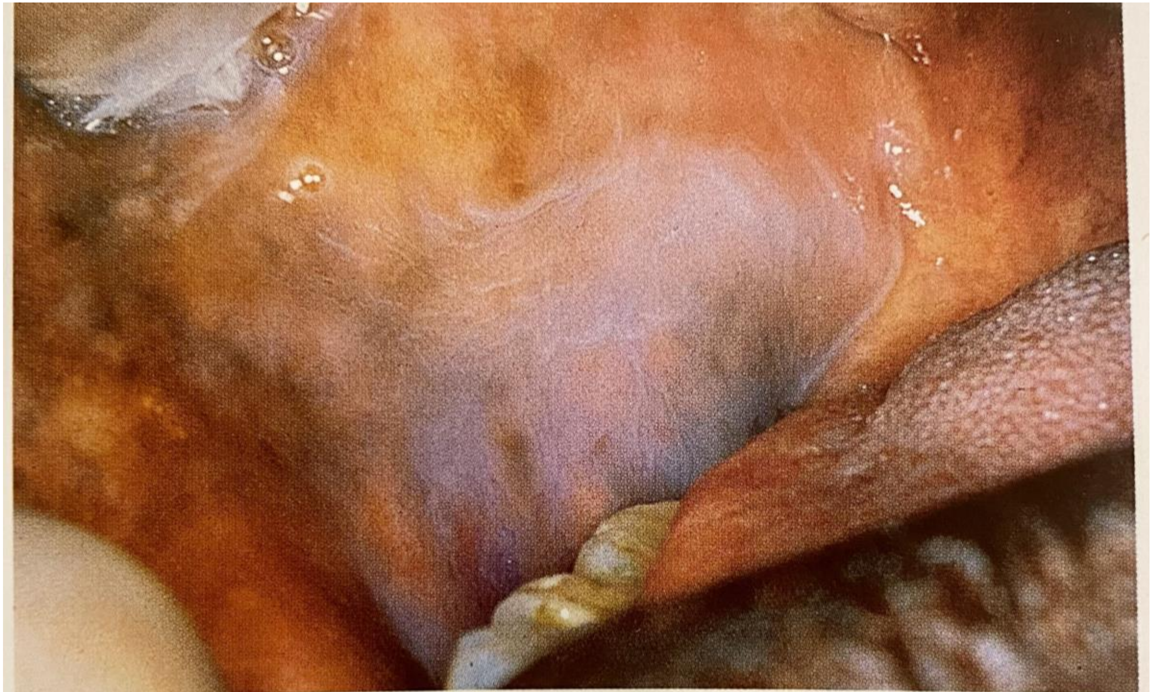
- **Linea Alba**
  - Appearance: linear white plaque related to clenching and bruxing.
  - Location: buccal mucosa.
- **Morsicatio buccarum**
  - Appearance: white hyper keratinized tissue from chronic cheek biting.
  - Location: buccal mucosa.
- Tx: Eliminate cheek-biting or lip-chewing habit.



Leukoedema

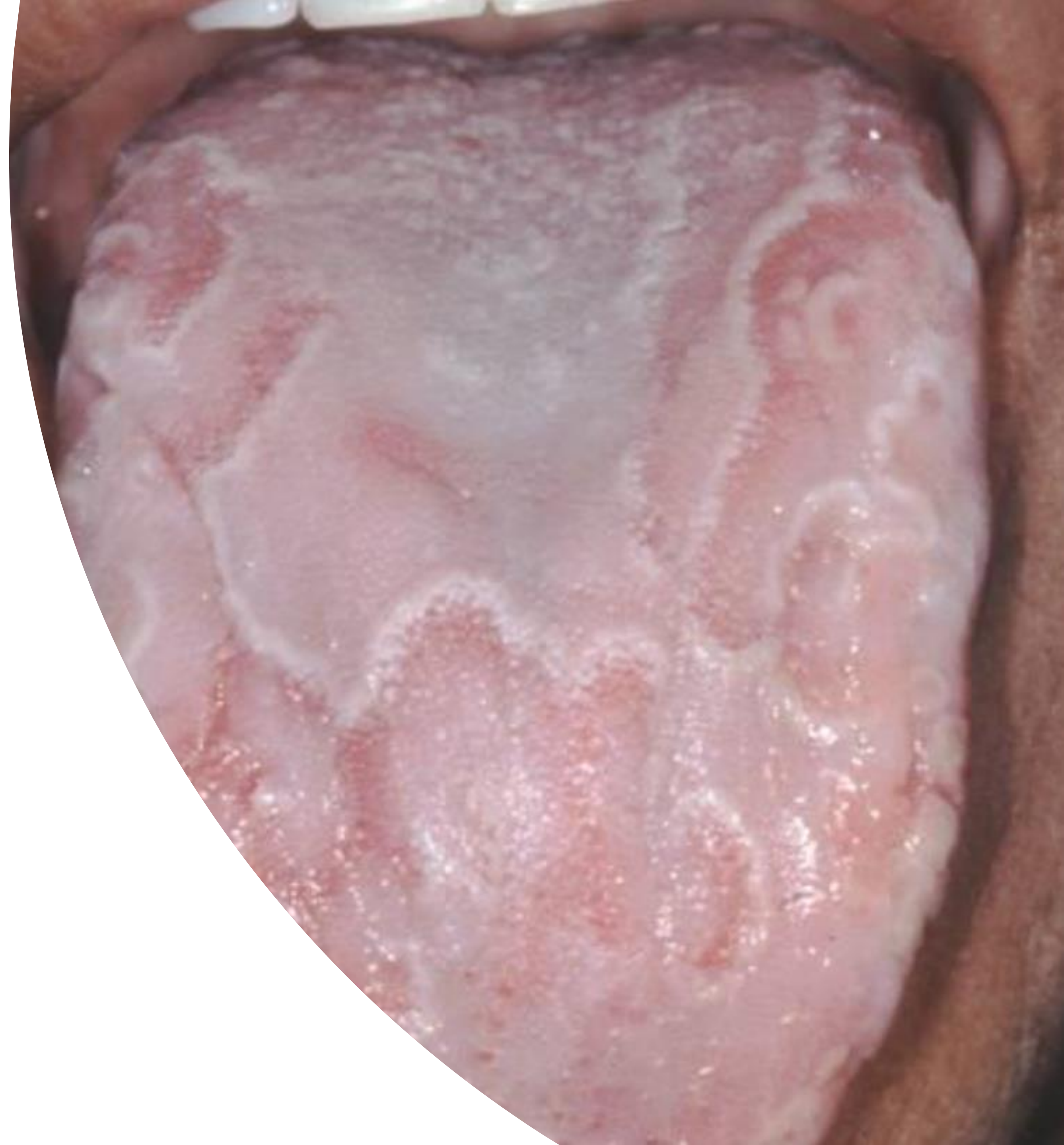
- Appearance:
  - Opalescent, milky-white or gray. Faint, bilateral. Fine white lines and wrinkles.
  - Exaggerated and chronic- overlapping folds of tissue.
  - Diagnosed by stretching the mucosa--> white diminishes or disappears.
- Location: Buccal mucosa (MC), labial mucosa, soft palate, FOM.
- Cause unknown. More prominent in smokers.
- Tx: none





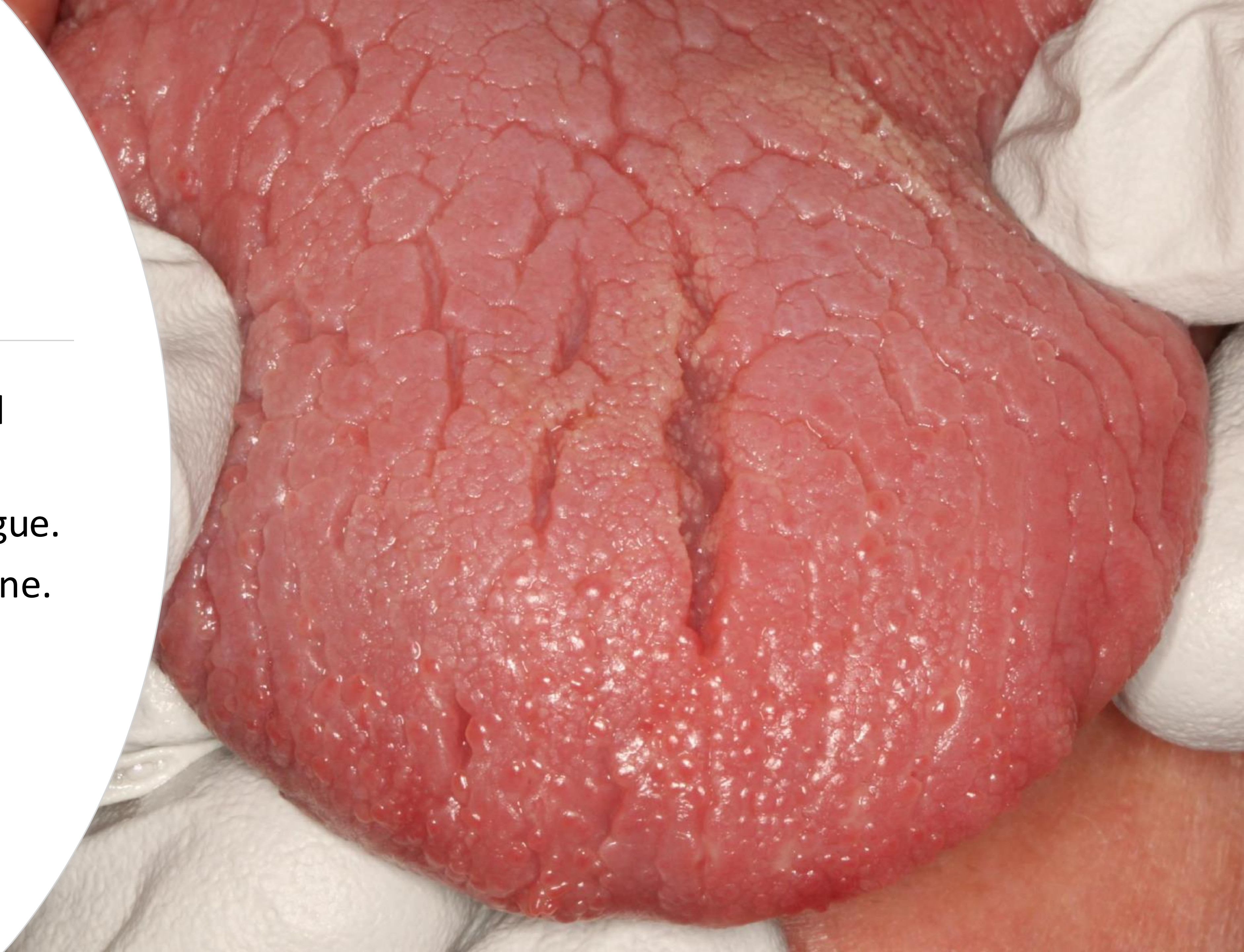
Benign Migratory Glossitis (Geographic tongue)

- Appearance: one or more erythematous patches incompletely bordered by yellow peripheries; lesions change position.
- Location: dorsal, lateral, ventral tongue.
- Tx: N/A



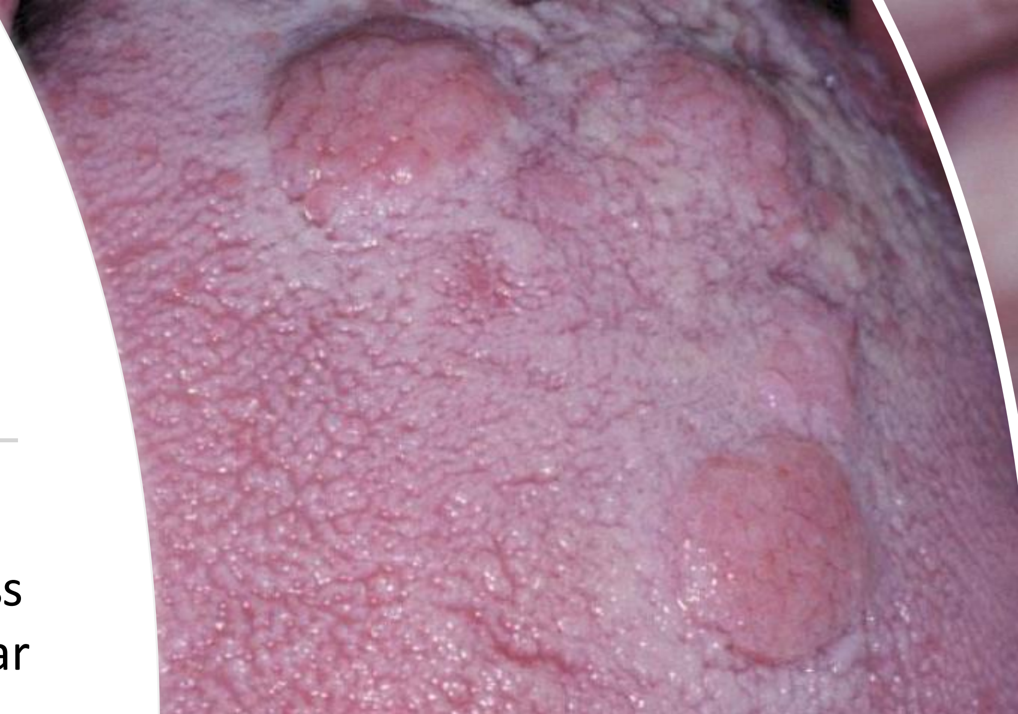
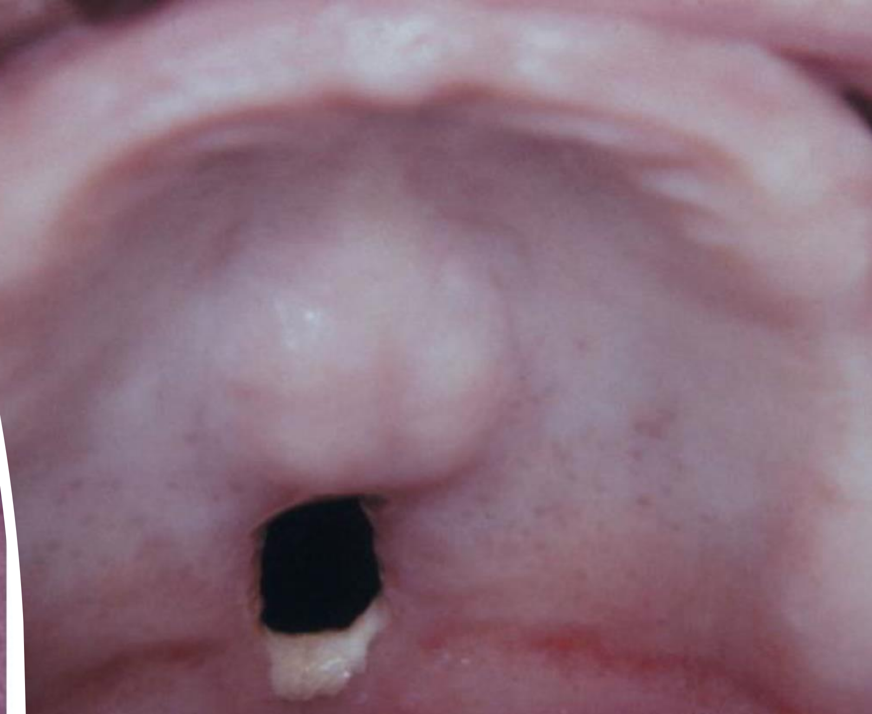
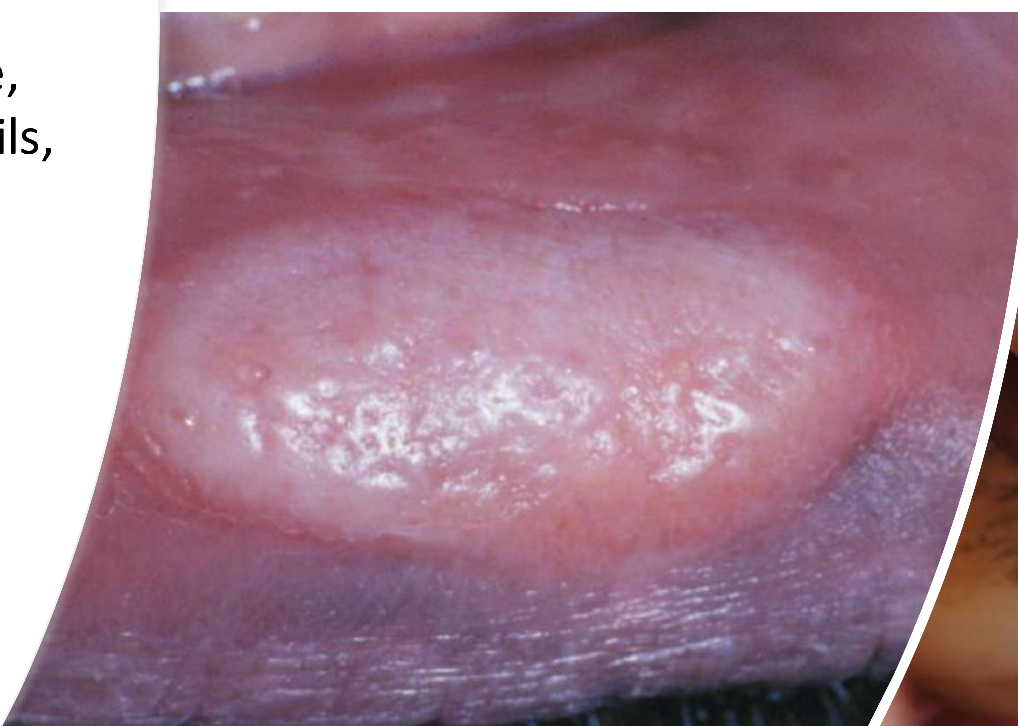
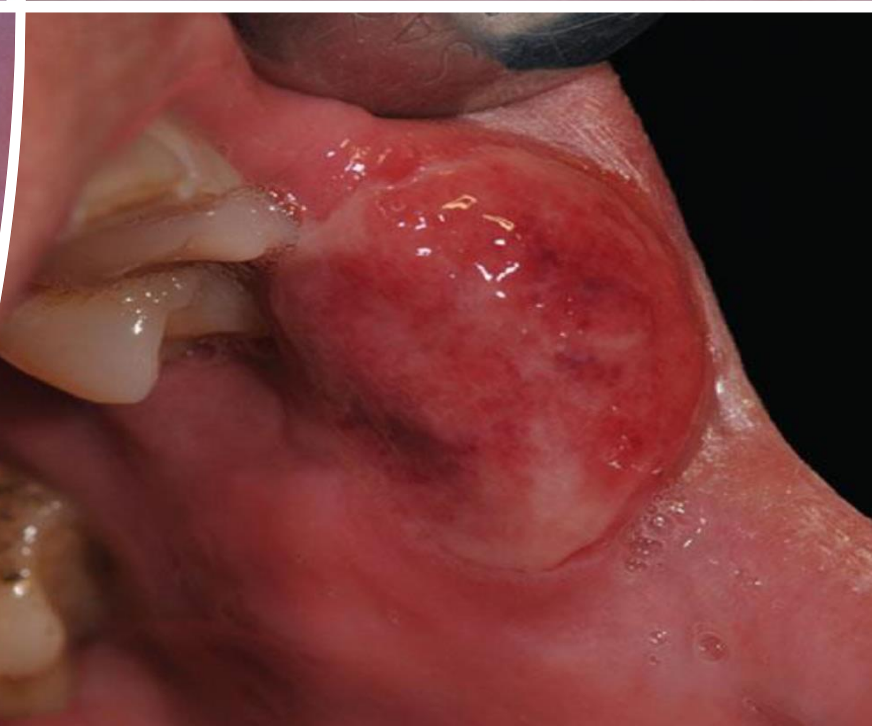
Fissured Tongue

- Appearance: cracked tongue with grooves.
- Location: dorsal tongue.
- Tx: proper oral hygiene.



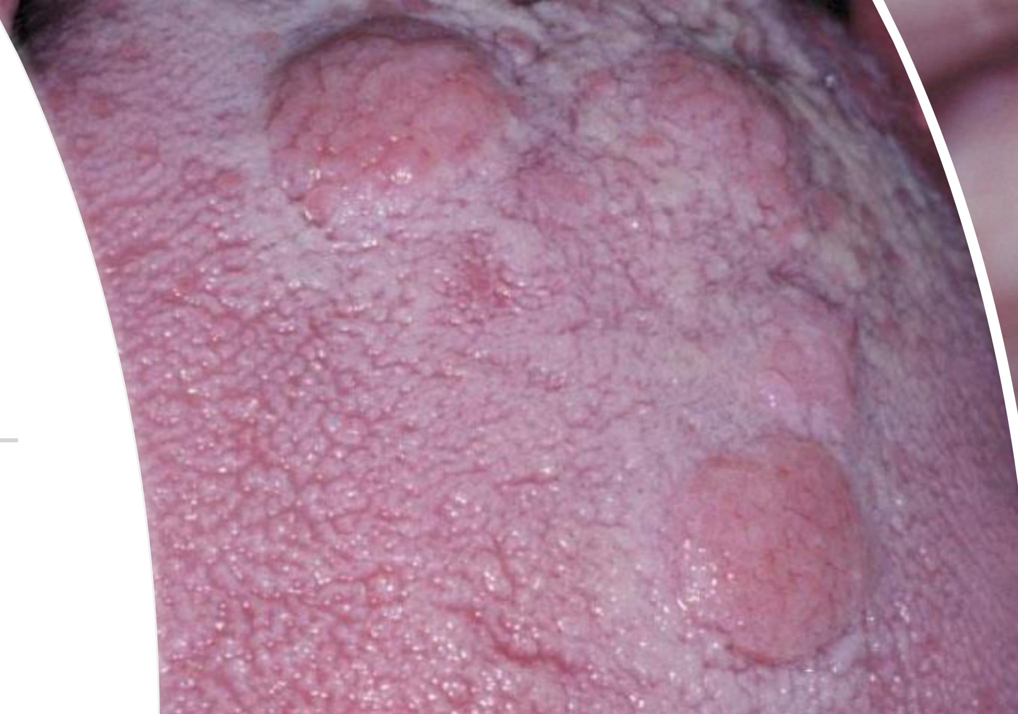
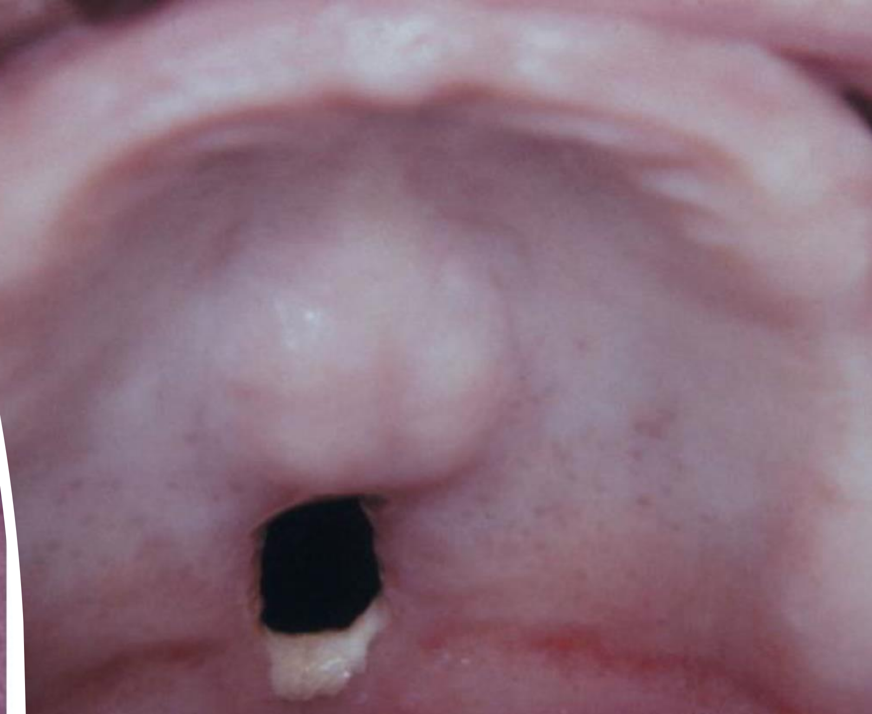
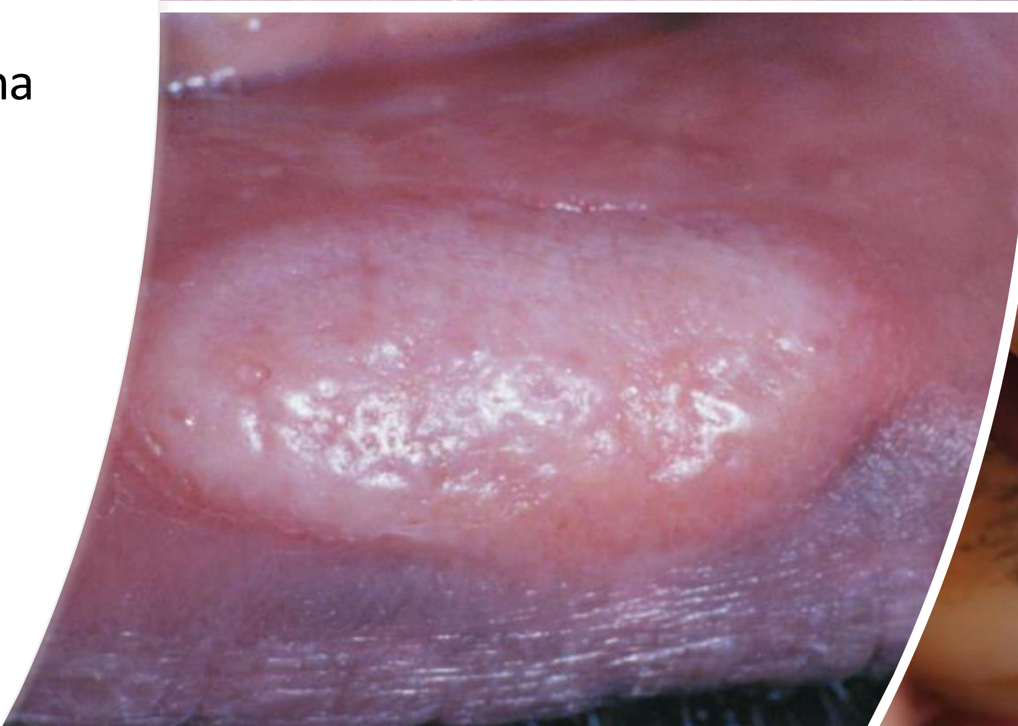
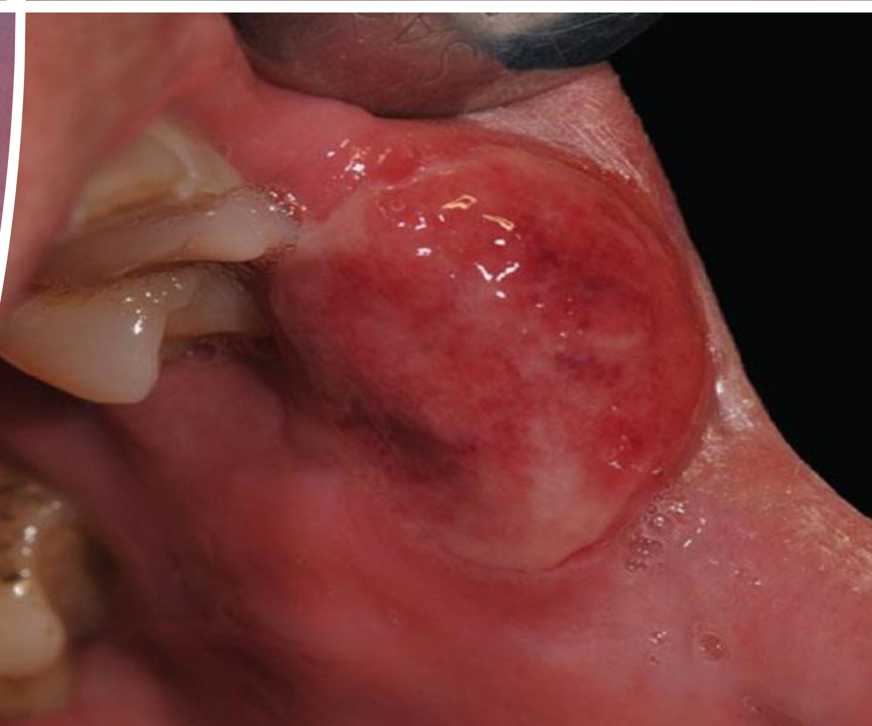
Syphilis - Primary

- **Primary**
  - Appearance: Painless ulceration or vascular proliferation.
  - Location: lip, tongue, palate, gingiva, tonsils, buccal mucosa.
- Tx: Penicillin G.

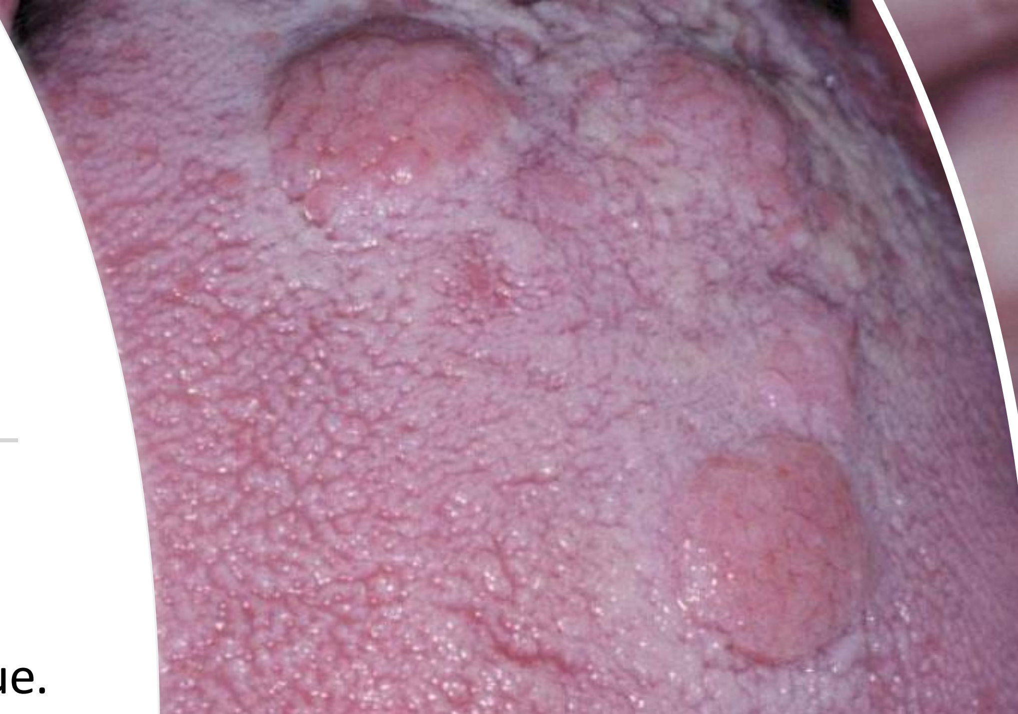
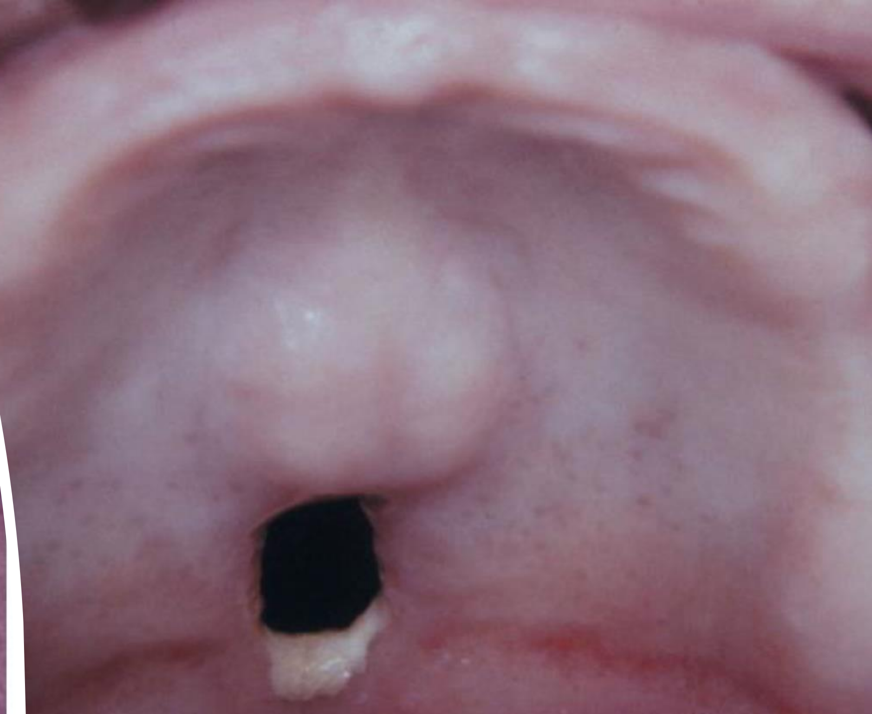
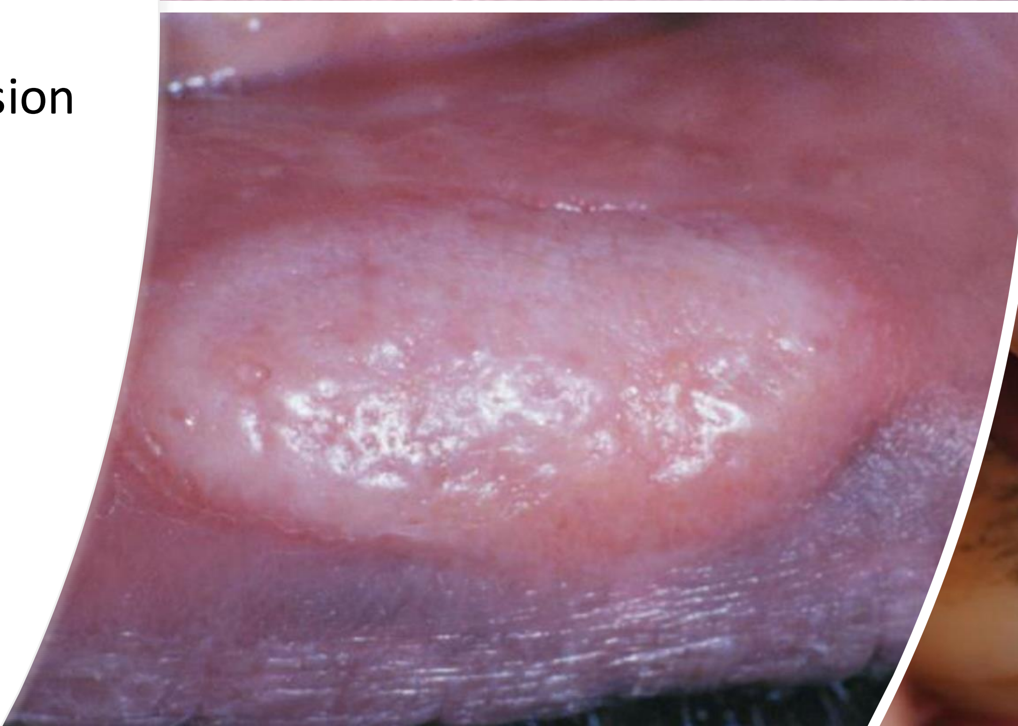
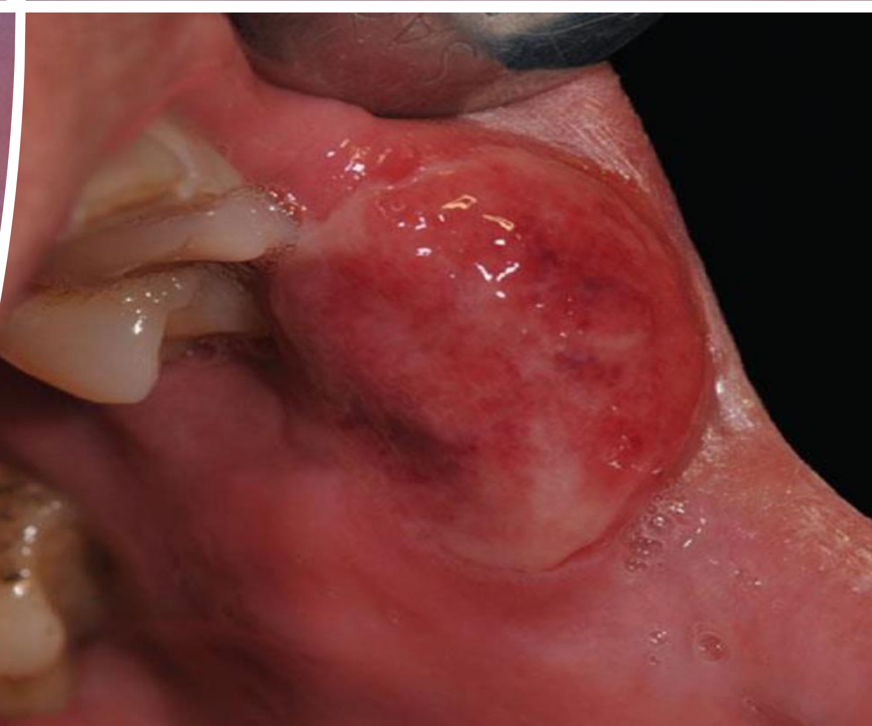
Syphilis - Secondary

- **Secondary**
  - Appearance: mucous patches, whitish areas of mucosa, condyloma lata papillary lesions.
  - Location: lip, tongue, buccal mucosa, palate.
- Tx: Penicillin G.

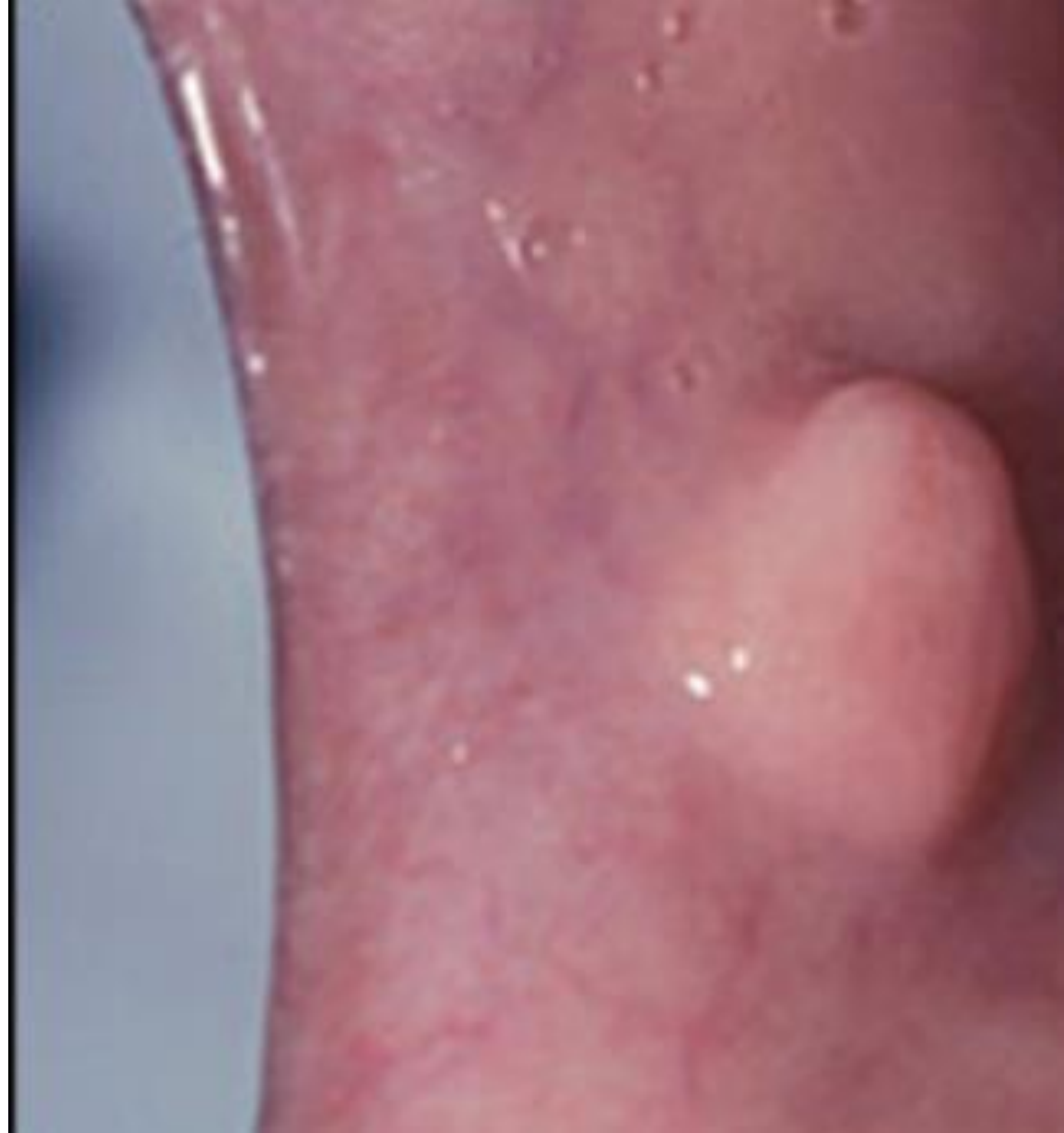
Syphilis - Tertiary

- **Tertiary**
  - Appearance: granulomatous inflammation of tissue.
  - Gumma- indurated, nodular ulcerated lesion resulting in tissue destruction.
  - Palatal surface perforated to nasal cavity.
  - Location: palate, tongue.
- Tx: Penicillin G.

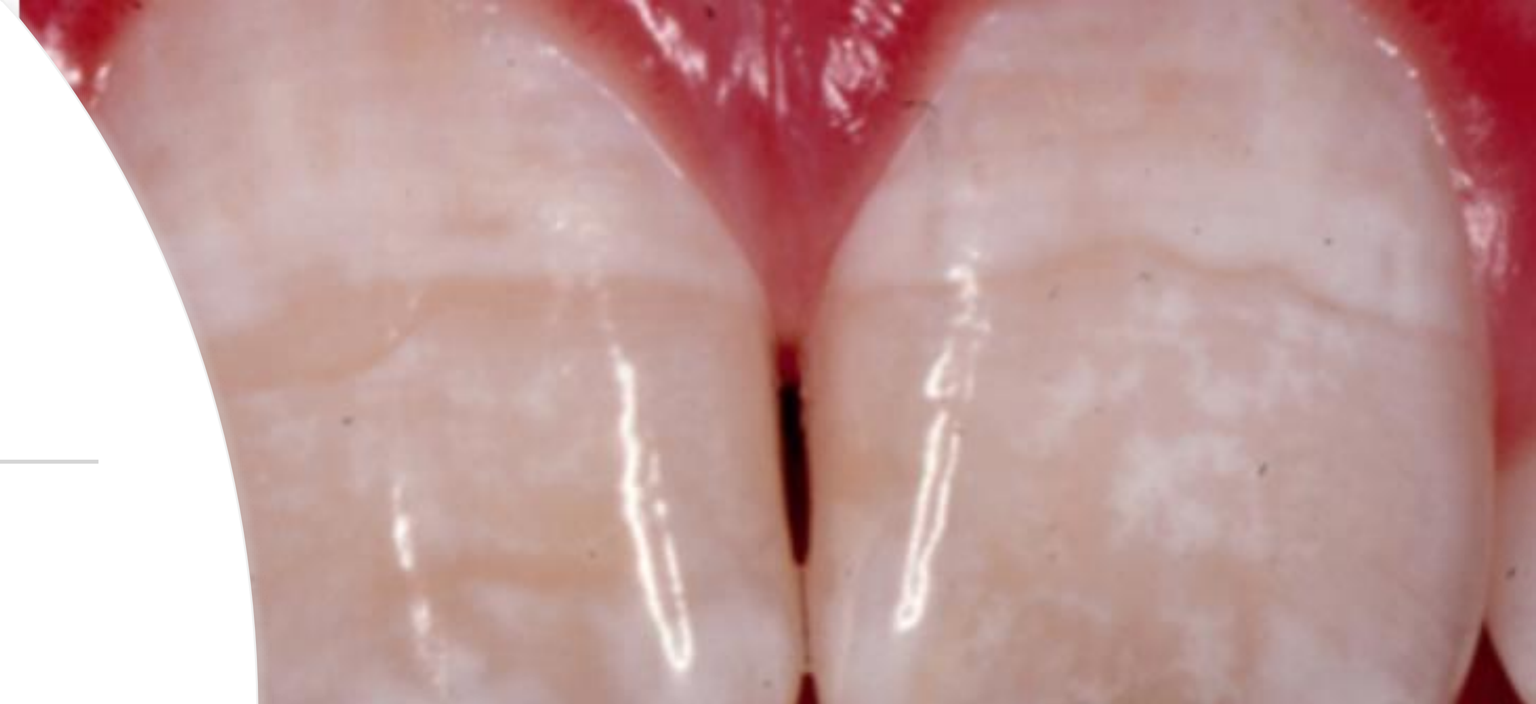
Fibroma

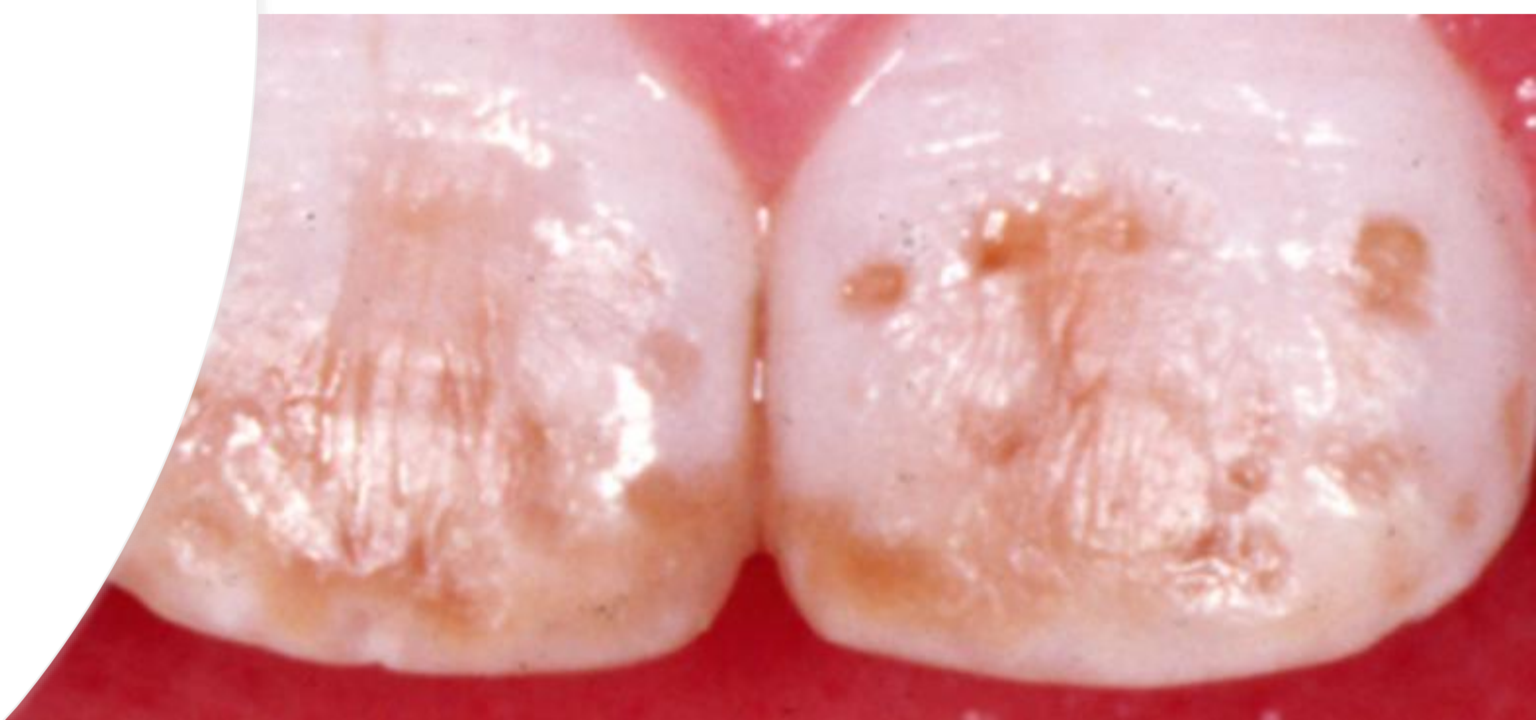
- Appearance: smooth, firm papule usually related to chronic irritation. Focus of hyperplastic connective tissue reacting to local irritation.
- Location: inside the cheek where upper and lower teeth meet, lateral tongue, gingiva, inside lower lip.
- Tx: none or excision of lesion.



Fluorosis

- Appearance: white spots, pits in teeth.
- Location: enamel of teeth.
- Tx: N/A





Meth Mouth

- Rampant Caries.
- Cause:
    - Drug's ability to decrease salivary flow and/or create perception of dry mouth and cause cravings for carbonated soft drinks.
    - Chronic exposure causes decay along gumline of anterior teeth, typically brownish color.

Recommend substance use counseling.

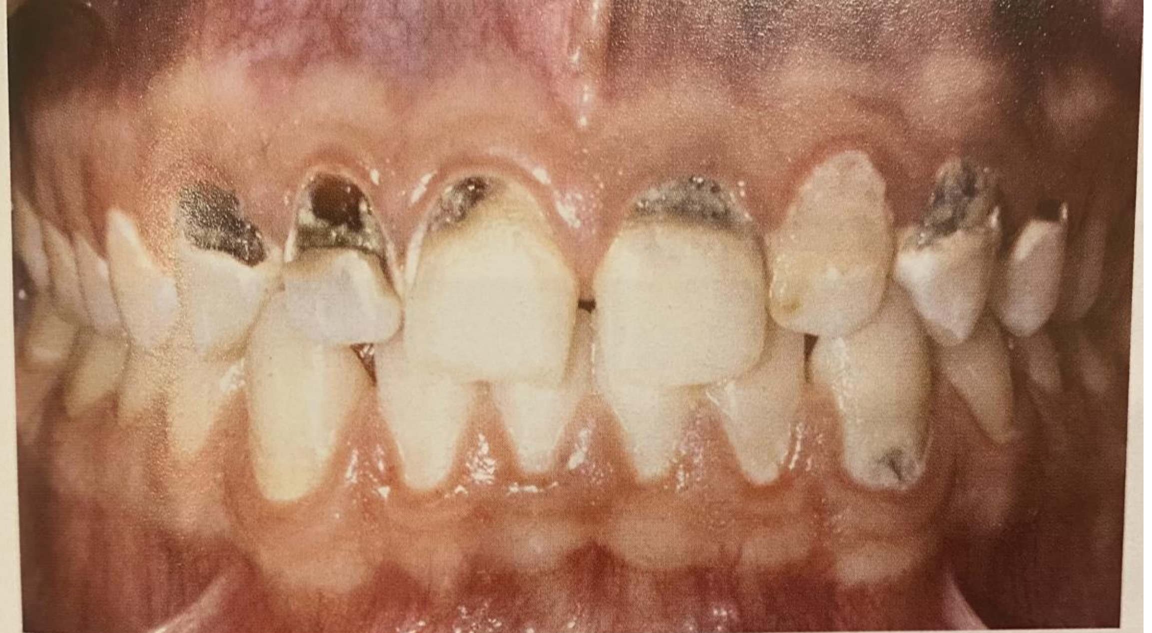


Fig. 94.1. **Meth mouth:** rampant decay incisors.

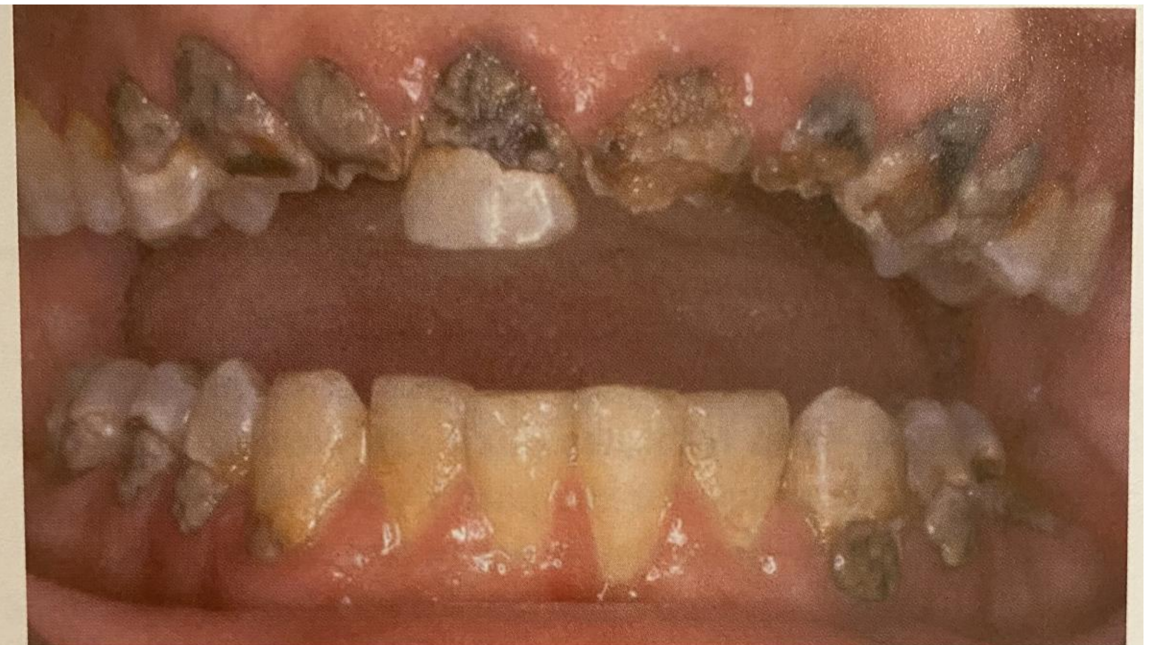
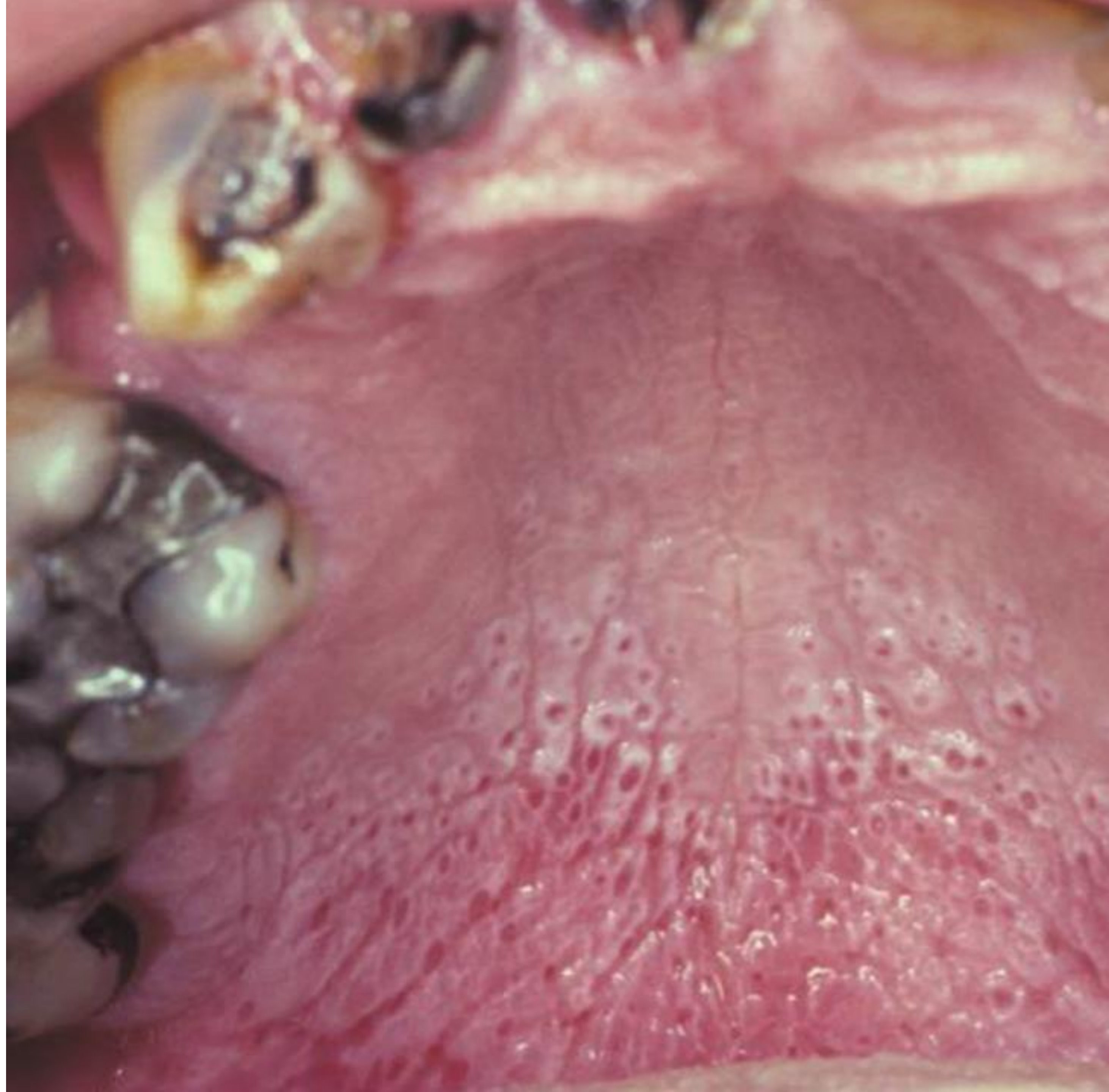


Fig. 94.2. **Meth mouth:** rampant and more advanced.

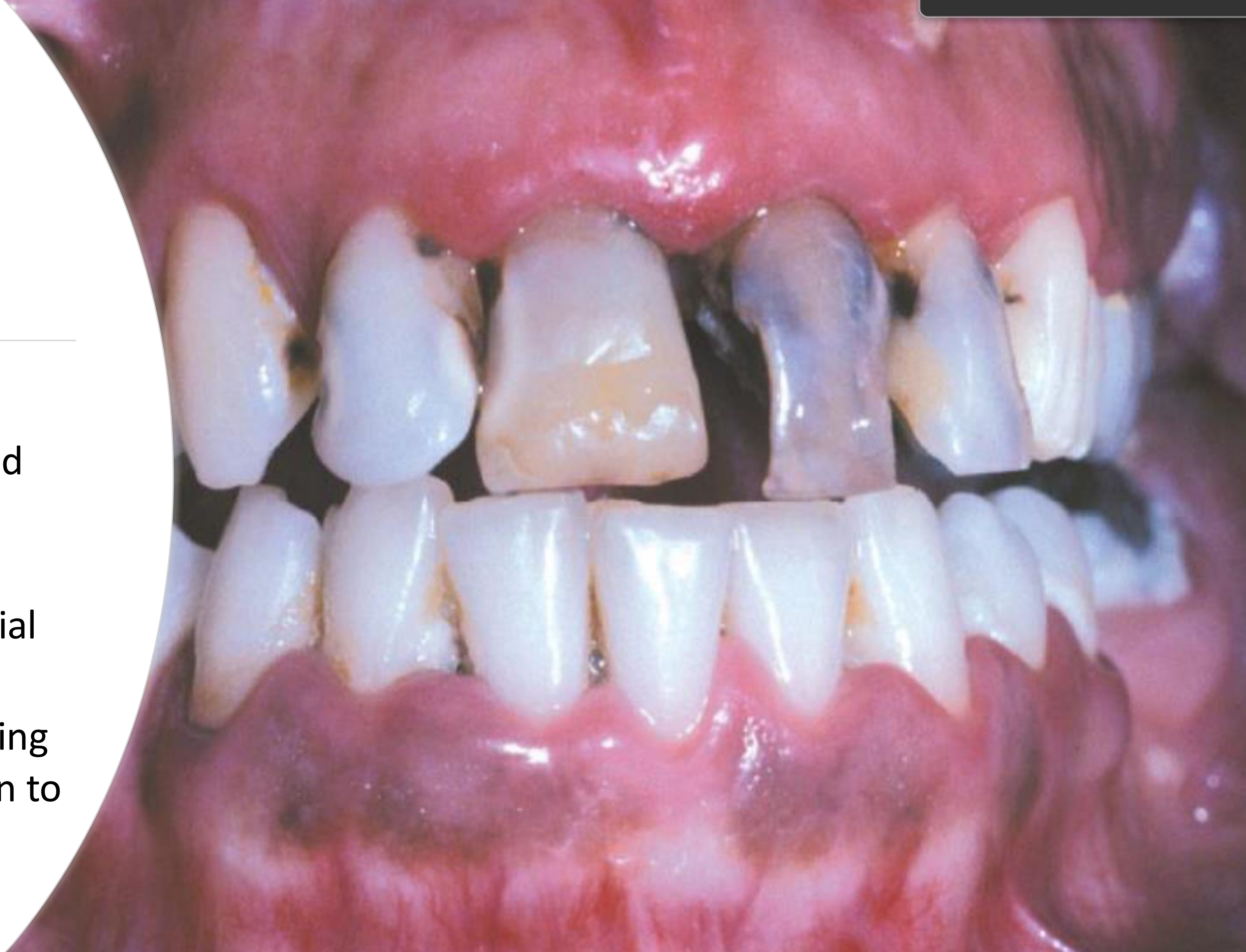
Nicotinic Stomatitis

- Appearance: red papules representing inflamed salivary glands.
- Location: palate.
- Tx: smoking cessation.



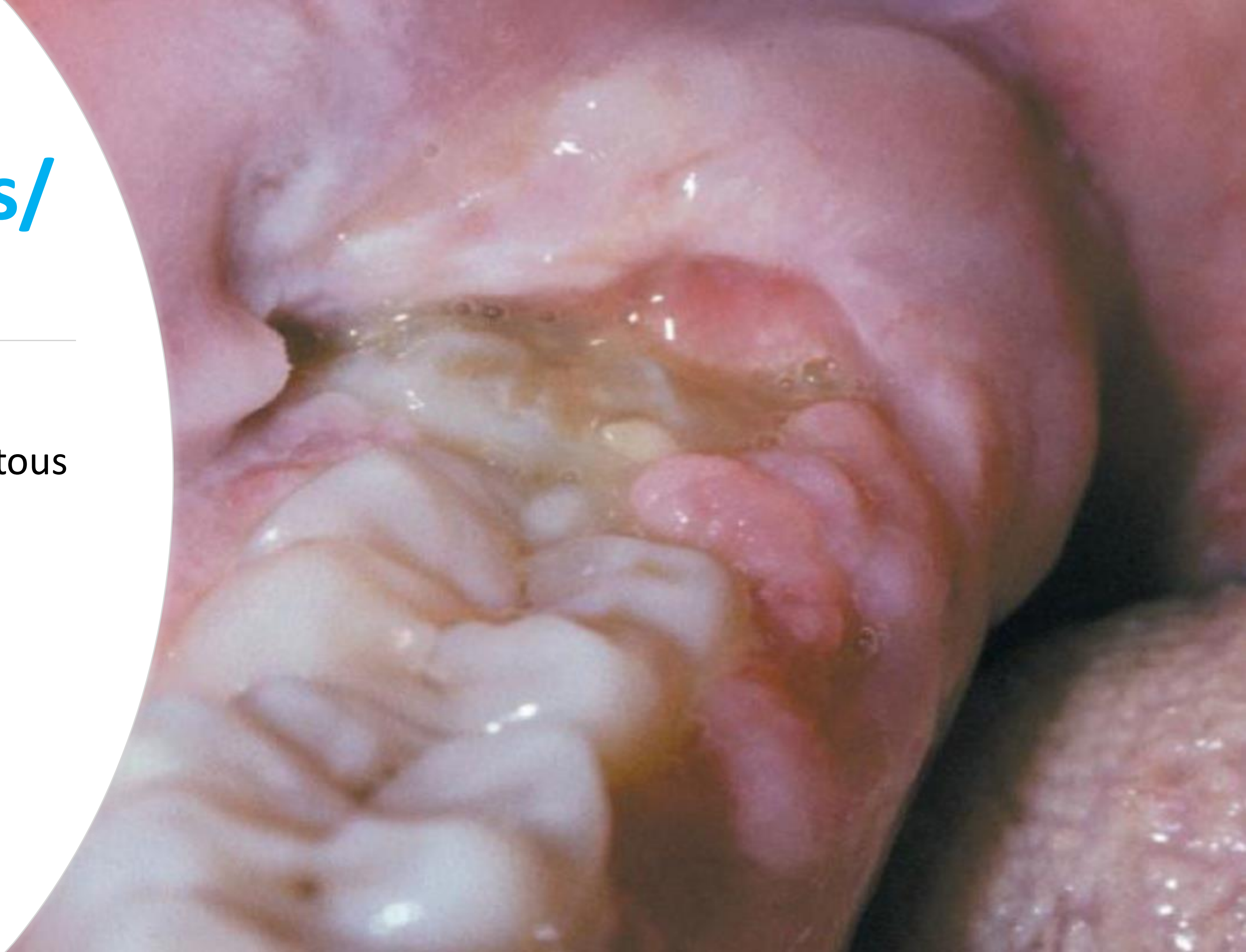
Smoker's Melanosis

- Appearance: oral pigmentation increased significantly in heavy smokers.
- Location: anterior facial gingiva.
- Tx: cessation of smoking can cause discoloration to fade over 3 years.

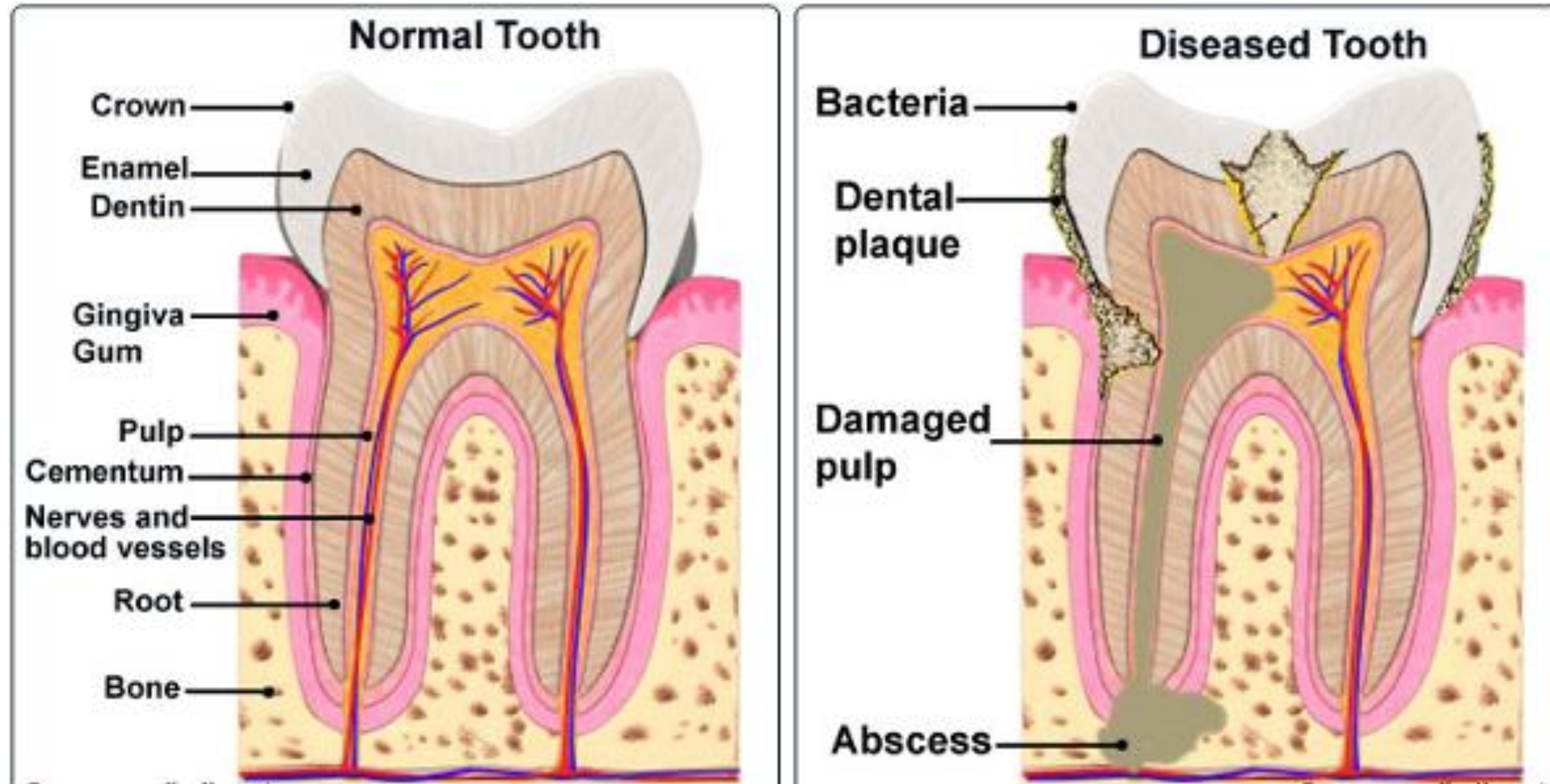


Pericoronitis/ Operculitis

- Appearance: erythematous/edematous tissue.
- Location: tissue surrounding 3rd molar (operculum).
- Tx: extraction underlying tooth.



Normal vs Infected Tooth



Dental Infections

4 classic features:
- Calor (**heat**), dolor (**pain**), rubor (**redness**), tumor (**swelling**).

Cellulitis: early infection.
- Firm & diffuse.

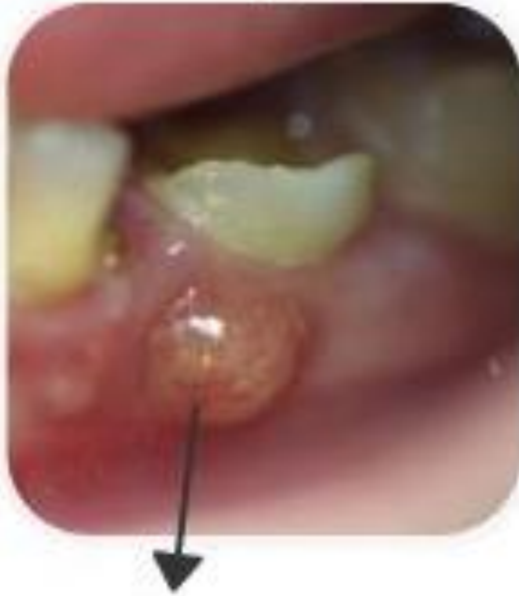
Abscess: area of pus caused by an infection.
- Soft & localized.
- Visible in or outside mouth. Drains spontaneously or when incised.

Parulis: draining infection.

Tx: Incision & drainage (I & D), root canal, debridement, extraction.

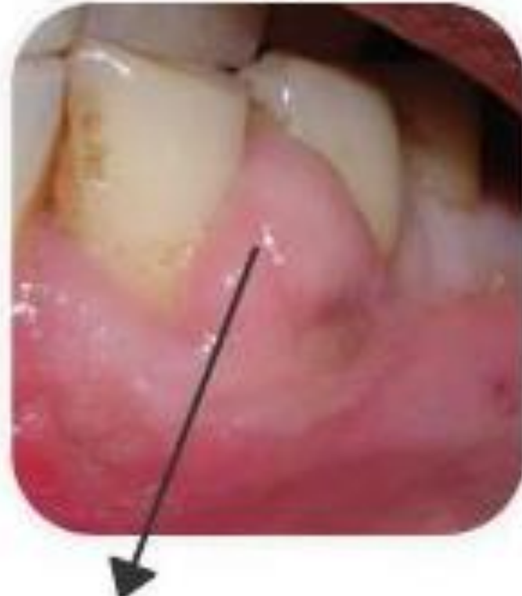
Types of Dental Abscess

Periapical



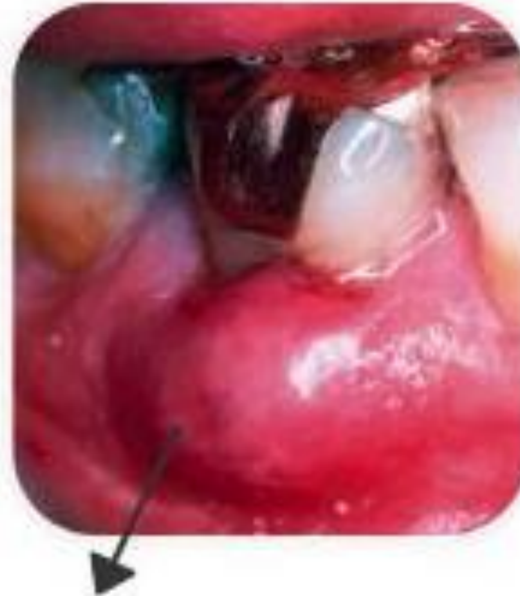
It forms at the root tip.

Gingival



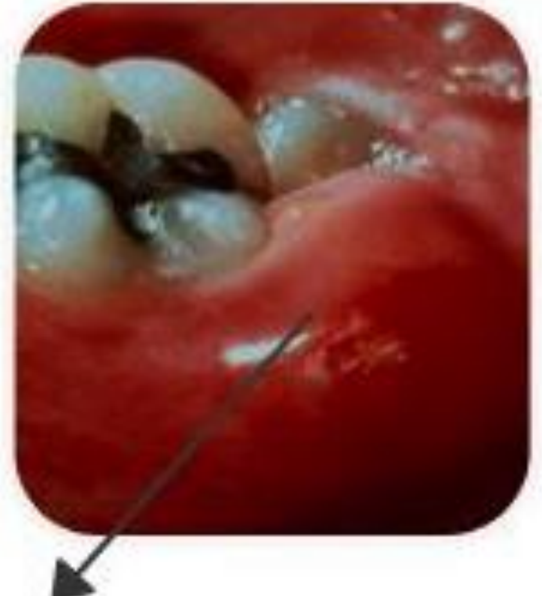
It forms in the space between the gum and tooth.

Periodontal



It forms in a periodontal pocket.

Pericoronal



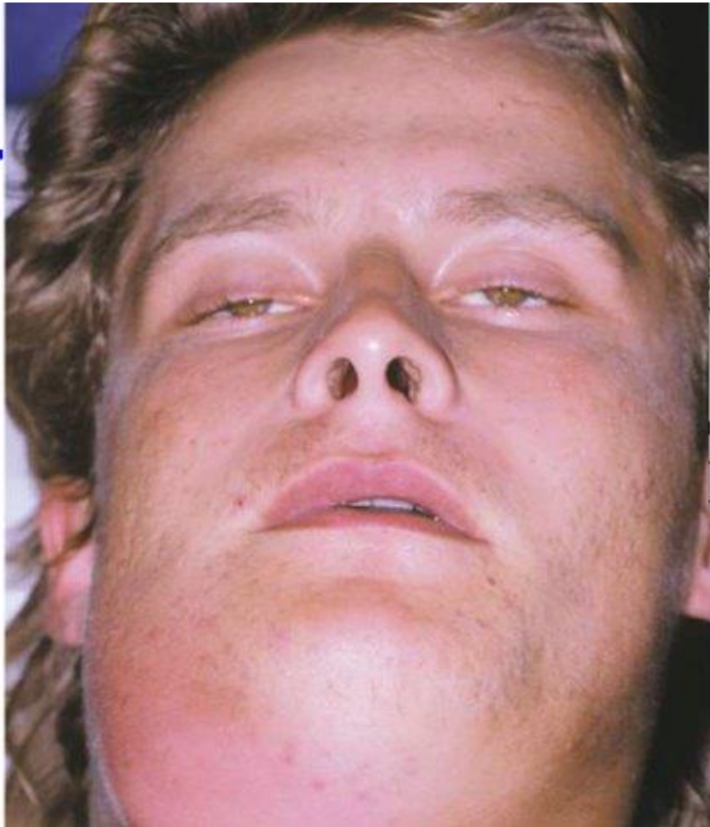
It forms around impacted or partially erupted tooth.

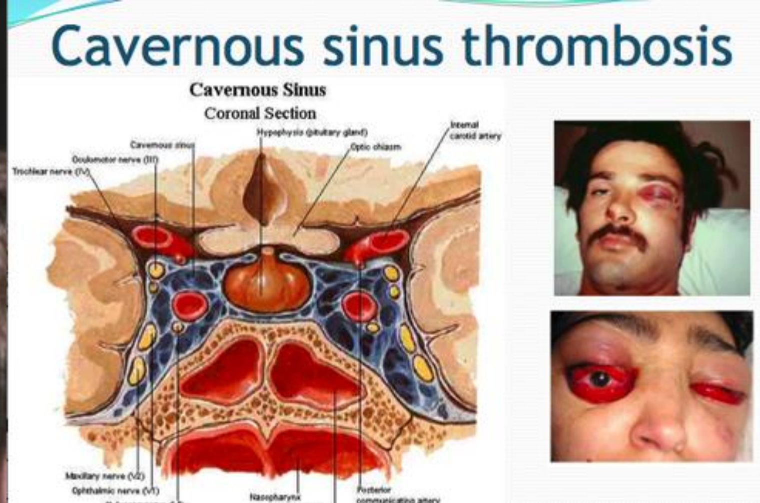
Consequences of Unresolved Infections

Infections may spread to other areas.

- 2 Life-threatening infections:
  - Ludwigs Angina
    - Bilateral swelling of sublingual, submandibular, submental spaces.
  - Cavernous Sinus Thrombosis
    - Edematous periorbital enlargement. Lateral nose and medial eye if involves canine space.
- Tx:
  - Refer to ER *immediately.*
  - incision, drainage, and antibiotics.

Consequences of Unresolved Infections





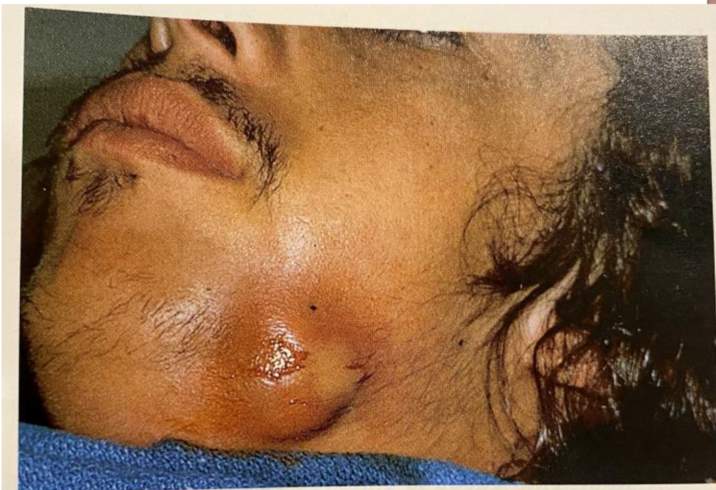


Fig. 33.8. **Abscess:** draining through mandible.[‡]

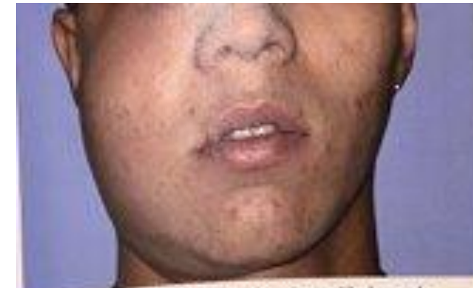


Fig. 65.1. **Buccal space infection:** infected mandibular molar.

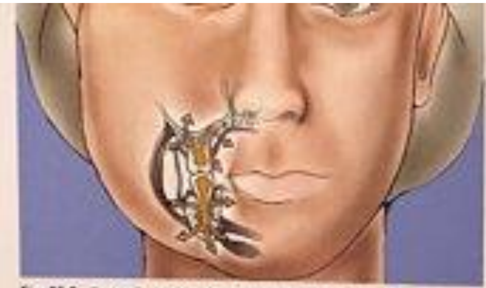


Fig. 65.2. **Buccal space infection:** anatomic illustration.

Fig. 65.3. **Masseteric space infection:** infected left mandibular first molar.

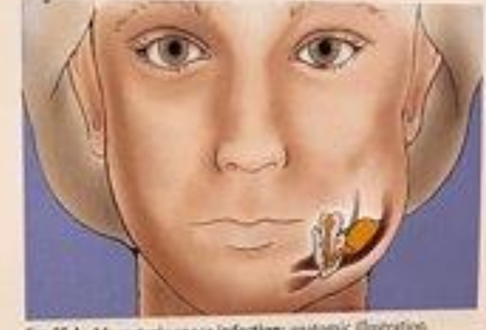


Fig. 65.4. **Masseteric space infection:** anatomic illustration.

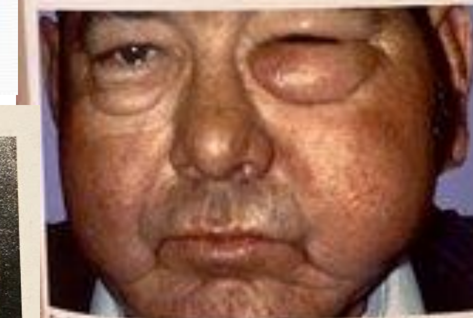


Fig. 65.5. **Infraorbital space infection:** impinging on the eye.

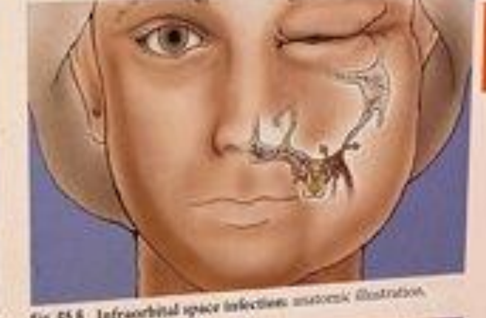
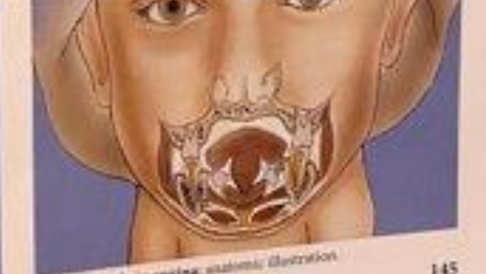


Fig. 65.6. **Infraorbital space infection:** anatomic illustration.



Medical Management of Oral Health

- What can primary care do for dental management and when should a patient be referred?
  - Check inside the mouth at medical visits. Mouth, head, and neck should be part of the Review of Systems.
  - Check if patient has routine dental care.
  - If outside normal or variation of normal, triage, and refer.
- General advice:
  - See dentist regularly.
  - Brush & floss daily.
    - Soft head electric toothbrush & toothpaste with fluoride.
    - String floss or dental picks.
    - Before sleeping is most important.
    - Rinse if unable to brush during the day.

Dental Emergency

What to do if a patient contacts medical with a dental emergency?

1. Check breathing and vision – if any problems refer to ER immediately.
2. History of present illness.
3. Medications and treatment:
   - Antibiotic ***If regional lymphadenopathy, fever, malaise, swelling.***
   - Pain meds.
   - Mouth rinse.
   - Management advice/instructions.
4. Referral to dentist.
   - Urgency of referral will depend on severity of dental issue.

Antibiotic Decision Making

Antibiotics

1. **Amoxicillin** or **Penicillin (PCN)**
   - **Pen VK** *if purely dental-related. Narrower than Amoxicillin.*
   - **Augmentin** *consider if severe, diffuse, or spreading quickly*.
2. If no response in 48 to 72 hours then use:
   1. **Clindamycin**
   2. Cephalexin or **Dicloxacillin**
   3. Add **Metronidazole** to **Amoxicillin**

- If allergic to PCN (Beta-lactams)

1. **Clindamycin**
2. **Azithromycin (Zithromax)** *if no response in 48-72 hrs*

**If no systemic symptoms no antibiotic – antibiotic resistance and adverse events.*

Medications: Infection (Bacterial)

Amoxicillin 500 mg
- **Disp** 21 tablets
- **Sig** take 1 tablet tid till gone

Clindamycin 150 or 300 mg
- **Disp** 21 tablets
- **Sig** take 1 tablet tid till gone

Cephalexin 500 mg
- **Disp** 28 tablets
- **Sig** take 1 table qid till gone

Penicllin V K (Potassium) 500 mg
- **Disp** 28 tablets
- **Sig** take 1 tablet qid till gone

Augmentin 875 mg
- **Disp** 21 tablets
- **Sig** take 1 tablet tid till gone

Metronidazole 500 mg
- **Disp** 28 tablets
- **Sig** take 1 table qid till gone

Azithromycin (Zithromax/Z-Pak) 250 mg
- **Disp** 6 (1 pack)
- **Sig** Take 2 tables on day 1 and 1 tablet on days 2-5

Medications: Analgesics

Acetaminophen 500 mg and/or **Ibuprofen 200 mg**

- Take 1 tablet of each every 4-6 hrs prn.
- Only Acetaminophen 500 mg if allergic to NSAIDs or if patient is pediatric (check dosage).
- If severe prescribe **Ibuprofen 600 mg** instead of 200 mg.
  - MRD:
    - APAP 4,000 mg
    - Ibuprofen 3,200 mg

Aspirin 325 mg

- Take 1-2 tablets q4-6 hrs prn.

Celecoxib (Celebrex) 200 mg

- **Disp** 15 capsules.
- **Sig** Take 2 capsules stat, followed by an additional 200mg if needed on day 1, then 1 capsule every 12 hours.
- Use if patient is NSAID sensitive.
- Do not prescribe if sulfa allergy.

Narcotics- in general do not prescribe but may be prudent in certain situations.

Medications: Mouth Rinse

Chlorohexidine Gluconate Oral Rinse 0.12%

- **Antimicrobial Rinse** for infection, gingivitis, periodontitis.
- **Disp** 3 x 16 oz (473 mL).
- **Sig** Floss and brush teeth, rinse toothpaste from mouth, swish 15 mL (one capful) for 30 secs and expectorate. Do not swallow and avoid eating for 2-3 hours.
- **Caution:** CHX may:
  - Stain teeth yellow to brown.
  - Alter taste (temporary).

Medications Summary

Medical may provide a variety of medications for oral health:

- **Analgesics**
- **Antimicrobials**
  - **Antibiotics**
  - **Antifungals**
  - **Antivirals**
- **Fluoride**
- **Dry Mouth Treatment**

Dental Emergency Advice

- Triage, refer to ER if respiratory or visual issues.
- Medications (analgesics, antimicrobials, etc.).
- Soft, mild diet, avoid trigger foods (hot/cold, spicy, acidic, etc.) and behaviors (limit chewing).
- Regular oral hygiene (brush & floss, most important before bed).
- Rinse after eating (can do warm salt H2O).
- Chlorhexidine (CHX) before sleeping.
- If swelling ice 20 min 2-4x/day.
- Schedule appointment with dentist.
- Rec patient call ER if swelling causes respiratory or visual problems.

Other Issues for Medical/Dental Coordination

- Medical consult (consider condition and ASA classification) before dental treatment.
- Recommend dental treatment if patients will be unable to receive dental treatment, e.g. cancer treatment, jail, etc.
- Orofacial pain.
- Antibiotic pre-meds for cardiac conditions (rec by AHA):
  - Prosthetic cardiac valve, e.g. transcatheter-implanted prostheses & homografts.
  - Prosthetic material used for valve repair, e.g. annuloplasty rings & chords.
  - History of infective endocarditis.
  - Cardiac transplant with valve regurgitation due to structurally abnormal value.
  - Congenital Heart Disease (CHD):
    - Unrepaired cyanotic CHD, e.g. palliative shunts, conduits.
    - Any repaired congenital heart defect with residual shunts or valvular regurgitation at the site or adjacent to site of a prosthetic patch or prosthetic device.

Summary: Dental Toolkit for Primary Care

- Understand connection of oral and systemic health and specifically HIV.
- Coordinate comprehensive care.
- Address barriers to care and enhance access to oral health services for PWH.

THANK YOU

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REFERENCES

- American Dental Association (ADA). 2020. Antibiotic Prophylaxis Prior to Dental Procedures. https://www.ada.org/en/member-center/oral-health-topics/antibiotic-prophylaxis
- Askinyte D, Matulionyte R, Rimkevicius A. "Oral manifestations of HIV disease: A review." *Stomatologija, Baltic Dental and Maxillofacial Journal.* 2015.
- Bajpai S, Pazare AR. "Oral manifestations of HIV." *Contemporary Clinical Dentistry.* 2010.
- Biotene. https://www.biotene.com/what-is-dry-mouth/dry-mouth-causes-medications/
- Health Resources and Services Administration (HRSA). (2019). *Integration of Oral Health and Primary Care Technical Assistance Toolkit.* https://targethiv.org/sites/default/files/file-upload/resources/hab-oral-health-integration-toolkit_july%202019.pdf
- *HIVdent.org.* http://www.hivdent.org/_PictureGallery_/picturegallery.htm
- Langlais, R., Miller, C., Gehrig, J. (2017). *Color Atlas of Common Oral Diseases.* 2-261.
- Lerman, M. *Pathology.* Tufts University School of Dental Medicine. 2017.
- https://www.neaetc.org/
- Sabbagh W. "Parotitis." *Antimicrobe. Infectious Disease and Antimicrobial Agents.*
- Sapp JP, Eversole L, Wysocki G. *Contemporary Oral and Maxillofacial Pathology 2nd Ed.* Sept 2003.
- Signature Smiles. (2020). The Stages of Caries Development. https://www.mysignaturesmiles.com/news/infographic/#0
- Swain SK, Gupta S, Sahu MC. "Recurrent Aphthous Ulcers- Stilla a challenging Clinical Entity." *Apollo Medicine. Oct 2017.*
- Taverna M. "Xerostomia Diagnosis and Management." *Dimensions of Dental Hygiene.* April 2020.
- WebMD. Reviewed by Wyatt Jr., A. https://www.webmd.com/oral-health/qa/what-medications-can-cause-dry-mouth

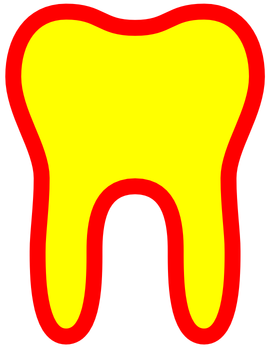
FENWAY HEALTH

Oral Health Care for People with HIV at Health Centers

Adam Thompson, MPH

Your Mother, Pastor, and **Doctor**

The Dental Home(less)



Extreme pain in back teeth

Sought **emergency care**

Identified as **“drug-seeking”**

Discharged with **drugs.**

The underlying dental concern was never assessed, and no referrals were made.

Missed Opportunities

Dental Care

HIV Testing

Referral to Ryan White HIV/AIDS Program

Access to Supportive Services & Housing

Payment for Substance Use Treatment

Thank You!

Questions/Comments?

HRSA Disclaimer

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