

Sat 12 June 2010

Millennium WS 28 + 38

2.00-2.55; 3.05-4.00 PM



Johnson & Johnson



THE UNIVERSITY
OF QUEENSLAND



Looking Beyond the Vermillion Border

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The University of Queensland

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Diagnostic sieve

- **Infections**

- Dental caries
- Periapical infections
- Periodontal diseases
- Oral fungal infections
- Oral malodour

- **Degenerative conditions**

- Dental erosion
- Accelerated tooth wear
- Cervical dentinal hypersensitivity

- **Neoplasia**

- SCC
- Salivary gland lesions
- Other oral cancers

- **Developmental conditions**

- **Inflammatory conditions**

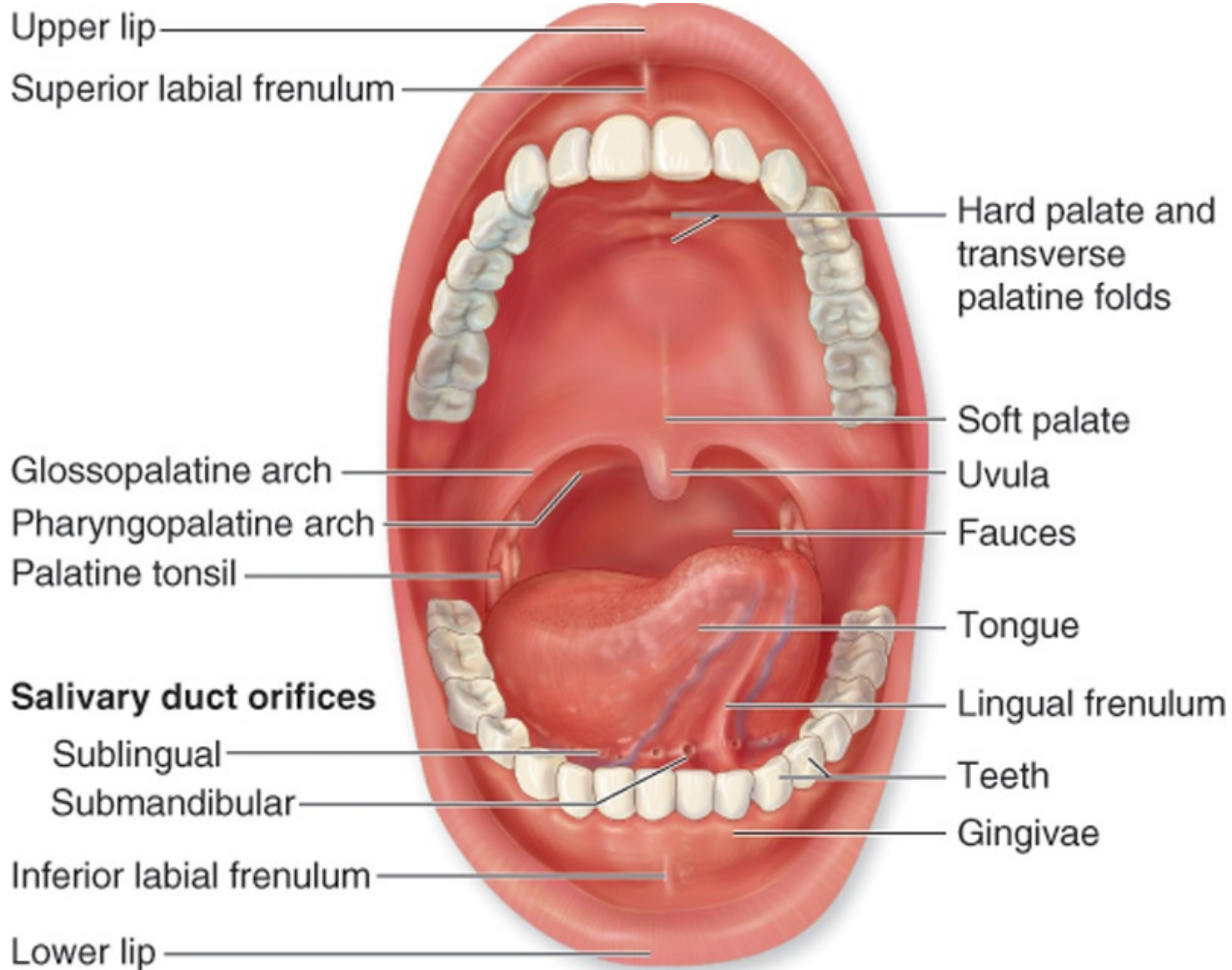
- Oral mucosal pathology
- Oral ulcerative diseases
- Auto-immune diseases
- TMJ problems
- Manifestations of systemic diseases
- Medication-induced side effects

Time bombs for medical GPs !

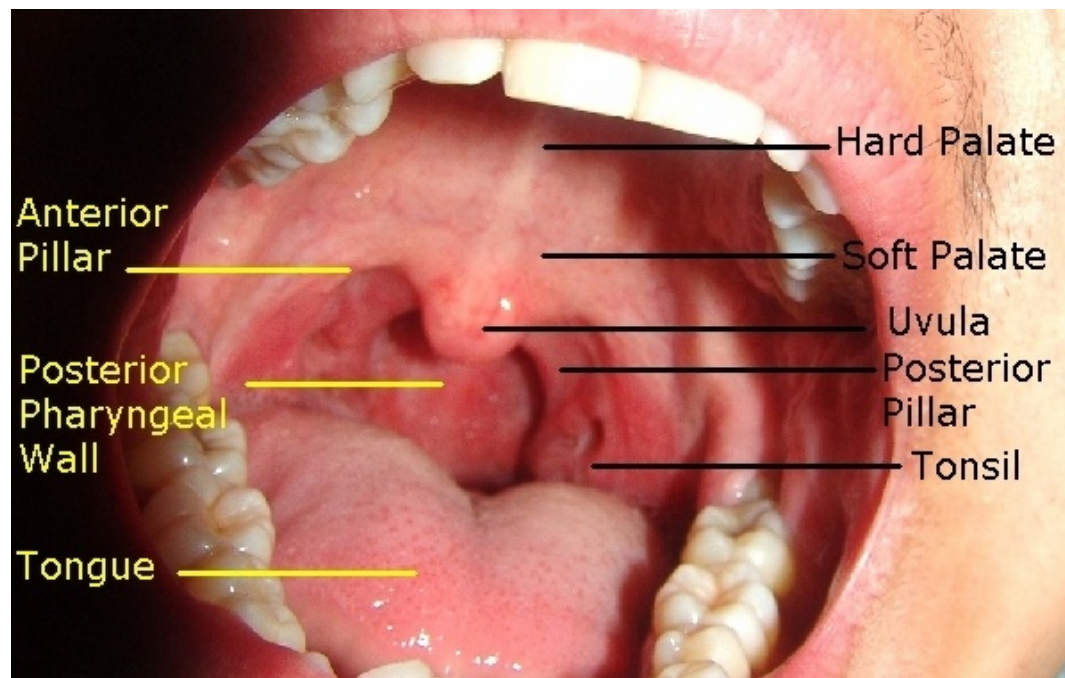
- Endodontic and periodontal abscesses
 - Sunset rule
 - Beta lactamase producing
- Irreversible pulpitis/ pulpal necrosis
 - Unstimulated toothache which keeps patient awake
 - Root filling or extract
- Endodontic pathology in oncology immune compromised patients
 - Fevers of unknown origin
- Mucormycosis or sinusitis
 - Symptom of maxillary toothache
- Untreated periodontitis and recurring fungal infections in diabetics
- Impaired nutrition
 - Third molars, pericoronitis and trismus
 - TMJ dysfunction
 - Primary or reactivated HSV infection intraorally
- Oral cancer
 - Lip, floor of mouth, tongue
- Maxillary anterior teeth
 - Dangerous triangle for cavernous sinus thrombosis
- Mandibular molar teeth
 - Ludwig's angina

Specialty Private Practice

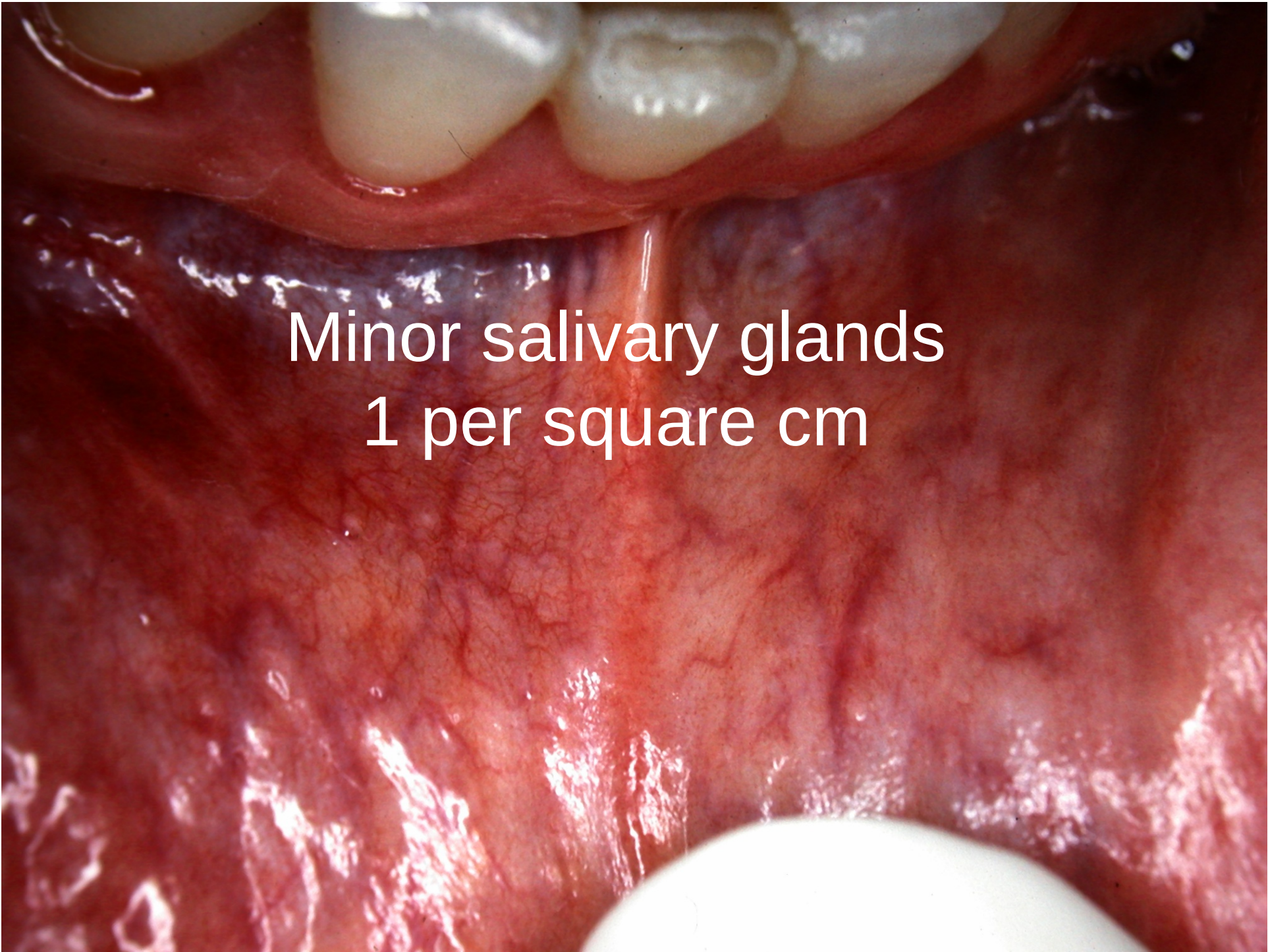




Normal oral mucosa







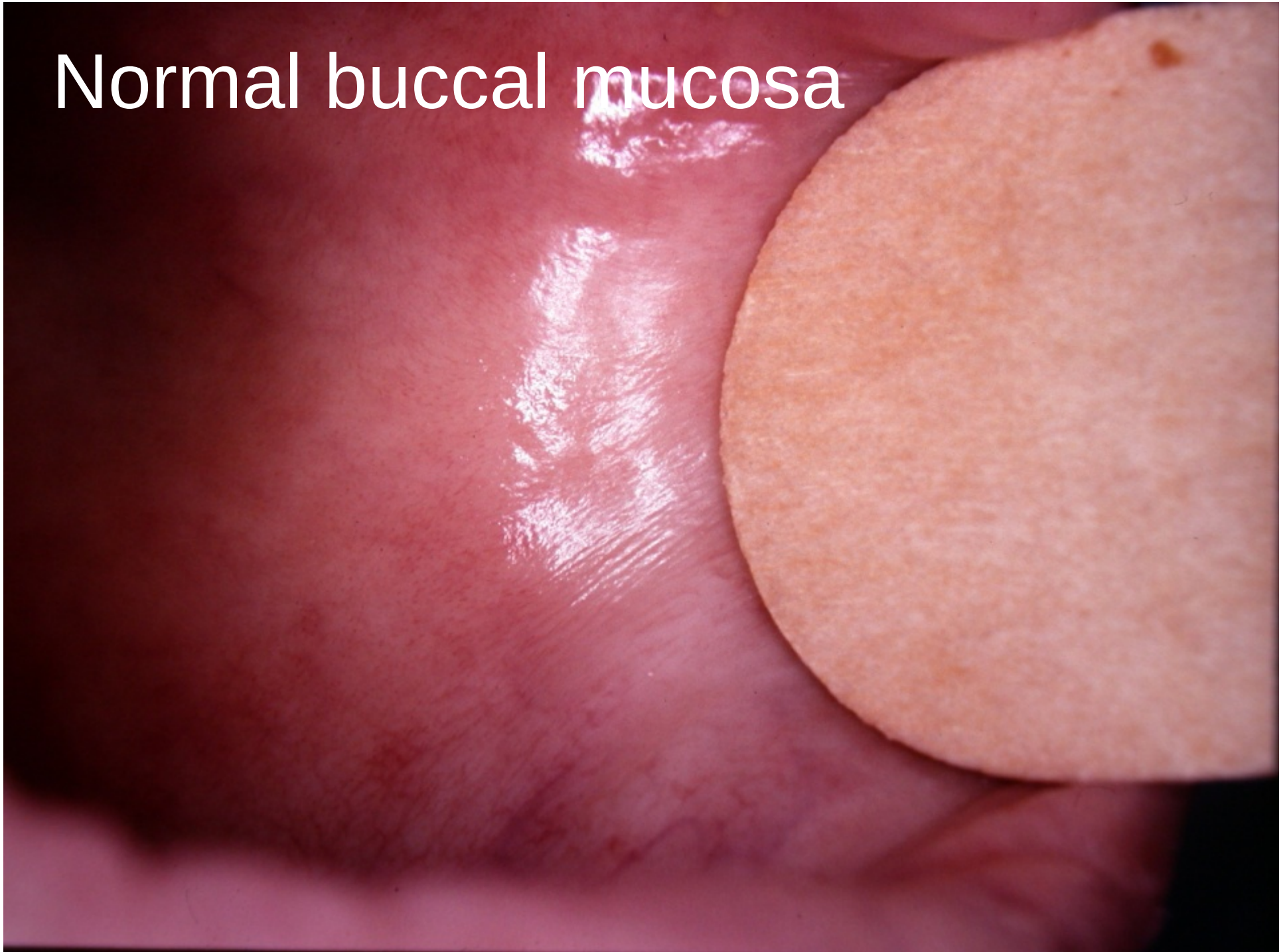
Minor salivary glands
1 per square cm

This clinical photograph shows the interior of the mouth, specifically the floor of the mouth. The sublingual gland is visible as a large, pale, lobulated mass. A small, clear duct is seen emerging from the gland and extending towards the center of the image. The surrounding tissue is a deep red color, and the surface is covered with a network of fine, branching blood vessels. The text 'Minor salivary glands 1 per square cm' is overlaid on the image, indicating the density of these glands in the oral cavity.

Normal floor of mouth
(should have watery saliva)

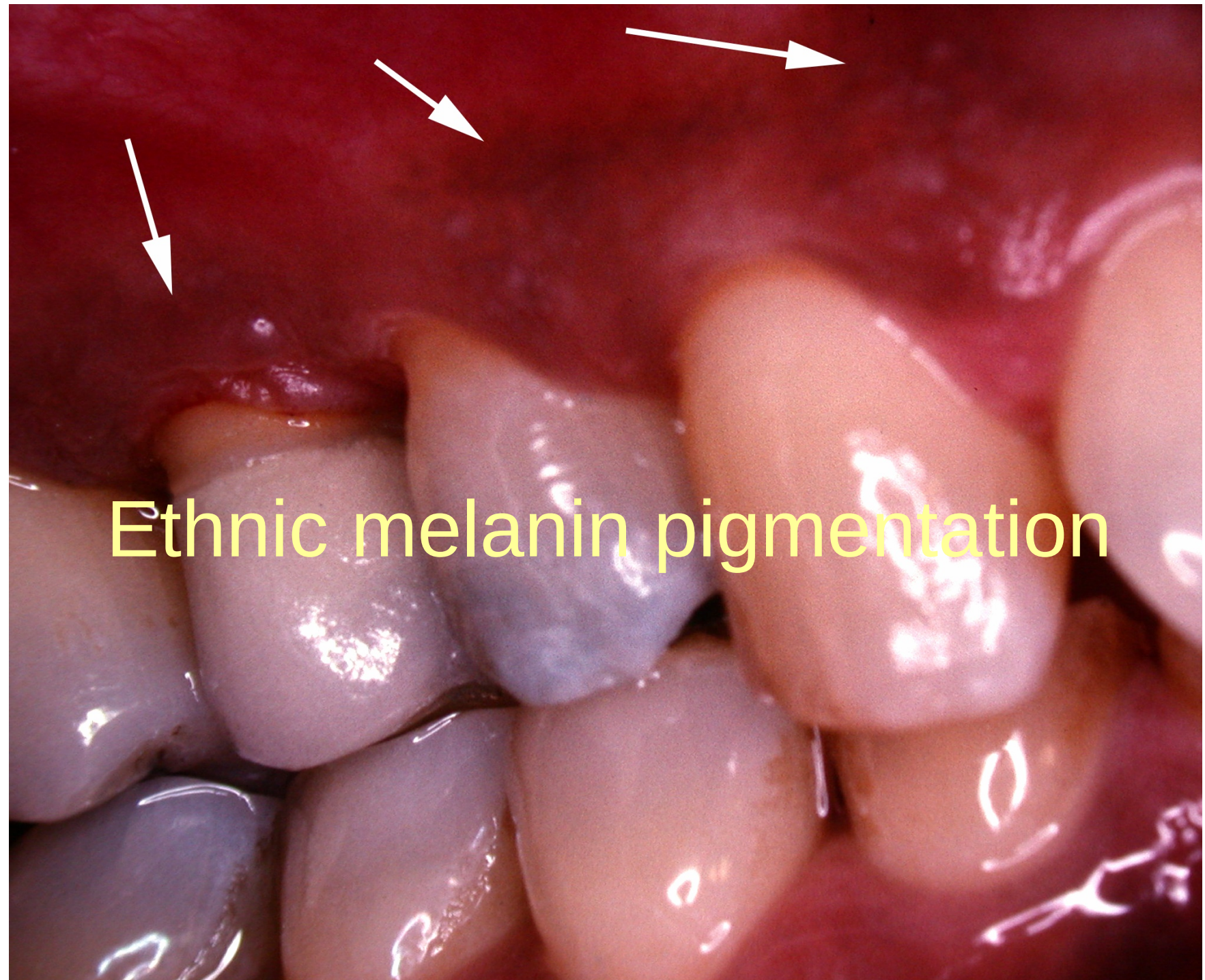


Normal buccal mucosa

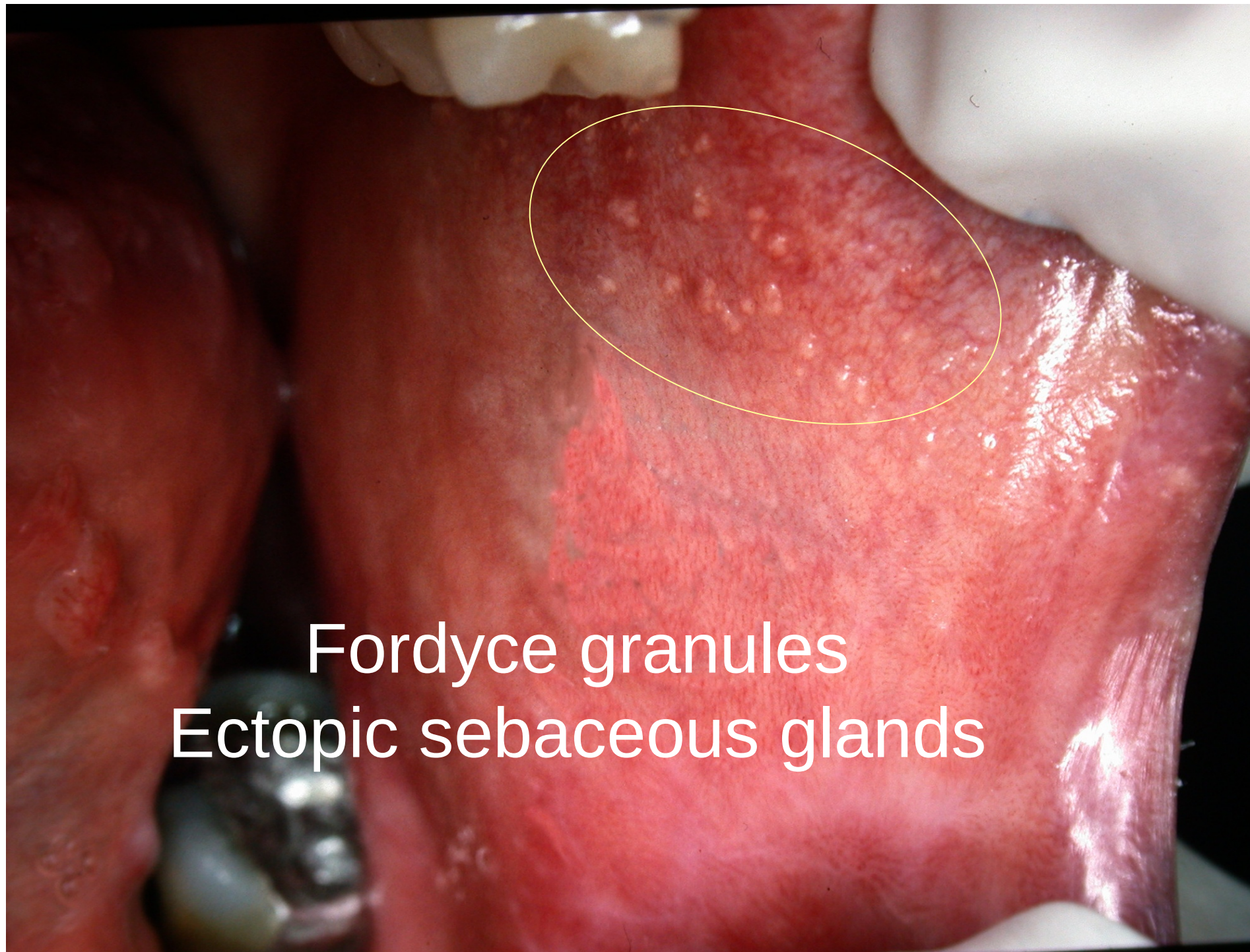


Ethnic melanin pigmentation





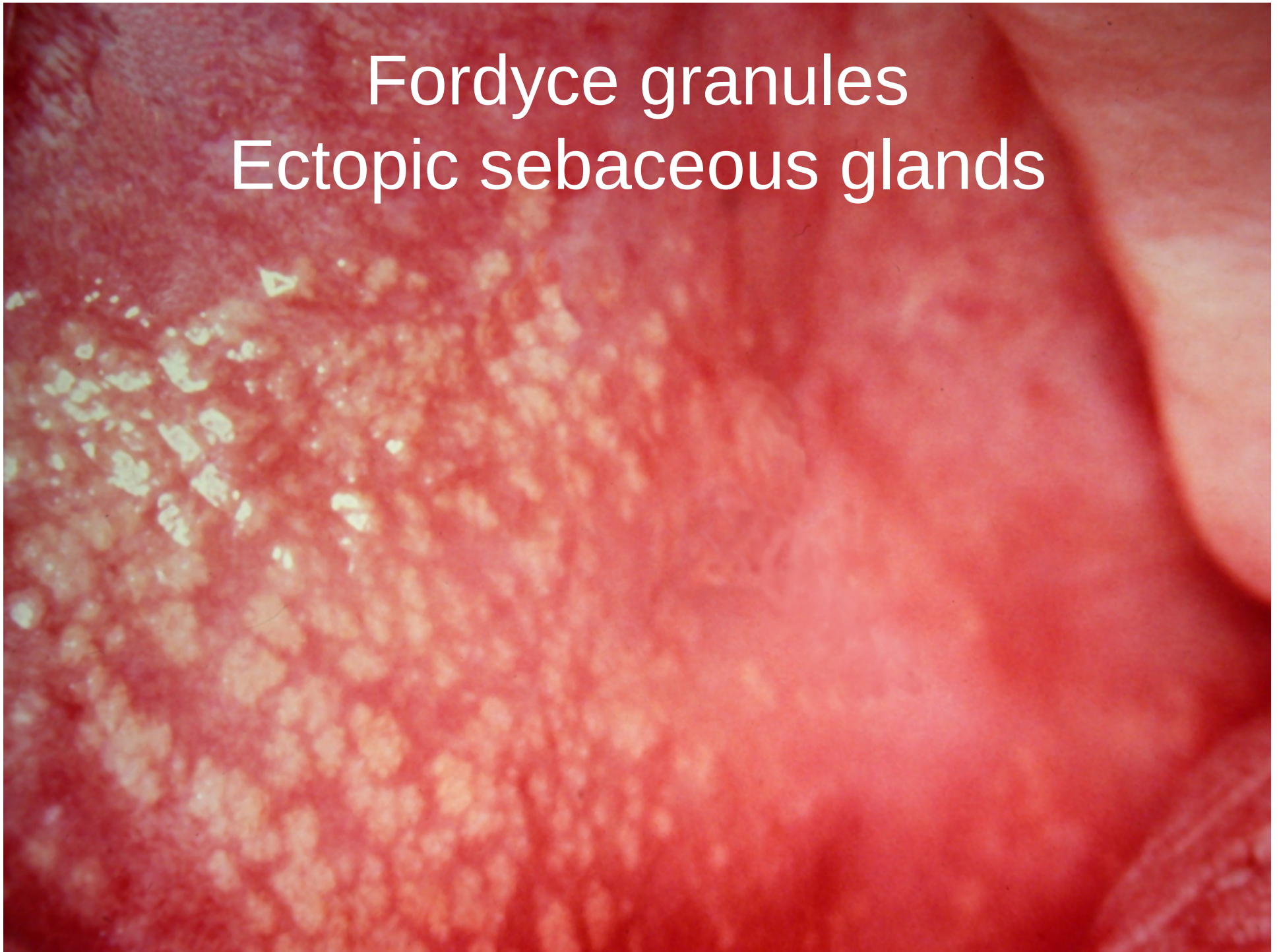
Ethnic melanin pigmentation

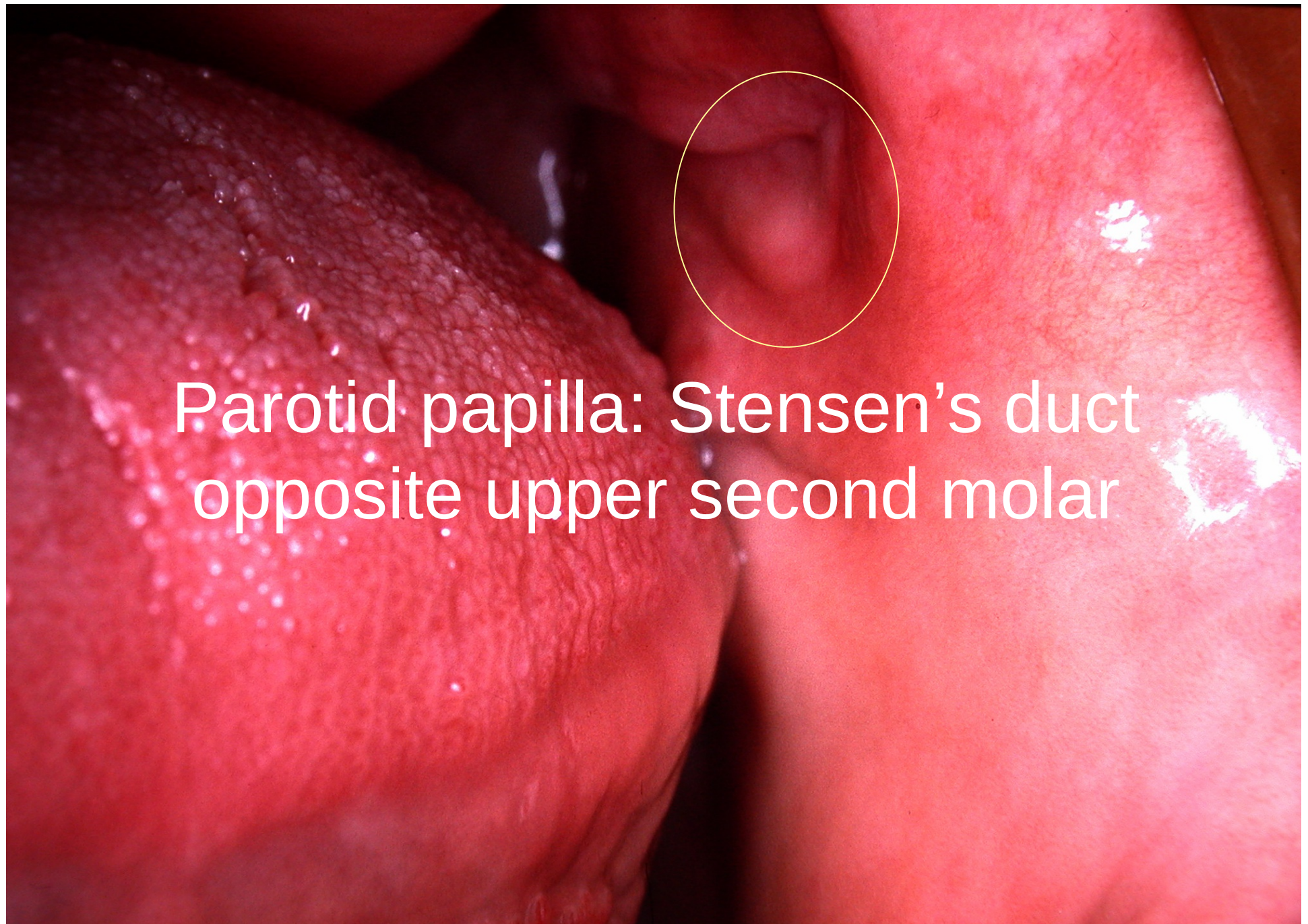


Fordyce granules
Ectopic sebaceous glands

Fordyce granules

Ectopic sebaceous glands





Parotid papilla: Stensen's duct
opposite upper second molar

Sinister lesions:

**Specialist dental referral
(Oral Medicine / Oral Surgery)**

Acute myeloid leukaemia

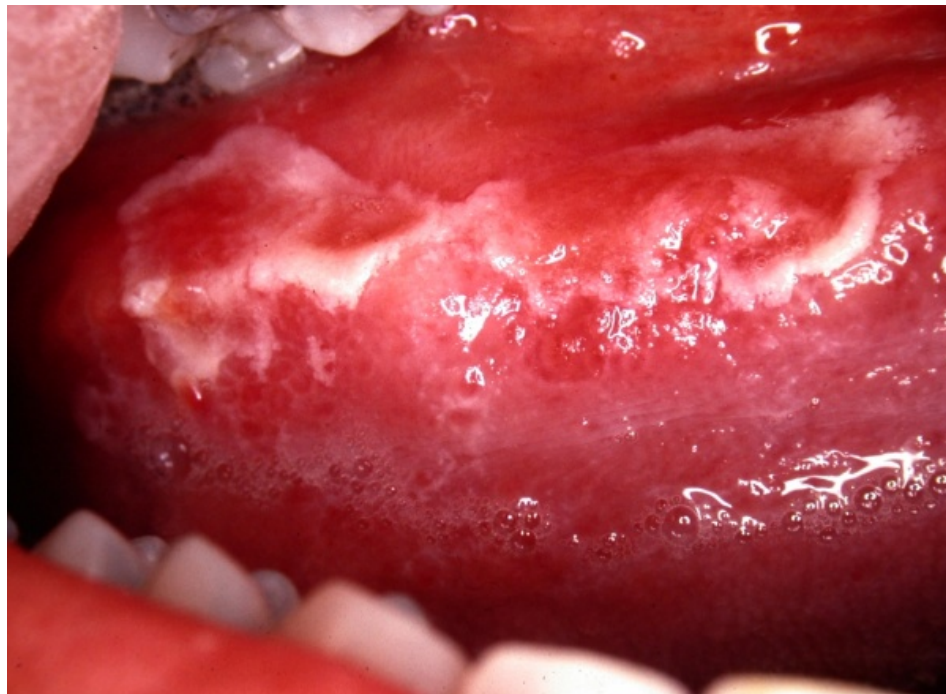


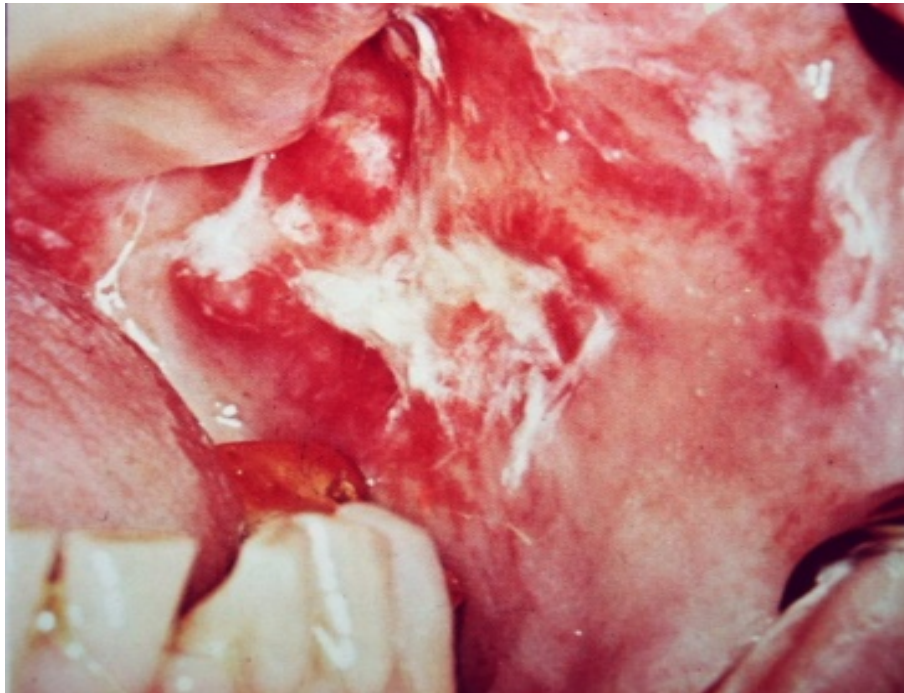
Chronic myeloid leukaemia





Mucositis from chemo/radiotherapy

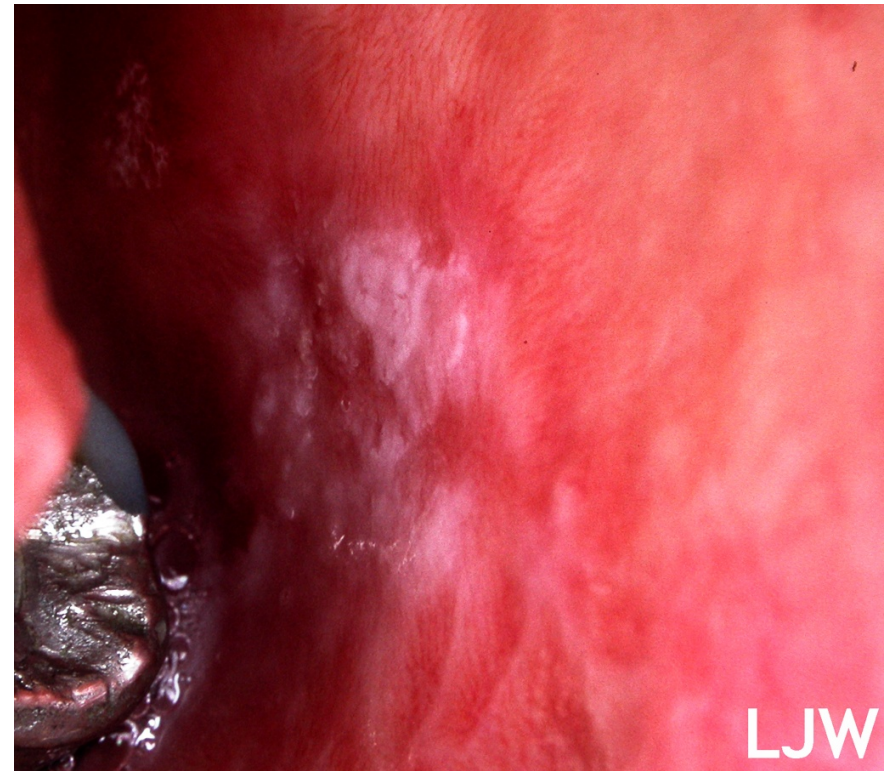
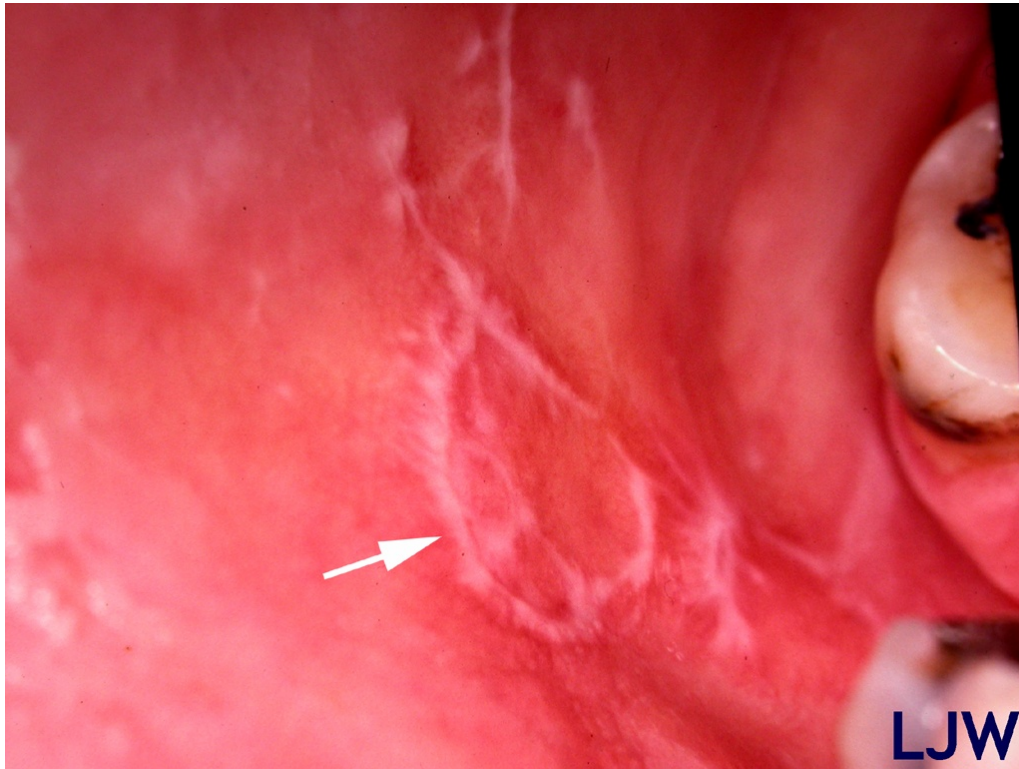




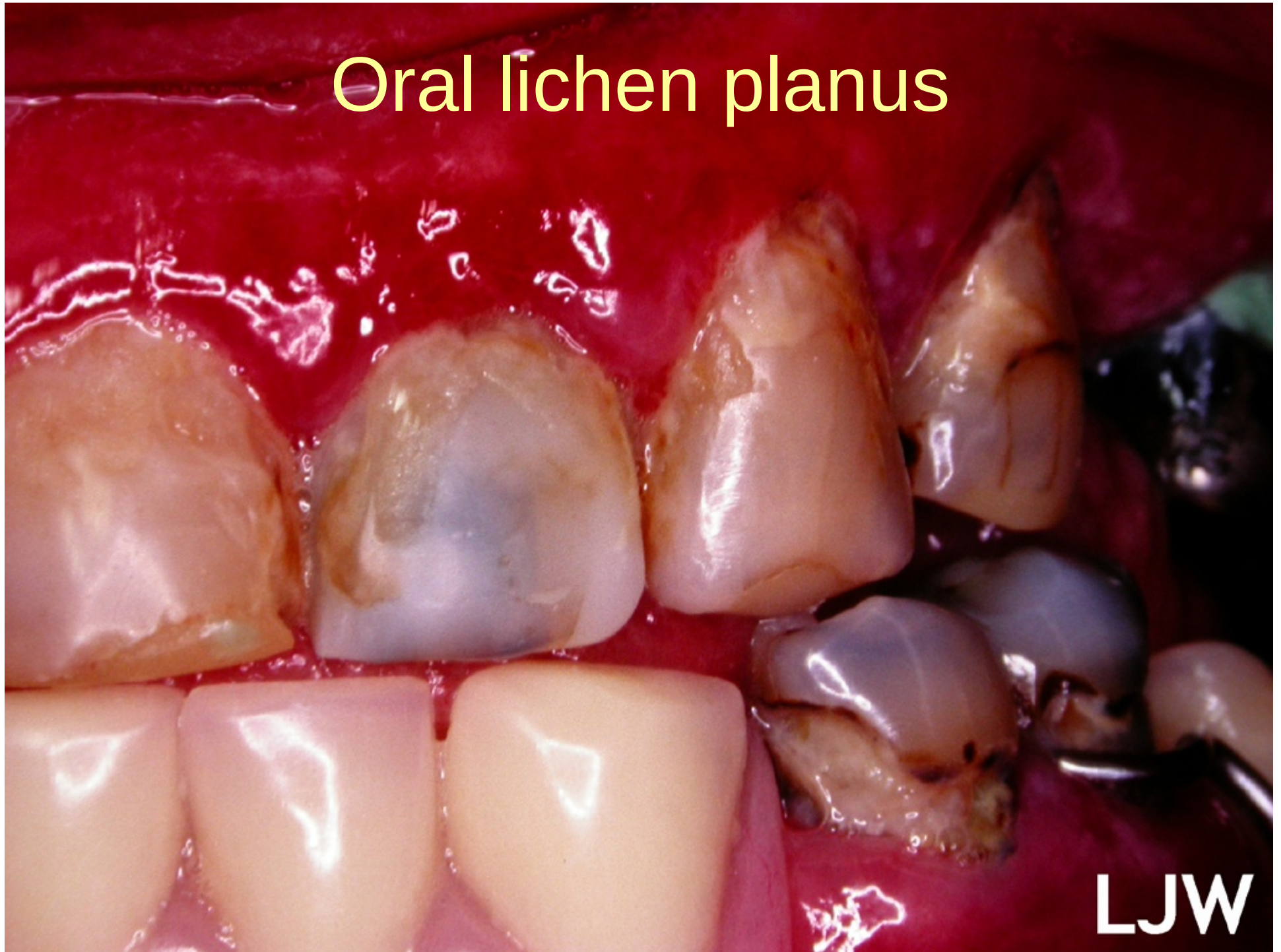
Lichenoid drug reactions



Oral lichen planus



Oral lichen planus

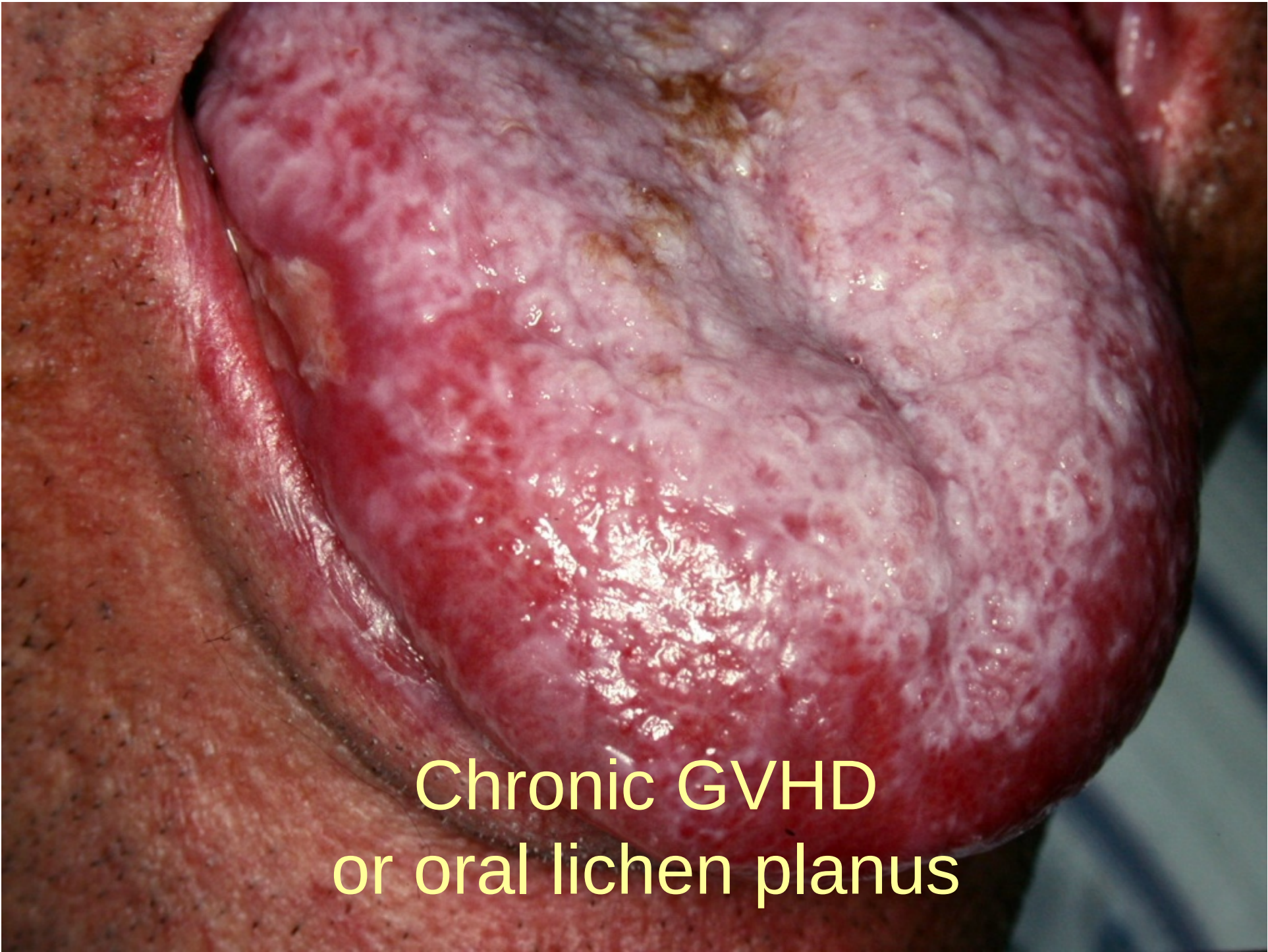


LJW



Chronic GVHD
or oral lichen planus

This clinical photograph shows the inner surface of the cheek (buccal mucosa). The tissue is covered with white, lacy, and reticular lesions, which are characteristic of chronic graft-versus-host disease (GVHD) or oral lichen planus. The lesions are composed of thin, white lines that form a network-like pattern. The surrounding mucosa appears slightly inflamed and red. In the lower-left corner, a portion of a black dental appliance is visible, and in the lower-right corner, the edge of a white dental appliance is visible.

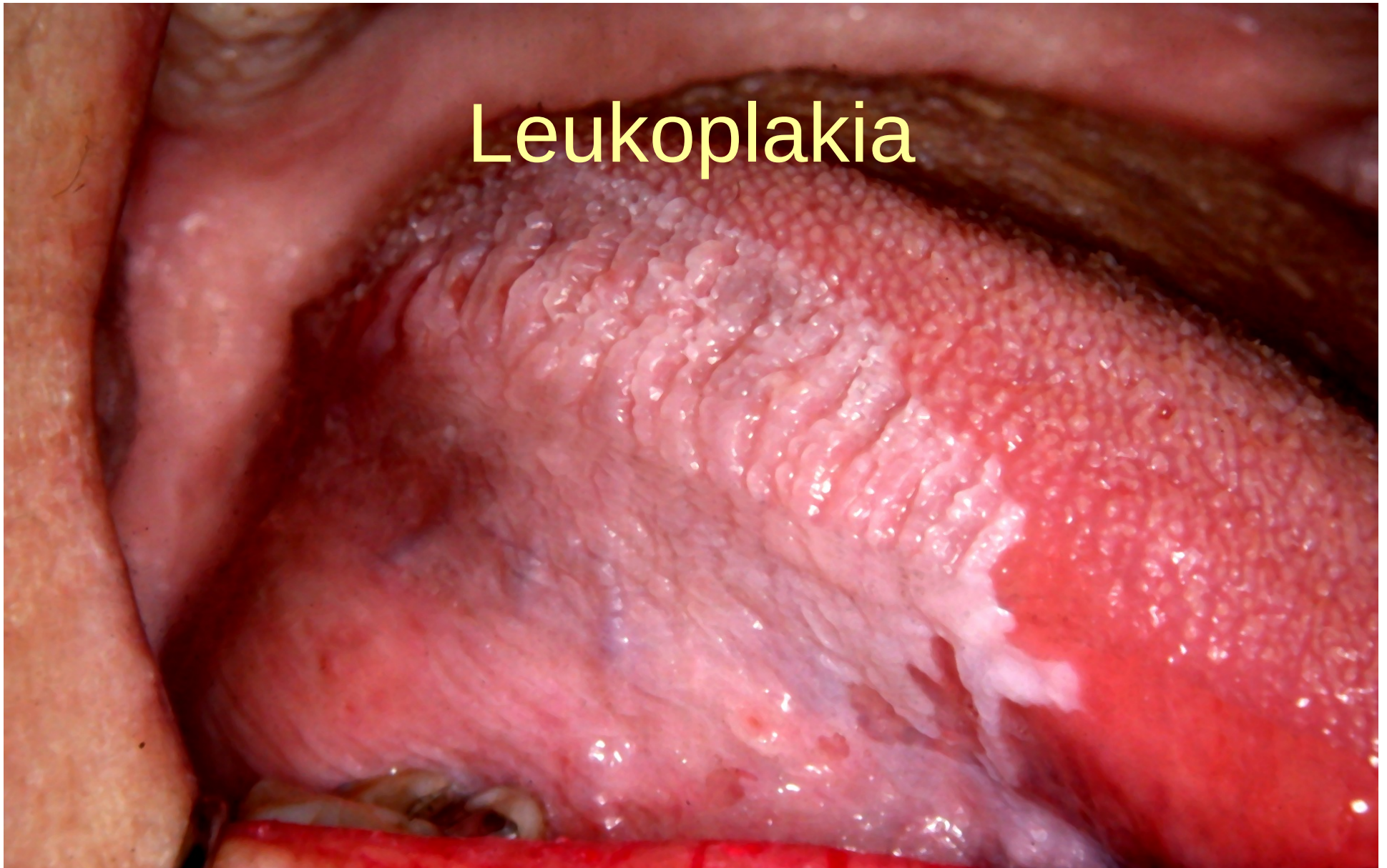


Chronic GVHD
or oral lichen planus

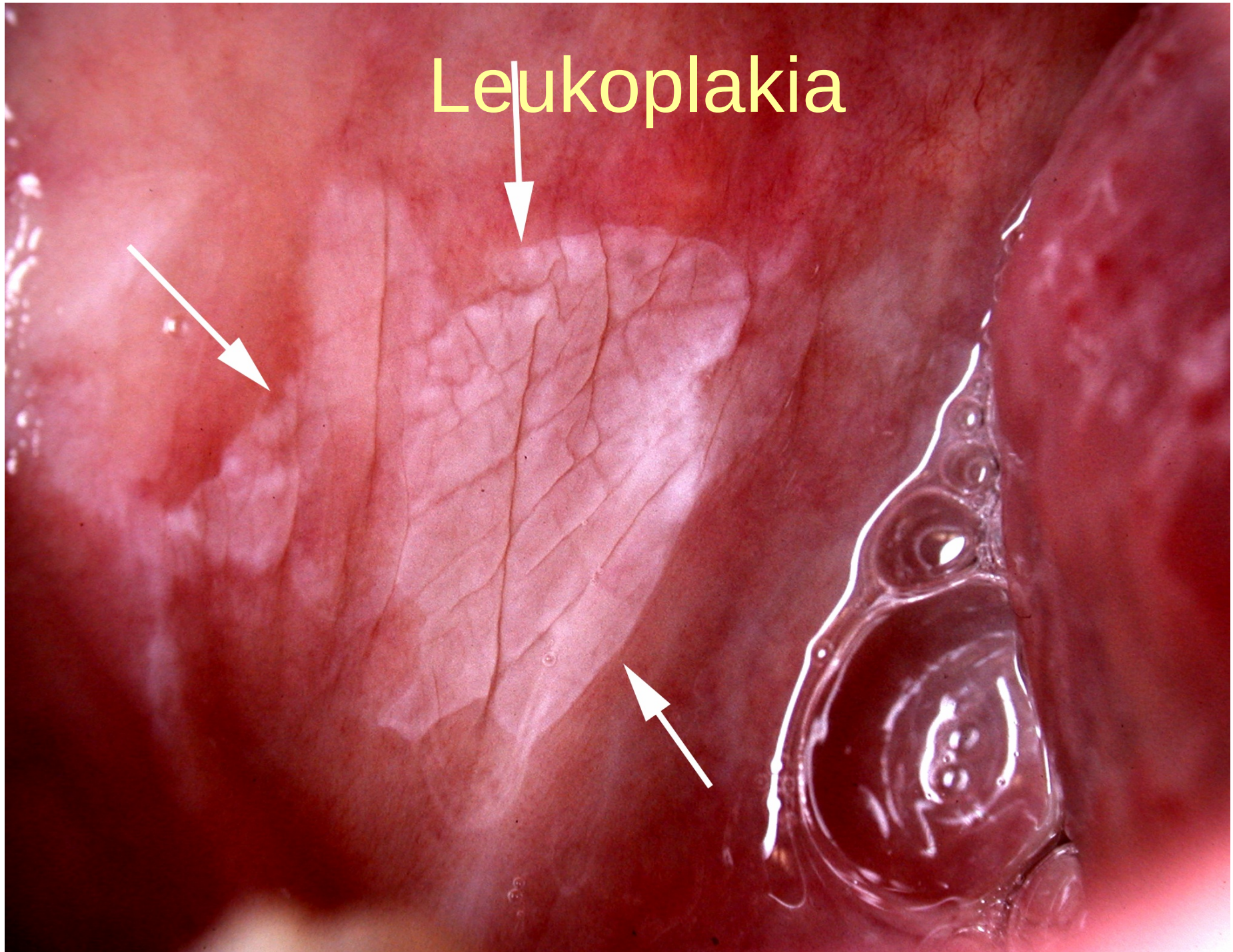
Smoker's keratosis



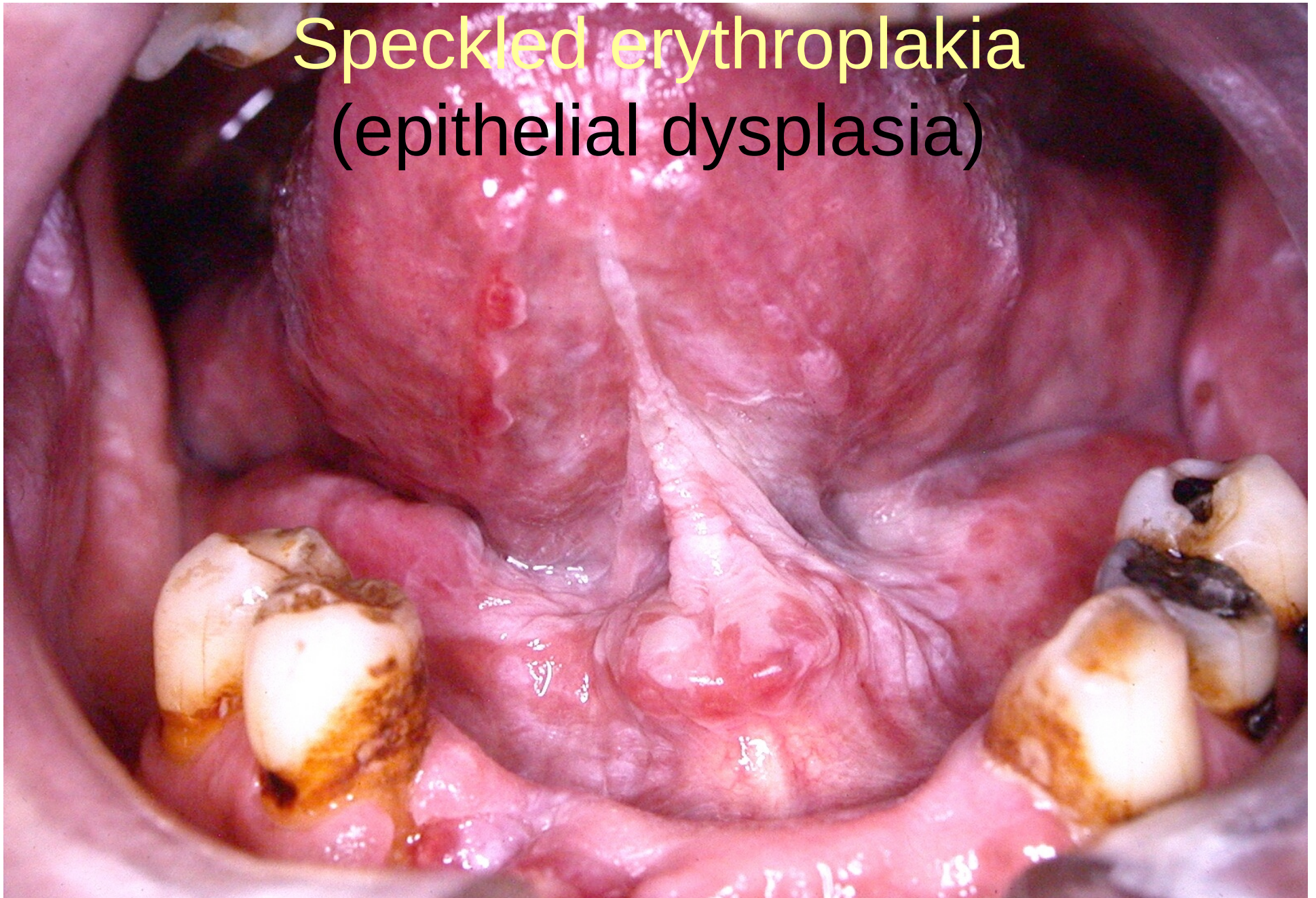
Leukoplakia



Leukoplakia



Speckled erythroplakia (epithelial dysplasia)



Dysplasia (soft palate)

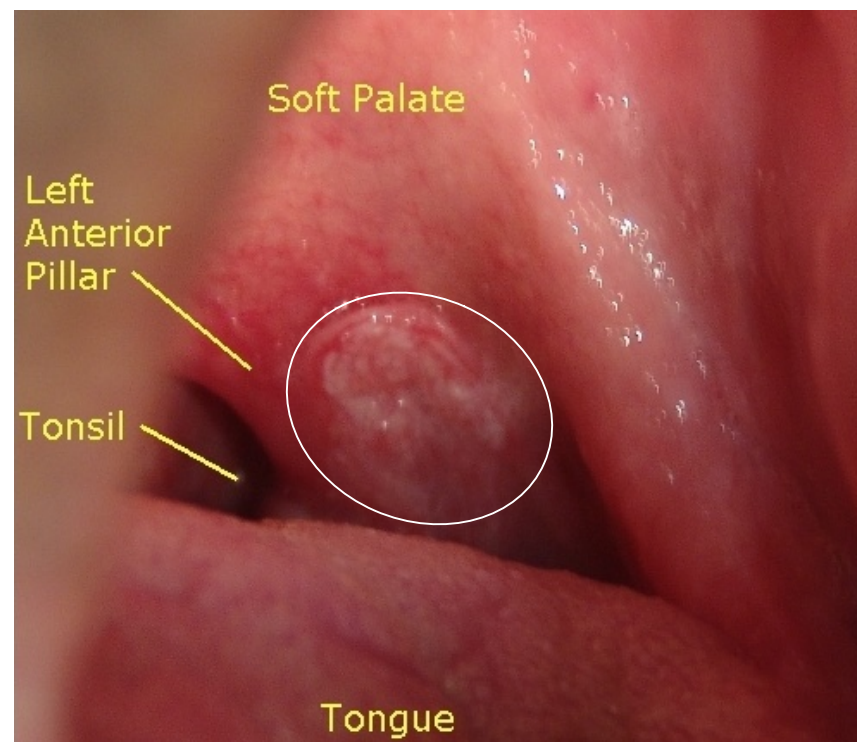
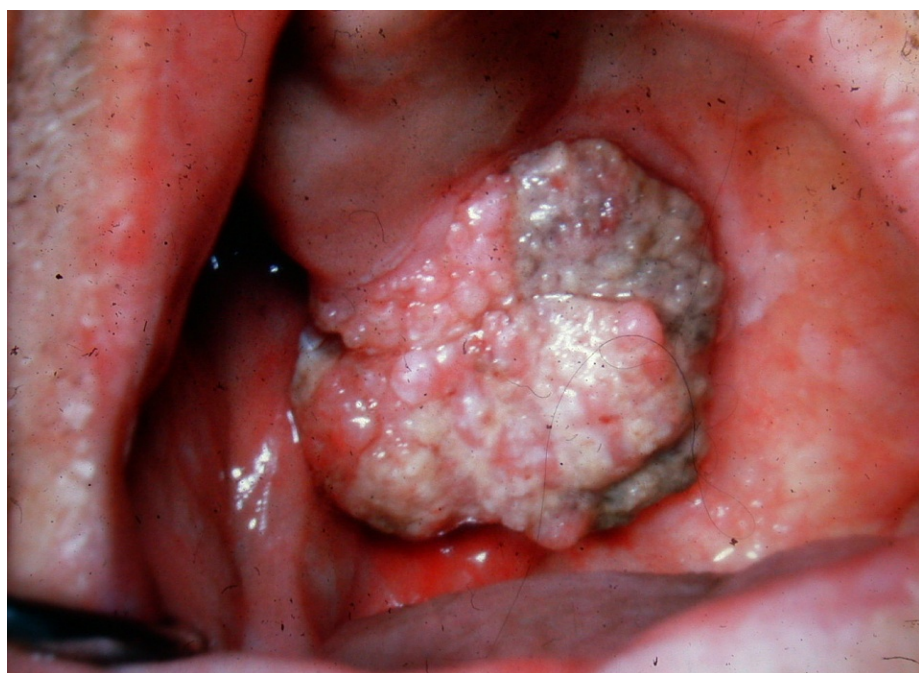


LJW

Oral cancer



Oral cancer

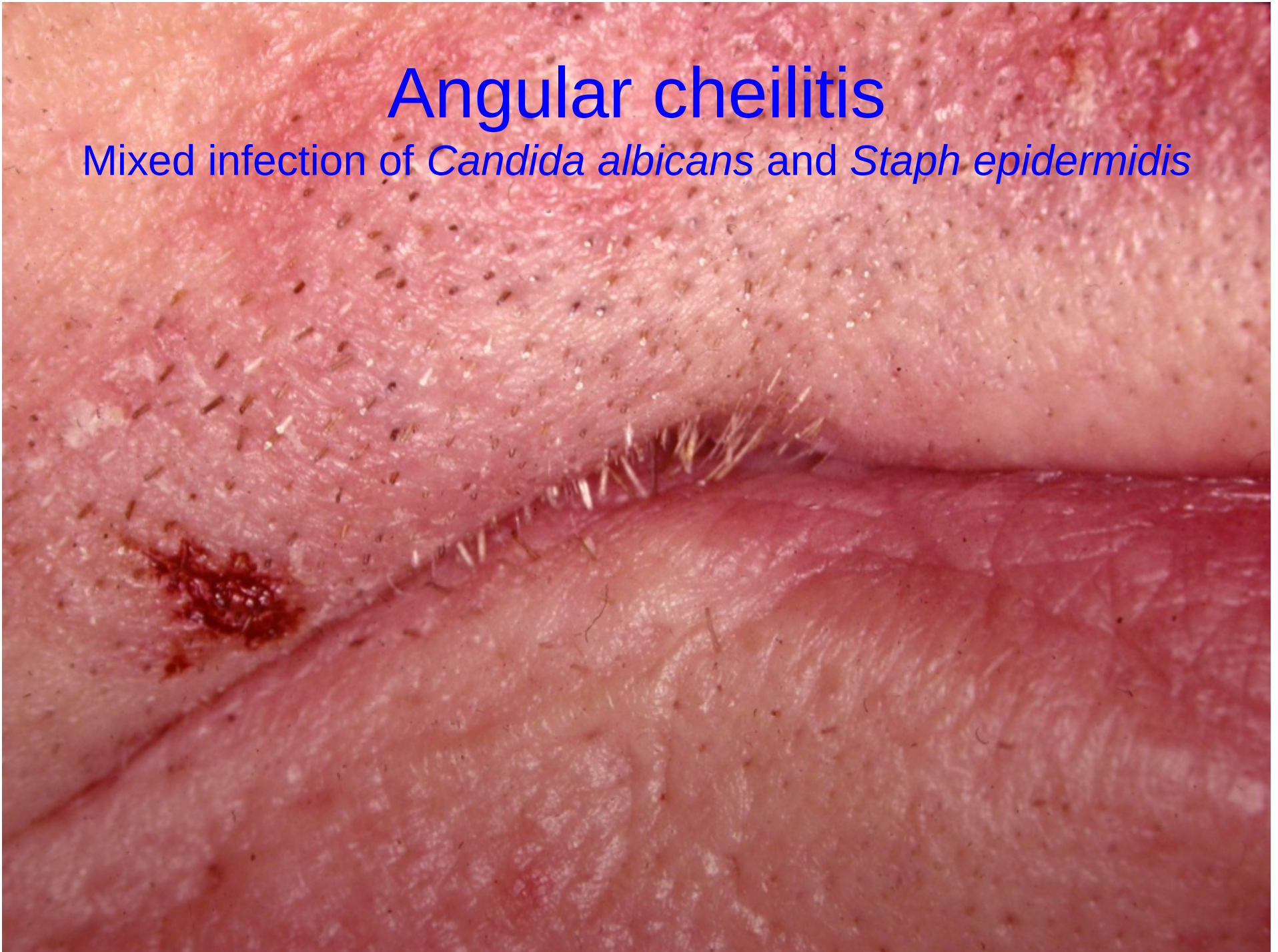


Looking Beyond the Vermillion Border

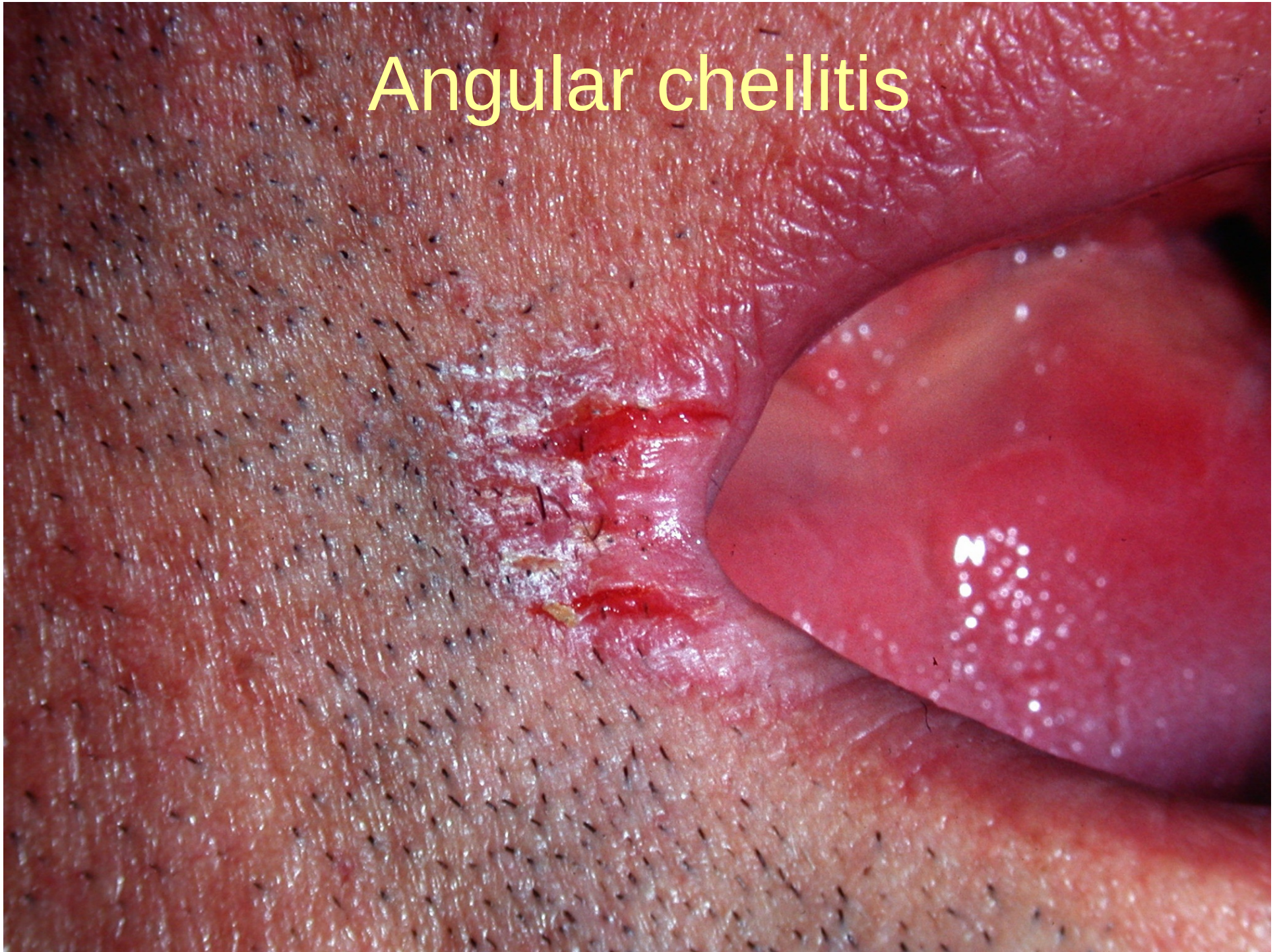
Part 2 Infections

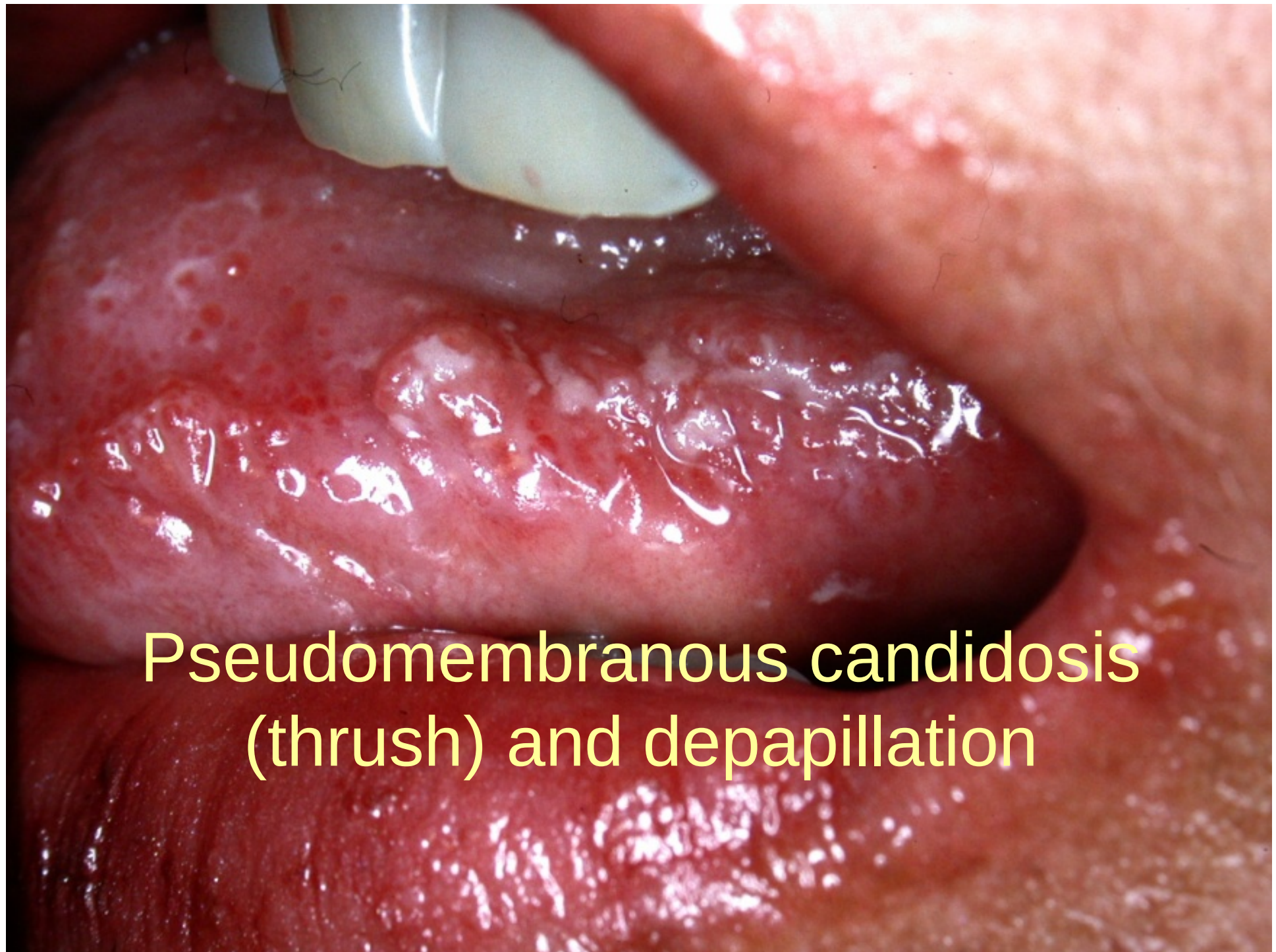
Angular cheilitis

Mixed infection of *Candida albicans* and *Staph epidermidis*



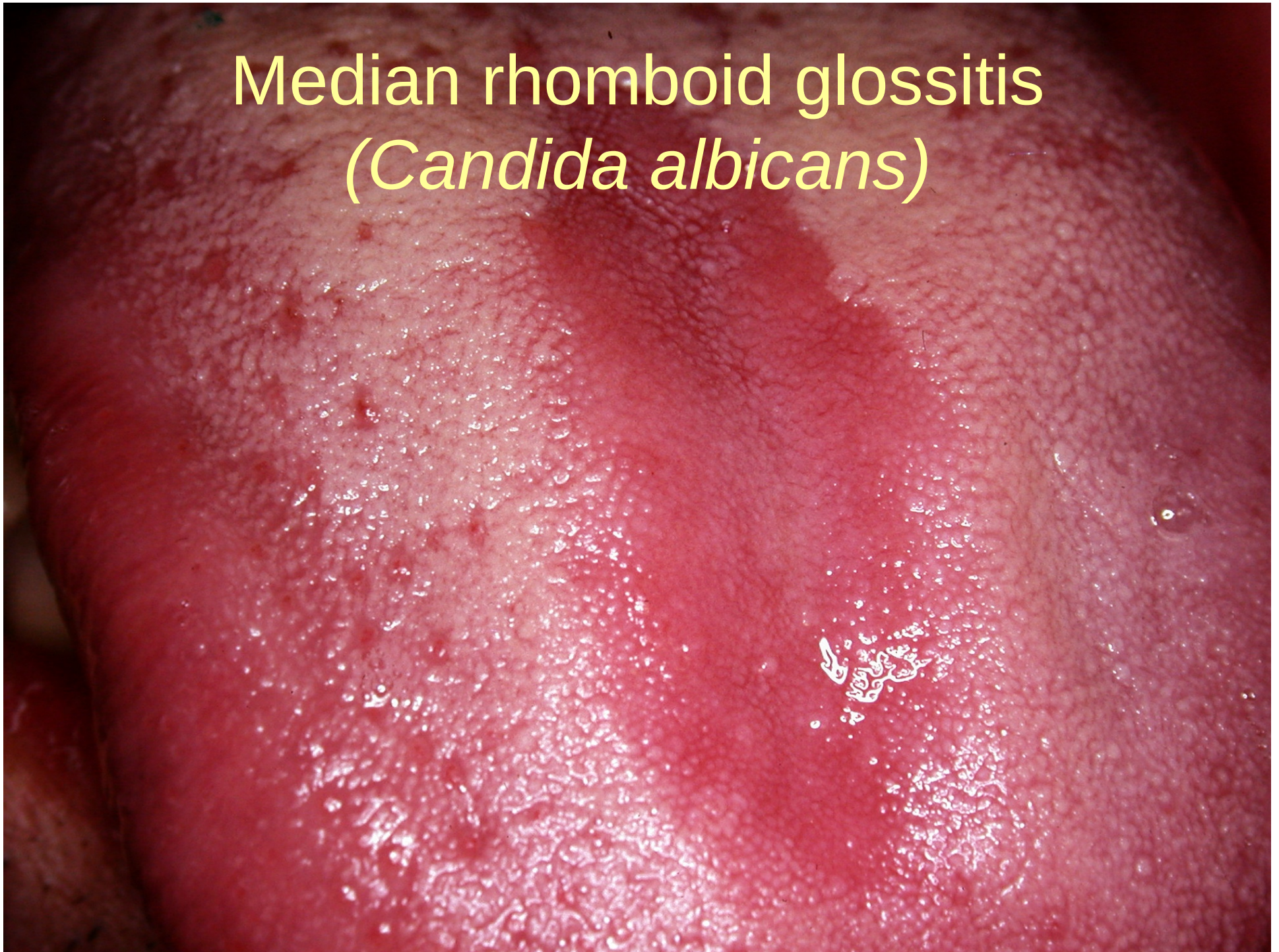
Angular cheilitis



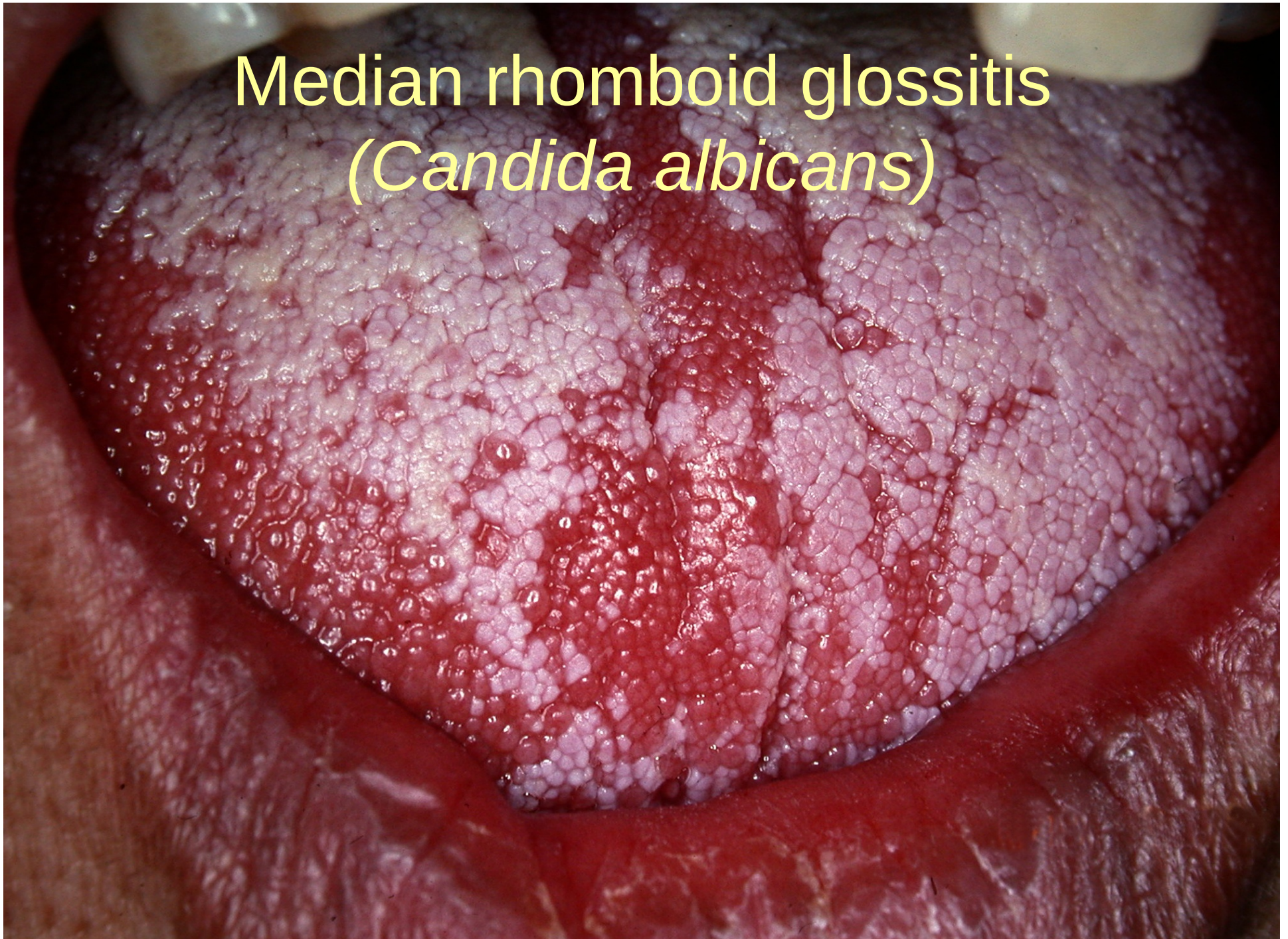


Pseudomembranous candidosis
(thrush) and depapillation

Median rhomboid glossitis (*Candida albicans*)

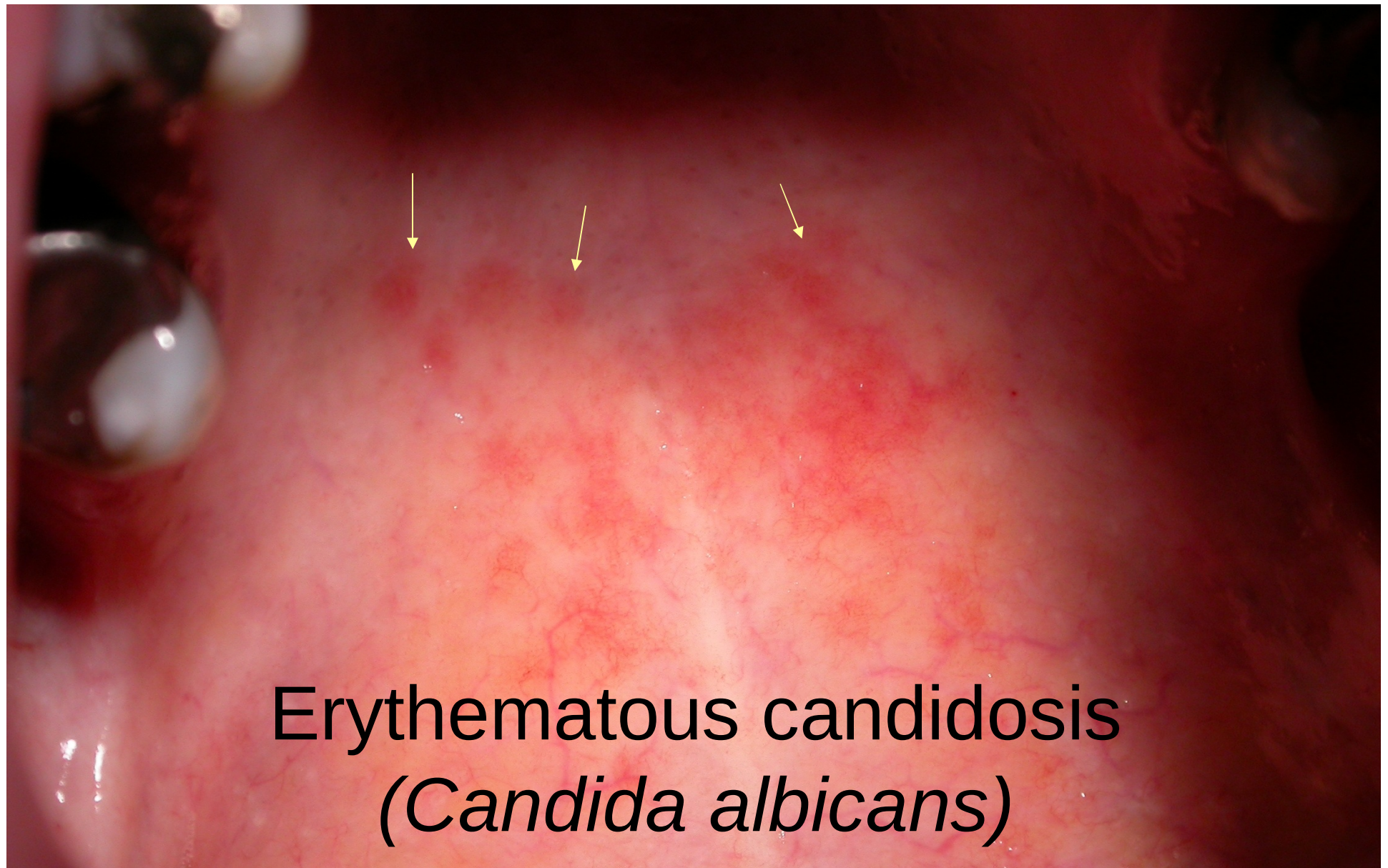


Median rhomboid glossitis
(*Candida albicans*)



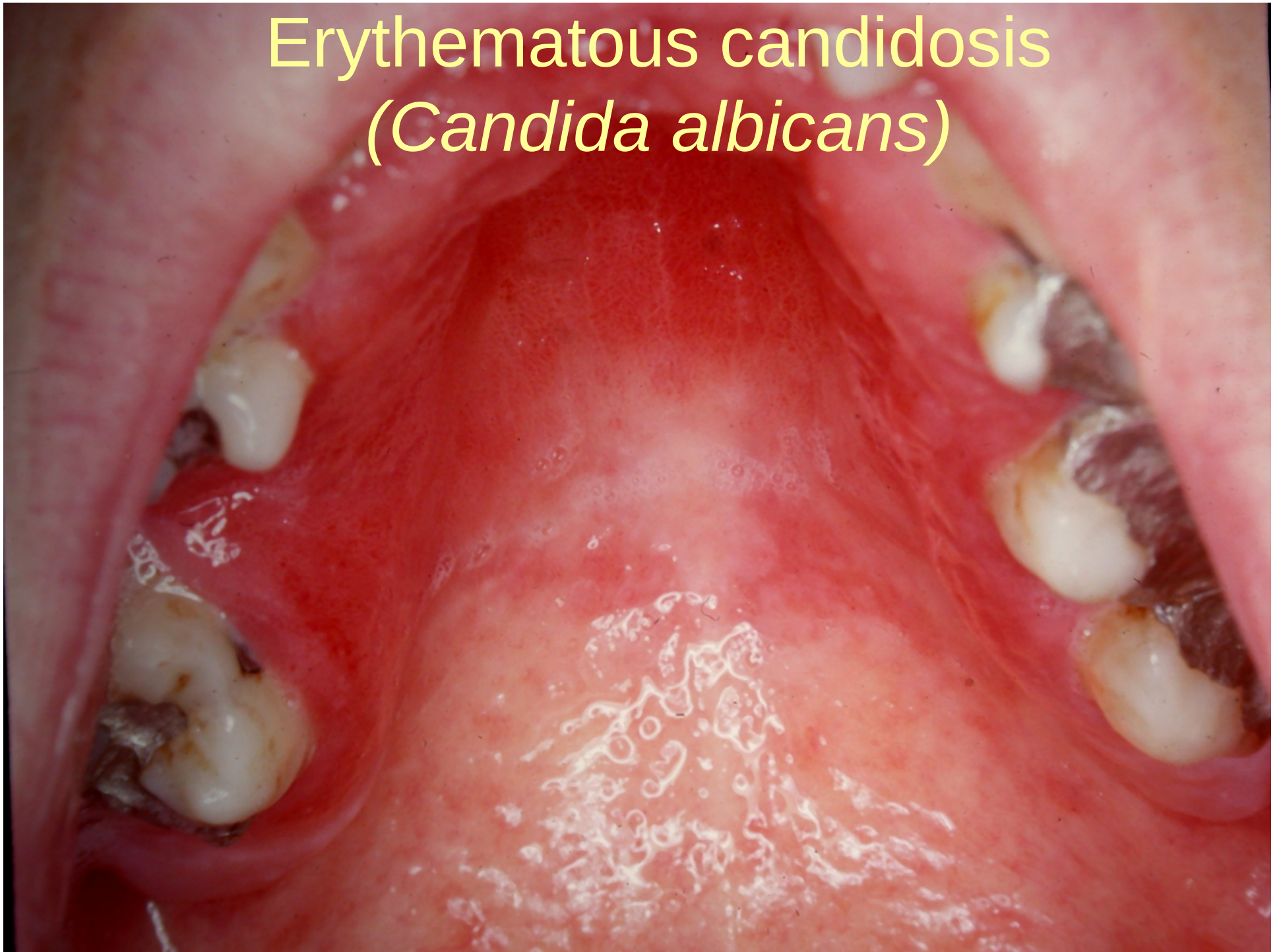


Median rhomboid glossitis
(*Candida albicans*)

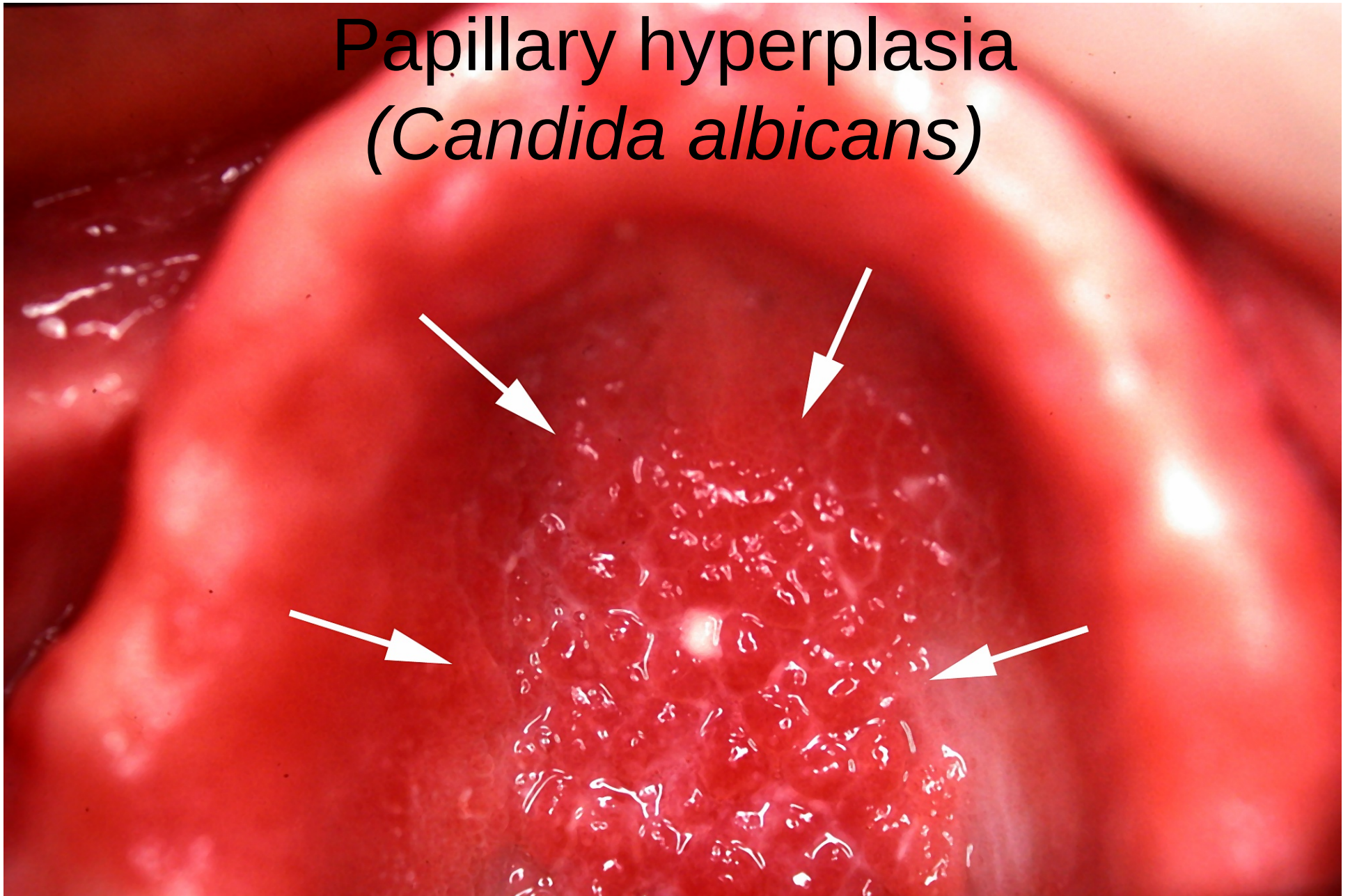


Erythematous candidosis
(*Candida albicans*)

Erythematous candidosis (*Candida albicans*)



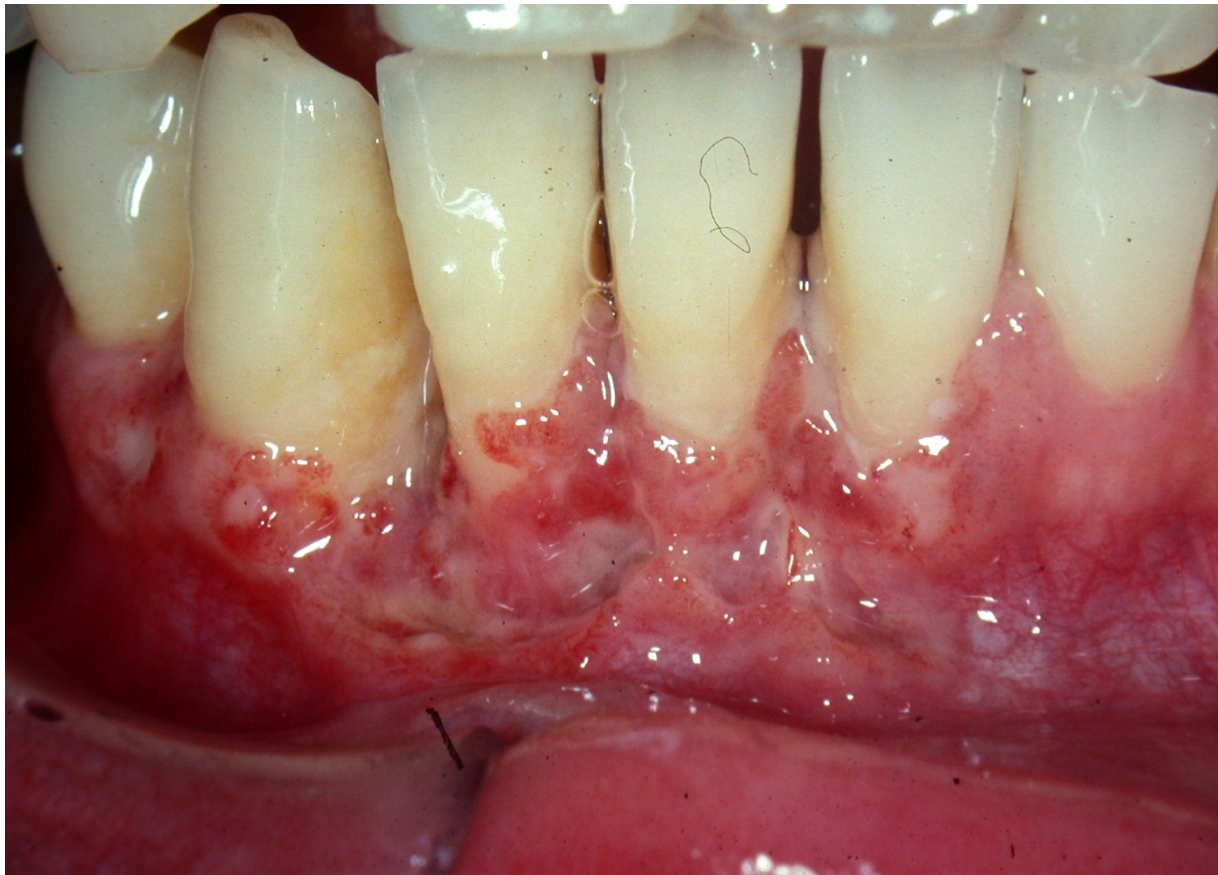
Papillary hyperplasia (*Candida albicans*)



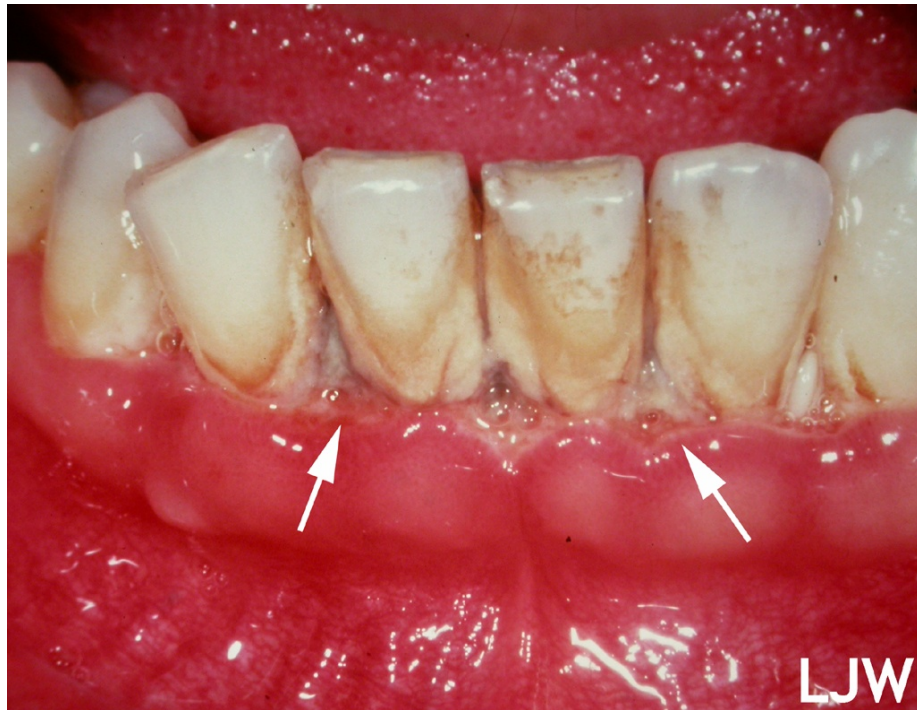
Bacterial invasion: suppuration and periodontal abscesses



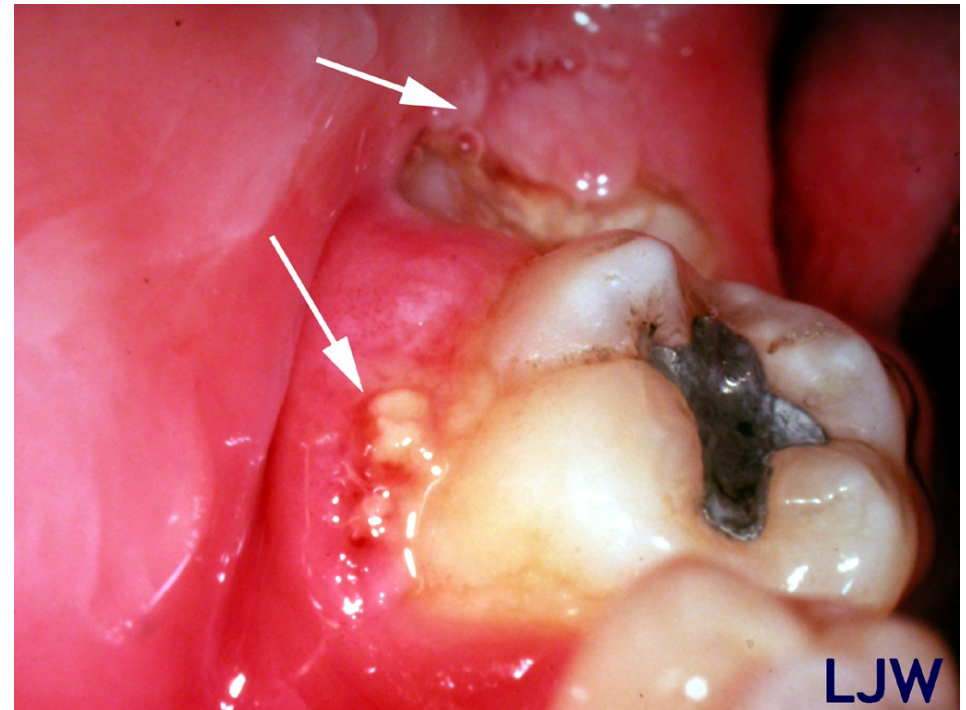
Bacterial invasion: NUP (HIV-P)



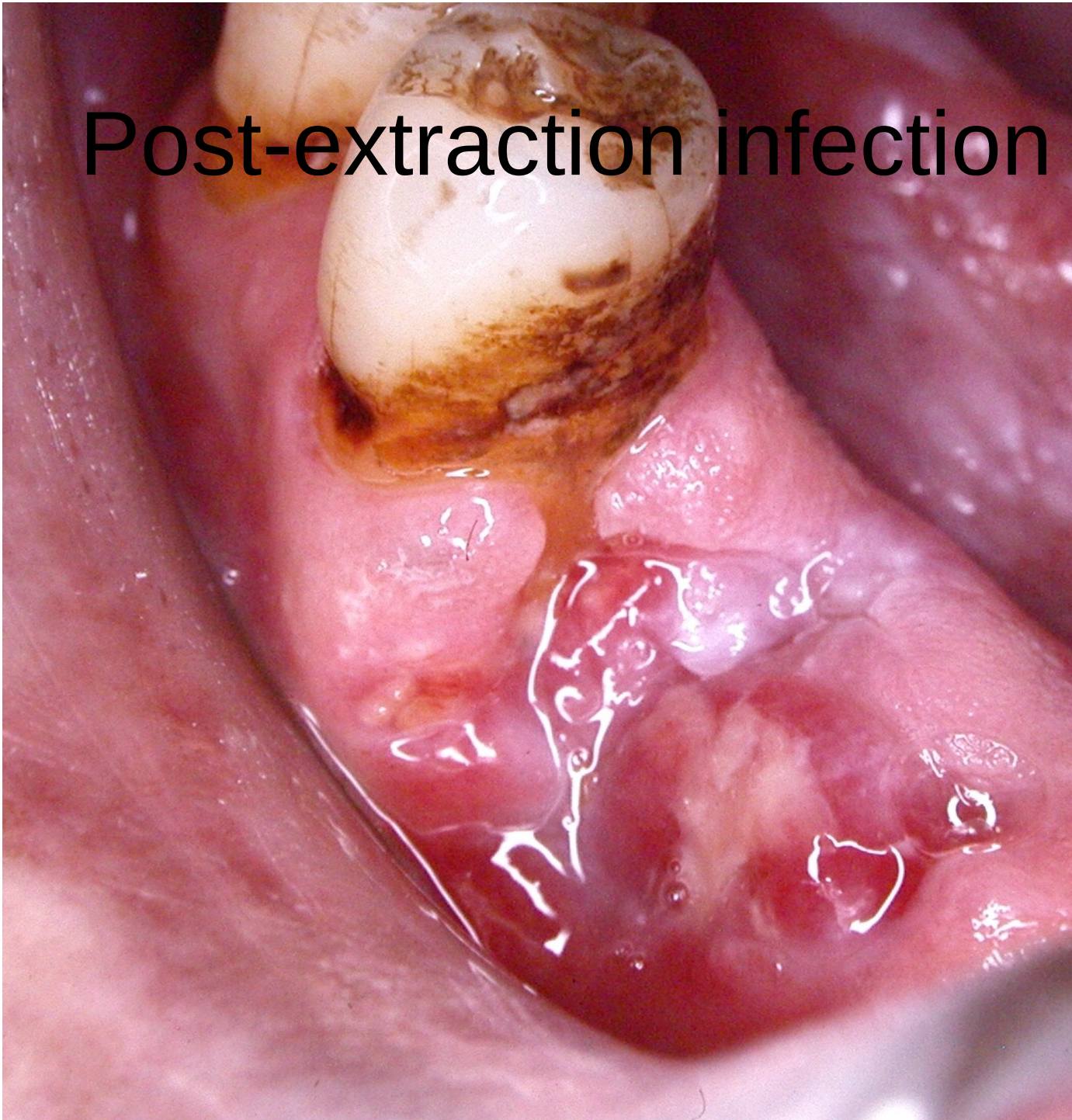
ANUG

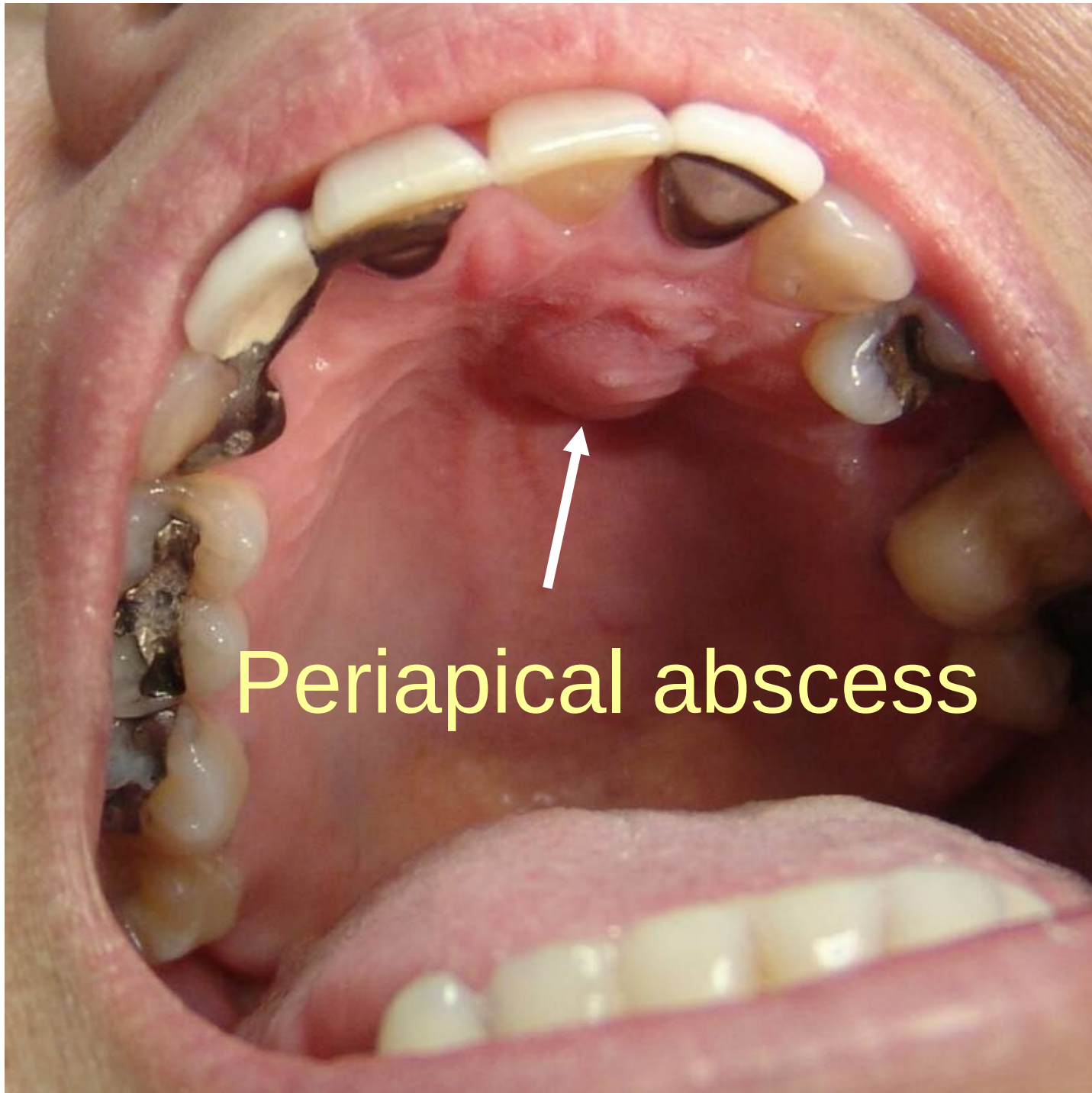


Pericoronitis



Post-extraction infection

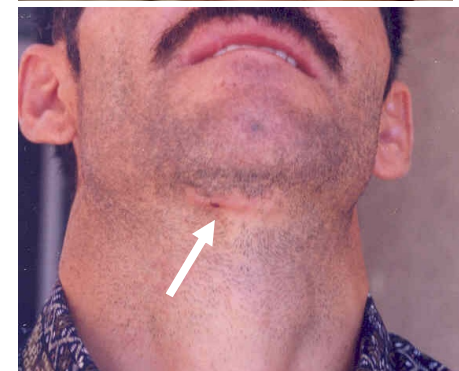




Periapical abscess

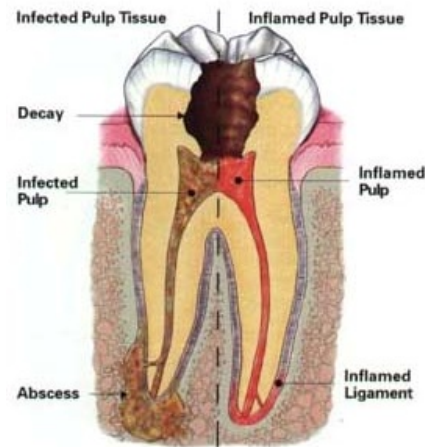
Fate of localized infections

- Local spread through alveolar bone and soft tissues
 - Osteomyelitis (MX, MD)
 - Sinus tract on the skin
- Systemic mediator release
 - Total burden of infection
- Osteomyelitis (MX, MD)

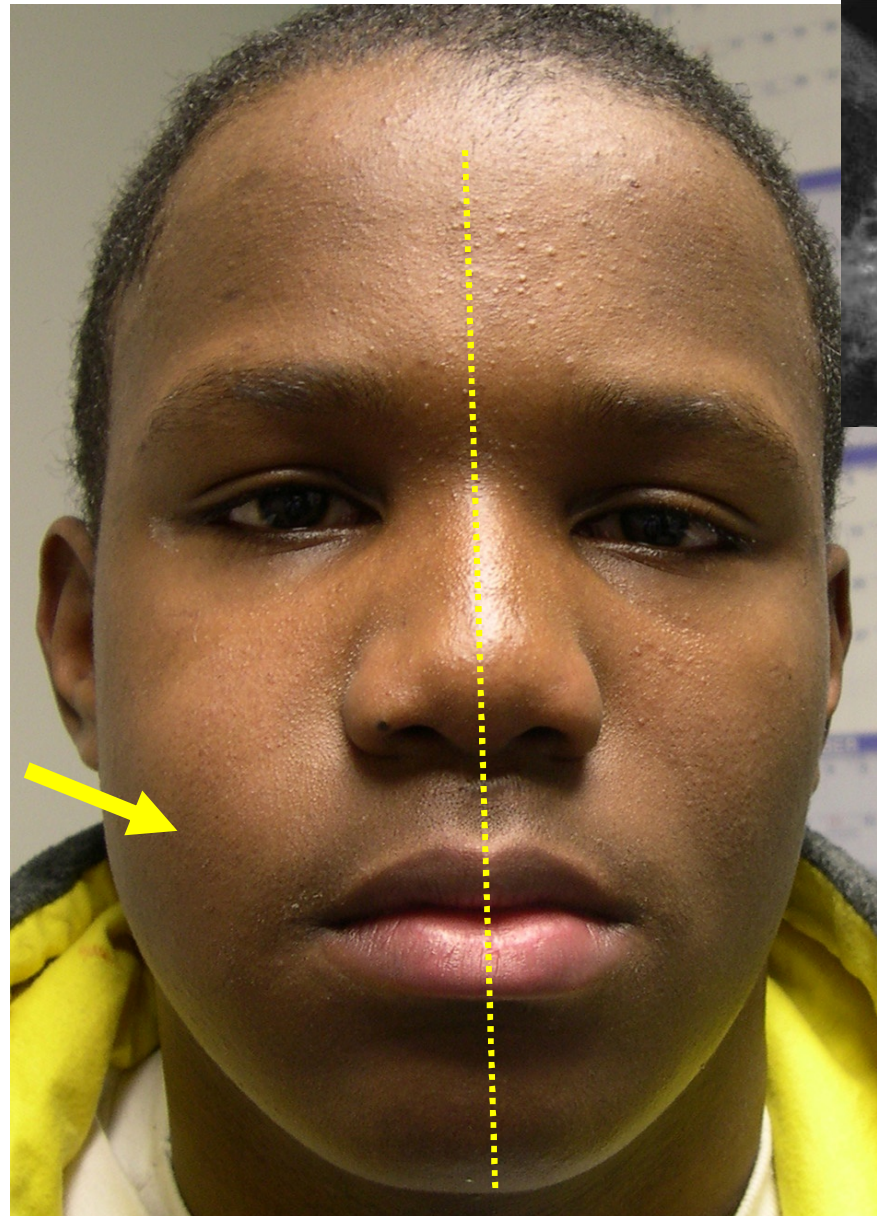


Regional spread of dental infections

- A lymphadenitis can form a cellulitis, which can suppurate and become an abscess.
- Infections sources include **dental infections** as well as pharyngitis, tonsillitis, otitis, adenitis, adenoiditis, sinusitis, and nasal infections.
- Risk factors:
 - low socioeconomic status
 - poor oral hygiene
 - immune dysfunction (including HIV, diabetes, and immunosuppression)



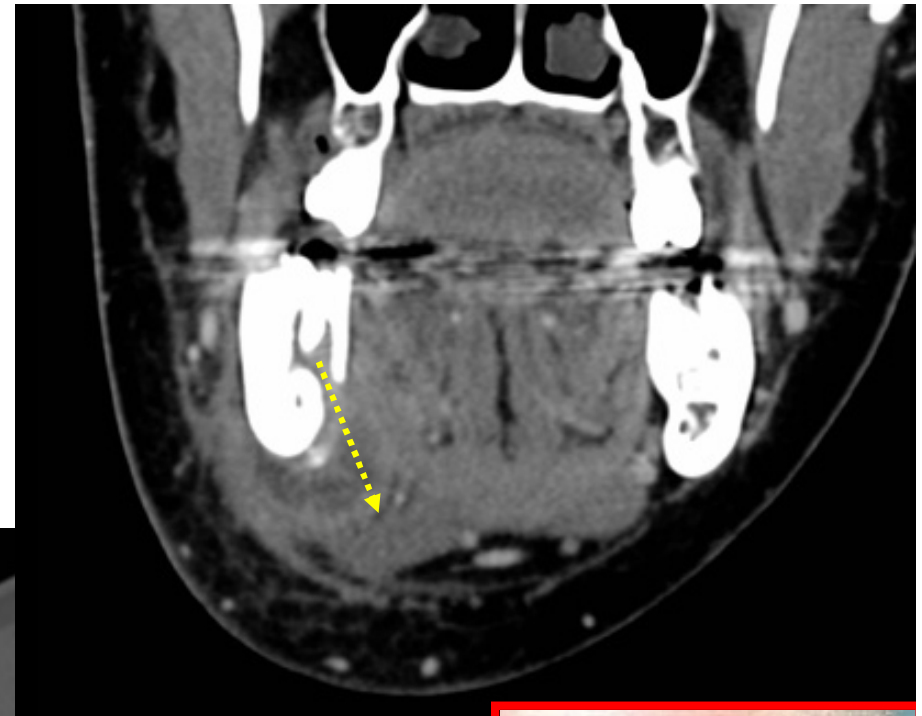
Cellulitis



Infected canine



Dental abscess extending into the submandibular space



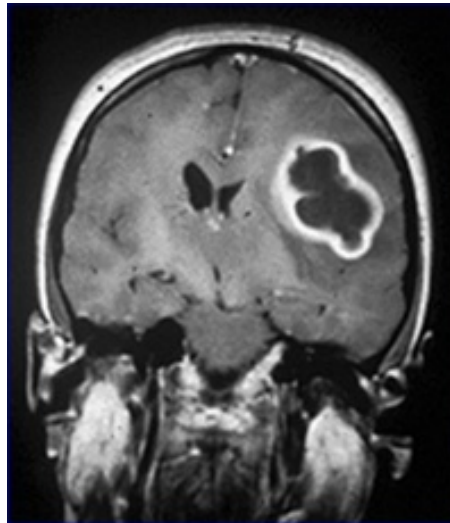
Ludwig's angina

- Serious, potentially life-threatening cellulitis infection of the tissues of the floor of the mouth
- Usually occurring in adults with concomitant dental infections
- Angina refers to the feeling of **strangling (compromise of the airway)**
- Tracheostomy often needed for airway support

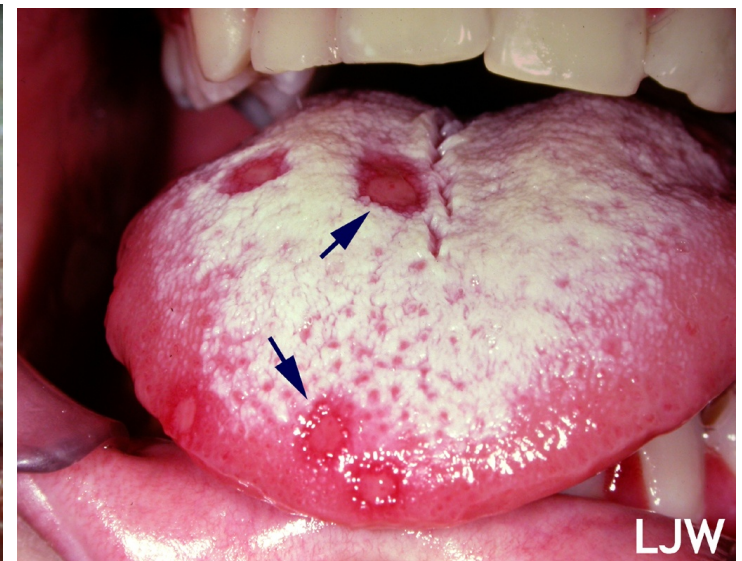


Haematogenous spread to distant sites

- Spread by the bloodstream to distant sites in immune compromised patients
- Systemic sepsis and intravascular coagulation
- Orbit
- Brain
- Liver
- Lung
- Spleen – abscess



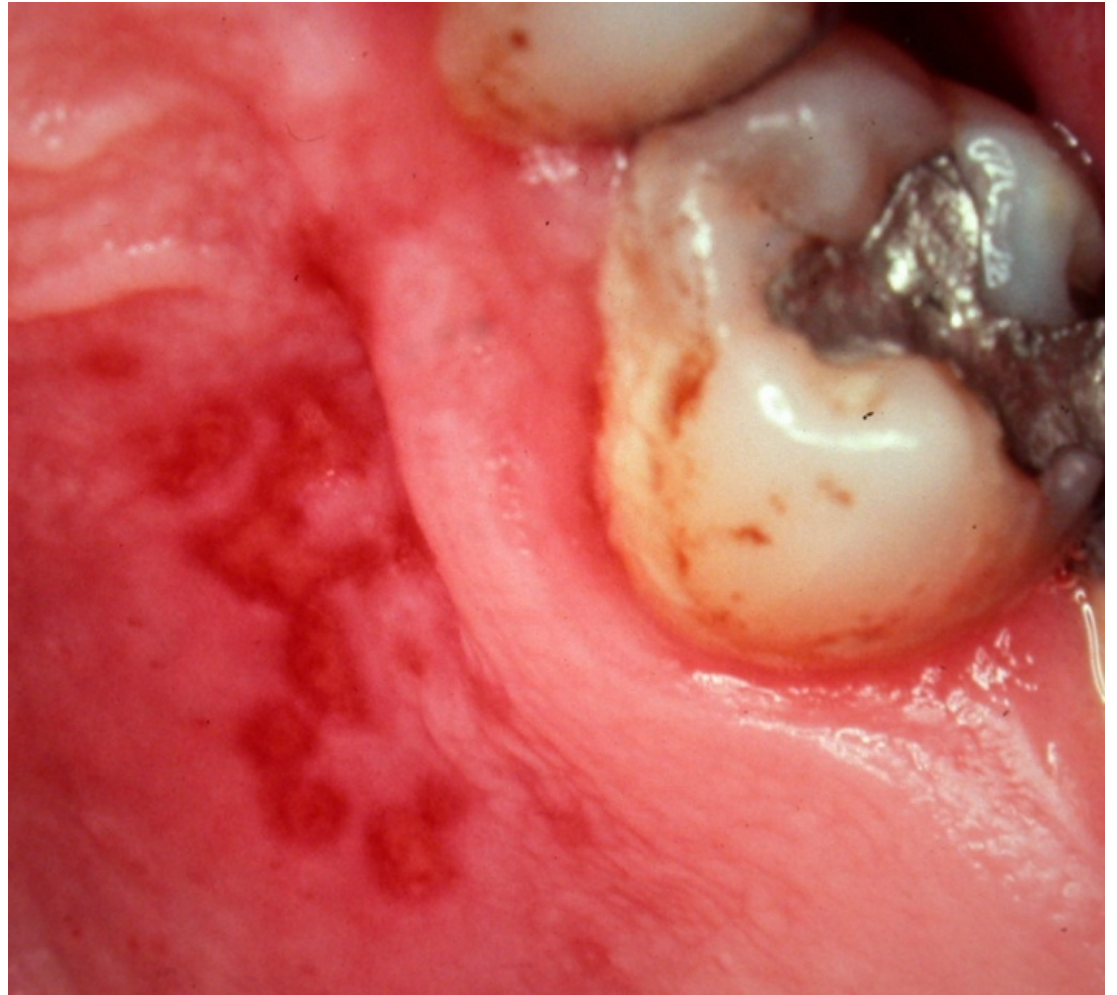
Acute herpetic gingivostomatitis



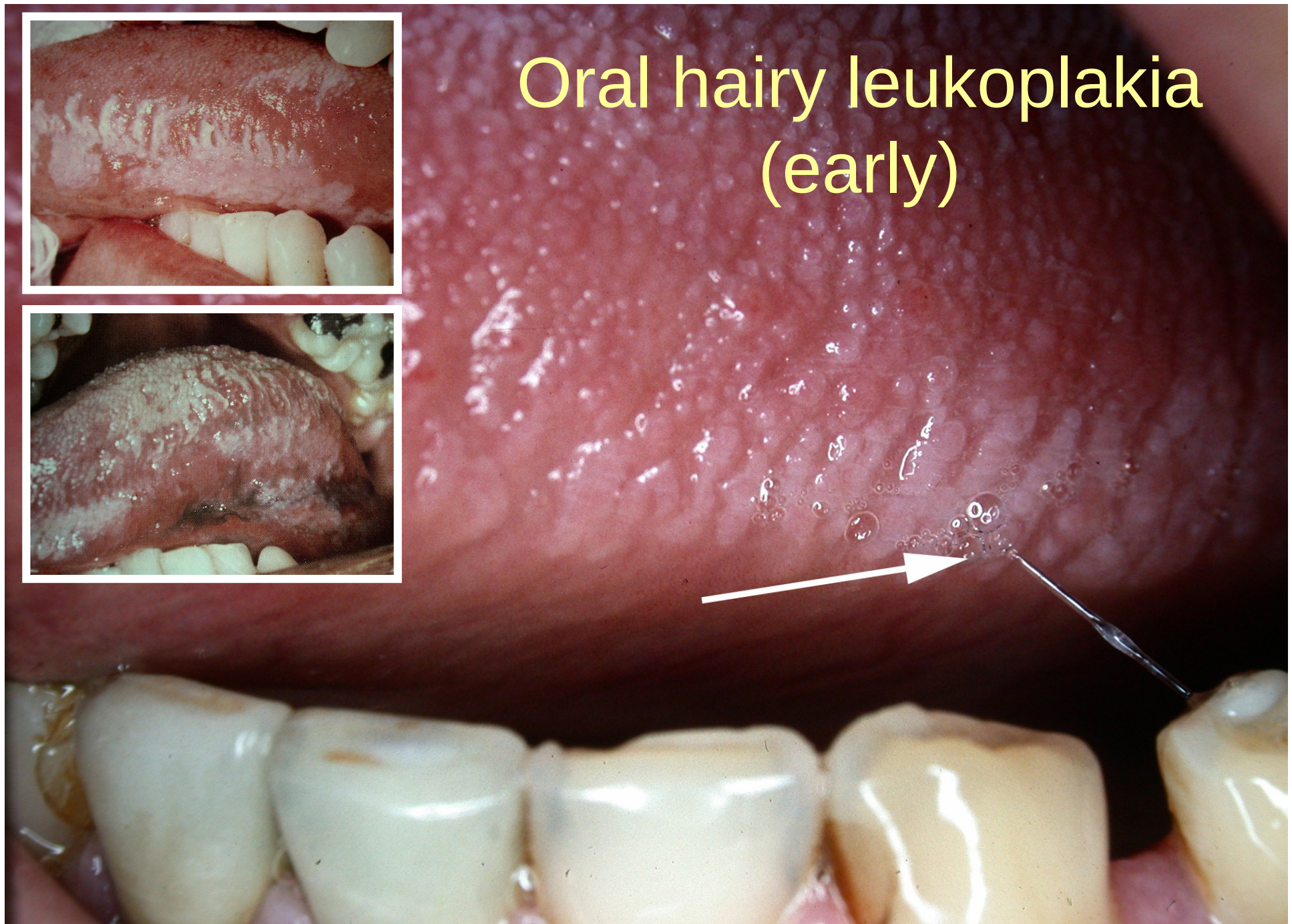
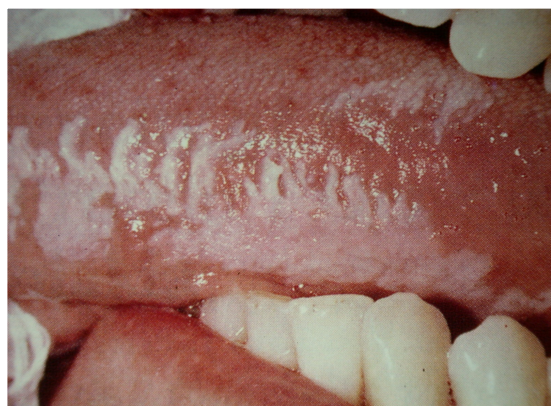
Herpes labialis



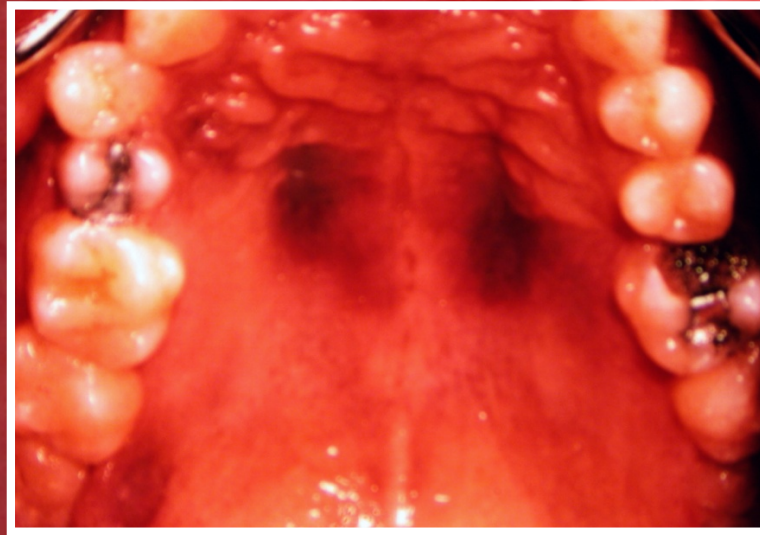
Recurrent palatal HSV



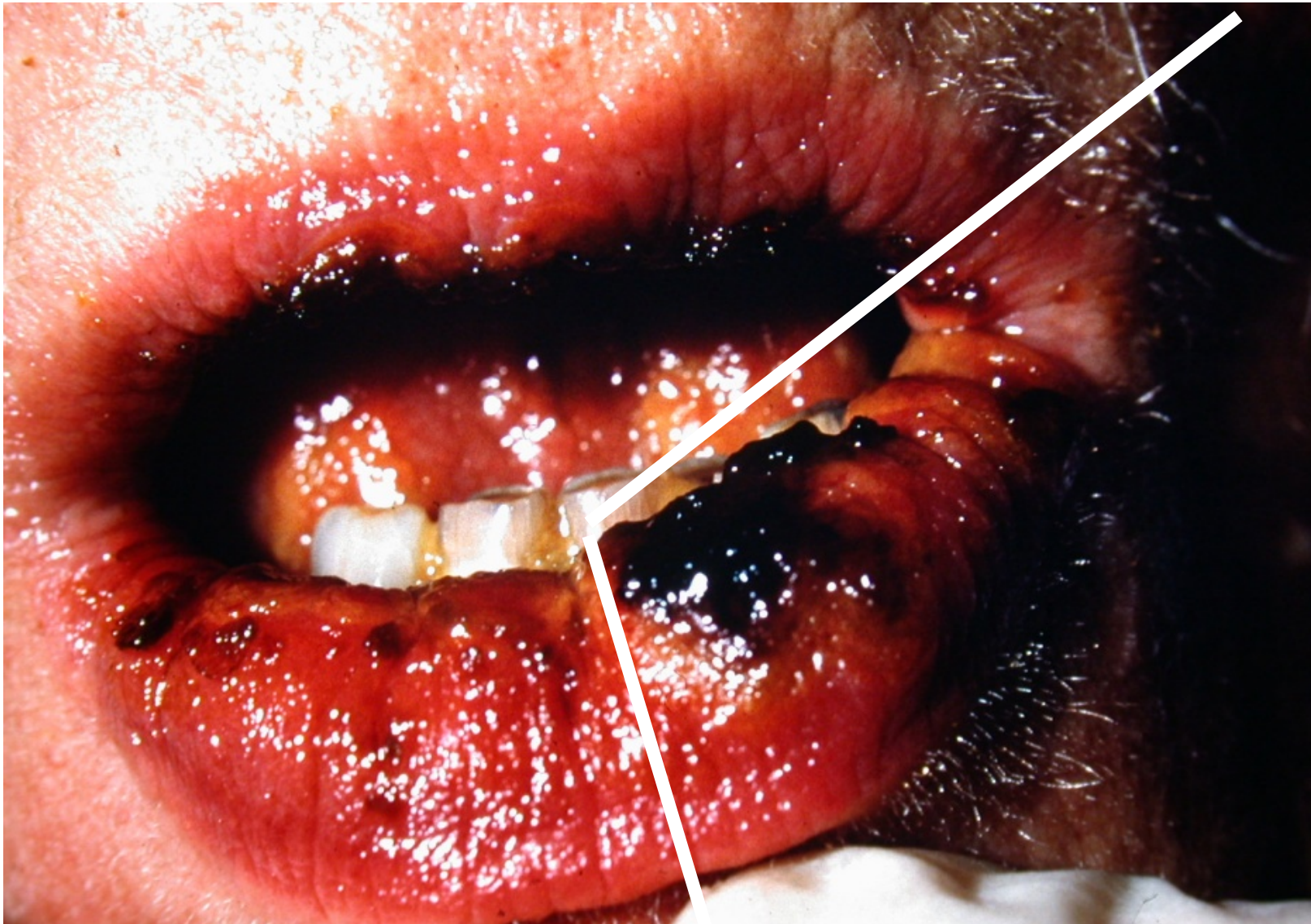
Oral hairy leukoplakia (early)



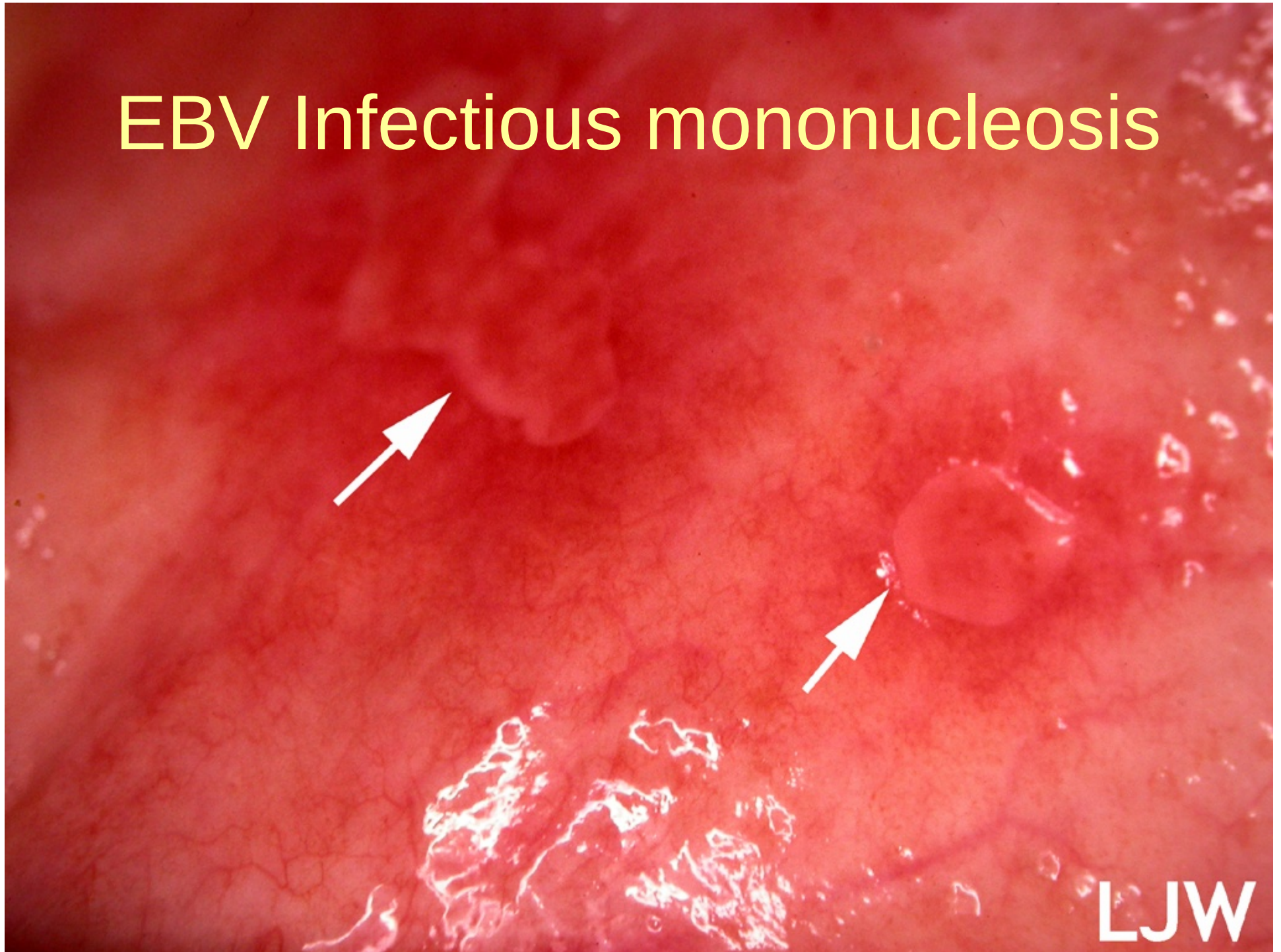
Kaposi's sarcoma



Zoster affecting V3 (trigeminal)



EBV Infectious mononucleosis



LJW

HPV Papilloma



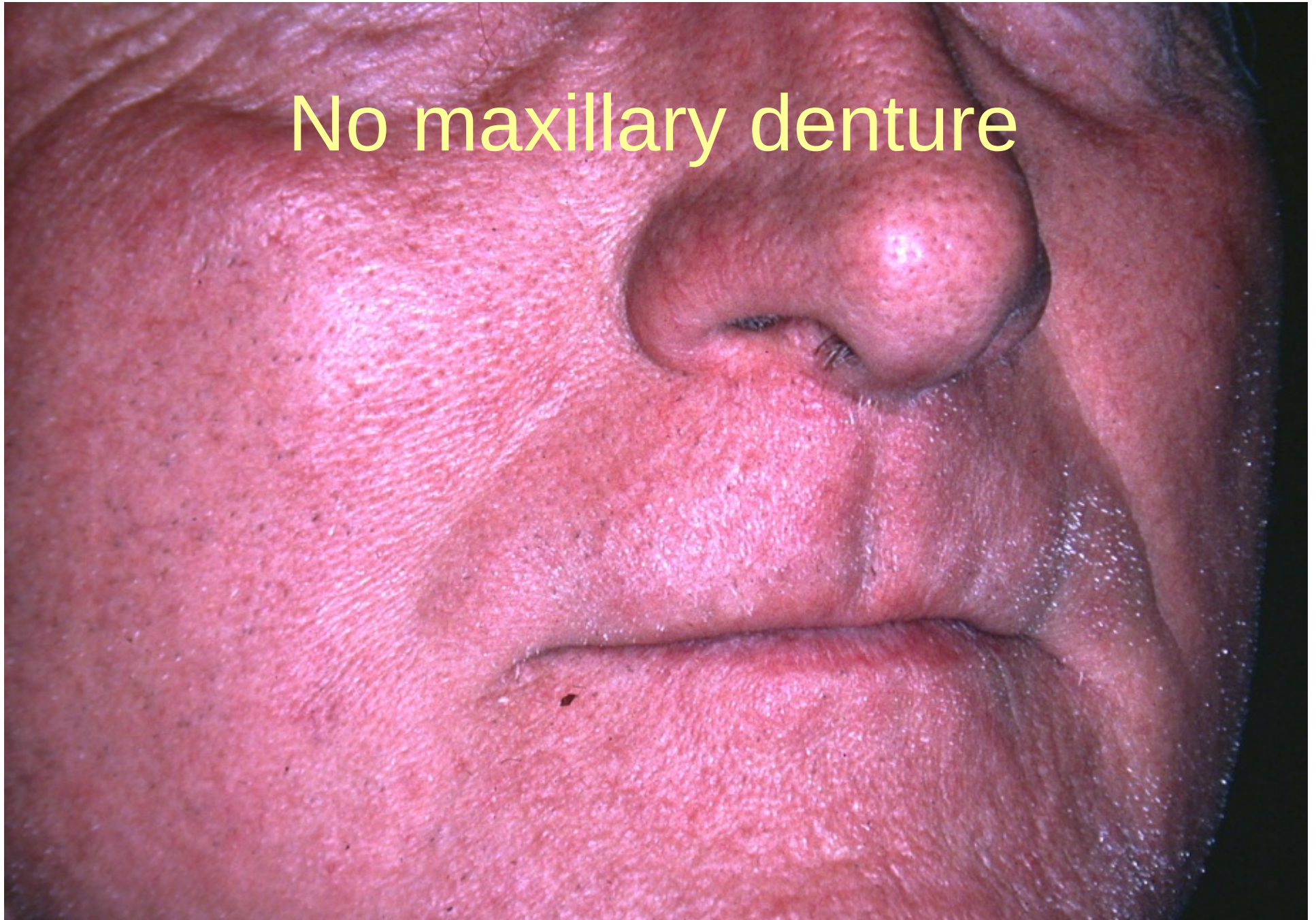
Condyloma accuminatum (HPV multiple lesions)



Part 3

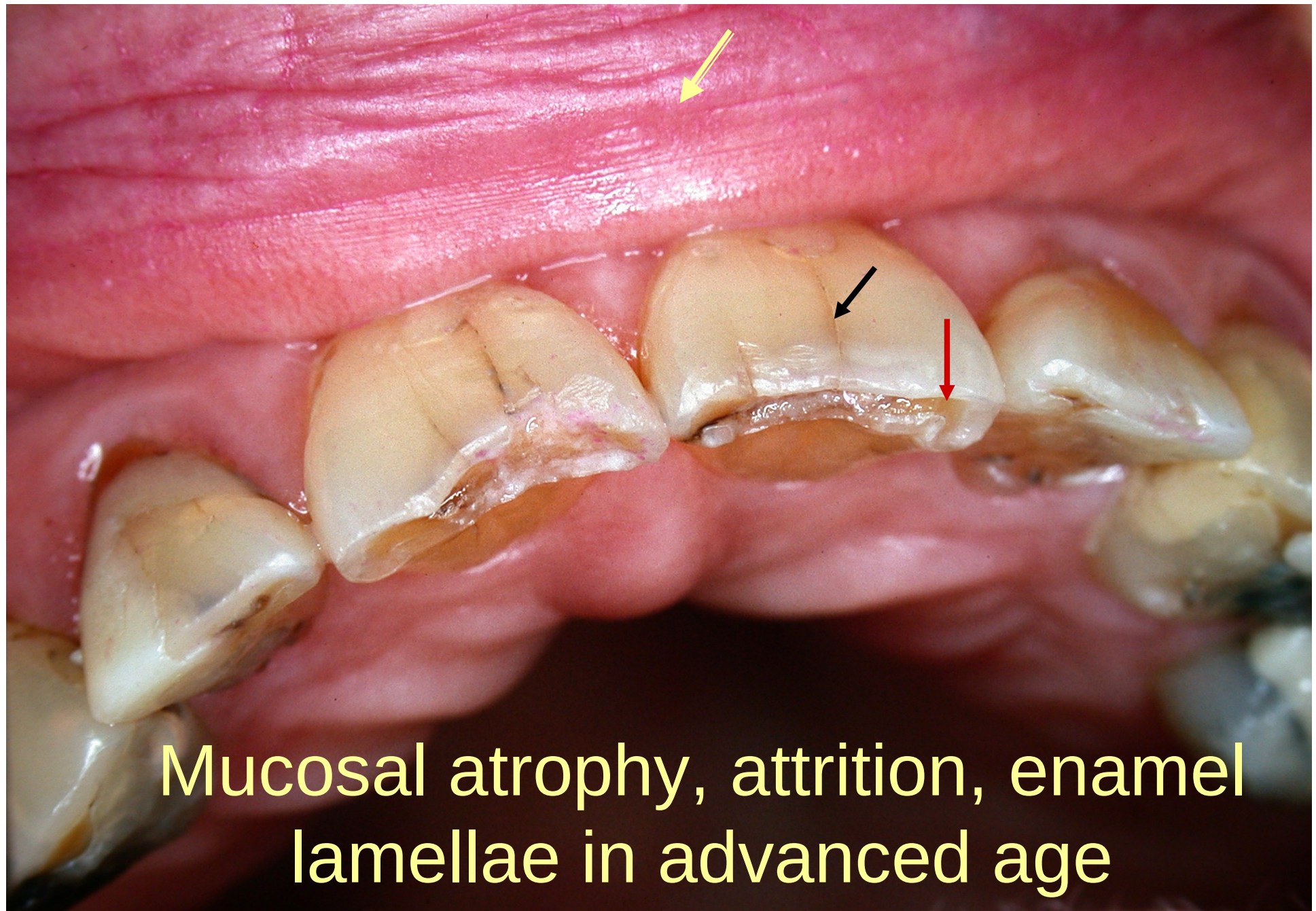
Common entities

No maxillary denture



Atrophy of the oral mucosa





Mucosal atrophy, attrition, enamel lamellae in advanced age

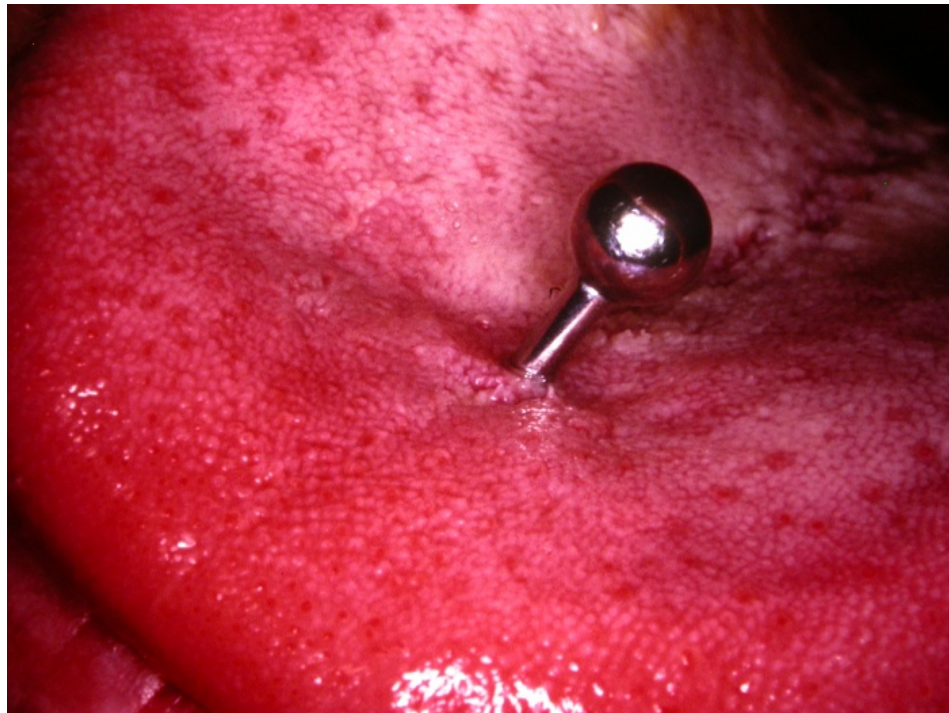
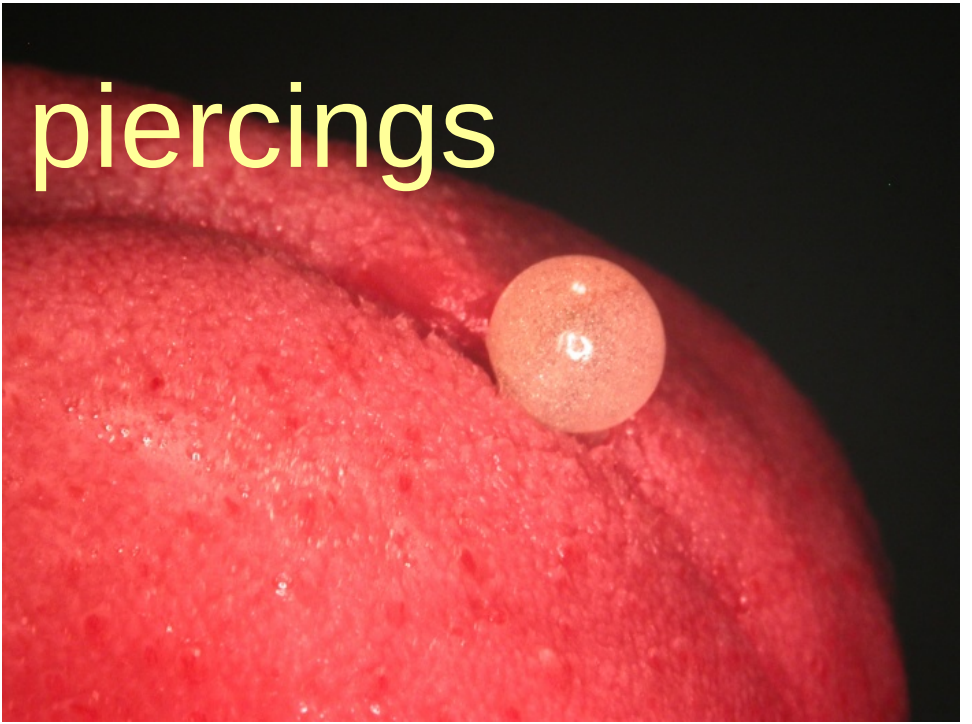
Mild hyperkeratosis of the gingiva



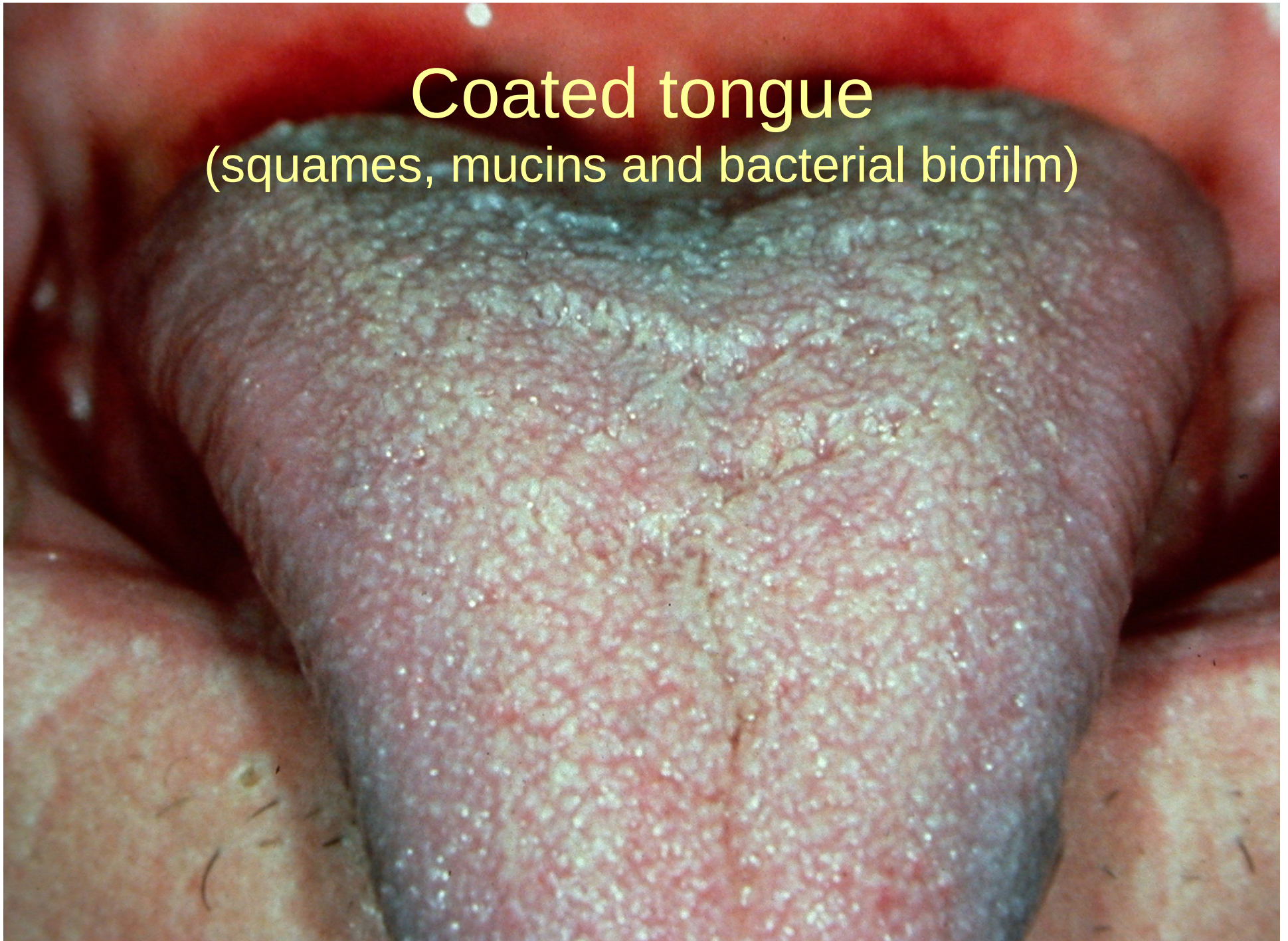
Extrinsic staining from smoking



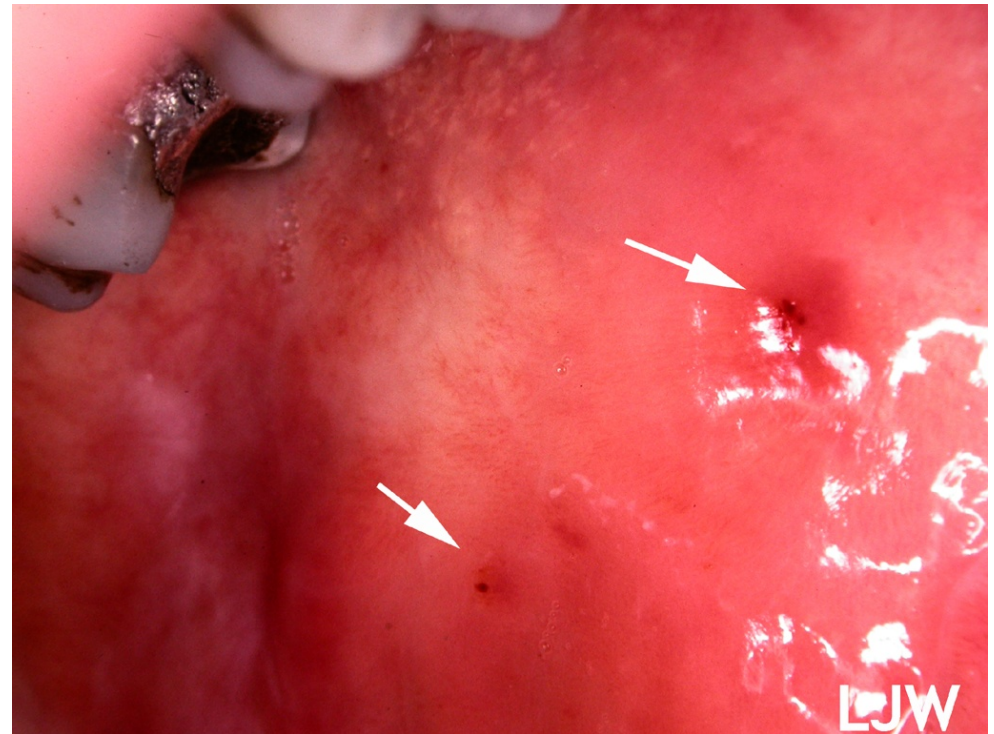
Tongue piercings

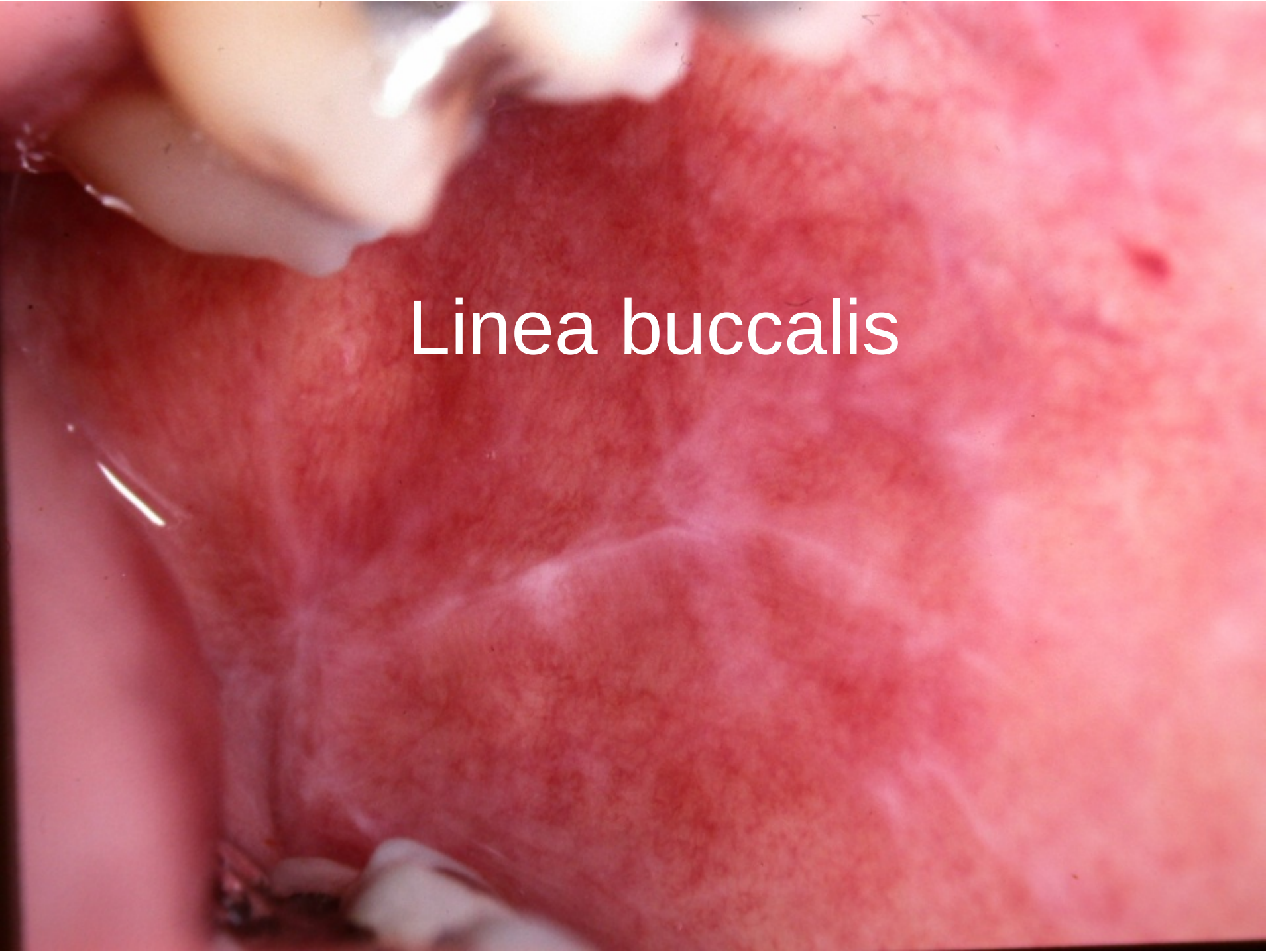


Coated tongue (squames, mucins and bacterial biofilm)



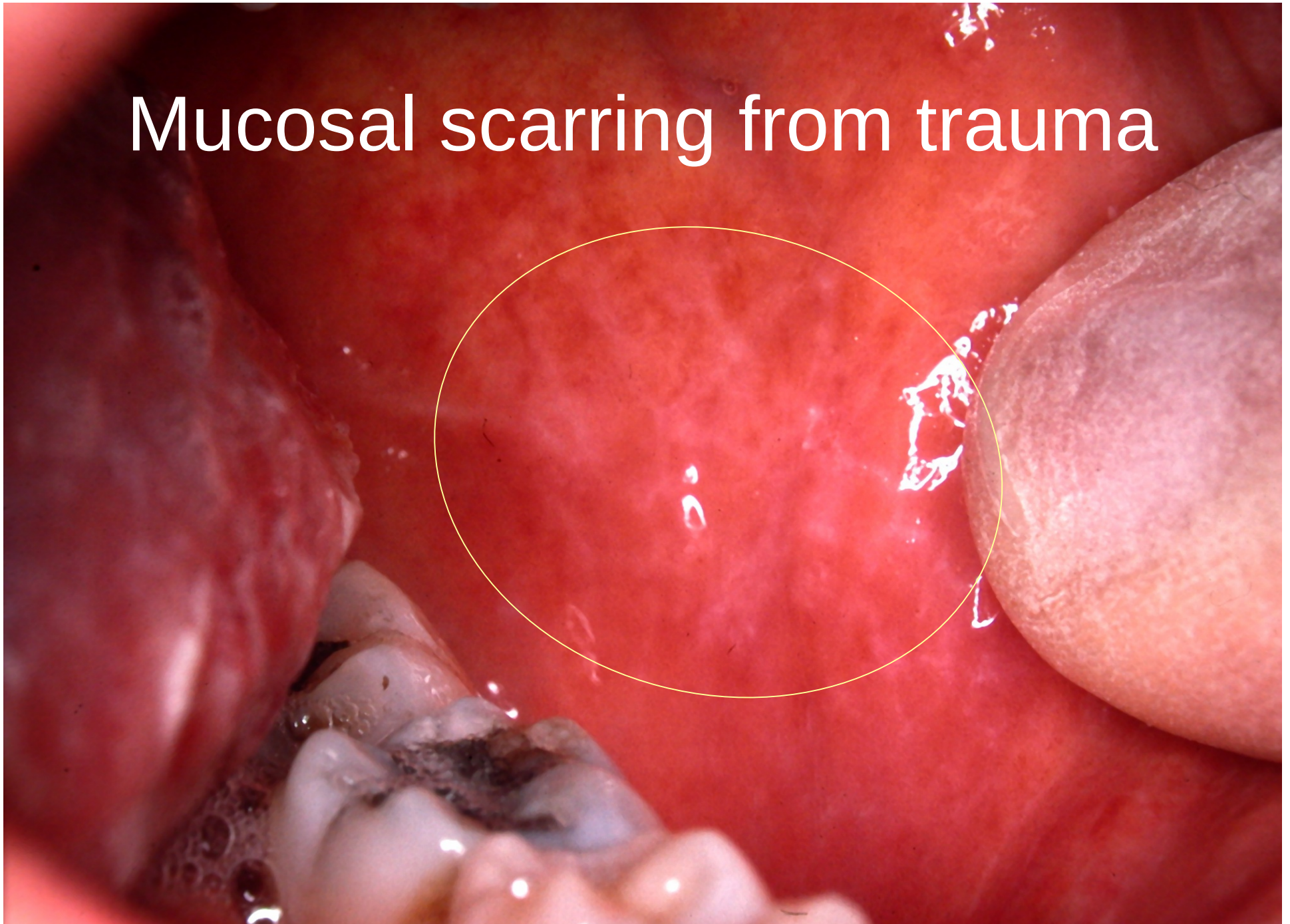
Cheek biting



A close-up photograph of a surgical site, likely on the inner surface of the lower lip or cheek. The tissue is a deep red color, indicating it is highly vascularized. A distinct, slightly raised, and irregular line runs across the middle of the frame, which is the buccal line. The surrounding tissue has a granular, moist appearance. In the upper left corner, a portion of a surgical instrument, possibly a retractor or a mirror, is visible, reflecting some light. The overall lighting is bright, highlighting the texture and color of the tissue.

Linea buccalis

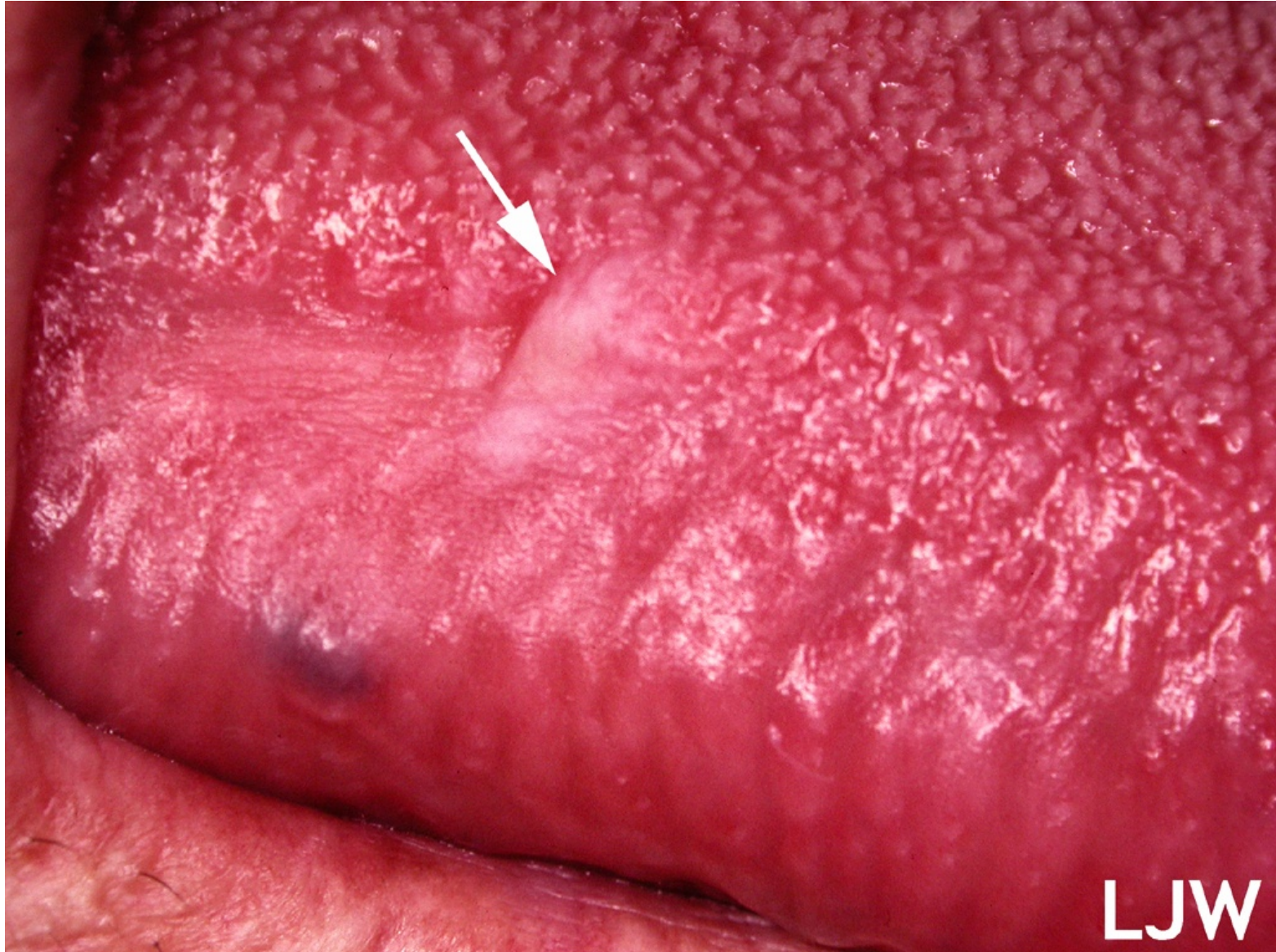
Mucosal scarring from trauma

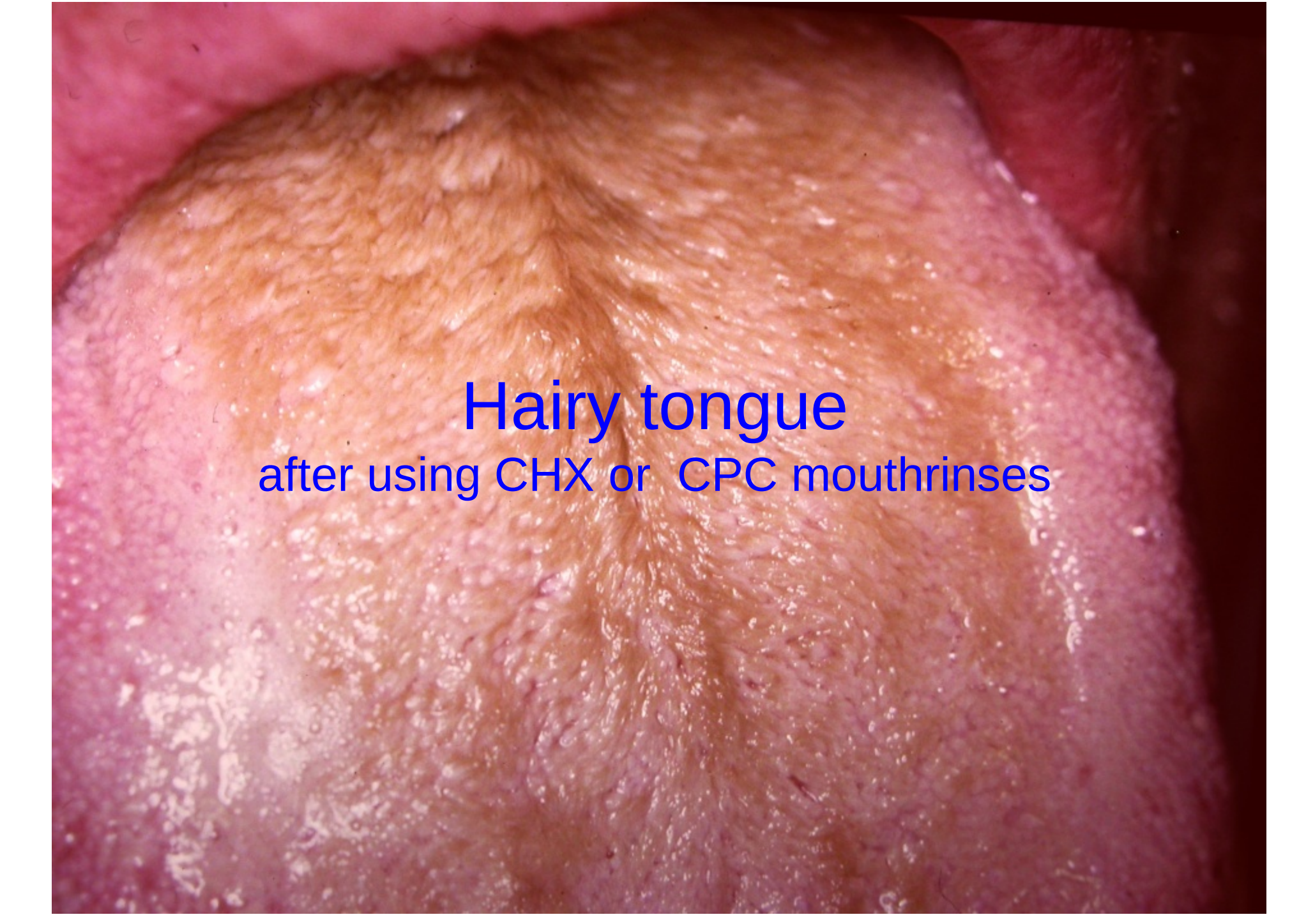


Partial depapillation and scarring
from trauma



Scar from tongue biting





Hairy tongue
after using CHX or CPC mouthrinses

Hairy tongue



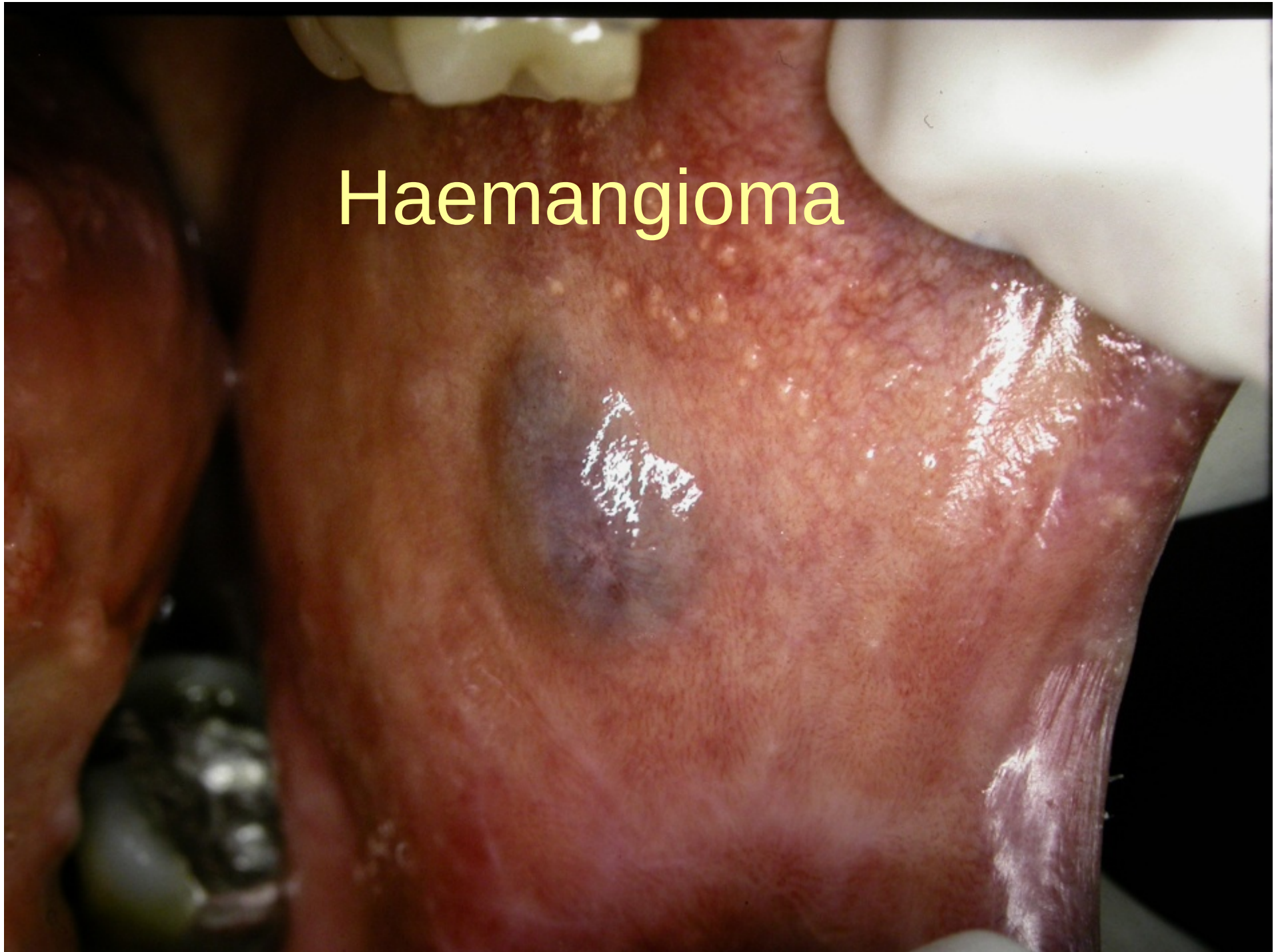
Fissured tongue



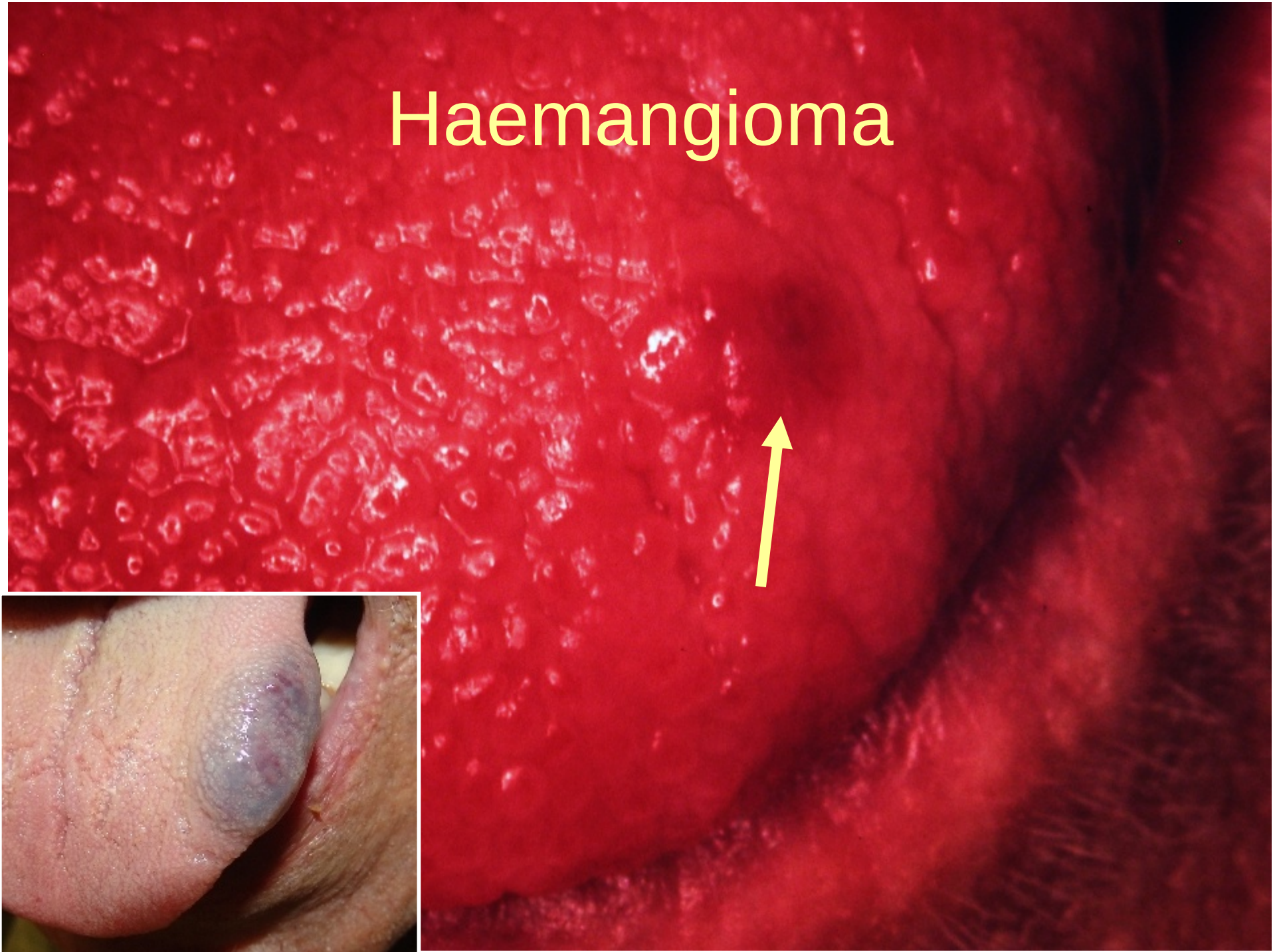
Geographic tongue



Haemangioma

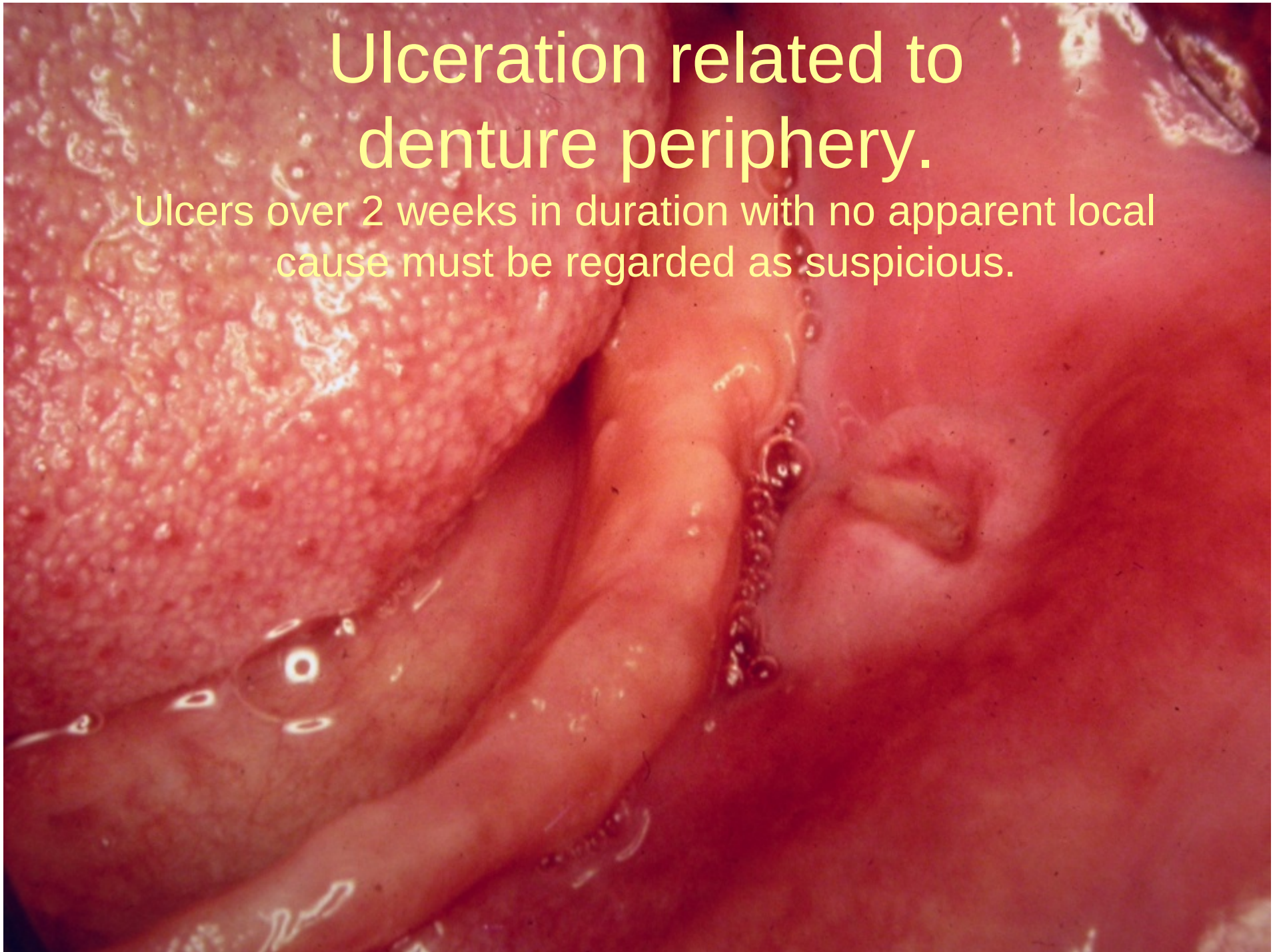


Haemangioma

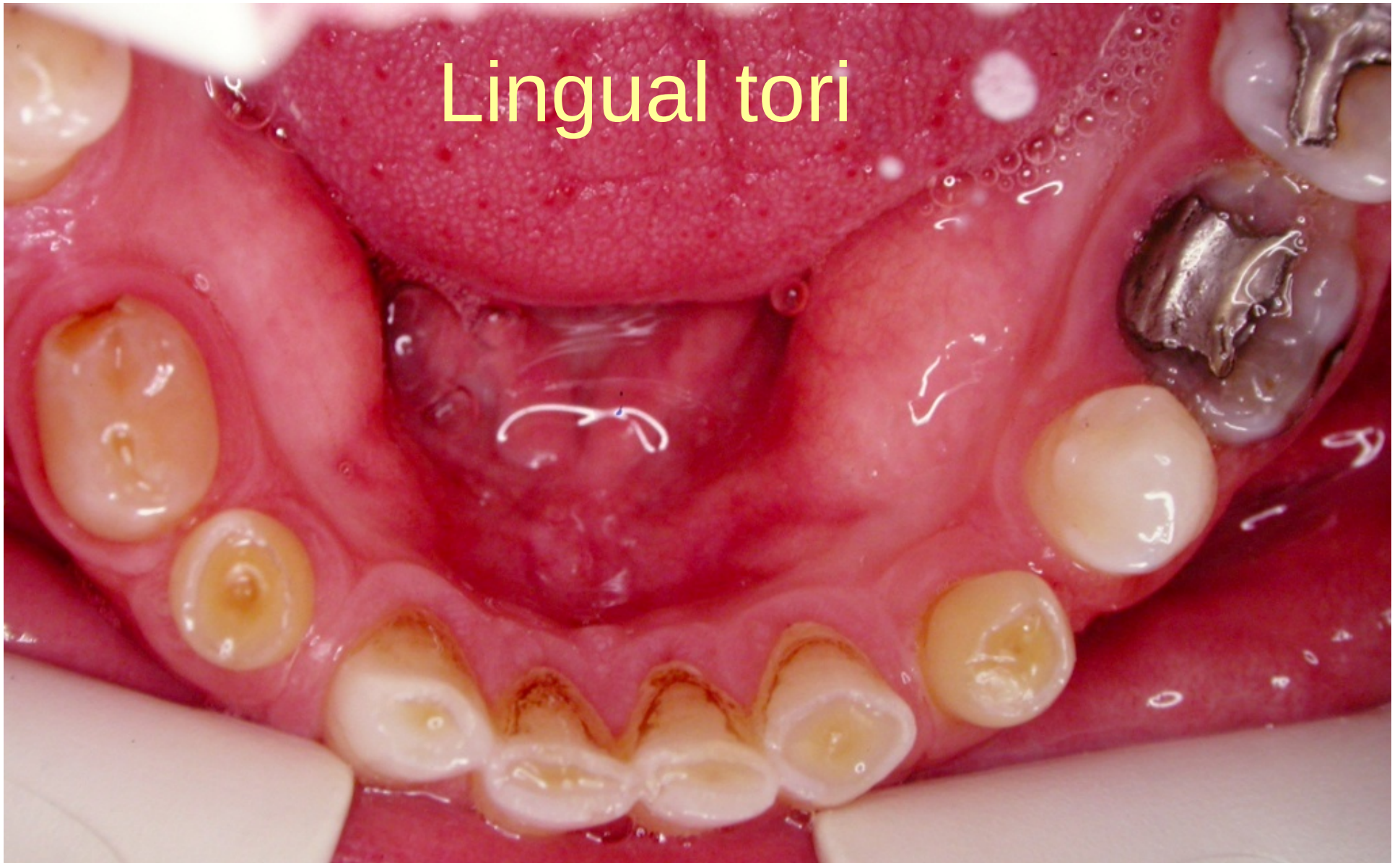


Ulceration related to denture periphery.

Ulcers over 2 weeks in duration with no apparent local cause must be regarded as suspicious.



Lingual tori



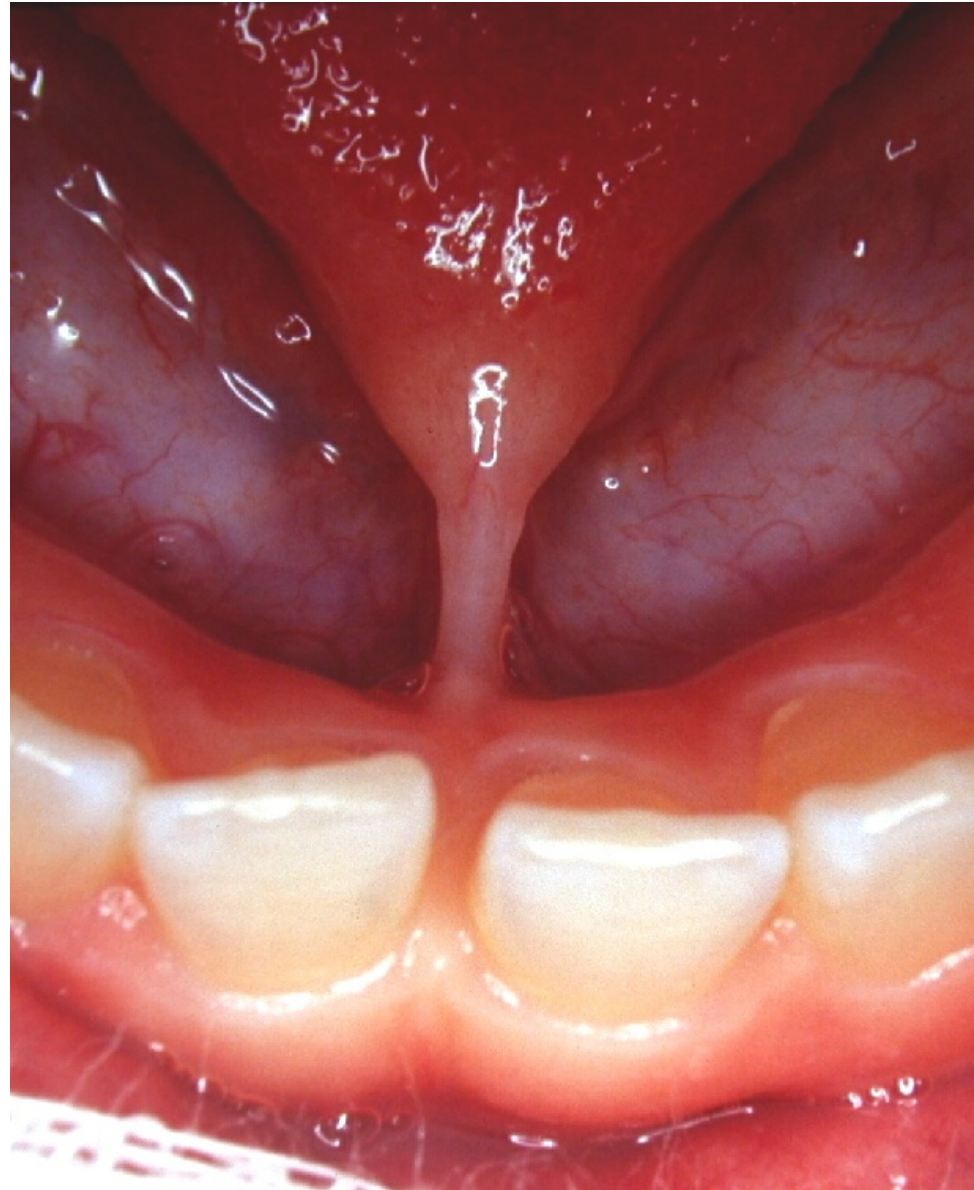
Tori



Part 4

Common oral mucosal pathology

Tongue tie



Xerostomia



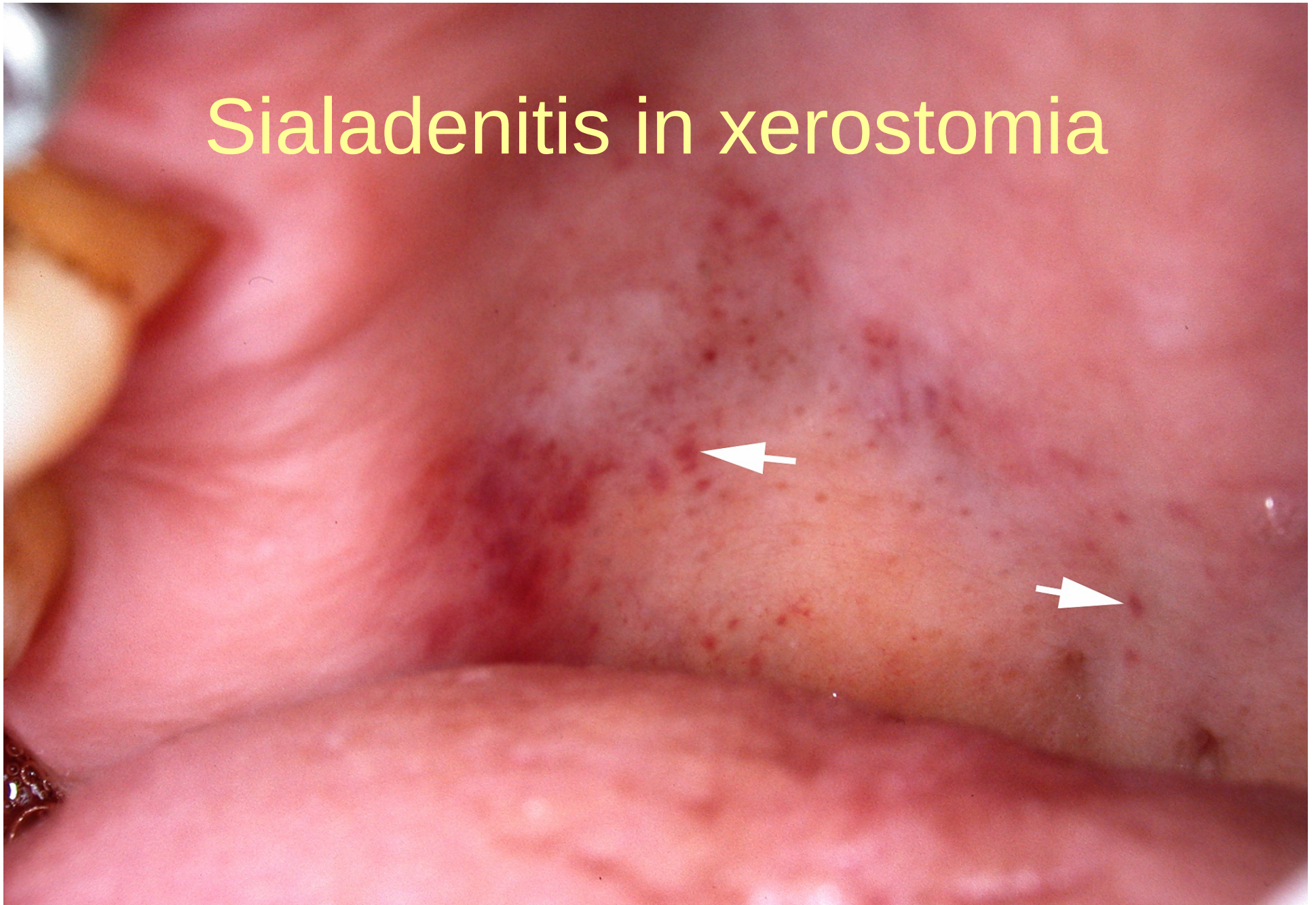
Dry mouth, tooth wear,
dental erosion, root surface caries



Sialadenitis



Sialadenitis in xerostomia



Sialadenitis in xerostomia



Hereditary gingival overgrowth



Drug-induced gingival enlargement



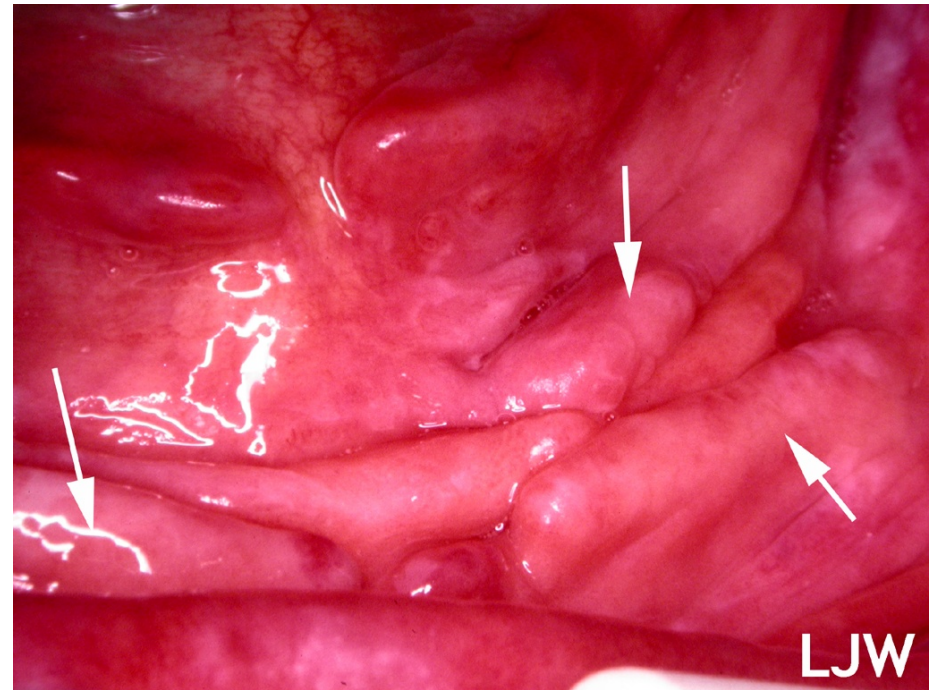
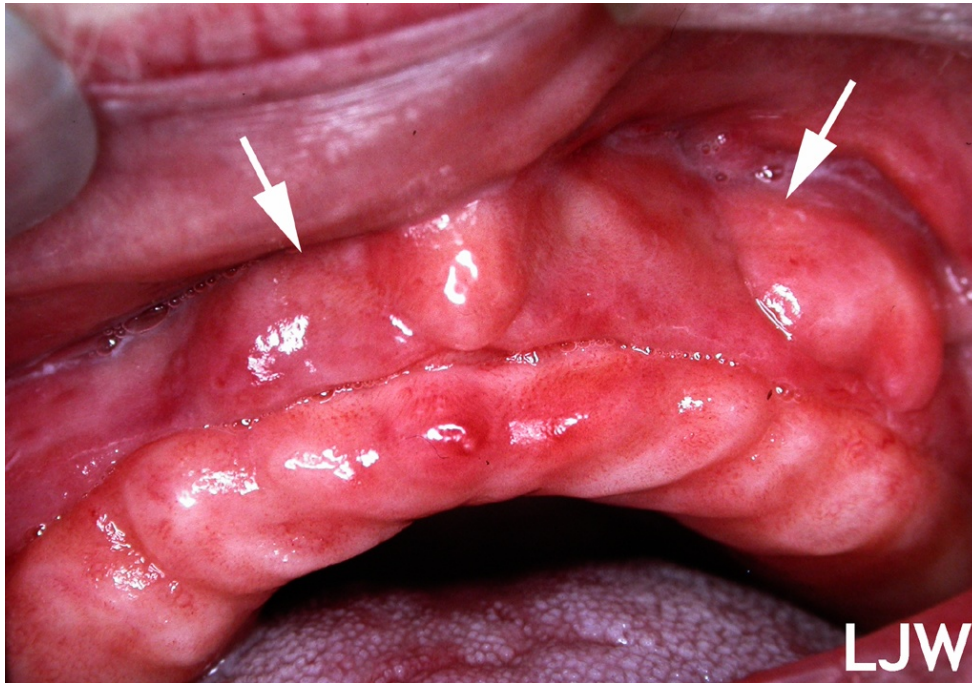


Drug-induced gingival overgrowth

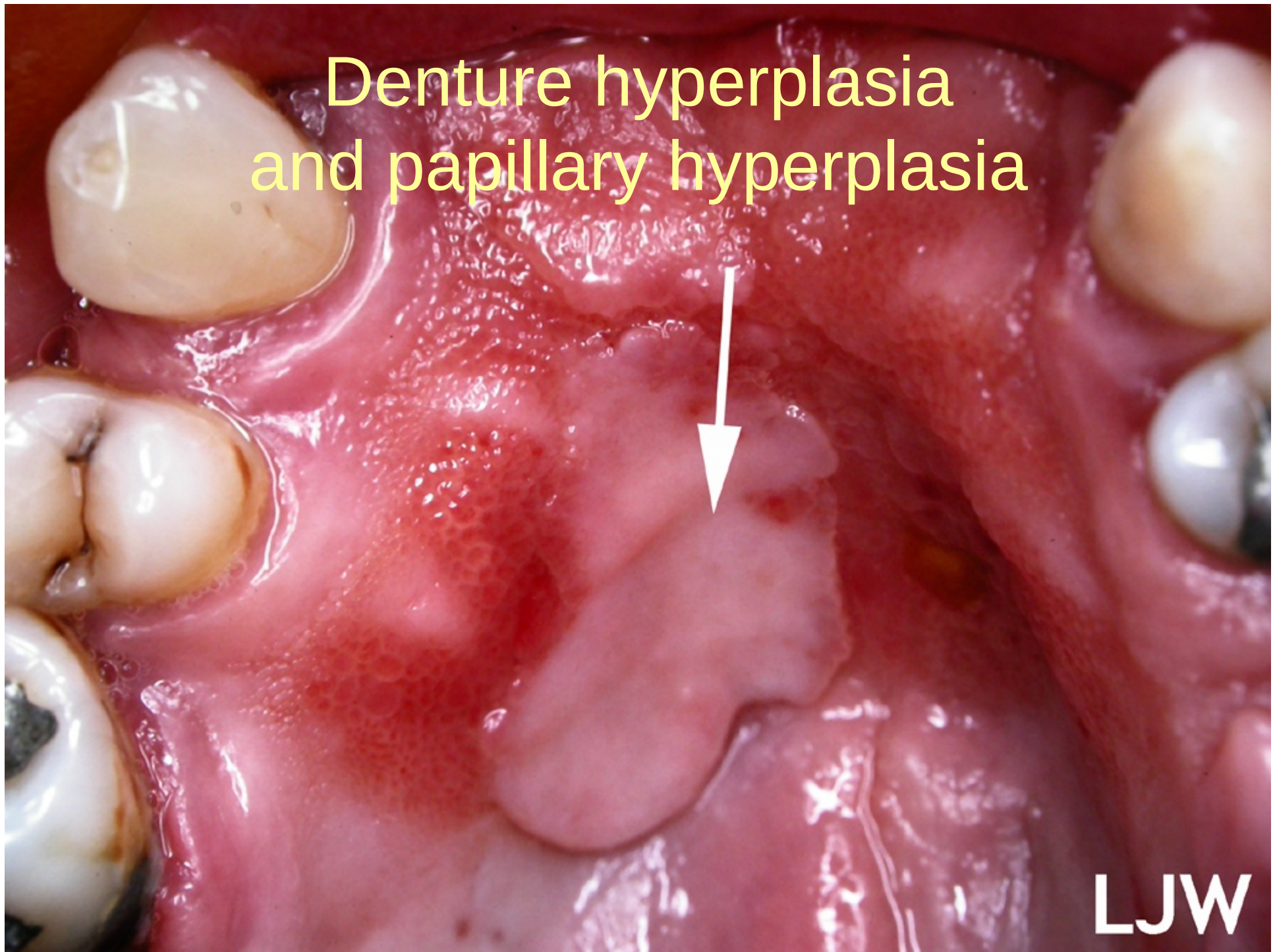
Localized gingival overgrowth
(medication induced)



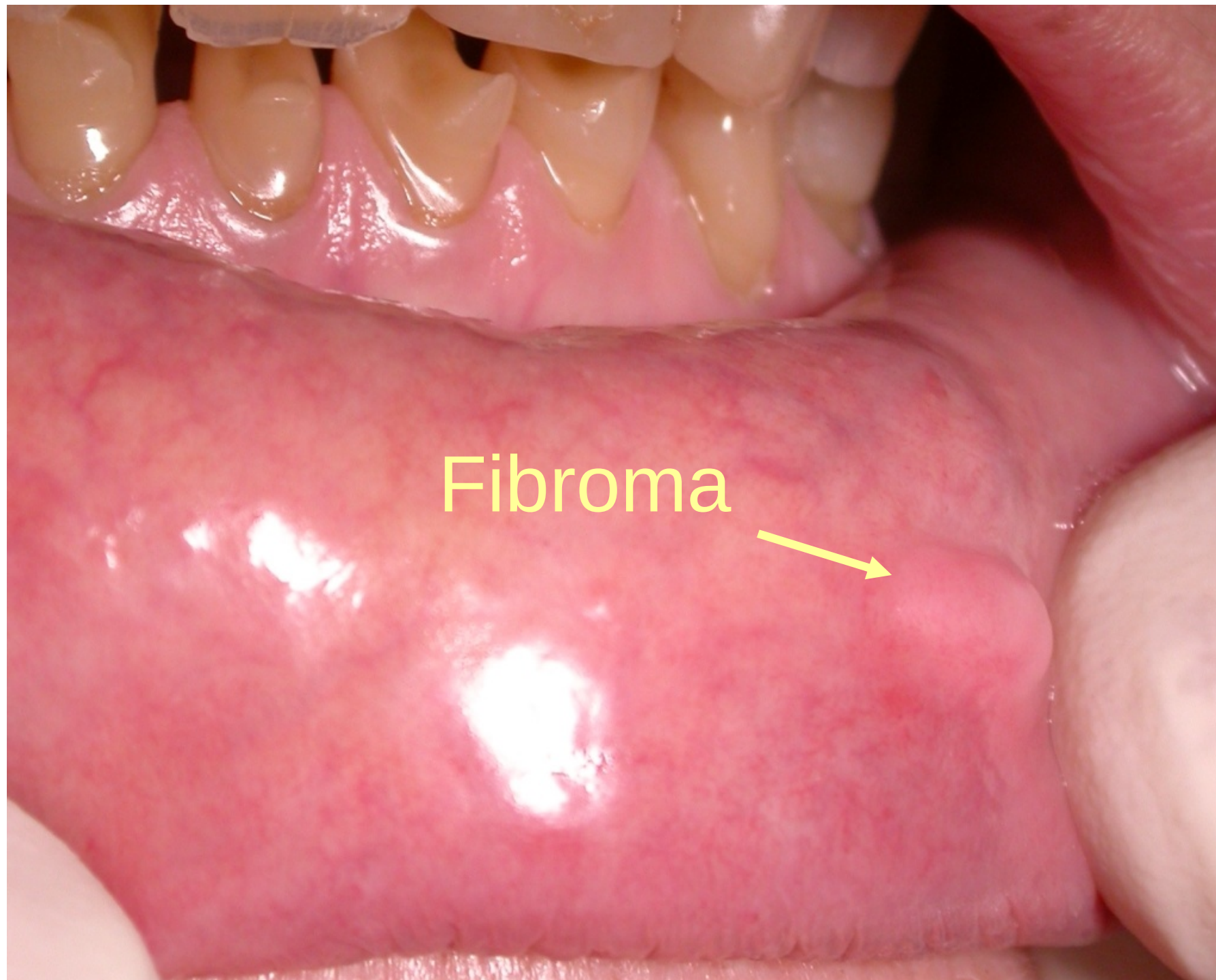
Denture hyperplasia



Denture hyperplasia and papillary hyperplasia



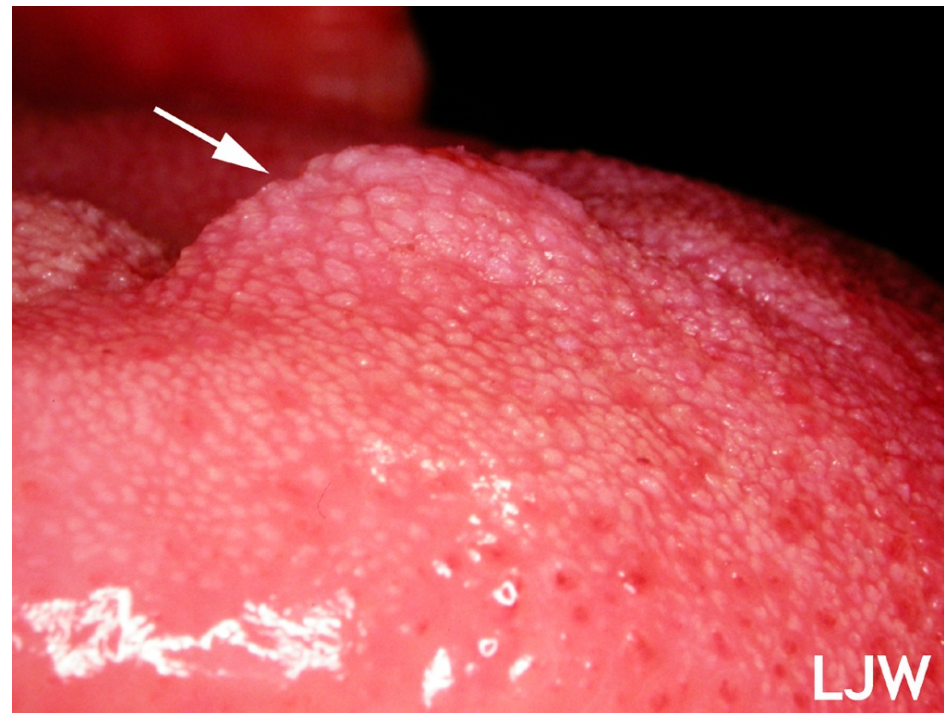
LJW



Fibroma



Fibroma

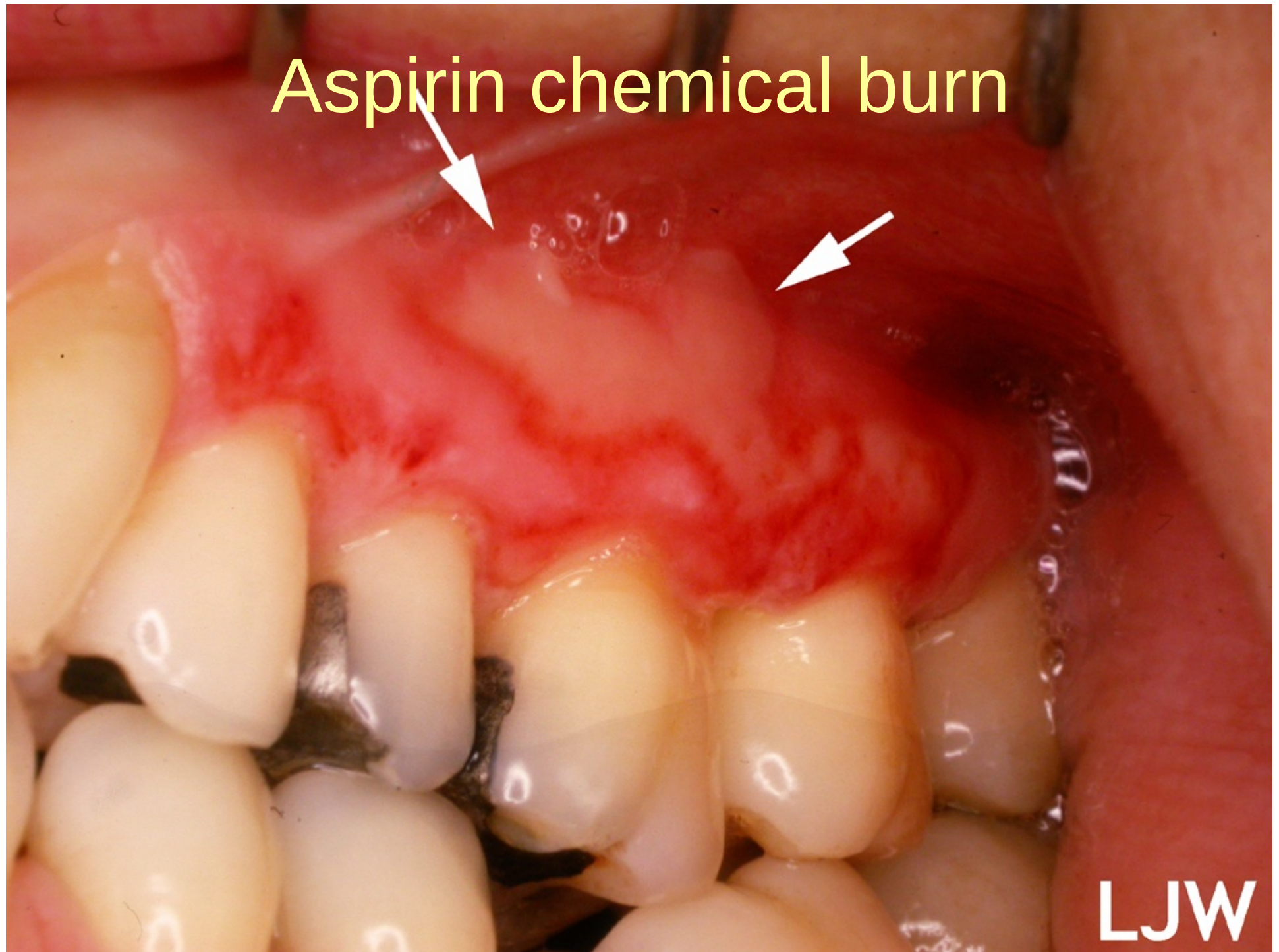


Angiogramuloma (pregnancy epulis)



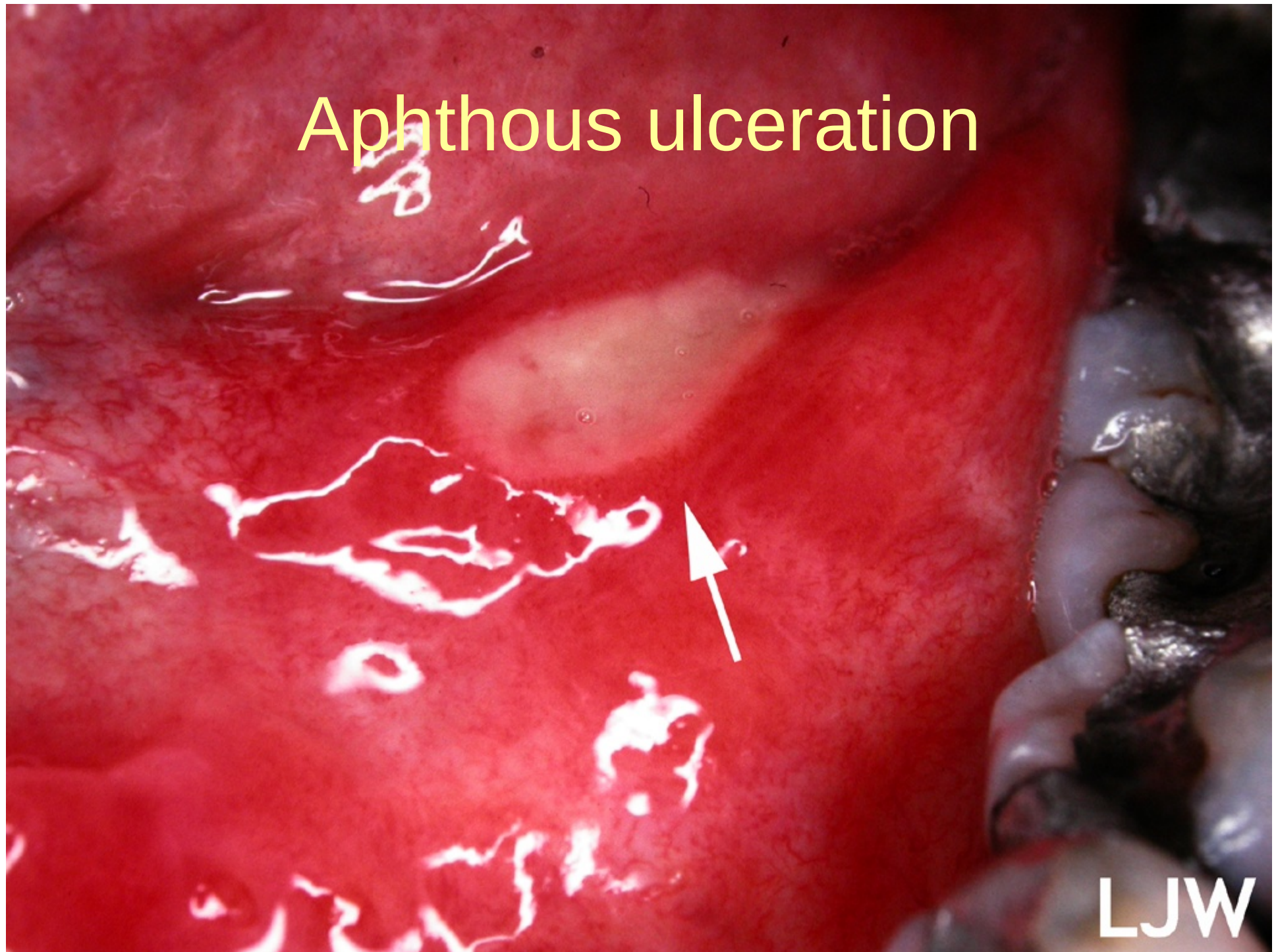
LJW

Aspirin chemical burn



LJW

Aphthous ulceration



Aphthous ulceration



Part 5

Dental Caries and Periodontitis

Dental plaque and gingivitis

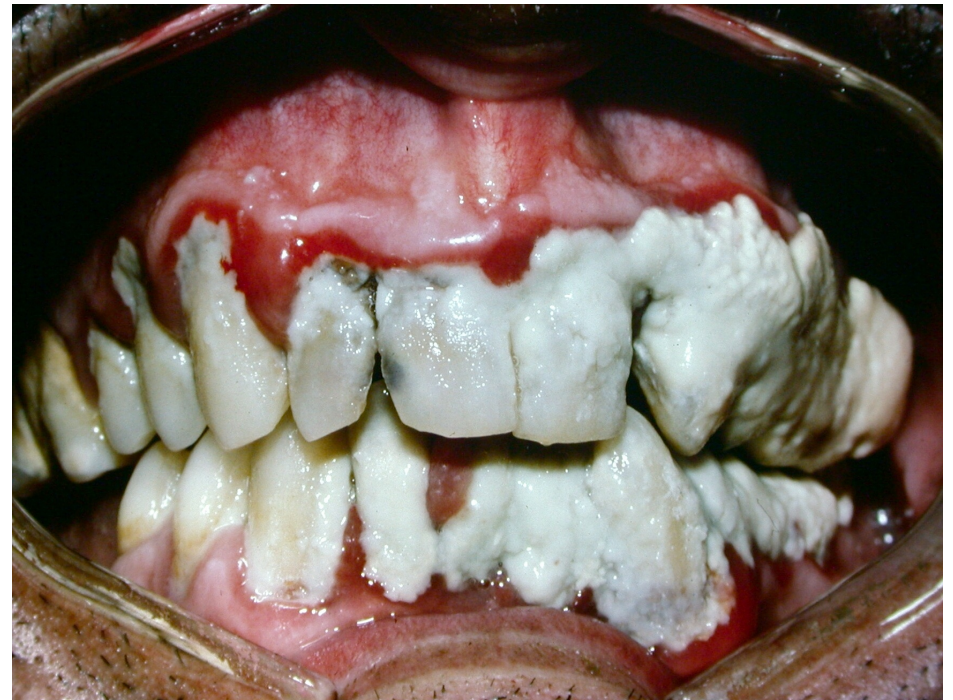
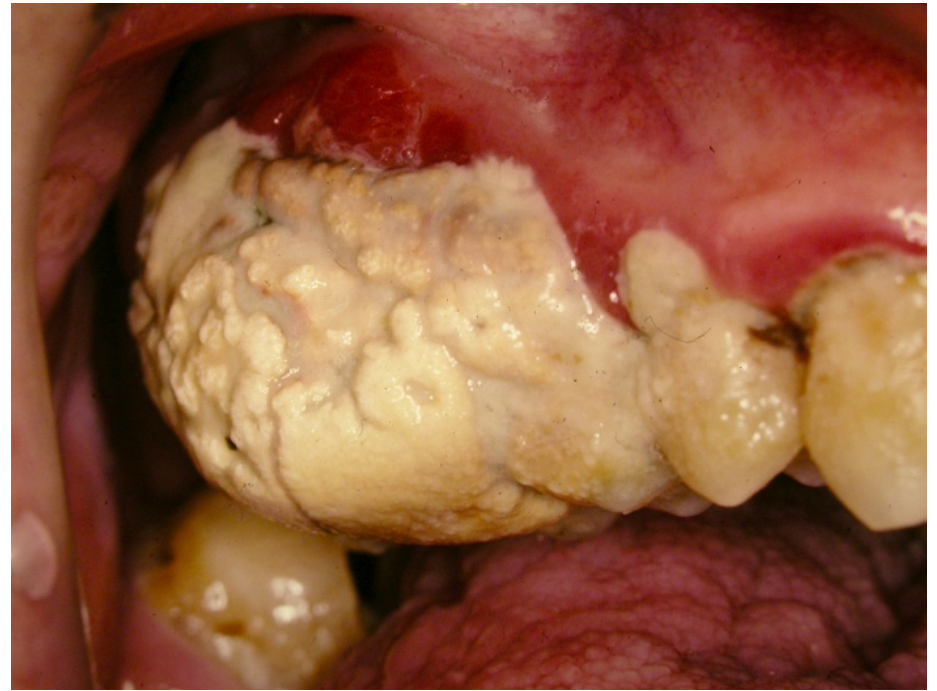




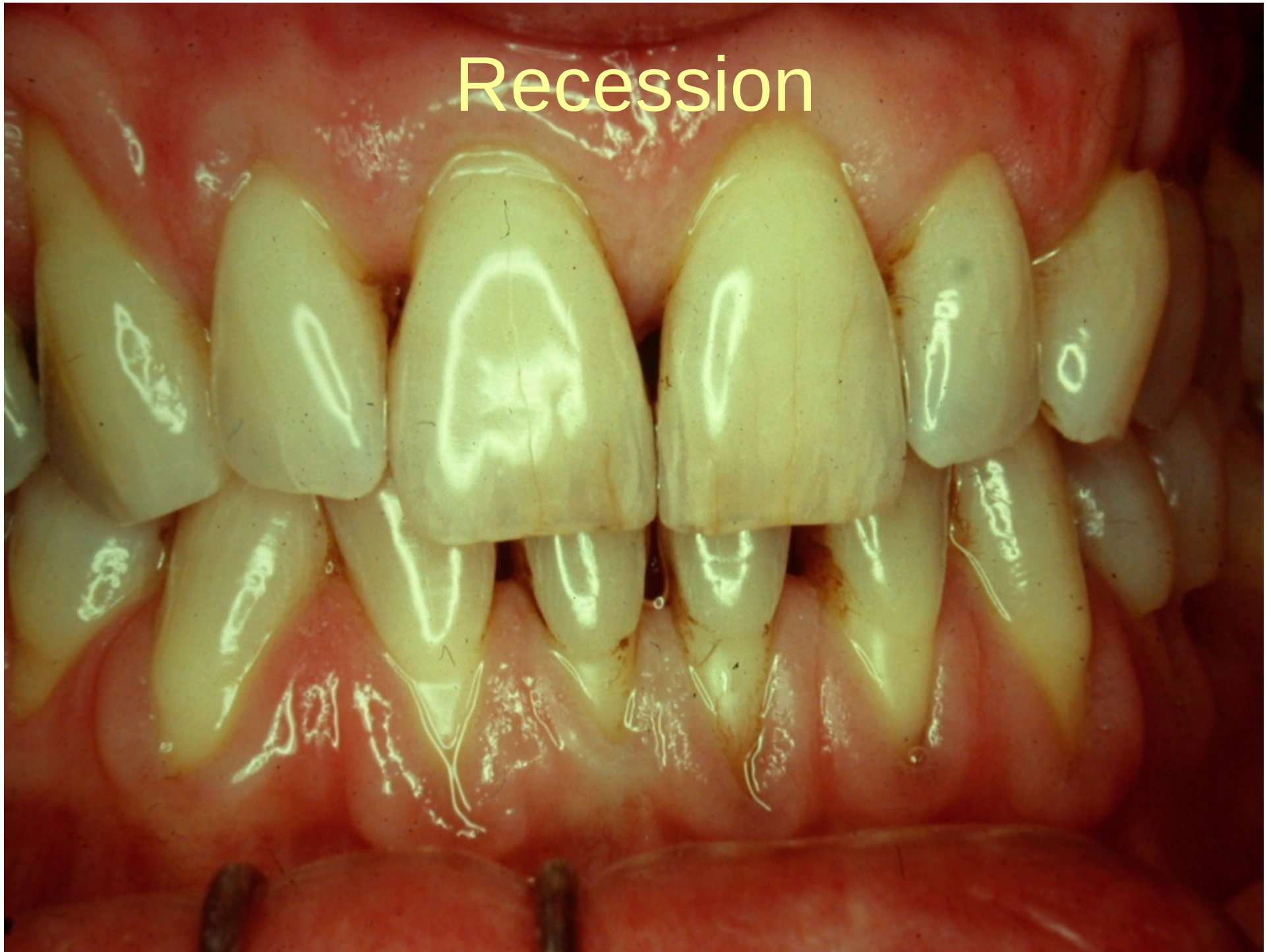
Supragingival calculus



Supragingival calculus (gross!)



Recession



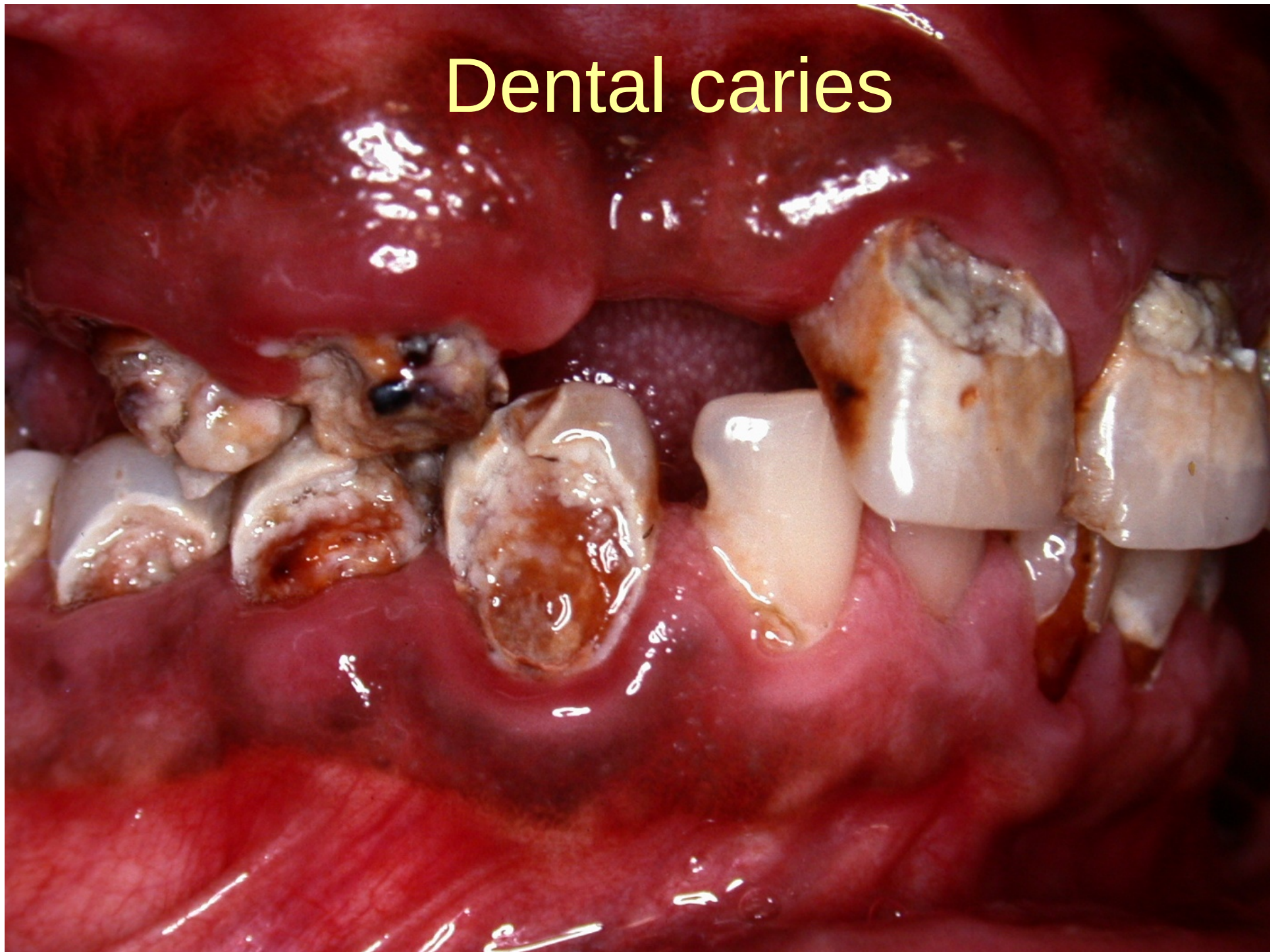


Chronic periodontitis





Dental caries



Caries from illegal drugs



Sever caries “meth mouth” Crystal Methamphetamine



Decoronated teeth



Heavily restored teeth and fractured cusps

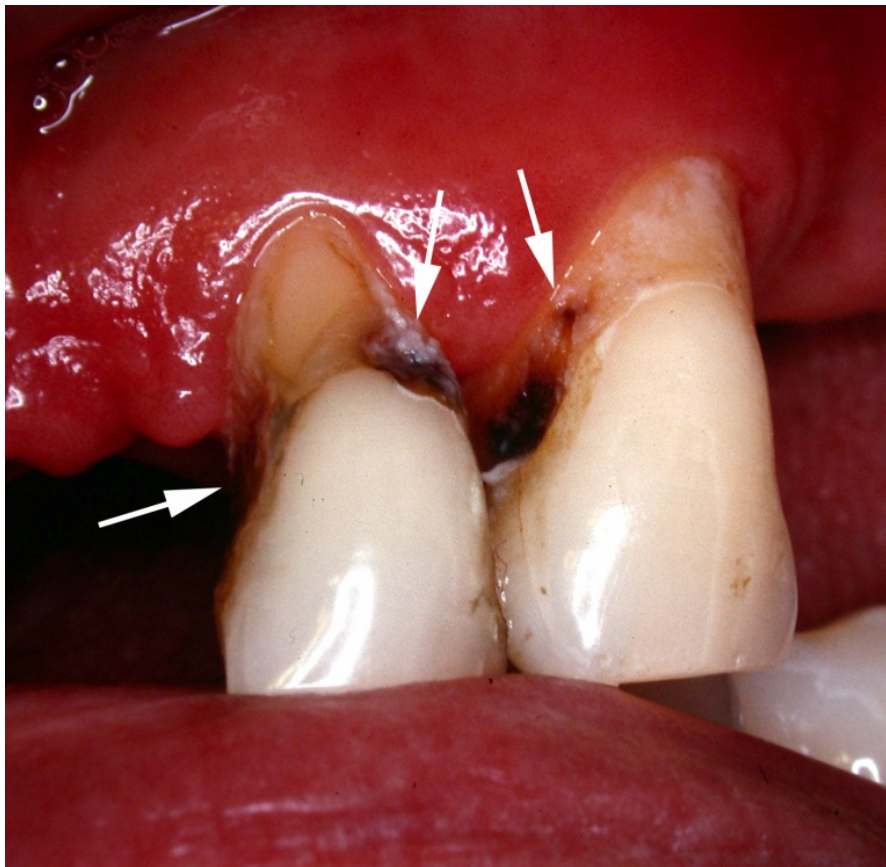




Denture-related
caries on
adjacent teeth



Root surface caries



Part 6

Pathological tooth wear and dental erosion





Dental erosion from subclinical
dehydration



Dental erosion from chronic
regurgitation/vomiting



Dental erosion



