White Lesions

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Definition

- ✓ “White lesion” stands for any mucosal area that appears whiter than its adjacent tissue. And the epithelial integrity is still pre served, otherwise it is considered as ulceration
- ✓ **Causes for white appearance of mucosa:**

a) hyperkeratosis: formation of abnormal keratin
b) epithelial edema: accumulation of fluid in the epithelium
c) subepithelial fibrosis: which with its decreased vascularity network
d) no structural epithelial changes, but as a result of exogenous deposits formed by microorganisms, such as fungi (produce whitish pseudomembranes consisting of exudate, necrotic cellular debris, and metabolic products) which are loosely attached to the oral mucosa

Definition

“White lesion”

- Whiter
- integrity is still

1. Actinic cheilitis

- ✓ characterized by white lesions on the lower lip
- ✓ caused by chronic and excessive exposure to sun
- ✓ carry malignant potential

2. Chemical burn

- ✓ as a result of exposure of the oral mucosa to chemicals such as aspirin (left), or some dental material
- ✓ diagnosis is by history and clinical examination (right)

3. Candidiasis

- ✓ caused by **fungal** infection
- ✓ commonly in patients taking **antibiotics, immunosuppressant drugs**, or having a disease that suppresses the immune system
- ✓ many forms of candidiasis, ex: white lesion that can not be wiped off (chronic hyperplastic candidiasis/ left picture) or as a pseudo-membrane when wiped off leaving leaves an inflamed and sometimes bleeding area (thrush/ right picture)

4. Fordyce Granules

- ✓asymptomatic yellowish- white granular lesions on the buccal mucosa and lips
- ✓ectopic collection of sebaceous glands in the cheek mucosa and lips
- ✓cannot be rubbed off
- ✓no treatment is necessary

5. Frictional Keratosis

- ✓ due to chronic mucosal friction
- ✓ 'linea alba' is the term used to describe the white keratotic line on the buccal mucosa approximating the occlusal plane
- ✓ sharp cusps of teeth rubbing against cheek mucosa or tongue can result in keratotic lesions
- ✓ ill- fitting dentures
- ✓ benign and cannot be rubbed off by gauge

linea alba

6. Oral Lichen Planus

- ✓chronic mucocutaneous **(skin and mucous membrane)** immune mediated disorder
- ✓Lesions are bilateral and symmetrical
- ✓There is no cure

6. Oral Lichen Planus

- ✓ has different forms:

a) reticular: lace- like white striae (Wickham's striae) is the most common form;

b) papular: small white raised papules resembling Fordyce's granules;

c) plaque- like: resembling leukoplakia;

d) erosive type

Papular

reticular

6. Oral Lichen Planus

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plaque- like

erosive

7. Oral Squamous Cell Carcinoma

- ✓ is a malignant neoplasm arising from oral epithelium
- ✓ with wide range of clinical features

8. Smoker's Keratosis

- ✓ oral white lesion induced by the action of **tobacco**
- ✓ in **pipe smokers**, palatal lesions are characterized by **red inflamed orifices of minor salivary glands** against the **white background** is also called stomatitis nicotina

9. Oral Leukoplakia

- ✓is a potentially malignant disorder affecting the oral mucosa.
- ✓ it is defined as an oral mucosal white lesion that cannot be considered as any other definable lesion.
- ✓Leukoplakia is thus a diagnosis of exclusion.

O. Pathology

Lecture

Ulcerative Lesions

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9. Oral Ulcers

- ✓An ulcer is a **break in the continuity of the epithelium**, exposing the connective tissue to the oral environment
- ✓Typically, oral ulcer appear as **well –defined** slightly **depressed** lesion with **red to yellow center**, this yellow represents fibrinopurlent membrane, this membrane can be removed by applying pressure

Important Causes of Oral Mucosal Ulcers

1. **Infectious, ex:**

a) **Viral:**

- Herpes simplex infection (primary infection and herpes labialis)
- Herpes varicella –zoster
- HIV-associated mucosal ulcers

a) **Bacterial:**

- Tuberculosis
- Syphilis

c) **Fungal**

Important Causes of Oral Mucosal Ulcers

2. **Immune disease, ex:**
- Allergic reactions
- Behçet's disease
- Lichen planus (erosive type)

3. **Trauma:** like ill fitting denture, hard food, biting, chemicals in toothpastes, burns from hot foods or drinks

4. **Unknown etiology:**
- Aphthous stomatitis (is the most common type and mostly associated with stress)

5. **Carcinoma**

Herpes simplex infection

Herpes simplex infection can be primary (first-time) or recurrent (herpes labialis). it is caused by the herpes simplex virus
The primary infection symptoms including fever, painful sores inside the mouth, while recurrent herpes labialis occurs due to reactivation of the dormant virus, which can cause the virus to replicate and spread again, Recurrences can be triggered by factors like stress, sun exposure, hormonal changes, fever, or illness, the very early symptom is tingling or itching, on or around the lips. Then followed by painful, fluid-filled blisters appear, most commonly on the lips, These blisters then will break crust over will form before the sores heal.

Herpes simplex infection

Herpetic whitlow. This is a characteristic non-oral site for primary infection as a result of contact with infected vesicle fluid or saliva. The vesiculation and crusting are identical to those seen in herpes labialis.

Herpes varicella –zoster

Herpes varicella-zoster (VZV) is the virus that causes two illnesses:

- primary infection: chickenpox (varicella), most common in children, and is highly contagious. It causes an itchy, red, vesicular rash and flu-like symptoms.
- recurrent infection: shingles (zoster). After a chickenpox infection, the virus lies dormant in the nerve ganglia and can reactivate years later, causing shingles, especially as immunity weakens with age. Shingles is characterized by a painful, blistering rash that appears on one side of the body, along with symptoms like itching, burning, and fever.

Treatment

- ✓ The treatment depends on the type of ulcer, the stage of disease

- ✓ Ex: Traumatic ulcer treatment

Identify the cause of trauma → remove the causative agent →
within 2 weeks the ulcer must heal → if not; send for biopsy

- ✓ Ex: viral disease like herpes simplex treated with antiviral medications