# RED AND WHITE LESIONS OF ORAL MUCOSA

White lesions- it is a non specific term used to describe any abnormal area of the oral mucosa that on clinical examination appears whiter than surrounding tissues & is usually slightly raised roughened or different texture from adjacent normal tissue.



#### White lesion-

- Abnormal area of oral mucosa
- whiter than surroundings tissues
- Slightly raised and roughened
- Different texture from adjacent normal tissue.

#### Keratosis-

- Increased thickness of the epidermal covering
- Increased keratin production- Keratosis
- Imbibition of fluids- whitish mucosa
- Whitish appearance in burns- coagulation of surface tissues- pseudomembrane(epithelial cells, fibrin, inflammatory cells)

# **Red Lesion**



- Area of reddened mucosa
- Smooth and atrophic, with granular and velvety texture

• Combination of red and white lesionsspeckled leukoplakia

### Non keratotic white lesions

• Lesions easily dislodged with gentle rubbing or scraping leaving a reddened or raw patch of mucosa- Non keratotic white lesions eg. candidiasis

## Keratotic white lesions

• White lesion that resist rubbing and scraping- Keratotic white lesion eg. leukoplakia

### Precancerous lesion

 Defined as a morphologically altered tissue in which cancer is more likely to occur than its apparently normal counter part.
 eg. Leukoplakia
 erythroplakia

## Precancerous condition

- Defined as a generalised state that is associated with a significantly increased risk of cancer.
  - eg. Lichen planus OSMF Syphilis

# CLASSIFICATION

Normal variations leukoedema fordyce's granules linea alba II. Non keratotic white lesions habitual cheek & lip bite burns- thermal, dental medicaments etc. radiation mucositis Koplik's spots

# Classification

- Red and white tissue reactions
- Infectious diseases
   Oral Candidiasis
   Hairy Leukoplakia
- Immunopathologic Diseases
  - Oral Lichen planus
  - Drug Induced Lichenoid reactions
  - Lichenoid reactions of graft versus Host disease
  - Lupus erythematosus

- Allergic reactions
   Lichenoid Contact reactions
   Reactions to Dentifrices & Chlorhexidine
- Toxic reactions

Reactions to smokeless tobacco Smoker's Palate

 Reactions to Mechanical Trauma Morsicatio buccarum Other Red & White Lesions

 Benign migratory glossitis- Geographic
 Tongue
 Leukoedema
 White sponge nevus
 Hairy tongue

### Infectious Diseases

• Oral Hairy Leukoplakia

• Candidiasis

## Oral Candidiasis

• It is the most prevalent opportunistic infection affecting the Oral Mucosa caused by yeast Candida Albicans

#### Infections caused by fungus CANDIDA

C. Albicans, C. Tropicalis & C.Glabrata are the species isolated from 80% of infections

### Classification

• Acute- -Familial chronic mucocutaneous C

• Pseudomembranous- -Diffuse chronic mucocutaneous C

Erythematous -C Endocrinopathy syndrome
 -Familial mucocutaneous C

- Chronic severe combined Immunodeficiency
- Pseudomembranous Di George syndrome
- Erythematous Chronic granulomatous disease
- Plaque like AIDS
- Nodular
- Candidal associated Lesions
  - Denture stomatitis
  - Angular Cheilitis
  - Median rhomboid Glossitis

#### **PREDISPOSING FACTORS**

- Local predisposing factors
  - Denture wearing
  - Smoking
  - Atopic Constitution
  - Inhalation of Steroids
  - Topical Steroids
  - Hyperkeratosis
  - Imbalance of the oral Micro Flora.
  - -Quality& quantity of saliva.

#### **GENERAL- PREDISPOSING FACTORS**

- -Immunosuppresive disease.
- -Impaired health status.
- Immunosuppressive drugs.
- -Chemotherapy.
- -Endocrine disorders.
- -Hematinic deficiencies.

# **Clinical Features**



- Pseudomembranous Candidiasis ( Thrush)-
  - White Plaque like areas on Oral Mucosa
  - Involves superficial areas Of Epithelium
  - Removal of This Plaque Reveals Underlying Erythematous or erosive areas
  - Plaque is composed of desquamated epithelial cells, inflammatory cells, Fibrin, Yeasts & Mycelial Elements.

• In Infants it is described as soft white or bluish white adherent to the Oral Mucosa.

• In adults Inflammation, erythematous & Painful Eroded areas are seen

## Prodromal Symptoms

• Bad Taste, Loss of Taste

• Burning of the Mouth & Throat

# Differential Diagnosis

- Flecks Of Milk
- Food Debris
- Antacids remaining on the Oral Mucosa
- Cheek Bite
- White Sponge Nevus

### Erythematous Candidiasis



- Previously called as Atrophic Oral Candidiasis
- Erythematous surface not just reflect the atrophy but Can also be explained by increased Vascularization.
- The lesion has Diffuse border which helps to Distinguish from Erythroplakia

- Commonly seen on the Palate & Dorsum of the Tongue Inhalation Of Steroids
- Erythematous Candidiasis may be considered as successor to pseudomemdranous candidiasis but may also emerge de novo.

#### Chronic Plaque – type & Nodular Candidiasis

- Previously called as candidal Leukoplakia
- Clinical presentation is characterized by a white plaque, which may be indistinguishable from the Oral Leukoplakia
- Correlation between Oral Candidiasis and Moderate to severe Epithelial Dysplasia has been observed
- Associated with Malignant transformation

## Candidal Leukoplakia



### Denture stomatitis

- Commonly seen in denture bearing palatal mucosa & Unusual to Mandibular Mucosa
- Classified into 3 Types

Type 1- Localized minor Erythematous areas caused by denture trauma

Type 2 – Effects the Major part of the denture covered area

type 3 – Granular mucosa in the Central Part of Palate with Type II

### Denture stomatitis



# Angular Cheilitis

- Infected Fissures In the Angle Of the Mouth
- Vit B12, Iron Deficiency, Loss of vertical dimension is associated with angular cheilitis.
- Atopy is also associated
- Dry skin enhances the fissures in the commissures allowing invasion by micro organism

## Angular Cheilitis

