

به نام خداوند جان و خرد

Most common oral
fungal infections

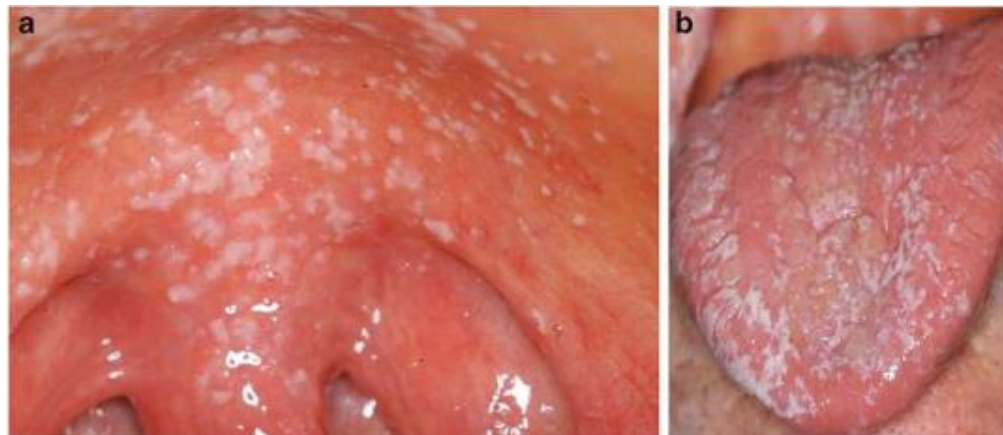
Oral Candidiasis

- ▶ *Candida albicans*
- ▶ primary infections
- ▶ secondary infections
- ▶ local and general predisposing factors

Local
Denture wearing
Smoking
Atopic constitution
Inhalation steroids
Topical steroids
Hyperkeratosis
Imbalance of the oral microflora
Quality and quantity of saliva
General
Immunosuppressive diseases
Impaired health status
Immunosuppressive drugs
Chemotherapy
Endocrine disorders
Hematinic deficiencies

Pseudomembranous Candidiasis

- ▶ taking antibiotics
- ▶ taking immunosuppressant drugs
- ▶ having a disease that suppresses the immune system



Erythematous Candidiasis

- ▶ palate & dorsum of tongue
- ▶ Predisposing factors : inhalation steroids
smoking
treatment with broad-spectrum antibiotics



Chronic Plaque-Type and Nodular Candidiasis

- ▶ *candidal leukoplakia*
- ▶ moderate to severe epithelial dysplasia
- ▶ malignant transformation



Chronic hyperplastic candidosis in the postmodiolus area of the right (a) and left (b) buccal mucosa (same patient)



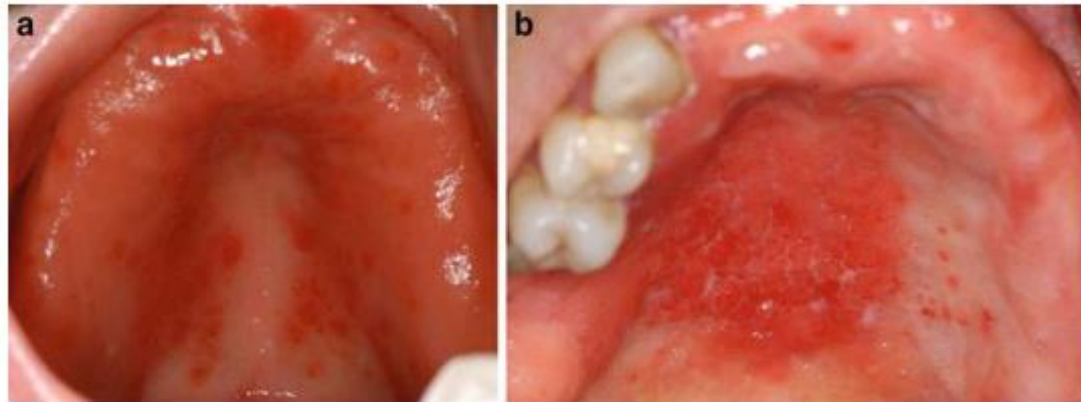
FIGURE 5-4 Chronic nodular candidiasis in the left retrocommissural area.



Chronic plaque-type candidiasis.

Denture Stomatitis

- ▶ denture-bearing palatal mucosa
- ▶ Type I : minor erythematous sites
- ▶ Type II : major part of the denture-covered mucosa
- ▶ Type III : granular mucosa



Angular Cheilitis

- ▶ *Candida albicans* and *Staphylococcus aureus*
- ▶ Vitamin B12 deficiency
- ▶ iron deficiencies
- ▶ loss of vertical dimension



Median Rhomboid Glossitis

- ▶ atrophy of filiform papillae
- ▶ surface : lobulated
- ▶ bacterial/fungal
- ▶ Smokers * denture-wearers * inhalation steroids
- ▶ kissing lesions



Oral Candidiasis Associated with HIV

most common types :

- ▶ pseudomembranous candidiasis
- ▶ erythematous candidiasis
- ▶ angular cheilitis
- ▶ chronic plaque-like candidiasis



Linear Gingival Erythema

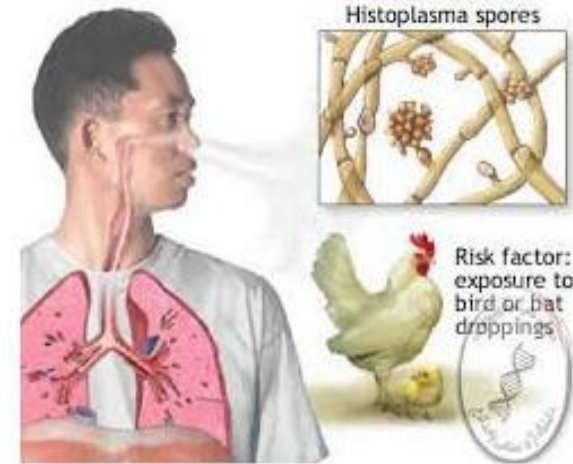
- ▶ Non plaque-induced localized or generalized gingivitis
- ▶ Distinct erythematous band of 2-3 mm along the margin of gingivae
- ▶ Prevalence : 2% to 38%



Management

- ▶ elimination or reduction of predisposing factors
- ▶ In smokers : cessation of the habit
- ▶ Polyenes : nystatin and amphotericin B
- ▶ Type III denture stomatitis : surgical excision - topical antifungal drugs
- ▶ treatment of choice for angular cheilitis : miconazole - mild steroid ointment

Histoplasmosis



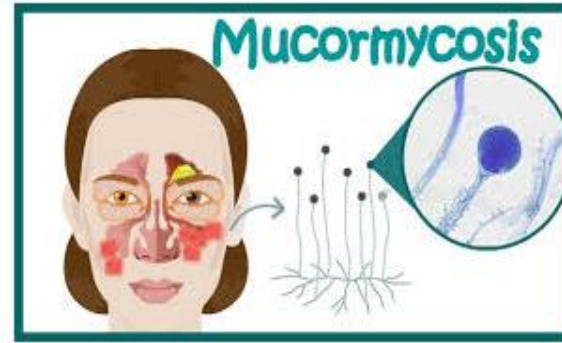
- ▶ *Histoplasma capsulatum*
- ▶ inhaling dust contaminated with droppings, particularly from infected birds or bats
- ▶ In most cases : primary infection is mild, self-limiting pulmonary disease
- ▶ disseminated form : anemia & leukopenia secondary to bone marrow involvement
- ▶ rapid diagnosis : smear of lesion stained or biopsy , Culture

Oral/Facial Considerations



- ▶ secondary to pulmonary involvement
- ▶ Oral mucosal lesions : erythema → papule → painful → granulomatous-appearing ulcer (indurated border)
- ▶ on the gingiva, palate, or tongue
- ▶ cervical lymph nodes : enlarged and firm
- ▶ resembles of squamous cell carcinoma, other chronic fungal infections, or lymphoma
- ▶ Ulcers for weeks or months : other lesions of infectious etiology (other deep fungal, mycobacterial, treponemal, or parasitic), traumatic ulcerative granuloma, squamous cell carcinoma, lymphoma, or other malignancy

Mucormycosis



- ▶ Mucorales - in soil and decaying organic matter
- ▶ nonpathogenic for healthy individuals
- ▶ pulmonary/sinus mucormycosis : spores are inhaled from environment
- ▶ cutaneous disease : spores enter traumatic wounds to skin
- ▶ arterial invasion
- ▶ hallmark of infection : formation of emboli → necrosis of involved tissue
- ▶ occurs in patients with decreased host resistance
- ▶ biopsy for culture and direct examination

Oral/Facial Considerations

- ▶ **rhinomaxillary form** : inhalation of fungus - invasion to blood vessels - thrombosis & ischemia
- ▶ most common symptoms : proptosis, loss of vision, nasal discharge, sinusitis, and palatal necrosis
- ▶ most common oral sign : ulceration of palate
- ▶ large and deep lesions → exposure of underlying bone
- ▶ on gingiva, lip, and alveolar ridge
- ▶ solitary mucosal ulcers of several weeks and months duration : traumatic ulcerative granuloma, squamous cell carcinoma, lymphoma, or other malignancy
- ▶ initial manifestation : odontogenic infection or conventional bacterial maxillary sinusitis
- ▶ More advanced disease with ulcer and palatal perforation : antineutrophil cytoplasmic antibody-associated vasculitis (e.g., Wegener granulomatosis)

