

**Ageing with HIV. Clinical features. Experience of dentist.**

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# Clinical and morphological characteristic of HIV-associated lesions of oral cavity

- Candidosis
- Hairy leucoplacia
- HIV-associated gingivitis
- Ulceral and necrotic gingivitis
- HIV-associated parodontitis
- Kaposi's sarcoma

# Candidosis

Mycotic infection, caused by *Candida* (*Candida albicans*, *Candida tropicalis*, *Candida krusei*). Main condition of candidosis is CD-4 level under 200.

- Erythematous candidosis
- Pseudomembranous candidosis
- Hyperplastic candidosis



# Erythematous candidosis

Main symptoms are extensive red patch on tongue and cheeks, without papillae, which react on temperature and sometimes itch. Patient feels uncomfortable during eating and active articulation.



# Pseudomembranous candidosis

Affects cheeks and tongue mucosa. Main symptoms are hyperemia, lack of saliva and white, cheese-like layers of Candida. At the beginning of disease layers are easily removed, showing red swelling mucosa. Later is hardly removed and shows erosion-like lesions.



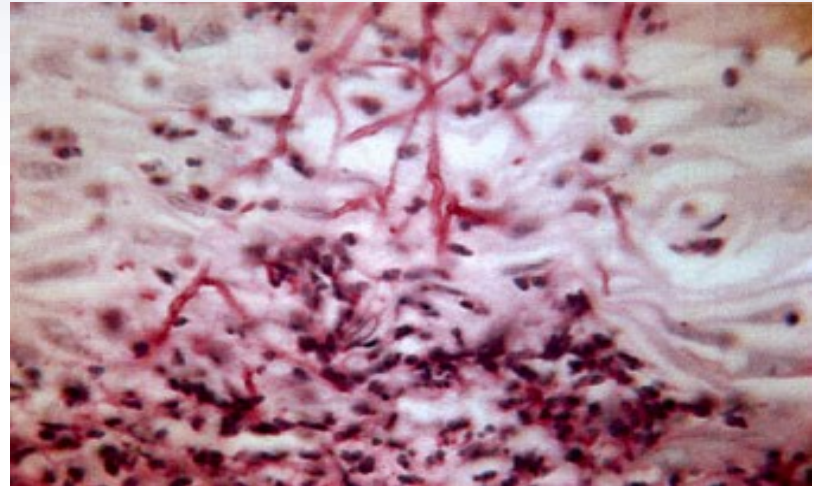
# Hyperplastic candidosis

Is characterized with thick layers of Candida on hyperemic mucosa, which are extremely hard to remove. Is located mostly on a back of a tongue.

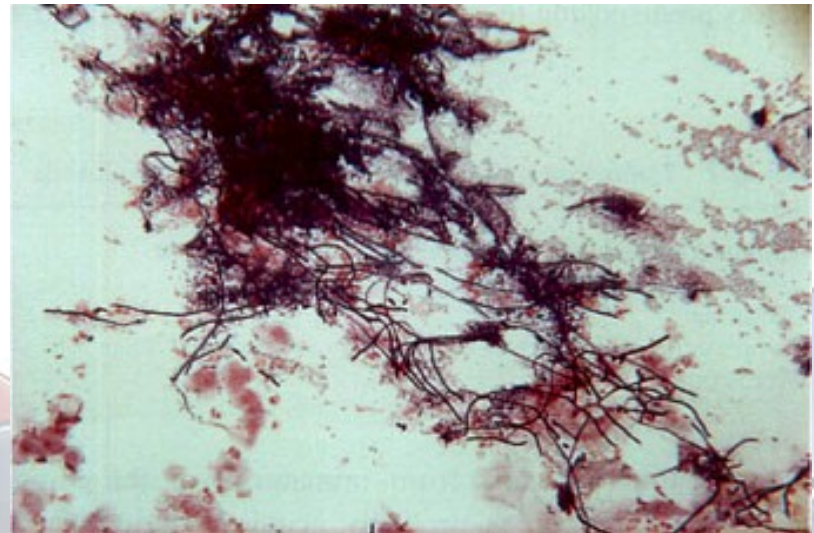


# Candidosis (microbiology)

Here we can see edema and stratification of superficial epithelium layers, caused by mycotic invasion and neutrophil's infiltration.



Bacterioscopically is presented by lots of *C. albican*'s hypha's, which are gram-positive chaotic masses.



# Hairy leucoplakia

Hairy leucoplakia, as a HIV-associated disease is one of the most common markers of HIV and AIDS.

- Clinically has a view of white layerer, The surface of the lesion is corrugated accentuating the normal anatomy of the lateral border of the tongue.



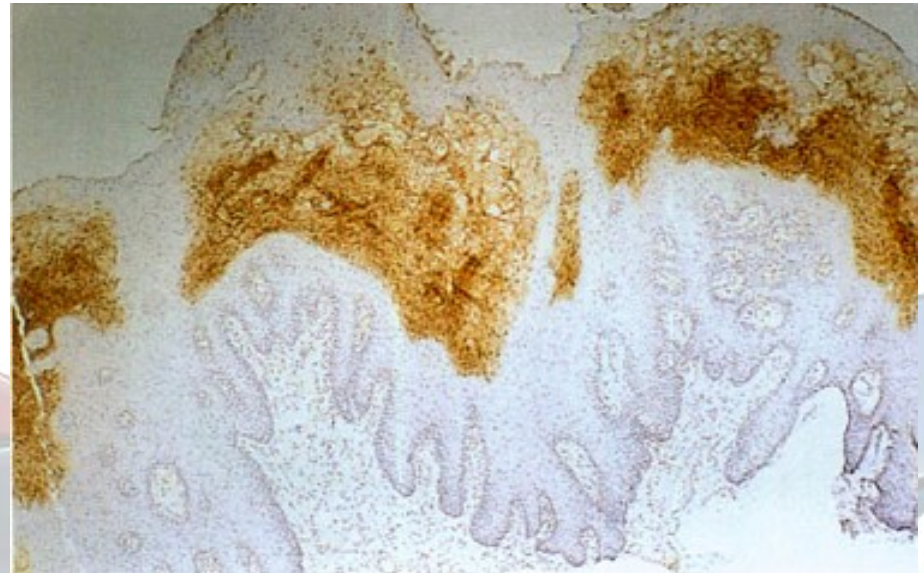


## Hairy leucoplakia (morphology)

Morphology is presented by epithelium acanthosis and hyperkeratosis.



Hybridization *in situ* shows Epstein-Barr viral DNA, presented by brown-color in spike epithelium layer.



# HIV-associated gingivitis

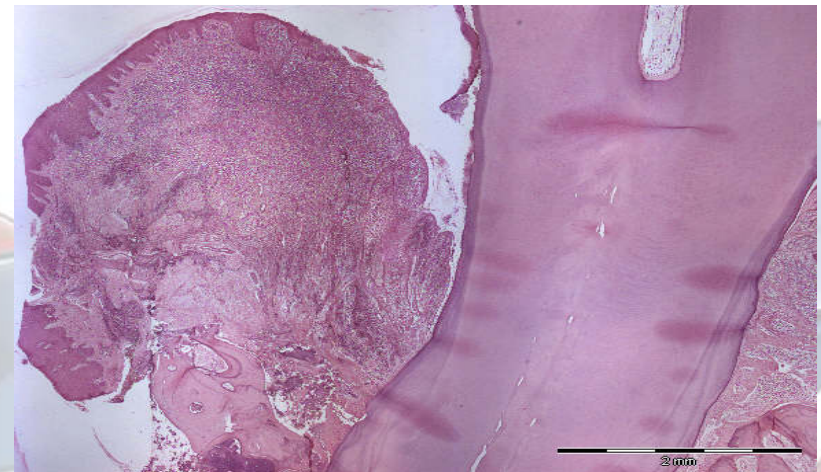
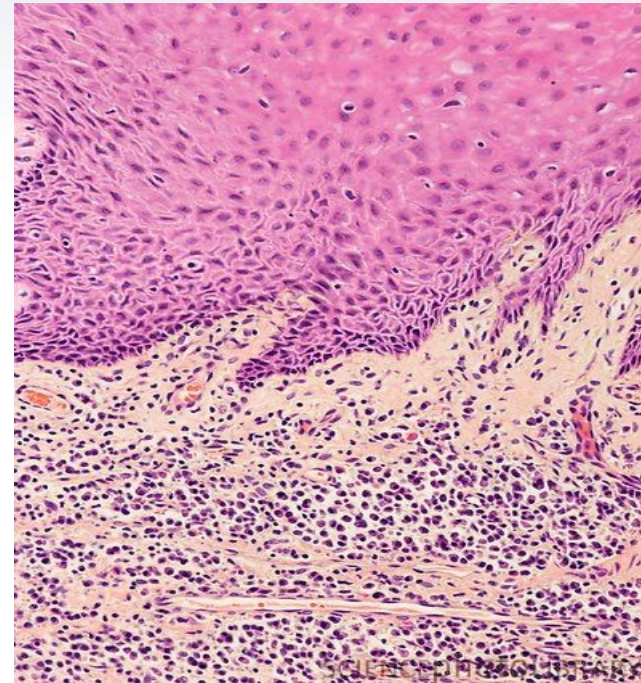
May be an early marker of HIV, anticipating other lesions.  
Etiology of this gingivitis isn't clear yet, but bacterial flora is the same as parodontal pockets has.

Manifests itself as clearly demarcated erythema line, which stretches out free and attached gingiva. Clinically is common to desquamating gingivitis, but includes profusive bleeding.



# HIV-associated gingivitis

By a microscopy we can see thickness of gingival epithelium, caused by mixed infiltration, including plasmatic cells.



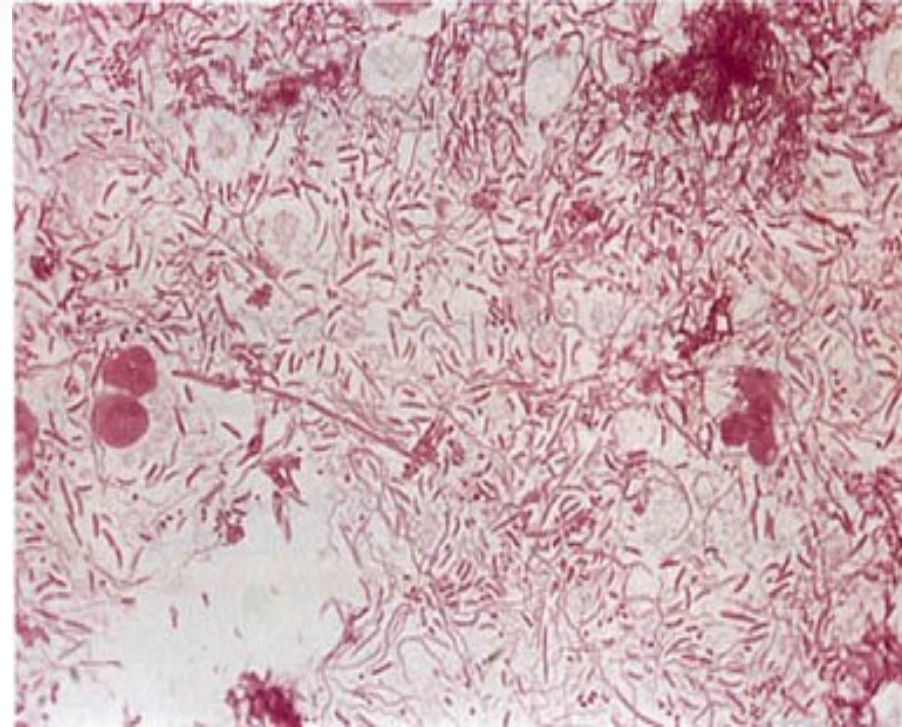
# Acute necrotizing ulcerous gingivitis

Usually causes soreness, but when it extends deeply and rapidly, destroying the underlying bone, causing severe pain. Mostly affects both jaw's gums.. Lesions are presented as ulcers, which are located closely to gingival margin and are covered y white fibrin layers.



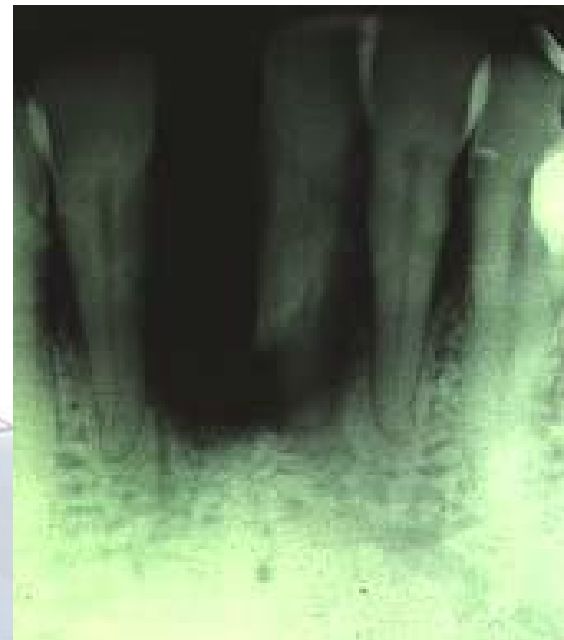
# Acute necrotizing ulcerous gingivitis

Ulcer's swab shows proliferation of *Treponema vinsetii* and *Fusobacterium mononucleare*.



# HIV-associated parodontitis

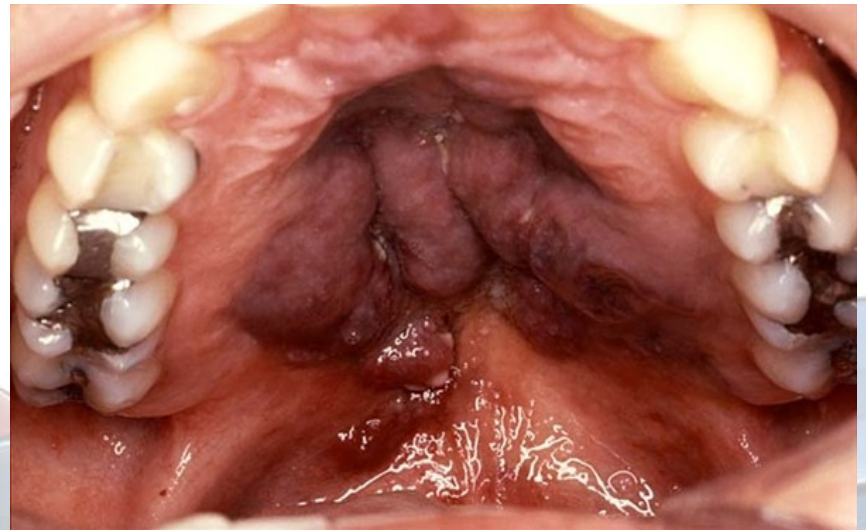
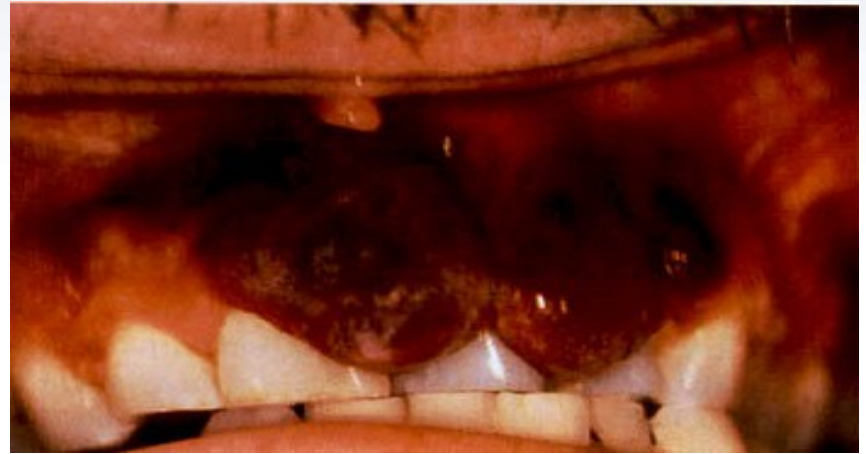
Mostly generalized, disease is more severe. Necrosis or ulceration, usually centered on the interdental papilla and often producing interdental cratering and “reverse architecture”. Sometimes extends away from gingival margin to involve bone or deep-soft tissue. Involving alveolar one often with extensive loss of attachment without significant pocketing.



# Kaposi's sarcoma

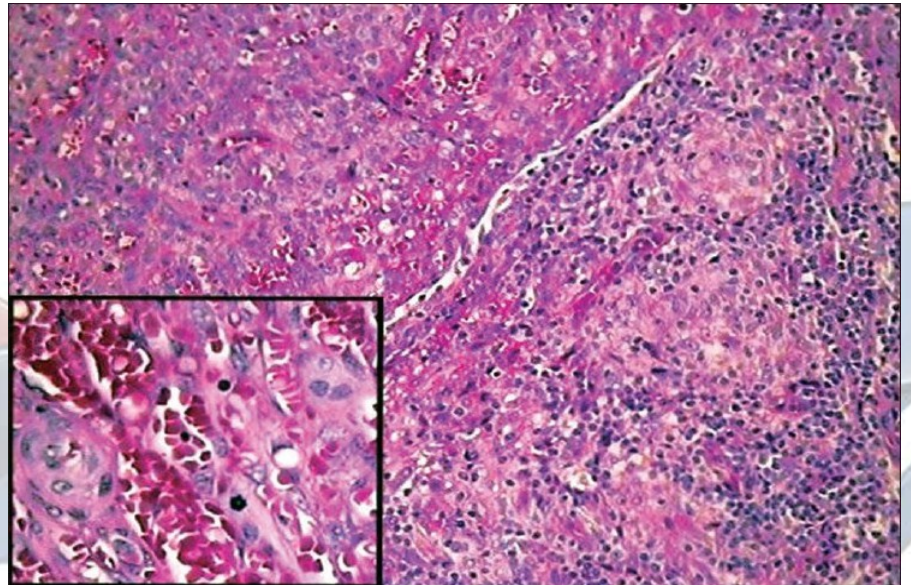
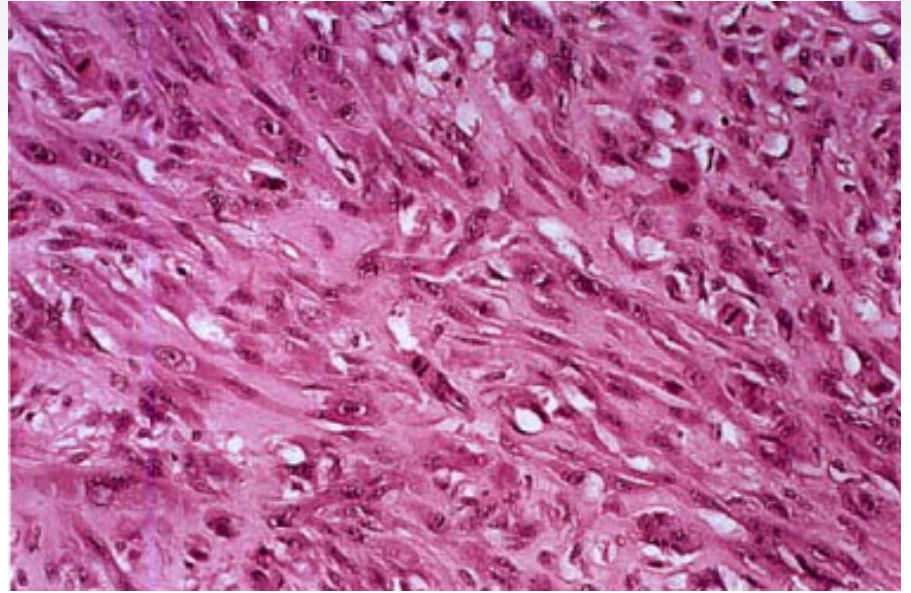
Is the most common type of intraoral sarcoma. Rarely develops in deeply immunosuppressed, HIV-negative patients.

Lesions are red, maroon or bluish and highly vascular. They may be flat or form tumor masses and the gingivae or palate are characteristic sites.



# Kaposi's sarcoma

Histologically Kaposi's sarcoma is composed of spindle and plump cells with cytological atypia and frequent mitoses. Many of the small holes visible are the result of formation of capillaries by the tumor cells.





Thank you for your attention!

