

AIDS & THE PERIODONTIUM





Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) is a spectrum of conditions caused by infection with the human immunodeficiency virus (HIV).

Acquired immunodeficiency syndrome (AIDS) is defined as an HIV infection with either a CD4+ T cell count below 200 cells per μ L or the occurrence of specific diseases associated with HIV infection.

Classification:

1. HIV-associated gingivitis (HIV-G):

- Linear inflammation around the gingival margin
- ♣ Punctuate Erythema extending throughout the attached gingiva

2. HIV-associated periodontitis (HIV-P):

- ♣ Rapid loss of attachment
- **♣** Connective tissue destruction
- Deep Bone pain

3. HIV-Necrotizing Gingivitis (HIV-NG):

4. Necrotizing Stomatitis (NS):

- Spontaneous sequestration of interdental bone
- **♣** Extensive soft tissue necrosis



Linear Gingivitis:

- ♣ Marginal linear erythema across the attached gingiva
- ♣ Punctuate lesions coalesce giving the entire gingiva a bright red appearance
- **♣** Spontaneous bleeding or bleeding on probing
- ♣ No ulceration , No loss of attachment



Necrotizing Ulcerative Gingivitis:

- **♣** Sudden onset, bleeding on probing
- ♣ Pain & Halitosis
- ♣ Gingiva appears fiery red & swollen and yellow to grayish necrosis is seen
- ♣ Anterior gingiva is the most affected limited to the soft tissues





Necrotizing Ulcerative Periodontitis:

- ♣ Severe pain, Localized soft tissue necrosis, Ulceration & Interproximal Cratering
- ♣ No deep pocket formation
- **♣** Soft tissue destruction
- ♣ Rapid horizontal bone loss
- **♣** Tooth mobility
- **↓** Low CD4+ cell count (Below 200 cells/mm³)



Necrotizing Stomatitis:

- ♣ Extensive soft tissue and bony necrosis with sequestration
- ♣ Resembles Noma & Cancrum Oris



Most Common Oral & Periodontal Manifestations of HIV Infection:



1. Oral hairy leukoplakia:

- ♣ Lateral borders of the tongue
- ♣ Caused by Human Papilloma Virus
- ♣ Keratotic Areas with corrugated appearance
- ♣ When it is dried, it appears hairy which does not rub off



2. Oral Candidiasis:

- ♣ Pseudomembranous (Thrush) Candidiasis
- ♣ Erythematous candidiasis
- ♣ Hyperplastic Candidiasis
- Angular Cheilitis





3. Kaposi's Sarcoma:

Multifocal, Vascular neoplasm which manifest as nodules, papules or non-elevated macules that are usually brown, blue / purple coloured



4. Bacillary Angiomatosis:

- ♣ Infectious Vascular , proliferative disease
- ♣ Appears red , purple, or blue edematous soft tissue lesions
- ♣ Destruction of the periodontal ligament & bone



5. Oral Hyperpigmentation





6. Atypical Ulcers & Delayed Healing



Management:

- → HAART Therapy : Nucleoside Reverse Transcriptase Inhibitors (NRTIs) For e.g. : Azidothymidine (AZT) , Stavudine , Lamivudine , etc.
- Non-nucleoside reverse transcriptase inhibitors (NNRTIs)

For e.g.: Nevirapine

- ♣ Protease Inhibitors : Ritonavir , Indinavir
- Proper Medical History
- Scaling of the affected areas
- ♣ Intrasulcular irrigation with 10% povidine iodine
- **♣** 0.12% Chlorhexidine mouthwash twice daily
- ♣ Antifungal agents like Nystatin & Oral suspension & Clotrimazole
- ♣ Removal of necrotic bone & soft tissue
- Oral Hygiene Instructions
- Systemic Analgesics
- Metronidazole
- Follow up (1-28 days, 1-6 months)



