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**Relationship between human immunodeficiency virus (HIV-1) infection and chronic periodontitis.**

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**Abstract**

Current studies show that, even in the era of antiretroviral therapies, HIV-1 infection is associated with more severe and frequent refractory chronic periodontitis. Areas covered: This review, based on a systematic analysis of the literature, intends to provide an update on factors that may be involved in the pathogenesis of periodontal disease in HIV-1-infected patients, including local immunosuppression, oral microbial factors, systemic inflammation, salivary markers, and the role of gingival tissue as a possible reservoir of HIV-1. Expert commentary: The therapeutic revolution of ART made HIV-1 infection a chronic controllable disease, reduced HIV-1 mortality rate, restored at least partially the immune response and dramatically increased life expectancy of HIV-1-infected patients. Despite all these positive aspects, chronic periodontitis assumes an important role in the HIV-1 infection status for activating systemic inflammation favoring viral replication and influencing HIV-1 status, and also acting as a possible reservoir of HIV-1. All these issues still need to be clarified and validated, but have important clinical implications that certainly will benefit the diagnosis and management of chronic periodontitis in HIV-1-infected patients, and also contributes to HIV-1 eradication.

**KEYWORDS:**

HIV-1 infection; mucosal reservoir; oral microbiota; periodontal diseases; saliva

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