[Expert Rev Clin Immunol.](https://www.ncbi.nlm.nih.gov/pubmed/29595347%22%20%5Co%20%22Expert%20review%20of%20clinical%20immunology.) 2018 Apr;14(4):315-327. doi: 10.1080/1744666X.2018.1459571. Epub 2018 Apr 12.

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

[Pólvora TLS](https://www.ncbi.nlm.nih.gov/pubmed/?term=P%C3%B3lvora%20TLS%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)1, [Nobre ÁVV](https://www.ncbi.nlm.nih.gov/pubmed/?term=Nobre%20%C3%81VV%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)2, [Tirapelli C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tirapelli%20C%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)3, [Taba M Jr](https://www.ncbi.nlm.nih.gov/pubmed/?term=Taba%20M%20Jr%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)2, [Macedo LD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Macedo%20LD%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)4, [Santana RC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Santana%20RC%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)5, [Pozzetto B](https://www.ncbi.nlm.nih.gov/pubmed/?term=Pozzetto%20B%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)6, [Lourenço AG](https://www.ncbi.nlm.nih.gov/pubmed/?term=Louren%C3%A7o%20AG%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)7, [Motta ACF](https://www.ncbi.nlm.nih.gov/pubmed/?term=Motta%20ACF%5BAuthor%5D&cauthor=true&cauthor_uid=29595347)7.

[**Author information**](https://www.ncbi.nlm.nih.gov/pubmed/29595347)

1

a Department of Stomatology, School of Dentistry , University of São Paulo , São Paulo , Brazil.

2

b Department of Oral & Maxillofacial Surgery, and Periodontology, School of Dentistry of Ribeirão Preto , University of São Paulo , Ribeirão Preto , Brazil.

3

c Department of Dental Material and Prosthesis, School of Dentistry of Ribeirão Preto , USP - University of São Paulo , Ribeirão Preto , Brazil.

4

d Division of Dentistry and Stomatology, Clinical Hospital, Ribeirão Preto Medical School , University of São Paulo , Ribeirão Preto , Brazil.

5

e Department of Internal Medicine, Ribeirão Preto Medical School , USP - University of São Paulo , Ribeirão Preto , Brazil.

6

f GIMAP EA 3064 (Groupe Immunité des Muqueuses et Agents Pathogènes) , University of Lyon , Saint-Etienne , France.

7

g Department of Stomatology, Public Oral Health and Forensic Dentistry, School of Dentistry of Ribeirão Preto , University of São Paulo , Ribeirão Preto , Brazil.

**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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