MOST FREQUENT ORAL MANIFESTATIONS IN PATIENTS WITH HIV/AIDS: LITERATURE REVIEW

Manifestações orais mais comuns em pacientes com HIV/AIDS: revisão de literatura

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Quick Response Code:	**Website:** https://periodicos.uff.br/ijosd/article/view/60228

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RESUMO

Objetivo: Detalhar as principais manifestações orais observadas em pacientes diagnosticados com HIV/AIDS**. Materiais e métodos:** Foi realizada uma busca por artigos científicos publicados nos anos de 2015 a 2022, nas bases de dados Scientific Electronic Library Online (SciELO), US National Library of Medicine (Pubmed) e Google Scholar. Foram coletados artigos em inglês e português. **Resultados:** Esta análise da literatura revelou que as principais manifestações orais associadas ao HIV englobam a candidíase oral, a leucoplasia pilosa, o sarcoma de Kaposi, patologias periodontais e úlceras recorrentes. **Conclusão:** Inúmeras infecções bucais estão correlacionadas com o HIV, frequentemente surgindo como um dos primeiros sinais da infecção. Portanto, é imperativo que

os cirurgiões-dentistas possuam profundo conhecimento sobre as manifestações orais em pacientes com HIV, possibilitando o diagnóstico precoce e a melhoria da qualidade de vida desses indivíduos.

Palavras-chave: HIV; Manifestações orais; Odontologia.

ABSTRACT

Objective: To detail the main oral manifestations observed in patients diagnosed with HIV/AIDS. Materials and methods: A search was carried out for scientific articles published between 2015 and 2022, in the Scientific Electronic Library Online (SciELO), US National Library of Medicine (Pubmed) and Google Scholar databases. Articles were collected in English and Portuguese. **Results:** This literature analysis revealed that the main oral manifestations associated with HIV include oral candidiasis, hairy leukoplakia, Kaposi's sarcoma, periodontal pathologies and recurrent ulcers. **Conclusion:** Numerous oral infections are correlated with HIV, often appearing as one of the first signs of the infection. Therefore, it is imperative that dental surgeons have in-depth knowledge about oral manifestations in patients with HIV, enabling early diagnosis and improving the quality of life of these individuals.

Keywords: HIV; Oral manifestations; Dentistry.

INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS) is an infectious disease of viral origin caused by the Human Immunodeficiency Virus (HIV). Its spread occurs through different routes, including unprotected sexual intercourse, exposure to contaminated blood and shared use of syringes, in addition to vertical transmission (LOMELÍ-MARTÍNEZ et al., 2022).

AIDS emerged in the early 1980s and spread globally as a potentially fatal disease, accompanied by the stigma that those infected had a very limited life prognosis. This infection is characterized as a global pandemic, with cases recorded in almost all countries around the globe (MOTTA et al., 2014).

After exposure to the HIV virus, it is common for an asymptomatic period to last for months or even years. The signs of this viral infection begin to manifest when the virus begins to attack the immune system, gradually weakening it. This weakening makes individuals more vulnerable to opportunistic infections,

especially those that affect the oral cavity, head and neck region (LOMELÍ-MARTÍNEZ et al., 2022).

Oral manifestations play a fundamental role in the diagnosis and prognosis of HIV infection, resulting from compromised immune systems and affecting more than 50% of patients with HIV/AIDS (MOTTA et al., 2014). The recognition of these manifestations is crucial, as they can raise suspicions of HIV infection in individuals who are not aware of their serological status and, when detected in patients already diagnosed, they can indicate the progression of the infection, requiring modifications in antiretroviral treatment. This early approach is essential for adequate management of the disease (NEVILLE et al., 2016).

Therefore, this work aims to present, through a literature review, the main oral manifestations observed in patients diagnosed with HIV/AIDS, as well as the therapeutic approaches for each condition.

MATERIALS AND METHODS

This work presents a narrative review of the literature, which is characterized as a type of scientific research. Its main objective is to explore consolidated topics and new perspectives related to the topic in question. Furthermore, it aims to compile existing knowledge on the specific subject, synthesizing and summarizing several relevant scientific publications (ROTHER, 2007).

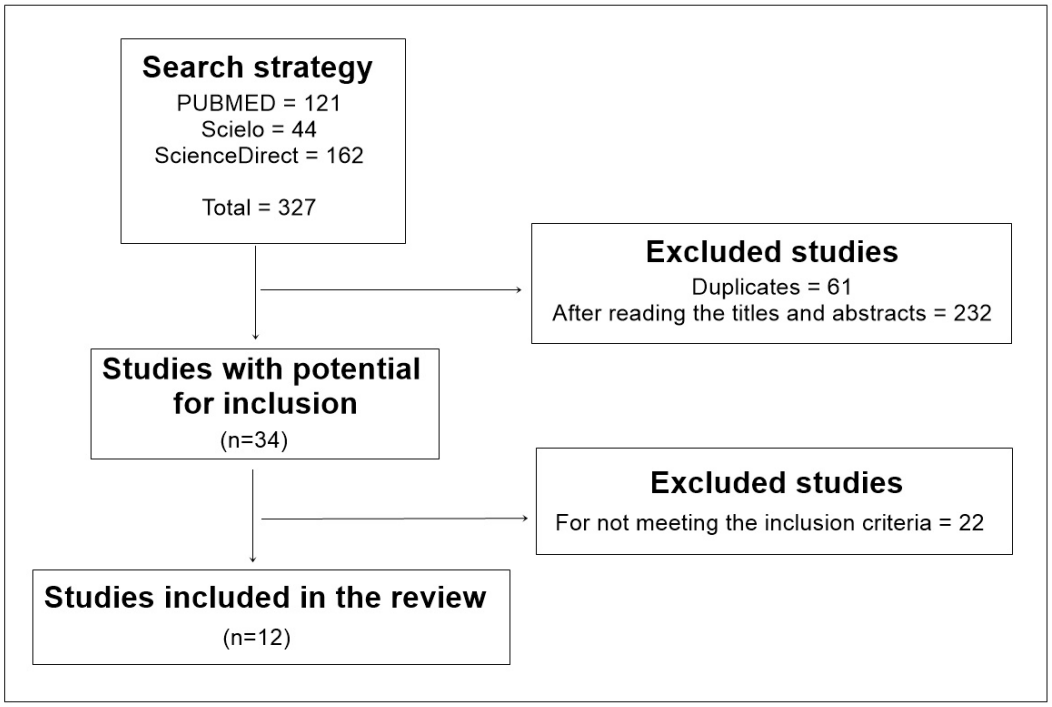
In addition to selecting the topic, a comprehensive search for scientific articles in Portuguese and English was carried out, accessed through the Scientific Electronic Library Online (SciELO), US National Library of Medicine (Pubmed) and ScienceDirect databases. The research covered the period from 2015 to 2022. The search terms listed in the Health Sciences Descriptors (DeCS) catalog were used. It is important to highlight that the research used the Boolean operation "AND" to establish thematic correlations, resulting in two combinations of descriptors: “Oral manifestations AND HIV“; “AIDS AND Oral manifestations“.

Specific inclusion criteria were applied to select articles. Those published in English and Portuguese, within the stipulated date range, were considered eligible. Furthermore, only articles that were published and indexed on the aforementioned research platforms were considered. The types of articles accepted included literature reviews, case reports and meta-analyses related to the topic under study.

On the other hand, exclusion criteria were established to guarantee the quality and relevance of the research. Conference annals, reviews, dissertations, course completion works and monographs were excluded. Articles that did not fit the researched topic or that were outside the defined period were also discarded. Furthermore, duplicate or repeated articles in different databases were also excluded from the research scope.

Initially, 327 documents were found and analyzed, 61 duplicate articles were identified. After reading and analyzing the titles and abstracts of the remaining articles, another 232 were excluded. Thus, 33 documents were read in full and, according to the established inclusion and exclusion criteria, only 12 were selected for this literature review.

Figure 1 - Flowchart of searching for articles in electronic databases.



Source: Authors.

RESULTS

Oral manifestations serve as critical indicators of immune system deterioration and disease progression in HIV/AIDS patients, reinforcing the need for proper communication between dental professionals and physicians. It is essential to highlight that HIV-positive individuals do not require structural modifications to the dental office for routine care; however, complex cases should be referred to specialized dental services. The oral cavity can present a broad spectrum of

manifestations, including fungal, viral, and bacterial infections, as well as neoplastic lesions (FELIPE et al., 2016).

Fungal infections

Pseudomembranous candidiasis

This condition is characterized by the presence of whitish or yellowish pseudomembranes, which can be easily detached by scraping, exposing an erythematous or slightly hemorrhagic surface. It can occur in various regions of the oral mucosa, with a predilection for the buccal mucosa, palate, lips, and dorsal surface of the tongue (ALVES et al., 2014; HELLSTEIN; MAREK, 2019).

Erythematous candidiasis

Erythematous candidiasis appears as reddish macules or patches, frequently affecting the palate, dorsal tongue, and buccal mucosa. This variant is commonly associated with prolonged antibiotic use, corticosteroid therapy, or immunosuppression (PAULIQUE et al., 2017; HELLSTEIN; MAREK, 2019).

Angular cheilitis

Characterized by painful radial fissures at the labial commissures, angular cheilitis is often accompanied by erythema and, occasionally, whitish plaques. This condition is frequently associated with intraoral candidiasis and may be exacerbated by nutritional deficiencies, mechanical irritation, or prolonged moisture exposure (PAULIQUE et al., 2017; HELLSTEIN; MAREK, 2019).

Bacterial infections

Necrotizing ulcerative gingivitis (NUG)

This severe periodontal condition is characterized by inflammation of the gingiva, including the free and attached gingiva, as well as the buccal mucosa. Clinical signs include intense erythema, edema, spontaneous bleeding, necrotic tissue covered by a pseudomembrane, and areas of ulceration. Patients often report severe pain, halitosis, and rapid loss of the interdental papilla (FILHO et al., 2021; MOURA et al., 2022).

Necrotizing ulcerative periodontitis (NUP)

NUP represents a progression of NUG, featuring extensive periodontal destruction with gingival necrosis, interproximal bone loss, and rapid deterioration of periodontal support. This condition is strongly associated with severe immunosuppression and requires immediate intervention to prevent further systemic complications (BARROS et al., 2017).

Viral infections

Herpes Simplex Virus (HSV)

Oral herpes in immunocompromised individuals is characterized by vesicular eruptions that coalesce into painful ulcerations, often persisting longer than in immunocompetent patients. In HIV/AIDS cases, lesions tend to be larger, more symptomatic, and may appear on both keratinized and non-keratinized mucosal surfaces, including the dorsal tongue, gingiva, lips, and hard palate (LOMELÍ-MARTÍNEZ et al., 2022; MOURA et al., 2022).

Hairy leukoplakia

Associated with Epstein-Barr virus (EBV) infection, hairy leukoplakia presents as vertical, hyperkeratotic striations that resemble whitish plaques but cannot be removed by scraping. It predominantly affects the lateral borders of the tongue and can appear unilaterally or bilaterally. This condition serves as a clinical marker of immunosuppression and is more frequent in individuals with low CD4+ T cell counts (RATHEE; JAIN, 2023). In advanced stages of HIV/AIDS, its presence may indicate disease progression (GREENSPAN et al., 2016).

Neoplasms

Kaposi's sarcoma (KS)

Kaposi's Sarcoma is an angioproliferative malignancy associated with Human Herpesvirus 8 (HHV-8) infection, commonly affecting HIV-positive men. It manifests as multiple, nodular, hyperpigmented lesions, predominantly on the lower extremities. In the oral cavity, KS lesions typically present as firm, purplish, or erythematous plaques, most often found on the hard palate, though they may also appear on the gingiva and tongue. These lesions may be asymptomatic or

painful, depending on their size and location (SANCHEZ; DITOMMASO; TSOUKAS, 2019; MAYA et al., 2018).

Non-Hodgkin's Lymphoma (NHL)

Oral lymphoma is characterized by a firm, painless mass that may evolve into ulceration due to mechanical trauma. This neoplasm can develop in any region of the oral cavity but is most commonly found in the gingiva, palate, or tonsillar area. Given its similarity to other conditions such as periodontal abscesses or dentoalveolar infections, an incisional biopsy is necessary for definitive diagnosis (BARROS et al., 2017). The aggressive nature of HIV-associated NHL underscores the importance of early detection and histopathological confirmation (GOMES et al., 2020).

DISCUSSION

Oral manifestations in HIV/AIDS patients indicate immune system deterioration and disease progression. These manifestations include fungal, bacterial, and viral infections, as well as neoplastic lesions. Oral candidiasis is highly prevalent among immunocompromised individuals. Pseudomembranous candidiasis, erythematous candidiasis, and angular cheilitis indicate both local infection and systemic immune suppression (HELLSTEIN; MAREK, 2019; PAULIQUE et al., 2017).

Bacterial infections, such as necrotizing ulcerative gingivitis and necrotizing ulcerative periodontitis, progress rapidly and require prompt intervention to prevent extensive tissue destruction (FILHO et al., 2021; MOURA et al., 2022). Viral infections like herpes simplex and hairy leukoplakia also serve as markers of HIV disease severity. Hairy leukoplakia, associated with Epstein-Barr virus, is common among immunocompromised patients (RATHEE; JAIN, 2023; GREENSPAN et al., 2016).

Neoplastic conditions, particularly Kaposi's sarcoma and lymphoma, are among the most severe oral manifestations observed in HIV patients. Kaposi's sarcoma presents as nodular or hyperpigmented lesions, often affecting the palate (SANCHEZ; DITOMMASO; TSOUKAS, 2019; MAYA et al., 2018). Lymphomas can mimic other intraoral lesions, complicating the diagnostic process. Early biopsy and histopathological evaluation are crucial for differential diagnosis and timely intervention (BARROS et al., 2017; GOMES et al., 2020).

Dentists play a key role in the early detection and management of HIV-related oral conditions. Recognizing these manifestations allows for timely referrals and adjustments in antiretroviral therapy, improving patient outcomes (LOMELÍ-MARTÍNEZ et al., 2022; NEVILLE et al., 2016). Ongoing research and professional training are essential to equip dental practitioners with the necessary skills to manage oral health challenges in HIV/AIDS patients.

CONCLUSION

HIV/AIDS presents various symptoms in the oral cavity. These manifestations often appear as early signs of infection, making them crucial for early diagnosis. Dental professionals play a fundamental role in identifying this condition. Preventing HIV transmission is essential to reducing stigma in patient care. All patients must be treated with due consideration, as they may potentially be at risk for infectious diseases.

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