

Images in Infectious Diseases

Primary tuberculosis of the tongue

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A 36-year-old man presented with a chief complaint of a painful non-healing lesion on the tongue, with a development time of approximately 60 days. Physical examination revealed a poorly defined ulcerative lesion affecting the tongue apex (Figure 1). Lymphadenopathy was not observed. The patient reported previous use of triamcinolone acetonide for over 30 days without any improvement. Hematological examinations were within normal limits, and serological tests were negative for human immunodeficiency virus (HIV), syphilis, and hepatitis. An incisional biopsy was performed to assist with the diagnosis. Microscopically, the lesion showed granulomatous inflammation, composed of multinucleated giant cells, epithelioid histiocytes, and lymphocytes (Figure 2A). Ziehl-Neelsen staining was positive for acid-fast bacilli (Figure 2B), leading to the diagnosis of tuberculosis. Neither chest imaging alterations nor other signals of pulmonary or systemic involvement were observed. Sixty days after starting antituberculous therapy, the patient presented with complete healing of the oral lesion (Figure 3). After six months, no signs of relapse were observed.

Primary oral lesions caused by tuberculosis occur without pulmonary infection and are extremely rare, occurring in less than 1% of extrapulmonary cases^{1,2}. The diagnosis of oral tuberculosis is challenging because the lesions are difficult to differentiate from other ulcerative conditions of the oral mucosa³. Despite its rarity, it should be considered in differential diagnosis because tuberculous lesions in the oral cavity may be the only manifestation of primary or secondary disease. Therefore, early diagnosis and proper treatment are fundamental to avoid complications and reduce the spread of infection in the community.



FIGURE 1: Initial clinical presentation of the ulcerative lesion affecting the apex of the tongue.

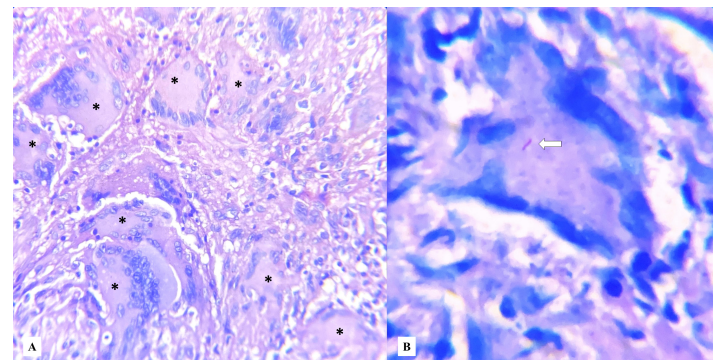


FIGURE 2: (A) Photomicrography showing multiple multinucleated giant cells (*), arranged along with inflammatory infiltrate composed primarily of epithelioid histiocytes and lymphocytes (Hematoxylin and eosin; original magnification $\times 400$). (B) Photomicrography showing acid-fast bacillus (arrow) inside a multinucleated giant cell (Ziehl-Neelsen stain; original magnification $\times 1000$).

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FIGURE 3: Complete healing of the ulcerative lesion in the tongue after two months of antituberculous therapy.

ETHICS

All procedures performed in studies involving human participants were in accordance with the ethical standards of the Institutional Research Committee as well as the 1964 Helsinki Declaration and its later amendments or other comparable ethical standards.

AUTHORS' CONTRIBUTION

AVMB: The author contributed to concept and design of the study; literature review; data acquisition and registration; surgical procedure; patient follow-up; manuscript preparation; manuscript editing; and manuscript review. EDOS: The author contributed to

definition of intellectual content; patient follow-up; and manuscript editing; and manuscript review. FACA: The author contributed to definition of intellectual content; literature review; surgical procedure; patient follow-up; manuscript editing; and manuscript review. MVC: The author contributed to literature review; histopathological and histochemical analysis and diagnosis; manuscript editing; and manuscript review.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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