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# Fever with perinasal and tongue lesions: A diagnostic challenge

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A Caucasic 45-year-old male presented to the Emergency Department complaining of fever (T max 40 °C) and the appearance of painless mucocutaneous lesions on the nose, tongue, and oral cavity, associated with pharyngodinia from a few days. Routine blood exams were unremarkable except for mild anemia (hemoglobin 9.6 g/dl), red blood cell reduction ($3.75 \times 10^6$/μL), lymphopenia ($0.23 \times 10^3$/μL), and elevated C-reactive protein of 54.44 mg/L (reference range, <5). He was transferred to the infectious diseases unit. Physical examination was notable for grey-yellow verrucous lesions on the tongue, perinasal right ala extended oval wet erosive lesion, and hepatosplenomegaly (see Fig. 1).

There were no submandibular, cervical, or retro-auricular lymph nodes. Blood cultures were negative, and HIV test screening resulted in positive. CD4 T-cell count was 7 cells/μL. Skin lesion biopsy showed an inflammatory infiltrate represented by rare superficial histiocytic cells containing bluish corpuscles and, peripherally, lymphoplasmacytic elements. Mucocutaneous and visceral leishmaniasis was suspected, and polymerase chain reaction on blood and lesion aspirate confirmed the diagnosis. Therapy with liposomal amphotericin B was administered for ten days, and long suppressive treatment was continued until the CD4 T-cell count was >200 cells/μL. Full recovery was observed after three months.

Leishmaniasis may be a serious opportunistic disease for patients with HIV infection. The Mediterranean area is endemic for visceral leishmaniasis caused by *Leishmania infantum*. This species is usually associated with visceral forms but may produce mucocutaneous lesions, especially in immunosuppressed people. When HIV infection and leishmaniasis co-exist, they often accelerate the severity of each other, determining uncommon clinical pictures and increasing death unless recognized early.

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## CRediT authorship contribution statement

**Luca Pipito `:** Writing – original draft. **Bianca Catania**: Writing – original draft**. Marcello Trizzino:** Revision original draft. **Vito Rodolico:** Edited the histological image. **Antonio Cascio:** Conceptualization, Revision original draft. All authors have read and agreed to the published version of the manuscript.

## Declaration of competing interest

Nothing to declare.

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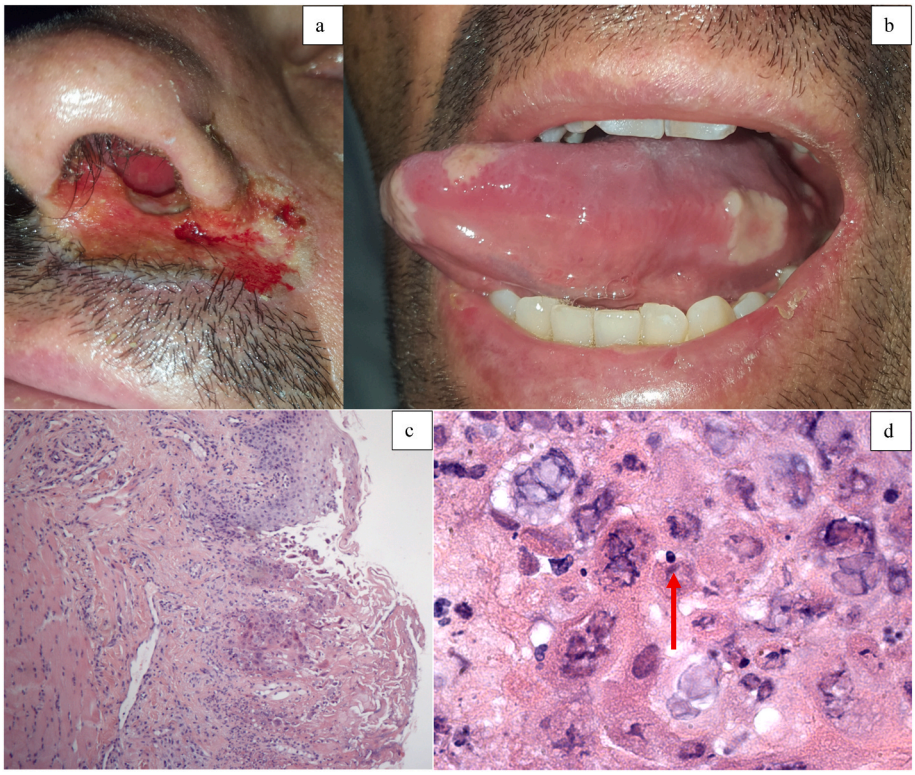


**Fig. 1.** a, oval wet ulcer on the left nasal wing; b, grey-yellow verrucous lesions on the tongue; c, inflammatory infiltrate with histiocytes containing intracellular and extracellular amastigotes surrounded by lymphoplasmacellular cells (Hematoxylin and Eosin staining 10x); d, leishmania amastigote (Hematoxylin and Eosin staining 100x). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)