

Case Report

An Unusual Oral Presentation of HIV Infection

Sangeetha Menon¹, Sandhya Kizhakke Neelamana^{2*}, Anita Balan³, Tinky Bose⁴, Sunu Ramachandran⁵ and Girija KL⁴

¹Department of Oral Medicine and Radiology, Private Practitioner, Kerala, India

²Centre for Interdisciplinary and allied health science technology studies, Kerala University of Health Sciences, Kerala, India

³Department of Oral Medicine and Radiology, JDME, Kerala, India

⁴Government Dental College Trivandrum, Kerala, India

⁵Government Dental College Alleppy, Kerala, India

Abstract

In some cases, oral lesions appear to be the primary manifestation of disease. We report one such case of oral histoplasmosis in a bisexual man who was seen with ulcerations on the gingiva and proved to be infected by HIV.

Keywords: HIV; Deep fungal; Oral; Granulomatous

Case Presentation

A 38-year-old male patient reported to our department complaining of painful swelling in the left side of lower gums for 10 days. The onset was sudden but progressed gradually. The pain was intermittent and there was increase in pain while having food and during the speech. Bleeding was also noticed while having food. There was no associated paresthesia, fever, trauma or tooth ache. He had visited a local hospital for the same and the patient was referred from there for evaluation of the swelling. He was under treatment for psoriasis and had generalized dry, scaly skin lesions particularly over hands and feet. He had the habit of chronic tobacco chewing, alcoholism, smoking for the past 20 years. He was also pale.

On extra oral examination, a slight asymmetry of the lower part of the face due to the swelling on the left side of the lower jaw was noted. Extra orally, a diffuse swelling was noted over the left angle of the mandible region (Figure 1). No fixity to the bone noted. There was no difficulty in jaw movement, swallowing, and speech. Enlarged single firm, mobile, non-tender level 1b lymph nodes were noted bilaterally.

Intra orally, a well-defined swelling involving alveolus and interdental gingiva concerning 34-38 region obliterating buccal vestibule present, which was also extending lingually. Obvious surface ulceration covered by pseudomembrane was noted. There was bleeding from the lesion. No visible pulsations elicited over the swelling. Oral hygiene was fair.

On palpation, a well-defined swelling involving alveolus and interdental gingiva concerning the 34-38 regions was noted. The

swelling was soft in consistency and tender on palpation. The overlying mucosa was ulcerated and covered by pseudomembrane with irregular ragged margins. There was bleeding on palpation. No induration present. There was no evidence of fluctuancy, reducibility, or fixity of skin. Supragingival calculus was present.

On hard tissue examination, the full complement of teeth was present. Supraerupted and Grade II mobile 36 noted. The provisional diagnosis was Primary carcinoma. Differential diagnosis was Metastatic lesion/Deep fungal infection.



Figure 1: Intra oral image showing ulcerative lesion in gingiva region of 34,35,36,37.

Investigations

Panoramic radiograph showed a mild interdental bone loss concerning 35-38 regions, Supraerupted 36. Routine blood examination showed Hb-8.9mg/dl.

CT imaging and Digital subtraction angiography was done. CT angiography showed a relatively well-defined mildly enhancing heterogenous hyperdense lesion on the left side lateral to the body of the mandible deep to the subcutaneous plane. A similar enhancing lesion was noted on the inner aspect of the alveolar surface of the mandible on the left side. Area of lucency noted between roots of 2nd

Citation: Sangeetha KP, Neelamana SK, Balan A, Bose T, Ramachandran S, Girija KL. An Unusual Oral Presentation of HIV Infection. *Ann Clin Case Stud.* 2023; 5(1): 1067.

Copyright: © 2023 Sangeetha KP

Publisher Name: Medtext Publications LLC

Manuscript compiled: Jan 20th, 2023

***Corresponding author:** Sandhya Kizhakke Neelamana, Research Fellow, Department of Oral Medicine and Radiology, Kerala University of Health Sciences, India, E-Mail: drsandhyakn@gmail.com

premolar and first molar on the left side. Subtle erosion was noted on the outer margin of the mandible adjacent to the lesion features were suggestive of periapical inflammatory mass/Nodal mass (Figure 2 and 3).

As a part of routine investigation for biopsy, retroviral test was performed and the patient was found to be positive for HIV 1&2 antigens with CD4 count-48/cumm. The patient underwent incisional biopsy and sent for histopathologic examination. The patient was advised to do Dermatology consultation for management of skin lesions.



Figure 2: Showing relatively well defined mildly enhancing heterogenous hyperdense lesion on left side lateral to body of mandible deep to the subcutaneous plane suggestive of Inflammatory mass/Nodal mass.

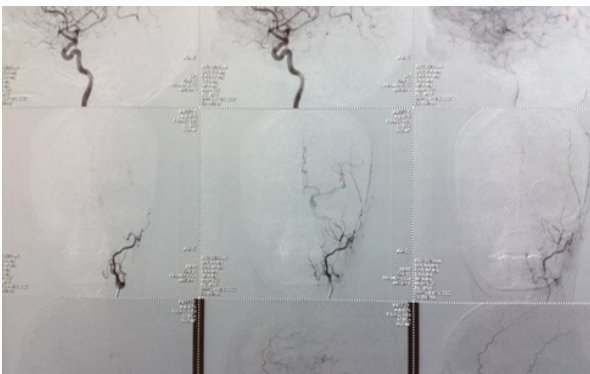


Figure 3: Digital Subtraction Angiography (DSA) showed contrast puddling in along the right side of the body of the mandible with small arterial feeders from right inferior alveolar and lingual arteries.

Histopathological examination and Immunohistochemistry analysis

Histopathology: Plenty of macrophages of histiocytic and foam cell type, phagocytes, chronic inflammatory cells, yeast, and non-septate hyphae are seen in granulation tissue. Necrotic foci and ill-defined giant cells were seen in some areas, Ulcerated parakeratotic stratified squamous epithelium, and tumor-like cells were noted (Figure 4).

Immunohistochemistry was done and the specimen was negative for epithelial or connective tissue cells. Thus, the final diagnosis was granulomatous inflammatory reaction secondary to deep/opportunistic fungal infection most probably Histoplasmosis. On further clinical and laboratory evaluations, no evidence of systemic disease was found. There was no hepatomegaly, and the chest

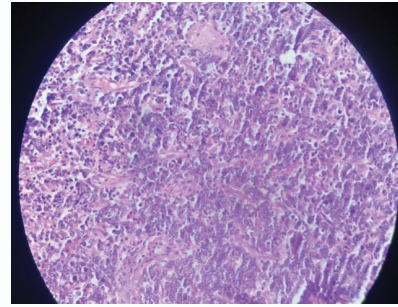


Figure 4: Histopathologic picture showing features suggestive of granulomatous inflammation.

radiograph was normal.

Treatment done

The patient was sent for HAART therapy.

- HAART therapy-combination of Tenofovir, Lamivudine, Efavirenz given.

Review and follow up

He was reviewed after 2 weeks and showed complete regression of the lesion (Figure 5).



Figure 5: Follow up image showing regression of lesion.

Discussion

There are at least 24 different oral lesions reported in the HIV literature. Only ten of these are encountered consistently. In descending prevalence, these are (a) Oral Candidiasis (OC), (b) Oral Hairy Leucoplakia (OHL), (c) Herpes Simplex Virus Infection (HSV), (d) Kaposi's Sarcoma (KS), (e) non-specific ulceration, (f) aphthous ulcers, (g) periodontal disease, (h) Salivary Gland Disease (SGD), (i) oral melanotic hyperpigmentation and (j) oral warts (OW). The first eight were encountered in more than half of the reviewed studies [1]. In addition to the ten OM of HIV described above, a lower prevalence of other oral lesions was reported.

Defective cellular immunity associated with AIDS may place the infected person at risk for a variety of opportunistic infections. These diseases frequently exhibit unusual clinical manifestations, diagnosis and treatment are difficult and often delayed [2].

Capsulatum is a dimorphic fungus that assumes a yeast form, about 1-4 microns in diameter, in the host tissue. In Indians, it tends to occur primarily in the extrapulmonary sites, particularly in the oral

cavity. Clinically it can take an acute pulmonary, a chronic pulmonary, or a disseminated form [3].

The recorded clinical findings show that the disease has a predilection for men and occurs mostly in middle-aged persons. The oral lesions exhibit a varied clinical appearance and are often painful. The most common presentation is an ulcerative lesion with indurated border [4,5]. The most common oral locations include the gingiva, palate, and tongue.

Oral lesions can manifest as papular, ulcerative, nodular, vegetative, furunculoid, granulomatous, or plaque-like lesions, with the most common presentation being a shallow or deep infiltrated ulceration with a pseudomembrane. Gingival manifestations include ulcerative and painful granulomatous lesions [5,6].

The disease is self-limiting in immunocompetent patients. Amphotericin B, at a dose of 2 gm IV for 10 weeks, is used in the management of pulmonary histoplasmosis, in HIV patients. Studies have shown that in immunocompetent patients without AIDS, amphotericin B is effective by 68%-92%, itraconazole by 100%, and ketoconazole by 56%-70%, whereas, in patients with AIDS, amphotericin B is effective by 74%-88% and itraconazole by 85%. Also, itraconazole is known to have rapid action and is effective in preventing a relapse [7].

Conclusion

Early recognition and prompt management of these infections are very important in maintaining health and prolonging the lives of patients with AIDS.

References

1. Tappuni AR. The global changing pattern of the oral manifestations of HIV. *Oral Dis*. 2020;26(Suppl. 1):22-7.
2. Hernández SL, López De Blanc SA, Sambuelli RH, Roland H, Cornelli C, Lattanzi V, et al. Oral histoplasmosis associated with HIV infection: a comparative study. *J Oral Pathol Med*. 2004;33(8):445-50.
3. Wang RJ, Miller RF, Huang L. Approach to Fungal Infections in Human Immunodeficiency Virus-Infected Individuals: Pneumocystis and Beyond. *Clin Chest Med*. 2017;38(3):465-77.
4. Wheat J, Sarosi G, McKinsey D, Hamill R, Bradsher R, Johnson P, et al. Practice guidelines for the management of patients with histoplasmosis. *Infectious diseases society of America. Clin Infect Dis*. 2000;30(4):688-95.
5. Patil K, Mahima VG, Prathibha Rani RM. Oral histoplasmosis. *J Indian Soc Periodontol*. 2009;13(3):157-9.
6. Eisig S, Boguslaw B, Cooperband B, Phelan J. Oral manifestations of disseminated histoplasmosis in acquired immunodeficiency syndrome: report of two cases and review of the literature. *J Oral MaxillofacStLrg*. 1991;49(3):310-3.
7. Economopoulou P, Laskaris G, Kittas C. Oral histoplasmosis as an indicator of HIV infection. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 1988;86(2):203-6.