Correspondence

OPEN ACCESS

Mucosal Leishmaniasis: An infrequent manifestation

Dear Editor,

I have read the case report entitled "Mucosal Leishmaniasis: a Rare Infection from Western Nepal" by Baidya et al. in Vol 6, No 1 (2023) in your esteemed journal [1].

I would like to acknowledge the authors for the thoughtful presentation on the rare occurrence of mucosal leishmaniasis, clinically masquerading oropharyngeal carcinoma. The presented case offers valuable insights into the clinicopathological aspects essential for accurate diagnosis and effective management of the patient.

Leishmaniasis is a complex zoonotic disease caused by multiple subspecies of Leishmania which is a vector-borne obligate intracellular protozoan parasite, transmitted by bite of infected sandflies of Phlebotomus and Lutzomyia species [1]. It can occur as cutaneous, mucocutaneous, or as visceral leishmaniasis with more fatal presentation.

Mucosal leishmaniasis is a form of leishmaniasis that is commonly associated with L. braziliensis, L. panamensis and L. amazonensis [2]. It has been described as secondary to the cutaneous involvement but isolated mucosal involvement can also occur [3]. About 3% of the patients with cutaneous leishmaniasis develop mucosal leishmaniasis which occurs weeks or even years after the primary lesion, although less than 20% of patients with mucosal leishmaniasis have concomitantly cutaneous and mucosal involvement [4]. In this case, clinical presentation of retracted cutaneous scar adds on the possibility of mucocutaneous involvement despite having any significant related past history.

Mucosal lesion commonly presents as inflammatory hypertrophy or destructive ulceration of nasal cavity. More severe form shows disfigurement with pharyngeal involvement causing airway obstruction [5]. Early and accurate diagnosis is an important aspect as in this case patient presented with history of dysphagia for 5-6 months with multiple whitish masses on nasopharynx reaching up to oropharynx causing nasal obstruction. One of the approachable diagnostic modality for mucocutaneous leishmaniasis includes histopathological evaluation (hematoxylin and eosin stain, Giemsa stain) as performed in this case where Leishmania donovani bodies (amastigote form) were observed within the macrophages in oropharyngeal mass. Serological rapid diagnosis with RK39 was also positive. However, Leishmania donovani bodies were not identified in the FNA of cervical lymph node. For the diagnosis of visceral leishmaniasis, histological examination of the spleen offers the highest sensitivity, followed in order by the bone marrow, lymph nodes, and liver [5]. Diagnosis and treatment of the patient has shown recovery which has halt the progression of life threatening complications.

Species level identification (isoenzyme analysis, molecular typing) was compromised due to resource limited setting. Nevertheless, the accurate tissue diagnosis and effective management of the case should not be overlooked and deserve commendation.

Rare presentations of cases can be challenging for both diagnosis and treatment. However, critical analysis remains a fundamental medical principle, and cases presentation like such contribute to refining the clinical and diagnostic approach, ensuring all possible avenues are explored for the patient's benefit.

Isha Gyawali
gyawaliisha40@gmail.com

https://orcid.org/0009-0007-9145-425X

Department of Pathology, Pokhara Academy of Health Sciences, Pokhara, Nepal

Citation

"Gyawali I. Mucosal Leishmaniasis : An infrequent manifestation. JBPKIHS. 2024;7(2):36"

https://doi.org/10.3126/jbpkihs.v7i2.77402

Declarations

The author declares that he has no conflict of interest.

References

1. Baidya P, Mahaseth SC, Adhikari M, Shrestha R, Ghimire PG. Mucosal Leishmaniasis: a rare infection from Western Nepal. JBPKIHS. 2023;6(1):42–5. DOI: 10.3126/jbpkihs.v6i1.54980
2. Lessa MM, Lessa HA, Castro TW, Oliveira A, Scherifer A, Machado P, et al. Mucosal leishmaniasis: Epidemiological and clinical aspects. Braz J Otorhinolaryngol. 2007;73(6):843–7. DOI: 10.1016/S1808-8694(15)31181-2.
3. De Arruda JAA, Tomo S, Cunha JLS, Guevara JR, Martínez I, Reyes O, et al. Mucosal Leishmaniasis of the lip: report of an exuberant case in a young man. Head Neck Pathol. 2023;17(2):540-5. DOI: 10.1007/s12105-022-01497-8.4.
4. Figueiredo LP, do Carmo Almeida L, Magalhães A, Arruda S, Lessa MM, Carvalho EM. Case report: Unusual presentation of pharyngeal mucosal leishmaniasis due to Leishmania (viannia) braziliensis. Am J Trop Med Hyg. 2020;103(4):1493–5. DOI: 10.4269/ajtmh.20-0219
5. Mathison BA, Bradley BT. Review of the clinical presentation, pathology, diagnosis, and treatment of leishmaniasis. Lab Med. 2023 Jul 5;54(4):363-371. DOI: 10.1093/labmed/lmac134. PMID: 36468667.