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Case Report

Leishmaniasis as a Neglected Cause of Isolated Lymphadenopathy: A Case Report

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Abstract

Leishmaniasis is an endemic parasitic disease in Iran. This paper reports the case of a 5-yr-old boy who presented with multiple isolated cervical lymphadenopathy for several months with no history of fever and no signs or symptoms. In an excisional lymph node biopsy, *Leishmania* parasites were histologically detected. Thus, leishmaniasis should be included in the differential diagnosis of isolated lymphadenitis in immunocompetent patients, even if the K39 and IFA for kala-azar are reported as negative.

Keyword: Leishmaniasis, Lymphadenopathy, Kala-azar

Introduction

Leishmaniasis is endemic in 98 regions and countries in the world with the annual incidence and prevalence of about 2 and 12 million people, respectively (1). As a major global health, it includes a group of diseases caused by protozoan parasites of the genus *Leishmania* transmitted to mammals through female phlebotomine sandfly bites (2).

Visceral Leishmaniasis (VL) is caused by *L. infantum* in the Mediterranean and Middle East countries like Iran (3, 4). Its most common clinical manifestations are fever and splenomegaly identified in 80% of patients. Besides, its most common laboratory abnormalities include elevated ESR, anemia, Neutropenia, thrombocytopenia, and hypergammaglobulinemia (5).

Case report

A 5-yr-old boy presented with enlarged multiple posterior cervical lymph nodes on the right side in Sep 2014. He had no history of fever and any signs or symptoms. All lymph nodes were mobile without tenderness; the largest node measured about 1 cm.

Results of laboratory tests including LDH, ESR, CBC, and CRP were within normal range. Patient was on OPD follow-up for 4 months. No changes occurred during that time, and the same lab tests were repeated and reported within normal range. An excisional lymph node biopsy was performed in Mar 2015 (Fig. 1).

Granulomatous lymphadenitis with focal necrosis and Leishmania parasites were histologically detected (Fig. 2). After this report, IFA for kala-azar and k39 were checked and reported as negative. The patient was treated with glucantime for 28 d with good response.

Informed consent was taken from patient's parents.

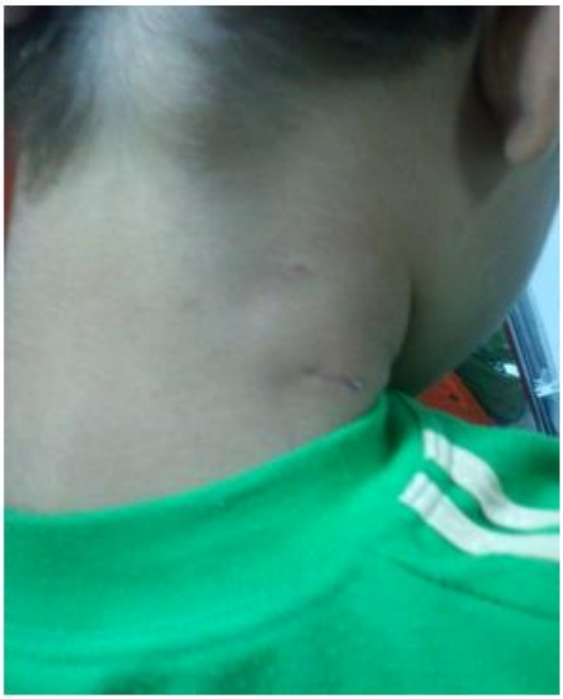

Fig. 1: 5-year-old boy who had multiple enlarged posterior cervical lymph nodes on his right side for several months and was finally diagnosed with leishmaniasis

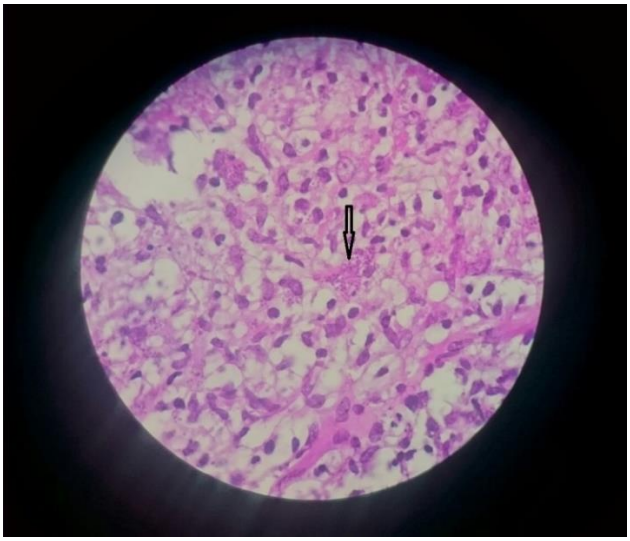

Fig. 2: Lymph node biopsy of a 5-year-old boy showing amastigotes of Leishman-Donovan bodies (arrow)

Discussion

VL diagnosis is commonly delayed due to a microscopically difficult identification of rare amastigotes in bone marrow smears, varied incubation times, nonspecific symptoms, and negative serological test results, especially in immunocompromised patients (4).

VL clinical manifestations in Iran and Mediterranean countries are of a similar type except that significant lymphadenopathy is lacking in the former country (5).

Spleen nodules (4), fever-free VL (5), isolated cervical leishmanial lymphadenopathy in apparently VL-cured patients (6), cutaneous leishmaniasis associated with pleural effusion (7) or an extensive ulcer in the left arm's entire lateral side (8), and isolated mediastinal lymphadenopathy in HIV patients (9) are some unusual forms of leishmaniasis reported in the literature. Moreover, Sharma (10) and Ignatius (11) reported an isolated lymphadenopathy in immunocompetent individuals as a rare manifestation of leishmaniasis.

The case reported herein is unique, because isolated lymphadenopathy was the only manifestation of leishmaniasis and results of general and specific tests for Leishmania were normal in an immunocompetent patient.

Conclusion

Leishmaniasis should be included in the differential diagnosis of isolated lymphadenitis in immunocompetent patients, even if the K39 and IFA for kala-azar are reported as negative.

Ethical considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Acknowledgements

The authors declare that there is no conflict of interest.

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