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Case Report

A Zoonosis without Fever

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Abstract

Introdution: Zoonosis are infectious diseases transmissible from vertebrate animals to humans under natural conditions. The infectious agents involved include bacteria, viruses, parasites, fungi and rickettsia, among others.

Case Presentation: A 13 year-old female teenager, presented with frequent epistaxis, pale mucosae and palpable hepatosplenomegaly on examination and history of contact with a neighbor's sick dog. Laboratory tests showed anemia, thrombocytopenia, mild hepatic dysfunction and negative serologies. Abdominal ultrasound showed moderate hepatosplenomegaly.Normal myelogram, bone marrow aspirate with positive leishmania PCR and peripheral blood positive leishmania IgM/IgG (ELISA), with negative leishmania PCR.Therapy with liposomal amphotericin B was iniciated, with progressive clinical and analytical improvement.

Conclusion: Visceral Leishmaniasis is a parasitic disease, caused by infection with Leishmania parasites. Human and animal reservoirs are key elements in the transmission chain.

Keywords: Leishmaniasis; Zoonosis

Introdution

Transmission of infectious agents from animals to man occurs by direct contact with the animal, by ingestion, inhalation or inoculation of infectious agent. Zoonosis are infectious diseases transmissible from vertebrate animals to humans under natural conditions. The infectious agents involved include bacteria, viruses, parasites, fungi and rickettsia, among others [1,2].

Leishmaniasis is a parasitic disease, most frequently in tropics, subtropics and southern Europe, caused by infection with Leishmania parasites, which are spread by the bite of female phlebotomine sand flies. Human and animal reservoirs are key elements in the transmission chain [1]. Most common forms of Leishmaniasis: cutaneous, mucocutaneous and visceral (also known as kala-azar) affects several internal organs (usually spleen, liver and bone marrow) and may be fatal if left untreated. The estimated number of new cases of Visceral Leishmaniasis (VL) per year is <100,000, symptoms evolve insidiously, with splenomegaly, irregular fever, anemia or pancytopenia, weight loss, and weakness occurring progressively over a period of weeks or even months [1,2]. Prompt diagnosis is important to prevent high mortality associated with missed diagnosis [3,4].

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Case Presentation

A 13 year-old female teenager, with cognitive impairment, third child of healthy consanguineous parents, rural area resident, with dog contact was referred to the paediatric department for frequent epistaxis with 1 week and thrombocytopenia and anemia, detected a month earlier in routine analysis, without fever, night sweats, tiredness, adynamia, anorexia, notion of recent weight lossor other symptoms.

On examination, had a weight and height in the 3rd percentile, pale mucosae, without visible skin bruising andwith palpable hepatosplenomegaly.

Initial laboratory tests showed normocytic/normochromic anemia (Hb 9g/dL; VGM 70fL; HGM 22pg), thrombocytopenia (80000/uL), mild hepatic dysfunction (AST 129U/L and ALT 77U/L), PCR 1,9 mg/dL, ESR 100mm/h and negative serologies for HIV 1/2 and IgM EBV/CMV.The chest x-ray was normal and abdominal ultrasound showed moderate hepatosplenomegaly regular contours and homogeneous echostructure, with no apparent focal lesions and no distortion of hepatic architecture.

Due to the tests results already performed, the history of contact with a neighbor's sick dog and living in an endemic area, a diagnosis of Visceral Leishmaniasis (VL) has been proposed.

The next laboratory tests showed normal myelogram,bone marrow aspiratewith positive leishmania PCR and peripheral blood positive leishmania IgM/IgG (ELISA), with negative leishmania PCR.

She iniciatedtherapy with liposomal amphotericin B (5mg/kg for 5 days) in D8; then (5mg/kg) in D14 and in D21, with progressive clinical and analytical improvement.

Discussion

We present this case due to the atypical presentation form and to underline the importance of detailed clinical history and physical exam in the early diagnosis and treatment of a potentially fatal disease.

Diagnosis of VL is made by direct identification of the parasite by microscope in tissue specimens or bone marrow; blood tests to detect antibody to the parasite and molecular tests to look for the parasite (or it's DNA). Treatment with liposomal amphotericin B or pentavalent antimony are the best choices available [3,4].

Conclusion

VL is a diagnostic challenge and high index of suspicion is required. Leishmaniasis is an endemic disease in some areas and prompt institution of treatment allows patients to survive [4].

Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Competing Interests

The authors declare that they have no competing interests.

Author's Contribution

JSM, TM, GR, MC, IBL and GS contributed equally to the concept, clinical management of the patient, writing of the paper, manuscript review and editing. All authors approved the final version.

Availability of Data

All relevant data are provided in the manuscript.

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