

Visceral Leishmaniasis: A Rarely Diagnosed Adult Case in Turkey

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SUMMARY: A 37 year-old woman patient, from the Turgutlu district of the city of Manisa, was given a diagnosis of visceral leishmaniasis. Immunosuppression was not detected with flow cytometric analysis. Fungizone was given to the patient in 50 mg doses on alternative days 20 times. The treatment was successful and no important side effect was recorded. Considering the importance of visceral leishmaniasis in Turkey and the rarity of adult cases, we decided to present this as a case report.

Key words: Leishmaniasis, visceral, *Leishmania infantum*, adult

Visceral Leishmaniasis: Nadiren Tanı Konulan Bir Erişkin Olgusu

ÖZET:Manisa'nın Turgutlu ilçesinden gelen 37 yaşındaki bir bayan hastaya visceral leishmaniasis tanısı konulmuştur. Hastada flow sitometri ile yapılan testler sonucunda immunsupresyon saptanmamıştır. Hasta, gün aşırı 50 mg olmak üzere toplam 20 doz kullanılan Fungizon verilerek başarı ile tedavi edilmiş ve herhangi bir yan etki gözlenmemiştir. Ülkemizde visceral leishmaniasisin önemi ve erişkinlerde nadir olarak görülmesi nedeniyle olgu sunumu olarak sunulması düşünülmüştür.

Anahtar Sözcükler: Leishmaniasis, visceral, *Leishmania infantum*, erişkin

INTRODUCTION

Leishmania infantum is found along the whole Mediterranean littoral mostly infant human infections. The number of adult cases is increasing in HIV-infected patients in Italy and other Mediterranean countries (1). Visceral leishmaniasis (VL) have long been known to exist as sporadic human cases in Turkey including Manisa city in Aegean region and most of the patients were children like in other Mediterranean countries (2, 3). As a standard treatment, pentavalent antimonials (Sb^v), such as sodium stibogluconate (Pentostam^R) or meglumine antimoniate (Glucantime^R), are used in the treatment of VL with a daily parenteral dose of 20 mg/kg Sb^v, for four weeks (3). The number of the patients is increasing because of the easy applicable and sensitive and specific diagnostic methods as IFAT and rK39 dipstick (2). Here, an adult case of VL is reported from Manisa city, Turkey.

CASE REPORT

A 37 years old woman patient from Turgutlu province of Manisa city referred to the local health center with the symptoms including ulcers locating around mouth, fever, weakness, weight loss (4 kilos) during last 2 months, dysuria and pollacuria. She was transferred to İzmir Tepecik Social Security Association Hospital with urinary tract infection, neutropenia and high sedimentation symptoms. It is reported that E.coli was isolated from urine sample and it was thought to be secondary to neutrophenia. Patient was seen with fever, cutaneous paleness and splenomegaly and laboratory results were reported as WBC 1,700/mL, RBC 3.07x10⁶/mL, hemoglobin, 6.7 g/dL, hematocrit 21.2%, platelets 153,000/mL, sedimentation rate: 135mm/h, CRP 12mg/dL, hypergammaglobulinemia (Alb: 2.3g/dl, Glob:3.8g/dL) with a high optical density of total IgG and IgG₃.

Because of the fever and urinary infection Ciproxin 2x1/D/8 days was given to the patient. Besides this, indirect immunofluorescence titre, for leishmaniasis was 1:1/2048 and rK39 dipstick was found to be positive. Results were confirmed by the presence of amastigotes on bone marrow smears. Flow cytometry analysis did not show immunosuppression.

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Treatment was initiated with Fungizone 50mg/alternative days for 20 times. The patient became non-febrile at the second day and clinical conditions improved after the end of the therapy. Hemoglobin (9.0g/dL), hematocrit (27.1%), WBC (4,900/mL) and platelet (314,000/mL) counts were increased and spleen was changed to normal size after therapy.

DISCUSSION

Fever, splenomegaly and pancytopenia may arise from a large range of infectious, hematologic or systemic diseases, and therefore represent a difficult diagnostic challenge. One of the possible cause of this syndrome is VL, an infectious disease due to intracellular protozoa of the genus *Leishmania*.

Leishmania/HIV co-infection is considered to be an emerging disease and a threat in several countries in accordance with WHO data. The global experience, mainly in European countries, is marked by an increasing number of co-infection cases in this decade, leading to modifications concerning the epidemiological profile, presentation and clinical outcome of VL in various countries (4). There was totally 452 diagnosed AIDS and 1063 HIV positive patients during 1985-2002 period in Turkey (5). However, there has not been any diagnosed HIV+VL patient in Turkey until now and it is important to search the immunological status of VL patients especially in adult cases. In the present case, flow cytometry analysis was not shown immunosuppression.

Because of the rarity of VL adult cases and sporadicity of the infection, the patients could be diagnosed lately. In a 24 year old woman living in Mediterranean region of Turkey, no definite aetiology could be identified in a local hospital. A bacterial infection had been suspected, but antibiotic therapy, at first with sulbactam-ampicillin and later with azithromycin, had no influence on the fever (6). Another patient was hospitalized with a prediagnosis of haematological malignancy, but the smears prepared from the bone marrow aspirates revealed *Leishmania* amastigotes and promastigotes were seen in NNN culture (7). In the present case, aetiology could also not identified at the local hospital.

It is important to publish the present leishmaniasis case not only for the alternative treatment course but also for taking the attention of clinicians to the adult cases with similar symptoms. Visceral leishmaniasis must be taken into consideration in the differential diagnosis of febrile splenomegalies not only in children but also in adult cases in Turkey.

REFERENCES

1. **Markell EK, Voge M, John DT.** 1999. Other blood and tissue dwelling protozoa. *Markell and Voge's Medical Parasitology*. Eight Edition. WB Saunders Company, p.123-188.
2. **Özensoy S, Özbek Y, Turgay N, Alkan MZ, Gül K, Gilman-Sachs A, Chang K-P, Reed SG, Özcel MA,** 1998. Serodiagnosis and epidemiology of visceral leishmaniasis in Turkey. *Am J Trop Med Hyg*, 59:363-369.
3. **Ok ÜZ, Balcioğlu IC, Taylan Özkan A, Özensoy S, Özbek Y,** 2002. Leishmaniasis in Turkey. *Acta Trop*, 84:43-49.
4. **da Silva ES, Pacheco RS, Gontijo CM, Carvalho IV, Brazil RP,** 2002. Visceral leishmaniasis caused by *Leishmania (Viannia) braziliensis* in a patient infected with Human Immunodeficiency Virus. *Rev Inst Med Trop Sao Paulo*, 44(3):145-149.
5. AIDS Savaşım Derneği Website, www.aidsderneği.org.tr. Erişim : 23.Dec.2003.
6. **Büyükaşık Y, İleri NS, Haznedaroğlu IC, et. al.** 1998. Fever, hepatosplenomegaly and pancytopenia in a patient living in the Mediterranean region. *Postgrad Med J*, 74:237-239.
7. **Şener B, Ergüven S, Günalp A.** 1999. Visceral and cutaneous leishmaniasis (report of 2 cases). *Cent Eur J Public Health*, 7:8-9.