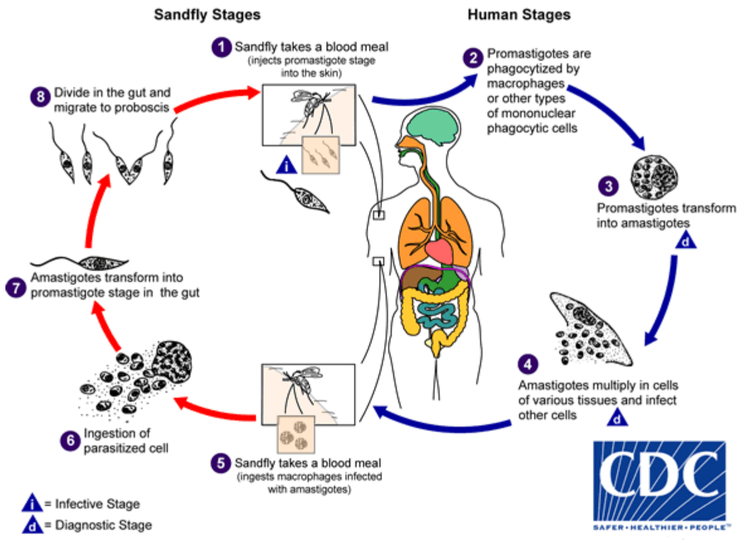
A case of visceral leishmaniasis in an English traveller.

Dr. Katy Fleming, Dr. Michael Hardman, Professor Diana Lockwood, Dr. Ayed Eden

Outline: This is a case presentation of a 74 year old Caucasian gentleman diagnosed with visceral leishmaniasis (VL) following an urgent referral to the haematology services at a hospital in Southeast England for investigation into a suspected haematological malignancy.

Method: The patient presented with a 6 week history of fatigue, poor appetite, sweats and one stone unintentional weight loss following a holiday in Almeria, Southeast Spain, where he suffered a short flu like illness lasting 3 days. He was referred to haematology based on symptoms and pancytopenia on a full blood count (WCC 2.1 X 10^9/L, platelets 58 X 10^9/L, Hb 109 g/L). On examination he was found to have a 10cm enlarged spleen. A bone marrow aspirate and trephine biopsy was performed to investigate for a primary bone marrow disorder.

Results: Bone marrow aspirate showed Leishman-Donovan bodies (figure 1) diagnostic of leishmaniasis. *Leishmania donovani* complex DNA was detected on bone marrow PCR. HIV serology was negative. The patient was treated with 5 days of once daily 3mg/Kg IV liposomal amphotericin followed by further doses on days 10 and 14. The patient felt much better and gained weight immediately following treatment. His splenomegaly resolved and blood count improved (WCC 5.0 X 10^9/L, platelets 156 X 10^9/L, Hb 103 g/L). He is being followed up at the Hospital for Tropical Diseases in London.



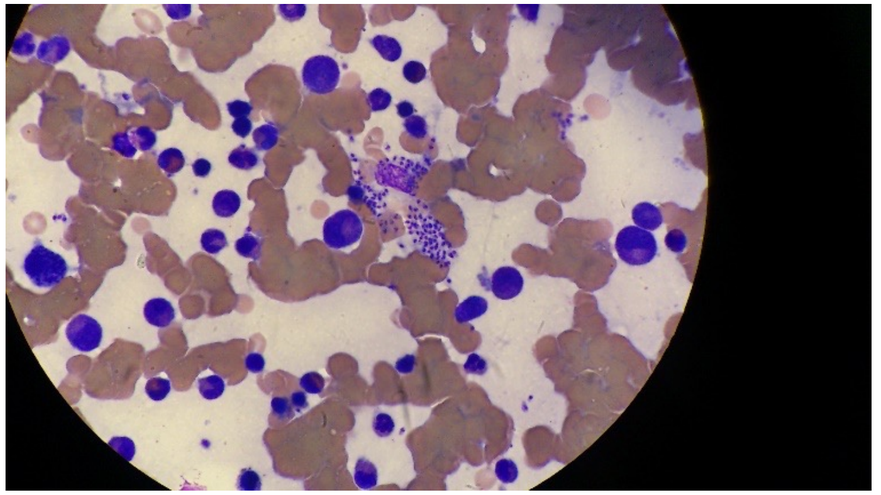


Figure 1: bone marrow aspirate shows intracellular amastigotes, each containing a nucleus and kinetoplast. Wright-Giemsa stain, original magnification 100× (oil).

Conclusion: Leishmaniasis is a vector-borne disease caused by infection of a host with protozoa from the *leishmania* genus. The disease is transmitted through the bite of an infected female phlebotomine sand fly. There are three types of leishmaniasis; cutaneous, mucocutaneous and visceral. The majority of cases of VL occur in the tropics and subtropics, however, the disease is known to be endemic in the Mediterranean. It is estimated that 50% of travellers who acquire leishmaniasis in Northern Europe have come from Spain and 35% from Italy and Malta combined[2].

VL commonly presents with fever, weight loss, splenomegaly and pancytopenia. These cases are often seen by haematology as the symptoms mimic those of haematological malignancies. HIV and immunosuppression are important risk factors and poor prognostic indicators in VL[3,4]. Untreated VL has a mortality of 80%. However, early treatment with liposomal amphotericin B is up to 100%[5] effective and is associated fewer of the systemic side effects attributed to conventional amphotericin therapy.

Take home message

- Thorough travel history is essential to identify cases of VL.
- A high index of suspicion is needed with patients coming from endemic areas.
- Consider risk factors such as immunosuppression and HIV co-infection.

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