

# Fever from the USA or Portugal?

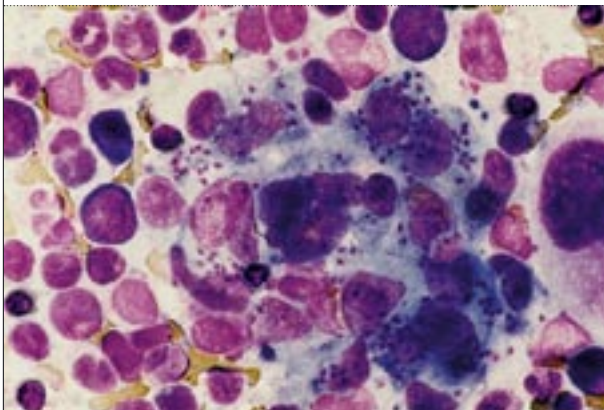
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## CASE REPORT

A 54-year-old woman presented with a long-standing high fever of four weeks. The daily fever reached 40°C every night without cold chills. She had just returned from a family visit to Florida (USA) one month ago. The family included three children in their teens. For the past three years she had lived in Portugal with her husband and visited the Netherlands regularly, several times each year. She did not have any other complaints. Physical examination was normal and the laboratory examination showed a BSE of 52 mm/hour and a C-reactive protein of 75 mg/l. The haemoglobin count was 7.3 mmol/l, the thrombocyte count was  $90 \times 10^9/l$  and the leucocyte count was  $2.8 \times 10^9/l$ . The lymphocytes showed an atypical morphology and the Monosticon (Pfeiffer) test was weakly positive. The serology for Epstein-Barr virus (EBV) was positive for IgM against early antigen and the IgG was negative. Cytomegalovirus serology was also unreactive. X ray of the chest did not show any abnormalities. An ultrasound of the abdomen showed a slightly enlarged spleen of 13.5 cm but was otherwise normal. The first working hypothesis was an acute EBV infection possibly related to her visit to Florida. However, two weeks later the clinical picture and laboratory abnormalities did not change at all and the second serological test for EBV did not show the formation of IgG early antigen. Further analysis was performed by bone marrow aspiration and bone biopsy because of the persistent pancytopenia. The microscopic examination is shown in *figure 1*.

**Figure 1** Bone marrow aspirate shows numerous intracellular pathogens in macrophages



## WHAT IS YOUR DIAGNOSIS?

See page 372 for the answer to this photo quiz.

ANSWER TO PHOTO QUIZ (ON PAGE 367)  
FEVER FROM THE USA OR PORTUGAL?

DIAGNOSIS

The diagnosis of visceral leishmaniasis (kala-azar) was made. The bone marrow aspirate showed numerous intracellular parasites in macrophages. These parasites have a large dark-purple, eccentric nucleus with blue-staining cytoplasm and a small rod-shaped mitochondrial structure known as the kinetoplast, which is characteristic for *Leishmania amastigotes*. This infection is spread by the sandfly in numerous parts of the world including the Mediterranean area. In Portugal visceral leishmaniasis is due to an infection with *Leishmania infantum* and frequently diagnosed in patients with defective cellular immunity by HIV.<sup>1</sup> The incubation time of this infection is one to three weeks. Our patient probably acquired this infection during her stay in Portugal. The most characteristic finding is usually hepatosplenomegaly which was almost absent in this case. The pancytopenia showed us the right way to the diagnosis of leishmaniasis. She was treated with liposomal amphotericine B and recovered completely.<sup>2,3</sup>

REFERENCES

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