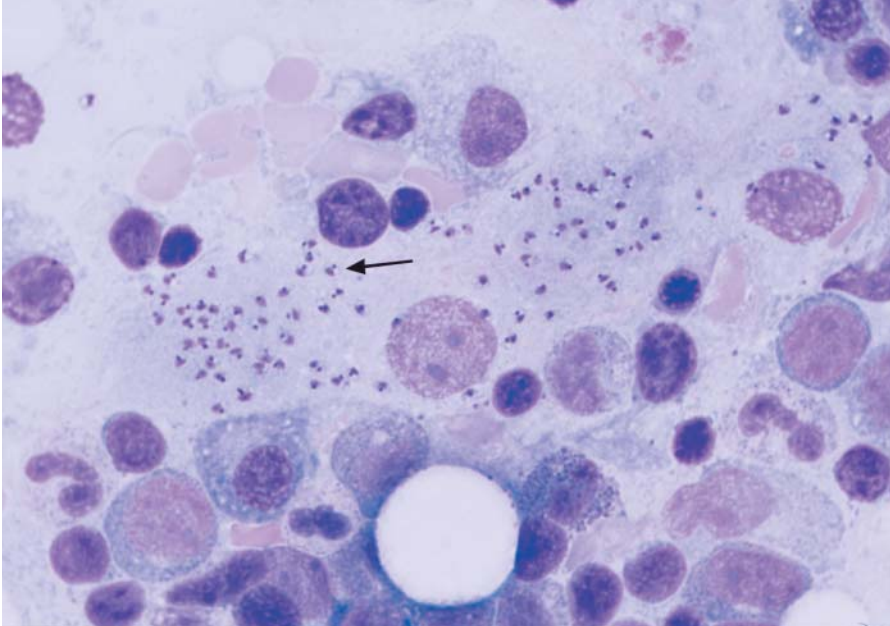


IMAGES IN CLINICAL MEDICINE

Kala-Azar



A 26-YEAR-OLD U.S. SOLDIER WAS REFERRED TO OUR INSTITUTION WITH a two-week history of unexplained fever and weight loss. The physical examination was unremarkable. Laboratory examination revealed anemia, leukopenia, mild proteinuria, and IgG and IgA hypergammaglobulinemia. Multiple blood cultures for bacteria and fungi were negative. Serologic tests for fungi and viruses, including an enzyme-linked immunosorbent assay for the human immunodeficiency virus and a test for p24 antigen, were also negative, as were titers of antinuclear antibodies and extractable nuclear antigens. Computed tomographic scanning of the chest, abdomen, and pelvis revealed only mild splenomegaly.

A bone marrow biopsy performed to rule out lymphoma demonstrated the presence in the aspirate of the intracellular amastigotes typical of visceral leishmaniasis (hematoxylin and eosin, $\times 400$). The small kinetoplast (arrow) contains mitochondrial DNA. A review of the patient's history revealed travel to southern Italy seven months before presentation. This travel placed him in proximity to the sandfly vector of the genus *phlebotomus*. Serologic testing identified the infecting protozoan as *Leishmania donovani*. The patient was treated with amphotericin B, with rapid resolution of fever and cytopenias.

Visceral leishmaniasis (kala-azar) can result from infection with multiple species of leishmania protozoa. Clinical manifestations are protean and subtle but often include fever and weight loss. Of the 500,000 new cases of visceral leishmaniasis diagnosed each year, 90 percent originate in the Middle East or South Asia. A history of travel to a region in which leishmaniasis is endemic should alert clinicians to the possibility of leishmania infection when they are evaluating the broad differential diagnosis of fever of unknown origin.

Copyright © 2003 Massachusetts Medical Society.

Matthew W. Pantsari, M.D.
Teresa A. Coleman, M.D.

Dwight D. Eisenhower Army Medical
Center
Fort Gordon, Augusta, GA 30905