The Spoils of War: An Imported Case of Cutaneous Leishmaniasis

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Case Report

A 59-year-old American soldier who served in Afghanistan presented with a one-year history of a gradually enlarging non-tender erythematous nodule on his left upper arm measuring 1cm in diameter (Figure 1A). He did not have splenomegaly, cervical or axillary lymphadenopathy. An incisional biopsy (Figure 1B) demonstrated parasite-laden histiocytes with intracytoplasmic amastigotes which were highlighted with Giemsa stains (Figure 1C).

Figure1: Illustration of Cutaneous Leishmaniasis

Tissue polymerase chain reaction (PCR) assay confirmed the presence of infection with Leishmania tropica. He was treated with two cryotherapy sessions, one month apart, and the lesion resolved with minimal scarring.

Leishmaniasis is a parasitic infection endemic in tropical and subtropical climates such as Central America, South America and southern United States (often termed New World leishmaniasis) and in the Middle East, Africa and Mediterranean basin (Old World leishmaniasis). However, in today’s interconnected world, imported cases of leishmaniasis have been reported almost anywhere.

The genus of sandfly which spreads leishmaniasis is Phlebotomus in the Old World and Lutzomyia in the New World. The sandfly ingests amastigotes when it draws blood from an infected mammal. The parasites then transform into flagellated promastigotes and multiply in the gut of the sandfly.

Anthroponotic (human-to-human spread with sandfly as the vector) cutaneous leishmaniasis is characterised by large, single or multiple lesions with a variable tendency to involute with scarring. The lesions are usually painless although they may become tender in the presence of secondary bacterial infections.

Some important differential diagnoses to exclude are cutaneous anthrax, tuberculosis, erythema nodosum leprosum, lymphoma and sarcoidosis.

Parenteral or intralesional therapy with pentavalent antimony (meglumine antimoniate and sodium stibogluconate) is the treatment of choice in the United States [1]. In India, resistance to antimony is relatively common; hence patients are treated with intravenous amphotericin B. Surgical excision is best avoided due to the high risk of local relapse and disfigurement [2,3].

References: