In the Literature

Treatment of New World Mucosal Leishmaniasis With Liposomal Amphotericin B

Rocio C, Amato VS, Camargo RA, et al. Liposomal formulation of amphotericin B for the treatment of mucosal leishmaniasis in HIV-negative patients. Trans R Soc Trop Med Hyg 2014; 108:176–8.

Mucosal leishmaniasis (ML) is most frequently caused by *Leishmania (Viannia) braziliensis*. It involves mucous membranes of the oral cavity and upper respiratory tract, typically emerging days to years after the occurrence of cutaneous leishmaniasis, although the latter may not have been apparent in some cases [1]. The lesions may be highly destructive and disfiguring. The differential diagnosis may include mycobacterial infection, fungal infection (eg, histoplasmosis, paracoccidioidomycosis, blastomycosis, basidiobolomycosis, entomophthoromycosis), schistosomiasis, rhinosporidiosis, and Hansen's disease. Amastigotes are often scarce and difficult to visualize in biopsies of New World ML lesions. Immunohistochemistry, culture, and polymerase chain reaction (PCR) are each more sensitive.

Rocio and colleagues in Brazil retrospectively reviewed the medical records of 16 patients with ML who were thought to have contraindications to the use of meglumine antimoniate, pentamidine, or amphotericin B deoxycholate and who were, as a consequence, treated with liposomal amphotericin B (L-AmB). Thirteen of the 16 were men, and the median age of the entire cohort was 64 years (range, 26–84 years). All patients had been symptomatic for at least 5 months, most commonly because of epistaxis, nasal obstruction, and rhinorrhea and, consistent with these symptoms, the nares were the most frequent site of involvement followed by the pharynx, oral cavity, and larynx. Amastigotes were detected by microscopic histopathological examination of mucosal biopsies of only 2 patients, whereas immunohistochemistry was positive in 8. In 2 of the 6 patients negative by these methods, the diagnosis was confirmed by kinetoplast DNA PCR. *Leishmania* culture was not performed.

Patients received a median daily dose of 2.65 mg/kg administered over a median of 12 days. The median cumulative total dose was 2170 mg (range, 570–3000 mg) or 29.23 mg/kg (range, 11–50 mg/kg). Cure was achieved in 14 (88%)

of the 16 patients; the 2 treatment failures were the consequence of drug discontinuation because of the development of nephrotoxicity.

Pentavalent antimonials are generally recommended for treatment of ML, but they have significant toxicity. L-AmB appears to have emerged as the treatment of choice for visceral leishmaniasis and, despite the known toxicity of amphotericin B, is generally much better tolerated than the antimonials, albeit much more expensive.

Reference

1. Strazzulla A, Cocuzza S, Pinzone MR, et al. Mucosal leishmaniasis: an underestimated presentation of a neglected disease. Biomed Res Int **2013**; 2013:805108.