

Amphotericin B lipid complex A Viewpoint by Rogelio López-Vélez

Infectious Diseases Department, Hospital
Ramón y Cajal, Madrid, Spain

Visceral leishmaniasis (VL) is an emerging disease for two main reasons: co-infection with HIV and resistance to conventional drugs. In patients co-infected with HIV, VL is characterised by a chronic course with frequent relapses, which requires life-long secondary prophylaxis. In these patients, antimonials have lost much of their efficacy and are associated with life-threatening cardiac and pancreatic toxicity.

Amphotericin B lipid complex, a new lipid formulation of amphotericin B, is taken up preferentially by macrophages from liver and spleen, making it possible to treat infections, such as VL, which are localised in cells of the reticuloendothelial system. The low serum and kidney levels of the drug reduce systemic and renal toxicity.

Amphotericin B lipid complex 3 mg/kg/day for 5 or 10 days was safe and effective in treating an acute episode of VL in HIV-infected patients in southern Europe. After parasitological cure in these patients, amphotericin B lipid complex 3 mg/kg every 21 days appears useful as secondary prophylaxis in preventing VL relapse.

The declining efficacy of pentavalent antimonials in hyperendemic regions means that they should no longer be used as first-line therapy. Amphotericin B lipid complex is an excellent anti-leishmanial agent and, based on data from India, is as effective as the conventional formulation. Total dosages of amphotericin B lipid complex as low as 10 mg/kg cured >90% of immunocompetent Indian patients with VL.

Thus, amphotericin B lipid complex represents a first-line drug to treat VL, but unfortunately, its high cost makes it affordable only in developed countries. ▲