

Trypan, a diamidine based drug, was tested as an antileishmanial agent. Duplicate cultures of both *Leishmania major* and *Leishmania donovani* promastigotes in M199 medium and Trypan at various concentrations were tested. The cultures were incubated at 25 degrees C and parasites counted at 48 h interval, and the data generated was used to establish growth inhibition curves. Drug-free cultures were included to serve as control. In the in vivo study, a total of 40 BALB/c mice were divided into five groups of 8 mice each. They were infected with 2×10^6 promastigotes on the left footpad. Two groups were treated with 70 microg/ml of Trypan, a total of 500 microl used immediately after infection, one group by topical application and the other administered intraperitoneally. The treatments were repeated for the two other groups 10 weeks post infection, one by topical application and the other administered intraperitoneally. One group was not treated and thus served as control. Footpad sizes were measured using Vernier calliper every 2 weeks for 21 weeks. In the in vitro studies, Trypan inhibited growth of either *L. major* or *L. donovani* promastigotes in all the concentrations tested with more dramatic inhibition in high concentrations. Based on the in vivo studies, it was evident that Trypan had effect on *L. major* infected lesions when applied topically immediately after infection. However, there was no effect when treatment commenced after the lesions were established. The data is discussed.