

Comparative evaluation of direct agglutination test, rK39 and soluble antigen ELISA and IFAT for the diagnosis of visceral leishmaniasis.

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Five serological tests for the diagnosis of visceral leishmaniasis (VL) were compared: a direct agglutination test (DAT) based on freeze-dried antigen (DAT-fd); a locally produced DAT (DAT-LPC); an IgG ELISA against rK39 (ELISA-rK39); an IgG ELISA for *Leishmania chagasi* (ELISA-L. *chagasi*); and an IgG IFAT against *L. chagasi*. Serum samples from 88 patients with VL, 20 non-infected individuals and 85 patients with others infectious diseases were evaluated. The sensitivity rates were: DAT-fd, 96.6%; DAT-LPC, 95.5%; ELISA-rK39, 88.6%; ELISA-L. *chagasi*, 89.8%; and IFAT, 92.0% ($P > 0.05$). The specificity for the control groups varied from 53.3% to 100%. DAT-fd had the highest efficiency (97.4%), followed by DAT-LPC (91.7%) and ELISA-rK39 (90.7%). Our data suggest that DAT-fd, DAT-LPC and ELISA-rK39 are useful tests for the diagnosis of VL and could replace IFAT as the routine diagnostic test in Brazil.

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