Serum antibodies to Trypanosoma cruzi antigens in Atacameños patients from highland of northern Chile

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In the present work we have investigated the serum antibody spectrum to parasite antigens involved in human T. cruzi infection. Analysis was performed by conventional serology (IHA, IFAT and ELISA), complement-mediated lysis, anti-gal antibody assay and reactivity against recombinant and synthetic peptides and metacyclic antigens by immunowestern-blotting. All the sera showed a significant reactivity in IHA, IFAT and ELISA. We found that 84.2% of the sera showed lytic activity and thirty serum samples (78.9%) which showed a lytic activity higher than 50%, also showed anti-gal antibodies at serum dilutions higher than 1:1,600. Ninety-four percent of sera reacted with one or more of the recombinant DNA clones and 97.3% reacted with one or more of the synthetic peptides. A pool of serum samples with a lytic activity higher than 75% were able to produce 60% to 78% inhibition of cell invasion. Thirty-six of the serum samples (94.7%) were able to react by immunowestern blotting with a T. cru