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



Neira, Iván

Gutiérrez, Bessy

Anacona, Daniel

Manque, Patricio

Silva, Ximena

Marín, Sussy

Sagua, Hernán

Vergara, Ulises

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