Abstract

Chagas disease is a major endemic disease caused by the protozoan parasite Trypanosoma cruzi. This parasitic disease is widely distributed throughout Latin America, affecting 10 million people. There are also reports of canine infection in the southern part of the United States. Dogs are considered the predominant domestic reservoir for T. cruzi in many areas of endemcity. In México, dog infection by this parasite has been poorly studied. In this work 209 dogs from six villages in Jalisco, México, were assessed to detect anti-T. cruzi antibodies by ELISA and Western blot. Seventeen (17) seropositive dogs (8.1 %) were detected by both tests, representing a seropositive value similar to that found in some southern states of México where the infection is present. No statistical differences were observed concerning the age and sex of infected and non-infected dogs. The major antigens recognized by positive sera were 26, 32, 66 and 80 kDa. These proteins are candidates to develop a specific diagnostic method for canine Chagas. No antibodies against HSP16 protein were found in T. cruzi seropositive sera. This is the first report of canine serology of Chagas disease in this central part of México. This report will contribute to the knowledge of the infection status of domestic reservoirs in the state of Jalisco, México.

Keywords

Canine Chagas, Infected dogs, Trypanosoma cruzi.