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Abstract (poster session)

Prevalence of antibodies to Trypanosoma cruzi in Latin American immigrants in Madrid

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Objectives: Chagas' disease, also known American trypanosomiasis is major public health problem in Latin American, affecting nearly ten million people. Outside of endemic areas, Chagas' disease may be transmitted through the transfusion of the infected blood components, organ transplantation and congenital infection. Our study aims to determine the prevalence of antibodies to Trypanosoma cruzi in a community sample of Latin American immigrants in our hospital. Methods: A total of 465 serum samples from Latin American individuals attending in our hospital between January 2010 and October 2011 were studied. Sixty-five percent (302) were women and thirty-five percent (163) were men. The median age was 34.2 (range 1-69) years and 12.7% (59) of patients were children. Serological screening was performed using a commercial enzyme immunoassay (EIA) (Chagas ELISA, Vircell). Samples reactive by EIA were confirmed by indirect immunofluorescence (IFA) (Inmunofluor Chagas, Biocientífica) and lateral flow immunochromatography (IC) (Chagas Ab Rapid Test, Biotech). Results: The geographic distribution of the patients was: 277 Bolivia (59.6%), 52 Colombia (11.2%), 42 Ecuador (9%), 26 Peru (5.6%), 16 Argentina (3.4%), and 7 other countries of Latin American (11.2%). One hundred seventy-seven patients (38%) were reactive for all three tests. Of these, 170 (96%) were from Bolivia, 3 (1.7%) Argentina, 2 (1.1%) Ecuador and 2 (1.1%) Paraguay. All serum samples from children were non-reactive. A non-reactive serum sample by EIA or by IC was reactive by IFA. It was for a woman from Colombia with leishmaniasis. Conclusion: High rates of T. cruzi seropositive patients among Latin American immigrants, mainly among Bolivian population (170/277, 61.4% in our study), underscore the importance of serological screening in this population to prevent transmission by blood transfusion or organ transplantation and vertical transmission. The rate of transplacental transmission from mothers with chronic T. cruzi infection to their newborns is 2-10%.