Biological characterization of Trypanosoma cruzi stocks from Chilean insect vectors

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Fifty-seven Trypanosoma cruzi stocks isolated from Triatoma infestans and Triatoma spinolai of the five different geographic endemic areas of Chile were studied by schizodeme and molecular karyotype analysis. Four different genotypes are found in the sylvatic T. spinolai vector and five in the T. infestans domiciliary vector. Of these genotypes, two common genotypes overlap on both transmission cycles exclusively in the extreme northern endemic areas of Chile. Metacyclic trypomastigotes obtained in vitro or cell-derived trypomastigotes proved to be infective in ?-irradiated Balb/c mice for the study of the immune response and biological behavior. Of a total of 57 T. cruzi stocks obtained, 19 of them, representing all the different genotypes found in Chile, were tested on a murine experimental model and then fully studied. Female compared with male animals demonstrated greater resistance to Chagas disease with all the T. cruzi stocks tested. The immune response was assessed by lytic ant