Microsatellite marker analysis shows differentiation among Trypanosoma cruzi populations of peripheral blood and dejections of Triatoma infestans fed on the same chronic chagasic patients : Microsatellite marker analysis and T. cruzi Venegas, Juan Miranda, Sandra

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To investigate whether Trypanosoma cruzi populations found in chagasic cardiopathic and non-cardiopathic patients are genetically differentiated, three molecular microsatellite markers were analysed. This analysis was also applied to compare T. cruzi samples from peripheral blood or dejections of Triatoma infestans fed on the blood of the same patients. In order to obtain the first objective, analyses of predominant T. cruzi genotypes were conducted using three approaches: a locus-by-locus analysis; a Fisher method across three loci; and analysis of molecular variance by Genepop and Arlequin programs. Only with one locus and on the blood samples was a significant differentiation detected among non-cardiopathic and cardiopathic groups, which was not confirmed by the other two methods. On the contrary, with the three approaches, it was found that T. cruzi clones present in the blood of patients are genetically differentiated from those detected in dejections of T. infestans fed on the sa