

Differential distribution of *Trypanosoma cruzi* clones in human chronic chagasic cardiopathic and non-cardiopathic individuals

Venegas, Juan

Coñoepan, William

Pichuantes, Sergio

Miranda, Sandra

Apt, Werner

Arribada, Arturo

Zulantay, Inés

Coronado, Ximena

Rodriguez, Jorge

Reyes, Eduardo

Solari, Aldo

Sanchez, Gittith

PCR and Southern blot hybridization were used to determine the distribution of *Trypanosoma cruzi* clones in 37 chronic chagasic cardiopathic and non-cardiopathic patients. Parasite DNA amplified from peripheral blood or dejections of *Triatoma infestans* fed on patient blood was hybridized with probes containing hypervariable minicircle nucleotide sequences capable of detecting three sublineages of *T. cruzi*. Probes Z-I and Z-IIb detect unique sequences in lineages TcI and TcIIb, respectively. Probe Z-hybrid detects sequences of lineages TcIIId and TcIIe. *T. cruzi* clones of the Z-I sublineage were detected in 62.2% of *T. infestans* dejections and 5.4% of peripheral blood samples. Clones of Z-IIb and Z-hybrid sublineages had similar distribution in blood and dejection samples. Interestingly, clones of the Z-IIb sublineage were significantly lower in cardiopathic than in non-cardiopathic patients (23.5% versus 75%; $P = 0.0006$). Clones of the Z-hybrid sublineage were found in 29.4% of cardiopat