

Presence of *Trypanosoma cruzi* in pregnant women and typing of lineages in congenital cases

Ortiz, Sylvia

Zulantay, Inés

Solari, Aldo

Bisio, Margarita

Schijman, Alejandro

Carlier, Yves

Apt, Werner

The objective of this study was to determine the presence of *Trypanosoma cruzi* in blood samples of mothers with chronic Chagas disease and their newborn by conventional PCR targeted to minicircle kinetoplastic DNA (kDNA), and to determine the lineages in mother/newborn pairs of the congenital cases by hybridization assays with probes belonging to the TcII, TcI and TcV Discrete Typing Units (DTU). In 63 (57.2%) of the mothers the presence of circulating *T. cruzi* was demonstrated by PCR immediately before delivery and in three newborn (3%) congenital transmission was confirmed by serial PCR and conventional serology between 1 and 16 months of life, at which point treatment was started. The hybridization signals showed that two of the newborn had the same DTU as their mother (TcI, TcII and TcV), whilst in the third congenital case only TcV was detected in the cord blood, suggesting that in this infant TcI and TcII did not cross the placenta or the parasite was not present at a detectabl