

Differential expression of *Trypanosoma cruzi* I associated with clinical forms of Chagas disease: Overexpression of oxidative stress proteins in acute patient isolate

Díaz, M. L.

Solari, A.

González, C. I.

Chagas disease has a variable clinical course with different manifestations and heterogeneous geographical distribution. Some studies suggest that this clinical variability could be influenced by the genetic variability of *T. cruzi*. Here we present the differential protein expression among trypomastigotes and amastigotes of *T. cruzi* group I isolates from patients with acute and chronic form of Chagas disease from Santander, Colombia. A total of 29 proteins were identified by MALDI-TOF and LC-MS/MS; twenty in trypomastigote and nine in amastigote stage. The 29 proteins identified were grouped in 7 functional categories: 1) metabolism 31%, 2) assembly of cytoskeleton 13.7%, 3) protein destination 13.7%, 4) defenses antioxidants 20.6%, 5) protein synthesis and cellular cycle 13.7%, 6) catabolism 6.8%, and 7) adhesion 3.4%. Tryparedoxin peroxidase, lipoamide dehydrogenase, tyrosine amino transferase and HSP70 were overexpressed in the acute Chagas isolate. Tryparedoxin peroxidase overexpres