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PROGRAMA Y RESÚMENES

PROGRAM AND ABSTRACTS

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**VI WORLD CONGRESS ON
MUMMY STUDIES**

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Temporal variation of *T. cruzi*
transmission among pre-
Columbian populations of
Brazil

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Palabras clave: Brasil; momia; poblaciones pre-colombinas; infección por *T. Cruzii*; ADN.

Pre-Columbian infection by *T. cruzi* was recently detected in a Brazilian mummy dated of 1200-600 years using nuclear regions from rDNA (18S and 12S) as target. Phylogenetic analysis showed genotype TCII associated with the severe form of the disease. Soft tissues and bones of the same mummy were retested using as targets the mini-exon gene and the kDNA minicircle conserved region. Hybridization, cloning, and sequencing were performed and the haplogroup of the mummy determined. *T. cruzi* DNA detection in all tissues confirmed infection. The mummy was characterized as an Amerindian of the haplogroup A. Another mummy dated of 7000-4500 years of the same archaeological site was negative for *T. cruzi* infection. The mummy was characterized as of the haplogroup B. These are the first attempts to a paleoepidemiological approach to the history of Chagas' disease in Brazilian Lowlands. The data suggest temporal variation in transmission of *T. cruzi* in ancient times.