

Short Oral Presentation I.3

Detection of Chagas disease infection in areas without vector transmission

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Introduction: In Bolivia, congenital Chagas disease (CCD) is an increasing source of *T. cruzi* infection while the transmission by vectors and blood transfusion are controlled. The treatment of infected newborns is efficient and safe, avoiding subsequent sequels. Strategy for CCD management was developed in endemic areas but not in regions free of vector transmission.

Objectives: To facilitate detection of infection in non-endemic areas and develop affordable strategies of CCD management.

Materials and methods: The study took place in 3 hospitals of La Paz and El Alto, both located in a region free from vectorial transmission. Blood samples from cord and newborn's heel were collected respectively in EDTA tubes and heparinized capillary tubes. Antibodies were titrated by ELISA and IHA. Parasites were sought on buffy coat. A standardized questionnaire was applied to all mothers.

Results: Based on 11,276 samples, prevalence of *T. cruzi* was 1.4% and congenital transmission rate reached 9.7% (95% CI: 4.5-17.5) close to the average of endemic regions (6%). The logistic regression from the questionnaire was completed in 6,915 women and showed a significant correlation between CCD and 1) history of Chagas disease, 2) heart or digestive disease, 3) birth in endemic region or 4) stay less than 1 month in endemic region.

Conclusion: Questionnaire focusing only on these 4 questions could screen probable cases of Chagas in area without vectorial transmission.

II

WORKSHOP INTERNACIONAL DE LA ENFERMEDAD DE CHAGAS, VECTORES TRIATOMINOS, *Trypanosoma cruzi* Y TRIATOMA VIRUS



LIBRO DE RESÚMENES

Del 17 al 20 de SEPTIEMBRE DEL 2012

COCHABAMBA - BOLIVIA

**II International Workshop on Chagas Disease,
triatomine vectors,
Trypanosoma cruzi, and Triatoma virus**



II International Workshop on Chagas Disease, triatomine vectors, *Trypanosoma cruzi*, and Triatoma virus

In memoriam of Dr François Noireau

Facultad de Medicina, IIBISMED-CUMETROP, Universidad Mayor de San Simón,
Cochabamba, Bolivia

September 17-20, 2012

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Workshop objectives

- To inform interested stakeholders about the current Chagas disease burden and control strategies.
- To discuss current and future methods and technologies oriented to control triatomines and other insect vectors.
- To get feedback from associations, industry sector, and research organizations about using *Triatoma* virus as biological control agent.
- To assess research needs and cooperation opportunities between scientists working on human and animal trypanosomiasis, insect vectors and viruses.

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