

Experimental protocol: *Atropa belladonna* highly diluted for the treatment of *Trypanosoma cruzi* infection

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Background: Natural products are a potential source of new drugs which may present fewer side effects [1]. The analysis of *Atropa belladonna* in different experimental models is suggested as object of study considering the Multicenter International Project on High Dilution.

Aim: To evaluate the effect of highly diluted medicine of *Atropa belladonna* under murine infection by *T. cruzi*.

Methodology: Project approved by the Animal Ethics Committee UEM. The experiments will be done under blind, controlled and randomized testing by draw. One hundred and twenty swiss male, mice, 8 weeks old, will be divided into groups with 12 animals according to the treatment: CI - infected non treated; CNI- non infected and non treated; infected and treated animals 48 hours before and after infection, subsequently were treated 56/56 hours until 9th day of infection with TM - *A. belladonna* mother tincture and in the 2cH; 3cH; 5cH; 6cH; 12cH e 30cH dilutions. Animals will be infected with 1400 blood trypomastigotes of *T. cruzi*, strain Y, via ip. Medicines are going to be prepared according to the Brazilian Homeopathic Pharmacopoea [2] and offered diluted in water *ad libitum*, in an amber drinker during 16 hours. Parasitological parameters evaluated: total parasitemia, total peak of parasites, pre-patent period and area under the curve. The parasitemia will be evaluated daily from the 1st day of infection until negative findings for 3 consecutive days. Histological parameters of spleen, heart, liver, intestine, skeletal muscle, and immunohistochemical analysis of the apoptosis process. Statistical comparisons will be analyzed by the Software Statistic 8.0 with 5% of significance.

Considerations: Since the Multicenter International Project on High dilution intends to study the same medicine in several experimental models and, moreover, the murine model of infection by *T. cruzi* is widely known, it will be possible to suggest probable mechanisms of action to the tested medicines.

Keywords: *Atropa belladonna*; Chagas' disease; Mice; *Trypanosoma cruzi*.

References

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