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ANTIOXIDANT POTENTIAL OF Morus nigra TINCTURE IN SWISS MICE INFECTED WITH THE QM2 STRAIN OF Trypanosoma cruzi.

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Abstract: The excessive production of free radicals can damage irreversibly biological macromolecules may also influence the progression of chronic diseases such as Chagas disease. Due to active principles of some plants, studies have shown pharmacological efficacy of various phytotherapics, in the prevention and or treatment of different cell damage. The aim of the study was to evaluate the antioxidant potential of tincture the basis of Morus nigra leaves in the progression of Chagas disease. Were used 96 mice "Swiss" males were divided into 08 groups of 12 animals each. 04 groups were infected with Trypanosoma cruzi strain QM2 and the other groups served as controls and placebo. The treatment was performed for 180 days through pipetting directly into the mouth of the animal at concentrations of 25, 50 and 75μ L/animal/day and 50μ L/animal/day and 20% alcohol solution. The parasitemia was held during the acute phase of disease and at treatment completion, the antioxidant capacity was measured by the method of inhibition of lipid peroxidation (TBARS) and by the method ferric reducing antioxidant power (FRAP). We observed a statistically significant reduction in parasitemia of the treated groups when compared to placebo, verifying greater reduction in the group given 25μ L. For the evaluation of antioxidant potential in the TBARS assay, the groups of 50 and $75\mu L$ uninfected, when compared with uninfected placebo showed a reduction in TBARS levels of about 80% statistically significant. For the FRAP assay, when compared to controls infected with their Corresponding infected, the 50µl group showed a reduction of approximately 30% when in the condition of infection ($p \le 0.05$). Given the need for new substances with biological activity against T. cruzi, the results obtained in this study demonstrated an important action of the Morus nigra tincture in the evolution of Chagas disease.