INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

COMPARISON OF CARDIOTOXIC EFFECTS IN PATIENTS WITH AMERICAN CUTANEOUS LEISHMANIASIS TREATED WITH N-METHYL GLUCAMINE ANTIMONIATE VERSUS ORAL MILTEFOSINE

F Ferraço Marianelli [(1)] - C Bresolin Pompeu [(1)] - A Costa Pinto [(2)] - V Santos Cunha [(2)] - Lm Tanaka Gonçalves [(1)] - F Suelen Jacques Sousa De Assis [(1)] - C Martins Gomes [(3)] - R Nonata Ribeiro Sampaio [(3)]

University Hospital Of Brasília, Dermatology, Brasília, Brazil [(1)] - Faculty Of Medicine, Univerity Of Brasília, Medicine, Brasília, Brazil [(2)] - Faculty Of Medicine, Univerity Of Brasília, Dermatology, Brasília, Brazil [(3)]

Introduction: Cuteneous Leishmaniasis (CL) is a worldwide neglected disease with an important impact on public health. The standard treatment consists of pentavalent antimony derivates that frequently result in cardotoxicity, mainly expressed by electrocardiogram alterations. In this context, miltefosine rises as an effective alternative against Leishmania. Although miltefosine is a drug that results in milder adverse reactions in comparison to pentavalent antimonials, its real effect on the cardiovascular system is unknown.

Objective: Compare the cadiotoxicity of the standard treatment with miltefosine.

Materials and Methods: We performed a retrospective cohort study in which electrocardiographic registries from patients treated for CL at University Hospital of Brasília were retrieved. Patients between 18 and 70 years-old diagnosed with CL were included. Patients were divided in two groups according to the treatment received: meglumine antimoniate (MG) and miltefosine (MILT). As main outcome we compared the relative risk (RR) of electrocardiographic alterations during specific treatment for CL.

Results: We screened medical records from 111 patients treated between 2008 and 2013 and retrieved electrocardiographic data from 53 of them (38 in the MG group and 15 in the MILT group). At the seventh day of treatment, 8.57% of individuals in MG group and 33.3% in MILT group presented with an altered corrected QT interval (cQT) (RR = 0.2571; 95% confidence interval = 0.07-0.94; p = 0.0485), while on the fourteenth day, 26.6% of MG group presented cQT alterations and on the twenty-first day, 35.3% of MG group presented an enlarged cQT against none in MILT group.

Conclusion: The present results state that miltefosine also influence on cQT interval enlargement, especially on initial phases of treatment; However, this effect was significantly less persistent when compared to MG. The profile of adverse effects of miltefosine makes this an interesting option for patients with contraindication to the use of pentavalent antimonials.