Reviewer’s report

Title: Renal function evaluation in patients with American Cutaneous Leishmaniasis after specific treatment with pentavalent antimonial

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Reviewer: Ivan Velez

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In the manuscript “Renal function evaluation in patients with American cutaneous Leishmaniasis after specific treatment with pentavalent antimonial” the authors present the results of a prospective study with 37 Brazilian patients with ACL.

A complete evaluation of renal function was carried out to each patient before and after a treatment with Glucantime at a dose of 20 mg/K/day for 20 days.

Before treatment Urinary concentration defect was observed in 27 (77%) patients and Urinary acidification defect in 15 (40%) and the conclusion was that the asymptomatic tubular dysfunction was probably induced by ACL.

In ACL there are very few studies regarding renal function evaluation and calling attention to this aspect is a valuable contribution of this paper.

However, ascribing tubular dysfunction to the infection with the parasite must be carefully analyzed.

In the paper it is pointed out that the average lesion evolving time is of only 28,5 days (7-90) and the MST (Montenegro Skin Test) is only positive in 59.5% of cases, however, there is no description of size or type of lesions.

The short time of evolution of the lesions and the low positivity of the MST indicate that most of the lesions were small and they were patients in initial stages of clinical manifestations, probably some of them even in nodular form, where the parasites have had little time to cause tubular dysfunction.

No data is presented of other studies in a general healthy population and it would be very convenient to have evidence that the renal findings are in effect caused by the parasite. Its necessary to have a control group with people of the same region of origin of the patients and with similar characteristics of age, sex, race and occupation. If this control population does not have any alterations in renal function and particularly in urinary concentration and urinary acidification, then Leishmania can be regarded as a cause. Without data of this control group the statements will need to be confirmed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.