Reviewer’s report

Title: Aortic Distensibility is Not Modified in Patients With Different Forms of Chagas' Disease

Version: 1 Date: 11 June 2005

Reviewer number: 1

Reviewer’s report:

General
The question of this paper is original, that is whether vascular properties may be altered in Chagas disease in its different forms of presentation. The methods to assess vascular function are appropriate. However, better description of the echocardiographic assessment would improve the manuscript. Also, other variables assessed such as O2 consumption are not methodologically described (which equipment).

As for the results section, besides echo data which are different (and the authors indicate that), peak VO2 is also different. The authors should state this finding (page 7). Although in patients with Chagas no changes in vascular properties were found, it is somewhat intriguing that even in group 4 (the sickest patients) values were similar to control subjects. The fact that their ejection fraction was not greatly impaired, their peak VO2 was equivalent to functional class III. I would expect some vascular dysfunction in this particular group. May be the authors could elaborate this a bit more in the discussion. Perhaps other forms to assess vascular endothelial function could show different data.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Careful review of english wording - for example - interleucina page 4.

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Discretionary Revisions (which the author can choose to ignore)

Describe methods better - cardiopulmonary test, echocardiogram
Results - It is questionable whether patients and control individuals should be included in the entire linear regression analysis, although the authors also ran patients and controls individually. Also, once the ANOVA showed no difference among the 4 groups, the linear analysis may be unnecessary.
Discuss the issue of why patients with low peak VO2 (around 14ml) did not show changes in vascular properties. Is that related to the property assessed - distensibility? Could this be different if other endothelial dysfunction assessments were made? - such as vascular Doppler under vascular stimuli?

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.