Reviewer's report

Title: Low prevalance of Leishmania donovani infection among the blood donors in kala-azar endemic areas of Bangladesh

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Reviewer: Narayan Raj Raj Bhattarai

Reviewer's report:

Major revision:
1. The article is well written and first time documented the presence of Leishmania donovani in healthy volunteer blood donor in Bangladesh. However, the study did not addresses that issues of large proportion of asymptomatic infection in healthy endemic areas of kala-azar in Nepal, Indian and Bangladesh. In Kala-azar, epidemiology of Leishmania donovani infection is not well known but in a recent study from India and Nepal (Otyn B et al 2011) documented high number of infection than diseases but it is not known how many percentage of infection develops to full blown diseases. It could be possible that most of the infection disappears by host immunity and only act as transient carrier for a certain period of time. In this context, Why is it important to screen the blood in blood bank for Leishmania donovani if blood donors are from endemic region?

2. The study used the antibody based rk39 dipstick test for the agreement analysis with other tests and to exclude or include study individuals. As, it is known that antibody remains for longer time (more than 8 to 10 years) once the individual had Kala-azar in their life time. Similarly, agreement between serology and molecular marker is very poor and it is also not known the meaning of PCR positivity in healthy endemic individuals so far. Moreover, agreement between serology and serology like rk39, DAT and IFAT is also very poor (Khanal et al, 2010, Bhattarai et al, 2009).

3. The selection of PCR techniques in this study is classical. As the study used the old nested PCR instead of recent application of single step PCR which already documented higher sensitivity and specificity on the sample of same region (Deborggraeve S et al 2008, Bhattarai et al 2009).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.