Reviewer’s report

Title: First case report of M1 macrophage polarization in an untreated symptomatic patient with toxoplasmosis

Version: 3 Date: 29 Nov 2017

Reviewer: George Yap

Reviewer's report:

This is a case report highlighting the presence of M1 type macrophages in the lymph node in a case of human toxoplasmosis. Because most studies on macrophage polarization during Toxoplasma gondii infection have been carried out in the mouse model, a brief note highlighting M1 macrophage polarization is a good addition to the field. Nevertheless, the interpretation that the cells identified are M1 macrophages needs to be more cautious, because only a single (phosphorylation of STAT1) marker was used. Additional markers (iNOS or interferon-induced GBP1s) should be investigated to reinforce the conclusion. Detailed comments to improve the manuscript are included below:

1. Abstract: Remove the sentence-"M2 polarization in rat toxoplasma infection is associated with chronic persistence:". This is out of place in the Conclusion section and not very meaningful, because the study did not investigate whether the macrophages were negative or positive for M2 markers.

2. Reference citation need to be consistent and accurate. For example, on page 2, sentence starting with "M2 macrophages are activated by various cytokines...." ends with a reference citation (#2), which is formatted differently from the rest of the manuscript. It is also not a relevant paper with respect to M2 cells. Similarly on page 5, reference 1 is cited for cytokine-activated murine endothelium contributes to clearance of T. gondii through recruitment of CD8 lymphocytes, which is also not a matching article for this statement.
3. Figures and legends: Instead of stating the magnification of the lens, scale bars should be depicted in the photomicrographs. Also, they should indicate what color is used to designate CD68 vs. pSTAT1 reactivity. Finally, in Figure 1 C, not all the arrows are pointing to double positive cells. It would have been informative to know whether the positive sites also contained parasites/parasite antigens.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.
Unable to assess

**Does the work include the necessary controls?**
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Unable to assess

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