Reviewer's report

Title: A misdiagnosed rickettsia infected patient presented with multiple cerebral infarctions and hemorrhage

Version: 2 Date: 11 January 2015

Reviewer: naoufel kaabia

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This is an interesting case of severe murine typhus with meningoencephalitis in old man with co-morbidities. These types of complications were noted in less than 5% of murine typhus cases. However, for further improvement of this study please consider the following remarks and comments:

Major comments:
1) According to the serology and molecular study, this is a case of Murine typhus also called Endemic typhus. Therefore, I recommend to change the title of this case report to “Rickettsial Infection by Murine typhus”. The reason for change of title is that rickettsial infection is a general term used when rickettsia was not identified.

2) Change the term “moseri” to “Rickettsia typhi” in all the texts. The term “moseri” is an old appellation for rickettsia.

3) Change “Rickettsial infection” to “endemic or murine typhus” in Keywords.

4) Need to identify or specify which technique was used to do serology, and if other rickettsia antibodies were tested. In general there is a cross reaction between many rickettsia spp.

5) For genetic sequencing, need to specify which technique and sample was used (peripheral blood, or CSF or skin biopsy), and in which laboratory this exam was conducted.

Minor comments
6) In Line 92, change “rickettsial disease” to “murine typhus”.

7) In Line 97, change the term conclusion to discussion.

8) In Line 117, change “Rickettsia typhus” to “Rickettsia typhi”.

9) In Line 136, change the statement “This older male farmer patient was bitten by murine typhus” to “This older male farmer patient presented murine typhus with...” since patient cannot be bitten by a disease!!!

10) In Line 137, change the statement “murine typhus involved endothelial and vascular smooth muscle cells resulting” to “Rickettsia typhi involved endothelial and vascular smooth muscle cells resulting...”.

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.