Reviewer’s report

Title: Mycobacterium arosiense, an unexpected cause of osteomyelitis in a patient with sarcoidosis: a case report

Version: 1 Date: 24 Sep 2019

Reviewer: Paulo Melendez

Reviewers report:

First of all, while it is possible to understand the article for the most part, I think its language could use some polishing. I recommend that the authors look into one of the options posted on the BMC website to improve their writing in English.

This is an interesting case, the authors are trying to make the case that this patient might have had Mycobacterium arosiense infection for a long time, misdiagnosed as sarcoidosis and exacerbated by the use of steroids. It would be helpful to have some more information to make the case stronger. I have some suggestions below:

Did the patient have other laboratory evidence of sarcoidosis when he received that diagnosis 6 years prior? Please include that information.

For how long was the patient treated with steroids for the presumed sarcoidosis? Was he receiving treatment with steroids at the time of his spinal infection?

Was the testicular biopsy specimen sent for cultures? And why was it done?

Was there any chest imaging available from the time of the sarcoidosis diagnosis and from the time of the MAC diagnosis? And was it suggestive of MAC pulmonary disease at all? Were there any prior lung biopsy or respiratory specimens sent for culture at any point?

Was there radiologic resolution of the hilar adenopathy after antibiotic treatment?

Line 162: How would routine 16s rRNA gene sequencing to identify Mycobacterium arosiense change management in these patients? Would it be cost effective? Perhaps this should be discussed a little more. Are there any implications other than underestimation of its real incidence?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Unable to assess

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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