Reviewer's report

Title: Periprosthetic-knee infection by Mycobacterium bovis and Candida guilliermondii in the context of a zoonosis: A case report and literature review

Version: 0 Date: 15 Dec 2018

Reviewer: Dr. Nakaharai

Reviewer's report:

1. Do you believe the case report is authentic?

Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.

Comments: No

3. Does the Introduction explain the relevance of the case to the medical literature?

Yes

4. Does the article report the following information? Where information is missing, please specify.
   a. The relevant patient information, including:
      - De-identified demographic information (age, gender, ethnicity)
      - Main symptoms of the patient
      - Medical, family and psychosocial history
      - Relevant past interventions and their outcomes
   
   b. The relevant physical examination findings

   c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at T = 0, follow up at T = 1 month.

   d. Diagnostic assessments, including:
      - Diagnostic methods
      - Challenges (e.g., financial, language/cultural)
      - Reasoning and prognostic characteristics (e.g., staging), where applicable

   e. Types and mechanism of intervention
f. A summary of the clinical course of all follow-up visits

Comments:

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments: Yes

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.

Yes

7. Is the Abstract representative of the case presented?

Comments: See below.

8. Does the case represent a useful contribution to the medical literature?

Comments: Yes

9. Additional comments for the author(s)?

This report has highly suggestive content about infection following total knee arthroplasty caused by clinically rare pathogens. To help readers understand this case, some additional information about the patient and pathogens seems to be needed.

1. Authors described that the patient initially presented with osteoarthritis of the knee (that was the reason for the operation). To show that the diagnosis of this case was a post-TKA infection (prosthetic-knee infection), authors should present evidence indicating that the patient did not have pyogenic arthritis before the operation.

2. Although authors mentioned the resident area of the patient and suspected source of M. bovis infection (contact with animals and drinking of raw milk), if possible, more detailed information about the patient's history of life should be presented (e.g., living environment, vaccination history including BCG, ADL, and history of travel or outdoor activity…).

3. As to the identification of M. bovis, authors also presented only limited information. What methods did authors use to detect M. bovis? Authors should describe the methods and process of identification.
(Minor points)
In line 29 (Abstract), the sentence, "Fungal prosthesis infection is the exception," seems to make no sense in this context. In line 37-38 (Abstract), the sentence, "After 14 month of follow-up no further no further complication has emerged," contains duplicated terms ("no further"). I would like to recommend that authors review the abstract section again and brush it up.

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Needs some language corrections before being published

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Were you mentored through this peer review?

No