Reviewer’s report

Title: Natural history of Mycobacterium fortuitum pulmonary infection presenting with migratory infiltrates: A case report with microbiological analysis

Version: 0 Date: 19 Jun 2017

Reviewer: Varsha Taskar

Reviewer's report:

The authors describe a case of recurrent M Fortuitum lung disease with clinical, radiological and microbiological data with biopsies showing lipoid pneumonia. They also demonstrate identical strains of M Fortuitum from sputum and intestinal fluid. The increased susceptibility of patients with increased esophageal acid exposure to M Fortuitum lung disease is known. The presence of migratory infiltrates and lipoid pneumonia on biopsy in the presence of positive cultures should favor the diagnosis of M Fortuitum lung disease versus colonization seems to be the message of this paper. The persistence and relapse of M Fortuitum lung disease adds an interesting aspect to this case.

2. Major revision: 1. Please consider revising the clinical history of the patient (tabulation/figure) to describe each episode of the infection in more detail including duration of therapy and drugs. This may help the reader understand why the patient remained relapse free after treatment for the last episode (I suspect longer duration of therapy) 2. Were culture sensitivities performed during each episode, was there any evidence of development of resistance. 3. Did the patient continue to smoke? Could this have contributed to his failure to clear his infection. 4. Any gastrointestinal studies or treatments to reduce reflux and any data if available on their association with persistent infection. 5. The primary focus has been the radiological, microbiology and pathology so I do not see much clinical data about the patient - functional status, weight changes. What happens with each episode - fever, cough, sputum. Any inter-current symptoms. This may be useful to add since clinicians may often consider therapy if the patient's clinical status warrants.

3. Minor revision: good discussion about migratory pulmonary infiltrates, consider incorporating radiographic distribution to distinguish infiltrates from underlying disorder versus infective.

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.

Yes

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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