Reviewer’s report

Title: Pseudonocardia carboxydivorans in human cerebrospinal fluid: A case report in a patient with traumatic brain injury

Version: 0 Date: 26 Aug 2016

Reviewer: Tatjana Lejko

Reviewer’s report:

I have several questions and comments:

From the article itself it is not clearly evident what was chronological order of events:

The patient received immunoglobulins, the next lumbar puncture showed better results and the patient was better clinically as well even before receiving antibiotic. There is no mention whether antibiotics were given together with immunoglobulins.

How do you explain normal results of the puncture and positive culture for Pseudonocardia later on; were there any attempts to confirm the pathogen with PCR from CSF?

Meningitis after brain trauma is usually related to neurosurgical procedure or open fracture. This was not the case in this patient. I am interested in pathogenesis of the infection and epidemiology because the ecology of this microorganism is quite specific. At the same time there is question about evolution of the disease, since trauma occurred one month before the admission to hospital and the patient had an episode of respiratory tract infections.

Since the pathogen is really unusual some speculation should be in order.

The conclusion of the article is very bold and it would be better to say that there is a possibility of connecting this microorganism with human pathology.

Minor comments:

sex of the patient (in the text the patient is referred as he but on page 4, line 42 it is written "her body.."

normal laboratory values are missing; CRP in my opinion was only slightly elevated

there are some spelling mistakes of microorganisms -- eg. Citomegalovirus

the results of MR examination should be reviewed

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?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

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

No

**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

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal