Reviewer's report

Title: Mycoplasma hominis necrotizing pleuropneumonia in an immunocompetent adolescent

Version: 1 Date: 6 January 2010

Reviewer: Ran Nir-Paz

Reviewer's report:

In this report Pascual et al. report an unusual and unexpected case of M. hominis bacteremia and empyema in a 15 years old adolescent. This report emphasizes the importance of this pathogen as a causative agent of invasive infections, without an obvious understandable source. This manuscript also intensifies the importance of DNA amplification methods for identifying the pathogen and directing the use of appropriate treatment which would not be considered otherwise.

Major compulsory revision:


Taking into account the presence of at least 4 such cases in the literature, I would recommend the addition of literature review and making the report less anecdotal. This will enable higher appreciation of the subject and somewhat better understanding of the evidence regarding the disease by the reader. An approach using a table for all cases and adding a review of literature paragraph in the results or discussion.

2. I would like to see a bit more detailed information about M. hominis in the introduction. In the recent years much more information was gained and one can quote few recent manuscripts for that. An example might be the fact that this microorganism is the 2nd smallest free replicating bacteria with 537 predicted genes (see Pereyre S Plos Genetics 2009).

3. Diagnostics – complete details regarding the molecular approach for diagnostics including primers, validation of the RT PCR and correlation to copy number is needed. The only time some info is mentioned is in the discussion, and the reference quoted (only in the discussion section) cannot be obtained as it was not published. Additionally, many eubacteria primers will not amplify mycoplasma spp., and thus I would anticipate having a detailed description (including primers and DNA extraction methods) for this approach.

4. I agree with authors that eubacteria PCR is a great tool for identification of unusual pathogens – however to support the claim in the conclusion – they need
to disclose more information on method, and maybe some information on performance of this approach on their institution. Alternatively, this need to be discussed in the discussion section using references from the literature.

Minor essential revision
1. Please mention in the beginning of the case report that we are dealing with a female patient.
2. Do we know if the event in this patient was secondary to sexual intercourse or vaginal manipulation of any kind? Previously it was suggested that similar cases might have been related to delivery or vaginal manipulation.
3. According to the journal policy - informed consent for publication is needed - please clarify this issue with the editor.
4. Figure 1a is redundant and not needed.
5. Page 4 last paragraph – what do the authors mean by surgical tap – is it by thoracotomy, thoracoscopy or by insertion of a chest tube? I would suggest revising this section to be clearer.
6. I would anticipate a more detailed reference list on M hominis associated complications (page 5 2nd paragraph). Authors might like to add a table

Discretionary revisions (author can ignore)
1. First sentence of conclusions – I suggest to change “should be” to “might be”.

Level of interest: An article of importance in its field

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