Reviewer’s report

Title: Successful resumption of tocilizumab for rheumatoid arthritis after resection of a pulmonary Mycobacterium avium complex lesion: A case report

Version: 1 Date: 10 Sep 2015

Reviewer: Michael Parkins

Reviewer's report:

Successful resumption of biological treatment for rheumatoid arthritis after resection of a pulmonary Mycobacterium avium complex lesion: A case report

Namkoong et al present a case report of patient with Crohn's and RA receiving tocilizumab for control of disease who developed MAC Lung infection. It is a reasonably straightforward case report, although confounded by very odd management choices prior to presenting to the MAC team (ie persistent low dose single agent macrolide for small pulmonary nodule?). Lots can be done to improve the description of the case and discussion.

Major pints

1. The monotherapy clarithromycin treatment must better be presented - and it must be made clear that this was neither standard of care nor appropriate. Please clarify here as well that MAC cultures were negative (merely reporting bacterial cultures implies just routine sputum culture and not NTM).

2. What was the treatment response clinically and microbiologically after the three months of medical therapy prior to lung resection (monthly sputum samples showed what)? What was the justification for lobectomy after three months if she was improving or was this refractory to medical therapy with repeated sputum samples? (They only report surgically excised tissue being culture positive at three months). Why not right at diagnosis? Very odd and should be justified.

3. How long was medical therapy continued after surgical excision?

4. The discussion reads; "Because of the negative sputum culture, it was not possible to make a diagnosis of MAC pulmonary disease." They report two positive cultures before hand… MAC disease was dx by ATS criteria.

5. Biological agents is a very non-descript term for many monoclonal antibodies increasingly being developed for control of chronic inflammatory diseases. The authors should be more specific with their terminology through the text as the mechanism of action and resultant degree of susceptibility to infections quite variable.
Minor points;

6. The line numbering of the manuscripts are blurred (I presume one numbering system in their manuscript and another in the journals PDF formation section).

7. Error in the abstract "TCZ was resumed for the exacerbation"

8. Not sure how "multidisciplinary" is relevant here. Multi-modality perhaps (surgical and medial therapy)…

9. Some medications are listed as mg/kg/day whereas others are total dose (without mention of what her weight actually was). Must better clarify especially as atypical doses appear to have been commonly employed.

10. Line 73 - it must be clarified in the text that TCZ was added to the MTX/Pred and not substituted.

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.

Unable to assess

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:

Acceptable

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.

No Competing interests to declare.

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