Reviewer's report

Title: Paradoxical response to disseminated non-tuberculosis mycobacteriosis treatment in a patient receiving tumor necrosis factor-alpha inhibitor: a case report

Version: 2
Date: 18 January 2014

Reviewer: Martyn French

Reviewer's report:

The authors present data on a patient who appears to have experienced a paradoxical reaction to M. intracellulare infection after adalimumab and tacrolimus therapy were ceased as part of the management of disseminated M. intracellulare infection caused by a combination of adalimumab, tacrolimus and prednisolone therapy. The case report is of interest because such cases have not been reported before. However, it requires substantial change to make it suitable for publication.

1. The relationship between ceasing adalimumab and tacrolimus and the onset of the putative paradoxical reaction should be made clearer. The data in figure 2 indicates that it occurred after ceasing adalimumab and tacrolimus but on page, 7 discontinuation of adalimumab and tacrolimus is discussed after discussion of the use of anti-mycobacterial therapy. It is also unclear in the abstract that the paradoxical reaction followed cessation of adalimumab and tacrolimus.

2. In the first paragraph, the authors refer to IGRAs as “serological tests” and anti-MAC antibodies as a diagnostic test for MAC infection. These statements are incorrect. In addition, IGRAs are not used to demonstrate T cell responses against NTM.

3. In the Discussion section, the authors indicate that they do not know why their case developed a paradoxical reaction. One possible explanation is that this case received a combination of TNF inhibitor and immunosuppressant therapies (adalimumab, tacrolimus and prednisolone). Did any other reported cases of NTM infection after TNF inhibitor therapy also receive immunosuppressant therapy? Could the combination of adalimumab, tacrolimus and prednisolone therapy have resulted in a high mycobacterial load that provoked an immune/inflammatory response when the adalimumab and tacrolimus were ceased?

4. In the footnote to table 2, what does “Gaffky No.” mean?

5. Finally and most importantly, there are many grammatical and spelling errors. The manuscript requires editing to improve the quality of the English language, either by the authors or by editorial staff.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

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.