Reviewer's report

Title: Acute Biliary Events During Anti-Tuberculosis Treatment: Hospital Case Series and Nationwide Cohort Study

Version: 0 Date: 08 Oct 2017

Reviewer: Vineel Reddy

Reviewer's report:

This nationwide cohort study "Acute Biliary Events During Anti-Tuberculosis Treatment: Hospital Case Series and Nationwide Cohort Study" by Dr. Chang et al, has reported for the first time the occurrence of ABE due to Anti-TB drug treatment. This study has clinical relevance. I have a few comments which authors can address.

1. Formation of gall stones (Cholelithiasis) is a gradual process which takes years to form. It is hard to believe that it happens within 4 weeks of anti-TB treatment. Possibility is that person is already having Cholelithiasis without symptoms and it might become evident due to assault caused by anti-TB drugs to TB patient.

2. Authors have mentioned the incidence of hepatotoxicity in Taiwan, what is the incidence in world population according to WHO. Authors can consider mentioning it in the manuscript.

3. Authors can mention 2016 TB report instead of 2014 in the first paragraph of introduction. There were 1.8 millions deaths due to TB in 2016.

4. Authors can consider including ethics statement as separate heading in materials and methods section.

5. Between 2010 and 2015, Total of 3936 patients (2704 patients at National Taiwan University Hospital + 982 patients at Hsinchu Branch = 3686 patients). 3936-3686 = 250 patients. What about the missing 250 patients. Authors can check the numbers.

6. Definition of ABE should come before identification of ABE in hospital based cohort study in materials and methods section.

7. Why only 4 cases were chosen for detailed report.
8. Table 2: Authors can mention optimum levels of ALT and bilirubin in healthy people in brackets

9. Authors can add AST data also to table 2.

10. Case 1: In text it was mentioned 1 week post TB treatment and in table 2 it is mentioned 2 weeks. Authors need to check and correct.

   Case 2: In text it was mentioned 4 week post TB treatment and in table 2 it is mentioned 5 weeks. Authors need to check and correct.

   Case 3: In text it was mentioned 2 week post TB treatment and in table 2 it is mentioned 3 weeks. Authors need to check and correct.

11. Authors need to check ALT levels mentioned for case 2 in text and table 2. Numbers are not matching.

   Authors need to check ALT, bilirubin levels mentioned for case 3 (after TB treatment) in text and table 2. Numbers are not matching.

   Authors need to check bilirubin levels mentioned for case 4 (after TB treatment) in text and table 2. Numbers are not matching.

12. Why 19 weeks for onset of ABE was mentioned in case 4 (table 2). I understand that these 4 cases of ABE occurred within 4 weeks of Anti-TB drug treatment.

   Authors need to clarify.
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.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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