Author's response to reviews

Title: Epidemiology and clinical presentation of the four human parainfluenza virus types

Authors:

Wen-Kuan Liu (ahlwk2000-2004@163.com)
Qian Liu (qianliu_in@163.com)
De-Hui Chen (cdh84@126.com)
Huan-Xi Liang (460167002@qq.com)
Xiao-Kai Chen (453340913@qq.com)
Wen-Bo Huang (609790793@qq.com)
Sheng Qin (b96106@163.com)
Zi-Feng Yang (jeffyah@163.com)
Rong Zhou (zhou3218@yahoo.com)

Version: 3 Date: 15 November 2012

Author's response to reviews: see over
Dear Tonilynn:

Thank you for making hard efforts to review and arrange review of our MS-1543378597271418. As you can see from the following “Listed Responses to the Reviewers”, we have revised the MS, and addressed the reviewers’ concerns and made appropriate changes to improve the quality of this MS.

Some changes in the MS have been highlighted with colors; I hope that you will find the revised MS now acceptable for publication by “BMC Infectious Diseases”.

Thank you very much indeed for your time and efforts to arrange all of these and I look forward to hearing a positive reply from you very soon.

Best regards

Sincerely Yours

Rong ZHOU
Prof.
State Key Laboratory of Respiratory Diseases, Guangzhou Medical University
The First Affiliated Hospital of Guangzhou Medical University
E-mail: zhou3218@yahoo.com
Address: State Key Laboratory of Respiratory Diseases, 1 Kang Da Road, Guangzhou, Guangdong 510230, China.
Tel.: +86 20 34282614;
Fax: +86 20 34282614.
Listed Responses to the Reviewers

Reviewer: Robin Brittain-Long

Reviewer's report:
The manuscript has improved following initial revision. Several issues pertaining to the methodology has been clarified, although some still remains to be elucidated. My main concern remains in the conclusions drawn from the analysis of clinical manifestations, and the methods used to achieve this analysis.

Major Compulsory Revisions
1a. please clarify the retrospective study design in the MS. A suggestion would be to include in the third paragraph, Methods section: "Clinical presentations were collected and categorized RETROSPECTIVELY into the following six groups from the patients' medical records using designed presentation cards..."
Response: Done
1b. the reason for excluding some patients (n=308) is not clarified in the MS. Please amend.
Response: We have revised the MS as “Patients with no complete clinical data available were excluded from the clinical data analysis.” in section of Results, Paragraph 6.
1c. OK
1d. OK
1e. OK
1f. OK (see suggestion in 1a)
1g and 2. Please clarify definitions used for the various diagnosis (and clinical syndromes) more clearly in the MS. This is still not clear. What is for example the definition of pneumonia in this study, and how does it differ from bronchopneumonia?
Response: The definitions of the symptoms were added in the paragraph 3 of METHODS section.
Please state if only one symptom is required for a patient to be designated into either of URTI, LRTI, Influenza-like illness etc? This distinction is important since the authors conclude (Discussion; paragraph 5) that "...LRTI was the significant presentation of
HPIV-positive patients...". This would be a controversial finding since previous studies support that the vast majority of HPIV infections are URTI and not LRTI. I suspect that patients on retrospective analysis may have been classified wrongly into the LRTI group, but if this is not the case then this interesting finding should be elaborated on. I also struggle to find the data in the tables or in the MS to support this claim in the discussion (!) If the analysis and findings of clinical manifestations are to remain in its current format then I would at least suggest clarifying the limitations of the study. Enclosed should be that the HPIV-negative group is potentially very heterogenous, that analysis for respiratory bacteria are lacking in both groups and that little is known of co-existing illnesses etc from both groups.

Response:

Thanks for your advice!

Yes, only one symptom is required for each clinical group and we have been described and emphasized that “Some patients were assigned to multiple clinical presentation groups” in the paragraph 3 of METHODS section. And clinical characteristics analysis was based on each clinical presentation but not the groups. In this study, we compared the clinical characteristics of HPIV-positive to HPIV-negative patients, and Significant differences were seen between HPIV-positive and HPIV-negative patients for “Abnormal pulmonary breathing sound” (p<0.001), “Dyspnoea” (p<0.001), “Pneumonia” (p=0.01) which belonged to the LRTI group. We want to give the statistic difference but not initial positive rate. The sentence "...LRTI was the significant presentation of HPIV-positive patients..." here might give the confusing information that HPIV-positive patients present more LRTI than URTI. To make it clear, we have revised as “…, and more “hoarseness” (p=0.015), “abnormal pulmonary breathing sound” (p<0.001), “dyspnoea” (p<0.001), “pneumonia” (p=0.01), and “diarrhoea” (p<0.001) presented in HPIV-positive patients than HPIV-negative patients”.

Minor essential revisions:
1. OK
2. Please present median age instead of mean, and interquartile range instead of standard deviation

Response:
The description has been revised as “The median age were 4.75 (interquartile range, 1.00 to 25.00)”.

3. OK

4. OK. Please add bacteria as well "...Not only HPIV, but also respiratory pathogens untested in this study (e.g. human rhinovirus and common bacterial pathogens) can cause..."

Response:

Done

5. OK

6. See Major compulsory revision, 1g and 2 above. Please also change the last sentence of the last paragraph. It is not grammatically correct. Please explain what is meant by "..therapeutic clue...".

Response:

We have revised as “To explore the clinical features and therapeutic clue of these pathogens infection, more studies are required throughout the world, including epidemiology, immunology, physiology and animal models etc.”

As to "...therapeutic clue...”, this study aims to explore epidemiological features and clinical manifestations of HPIV infections in both children and adults. We want to give some valuable information at the beginning of diagnosis to the patients which in accordance with the feature of HPIV infection, and to provide positive influence for treatment.

7. OK

8. OK

9. OK

10. OK.

11. OK

12. OK

13. OK, see comment 1g and 2 under Major Compulsory Revisions

Further minor essential revisions:

- Table 2. Explanation below table. " * Data are No..... .... some patients had more than xxx diagnosis." I presume the word ONE is missing
Response:
We have added the missing word.
- Results; 4th paragraph. First sentence, beginning with "Sixty-six.... " does not make sense. Please amend.
Response:
We have changed the description.
- Discussion, paragraph 5, last sentence, beginning with "This result suggests..." Please rephrase. A suggestion could be writing ...may differ by patient age as previously shown for HBoV [19].
Response:
We have revised the sentence.

Thanks for your efforts to help revise the MS, we hope the MS now can meet your requirement.