Reviewer's report

Title: Epidemiological and clinical profiles of respiratory syncytial virus infection in hospitalized neonates in Suzhou, China

Version: 0 Date: 24 Jul 2015

Reviewer: Tze Ping Loh

Reviewer's report:

Comments:

This study examined the epidemiology of RSV infections among neonates who were admitted to a large children's hospital in Soochow. The data presented provide useful insight for a relatively under-studied population. The manuscript requires significant rewriting to improve its clarity.

Abstract:

1. Please provide total number of hospitalised neonates with LRI in Results.

Main text:

Methods:

1. Neonates and newborn are used interchangeably in the manuscript but has the potential to mean different age to different people. For clarity, please provide age definition (=<28 days, if this was the case for the study).

2. Please remove "Of all the hospitalized neonates with LRTs, 374 cases were confirmed with RSV." from the Methods section as it is (more appropriately) mentioned in the Results section.

3. Please provide ethics approval reference number.

4. Please provide the reference for the bocavirus and mycoplasma PCR methods.

Results:

1. Please clarify if 'non RSV-positive neonates' referred to neonates infected with viruses other than RSV, or did it include those tested negative for any virus/pathogen as well?

2. Please give the male to female ratio for the 'non RSV-positive neonates' as well.

3. Please summarise the results for all positive NPA (including other pathogens) in a Table.

4. It is difficult to read Figure 2 in its present form. Suggest stacking the line chart on top of the bar chart. The y-axis is too wide for certain parameters and they are compressed too much for meaningful interpretation.
5. Under "Clinical and laboratory characteristics in neonates with RSV infection", please change kilograms to grams.

6. In the same section, when you mention "non-RSV (other virus positive) neonates", did you mean single infection with other respiratory virus or other co-infections without RSV? From the n =32, it seemed to suggest the latter case. I would be surprised if there had been only 32 non-RSV-related infections for the study cohort.

7. Table 3. Please specify what were the underlying conditions collected for the purpose of this study in the Methods section. Not all underlying conditions may be relevant to RSV infection and the inclusion of them may be misleading.

8. Were the laboratory parameters performed at presentation or any time during admission? Similarly, were the symptoms/signs collected at presentation or any time during admission?

9. What is the significance of AST and CK-MB in patients with RSV infections?

10. Since disease severity was not otherwise described in detail in the Methods section, please change "disease severity" with "NICU stay".

11. Please keep percentages to single decimal place.

12. Please describe the climate conditions during which RSV activities peaked.

13. Please clarify who interpreted the chest radiographs.

Discussion

1. Please discuss in greater details the difference between your study and the Tunisian [ref 10] and Netherland [ref 11] studies. E.g. age of neonates, inclusion/exclusion criteria, underlying condition, climate factors etc.

2. How often was mycoplasma detected alone without RSV? Should not generalise the finding of co-infection of RSV and mycoplasma (8/1803, 0.4% of total study population) as it being an important cause of lower respiratory tract infections among neonates.

3. Another factor why older neonates may have increased risk of RSV infection is the waning of passively derived maternal antibodies.

4. Both temperate (Discussion, para 2, second last sentence) and subtropical climates (Discussion, para 3, third last sentence) have been mentioned for Suchow, please clarify which is the correct description.
Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

No

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 recommend additional statistical review

Quality of written English

Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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