Author’s response to reviews

Title: Impact of early detection of acute invasive fungal rhinosinusitis in immunocompromised patients

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Re: BMC Infectious Diseases – INFD-D-18-00532R4 – Impact of early detection of acute fungal rhinosinusitis in immunocompromised patients

We are submitting a new version of the manuscript, according to reviewer’s comments:

Reviewer reports:

Reviewer 1:

Please re-check the statistical calculation of the sensitivity and specificity. As the paraffin-embedded biopsy (FFPE) is the reference standard, the sensitivity (from Table 1) is the
calculation of True positive (TP) / (TP+False negative), and Specificity is TN / (TN+FP). So the Sens from this study should be: 29 / (29+3) = 90.6%, and Spec should be: 8 / (8+3) = 72.7%.

So the discussion in the manuscript should be revised according to the primary research question, which is the sensitivity and specificity. And the implementation (external validity) will be followed from this issue as well.

We would like to thank the reviewer for seeing this mistake, and the Results and Discussion sections were corrected accordingly. We apologize for this mistake…

Reviewer 2:

GENERAL COMMENTS: This study elucidates a lot of what is already known about this disease and its work up and treatment, but it addresses the issue in a comprehensive and systematic way.

We would like to thank the reviewer for this comment. This was the main reason why we decided to write this article.

REQUESTED REVISIONS: The interpretations are reasonable and useful, but from a scientific perspective, it would be useful if they included in the discussion how their algorithm led to more favorable results than their previous experience with a less differentiated decision-making process. In other words, what were the quantitative improvements in mortality or disease-free status?

After we implemented this algorithm in our routine, we could decrease the mortality rate in our population in 20% (from 50 to 30.2%). This comment was highlighted in Discussion section, as a final message, to stress the importance of shortening the time to diagnose this entity.

ADDITIONAL REQUESTS/SUGGESTIONS: The manuscript highlights that a high index of suspicion is necessary and should precipitate aggressive pursuit of the diagnosis, even when
other objective data such as the CAT scan are fairly unremarkable. Although this is already somewhat known, it is useful to stress this in the setting of a respective review of a series of patients with this complicated morbid disorder.

Yes, this is exactly the main message of this article. We highlighted this information in Discussion section.

We would like to thank the Editor and the Reviewers from their careful evaluation of our manuscript, and we hope that it can be now considered for publication in the BMC Infectious Diseases.

Thank you very much for this opportunity