

Dear editor,

Our thanks to you and the reviewers for the useful comments, and for the opportunity to submit our revised manuscript.

We have adjusted the manuscript according to your remarks, including the title page, article highlights and references.

The manuscript has been read and corrected by an English language editing company.

As to the reviewers comments, we have made some additions and improvements (changes are marked in yellow):

1. "The 52 patients cohort may not be representative of the target population, thus I suggest to compare baseline characteristics between the included 52 patients and the excluded 31 ones. because the target population should be patients suspected to have PJI. furthermore, the definition of inclusion/exclusion criteria were not explicitly specified. this is important for the results to be generalized to other populations."

Thank you. We have added the details of the excluded patients to table 1. Also, we have added the following line to the materials and methods section:

Exclusion criteria were: significantly incomplete medical record data (e.g. missing culture results, unavailable data on surgery performed elsewhere), aspiration of other arthroplasty than THA or HA, unavailability of ADLF test (not performed or missing data).

2. what is the indication for performing ADLF in your institution, as a significant number of patients did not have this test; this can introduce selection bias is not properly addressed.

3. "and excluded if medical record data were incomplete."---this description is vague; what did you mean by incomplete? what is incomplete; will a patient with missing value on age or gender be excluded? furthermore, there are sophisticated methods to deal with missing data. suggest to discuss this as a limitation by citing some useful reference (Ann Transl Med. 2016 Jan;4(1):9. doi: 10.3978/j.issn.2305-5839.2015.12.38.).

Thank you for the useful remark. Indeed, selection bias is difficult to avoid in small retrospective studies like ours. We have tried to explain in more details why the test was not always performed. The incomplete data comment has been addressed above, with the addition to the materials and methods section.

Furthermore, we have added the mentioned reference to the discussion section:

Furthermore, the ADLF test was not performed in all patients that underwent aspiration, mostly due to insufficient amount of aspiration fluid or bloody fluid aspiration. Therefore, selection bias may have occurred. Although several statistical methods exist to address missing data, we believe these are more useful for big data trials than for this retrospective study^[19].

We would like to thank you for this opportunity.

Sincerely,

also on behalf of Pieter Pander and Stan Vos

Jesse Kuiper

Dear editor,

In addition to the changes we previously made, we now changed figure 1-3 in table 1-5, as per your suggestion. The original tables have been changed from 1, 2 and 3 to 6, 7 and 8; figure 2 has been changed to figure 1.

The new manuscript file including all tables and powerpoint file with the figure have been uploaded.

With best regards, Jesse Kuiper