Peer Review File

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Reviewer A#

1. In the abstract: Conclusion- "should be based on the development of the glans..." Does this study provide any evidence that this is the case? You write that you found no significant difference in the two groups regarding glans diameter. Was there a difference in glans size between those with complications and those without? In that case this should be shown in results. Otherwise, although it might be true, this statement should not be the conclusion of this study, or at least stated with the reservation that, "although we could not show it in this study, we believe..."
   Response: Thank you for your remind. There is a lack of the solid evidence supporting the development of the glans in this case from our study, which was summarized by our clinical experience. We have corrected the statement in the abstract (See Page 4, Line 54-59).

2. Ref 1 is a very old reference. The incidence is variable in different parts of the world. What's the incidence in China?
   Response: Thank you for your comments. We have noticed this issue, and replaced it with an updated one, as well as the statement of the incidence of hypospadias in China (See Page 5, Line 66-68).

3. It is mentioned in the discussion, but I miss the information in results: was there any difference in results according to age at surgery?
   Response: In the section of Results, the statement of basic characteristics of patients in our study was missing, which was shown in Table 1. According to the statistics, there was no significant difference of age between two groups. We have complemented the describe of baseline characteristics of patients in the section of Results (See Page 8, Line 142-151).

4. Follow-up of 2-53 months. Two months seems rather short to determine if there is a stricture. Also, I assume the 2-stage group were the ones operated last (a change in practice at your centre?) so the 1-stage group with more complications had a longer follow-up? May I suggest to add time for follow-up to table 2. It is a bias. Some complications develop late and the need for a re-operation may show more than 10 years after primary surgery (recurrent curvature, stricture, cosmesis). Even a fistula-formation may be missed at a 2 month follow-up and be visible later on.
   Response: Thank you for your remind. We have added the data of follow-up in two groups in the Table 1, and no significant difference was observed ($P > 0.05$), which means the follow-up duration may not contribute to the final comparison results in Table 2. Moreover, the reason of including the case with 2-month follow-up is that, according to our individual experience, most complications were

reported within the first month after the surgery. For the urinary fistula issue, all reported cases in our study were observed in the first month after the removal of catheter. Finally, we feel so appreciated for your comments of long-term follow-up in our study. The further exploration and analysis of two-stage repair surgery will be based on the long-term follow-up (mostly more than two years), which has been on the way enrolling the patients and collecting the data.

5. Row 145 Perhaps another choice of word than formidable? Discouraging?
   Response: Thank you for your remind. We have replaced the “formidable” with “challenging” (See Page 9, Line 172).

6. Row 147 In 1980 - not 1908! Also, just a word of caution that a plication might shorten an already short penis, which is of great concern for the boys growing up.
   Response: We have corrected the word of “1908” into “1980” (See Page 10, Line 174). Again, thank you for your remind. We have noticed this issue, and further extensive study concerning this issue has been on progress.

7. Row 163 "The majority of scholars preciously thought that the urethral plate was previously thought as underdeveloped and therefore should be excised, thus TPIF alone was used in urethroplasty."->The majority of scholars previously thought that the urethral plate was underdeveloped and therefore should be excised, thus...
   Response: We have revised this sentence here (See Page 10, Line 190-191).

8. Row 174-192 describes the results of a previous (interesting) study in very much detail. It could be summarized and referred to as a reference.
   Response: We have simplified this paragraph by deleting the very detailed describe of the previous references (See Page 10-11, Line 190-200).

9. Row 197 perhaps change "application" to "practice"?
   Response: We have corrected the word of “application” into “practice” here (See Page 10, Line 214).

10. Row 205, 207 Terminology: as I understand it, a flap is with a pedicle (vascularized) and graft is a "dissociated flap" ie without the pedicle. Perhaps good to use "preputial flap" and "preputial graft" throughout?
    Response: Thank you for your correction. We have unified the “preputial flap” and “preputial graft” in the whole manuscript according to your comments (See Page 12, Line 222, 224; Page 21, Line 421).

11. Row 229 This makes sence. Since a diverticula or a fistula often develops due to a distal stricture - if you leave a proximal "fistula" during healing, this won't happen. Still, the distal neourethra could possibly be narrow but healed well. Do you have any postoperative uroflows? How do you know there was no stricture?
    Response: Thank you for your comments. In this study, we did not observe any

postoperative uroflows. To identify the post-operative stricture, the urinary stream of each patient would be observed during the hospitalization, as well as in the outpatient clinics.

12. Row 236 In my understanding, the way the Duckett procedure is used nowadays is simply transecting the plate, not removing it, and anastomosing the preputial flap to it.
    Response: We appreciated for your comments, and your understanding here is the same meaning of this sentence.

13. Row 252 Defined how? Calibration? Uroflow?
    Response: Firstly, the “urinary fistula” should be corrected to be “urethral fistula” in this sentence. We have made the correction (See Page 14, Line 268). Then, the urethral fistula after the surgery should be defined depending on the width of fistula: the larger one could be visualized directly during the removal of the suture; on the contrast, the tiny one could be observed by the uroflow during the urination.

14. Row 252-256 Move to result-section or at least, make sure to mention also in result section.
    Response: We have moved the statement here to the section of “Results” (See Page 9, Line 165-169).

15. Row 285 " a more severe"
    Response: We have replaced the word by “a more severe” (See Page 15, Line 298-299).

16. Row 291 Is there a reference for this?
    Response: We have added the reference here (See Page 15, Line 305).

17. Row 297 width instead of breadth
    Response: We have replaced the word here by “width” (See Page 16, Line 310).

18. Several references are 20 years old. There are newer ones. For exemple regarding complications after the Duckett procedure: Hueber 2016 and Andersson 2020.
    Response: Thank you for your remind. We have replaced the old references with the updated ones (See Page 18-19, Reference 4-6).

Reviewer B#

The authors report their outcomes with a technique that utilizes the transected urethral plate in children with severe hypospadias. I applaud their work and extensive literature review and have no objections to publishing this manuscript as it is.

That there is a myriad of hypospadias repair techniques is testament to the fact that no

perfect repair exists. Nevertheless, the principle of preserving the urethral plate when possible is certainly a valuable addition to the literature and one that should be explored further in the future.

Response: We feel so appreciated for your comments! Indeed, there are several surgical techniques for the treatment of hypospadias which seems to be optimal for certain cases. However, limited to the task of this study, we only compared two surgical methods here. Further extensive study has been carried out to include more surgical methods in the second-stage period.