Peer Review File
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Review Comments
Reviewer A

The structure of this paper appears to be rehashed by existing review papers on PD and inflatable penile prostheses. The content is not innovative nor provides readers with useful information regarding surgical algorithms or troubleshooting such as when to employ the various adjunctive surgical tricks such as remodeling vs plication vs graft reconstruction - what are the sequence and when to decide which is the optimal option.

Reply 1: Thank you for this constructive comment. The article was an invited "review article" summarizing the different management options for PD in IPP placement. As such, we feel we accomplished this task. We have added a decision tree on page 5 paragraph 1 to serve as a helpful algorithm. Ultimately, there are many options that all work for the same patient (plication, modeling, plaque incision, etc) to give an outstanding result, and the decision tree will rest with what the surgeon is most comfortable performing based on experience and training.

Reviewer B

Overview: In this well written review, the authors highlight the role of IPP placement in management of patients with both peyronie's and ED. They do an excellent job covering literature regarding adjunct procedures and IPP approaches

Major revisions before acceptance:
Please identify and include images of the different adjunct techniques, this will improve readability of the paper and its impact on readers.

Reply 2: Thank you for this helpful comment. This was an oversight in the original submission. We have added images of several adjunctive techniques discussed, to improve the readability of this paper, including modeling, PIG, PEG, MoST, and MuST. Please see images on pages 4, 5, 8, 9, 10, and 11.

Consider using the data highlighted for adjunct procedures to create a decision tree/flow chart
- based on curvature, complication rates, etc are there maneuvers that your group would recommend more based on patient characteristics
- Ultimate decision making will of course be by the surgeon but would be helpful for young urologists/fellows to be able to see what they should consider for different patient groups

Reply 3: Thank you for this excellent suggestion which will strengthen the paper. We have created a decision tree which can be found referenced on page 5, paragraph 1. We believe this will serve as a helpful algorithm.

Finally while the review is focused on IPP, consider adding a paragraph or few sentences on malleable implant and which patients who are not candidates for IPP (due to neuropathy, decreased grip strength, etc) could still help achieve functional sexual status using malleable.

Reply 4: Thank you for this suggestion to strengthen our paper. We have added a third paragraph discussing this point under the patient selection section on page 4.

Abstract:
Consider categorizing ED (moderate/severe?) as patients with mild ED responsive to oral PDE5i may not be the ideal candidate to progress directly to IPP
- This is highlighted in your indications paragraph but may be helpful for readers to see in abstract as well

Reply 5: Thank you for this thoughtful suggestion. We have added the qualifiers such as “moderate to severe” and “refractory to standard medical therapy” for which type of ED is best treated using IPPs. This has been added in the abstract on page 2 and the conclusion on page 14.

Modeling:

“with care taking place to lift up and bend” – Having seen and performed modeling numerous times I know what you are suggesting but can you reword this to make it more clear for readers? It may also be helpful to identify or include an image showing modeling technique as a figure (esp one showing the glans pressure to aovid perforation)

Reply 6: Thank you for this comment. We have altered this section on page 5 to clarify to the reader and including both an illustration and a real time operative photo of modeling for the reader.

“They later applied this method to patients undergoing IPP implantation and found it to be successful.[26] This technique allows for an IPP to be inserted through the same incision used for plication, reducing potential surgical trauma from multiple incisions.[26]” Please expand on type of incision, sub-coronal?

Reply 7: Thank you for your comment. We have revised this section of the paper on page 6 under Penile Plication to clarify that this is a penoscrotal incision being used.

Consider moving “scratch” technique to separate section unless the authors suggest that scratch technique should be accompanied by modeling after placement
Reply 8: Thank you for this comment. The “scratch” technique is discussed in the adjunctive section on page 7, as a novel method, as well as in the infrapubic surgical approach section on page 12. The reason for this is to discuss the technique in the context of adjunctive measures, such as modeling, and also in the context of how the IP approach may be beneficial to deploying the “scratch” technique.

PEG/PIG:

Similar to modeling, please include figures demonstrating the grafting and sliding techniques to help the reader follow along with your description

Reply 9: We have added these pictures to the paper.

Have other authors highlighted the role of modified H incision typically used in incision/grafting for combined cases OR as sequential procedures?
https://www.nature.com/articles/s41443-020-0312-y

Reply 10: We appreciate your comment. We have added this citation, and a discussion of the findings to the paper on page 8 paragraph 4 in the discussion on grafting in Peyronie’s.

Would be helpful to highlight that another decision point for surgeons is whether to do this as an adjunct procedure vs stagger cases, particularly with graft cases as the added time in the OR has theoretical risk of increasing risk of infection of IPP

Reply 11: Thank you for this suggestion. This is a good point that does often come up in more challenging case with experienced surgeons. The reason we chose not to add another section on performing procedures in one setting versus staggering is that even in the experienced hands, many surgeons take about 3-4 hours to do a complex plaque excision and grafting technique with IPP placement in a single setting and as such we feel where able, a single setting operation is best. We have certainly had our own complex cases where the need arose to bring the patient back for another day, but feel this discussion is outside the scope of this paper for an all-inclusive review article on adjunct procedures for Peyronies during IPP.

Peno-scrotal:
“Postoperative scrotal swelling is a potential complication of the PS approach, and the resultant pain may result in a delay in device activation. [44] “ This the most common complication, really should be expected side effect of surgery but in literature swelling/bruising are still listed as complications. as noted impacts time to device activation

Reply 12: Thank you for this comment. We have edited the paragraph to reflect these changes in wording. (Page 11 paragraph 2, under Penoscrotal approach).

Conclusion:
Similar to with the abstract, please clarify what kind of ED with PD should be addressed with IPP as the gold standard.

Reply 13: We appreciate this suggestion. We have made this revision in our paper in the abstract as well as the conclusion.

Reviewer C

Well written review - hits the high points in terms of adjunctive measures at the time IPP and PD correction

Reply 14: Thank you for your time and consideration in reviewing our article.

Reviewer D

Well written article with correct focus on different surgical techniques used for Peyronie's disease treatment with concomitant ED.
The surgical approach paragraph of the manuscript sounds slightly redundant and could have been more focused on the techniques related to IPP in patients with PD. Paying more attention to pros and cons of each approach when approaching Peyronie's disease, rather than explaining the whole technique, could give an interesting final touch to an already good manuscript._

Reply 15: Thank you for your comment. In order to focus the paper more on IPP in PD specifically, a significant portion of the surgical approach sections, including the IP, PS, and SC sections, has been rewritten. These changes can be found on pages 10-13 We have added decision trees for patients with particular characteristics to page 5 paragraph 1. In addition, a table with the pros and cons of each surgical approach in regard to PD can be found referenced on page 13.