Peer Review File

Article information: https://dx.doi.org/10.21037/tau-23-224

Review Comments Reviewer A

The authors have submitted "Penile Prosthesis in Priapism: Outcomes and Complications" for review.

ABSTRACT: No issues

INTRODUCTION:

Comment: Mention of IPP placement in stuttering/recurrent priapism represents a different cohort of men and should not be included in this analysis. Reply: Thank you very much for reviewing this manuscript. This has been removed from analysis.

MATERIALS AND METHODS: No issues

RESULTS:

Comment: The quality of the manuscript would be enhanced if the authors compared the outcomes of IPPs implanted after priapism and those that are routinely implanted. The readers understanding how the infection rate, operative time, satisfaction, and malfunction rate differs between these two groups would improve the impact of the manuscript.

Reply: Thank you for the comment, we do acknowledge the interesting research question you propose. In this manuscript, we have decided to focus on penile prosthetic outcomes for priapism. We do feel the comparison between the routine penile prosthetic implant and penile prosthetic implant for priapism is outside of the scope of the manuscript and better addressed in a separate manuscript if the reviewer desires.

DISCUSSION:

Comment: A discussion of the differing rates of infection, erosion, and malfunction between IPPs in priapism and routine IPP's should be included. Reply: Thank you for your review of the manuscript. This has been addressed to the best of our ability; however, we have decided to focus this manuscript on the use of IPP for priapism.

CONCLUSIONS: No issues

REFERENCES: No issues

Reviewer B

This review is trying to answer the question about penile implant safety in patients who had priapism taking in consideration timing and type of implant. The authors correctly pointed to the issue here: lack of consensus among the studies on what constitutes immediate versus late implant, the difference in reporting of patient satisfaction and outcomes, and no long term follow up comparisons.

Below are few edits that may be clarify some items (by line numbers) for this well written article.

87 need to add: "in absence of sexual stimulation"

115- 117 consider rewording: "When ischemic, low-flow, or veno-occlusive priapism fail conservative—corporal fibrosis"

142 remove "posterior"

167 Consider adding in the text the total number of patients (with percentage) in figure 2, to compare immediate vs delayed implant , and same for figure 3

191 change to "bending"

218 consider "expanding the corpora requiring extended/multiple corporotomies and use of special tools,"

195 Need to elaborate on the infection rates in early versus the delayed penile implants in different studies (may consider separate graph) since this is one of the major concerns for immediate placement after attempts to treat priapism.

Reply: Thank you for your recommendations. We have made the suggested edits to enhance the clarity of the manuscript.

Reviewer C

The authors sought to perform a comprehensive review of available data on the implantation of penile prosthesis in setting of refractory ischemic priapism. The review goes into details of early vs. late implantation and different outcomes, but the reader may have a difficult time seeing the forest from the trees. The way the review paper tells the story, the reader is pulled in different directions.

Reply: Thank you very much for reviewing this manuscript. We do acknowledge the challenges of writing a manuscript in this area given the lack of robust data, however we attempted our utmost effort to gather all published data in this area and highlighting the outcomes, timing, and surgical challenges.

Introduction:

- Much of the introduction focuses on the different types of priapism rather than discuss the rationale behind surgical implantation of penile prosthesis in a refractory case. Why do AUA guidelines recommend this? When did the recommendations change? Is this the case in other societal guidelines? Are there arguments for or against early/delayed implantation? (Further details of this may be fruitful for the discussion section as well)

Reply: Thank you for reviewing this manuscript. We have referenced the guidelines from the AUA (American Urological Association) and EUA (European Urology Association) concerning the management of priapism in our introduction

and discussion. Additionally, we have provided in-depth elaboration on the recommended key points.

The authors make a statement in line 132 that surgical management can be extremely challenging - the authors could further elaborate on this within the introduction. - Can the authors place a reference for the statement in line 122-123.

Reply: Thank you for reviewing this manuscript. We have added to this section with appropriate references.

Methods:

- was the 2002 date an arbitrary start date or the first available study on penile prosthesis for the management of priapism

Reply: Thank you very much for reviewing this manuscript. Yes, 2002 was the date of the first study that we identified per our screening criteria that provided data on outcomes and complications with regards to penile prosthesis for the management of priapism.

- The authors discuss the outcomes of satisfaction rate, sexual intercourse achievement and penile length. Were these the primary outcomes? or was the comparison of early vs. late the primary outcomes? The results focused a lot on determining early vs. late penile prosthesis. The introduction mentions that the surgical management can be extremely challenging - if that's the focus, should there be different primary outcomes such as intra op and post op complications, operative time duration, etc.

Reply: Thank you very much for reviewing this manuscript. Indeed, we acknowledge that various studies have different definitions of early/late implantation timelines, leading to variations in the reporting of primary outcomes. This suggestion has been incorporated into the manuscript. To enhance the comprehensiveness of our study, we have made the decision to include all relevant papers that report any outcomes, regardless of whether they are classified as primary or secondary outcomes. By doing so, we aim to provide a more inclusive report of the subject matter.

Results:

- Line 160 - 161: this info should not be in results as it is not a result.

- Line 162-163: would move to discussion section as this is an interpretation

- Line 171 - 172: authors state that overall studies show a higher satisfaction rate - it was not clear what this was being compared to.

- Can the authors clarify how the measurements were assessed for length along with the girth? Were the girth sizes utilized the measurement of the cylinders that were utilized?

- Line 191: unclear what the authors meant by "pain on pending".

- Line 193 - 195: can the authors provide objective percentages?

- Line 197 - 199: what were the overall satisfaction rates? the authors mention higher satisfaction rates but there are no comparisons between the two types.

Reply: Thank you for your review of the manuscript. These edits have been addressed to the best of our ability.

discussion:

- authors initially mentioned in the introduction three types of priapism and then refer back to 2 types of priapism in discussion

- Line 210 - 211: authors mentioned the injection of alpha agonists x 2

- no discussion of more contemporary use of penoscrotal decompression

- consideration of rewording "virgin erectile dysfunction patients"

Reply: Thank you for your review of the manuscript. This has been addressed.

Figure 3: needs axis labels and a title

Reply: Thank you for your review of the manuscript. This has been addressed.

Table 1:

- should include a key/legend for all the abbreviations present Reply: Thank you for your review of the manuscript. This has been addressed.

Other:

Consider these papers: Broderick GA, Harkaway R. Pharmacologic erection: time-dependent changes in the corporal environment. Int J Impot Res 1994; 6: 9–16

Muneer A, Minhas S, Freeman A, Kumar P, Ralph DJ. Investigating the effects of high-dose phenylephrine in the management of prolonged ischaemic priapism. J Sex Med 2008; 5: 2152–9

Reviewer D

nice paper summarising penile implants in priapism

You also need info on when shunts were performed, in relation to time of implantation to see if complication rates increase

Also perhaps do some cumulative data rather than just stating the papers

Reply: complications- ipp vs malleable

2. satisfaction

complications vs time to implant, early, 3 weeks, 6 months

3. shunts/types vs complications

Reply: Thank you very much for reviewing this manuscript. We have noted your observation regarding the absence of specific details on the timing of shunt procedures in relation to implantation time, which unfortunately hinders our ability to analyze how complication rates may vary based on this variable. Considering the diverse reporting of outcomes among the individual papers, we agree that it is most appropriate to present each paper's outcome in a comprehensive manner. Attempting to subdivide individual outcomes would be more suitable for a separate manuscript, as it would require an in-depth analysis and might not be adequately addressed within the scope of this current work.

Reviewer E

A comprehensive review of the strengths and limitations of penile prosthesis surgery in the context of priapism.

Reply: Thank you very much for reviewing this manuscript.

Reviewer F

interesting paper

Reply: Thank you very much for reviewing this manuscript.