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Review Comments <u>Reviewer A</u>

<u>Comment 1:</u> This is truly an excellent paper, and it covers both what is known in our field as well as what remains unknown and the pertinent findings from other fields. I would only suggest revising the text once more to assess for minor grammatical errors. Otherwise this is phenomenal work and I commend the authors on their excellent review of this topic.

<u>Reply 1:</u> Thank you for your review of our manuscript. The paper has been reviewed for grammatical errors and edits have been incorporated.

Changes in the text: Please see responses to Reviewer C.

Reviewer B

<u>Comment 1:</u> The paper is a well written but overall brief literature review that does not incorporate too many objective data regarding the barriers for salvage IPP. That being said, this paper provides a nice broad scale summation of salvage IPP limitations that may be of benefit to both patients and primary care providers.

The methods section would benefit from more detail regarding how many studies were collected / assessed. This could be in the form of a diagram that starts with how many studies were included and how many were excluded (explaining why studies were excluded) or simply an in text brief summary

<u>Reply 1:</u> As very limited literature exists that specifically addresses the barriers to the utilization of penile prosthesis salvage, a systematic review of the literature was not completed. As such, a detailed diagram outlining included and excluded studies cannot be provided. We have provided more detail regarding our search strategy and selection process in Table 1 and Supplementary Table 1. Some included material is author opinion and expert opinion, which is described within the methods section.

<u>Changes in the text:</u> Addition of Table 1 and detailed search strategy of PubMed as an example in Supplementary Table 1 (page 5, line 138; page 14, Table 1; Supplementary Table 1).

<u>Comment 2:</u> Lines 167-169, Please elaborate on what the effectiveness was in the study "Razdan et al. recently showed the effectiveness of IS/MIST washout with a single solution (Irrisept (chlorhexidine gluconate)) in a limited series (23)"

Reply 2: The text has been updated to include more details on this study.

<u>Changes in the text:</u> Sentence changed to: Razdan et al. recently showed that IS/MIST washout with a single solution (Irrisept (chlorhexidine gluconate)) is effective, demonstrating a 100% success rate with no erosion or reinfection in a limited series of 4 patients (23). (page 6, lines 174-176)

<u>Comment 3:</u> Lines 186-189, I do not believe many urologists who both perform or don't perform regular salvage or general infected IPP removal would consider that clinical situation an emergency that requires an overnight OR. Would recommend amending the wording to soften the

tone on this barrier to align more with the tone in Lines 241-267.

<u>Reply 3:</u> We agree that this portion of the text comes across too harshly. While there are likely few urologists who would operate on a stable patient with an infected IPP overnight, we do feel that many urologists who do not routinely manage these complications misinterpret the urgency of intervention. Furthermore, we find this barrier important to note as many of our colleagues (ED, IM, general surgery, etc.) assume that infected hardware translates to a leveled OR case and may pressure the urologist to intervene at inopportune times.

<u>Changes in the text:</u> Softened wording as recommended, substituting urgently for emergently and removing mention of overnight intervention. (page 6, line 180). Additional changes were made to the wording of the following paragraph to agree with these edits (page 7, lines 187-188).

<u>Comment 4</u>: Please comment on if any noticeable difference was noted in frequency of the IPP brand that was more commonly used as the replacement in the setting of salvage IPP <u>Reply 4</u>: To our knowledge, there is no literature reporting the frequency of the brand used for IPP salvage. Given the increased use of the MIST procedure in the last 20 years, the majority of literature reporting salvage with an IPP replacement was published several decades ago. Even within this literature, replacement brand is not consistently reported.

Similarly, the national utilization patterns of MPP brands are also unknown. More recent literature on MIST does tend to report the brands used in their cohort (usually a breakdown of AMS and Coloplast, although Rigicon is also available in the United States), however, this cannot necessarily be extrapolated to a wider population.

<u>Changes in the text:</u> Added information regarding the available MPP brands and commented that their relative frequency of use is unknown. (page 8, lines 213-216).

Reviewer C

<u>Comment 1</u>: Line 96, 97, 113, 115, 160 - typo. Should be "prosthesis." This is a proofreading error. <u>Reply 1</u>: This typo has been corrected.

<u>Changes in the text</u>: Typo corrected (page 2, line 75; page 3, lines 98,99; page 4, lines 116, 118; page 6, line 167; page 15, Table 2)

<u>Comment 2</u>: Lines 97-99 - There should be a more recent reference for infection risk in penile prosthesis after 2007.

<u>Reply 2</u>: A more recent publication from 2023 was added to further support the reported infection rate.

Changes in the text: Reference added. (page 3, line 101)

Comment 3: Line 104 - please give percentage.

<u>Reply 3:</u> We have included that reinfection rates following immediate salvage are low at <10%. This is also discussed more specifically in the Medical/Surgical Barriers section (page 9, lines 242-245).

Changes in the text: Added percentage and additional supporting reference. (page 3, 107)

<u>Comment 4:</u> Line 105- MIST must be spelled out as it is the first use in the manuscript. <u>Reply 4:</u> MIST is now spelled out as malleable implant salvage technique within the manuscript. <u>Changes in the text:</u> MIST was changed to malleable implant salvage technique (MIST). (page 3, lines 107-108)

Comment 5: Line 107 - how did MIST challenge dogma?

<u>Reply 5:</u> MIST has been shown to be successful in patients who would historically have been excluded from immediate salvage. As discussed by Chandrapal et. al. (11), this expanded salvage criteria includes patients with exposed hardware, tissue necrosis, purulence on the device, purulent infections in diabetic patients, or severe diabetes. The manuscript currently states that dogma was changed surrounding contraindications to immediate salvage, which can be further expanded upon by the referenced articles (Chandrapal and Gross). We are glad to further describe this in the introduction but worry that it may lengthen the introduction without significant benefit to the reader.

Changes in the text: N/A

<u>Comment 6:</u> Line 119- A clear sentence with the hypothesis would be appreciated. <u>Reply 6:</u> A hypothesis statement has been added to the end of the introduction. <u>Changes in the text</u>: Added, "Herein, we describe the etiology of and possible solutions to these barriers while broadly categorizing them as institutional, medical/surgical, or relating to patient preference." (page 4, lines 123-124)

<u>Comment 7:</u> Methods- TAU usually requires a complete breakdown of number of studies included as per their reporting guidelines and checklist for a narrative review. Please verify this and include all of the information in a table. "Date of search, Databases and other sources searched, Search terms used, Timeframe, Inclusion criteria, Selection process."

<u>Reply 7</u>: In accordance with editorial comments we have made editions to the methods section and added Table 1.

<u>Changes in the text:</u> Added search strategy as Table 1, which is referenced within the methods section. (page 5, line 138; page 14, Table 1)

<u>Comment 8:</u> Line 180 - I am not sure why "OR" (operating room) is defined here versus earlier in paper, which is the first time it should be utilized.

<u>Reply 8:</u> OR is now defined at its first appearance in the manuscript and is simply "OR" for the following occurrences.

<u>Changes in the text:</u> Operating room changed to OR on line 180 and defined at the initial use in the text. (page 4, line 115; page 6, line 180).

Comment 9: Line 181 - needs reference

<u>Reply 9:</u> The tone of the previous version of line 181, "surgeons often misinterpret infected PP/IS as an indication for emergent operative intervention," has been softened in accordance with Comment 3 from Reviewer B. Additionally, references have now been included that discuss the correct indications for urgent operative intervention in the setting of an infected PP and the common misunderstanding of the proper timing of salvage among some urologists. Overall, there is a speculative tone to this statement that should now be more accurately conveyed in the text. <u>Changes in the text:</u> Softened wording of the sentence and added references as requested. (page 7, line 188)

<u>Comment 10:</u> Line 182 - typo, should be "has been" <u>Reply 10:</u> The typo has been corrected. <u>Changes in the text:</u> "Has be" changed to "has been". (page 7, line 189)

<u>Comment 11:</u> Line 189- if you are going to say this statement, you would then have to support how urologists have managed the infected penile prosthesis non-operatively, though I am sure many would still perform explant in certain circumstances. This point needs more elaboration. <u>Reply 11:</u> Thank you for identifying this deficiency. The goal of this portion of the manuscript was to conjecture that urologists may be more likely to continue with explantation alone, rather than IS. However, your point is well taken. In addition to clarifying the initial point, the option of conservative management with long-term antibiotics is now also briefly discussed. <u>Changes in the text:</u> An additional sentence was added to clarify the point discussed above. A brief discussion of conservative management of PP infection and how this may contribute to the barrier of insufficient OR availability was also added. (page 7, lines 196-200)

Comment 12: Line 193 - "MPP" needs to be defined

<u>Reply 12:</u> We believe MPP is defined in the manuscript within the introduction on line 109. <u>Changes in the text:</u> N/A

<u>Comment 13:</u> Lines 200-202 - The authors can mention that it would be more helpful to have the smaller sizes available due to risk of encountering intra-op fibrosis that would preclude placement of a larger malleable penile prosthesis.

<u>Reply 13:</u> This is a useful tip that would be helpful to the reader. It has been incorporated into the manuscript.

<u>Changes in the text:</u> Added discussion of the availability of multiple diameters of MPP and the utility of smaller diameters in the setting of corporal fibrosis. (page 8, lines 210-212)

<u>Comment 14:</u> Line 206 - should be "others" <u>Reply 14:</u> The typo has been corrected. <u>Changes in the text:</u> "Other" changed to "others." (page 8, line 221)

<u>Comment 15:</u> Line 208 - should be "counsel" <u>Reply 15:</u> The typo has been corrected. <u>Changes in the text:</u> "Council" changed to "counsel." (page 8, line 223)

<u>Comment 16:</u> Line 209 - patients may still have geographic limitations. It would be pertinent to discuss this, and especially how patients may not follow up consistently if their prosthetic urologist is far away. How is the median follow up for patients who undergo prosthesis surgery? <u>Reply 16:</u> This is a great point. While a temporary solution to the discussed barriers could be for patients to return to their original surgeon with any post-operative complications, this is not practical for all. Additions have been made to discuss how distance, travel, and follow-up present shortcomings of this solution.

<u>Changes in the text:</u> Several sentences were added to the end of the final paragraph of the Institutional barrier section to discuss the difficulties some patients may have in returning to their original prosthetic urologist. (pages 8-9, lines 225-228)

<u>Comment 17:</u> Line 249 - remove the extra "is" <u>Reply 17:</u> The typo has been corrected. <u>Changes in the text:</u> Extra "is" removed. (page 11, line 269)

Comment 18: Line 250 - need reference

<u>Reply 18:</u> We had intended for the reference following the next sentence to account for this statement. For clarity, the reference was added following the sentence on line 250. <u>Changes in the text:</u> Reference added. (page 10, line 271)

<u>Comment 19:</u> Line 277 - one could argue that loss of length and developing further fibrosis would give patients more anxiety, and that a malleable that helps to prevent this may help with patient satisfaction. One of the things patients complain the most about after penile prosthesis surgery is perceived loss of length.

<u>Reply 19:</u> We agree that depending on the source of the patient's anxiety the least anxiety provoking choice may be proceeding with IS.

<u>Changes in the text:</u> A sentence was added to clarify that depending on the source of the patient's anxiety, IS could be a favored option. (page 12, lines 197-300)

Comment 20: Line 288 - should be "explantation."

<u>Reply 20:</u> The typo has been corrected.

Changes in the text: "Explanation" changed to "explanation." (page 12, line 311)

<u>Comment 21:</u> Line 292- please give some references for perception of post-operative pain (does it last several weeks or several months, etc)

<u>Reply 21:</u> Data regarding post-operative pain perception in the setting of penile prosthesis surgery is available for the immediate post-operative period with the most significant pain scores being on post-operative day 0. Some literature is available discussing the expected course of post-operative pain and the development of chronic pain. Interestingly, diabetic patients with HgbA1c >8 have been described to be a cohort at risk for more significant post-operative pain. We have now incorporated this information into the manuscript and believe that it does help to support the point that post-operative pain may deter some from pursuing IS.

<u>Changes in the text:</u> Several sentences were added to describe pain in the post-operative period with references. (page 12-13, lines 315-321)

Reviewer D

Comment 1: Well-written, clear. Suggest more detail in Methods section on how various literature was selected for inclusion and how other literature was excluded.

Reply 1: In accordance with editorial comments we have made editions to the methods section and added Table 1.

Changes in the text: Added search strategy as Table 1, which is referenced within the methods section. (page 5, line 138; page 14, Table 1)

Editorial Comments

<u>Comment 1:</u> Please kindly confirm the title indicate the subtype of this review, i.e., a narrative review or a literature review <u>Reply 1:</u> The has been changed to reflect the subtype of this review. <u>Changes in the text:</u> Title changed to: Overcoming barriers to immediate penile implant salvage surgery: A narrative review. (page 1, line 2)

<u>Comment 2:</u> Please provide the degree of Dr. Aaron C. Lentz. <u>Reply 2</u>: Degree has been added to the title page. <u>Changes in the text:</u> Corresponding author changed to: Aaron C. Lentz, MD, FACS. (page 1, line 10)

<u>Comment 3:</u> Please provide the Abstract structured with the subheadings Background and Objective, Methods, Key Content and Findings, and Conclusions. <u>Reply 3:</u> This change has been made to the abstract. <u>Changes in the text:</u> Subheadings adjusted as requested. (page 2, lines 45, 57, 70)

<u>Comment 4:</u> The Methods section should include Table X. <u>Reply 4:</u> Table X has been added to the manuscript. <u>Changes in the text:</u> Table 1 is now included in Methods section. (page 14)

<u>Comment 5:</u> Please include a statement "We present this article in accordance with the Narrative Review reporting checklist" at the end of the "Introduction". Reply 5: This statement is now included.

<u>Reply 5:</u> This statement is now included.

<u>Changes in the text</u>: The statement above was added to the end of the introduction. (page 4, lines 124-125)

<u>Comment 6:</u> Narrative reviews should also adhere to the narrative review checklist (attached) and each submission should include the Checklist as supplementary material. The relevant page/line and section/paragraph number in the manuscript should be stated for each item in the checklist. Please Do not leave any blanks, fill in N/A for inapplicable items.

<u>Reply 6:</u> The checklist has been completed and attached as supplementary material. <u>Changes in the text:</u> N/A