

COMMENT



Response to the comment on: "Current opinions on the management of prolonged ischemic priapism: does penoscrotal decompression outperform corporoglanular tunneling?"

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IJIR: Your Sexual Medicine Journal; <https://doi.org/10.1038/s41443-024-00883-w>

We appreciate the thoughtful commentary provided by Dr. Lee and colleagues [1] on our recent article regarding the shifting paradigm in the management of cases of prolonged (>24 h) ischemic priapism (PIP) among subspecialty urologists who treat the condition [2]. They bring to light multiple interesting sentiments regarding the current and evolving role of penoscrotal decompression (PSD), as well as some of its challenges.

The authors note encouraging results with their own early foray into performing PSD at their institution. In an abstract presented at the 23rd annual fall scientific meeting of the Sexual Medicine Society of North America, they note successful resolution of priapism in all 13 men despite a median duration of PIP of 48 h at presentation [3]. They report starting with only unilateral PSD, with 9/13 (69%) requiring progression to bilateral decompression. One patient who had undergone unilateral PSD (1/4, 25%) also developed recurrent ischemic priapism within 24 h. As reported in our previous multi-institutional experience [4], we found an early recurrence rate of 20% (2/10) among those who had undergone unilateral PSD; although this difference was not significant, we have transitioned to performing bilateral decompression in all cases and have done so for the last 5 years at our institution.

They also discuss a modification of the traditional PSD technique, avoiding the penoscrotal incision altogether and instead approaching the corpora through a proximal penile shaft incision. The authors suggest that general urologists may be more comfortable with this approach, and also avoid violation of the scrotal dartos. We agree that this modification could make facilitate penile prosthesis placement, especially creation of the subdartos pouch for pump placement. Perhaps they will need a new moniker, such as "penile corporal decompression." Regardless of the name, the mechanics are the same as PSD with proximal and distal dilation of the corporal spaces, and appears to perform quite well in their hands.

The question remains where PSD should fall in the overall treatment algorithm of ischemic priapism. We agree with Lee and colleagues that distal shunts should and will likely remain the standard-of-care first line surgical intervention for early ischemic priapism not relieved by non-surgical means. For those with refractory PIP, we believe that PSD should be considered the

standard-of-care first line surgical intervention given its high efficacy, straightforward surgical approach, and the benefit of avoiding violation of the distal glans. Our survey results confirm a shift towards tunneling maneuvers in this space, and among those who have performed both corporoglanular tunneling (CGT) and PSD, a feeling that the latter is more effective [2]. A recent report by Akula and Hofer also supports the increasing adoption of PSD even in the private practice setting [5].

We are encouraged by the inclusion of PSD in the EAU guidelines on sexual and reproductive health and look to the next iteration of the AUA guidelines to help define the evolving role of PSD in this space [6]. The 2022 clarification in the EAU guidelines opining that PSD further delays definitive penile prosthesis insertion and may lead to poorer outcomes (including penile shortening and prosthetic infection) is disappointing, especially as it is based on conjecture and not data at this time. While we agree that PSD is necessarily associated with a longer interval from presenting priapism episode to prosthesis placement compared to immediate penile prosthesis placement at the time of priapism, our study suggests that only 10% of subspecialists surveyed prefer upfront prosthesis placement.

Moreover, survey responses suggest that many patients are perceived to ultimately not pursue prosthesis placement after recovery from the priapism episode [2]. Whether this is a matter of successful sexual function recovery (as has been suggested to occur in some patients after PSD even with prolonged duration of priapism) or the patient electing to eschew delayed prosthesis placement after discussion of risks, benefits, and alternatives is not clear at this time and would be an interesting area of research. Regardless, these findings suggest that upfront prosthesis placement in all patients at the time of refractory PIP presentation would potentially result in the overtreatment of many patients who may not have otherwise desired a prosthesis long-term.

In their own recent abstract, the authors affirm that "PSD averted the need for penile prosthesis insertion in 54% of men." [7] Delaying prosthesis placement, even by 3 weeks as suggested by Lee and colleagues in their comment, allows the patient the time to weigh the risks and benefits of prosthesis placement. Such early placement at 3 weeks may be helpful to avoid the

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Received: 7 March 2024 Revised: 25 March 2024 Accepted: 2 April 2024

Published online: 22 April 2024

development of corporal fibrosis which adds to the complexity of penile prosthesis placement. While not included in our study results, 36% of respondents offered a penile prosthesis less than 3 months after the priapism episode, while 43% offered an implant between 3 and 6 months after the priapism episode (unpublished study data).

We agree that prosthesis placement is significantly more challenging after the development of corporal fibrosis. In our own practice, we strongly encourage the use of vacuum erection devices after PSD in order to increase the flow of well-oxygenated blood into the corpora, which has been shown to suppress pro-fibrotic factors, facilitate cylinder placement, and may also be associated with length preservation [8, 9]. The availability of smaller-diameter cylinders such as the Coloplast Titan Narrow-body (Coloplast Corp., Minneapolis, MN) and AMS 700 Controlled Expansion Restricted cylinders (Boston Scientific, Marlborough, MA) also aids successful penile prosthesis placement; these may be revised to full-sized cylinders as a staged approach if the patient desires [10].

In addition, placement of a penile prosthesis after PSD—as opposed to after CGT—has the theoretical advantage of glans preservation. Prior reports have noted the occurrence of distal device erosion when penile prostheses are placed after glans-violating interventions for priapism such as distal shunts [11, 12], although some authors have advocated for the use of suture slings routinely in this case to avoid this complication [13]. Because PSD allows preservation of the distal corporal tips and avoids violation of the glans, the theoretic risk of distal erosion is lower. While this has not been formally studied, we have not found any reports in the literature of distal erosion for prostheses placed after PSD, nor have we anecdotally encountered this in our own experience.

The main challenge in studying ischemic priapism is its relative rarity, for which we—and our patients—should be grateful. To this end, survey studies such as ours help to bridge the information gap, furthering academic discussion and perhaps serving as a springboard to future clinical studies. As PSD gains popularity globally, additional research will help to answer the remaining questions regarding efficacy, sexual outcomes, and long-term results after penile prosthesis placement.

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AUTHOR CONTRIBUTIONS

All contributions were from the single author (MV).

COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

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