COMMENT

Response to Comment on: Is it safe to implant a penile prosthesis in a solid organ transplant recipient? A systematic review

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We appreciate the authors, Drs. Pozzi and Ramasamy, for their thorough evaluation of our manuscript [1] and for acknowledging our work in conducting a comprehensive systematic review on penile prosthesis (PP) implantation in solid organ transplant (SOT) recipients [2].

Our study was motivated by the unique challenges faced by SOT recipients with erectile dysfunction (ED). As noted, SOT recipients experience ED at significantly higher rates compared to the general population (39.8–86.2% vs. 16%) due to their comorbidities and the impact of post-transplant medications [3, 4]. Although treatment generally follows protocols for the general population, SOT recipients often require higher doses and may respond less effectively [5–7]. Despite the clinical need, a pervasive fear surrounds PP implantation in this population, primarily due to limited published data addressing infection risks and device outcomes.

In our systematic review, we sought to address several critical questions: Are SOT patients at an elevated risk of infection or graft loss following PP implantation? Should concerns about immunosuppression deter the procedure? Our review included 14 studies that met the criteria for data quality, yet the process proved challenging due to the age of certain publications and limited reporting on complication-free outcomes. These factors likely contribute to a skewed perception, as literature often emphasizes severe complications while overlooking uneventful cases. This gap raises the question of whether decisions about PP implantation are being influenced by isolated adverse outcomes rather than a balanced understanding of risks and benefits.

The included studies varied widely in sample size, ranging from individual case reports to studies with 175 SOT recipients. Only four of these were case-control studies, which compared SOT recipients to non-transplant controls [8–11]. We noted substantial heterogeneity in study design, patient follow-up, and reporting practices. Additionally, studies varied in the timing of PP implantation relative to transplantation, the type of device implanted, and surgical techniques used (penoscrotal vs. infrapubic). These differences make it difficult to establish clear guidelines or draw firm conclusions.

Importantly, infection control measures were not consistently reported. While some studies provided details on antibiotic prophylaxis, others omitted this information, making it challenging to assess the role of prophylactic measures in infection rates.

Among the SOT recipients in our review, 13 cases of infection (4.26%) were reported. Most required hospitalization and intensive treatment, but it remains unclear whether these cases represent a typical complication rate. In the four case-control studies, only three infections were reported, suggesting that serious infections may not be as prevalent as expected. The reliance on case reports and small case series limits our ability to generalize these findings across all SOT recipients.

We believe it is critical not to assume that PP implantation is inherently unsafe for SOT patients based on the limited data currently available. A lack of evidence is not evidence of increased risk. Given these limitations, we question whether the perceived risks are disproportionately influenced by a few high-profile cases. Until more robust, prospective studies are conducted, conclusions about safety should be approached with caution, as the existing data is insufficient to definitively conclude that PP implantation poses significant risks. Without better-quality studies, we risk underestimating the potential quality-of-life benefits that effective ED treatment could offer these patients.

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In closing, we concur with Drs. Pozzi and Ramasamy on the need for a multidisciplinary, patient-centered approach to ED management in SOT recipients. This approach must involve close collaboration among clinicians, considering patient-specific factors such as comorbidities, immunosuppression levels, and individual quality-of-life goals. However, it is essential that clinical decisions are grounded in a balanced understanding of both risks and benefits, informed by robust, prospective research rather than isolated adverse events. Further studies are crucial to clarify the real complication rates associated with PP implantation and to optimize care strategies for SOT recipients.

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AUTHOR CONTRIBUTIONS

Conception and design: AT. Acquisition of data: ALA, MB. Analysis and interpretation of data: AT, ALA, MB. Drafting of the manuscript: AT, ALA, MB. Critical revision of the manuscript for important intellectual content: AC, ERC, FC, GM, TP, APi, APe, BBM, MID, FE, GIR, RC, AB.

COMPETING INTERESTS

The authors declare no competing interests.

ETHICAL APPROVAL

The authors certify that this document complies with the current ethical standards and that no individual data have been used.

ADDITIONAL INFORMATION

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