COMMENT

Response to comment on: zero infection protocol in inflatable penile prosthesis Surgery: a prospective cohort study using chlorhexidine-alcohol skin preparation and fibrin sealant hemostasis

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We appreciate the thoughtful and constructive commentary by Frazier et al. on our recently published prospective study evaluating a "zero infection protocol" in inflatable penile prosthesis (IPP) surgery [1]. In their comment, they appropriately contextualize our findings within the contemporary prosthetic infection literature, emphasizing that despite advances in skin antisepsis, antibiotic prophylaxis, surgical technique, and surgeon experience, postoperative infection following IPP placement has not been completely eliminated and remains approximately 1–2% in modern series. They further underscore the multifactorial nature of prosthetic infections, including the influence of patient comorbidities, operative time, antimicrobial strategies, and institutional experience, and they caution against interpreting results from single-center, small prospective cohorts as definitive evidence of universal infection eradication [2].

First, we fully acknowledge that no surgical approach can eliminate the risk of infection in inflatable penile prosthesis (IPP) surgery. The term "zero infection protocol" was used descriptively to reflect the outcomes observed in our prospective cohort of 103 consecutive patients with zero postoperative infections. It was not intended to imply that infection risk can be universally eradicated. As Frazier et al. note, modern multicenter studies report infection rates of approximately 1–2% even under optimized conditions [3].

Second, the commenters correctly highlight that our study was not powered to determine non-inferiority relative to established infection benchmarks. Our work was designed as a hypothesis-generating prospective cohort, and we explicitly avoided making statistical claims beyond what our sample size allowed. Nonetheless, the combination of chlorhexidine–alcohol skin antisepsis and fibrin sealant hemostasis is biologically plausible and supported by prior randomized evidence demonstrating the superior efficacy of chlorhexidine–alcohol compared with povidone–iodine for eliminating skin flora before prosthetic urologic procedures [4]. This provides a rational basis for further study but does not constitute a claim of universal infection eradication.

Regarding surgeon experience, we agree that surgical volume and expertise are associated with improved prosthetic outcomes [5]. In our study, all procedures in both the historical and prospective cohorts were performed by the same high-volume prosthetic surgeon, who is recognized as a Coloplast-designated Center of Excellence implanter. The surgeon's operative technique and perioperative workflow were stable during both study periods, reducing—though not completely eliminating—the potential contribution of temporal experience trends to the observed infection difference.

Finally, we appreciate the opportunity to clarify that neither cohort in our study utilized scrotal drains. Thus, hematoma differences were not attributable to drain duration or drain-related variables. Our objective was to evaluate whether fibrin sealant could provide effective hemostasis without reliance on drains. While additional comparative studies are needed, our findings suggest that fibrin sealant may serve as a feasible alternative in selected cases.

In conclusion, our study does not claim that infection risk in IPP surgery can be eliminated universally. Rather, our findings suggest that a protocol incorporating chlorhexidine–alcohol skin antisepsis and fibrin sealant hemostasis—without drains—was associated with favorable outcomes in our prospective series. We agree that larger, multicenter studies are needed to further validate and refine infection-prevention strategies in prosthetic urology.

REFERENCES

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AUTHOR CONTRIBUTIONS

AF: Study conception, protocol design, manuscript drafting. SiR: Manuscript drafting, technique standardization, manuscript review. SaR: Senior surgical oversight, critical revisions, final manuscript approval.

COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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