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EDITORIAL COMMENT



There is undeniable evidence that 1 unintended consequence of bulbar urethroplasty is sexual dysfunction. While the majority of patients return to baseline within 6–12 months, transient, but clinically significant, sexual dysfunction has been reported in up to 40% among experienced surgeons.¹ We owe it to our patients to counsel and set appropriate expectations regarding likelihood of erectile and ejaculatory dysfunction, penile shortening, cold glans, and altered sensitivity following bulbar urethroplasty. The current study, while retrospective, has a lengthy follow-up of greater than 6 years with an impressive amount of patient reported urinary and sexual function data following bulbar urethroplasty. Three takeaway points from this study: (1) bothersome postvoid dribbling is more common following buccal mucosa graft—likely resultant to a disruption of natural bulbar urethral elasticity and mucosa coaptation, (2) anastomotic urethroplasty is more susceptible to penile tethering—a consequence of lengthy excision of mid to distal bulbar strictures and/or inadequate urethral mobilization, and (3) even in those men with some element of persistent sexual dysfunction there was a high level of patient satisfaction following urethroplasty.

While we continue to debate the significance of urethral transection as a contributing factor to postop erectile dysfunction,^{2,3} this series found no difference between cohorts with extended follow-up. Until there is high-level compelling evidence otherwise, anastomotic urethroplasty should continue to remain an excellent primary reconstructive solution for most mid to proximal bulbar urethral strictures <2–3 cm. We have found with adequate mobilization to the penoscrotal junction that the redundant urethral elasticity of the mid to proximal bulb allows for a tensionless anastomosis without significant loss of penile length or tethering. Additional maneuvers which may reduce associated sexual side effects include sharp midline division and suture reapproximation of the bulbospongiosus muscle (ejaculatory dysfunction), spongiosal sparing 2-layer anastomosis (cold glans), minimizing extensive deep dissection within the intracanal space and cavernosal nerve injury (erectile dysfunction), and avoiding division of the central perineal tendon and damage to the perineal nerve (sensory and ejaculatory dysfunction).

AUTHOR REPLY



We agree with the points made by the author of the editorial comment. Most bulbar strictures are within the mid-proximal bulbar urethra. For proximal strictures, our favored approach early in our series was to transect the urethra under the bulb, which included division of the bulbar arteries, dorsally spatulate both segments after stricture excision, and then perform a 1-layer primary anastomosis. This remains our preferred approach for dense proximal bulbar strictures that extend into the membranous urethra. However, for other bulbar strictures, we shifted toward an oblique transection of the urethra distal to the bulbar arteries with preservation of bulbar artery flow into the proximal bulb. After stricture excision, we dorsally spatulate the proximal segment to 30+ French, spatulate the distal segment, and then do a 2-layer repair. The objective is to restore proximal bulbar arterial blood flow within the corpus spongiosum.

Our series included both anastomotic urethroplasty techniques. We are now carefully reviewing this group, and our recent sub-set analysis suggests that when we can preserve the bulbar arteries and perform a 2-layer repair, this is associated with a reduced risk of sexual dysfunction. Although this was not reported as a part of our current paper, this finding is in line with the comments that certain technical maneuvers and nontransecting techniques when appropriate, may reduce the risk of sexual complications.

Since patients were not randomized to anastomotic versus dorsal buccal substitution urethroplasty, and the mean stricture length was longer in our patients that underwent dorsal buccal repair, we reported our data as an analysis of 2 techniques rather than a direct comparison. However, the fact that we noted similar rates of sexual dysfunction where the anastomotic group contained many patients that had bulbar transection and 1 layer suggests that if these bulbar artery sparing modifications truly reduce the rate of sexual dysfunction, this would further support the editorial comment that anastomotic urethroplasty should continue to remain an excellent primary reconstructive solution to shorter bulbar strictures.

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