

RECONSTRUCTIVE UROLOGY

Muscle- and nerve-sparing bulbar urethroplasty: a new technique

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Background: To describe a new surgical technique for the repair of bulbar urethral strictures to preserve the bulbospongiosum muscle and its perineal innervation. **Objective:** Surgical steps of muscle- and nerve-sparing bulbar urethroplasty are described. The outcome is provided regarding semen sequestration and postvoiding dribbling.

Design, Setting, and Participants: We performed the procedure in 12 patients (average age: 43.58 yr) with bulbar urethral strictures (average stricture length: 4.47 cm). **Surgical Procedure:** Six patients underwent urethroplasty using a ventral oral mucosal onlay graft, and six patients underwent urethroplasty using a dorsal oral mucosal onlay graft. In all patients, the surgical approach to the bulbar urethra was made avoiding dissection of the bulbospongiosum muscle from the corpus spongiosum and leaving the central tendon of the perineum intact.

Measurements: Clinical outcome was considered a failure when any postoperative instrumentation was needed. The primary outcome examined the technical feasibility of the muscle- and nerve-sparing bulbar urethroplasty. The secondary outcome examined the presence or absence of postoperative postvoid dribbling and semen sequestration using a nonvalidated questionnaire (Appendix).

Results and Limitations: In all patients, postoperative voiding cystourethrography was performed 3 wk after surgery and no urethral sacculation was evident. Urethrography were repeated after 6 mo and 12 mo. No postvoid dribbling or semen sequestration was demonstrated in all patients at 6 mo and 12 mo after surgery. No patient showed stricture recurrence. The average follow-up was 15.25 mo (range 12 mo to 26 mo, median 13.5 mo).

Conclusions: Bulbar urethroplasty preserving the bulbospongiosum muscle, the central tendon of the perineum, and the perineal nerves is a safe, feasible, minimally invasive alternative to traditional bulbar urethroplasty.

One-sided anterior urethroplasty: a new dorsal onlay graft technique

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Objective: To investigate the feasibility, tolerability, safety and efficacy of using a new surgical technique for the repair of anterior urethral strictures to preserve vascular supply to the urethra and its entire muscular and neurogenic support.

Patients and Methods: In all, 24 patients (mean age 46 years) underwent a new one-sided anterior dorsal oral mucosal graft urethroplasty while preserving the lateral vascular supply to the urethra, the central tendon of the perineum, the bulbospongiosum muscle and its perineal innervation. The cause of stricture was instrumentation in three cases (12%), unknown in five (21%), infection in four (17%), and lichen sclerosus in 12 (50%). The stricture site was bulbar in 12 cases (50%) and panurethral in 12 (50%). The mean stricture length was 4.2 cm in patients with bulbar strictures and 10 cm in patients with panurethral strictures. Of 24 patients, 20 patients (83%) had received previous treatments. Clinical outcome was considered a failure when any postoperative instrumentation was needed, including dilatation.

Results: The overall mean (range) follow-up was 22 (12-55) months. Of the 24 patients, 22 (92%) had a successful outcome and two (8%) were failures. One failure was treated using definitive perineal urethrostomy and another failure underwent successful internal urethrotomy.