

OUTCOMES OF URETHRAL TRANSECTION FOR RECONSTRUCTION OF CIRCUMFERENTIAL URETHRAL DIVERTICULA

Hypothesis / aims of study

Circumferential urethral diverticula (cUD) extending around the urethra represent a particular reconstructive challenge as the repair of such lesions may leave a large gap in the urethra. It is unclear whether such a configuration presents differently or confers a worse prognosis as compared to simple UD (sUD). This unusual configuration has only rarely been reported on in the literature. We present our experience with the clinical findings and reconstruction of these complex UD.

Study design, materials and methods

Following IRB approval, a retrospective review of patients who underwent transvaginal urethral Diverticulectomy (TVUD) at a single institution from 2004 to 2009 was performed. 9/34 TVUD were circumferential. Repair of these lesions was performed using a previously described technique utilizing complete division of the urethra to access the dorsally located UD, and reconstruction of the urethra with an end-to-end anastomosis. Martius flap and autologous fascial pubovaginal sling (PVS) were performed as needed. Presenting symptoms and post-operative results were reviewed and outcomes assessed based on patient (pt) questionnaires, chart review, and imaging including, VCUG, CT and/or MRI.

Results

Mean age was 53 yo in the cUD vs. 51 yo in the sUD. Presenting symptoms in the cUD vs. sUD groups included: stress urinary incontinence (SUI) in 8 (89%) vs 14 (56%), urgency was present in 4 (44%) vs. 13 (52%), pelvic pain and/ or dyspareunia in 8 (89%) vs. 15 (60%), recurrent urinary tract infections (UTI) in 6 (67%) vs. 17 (68%) and vaginal mass in 5 (56%) vs. 17 (68%) and tender anterior vaginal wall was present in 6 pts (67%) vs. 12 (48%). Three pts presented with dysuria and one pt had bladder outlet obstruction and high post void residuals secondary to previous sling surgery. The incidence of postoperative complications in the 2 groups were similar (p=0.4). PVS was performed in the 8 pts with SUI and Martius flap in 4 in the cUD group. All patients reported subjective improvement of symptoms. Postoperative SUI was noted by history, physical examination or on urodynamics in 0 vs. 5 pts (cUD vs sUD respectively, p=0.085). Recurrent UD was seen in 1 pt in the cUD group.

Interpretation of results

Presenting symptoms were not significantly different between the two groups. The incidence of postoperative complications in the 2 groups were similar (p=0.4). All patients reported subjective improvement of symptoms. Postoperative SUI between the 2 groups was not significant p=0.085.

Concluding message

Patients with cUD have a similar presentation and similar prognosis as compared to those with sUD.

Surgical reconstruction and removal may be technically demanding at times however results are similar as compared to sUD. Urethral transection and end-to-end anastomosis is a feasible approach in experienced hands and can result in satisfactory clinical outcomes.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Medical University of South Carolina IRB **Helsinki:** Yes **Informed Consent:** Yes