

SINGLE CENTRE SURGICAL OUTCOME OF URETHRAL DIVERTICULUM REPAIR

Hypothesis / aims of study

Urethral diverticulum (UD) is an uncommon clinical entity, presents with diagnostic and therapeutic challenges. Complete transvaginal excision is the treatment of choice. Here we present a single institution series after examining presenting symptoms, imaging and videourodynamic findings along with the clinical outcomes of surgery with judicious use of interposition of Martius flap.

Study design, materials and methods

Patients undergoing surgery for UD were identified retrospectively. Demographics, videourodynamic, imaging characteristics, intra operative findings and clinical outcomes were analysed.

Results

Between 2010 and March 2017, 26 patients underwent surgery. Mean age 43 years (17-80). All patients were tertiary referrals, 4 patients (15.38%) had previous failed urethral diverticulum repair.

The most common presenting symptom was vaginal lump 11 patients; dyspareunia in 7, dribbling in 6, UTI in 6 and 2 patients demonstrated the full classic triad of symptoms.

The mean duration of symptoms prior to diagnosis was 22 months (4-144).

MRI reported complex urethral diverticulum in 11 patients (42%), simple urethral diverticulum in 10 patients (38.46%), paraurethral cyst in 2 patients (7.69%), normal findings in 2 patients (7.69%) and urethral thickening in 1 patient (3.84%).

18 patients (69.2%) had videourodynamics and found bladder outflow obstruction, urethral diverticulum, stress urinary incontinence and detrusor over activity in 10 (55.55%), 4(22.22%), 3(16.66%) and 1 (3.85%) patients respectively.

12 patients (46.15%) had distal urethral diverticulum whereas mid urethral diverticulum in 9 patients (34.61%) and proximal urethral diverticulum or urethral diverticulum near to the bladder neck in 5 patients (19.23%)

Three layers closure without additional Martius flap interposition and with additional Martius flap interposition had received 21 patients (80.76%) and 5 patients (19.23%) respectively.

All patients total 5 in number (19.23%) who received additional Martius flap interposition had complex urethral diverticulum and location of urethral diverticulum was in proximal urethra and or near to the bladder neck.

20 patients of three layer closure without additional Martius flap interposition have had successful outcome and 1 patient developed recurrence. 5 patients who have had treated with additional Martius flap interposition reported no recurrence.

Surgery was successful in 22 patients out of 26 patients (84.61%) and 4 patients (15.38%) developed complication in terms of recurrence, dyspareunia, storage LUTS and persistent stress urinary incontinence.

Interpretation of results

Videourodynamic assessment of 18 patients reported bladder outflow obstruction in 10 patients (55.55%), urethral diverticulum in 4 patients (22.22%), urodynamic stress incontinence in 3 patients (16.66%) and detrusor over activity 1 patient (3.85%).

Overall a single procedure was successful in 22 patients (84.61%) with 1 patient (3.85%) developed recurrence. Dyspareunia, storage LUTS and persistent stress urinary incontinence reported in 1 patient (3.85%) each respectively.

No patient developed fistula or de novo incontinence.

Concluding message

Presentation of UD can be varied, diagnostic delay is not infrequent. Bladder outflow obstruction appeared a relatively common videourodynamic finding in our series.

Excellent outcomes can be achieved with a 3 layer closure technique with judicious use of Martius flap interposition. Our outcomes is comparable with those of other published series.

Disclosures

Funding: No **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It's a retrospective study of the patient's who had underwent Excision and repair of UD and we assessed the outcome of surgery in term of recurrence while performing three layers closure with judicious use of Martius flap interposition. **Helsinki not Req'd:** As it is retrospective study of the patient who have had already surgical procedure for the urethral diverticulum, we have gathered the data from the information database for assessing the types of procedure and overall outcome of the procedure. **Informed Consent:** No