

Lower Urinary Tract Symptoms and Urodynamic Findings Before and after Urethral Diverticulum Excision

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Introduction

Many textbooks describe the triad of dysuria, dyspareunia and dribbling as pathognomonic of urethral diverticula (UD).
Further understanding of the functional outcome of excision is important for patient counselling.
We describe the incidence of pre and post-operative lower urinary tract symptoms (LUTS) associated with UD in a large series

Materials and methods

A prospectively acquired database of all 100-patients(mean age 45.8years) having excision of UD at a tertiary centre since 2004 with a minimum follow-up of 6months(6-112) was reviewed. Video-urodynamics was performed in all pre-operatively and in those with symptoms post-surgery.

Results

- Of those patients with pre-existing voiding symptoms all but 3 (15%) resolved by 12 months post excision.
- Of those with persistent/de-novo voiding symptoms (N=6) at 12 months post excision;
 - 1 had urethral dilatation (UDn) with temporary SPC
 - 2 had UDn alone
 - 2 had sacral neuromodulation (SNM) for high-tone none relaxing sphincter
 - 1 had a urethroplasty for stricture with symptomatic resolution in all
- Storage symptoms persisted post excision in 9 (24%) and had de novo onset in 7 (11%).
- Storage LUTS resolved by 12-months with conservative treatment in 11(69%). 5(31%) progressed to further treatment; 4 with intra-vesical onabotulinumtoxin A, and 1 with SNM.

	Pre-surgery	Post-surgery	
		Persistent	New
Storage symptoms (frequency - urgency)	37 (37%)	9/37 (24%)	7/63 (11%)
Urodynamic DO	15 (15%)	5/12 (41%)	7/21 (33%)
Voiding symptoms (poor flow)	20 (20%)	3/20 (15%)	3/80 (4%)
Urodynamics BOO	37(37%)	8/10 (80%)	1/23 (4%)

Conclusions

- 76% of pre-existing storage and 85% of voiding symptoms settle following excision of UD. New onset storage and voiding symptoms occur in 11% and 4% of patients. By 12-months post UD excision storage and voiding symptoms remained in only 6% and 5% of patients.
- The relationship between the presence of a UD, LUTS and urodynamic findings is complex. The study of change in LUTS, after excision of UD are important for patient counselling pre-operatively.