

THE INCIDENCE AND MANAGEMENT OF STRESS URINARY INCONTINENCE IN FEMALES WITH URETHRAL DIVERTICULUM

Hypothesis / aims of study

Urethral diverticula are known to be associated with Urodynamic Stress Urinary Incontinence (USUI) both pre-existing and new-onset after excision of the diverticulum. Currently the literature is sparse on the management of USUI in this population. This series evaluates the incidence and management of USUI in patients with urethral diverticulum.

Study design, materials and methods

A prospective database of all patients undergoing urethral diverticulum excision between 05/2007 and 08/2016 was reviewed for presentation, investigation, surgical outcome and post-operative follow-up. All patients had pre-operative MRI and videourodynamics (VUDS) whilst those with persistent or new onset urinary incontinence also had VUDS 6 months post-surgery.

Results

100 patients had urethral diverticulum excision. 25% (n=25) presented with pre-existing USUI. 10 patients (40%) had resolution of pre-existing USUI following excision of their urethral diverticulum.

Post-operatively 25% (25) had USUI (persistent or new-onset). Of these 15 (60%) had persistence of their pre-existing USUI. 5 achieved complete resolution of their USUI with conservative management. 5 had insertion of a mid-urethral tape (MUT) with complete symptom response in 4 and 1 patient required further intervention with bulking agent for symptom improvement. 4 patients had a rectus fascial sling insertion (RFS) with successful post-operative outcome and 1 is awaiting surgery.

10 (40%) had new-onset USUI persisting at 6 months post-surgery. 5 patients had complete resolution with conservative management. 2 had mixed urinary incontinence and treatment of the urge urinary incontinence component resolved their symptoms. 2 achieved resolution of symptoms with MUT and 1 proceeded to RFS insertion requiring subsequent bulking agents to achieve moderate symptom improvement.

Interpretation of results

In our cohort 25% of patients undergoing urethral diverticulum excision will have USUI post-operatively; 10% will have new-onset USUI and 15% persistence of pre-existing USUI. USUI (persistent or new-onset) resolves by 6 months in 40% of patients with conservative management alone. Surgical intervention is required in only 60% of patients with USUI after excision of a urethral diverticulum.

Concluding message

Our cohort shows that both conservative and surgical approaches are successful for USUI after excision of urethral diverticulum. Outcomes with standard surgical interventions are uniformly good. This series supports our current practice which is to treat the urethral diverticulum primarily and to manage any subsequent USUI in a secondary procedure if required.

Disclosures

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