

Voiding Dysfunction

Re: Prediction of Persistent Storage Symptoms after Transurethral Resection of the Prostate in Patients with Benign Prostatic Enlargement

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Urol Int. 2014; [Epub ahead of print]

EDITORIAL COMMENT

Treatment for benign prostatic enlargement (BPE) should involve adequate and steady control of lower urinary tract symptoms (LUTS). TURP has gained enormous popularity over the past years, and this surgical treatment of BPE improves both voiding and storage symptoms. However, a large proportion of patients complain of persistent storage symptoms following TURP. Although TURP could relieve storage symptoms, there is a definite limitation on the clear satisfaction of symptom improvement, and clinicians should consider whether early use of medications such as anticholinergics could help in the treatment of storage symptoms. In this study, authors tried to investigate the association between various preoperative clinical parameters and remaining postoperative storage symptoms following TURP. From this analysis, they aimed to clarify valuable prognostic factors regarding the persistence of storage-related symptoms following BPE-related surgery. In this study all patients completed the International Prostate Symptom Score (IPSS) with a subscore for storage symptoms (questions 2, 4 and 7). Patients underwent the following basic clinical evaluations: prostate volume estimated by transrectal ultrasound, functional bladder capacity (FBC) and voiding frequency per day urodynamics were also assessed, including Q max (maximum flow rate), postvoid residual urine estimated by ultrasound, maximum cystometric capacity, detrusor pressure at maximum flow (Pdet Q max) and Abrams-Griffith number (Pdet Q max- 2 × Q max). In this study, initial storage symptom score, age, FBC and BCI were identified as independent predictors for an improvement in storage symptoms. The authors concluded that Positive and consistent correlations between the baseline degree of worse initial storage symptoms, bladder capacity, detrusor contractility and age and the improvement in storage symptoms were observed.

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Re: Does Defective Volume Sensation Contribute to Detrusor Underactivity?

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Neurourol Urodyn. 2014; doi: 10.1002/nau.22653. [Epub ahead of print]

EDITORIAL COMMENT

The urodynamic observation of detrusor underactivity (DU) and the related clinical disorder of detrusor hyperreflexia with impaired contractility (DHIC) are common contributors to urinary incontinence, voiding disorders, and overactive bladder symptoms especially in the aged. While DU can be due to chronic obstructive or neurologic damage, in many cases the etiology is unknown. The nominally implied detrusor motor dysfunction is generally attributed to either impaired parasympathetic outflow or structural changes of the detrusor muscle resulting in diminished muscular contractile capabilities. However, animal and human evidence is not conclusive regarding a primary age-associated loss of detrusor contractile capabilities. Authors hypothesized that the observation of DU, with or without detrusor overactivity, as a primary urodynamic finding would be associated with higher volume sensory thresholds when compared to other common nonobstructive, non-neurologic urodynamic conditions. Data from each urodynamic record abstracted into a spreadsheet, included age, gender, volume and pressures at each sensation, voiding volumes and flow rates, and maximum Watts Factor (WFmax) as calculated over the voiding phase by the urodynamic software. Wall stress at each sensation was calculated as the product of detrusor pressure and volume. Examination suggests a diminished rate of response to volume, pressure and wall stress in DU patients (except for pressure in DU, as discussed above) as the bladder reaches larger volumes, in contrast to a more linear response in normal voiders. Authors conclude that DU is associated with altered perceptions of bladder volume, and not necessarily diminished detrusor contractility. This diminished sensitivity to bladder volumes may be mediated by dysfunctional central processing of afferent information provided by the filling bladder.

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