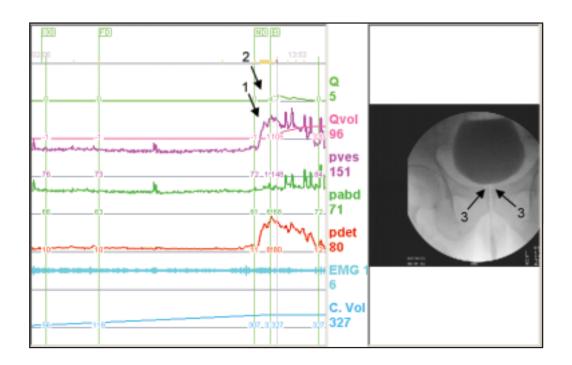
Urgency and Urge Incontinence after Intraprostatic Injection of Botulinum Toxin A for Benign Prostatic Hyperplasia

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BRIEF HISTORY

A 65 year-old man had clinical benign prostatic hyperplasia (BPH) and moderate lower urinary tract symptoms (LUTS) for 1 year. He was enrolled into a clinical trial of intraprostatic injections of botulinum toxin A (BTX-A) for BPH. However, 2 months after the injections, LUTS remained the same and he still suffered from urgency and urge incontinence although he did not complain of difficulties in urinating.

CLINICAL INVESTIGATION

The total prostatic volume (TPV) was 43 mL, maximum flow rate (Qmax) was 12 mL/s and postvoid residual (PVR) was 120 mL. There were no neurological signs or other systemic disease.

VIDEOURODYNAMIC STUDY

Videourodynamic study (VUDS) was scheduled to investigate the underlying pathophysiology. The result revealed an urge sensation at 307 mL and he had to urinate at a volume of 327 mL. During the voiding phase, the detrusor pressure (Pdet) was 69 cm water and Qmax was 7 mL/s (arrow 1). Flow pattern showed an obstructive flattened flow (arrow 2) and voiding cystourethrogram (VCUG) disclosed a narrow bladder neck and prostatic urethra during voiding (arrows 3).

CLINICAL DIAGNOSIS AND MANAGEMENT

These urodynamic findings indicated the presence of bladder outlet obstruction (BOO) and detrusor overactivity in the patient. Aggressive management of BPH should be the first step in relieving his BOO. Antimuscarinic agent may be helpful if the storage LUTS persists after his BOO has been resolved.