

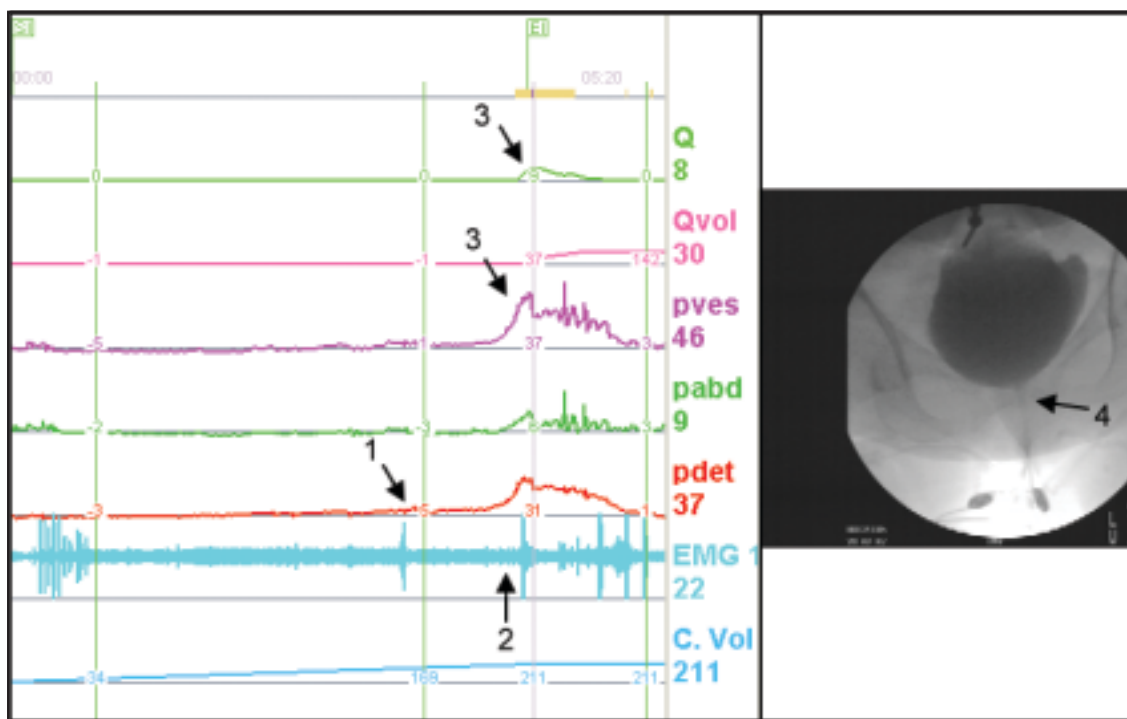
Chronic Urinary Retention in a Woman with Diabetes

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BRIEF HISTORY

A 60 year-old woman had diabetes mellitus for 5 years which was well-controlled with a hypoglycemic agent. Acute renal failure developed and she was admitted to the medical ward. A large postvoid residual (PVR) and urinary retention developed during hospitalization.

CLINICAL INVESTIGATION

She was chronically ill-looking. Neurological examination and urinalysis revealed no abnormalities. An indwelling Foley catheter was inserted.

URODYNAMIC FINDINGS

Videourodynamic study revealed a first sensation of filling at 169 mL, and an urge sensation at 211 mL (arrow 1). The urethral sphincter

coordination was normal, but during the voiding phase, urethral sphincter relaxation was poor and she had to use abdominal straining to initiate voiding (arrow 2). When the urine started to flow, the voiding pressure was 31 cm water and the maximum flow rate was 8 mL. The PVR was about 100 mL (arrow 3). Cinefluoroscopy revealed a patent bladder neck and urethra during voiding (arrow 4).

CLINICAL DIAGNOSIS AND MANAGEMENT

This urodynamic study demonstrated detrusor underactivity with poor relaxation of the urethral sphincter. The detrusor contractility was inadequate to completely empty her bladder. Therefore she had to use abdominal straining to increase intravesical pressure, resulting in subsequent relaxation of the pelvic floor muscles as well as the urethral sphincter. An alpha-blocker and skeletal muscle relaxant such as baclofen would be helpful.