

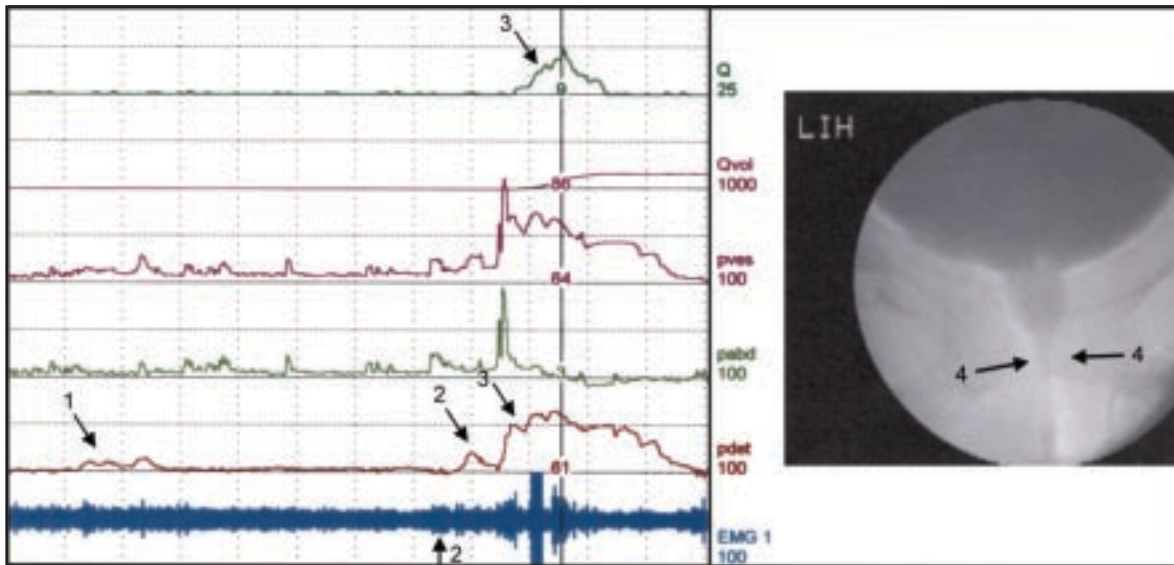
Detrusor Overactivity with Poor Relaxation of the Pelvic Floor Muscles

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BRIEF HISTORY

A 54 year-old woman presented with frequency urgency and nocturia for 1 year. She had no previous pelvic surgery, but had recurrent cystitis over the past 5 years. No constipation was noted. She was treated with an antimuscarinic agent (Detrusitol 4 mg QD) with good effect but the lower urinary tract symptoms recurred once she discontinued the medication. A videourodynamic study (VUDS) was done to investigate the possible underlying lower urinary tract disorders.

CLINICAL INVESTIGATION

She was healthy in appearance and neurologically intact on physical examination.

URODYNAMIC FINDINGS

During the VUDS, involuntary detrusor contractions were noted in the filling phase but she was able to inhibit them (arrow 1). At a blad-

der volume of 240 mL, increased external sphincter activity was noted and she felt a strong urge to void (arrow 2). After a strong spontaneous detrusor contraction, she could not hold the urine and voided with a high detrusor pressure (61 cm water) and a low maximum flow rate (9 mL/s). The voided volume was 180 mL and postvoid residual was 60 mL (arrow 3). A voiding cystourethrogram revealed a dilated bladder neck and posterior urethra, but a narrow distal urethra was observed throughout the voiding phase (arrow 4).

CLINICAL DIAGNOSIS AND MANAGEMENT

This is a case of dysfunctional voiding due to poor relaxation of the pelvic floor muscles. The patient had also developed detrusor overactivity after long-term functional bladder outlet obstruction. The dysfunctional voiding might have resulted from recurrent urinary tract infections which increased sensory input from the bladder wall and enhanced the pelvic floor muscle tone, causing a poorly relaxed pelvic floor. Biofeedback pelvic floor muscle training may relieve her lower urinary tract disorders.