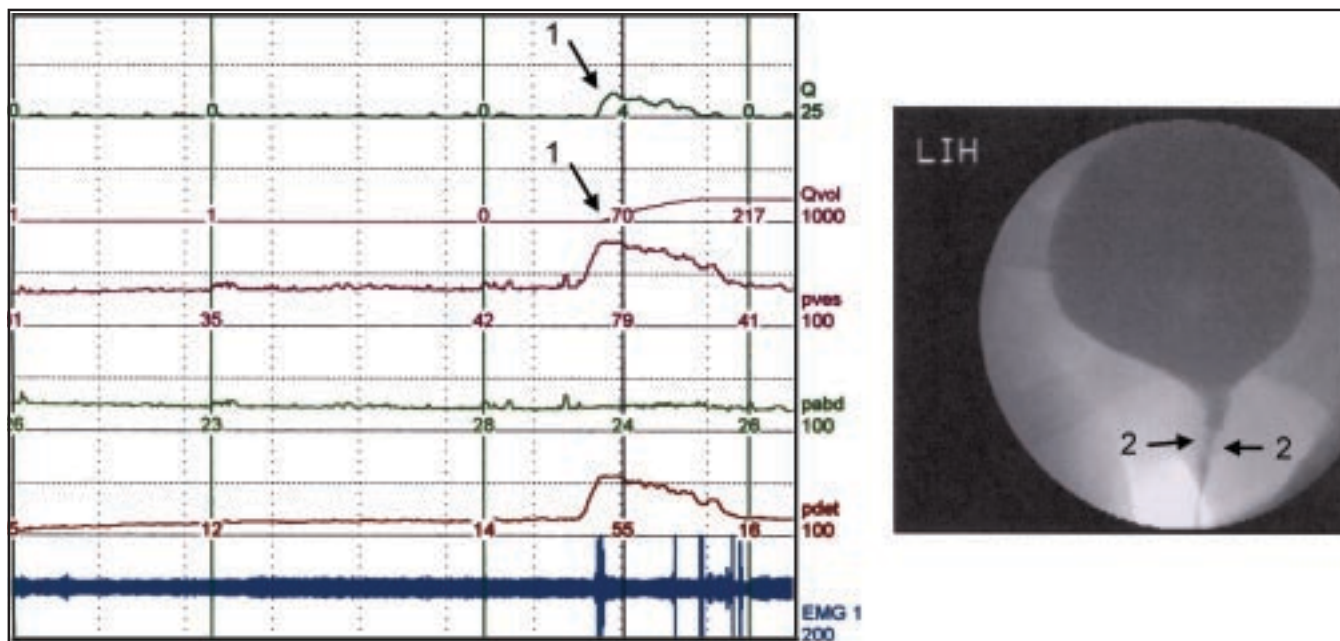


## Female Urethral Stricture and Overactive Bladder

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### BRIEF HISTORY

A 78 year-old woman presented with frequency urgency and small caliber urine for 1 year. She had a hysterectomy for myoma uteri 10 years previously but had been asymptomatic until the last year. The lower urinary tract symptoms could not be relieved by antimuscarinics, Detrusitol 4 mg QD, and therefore she was referred for further management.

### CLINICAL INVESTIGATION

Physically, the vaginal mucosa was pale and the vaginal introitus was atrophic. The anal tone was loose but she could contract the anal sphincter voluntarily with weak power.

### URODYNAMIC FINDINGS

Videourodynamic study (VUDS) revealed sensory urgency with-

out detrusor overactivity. The bladder capacity was 210 mL and the bladder compliance was good (compliance=30 mL/cm water). During the voiding phase, the detrusor pressure (Pdet) was 37 cm water, the maximum flow rate (Qmax) was 4 mL/s (arrows 1), the voided volume was 217 mL and the post-void residual (PVR) was 10 mL. A voiding cystourethrogram showed a dilated proximal urethra and a narrow distal urethra (arrows 2).

### CLINICAL DIAGNOSIS AND MANAGEMENT

This VUDS tracing demonstrates a bladder outlet obstruction (BOO) due to urethral stricture in this elderly woman. Cystoscopy confirmed the diagnosis and she voided smoothly after serial urethral dilations. The frequency urgency symptoms greatly improved after treatment without use of an antimuscarinic agent. Atrophic vaginitis due to estrogen deficiency causing distal urethral stricture is likely the cause of her BOO. Estrogen replacement therapy with regular urethral dilation may be helpful.