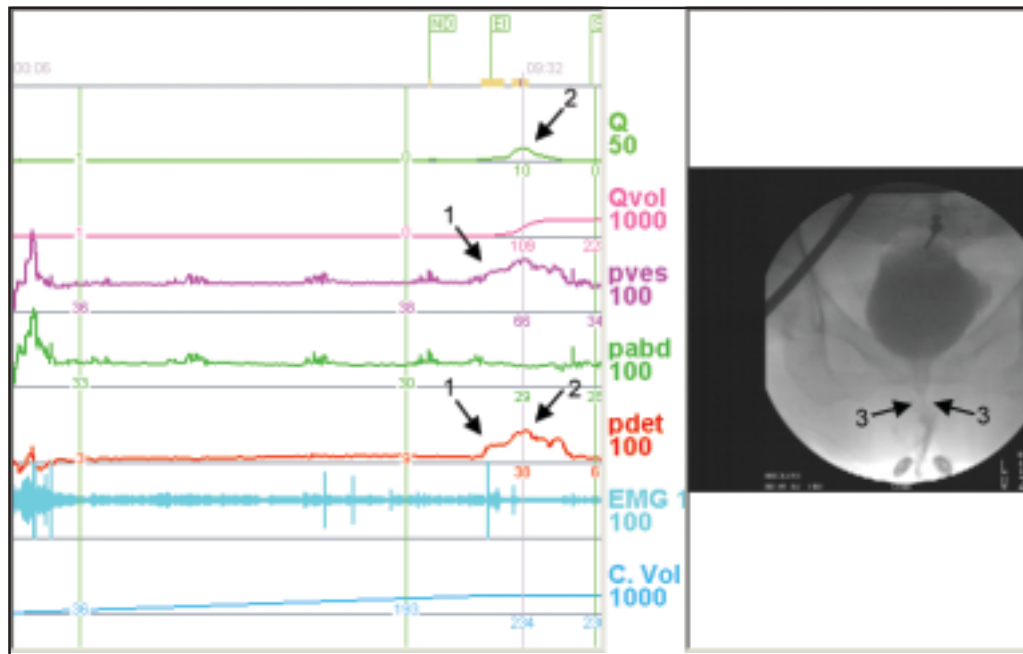


## Frequency Urgency and Bladder Pain in a Woman

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### BRIEF HISTORY

This 52-year-old woman had undergone abdominal total hysterectomy for her myoma uteri 5 years ago and was followed by a bilateral oophorectomy 2 years ago. Since these operations, she suffered from frequency, urgency and lower abdominal pain at full bladder. Antimuscarinics and imipramine had been tried but these failed to treat her lower urinary tract symptoms.

### CLINICAL INVESTIGATION

Urinalysis was negative and she was neurologically normal. Cystoscopy revealed no urethral stricture or intravesical lesions.

### VIDEOURODYNAMIC FINDING

Videourodynamic study (VUDS) was arranged to exclude the possibility of bladder outlet obstruction or interstitial cystitis. The bladder

capacity was 234 mL and she experienced a strong urge sensation. During voiding, the urethral sphincter relaxed slowly (arrows 1) and detrusor pressure (Pdet) rose gradually. Pdet was 29 cm water and maximum flow rate (Qmax) was 10 mL/s (arrows 2). Voiding cystourethrography showed an open bladder neck and proximal urethra, however, the distal urethra was narrow throughout the voiding phase (arrows 3). After VUDS study, a potassium chloride (KCl) test revealed a positive finding. The patient felt bladder discomfort and urge sensation although only 20 mL of 0.4 M KCl solution was instilled.

### CLINICAL DIAGNOSIS AND MANAGEMENT

This patient might have a urothelial leak syndrome, which results in an increased sensation of bladder filling. Through chronic irritation via suburothelial sensory nerves, the pelvic floor muscle tone is increased and therefore causes a poor relaxed pelvic floor and urethral sphincter. Cystoscopic hydrodistention is necessary to confirm the diagnosis of interstitial cystitis.