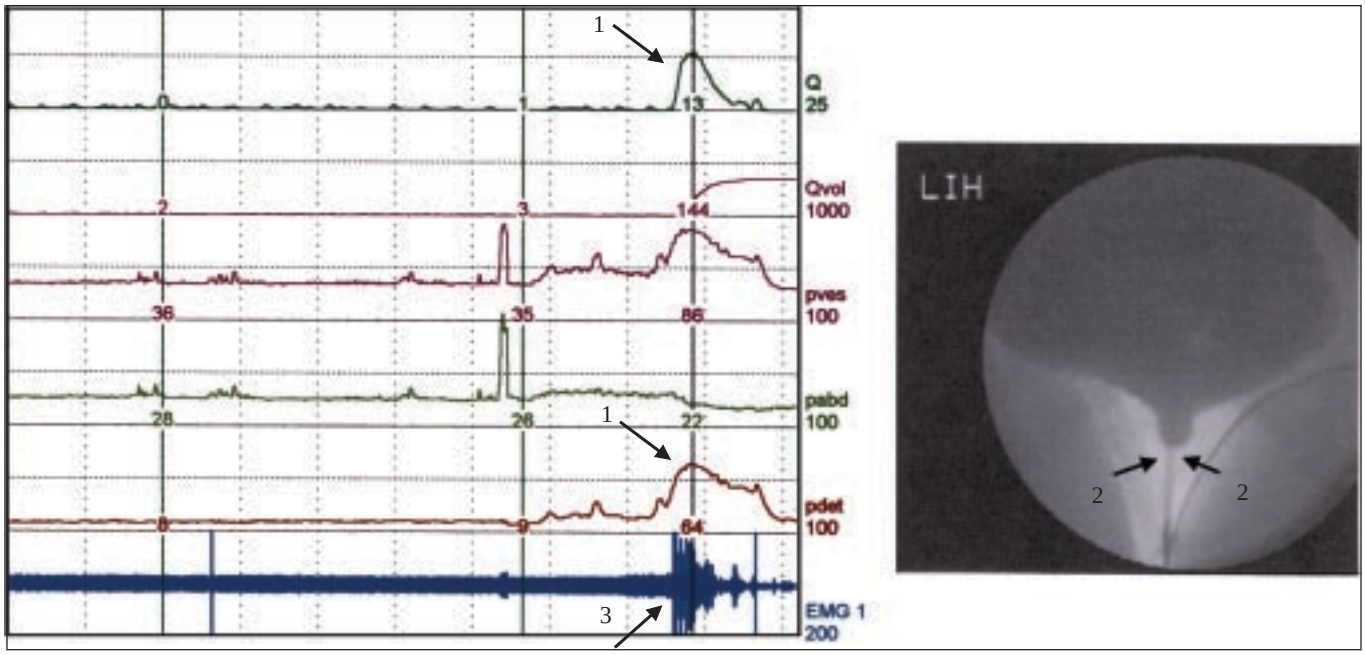
Dysfunctional Voiding in a Woman

Hann-Chorng Kuo, M.D.

Department of Urology, Buddhist Tzu Chi General Hospital and Tzu Chi University, Hualien, Taiwan; E-mail: hck@tzuchi.com.tw



BRIEF HISTORY

A 57-year old woman had suffered from lower urinary tract symptoms (LUTS) of frequency urgency and nocturia for 2 years. She had previously undergone an abdominal total hysterectomy for myoma uteri 10 years ago. The LUTS had been improved by treatment with an antimuscarinic agent but difficult urination was still a problem. Therefore, a videourodynamic study was arranged to investigate the underlying pathophysiology of the patient's LUTS.

CLINICAL INVESTIGATION

The patient had a healthy appearance and the urogenital examination produced negative finding and the patient was neurologically intact.

URODYNAMIC FINDING

A videourodynamic study (VUDS) revealed a hypersensitive bladder with urge sensation at 300 mL, a high voiding pressure (51 cm water) and a low maximum flow rate (13 mL/s) on the tracing (arrow 1). Cinefluoroscopy revealed a wide open bladder neck and proximal urethra; furthermore a narrow middle urethra during voiding was detected (arrow 2). The activity of the urethral sphincter increased as the bladder volume increased, but this activity did not become silent during an attempt at voiding (arrow 3).

CLINICAL DIAGNOSIS AND MANAGEMENT

The urodynamic findings and the VCUG showed the presence of a spinning top appearance to the urethra, which indicated a spastic urethral sphincter causing functional bladder outlet obstruction and bladder dysfunction. The flow pattern was normal and bell shaped, therefore it seems likely that detrusor contractility was good and the functional BOO was not severe. Medication by an alpha-blocker and a skeletal muscle relaxant such as baclofen should be tried first and this should be followed up with biofeedback pelvic floor muscle training to relax the muscles responsible for voiding dysfunction.