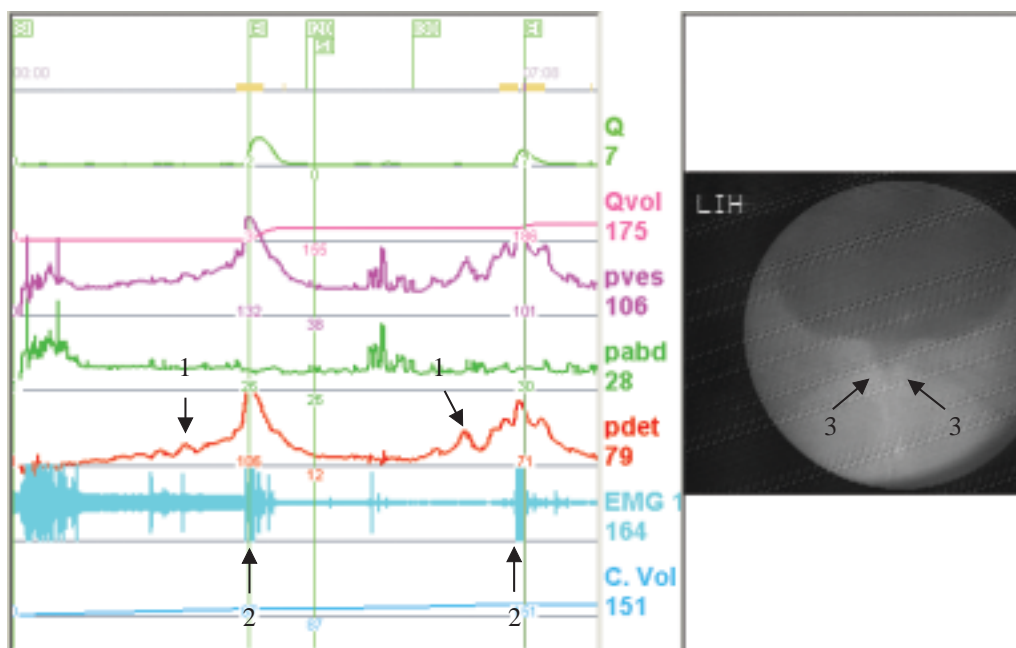


Dysfunctional Voiding and Urgency Frequency Syndrome

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 72-year old woman had symptoms of difficult urination and urgency frequency for more than 3 years. She had chronic constipation, but no urge incontinence or stress urinary incontinence was experienced. She had no history of previous abdominal surgery.

CLINICAL INVESTIGATIONS

Physically the patient was quite healthy. There was no abnormality in the pelvic floor. The bulbocavernosus reflex was intact. The anal tone was high with good spontaneous contraction of the anal sphincter.

URODYNAMIC STUDY

Videourodynamic study was done using a 6 Fr double-lumen catheter, 8 Fr intrarectal catheter and surface EMG patches with an infusion rate of 30 mL/min. First sensation of filling was noted at 68 mL, and full sensation was seen at 87 mL. Uninhibited detrusor contractions occurred during the filling phase (1). External sphincter EMG ac-

tivity increased concomitantly when the detrusor contracted (2). The detrusor pressure was 60 cm water with a maximum flow rate of 11 mL/s and voided volume of 156 mL. Postvoid residual was 50 mL. During voiding, the bladder neck was open, but the middle urethra was narrow (3).

DIAGNOSIS AND MANAGEMENT

This was a typical case of dysfunctional voiding manifested by detrusor overactivity, high voiding pressure, low flow rate, increased urethral sphincter activity during voiding and small bladder capacity. The disease process in this patient could have been quite long, causing the small bladder capacity and severe detrusor overactivity. This patient can be treated with an antimuscarinic such as tolterodine combined with an alpha-blocker and baclofen for detrusor overactivity and spastic urethral sphincter. A stool softener would also be helpful. If oral medication fails, urethral sphincter injection of botulinum toxin A can effectively reduce the urethral resistance and facilitate recovery of voiding function.