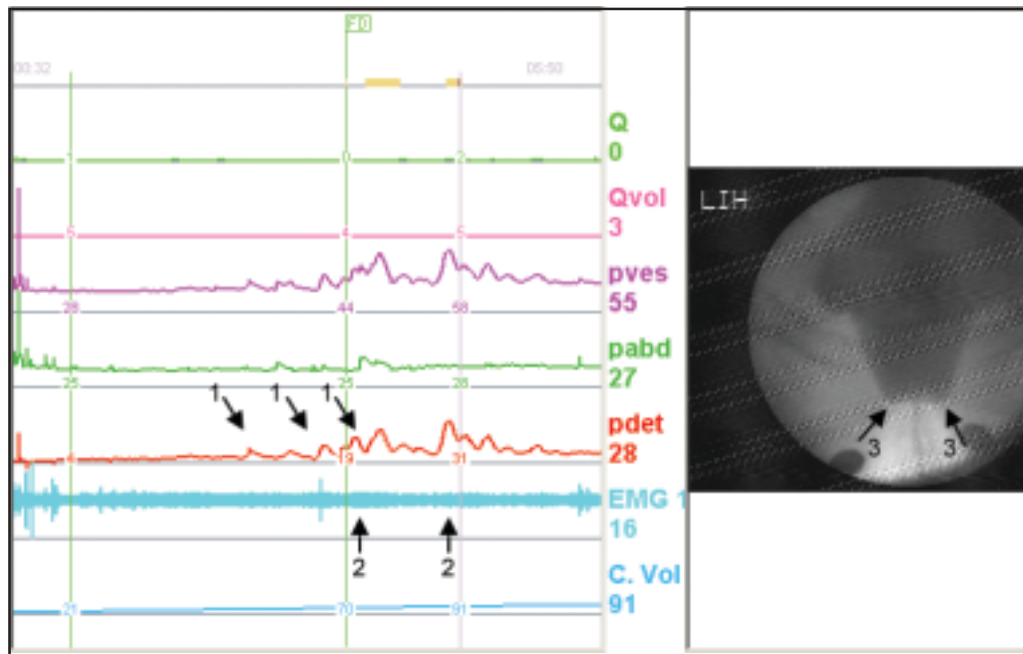


# Suspicious Fowler's Syndrome and Chronic Urinary Retention in a Young Girl

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## BRIEF HISTORY

An 18-year old girl had symptoms of chronic urinary retention for more than 3 years ever since she had an episode of urinary tract infection. She had chronic constipation, urgency sensation, but no urge incontinence was ever experienced. She had been treated with many medications but these failed to relieve symptoms, therefore she is currently on clean intermittent self-catheterization (CISC).

## CLINICAL INVESTIGATIONS

Physically she was quite healthy. There was no anatomical abnormality in the pelvic floor. Bulbocavernous reflex was intact but the anal tone was high with good spontaneous contraction of the anal sphincter. Cystoscopic examination revealed no urethral stricture. Urinalysis was negative.

## URODYNAMIC FINDING

Videourodynamic study using a 6 Fr double-lumen catheter, 8 Fr intrarectal catheter and surface electromyography (EMG) patches with an infusion rate of 30 mL/min. First sensation of filling was noted at 52

mL, full sensation at 119 mL and urge sensation at 255 mL. Several uninhibited detrusor contractions occurred during the initial filling phase (arrows 1). External sphincter EMG activity increased concomitantly during detrusor contractions but was not relaxed when she attempted to void (arrows 2). The maximal detrusor pressure (Pdet) was 47 cm water with no flow. During voiding, the bladder neck was fully open and the proximal urethra was dilated, but the middle urethra was closed with a cutoff sign (arrows 3).

## DIAGNOSIS AND MANAGEMENT

This is a case that arouses suspicions of Fowler's syndrome. There was no anatomical stricture in the urethra nor were neurological lesions responsible for her voiding dysfunction. The cause for her chronic urinary retention could be a spastic urethral sphincter either from learned dysfunction or from increased sensory activity of the pelvic floor. This patient can be treated with urethral sphincter injection of botulinum toxin A (BTX-A). However, because there might be abnormal EMG activities in the urethral sphincter, BTX-A might not be able to inhibit the abnormal myogenic activities. If she cannot benefit from BTX-A injections, continuing CISC or transurethral incision of the urethral sphincter is also feasible.