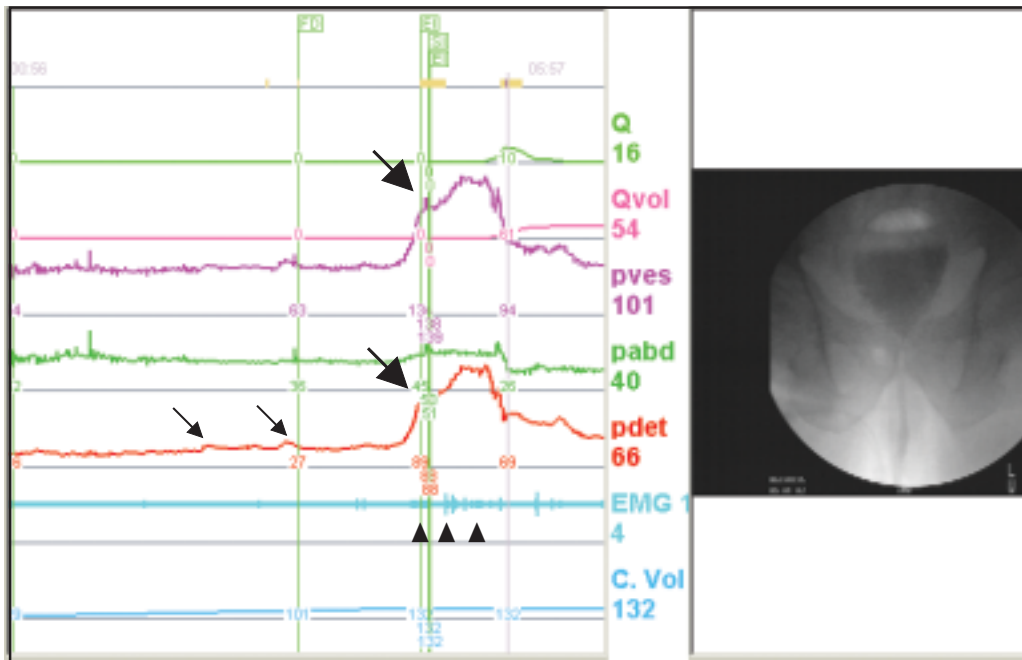


Urgency Incontinence in an Elderly Man with a Chronic Stroke

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BRIEF HISTORY

A 73-year-old man had a mild cerebrovascular accident 3 years previously. He had a minor gait impairment but no problems with voiding afterwards. In the past 3 months, his voiding frequency increased and he started to have urge incontinence. Antimuscarinic agents failed to relieve his lower urinary tract symptoms (LUTS).

CLINICAL INVESTIGATION

The patient had a healthy appearance. Urinalysis showed no abnormalities and other biochemistry studies were within normal limits. The total prostate volume was 33 mL, transition zone index 0.3, free maximum flow rate (Q_{max}) 12 mL/s, and postvoid residual (PVR) 10 mL.

VIDEOURODYNAMIC FINDINGS

Videourodynamic study revealed pseudodyssynergia of the urethral sphincter without bladder outlet obstruction. During the bladder filling phase, there were phasic detrusor contractions but he could in-

hibit the urge sensation (arrows). At a bladder volume of 132 mL, uninhibited detrusor contractions occurred and increased external sphincter activity to inhibit the detrusor contractions (small arrow heads) was noted. This dyssynergic sphincter contraction resulted in an isovolumetric contraction and a high intravesical pressure (large arrow heads). When he was instructed to void, the voiding pressure decreased and he urinated with a normal detrusor pressure (P_{det}) of 42 cm water and a Q_{max} of 10 mL. The bladder neck and prostatic urethra were open during voiding and the PVR was minimal.

CLINICAL DIAGNOSIS AND MANAGEMENT

Urethral sphincter pseudodyssynergia can be found in about 10% of patients with intracranial lesions. Detrusor overactivity during bladder filling results in a guarding reflex of the urethral sphincter and causes a tight bladder outlet during the initial voiding phase. When the patient relaxes the urethral sphincter, the voiding pressure decreases and no obvious bladder outlet obstruction is noted. Antimuscarinic agents can decrease detrusor overactivity and increase bladder capacity. Concomitant use of alpha-blockers may increase the Q_{max} and decrease the PVR if the patient cannot empty the bladder completely.