

PSYCHOLOGICAL CO-MORBIDITIES IN WOMEN WITH A PRIMARY DISORDER OF URETHRAL SPHINCTER RELAXATION (FOWLER'S SYNDROME)

Hypothesis / aims of study

Urinary retention is a relatively uncommon problem in young women and one of the well described causes is a primary disorder of urethral sphincter relaxation or Fowler's Syndrome (FS). Typically characterised by women retaining volumes of urine over a litre and impaired sensations of bladder fullness, urethral sphincter electromyography (EMG) shows characteristic abnormalities- complex repetitive discharges and decelerating bursts- and the urethral pressure profile is raised. Recent studies have suggested a vulnerability to physical and psychological co-morbidities in women with the condition, however these have not been clearly reported.

The aim of the study was to study the frequency of pain, psychological or functional disorders in patients with FS.

Study design, materials and methods

In this retrospective study, the charts of women referred to a tertiary centre teaching hospital for voiding difficulties or urinary retention between 2009-2013 were reviewed. Patients had been referred when local urological and local neurological investigations had been unable to find a cause for voiding dysfunction. Urethral pressure profile (UPP) was measured and concentric needle EMG of the striated urethral sphincter was performed in all patients. Patients with the characteristic abnormal EMG findings described above were diagnosed as having FS. Information about pain and non-urological symptoms such as psychological or psychiatric symptoms or diagnoses, functional or "unexplained" physical symptoms were noted.

Results

Of 62 women with clinical and electromyographic diagnosis of Fowler's syndrome, 31 (50%) had unexplained chronic pain syndromes, 12 (19%) of these were taking opiates. 15 (24%) had "functional" neurological symptoms. Fifteen patients (24%) had functional neurological symptoms with overlap of symptoms (loss of consciousness (n=7), limb weakness (n=6), sensory disturbance (n=6), memory impairment (n=3)). Nineteen patients (30%) reported symptoms of anxiety/depression (n=18) or obsessive compulsive symptoms (n=3). In total only 19 (30%) patients had no pain symptoms or psychological co-morbidities.

Interpretation of results

In this retrospective case note review, a high levels of psychological co-morbidity was observed in FS. The high level of comorbidities may be the inevitable effect of a distressing medical condition in otherwise young women. However the observed high prevalence point to the need for further studies exploring behavioural underpinnings contributing to these, and the complex interplay, if any, with their sphincter disturbance.

Concluding message

High levels of psychological co-morbidities may be seen in FS. There are several potential explanations for this association, and these should be concomitantly addressed when managing urinary retention in women with FS.

References

1. Wiseman O, Swinn M, Brady C, Fowler C. Maximum urethral closure pressure and sphincter volume in women with urinary retention. *J Urol*. 2002;167(March):1348-52.
2. De Ridder D, Ost D, Bruyincx F. The presence of Fowler's syndrome predicts successful long-term outcome of sacral nerve stimulation in women with urinary retention. *Eur Urol Internet*. 2007 Jan cited 2014 Feb 19;51(1):229-33

Disclosures

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