



FEMALE UROLOGY

## Botox injections are effective for Fowler's syndrome

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OnabotulinumtoxinA improves patient-reported lower urinary tract symptoms and objective measures of bladder function in women with Fowler's syndrome, according to data published in *BJU International*.

Fowler's syndrome is a primary disorder of urethral sphincter relaxation, whereby patients retain large volumes of urine but do not sense signs of bladder fullness. Characteristic findings on urethral sphincter electromyography, paired with high urethral pressure profiles, confirm the diagnosis. Sacral modulation is the main treatment option for women with Fowler's syndrome, but is costly and associated with complications, with a revision rate of over 50%. Although a 1992 study found that low-dose abobotulinumtoxinA injections into the urethral sphincter were ineffective in women with Fowler's syndrome, evidence collected since then suggests otherwise, leading researchers to launch this pilot study to investigate high-dose onabotulinumtoxinA therapy.

Baseline urinary flow, post-void residual volume and International Prostate Symptom Score (IPSS) were recorded, after which 14 women received the treatment (100 U onabotulinumtoxinA dissolved in 2 ml saline), 10 of whom completed the study. Women were followed up at weeks 1, 4, and 10 with uroflowmetry, bladder scan and IPSS assessment. Mean symptom score on IPSS improved from 25.6 to 14.1 at 10 weeks. Flow rate in women who could void improved from 8.12 ml/s to 15.8 ml/s and four of five women who were previously in complete retention could void spontaneously. No serious adverse effects were reported and seven of the women who completed the study returned for repeat injection.

"The study for the first time demonstrates that this treatment is beneficial in women suffering from voiding dysfunction due to Fowler's syndrome," lead author Jalesh Panicker told *Nature Reviews Urology*. "This is, therefore, a potential alternative for women who are either unable to access, or not keen to explore, sacral neuromodulation. The results suggest that this is an option for discussing with patients, explaining the preliminary nature of the results."

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**Original article** Panicker, J. N. *et al.* Open label study evaluating outpatient urethral sphincter injections of onabotulinumtoxinA to treat women with urinary retention due to a primary disorder of sphincter relaxation (Fowler's syndrome). *BJU Int.* doi:10.1111/bju.13342

**Further reading** Osman, N. I. & Chapple, C. R. Fowler's syndrome—a cause of unexplained urinary retention in young women? *Nat. Rev. Urol.* 11, 87–98 (2013) | Shin, J. I. Fowler's syndrome—progesterone deficiency or oestrogen excess? *Nat. Rev. Urol.* 11, 553 (2014) | Osman, N. I. & Chapple, C. R. Unravelling Fowler's syndrome—current pathophysiological concepts. *Nat. Rev. Urol.* 11, 553 (2014)