# OUTCOMES OF EXTERNAL URETHRAL SPHINCTER (EUS) ONABOTULINUM TOXIN TYPE A (BOTOX) AFTER FAILED SACRAL NEUROMODULATION (SNM) THERAPY IN WOMEN WITH VOIDING DYSFUNCTION (VD)/CHRONIC NON-OBSTRUCTIVE URINARY RETENTION (CNOUR)

<u>K. Kapriniotis</u>, A.Snook, M.Imran, A. Mercado- Campero, E. Day, H. Gresty, A. Noah, R. Nobrega, J. Ockrim, T. Greenwell, M. Pakzad

## Introduction:

Treatment options for VD/CNOUR are limited. SNM is the only minimally- invasive NICE-approved treatment. EUS-Botox is a promising alternative for patients who fail SNS. We reviewed the outcomes of EUS Botox in all female patients who had failed previous SNM for VD/CNOUR in a tertiary urology unit.

### **Patients and Methods:**

Retrospective review of all SNM procedures in a single tertiary referral centre between 2011-2021. All female patients with a history of VD/CNOUR and failed SNM followed by EUS-Botox were included. Botox 100IU was administered under cystoscopic vision via 4 injections in the urethral sphincter. Demographic, clinical, urodynamic and patient global impression of improvement (PGI-I) data was collected.

# Results:

Twelve patients were included in this study (mean age 31.8±12.9 years). Six (50%) were in complete retention (due to acontractile bladder [n=5] or bladder-outlet-obstruction [BOO; n=1]), requiring intermittent (CISC; n=5) or indwelling-urethral (IDUC; n=1) catheterisation. The other 6 patients were spontaneously voiding with high post-void residuals, emptying via CISC (n=4), suprapubic-catheter (SPC; n=1) or simply not emptying (n=1). Two had acontractile bladder and four BOO. All patients had raised maximum-urethral-closure-pressure in the standard urethral profilometry (MUCP; mean 105±25cmH2O, expected 62±13cmH2O). Based on PGI-I, 6 patients (50%) reported no change after EUS-Botox (PGI-I=4); three of them continued CISC, two underwent and one is considering a Mitrofanoff procedure. Six (50%) patients reported improvement (PGI-I=1-3) with less pain on catheterisation (n=1), minor flow improvement (n=1), >50% reduction of PVRs (n=2) or becoming catheter free (n=3). Initial benefit was maintained in 4 of these 6 patients, who continued to repeat injections (range 2-6 injections). One patient has a postop urinary tract infection and one transient self-limited haematuria.

# **Conclusion:**

Despite a discrete 50% success rate, our data suggests that EUS-Botox is an acceptable and safe minimally invasive alternative to major reconstructive surgery in patients with VD/CNOUR.