

ONABOTULINUMTOXINA INJECTION TO THE EXTERNAL URETHRAL SPHINCTER FOR VOIDING DYSFUNCTION IN FEMALES: A TERTIARY CENTRE EXPERIENCE

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Introduction and Objectives

Treatment options for voiding dysfunction in females are limited. The aim of this study was to examine the functional outcomes of onabotulinumtoxinA injections into the external urethral sphincter (EUS) for voiding dysfunction in females.

Material and Methods

A retrospective analysis of a prospectively kept database was performed, of all patients receiving onabotulinumtoxinA injections at a tertiary centre. Cases were performed from 2015 to 2017, all under general anaesthesia. All patients were evaluated with pre-operative videourodynamic study and urethral pressure profilometry and all received 100U of treatment. All had three months of follow up.

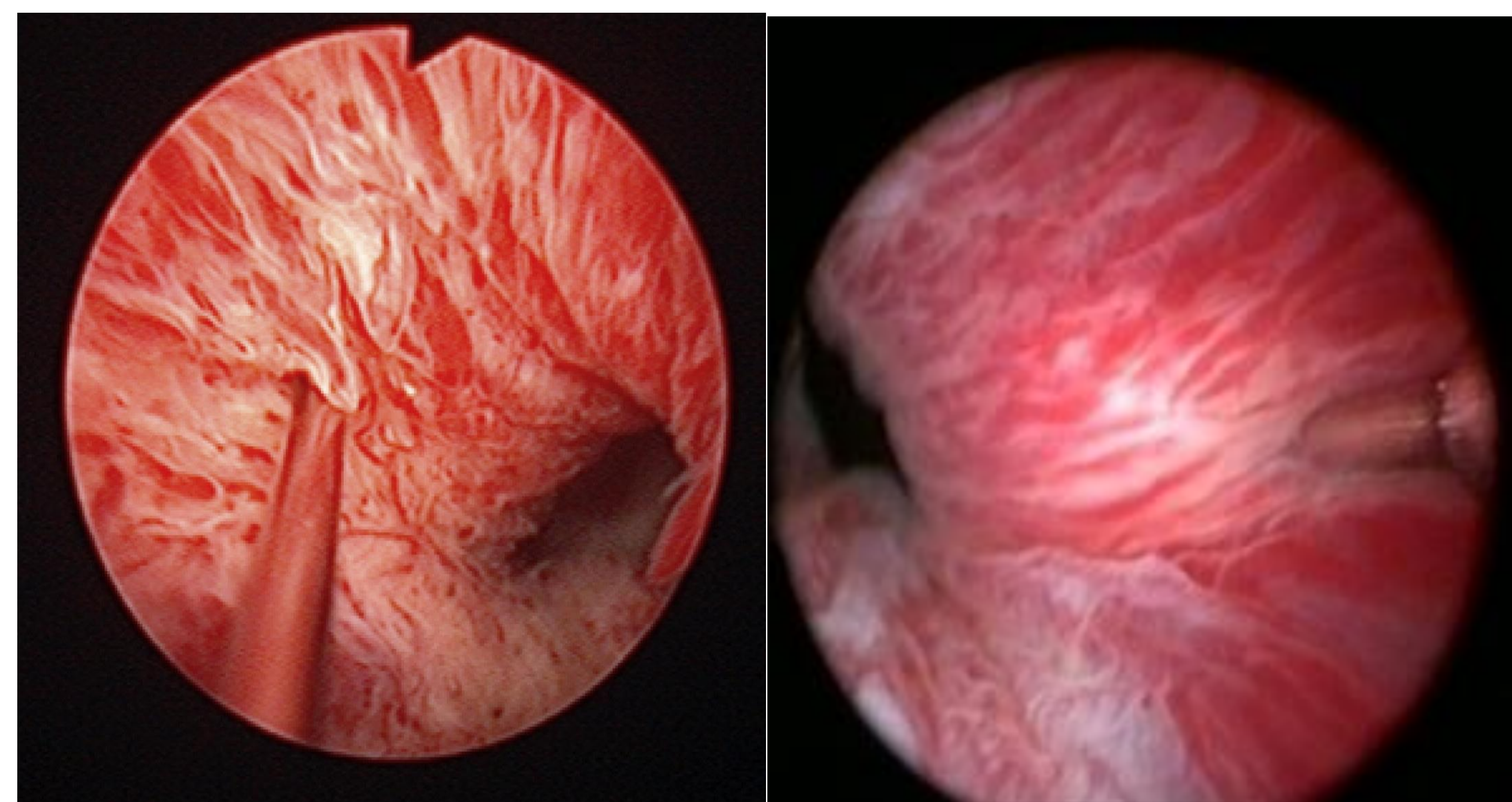


Fig 1 – 2 : Endoscopic images of onabotulinumtoxinA injections to external urethral sphincter

Results

- 10 female patients with mean age 45.5 years (18-80)
- 4 urodynamic evidence of BOO
 - 2 had detrusor sphincter dyssynergia
- 6 had an acontractile detrusor
- The mean pre-op mid-urethral closure pressure (MUCP) was 93.3cmH₂O
 - Mean expected MUCP was 45cmH₂O
- The measured MUCP was higher than the expected MUCP in all cases.
- 6 had failed previous Sacral Nerve Stimulation
- 4 women were voiding pre-onabotulinumtoxinA
- 4 were performing clean intermittent self-catheterisation (CISC)
- 2 had an indwelling suprapubic catheter (SPC)

Interpretation of results

After onabotulinumtoxinA:

- 6 patients were voiding, 2 were performing CISC, 2 remained with an SPC
- Median pre-op QMax improved from 8.5ml/s to 12.5ml/s
- Mean post void residual volume decreased from 244mls to 94mls.
- 4 patients reported quality of life improvement after treatment, however 1 reported short lived benefit lasting less than 3 months.
- 2 patients went onto repeat treatments. There were no significant adverse events. 1 patient developed transient stress urinary incontinence after the injection.

Conclusion

OnabotulinumtoxinA to the EUS, is a valid treatment in females with voiding dysfunction, where therapeutic options are limited. The results can be short lived and patients must be made aware of this. Further study is required, with longer term follow up.