

2021 Best Research Poster Award



Intravesical OnabotulinumtoxinA. A wonderful tool but are we underestimating urinary retention? A retrospective review from a single urological specialist in Australia looking towards predictive factors.

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INTRODUCTION

Intravesical OnabotulinumtoxinA (Botox) is becoming a well-used tool for management of overactive detrusor refractory to medical management, with efficacy well documented (1, 2). Allergan® report a rate of urinary retention requiring intermittent catheterization (IC) at approximately 6% for patients post treatment of idiopathic detrusor overactivity (1). Despite this classically reported risk, other randomized controlled trials report rates of IC between 4.3% - 43% (2).

OBJECTIVES

This study aims to review the experience of a specialist urological surgeon to assess if current quoted rates of urinary retention are in line with prior experiences; as well as to identify preoperative predictors for retention to help guide future consent and patient management.

METHOD

Study: Retrospective review of a single Australian urologist was completed.

Inclusion: All female patients who underwent intravesical OnabotulinumtoxinA for management of idiopathic detrusor overactivity were included.

Exclusion: Patients who did not have a complete preoperative urodynamic assessment available for analysis, or if a patient was lost to follow up.

Timeframe: February 2016 to March 2021.

Patient demographics, significant past medical history, urodynamic assessment and post-operative post-void residual (PVR) was recorded.

Outcomes:

- 1) Post void residual
- 2) Initiation of intermittent catheterisation

RESULTS

77 female patients qualified for inclusion.

Mean age of 70 years (18-95 years).

Average first post-operative PVR was 157.7ml (range 0ml - 1139ml).

23 (30%) patients experienced urinary retention with clinical concern for incomplete bladder emptying resulting in initiation of IC. Post void residual for these patients had an average volume of 443ml (range 150-1139ml).

In total 54 (70%) patients were deemed clinically safe to avoid intermittent catheterization with an average PVR 105ml (range 0-478ml).

DISCUSSION

We have identified a higher than expected rate of requirement of intermittent catheterization with 30% within our cohort compared to quoted 6% in Allergan® material, this is despite our surgical experience having more tolerance for comparatively elevated post void residuals. Within our cohort age and preoperative PVR did not appear to be a predictive factor.

Limitations: Single surgeon cohort.

CONCLUSION

These results are in line with other internationally recognised studies with similar rates of intermittent catheterization post 100units OnabotulinumtoxinA (3), which are up to six times those reported from Allergan®.

We have commenced further investigation

- Systematic review looking at impacts of dosage volume and distribution of OnabotulinumtoxinA within the bladder
- Consideration of a prospective trial to see if volume of aliquot administration has an impact of retention rates and efficacy
- Survey of Victorian Urologists to establish local best practice

REFERENCES & ACKNOWLEDGEMENTS

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