

## Introduction

Long-term post-prostatectomy urinary incontinence affects between 3-10% of all patients who have undergone a radical prostatectomy.

This can either be urodynamically proven stress urinary incontinence (SUI), detrusor overactivity (DO), or mixed urinary incontinence (MUI).

This can have a severe impact on a patient's quality of life. The aim of the study was to evaluate the efficacy of intravesical Botox (Botulinum ToxinA) for patients with Post-Prostatectomy incontinence from Overactive Bladder (OAB).

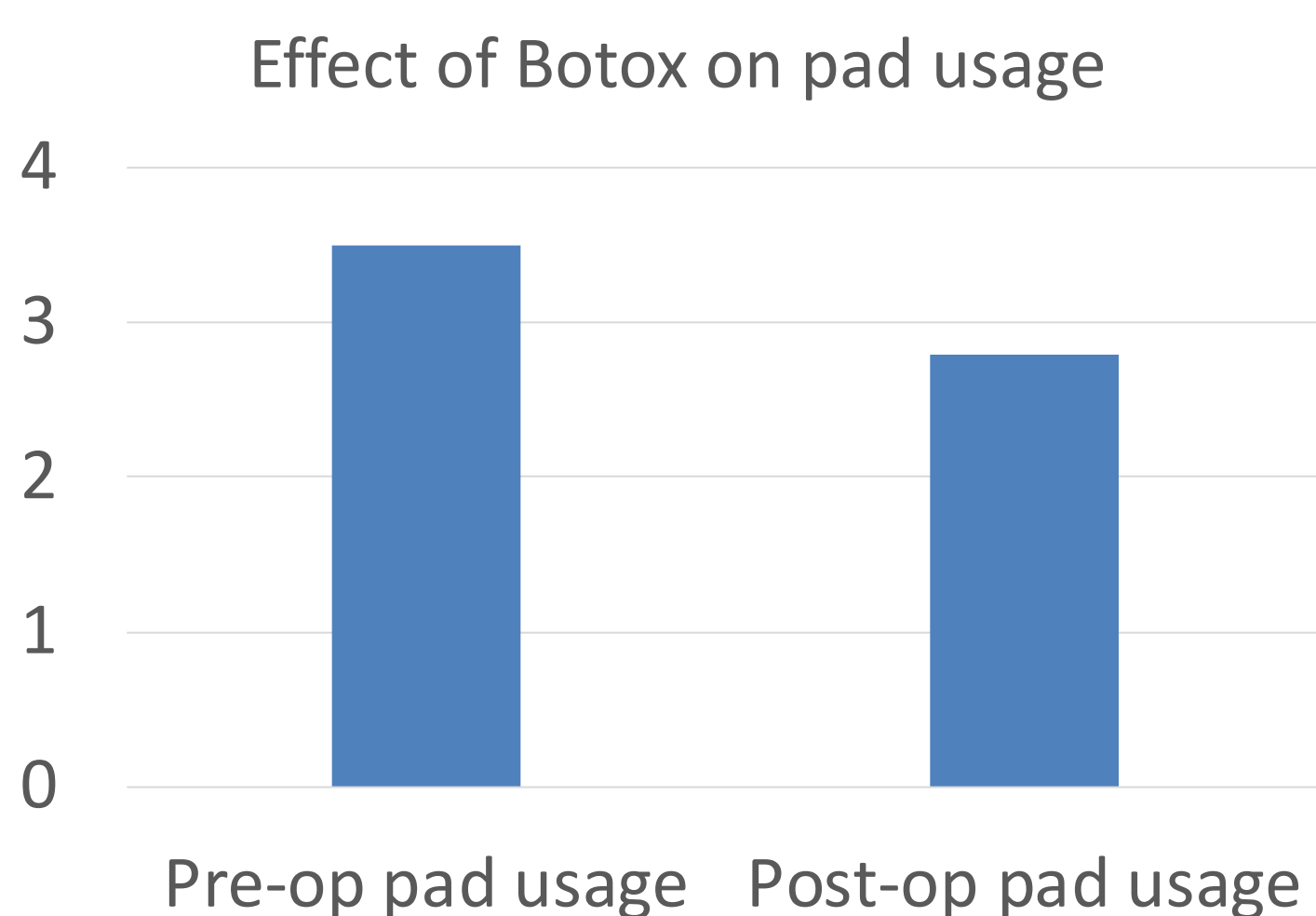
## Methods and Materials

A retrospective review of all patients at a Tertiary London University Hospital was conducted from January 2018 – December 2021.

The type of urinary incontinence was confirmed on urodynamics.

Demographics and symptom severity were collected. ICIQ-OAB questionnaires were filled in by the patients before and 3 months after their procedure. 24-hour pad usage was quantified before and after the procedure.

PG-II scores were filled in after their procedure to assess patient satisfaction with their intervention. Patients were followed-up at 3-month post-procedure. Student T-tests were used to assess for significance.



## Results

35 patients with OAB symptoms were identified to have had intravesical Botox in this time. The mean age of each patient was 69.4 years. 45.7% (16) had pure DO, 2.8% (1) had pure SUI with OAB symptoms, whilst 51.4% (18) had mixed incontinence (MUI) DO and SUI.

Mean total 24-hour pad use was 3.5 per day pre-operatively and 2.8 per day post-operatively at 6 months. 45.8% (16) of patients went on to a further treatment with Botox, 82% (12) of which were from the DO group. 12.5% (3) of patients needed to temporarily self-catheterise after treatment.

Significant clinical improvement was found in the DO group when compared with the MUI group. Average PGII score was 3.21.

Table 1 shows a breakdown of scores per patient group (DO vs MUI). 7 patients with MUI went on to have the SUI component treated with artificial urinary sphincter or male sling.

Table 1

PGII score	DO		Mixed UI	
	Pre-op	Post-op	Pre-op	Post-op
Pads	3	1.75	3.8	3.7
	41.6% decrease (p=0.001)		2.6% decrease (p=0.98)	
ICIQ-OAB (symptoms)	9.3	6.0	8.9	7.7
	35.5% improvement (p=0.000)		13.5% improvement (p=0.753)	
ICIQ-OAB (bother)	26.9	19.9	26.7	24.1
	26% improvement (p=0.013)		9.7% improvement (p=0.311)	

## Conclusions

There is higher patient satisfaction and more effective symptom control, from intravesical Botox, reported from patients with pure DO than from patients with DO and SUI (MUI) combined.

This is the largest reported series to date of the efficacy of intravesical Botox in this patient cohort. Significant improvements in patient satisfaction, quality of life, severity of incontinence symptoms, and pad use were noted for patients with pure DO treated with Botox. They were also more likely to opt for repeat treatment rounds. There is no significant effectiveness in patients with MUI. A larger cohort of patients is required for greater evaluation. For MUI in males, initial treatment of the SUI component could be considered before the DO component.