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# SHORT-TERM EFFICACY OF BOTULINUM TOXIN A FOR THE TREATMENT OF REFRACTORY URINARY URGENCY IN THE ELDERLY POPULATION

# Hypothesis / aims of study

The treatment of elderly patients with urinary urgency and urgency incontinence is fraught with difficulties. Behavioral therapies are often difficult to implement, anticholinergics are often ineffective or unsafe, and the use of sacral nerve stimulation is largely contraindicated owing to patient co-morbidities. Given these limitations, we prospectively evaluated the efficacy and safety of botulinum toxin A (BTX-A) injections into the detrusor muscle for the treatment of elderly patients with refractory overactive bladder.

## Study design, materials and methods

Patients at least 75 years of age with refractory urinary urgency and urgency incontinence were prospectively evaluated and offered treatment of their symptoms with BTX-A. A voiding diary was obtained and urodynamics (UDS) were performed on each patient prior to treatment. Patients then underwent injection of 200 Units (U) of BTX-A into the detrusor muscle at 20 sites under cystoscopic guidance. Patients were followed postoperatively for evidence and duration of success, complications, and the need for repeat treatment. Statistical analysis was performed

#### Results

From January 2006 to May 2007, a total of 21 patients with a mean age of 81.2 years (range 75-92 years) refractory to or intolerant of anticholinergics were treated with intravesical BTX-A at our institution. Preoperatively, the mean number of voids per day was  $11.4 \pm 1.67$  and the mean number of pads/day was  $4.0\pm0.89$ . Preoperative UDS confirmed detrusor overactivity and urge incontinence in all patients. All patients subsequently underwent intravesical botulinum injection. At a mean follow-up of 12.5 months (range 3-19 months), 16 of 21 patients (76%) reported >50% improvement in symptoms after 1 injection. Specifically, there was a significant improvement in the mean number of voids/day (5.19 $\pm0.83$ , p < .001) and daily pad usage (1.3 $\pm0.60$ , p < .001). Of the remaining 5 patients, 2 demonstrated >50% symptom improvement following repeat injection while 3 patients failed to demonstrate any improvement after 2 injections. Mean time to deterioration was 7.12 months. There were no intraoperative or postoperative complications, specifically no new-onset urinary retention.

### Interpretation of results

The use of intravesical BTX-A for the treatment of detrusor overactivity in the elderly population appears efficacious and durable at a mean follow-up of 12 months

## Concluding message

Given its low incidence of adverse events, BTX-A should be considered a viable treatment option in this population.

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require eithics committee approval because	this is golden standard treatment in patients not responding to
	behavioral changes and anticholinergic treatment
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes