

## INTRAVESICAL BOTULINUM TOXIN FOR OVERACTIVE BLADDER SYNDROME WITHOUT DETRUSOR OVERACTIVITY

### Hypothesis / aims of study

Intravesical botulinum toxin A injection (botox) has been established as an effective treatment for overactive bladder syndrome (OAB) (1), particularly where oral anti-muscarinics have proven unsuccessful or are poorly tolerated. Thus far, trials have largely focussed on patients with detrusor overactivity demonstrated on urodynamic assessment.

We hypothesise that patients with OAB symptoms without detrusor overactivity on urodynamic assessment may also benefit from treatment with intravesical botox, and that the absence of detrusor overactivity should not represent a contraindication to intravesical botox treatment.

### Study design, materials and methods

Data regarding presentation, diagnosis, urodynamic findings, date and dose of treatment, and outcomes were recorded prospectively for 139 consecutive patients undergoing intravesical botox treatment.

Patients were designated as responders or non-responders based on their assessment of whether their symptoms had improved and response rates were calculated for patient groups based on: clinical indication for treatment, urodynamic findings, and type of botulinum toxin used. Rates of urinary retention requiring catheterisation post-procedure were also recorded for each group.

### Results

An overall response rate of 84% was achieved across all patient groups (n=139). Response rates were similar for different clinical indications, with no statistically significant difference between groups.

Patients without detrusor overactivity on urodynamic assessment (n=27) had an overall response rate of 89%, which compared favourably with response rates of 81% and 93% in patients with idiopathic detrusor overactivity (n=91) and neurogenic detrusor overactivity (n=15) respectively. Chi-squared analysis revealed no significant difference between response rates for these groups.

Overall, 39% of patients who were voiding normally prior to intravesical botox treatment required intermittent self-catheterisation after the procedure. The requirement for ISC did not appear to be influenced by urodynamic findings, clinical indication, or type of botox used.

### Interpretation of results

These data provide a preliminary indication that intravesical botox may be a safe and effective treatment for OAB symptoms in the absence of detrusor overactivity on conventional urodynamic studies. Urinary retention and need for intermittent self-catheterisation is a relatively frequent complication in patients undergoing this treatment and should be discussed with patients prior to the initiation of treatment.

### Concluding message

Intravesical botox injection may be efficacious in patients with OAB symptoms without detrusor overactivity on conventional urodynamic studies. Its use in this setting should be evaluated formally in a randomised, placebo controlled trial.

### References

1. Duthie JB, Herbison GP, Wilson DI, Wilson D. Botulinum toxin injections for adults with overactive bladder syndrome. Cochrane Database of Systematic Reviews 2007, Issue 3

<b>Specify source of funding or grant</b>	<b>None</b>
<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>Audit of outcomes from patients undergoing non-experimental treatment.</b>

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<i>Was the Declaration of Helsinki followed?</i>	<b>Yes</b>
<i>Was informed consent obtained from the patients?</i>	<b>Yes</b>

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