

## ENDOSCOPIC INTRADETRUSOREAL BOTULINUM TOXIN TYPE A INJECTION FOR THE MANAGEMENT OF NEUROGENIC DETRUSOR OVERACTIVITY. TECHNIQUE DEMONSTRATION.

### Introduction

Anticholinergics are the standard treatment for the management of Detrusor Overactivity. Neurogenic patients are very often refractor to the standard treatment even at the highest dosages of the medical treatment. For these cases intradetrusoreal botulinum toxin type A injections is an effective minimal invasive treatment. Even the technical point of view seems simple we demonstrate the technique in our video, in order more urologists to become familiar with this subject.

### Design

A 53 years old man with incomplete paraplegia, due to traumatic lesion at T10 spinal cord level 12 years ago, suffers from Neurogenic Detrusor Overactivity (NDO) and Detrusor – Sphincter Dyssynergia (DSD). Patient tried all the available anticholinergic medication even at the highest dosages, but the bladder compliance is getting worse over time and the intravesicle pressure remains at high levels. Endoscopic intradetrusoreal botulinum toxin type A injections was considered as the appropriate 2<sup>nd</sup> line treatment for him. We totally applied 300 Units of BOTOX toxin to the bladder wall.

### Results

Every flacon contains 100 Units of toxin and dilution takes place up to 10ml. For the total 300 Units the solution is 30ml which is injected in 30 points at the bladder wall (trigone sparing). Every injection contains 1ml of the solution. During the procedure the bladder remains in moderate filling. The puncture length of the needle is 5mm.

### Conclusion

Endoscopic intradetrusoreal botulinum toxin type A injection is a 2<sup>nd</sup> line treatment for NDO which is refractor anticholinergic treatment. Especially in neurogenic patients this procedure can offer a low pressure bladder which empty by intermittent catheterizations. On the other hand all these patients are familiar with self-catheterizations.

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>National Organization for Medicines</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>