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Role of Botulinum Toxin a Injections as a Salvage Therapy for Refractory Overactive Bladder: Insights from Urodynamic Studies

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Abstract

The aim of study was to establish the role of botulinum toxin A (BTX-A) in the treatment of refractory idiopathic overactive bladder (OAB) patients and to find out if urodynamic values could predict the positive third line treatment response. Many clinicians use UDS to diagnose DO before detrusor injection treatment. According to NICE Guide it is mandatory to investigate "urodynamics" to confirm the diagnosis of DO before performing minimally invasive treatment such as BTX-A injections. Was obtained clinical data based on the necessity of performing urodynamic tests before BTX-A injection, at patients with idiopathic refractory OAB, ensuring effectiveness and long-lasting treatment, as well as providing predictive parameters for potential postoperative complications. A retrospective study was performed on 30 patients with OAB symptoms who followed first line therapy for 4 months, without any positive results. The study was performed during 2021-2022, at the Department of Urology, "Nicolae Testemitanu" USMF, Republic of Moldova. After 6 weeks of intravesical BTX-A injection, was demonstrated significant reductions in frequency, nocturia and quality of life compared to baseline. This study identified several urodynamic variables that are directly associated with clinical data, influencing the severity of symptoms in patients with refractory idiopathic OAB and the effectiveness of BTX-A injection as a treatment option, especially when it is a urodynamic confirmation of DO. The administration of 100 U of BTX-A through detrusor injection has



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been shown to be efficacious in the management of OAB with DO confirmed on urodynamic, in patients that are unresponsive to second line therapy. *Keywords: Botulinum toxin, bladders, urodynamic studies*

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