37. IDIOPATHIC OVERACTIVE BLADDER TREATMENT IN WOMEN AFTER REINJECTION OF BOTULINUM TOXIN

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Introduction. The aim of the study was to evaluate the efficacy and duration of the response after detrusor injection with botulinum toxin type A(BTX-A) in the treatment of idiopathic overactive bladder(OABi) with detrusor overactivity(DO) in women. Standard pharmacological treatment for OABi starts with anticholinergics or β3-agonists, but 46.2% of patients with OABi discontinued medical treatment due to poor or less effective response than expected or appearance side effects (xerostomia,constipation,vision deficiency). Complete investigation of bladder contraction function by urodynamic examination methods, including urinary phase, is recommended before detrusor injection with BTX-A. Intravesical BTX-A is effective for OABi symptoms associated with DO. The most common adverse event of BTX-A treatment for OAB is urinary retention and urinary tract infections (UTIs), which are found in 18% of cases at 2 weeks post-injection.

Case presentation. Was analyzed the efficacy and durability of repeated injectable treatment, performed on 30 years old females, diagnosed clinical and paraclinical with OABi and DO, during 2019-2021 at the Department of urology and surgical nephrology. The effectiveness of the procedure was assessed according to the voiding diary/24h, symptoms questionnaire (OABSS) and quality of life questionnaire (OABq) before injection and at 1-month checkup visit. The patient was refractory to treatment for 3 months, at least 2 different anticholinergic agents, discontinued treatment 4 weeks before BTX-A injection. Three injections of BTX-A were performed at doses of 100 U(1st and 2nd) and 200 U (3rd injection) into the bladder wall by rigid cystoscope, under i/v anesthesia, in 20 places around the bladder wall, avoiding the trigone.

Discussion. Analyzing the urodynamic data before injection after third dose of BTX-A, showed an increase values such as maximum urinated volume by 34 ml, the maximum capacity of the bladder by 57 ml and the decrease of number of phasic contractions and the detrusor pressure by 5,6ml/H2O. The dose of 200U has been shown to be consistent with improved voiding diary values, nocturnal indices (1.1) and nocturnal polyuria (10%), increased bladder function capacity (≤110 ml), and decreased frequency pe day (n<8). Significant improvement in urinary symptoms was established in the 3rd month compared to the first month in the patient after BTX-A injection at 200 U, except for nocturia, a symptom that disappeared immediately after all 3 injections. Based on the OABSS questionnaire, it was established that the symptoms improved to a slight degree of post-injection damage. The total index of urgency and frequency of urination after the third dose decreased with 27 units. The average duration of action after the first injection of the detrusor with BTX-A (100 U)~9 months, after the second injection (100 U)~6 months, and after the 3rd injection (200 U)~11-12 months. After all injections, no symptomatic/asymptomatic acute urinary retention developed that would have temporarily required clean intermittent catheterization or positive PVR, and ITU was confirmed only after the second injection by positive urine culture. The high score of OABq, after injection of all doses, was up to 90%, consistent throughout the follow-up of the patient.

Conclusion. BTX-A therapy is the optimal option for managing the refractory OABi symptoms due to DO. This study demonstrates that repeated detrusor injections of BTX-A are safe and valuable as a treatment option for DO over a period of several years.