Outcome of Botulinum Toxin-A intraprostatic injection for benign prostatic hyperplasia induced lower urinary tract symptoms A prospective multicenter study

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# الملخص الأنجليزي

#### Purpose:

Our aim was to determine the factors predicting the outcome of intraprostatic injection of Botulinum Toxin-A (BTX-A) in the treatment of benign prostatic hyperplasia (BPH)-induced lower urinary tract symptoms (LUTS) and to evaluate its efficacy and safety.

#### Patients and Methods:

Between September 2016 and May 2018, 45 Egyptian patients, with BPH induced LUTS were included; the indication was a failure of medical treatment, unfit, or refusing surgical intervention. Measurements of prostate size by TRUS, total PSA level before and 12 weeks after injection. IPSS, uroflow, and postvoiding residual urine (PVR) were measured before injection, 2, 4, 8 and 12 weeks post injection. 100 U BTX-A vial was diluted with 10mL of saline then injected into the transition zone at base and midzone of the prostate by TRUS.

### Results:

The mean patients' age was 64.4±6.6 years. Mean baseline IPSS 24.06 decreased to 18.75 at 2 weeks and progressively decreased to 16.37 at 12 weeks (P<0.001), Qmax of 9.08mL/s. increased to 10.44 at 2 weeks and 11.44 at 12 weeks (P<0.001), mean prostate volume was 67.44cc; decreased to 66.06cc (P<0.001) at 12 weeks and mean residual urine was 82.62mL and decreased to 57.66mL at 12 weeks.

## **Conclusions:**

Intraprostatic injection of BTX-A as modality treatment of LUTS/BPH significantly improve IPSS, Qmax, PVR, and decrease prostate volume. We can suspect better results with this line of treatment in patients with IPSS≤22 and Qmax ≤10mL/min and prostate volume≤56.5cc.