Shrinkage of Prostate Glands after Botulinum Toxin A Prostatic Injections

Hann-Chorng Kuo, M.D.

Department of Urology, Buddhist Tzu Chi General Hospital and Tzu Chi University, Hualien, Taiwan; E-mail: hck@tzuchi.com.tw

The patient was a 75-year-old man who had had lower urinary tract symptoms (LUTS) for 2 years. His prostate was enlarged (total prostate volume 60 mL, transition zone index 0.6) and the maximum flow rate was 7 mL/s with a post-void residual volume of 120 mL. He had been treated with alpha-blocker combined with 5-alpha-reductase inhibitor for more than 1 year but the LUTS remained bothersome. Therefore, he was recommended for botulinum toxin A (BTX-A) addon therapy: 200 units of BTX-A (Botox, Allergan, U.S.A.) dissolved in 12 mL normal saline was injected into the middle portion of the bilateral lobes of the prostate. During prostatic injection, the BTX-A solution distributed to the whole lobe through a single puncture and injection (Fig. 1). Cystoscopy was also performed to investigate the prostatic urethra at baseline and after BTX-A injection (Fig. 2). As we can see, the prostatic urethra was dilated at 1 month and further dilated at 3 months after BTX-A injection, indicating the pro-static volume had decreased and the bladder outlet obstruction had been relieved. The patient had an improved LUTS score and increased maximum flow rate after treatment.

REFERENCE

1. Chuang YC, Chancellor MB: The application of botulinum toxin in the prostate. J Urol 2006; **176**:2375-2382.

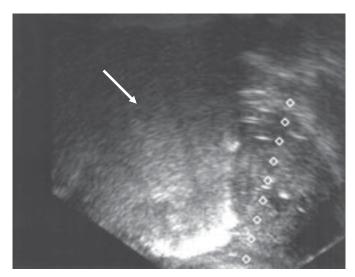
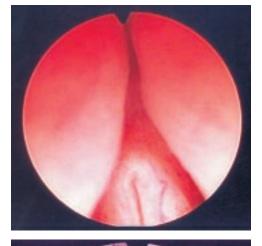


Fig. 1. Distribution within right lobe after BTX-A injection.



Baseline



1 Month



3 Months

Fig. 2. Serial cystoscopy at baseline and after BTX-A injection in patient with benign prostatic hyperplasia.