idiopathic detrusor overactivity or for those patients with striated sphincter dysynergia, I am a little bit skeptical about whether it is what we need the most for the patients with BPE.

References


DOI: 10.1016/j.eururo.2008.06.017
DOI of original article: 10.1016/j.eururo.2008.06.016

Editorial Comment on: Is Botulinum Neurotoxin Type A (BoNT-A) a Novel Therapy for Lower Urinary Tract Symptoms Due to Benign Prostatic Enlargement? A Review of the Literature

Christian Gratzke, Oliver Reich
Department of Urology, University-Hospital Grosshadern, LMU Munich, Germany
christian.gratzke@med.uni-muenchen.de

Medical treatment of lower urinary tract symptoms (LUTS) suggestive of benign prostatic hyperplasia (BPH) has been primarily based on α1-adrenoceptor (AR) antagonists, 5α-reductase inhibitors, and phytotherapy. Only a few new drug classes have been added, which is probably because the pathophysiology of LUTS is multifactorial and treatment targets are difficult to define. It is currently unclear whether the most relevant target is within the prostate or whether extraprostatic sites are more important. Many patients with benign prostatic obstruction still experience persistent storage symptoms after prostatectomy, which should relieve obstruction. Furthermore, LUTS also occur in women. Therefore, focus has shifted from the prostate to the bladder as the source of some LUTS and as a therapeutic target [1].

Botulinum neurotoxin type A (BoNTA) has been recently introduced not only for the treatment of LUTS but also for neurogenic and idiopathic detrusor overactivity (DO) [2]. Oeconomou et al present a timely review of the current knowledge of BoNTA as a novel therapeutic option in the treatment of LUTS [3]. Intraprostatic injection of BoNTA results, with few side effects, in significant improvements in urinary flow rate, Quality of Life Index, reduction of International Prostate Symptoms Score, prostate-specific antigen (PSA), postvoid residual volume, and prostate volume. Although the mechanism of action leading to these improvements is not completely clarified, next to atrophy of the prostate and relaxation of prostatic smooth muscle, afferent signaling pathways might be of importance. After intradetrusor BoNTA injection, a decrease of transient receptor potential vanilloid type 1 (TRPV1) and P2X3-immunoreactive positive nerve fibers was observed [4]. TRPV1 and purinergic receptors are expressed by urothelial cells as well as by afferent nerves in proximity to urothelial cells in the urinary bladder, whereas intravesical adenosine triphosphate (ATP) induces detrusor overactivity in conscious rats [5]. It remains to be determined whether other factors that influence bladder function are modulated by BoNTA.

Further randomized controlled studies with longer follow-up are needed to evaluate the potential of BoNTA. Based on the current findings, however, BoNTA seems to be a promising new option for the treatment of LUTS.

References


DOI: 10.1016/j.eururo.2008.06.018

DOI of original article: 10.1016/j.eururo.2008.06.016