







Special Issue Reprint

Botulinum Toxin Treatment for Pain and Inflammation in Functional Urological Disorders

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The botulinum toxin has been widely applied in the treatment of functional urological diseases, such as overactive bladder, neurogenic detrusor overactivity, interstitial cystitis, and chronic pelvic pain syndrome. Evidence has shown that the botulinum toxin not only affects the release of neuropeptides from motor nerve endings, but also connects sensory nerves to the central nervous system. Inflammation in the central nervous system can be reduced after botulinum toxin treatment. The scope of therapeutic targets involves detrusor overactivity, sensory disorders, bladder pain and pelvic pain, and inflammatory disorders of the bladder, prostate, and bladder outlet. Although the actual pathophysiological mechanism of the action of the botulinum toxin has not been completely demonstrated, an anti-inflammation effect might be the predominant therapeutic mechanism for functional urological disorders such as an overactive bladder, bladder hypersensitivity, interstitial cystitis, chronic pelvic pain syndrome, chronic prostatitis, and lower urinary tract symptoms/benign prostatic hyperplasia. This Special Issue of Toxins covers the therapeutic potentials of the botulinum toxin on lower urinary tract dysfunctions, with emphasis on the mechanism of pharmacological action and clinical effects.





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