



**toxins**



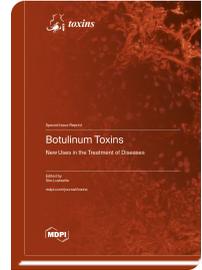
*Special Issue Reprint*

## **Botulinum Toxins: New Uses in the Treatment of Diseases**

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Animal and clinical studies have extensively reported the therapeutic efficacy of botulinum neurotoxins in many diseases characterized by excessive muscle contractions. The therapeutic effects of botulinum neurotoxins originate from their elective action as inhibitors of cholinergic transmission, this fact has given extraordinary support to the clinical use of botulinum neurotoxins in pathologies such as dystonia, torticollis, blepharospasm, and many others originating from hypercholinergic dysfunctions. Today, the list of human pathologies in which treatment with botulinum neurotoxins produces favorable results is constantly growing. This reprint presents a collection of research into new therapeutic applications of botulinum neurotoxins. Review and research articles discussing animal models, clinical studies, case reports, and off-label indications are presented. The goal of this reprint is to provide an updated framework regarding the development of new applications of botulinum neurotoxins to enable their future clinical use.



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