



Botulinum Neurotoxin and Parkinson's Disease

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Message from the Guest Editors

Parkinson's disease (PD) is a progressive neurodegenerative disease, and is the second most frequently occurring of this type. The main motor symptoms of PD, such as bradykinesia, akinesia, rest tremor, rigidity, postural instability, and gait disorders, are caused by axonal degeneration of dopaminergic fibers in the striatum and subsequent or parallel loss of dopaminergic neurons in the substantia nigra pars compacta.

Botulinum toxins, produced by the anaerobic bacterium *Clostridium botulinum*, are among the most potent poisons present in nature. They inhibit the release of acetylcholine from the presynaptic terminal by affecting SNARE and SNAP proteins. In recent years botulinum neurotoxin (BoNT) has been used for the treatment over 100 different medical indications. Many of the symptoms for which BoNT has been found to be effective occur in a variety of neurological disorders. Especially in Parkinson's disease, BoNT has been successfully applied to treat various motor symptoms.

In this Special Issue, we ask experts to contribute manuscripts that examine the current therapeutic indications and effectiveness of BoNT in PD or respective animal models.





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Message from the Editor-in-Chief

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