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Treatment of Parkinson's Disease: Current Treatments and Recent Therapeutic Developments

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Abstract

Background: Parkinson's disease (PD) is a neurodegenerative syndrome defined by a variety of motor, cognitive, and psychomotor dysfunctions. The current pharmaceutical treatment focuses on treating the condition's symptoms. They are primarily concerned with reducing illness symptoms or avoiding dopamine metabolism. As our understanding of disease pathogenesis improves, new therapeutic approaches emerge.

Objective: This article aims to describe the standard Parkinson's medications based on symptoms and requirements. It emphasizes recent advancements in symptomatic therapy for motor indications and achievements in the research and clinical testing of medicines that promise to enable disease modification in patients with already-manifest PD.

Methods: Information for this paper was found by looking through Google Scholar and reading several research and review articles from Bentham Science, Science Direct, Elsevier, Frontiers, Taylor & Francis, and other publishers.

Result: Parkinson's disease therapeutic interventions are now limited to symptomatic therapy, mostly in dopaminergic medications and deep brain stimulation (DBS). They have the potential to deliver great therapeutic progress, yet they can also have serious drawbacks that decrease a patient's quality of life. The progress of pluripotent stem cell therapies and genome engineering procedures has sparked renewed hope for the treatment of a wide range of human illnesses, particularly genetic abnormalities.

Conclusion: The current Parkinson's therapy trends are successful and continually evolving, with several drugs currently undergoing clinical trials. As these new therapies constantly coming out and can be used together, they will likely change how Parkinson's disease is treated in the coming years.

Keywords: DA agonists; deep brain stimulation; dual D2/5-HT1A receptor agonists; immunotherapy; neural transplant; selective D1 receptor agonists.

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