OPEN ACCESS Freely available online

ISSN: 2168-975X
Brain Disorders & Therapy

Perspective

Treatment and Management of Parkinson Disease

Joseph Jankovic*

Department of Neurology, Baylor College of Medicine, Houston, Texas, USA

DESCRIPTION

The goal of medical treatment for Parkinson's disease is to keep signs and symptoms under control for as long as feasible while reducing side effects. Studies show that if therapy is not started immediately following a diagnosis, a patient's quality of life swiftly deteriorates.

Symptomatic and neuroprotective therapy

Symptomatic and neuroprotective (disease modifying) therapy are two types of pharmacologic treatment for Parkinson's disease. There is no proven neuroprotective or disease-modifying treatment at this time.

The standard of symptomatic treatment for Parkinson's disease is levodopa combined with carbidopa, a peripheral decarboxylase inhibitor (PDI). Carbidopa prevents levodopa from being decarboxylated into dopamine in the systemic circulation, allowing for more levodopa to reach the central nervous system. In the short term, levodopa has the highest antiparkinsonian effectiveness for motor signs and symptoms, with the fewest side effects; nevertheless, long-term treatment is linked to motor fluctuations ("wearing-off") and dyskinesias. It's difficult to get rid of fluctuations and dyskinesias once they have become a problem.

Inhibitors of the Monoamine Oxidase (MAO)-B enzyme can be used to treat early illness. According to a Cochrane review, these medications provide mild clinical relief, have excellent side effect profiles, and have improved long-term outcomes in quality-of-life indices by 20%-25%.

When compared to levodopa, dopamine agonists (ropinirole, pramipexole) provide a moderate clinical benefit and postpone the onset of dyskinesia. Screen patients who are taking oral dopamine agonists for side effects ahead of time. These drugs produced a 15% rise in adverse events such as somnolence, rapid onset sleep, hallucinations, edoema, and impulse control issues, according to a review of the Cochrane and PubMed data bases from 1990 to 2008. It's important to keep in mind that patients may be hesitant to discuss these occurrences or may not link them to their treatment.

Symptomatic anti-Parkinson disease drugs can usually keep motor symptoms of Parkinson's disease under control for 4-6 years. After then, despite the best medical care, impairment often worsens, and many patients suffer long-term motor problems, such as fluctuations and dyskinesias. Postural instability (balance problems) and dementia are two more causes of disability in late disease. As a result, symptomatic management for late disease necessitates various approaches.

Neuroprotective therapy is described as a treatment that slows, blocks, or reverses disease progression by slowing the underlying loss of dopamine neurons. Despite the fact that no medication has been demonstrated to be neuroprotective, MAO-B inhibitors are still being studied for their long-term effects. Creatine and isradipine are two other agents now under investigation.

The authors lay a greater emphasis on long-term concerns to guide early treatment when the patient is younger. Young individuals have a higher chance of developing motor fluctuations and dyskinesias due to their extended life expectancy. Long-term considerations are less important for elderly patients and those with cognitive impairment; instead, the focus is on giving appropriate symptomatic relief in the short term with as little side effects as feasible.

Surgery is considered for patients who have motor fluctuations and dyskinesias that cannot be successfully treated with drug adjustment. Deep Brain Stimulation (DBS) has largely supplanted neuroablative lesion procedures as the primary surgical approach. Intestinal gel infusions containing levodopa and carbidopa are available in some countries and are being tested in others, including the United States.

Non motor symptoms

Non motor symptoms in Parkinson's disease are now acknowledged as being as bothersome as, if not more so than, motor symptoms. Depression, dementia, hallucinations, rapid eye movement (REM) sleep behaviour disorder (RMD),

Correspondence to: Joseph Jankovic, Department of Neurology, Baylor College of Medicine, Houston, Texas, USA, E-mail: Joseph@jankovic.edu

Received: 02-May-2022, Manuscript No. BDT-22-16960; **Editor assigned:** 04-May-2022, PreQC No. BDT-22-16960 (PQ); **Reviewed:** 18-May-2022, QC No. BDT-22-16960; **Revised:** 25-May-2022, Manuscript No. BDT-22-16960 (R); **Published:** 03-Jun-2022, DOI: 10.35248/2168-975X. 22.11.160.

Citation: Jankovic J (2022) Treatment and Management of Parkinson Disease. Brain Disord Ther. 11:160.

orthostatic hypotension, and constipation are examples of nonmotor symptoms that might be classified as autonomic, cognitive/psychiatric, or sensory. Depression, discomfort, numbness, paresthesia/dysesthesia, akathisia, and restless-legs syndrome are among non-motor symptoms that might change. Non motor symptoms of Parkinson's disease must be recognized in order to receive proper treatment.

Patients with Parkinson's disease should be screened for depression and treated if it is present. According to an American Academy of Neurology (AAN) evidence-based guideline, physician detection of depression in Parkinson's disease is poor, with less than 30% of clinically verified cases. Many factors contribute to the difficulty in diagnosing Parkinson's disease in these people, and depression has the single greatest impact on their quality of life.

The American Academy of Neurology (AAN) published guidelines on the management of non-motor symptoms of Parkinson's disease in 2010. The following suggestions were made. Constipation may be treated with polyethylene glycol. Patients who experience extreme daytime somnolence can consider using modafinil.

In the case of insomnia, there is insufficient evidence to support or deny the use of levodopa to enhance objective sleep parameters that are not impacted by motor symptoms; similarly, there is insufficient data to support or refute the use of melatonin to improve poor sleep quality.

In Parkinson's disease, levodopa/carbidopa should be considered to treat periodic limb movements during sleep, although there is little evidence to support or reject the use of nonergot dopamine agonists to treat this or restless-legs syndrome.