Update on Treatment of Parkinson's Disease

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The goal of medical management of Parkinson disease is to provide control of signs and symptoms for as long as possible while minimizing adverse effects. Studies demonstrate that a patient's quality of life deteriorates quickly if treatment is not instituted at or shortly after diagnosis. Pharmacologic treatment of Parkinson disease can be divided into symptomatic and neuroprotective (disease modifying) therapy. At this time, there is no proven neuroprotective or disease-modifying therapy. Dopaminergic medications are the mainstay of symptomatic therapy for motor symptoms in Parkinson disease. Because patients with early-onset disease are more likely to develop levodopa-induced abnormal movements (dyskinesia), dopamine agonists are often introduced as initial treatment; however, this early advantage of dopamine agonists over levodopa diminishes over time (about 10 yr). There is also some controversial evidence for neuroprotection with the monoamine oxidase B inhibitor rasagiline at the 1 mg daily dose. Dopamine agonists (ropinirole, pramipexole) provide moderate symptomatic benefit and delay the development of dyskinesia compared with levodopa. Symptomatic anti-Parkinson disease medications usually provide good control of motor signs of Parkinson disease for 4-6 years. Neuroprotective therapy aims to slow, block, or reverse disease progression; such therapies are defined as those that slow underlying loss of dopamine neurons.