Journal of
Disease & Parkinsonism

Andrea Tales*
Department of Experimental Psychology,

About the Study

Parkinson's disease (PD) is a neurodegenerative disease that primarily affects the elderly, with a median onset age of 60 years. The precise cause of this pathological change is unknown at this time. Genetic factors, environmental factors, ageing, and oxidative stress may all play a role in the degeneration of dopaminergic neurons in Parkinson's disease. The condition has significant autonomic, cognitive, behavioural, sensory, and sleep components, despite being best characterised as a movement disorder. The formation of intracellular inclusions known as Lewy bodies comprising α-synuclein and the loss of dopamine neurons, most often in the substantia nigra, are hallmarks of Parkinson's disease. The genetic susceptibility factors for Parkinson's disease have been detected, including nine genes related to heritable, monogenic forms of the disease. Over 41 genetic susceptibility loci have been linked with late-onset PD. A few genes have been characterised as potentially causal within these risk loci, but it is still unknown which genes are responsible for PD risk in the majority of cases. It is currently uncertain on a broader scale but on current scenario. There are currently 178 genes known to be linked to Parkinson's disease. The presumption is that genes linked to the same or similar diseases tend to congregate in the same molecular network neighborhood. As a result, determining the distance between candidate genes and known disease genes in the protein-protein interaction (PPI) network is an important step. 28 genes, including those encoding alpha-synuclein (SNCA), leucine-rich repeat kinase 2 (LRRK2), and microtubule-associated protein tau (MAPT), have been related and/or associated