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Mitochondrial Dysfunction and *PINK1* Gene Mutation: In Parkinson's Disease (PD)

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ABSTRACT Parkinson's disease (PD) is a progressive neurodegenerative disorder, caused by the loss of dopamine and characterized by the presence of cytoplasmic protein inclusions. In Parkinson's disease, mitochondrial dysfunction has gained attention because number of genes like *LRRK2*, *SNCA*, *PARK7*, *Parkin* and *PINK1* which implicates the pathogenesis of Parkinson's is also found to be essential for the maintenance and proper functioning of the mitochondria. Any mutation in these genes can potentially result in mitochondrial dysfunction. Amidst, *PINK1* gene has a crucial role because it is important for the activation of the mitochondrial quality control mechanism and clearance of damaged mitochondria. Hence, the mutation in the *PINK1* gene may mediate the accumulation of dysfunctional mitochondria and may induce Parkinson's disease. This review elaborates interlink between *PINK1* gene and mitochondrial dysfunction in Parkinson's disease.