

(d) Parkinsonism

→ disease that
last 1 year or more

Parkinson's Disease is a chronic, progressive, neurological disease.

— Brain disorder that causes unintended or uncontrolled movements.

Loss of Dopaminergic neurons (neurons which release dopamine)

Dopamine level drops

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Parkinson's disease

* Etiology —

It is caused by loss of nerve cells in part of brain responsible for producing chemical called Dopamine.

Tremor of hands, arms, legs, jaw and face.
Speech and writing changes
Sleep disturbances, depression.

The other causes are —

1. Medication (Eg: Anti-psychothic drug)

2. Progressive brain condition PCM

3. Cerebrovascular disease

Also includes slow movements, rigidity / stiffness
blinking less than usual

Syn - nuclein

α -synuclein

Pathophysiology

BPL
HPL
MPL

Age

Environmental factors

Iron \rightarrow Mutation and presence of α -synuclein. (Lewy bodies present) \leftarrow Excitotoxicity excitement

synuclein

Protein aggregation

Mitochondrial dysfunction damage

Increased oxidative stress & lysosomal dysfunction

cell death

Apoptosis and abnormal movement

Symptoms of Parkinson's disease

Tremor
Rigidity
Postural instability
Speech and writing changes

* Treatment

It includes medication and surgical therapy.

1. Anticholinergics : Atropine
2. Dopaminergics : Levodopa
3. Dopamine agonist : Bromocriptin
4. Fetal tissue transplantation
5. Transplantation of genetically engineering cell lines.

Surgical treatment
of Parkinson's disease

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