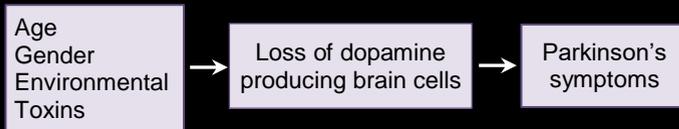


Parkinson's disease (PD)



A progressive disorder of the brain and nervous system that affects movement and coordination. Results from loss of certain brain cells that produces a chemical called dopamine.



Main symptoms are listed by the acronym “TRAP”:

- **Tremors:** Usually observed in arms or legs when limbs are at rest. Often evident when patient is concentrating on a mental task (e.g. reading, math). Hand writing is usually affected
- **Rigidity:** Refers to stiffness of the limbs
- **Akinesia (Bradykinesia):** Term used to represent slowing down of movements
- **Postural instability:** Refers to difficulty maintaining balance, usually when standing, with tendency to trip or fall

Other symptoms may include:

- Loss of smell
- Sleep disturbance
- Anxiety
- Depression
- Memory disturbance
- Altered bowel habits

PD tremor should be distinguished from patients with essential tremor (ET) which is a more common and relatively benign.

Comparison of tremor in PD and ET

Parkinson's tremor (PD)	Essential tremor (ET)
Slow tremor that is typically present when limbs are at rest	Rapid tremor that is present when holding object (e.g. teacup) and moving limbs
Usually more pronounced on one side of the body	Affects both sides of the body equally
Involves hands, legs, chin	Involves arms, legs, voice, neck, face or tongue

Causes: The condition is due to loss of cells in a specific area of the brain that produces a chemical called dopamine. Why these brain cells die is not fully understood. However, some potential risk factors are:

Potential risk factors	Description
Age	Sometimes the disease may start early in life, but often the condition tends to be seen more so after age 50 years
Hereditary	Small genetic link in the minority of patients. The majority of cases appear to be sporadic with no family history
Toxins	Possible increased risk due to exposure to certain herbicides, pesticides, street drugs

Treatment:

- In early stages no medications may be required
- Medications that replace dopamine in the brain may control the symptoms, particularly in early to moderate stages of PD
- Lifestyle changes to include both aerobic and weight bearing exercises may help with stamina and core strength
- Deep brain stimulation (DBS), a surgical procedure whereby a thin wire (or electrode) is placed within the brain to stimulate certain brain cells, may help to relieve symptoms. DBS may be considered in selected patients

Healthy living tips:

- Regular visits to family doctor and neurologist
- Comply with prescribed medication
- Avoid undue emotional or physical stress
- Adopt a healthy diet combined with regular exercise
- Reduce fall risk – e.g. remove floor rugs

For more information on Parkinson's and other diseases: visit at www.educateyourhealth.com