

Parkinson's Disease

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Background

- * Original name “ Paralysis Agitans”
- * James Parkinson’s discover the six symptoms to the Parkinson’s disease

Symptoms

- * Tremor
- * Slowed Movement
- * Rigid Muscle
- * Impaired Posture and Balance
- * Loss of automatic movement
- * Speech changes

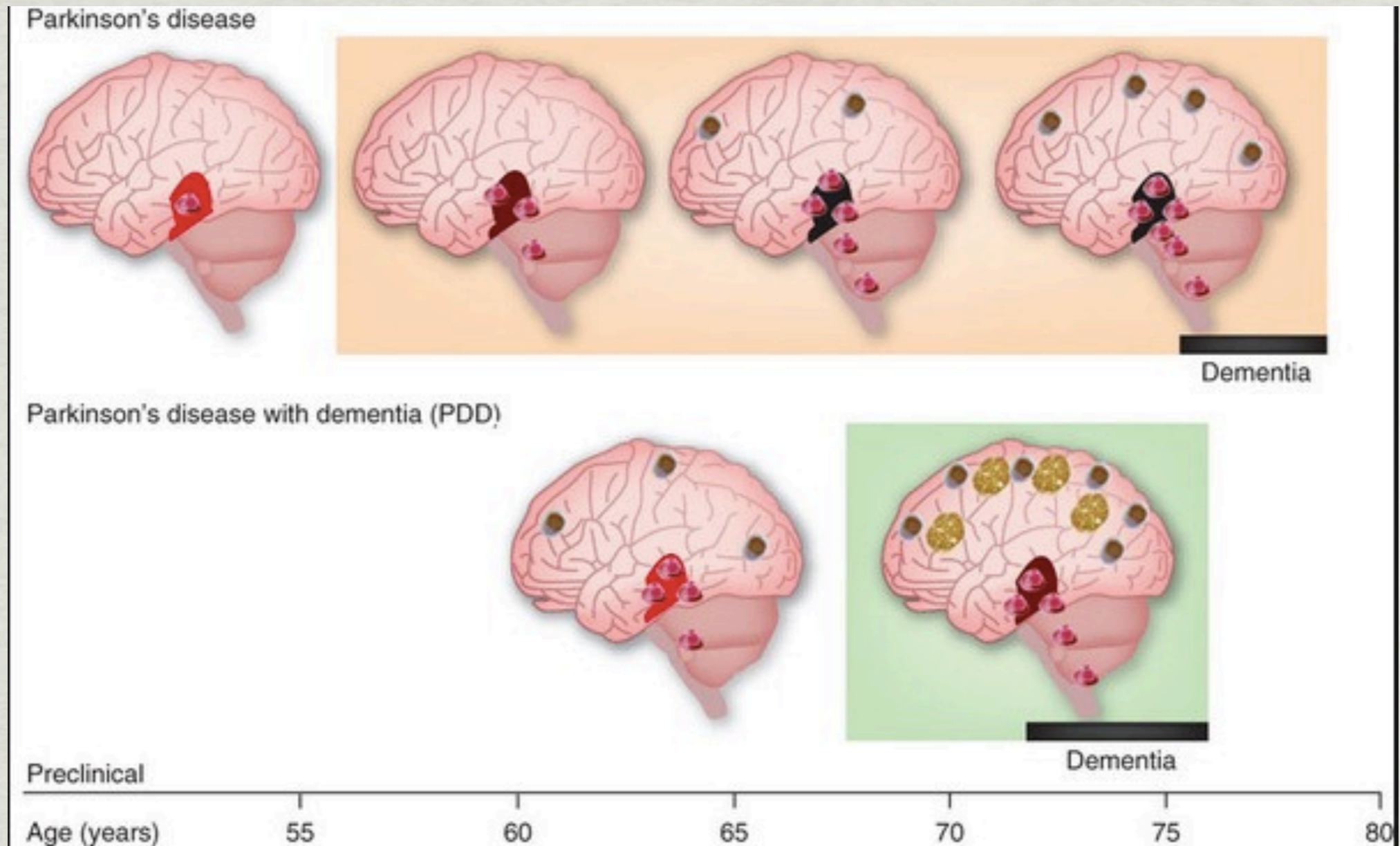
Cause of Parkinson's

- * Genetic Trigger
- * Environmental Trigger
- * Impairment or deterioration of neurons in an area of the brain known as the substantia nigra.
- * Lack of dopamine for the neuron to communicate

Dopamine

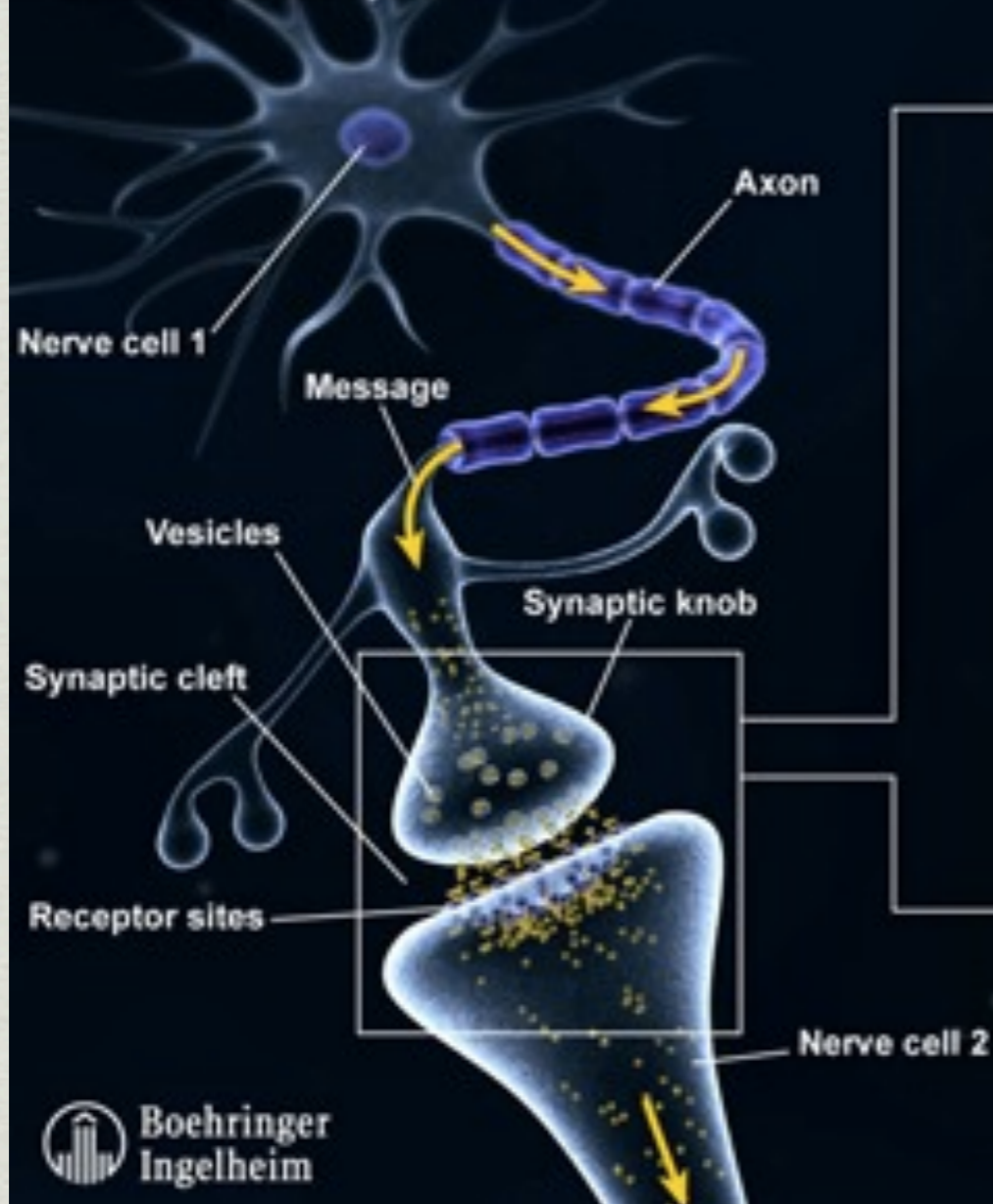
- ✱ A neurotransmitter of the catecholamine and phenethylamine families that plays an important roles in the human brain and body.
- ✱ Responsible to release chemical by nerve cells to send signals to other nerve cells

Stages of Parkinson's

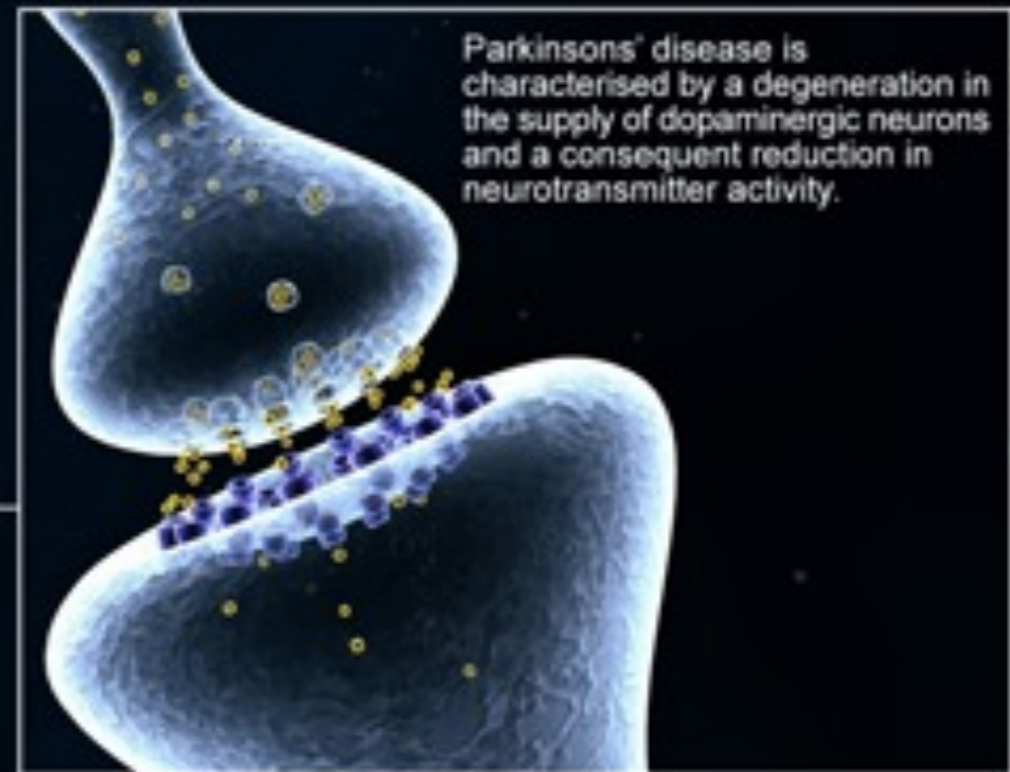


Dopamine

Dopamine is a neurotransmitter, a naturally occurring chemical in the body. A neurotransmitter transfers nerve impulses across spaces between nerve cells (synapses) and in this way allows cells to communicate with each other. Dopamine is essential to the functioning of the central nervous system.



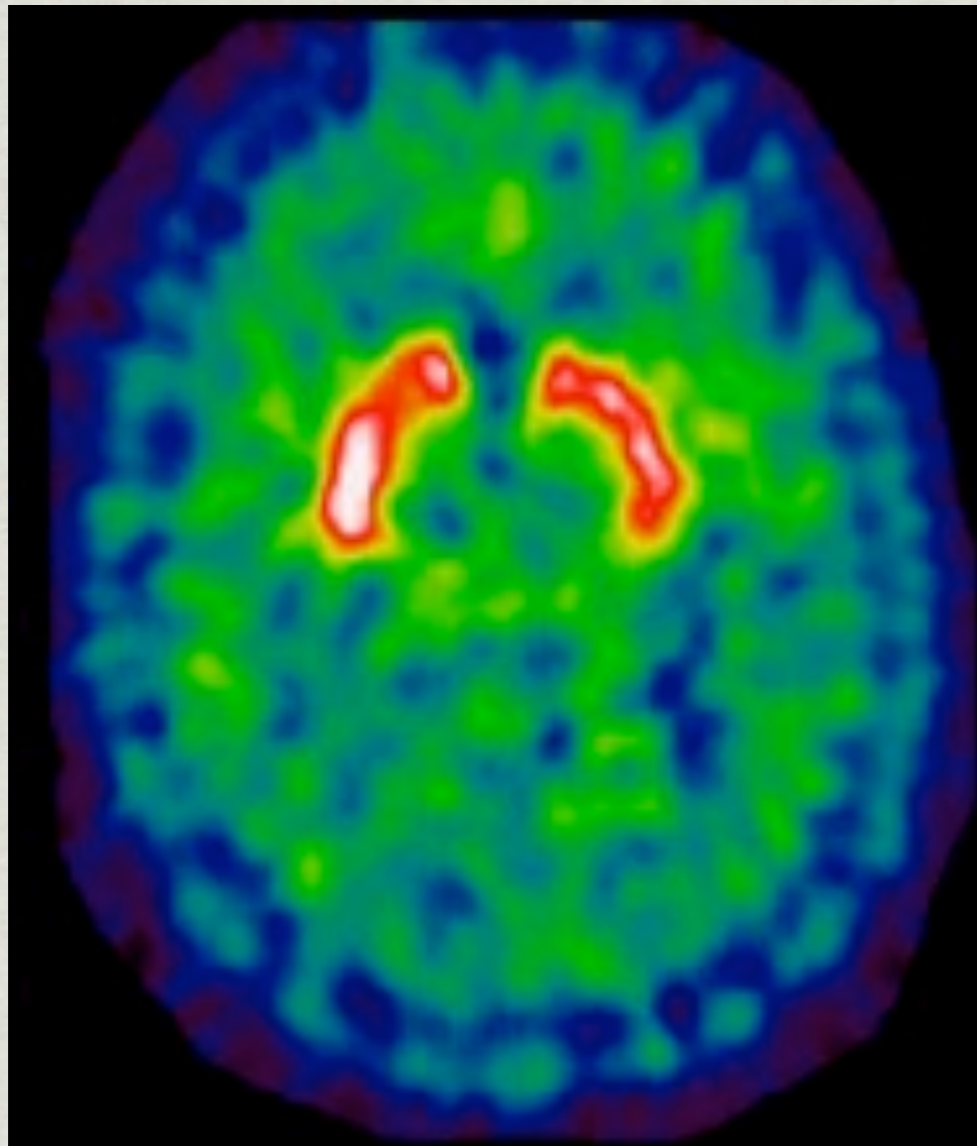
 **Boehringer
Ingelheim**



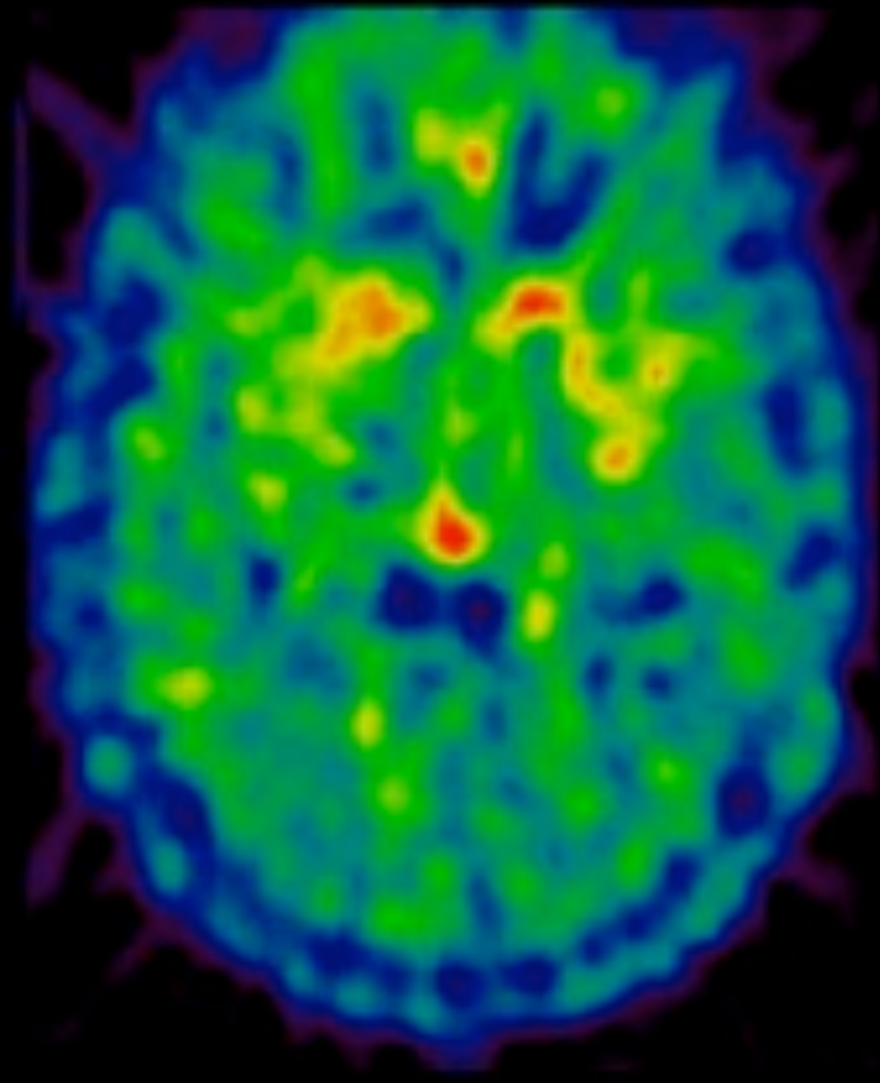
Parkinson's disease is characterised by a degeneration in the supply of dopaminergic neurons and a consequent reduction in neurotransmitter activity.



Dopamine agonists directly stimulate post-synaptic dopamine receptors in the striatum, mimicking the effect of the neurotransmitter dopamine.



Normal



Parkinson's Disease

Men vs Women

- * More men are diagnose by Parkinson's Disease than women

Treatment

- ✱ No cure to Parkinson's Disease
- ✱ There are Medication and Therapy to treat its symptoms
- ✱ Surgical procedures

Medication

- * Carbidopa-levodopa
- * Dopamine Agonists
- * MAO-B Inhibitors
- * Catechol O-methyltransferase Inhibitors
- * Anticholinergics
- * Amantadine

Surgical Procedures

- ✱ Deep Brain Stimulation
 - ✱ Implant electrodes into specific part of your brain
 - ✱ Connected to a generator implanted into your chest near your collarbone that sends electrical pulses to your brain and reduce symptoms

Fun Fact

- * Smoking reduce the risk of having Parkinson's Disease