



Diagnosis of Parkinson Disease

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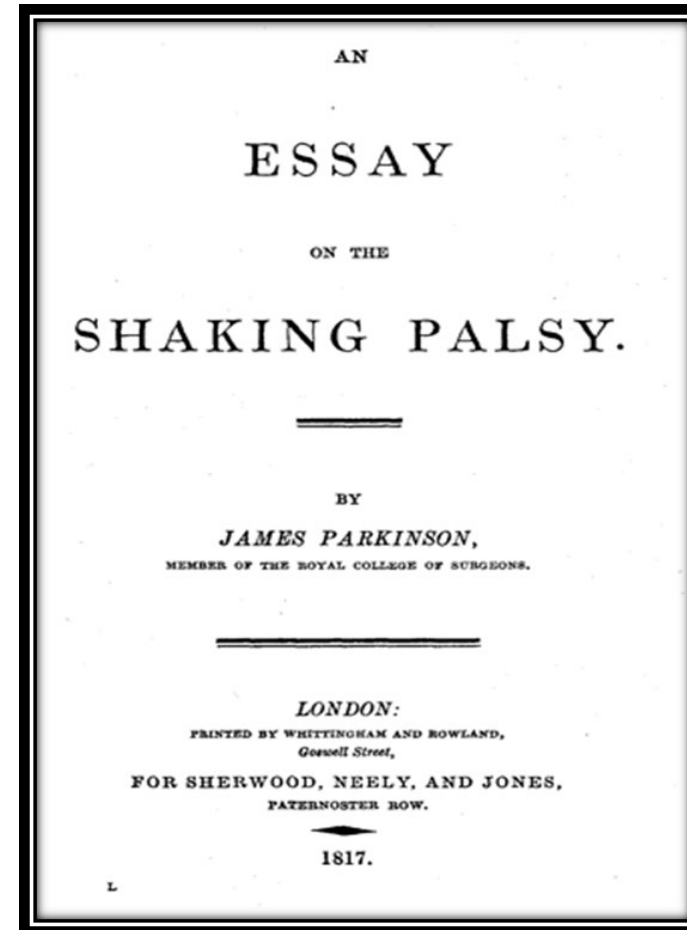
Madden Center for Parkinson Disease and Other Movement Disorders

The Ohio State University Wexner Medical Center

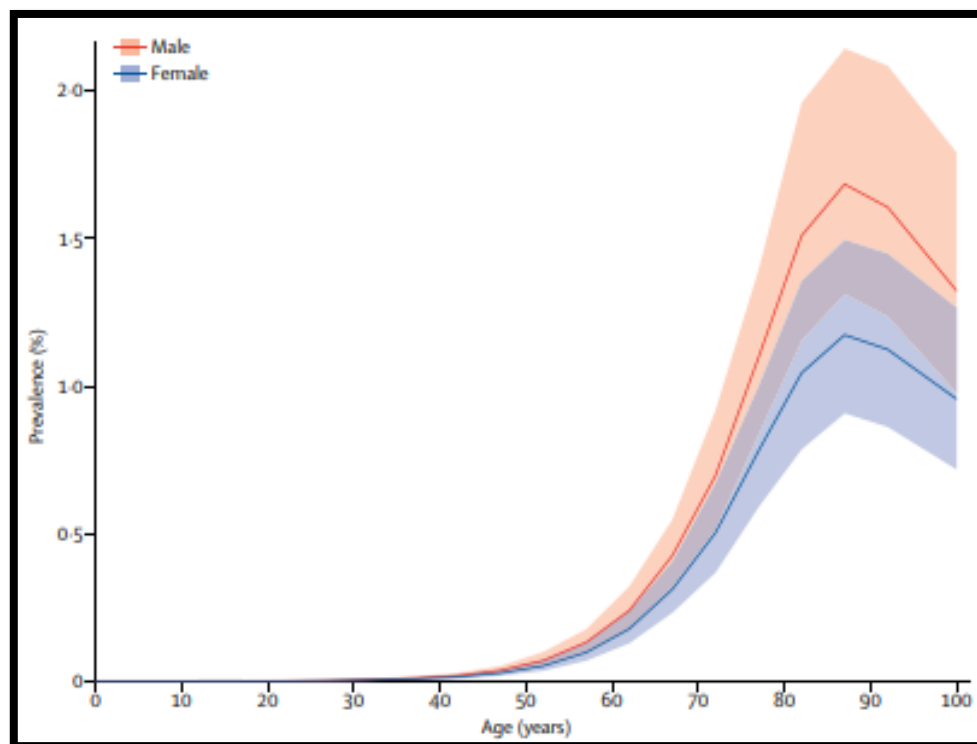
Parkinson Disease



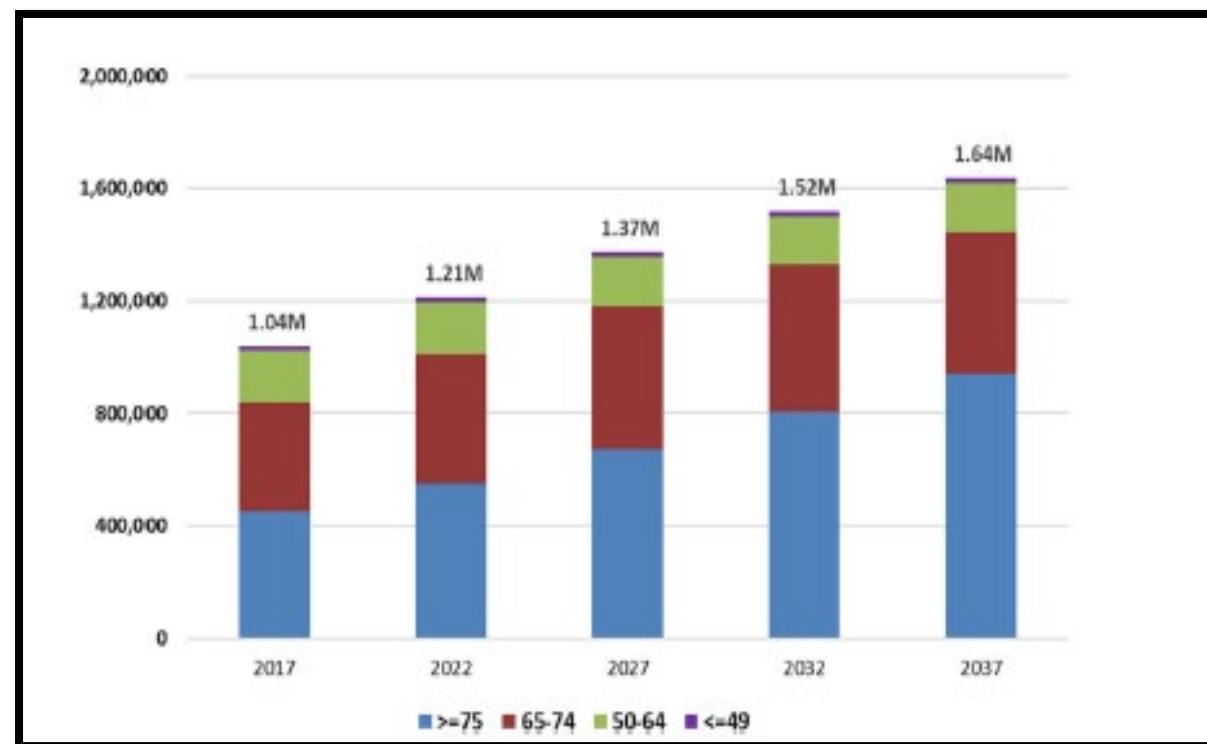
James Parkinson
(1755-1824)



Parkinson Disease



Global Burden of Disease Study 2016 Parkinson's Disease Collaborators, Lancet Neurol, 2018

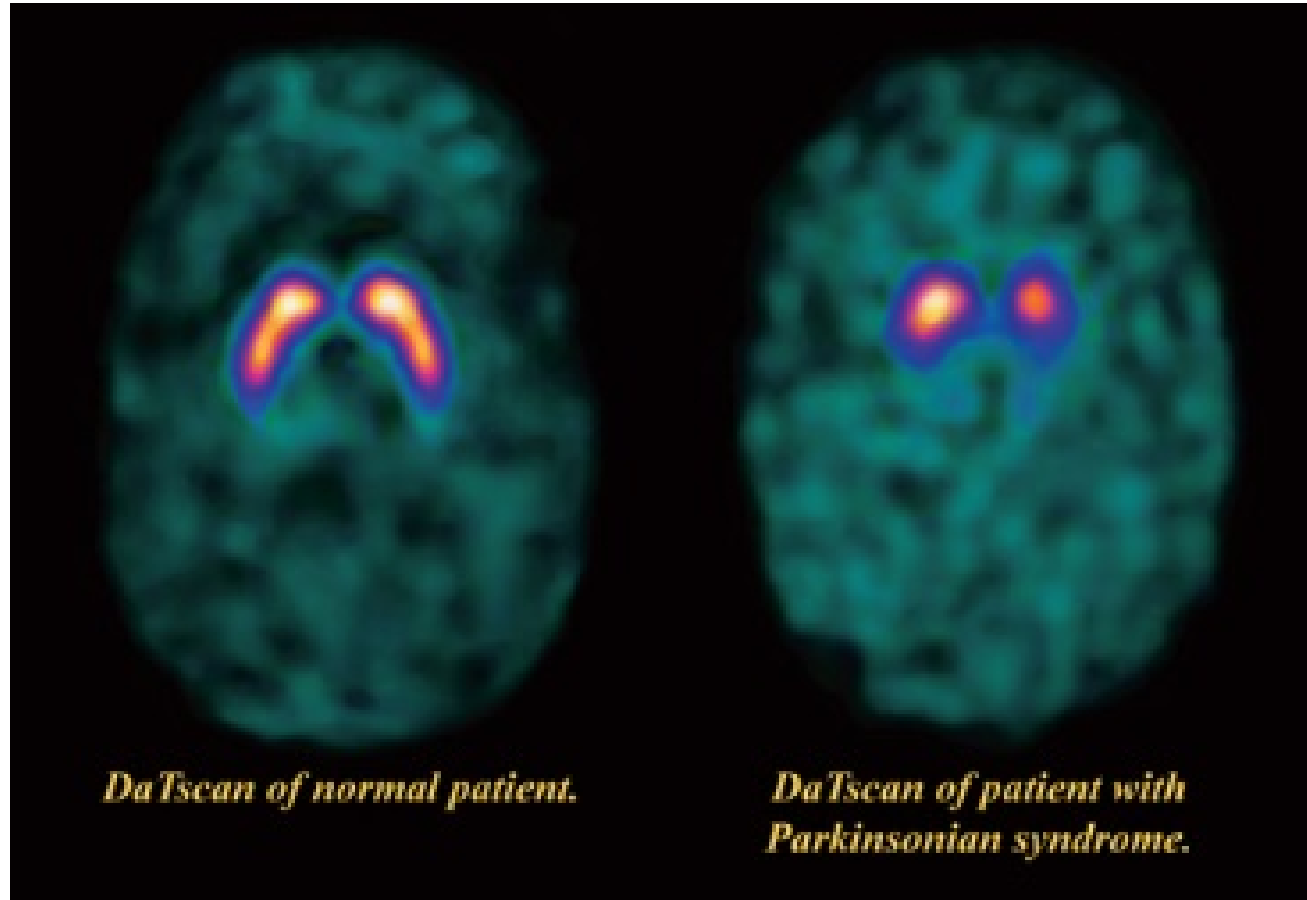


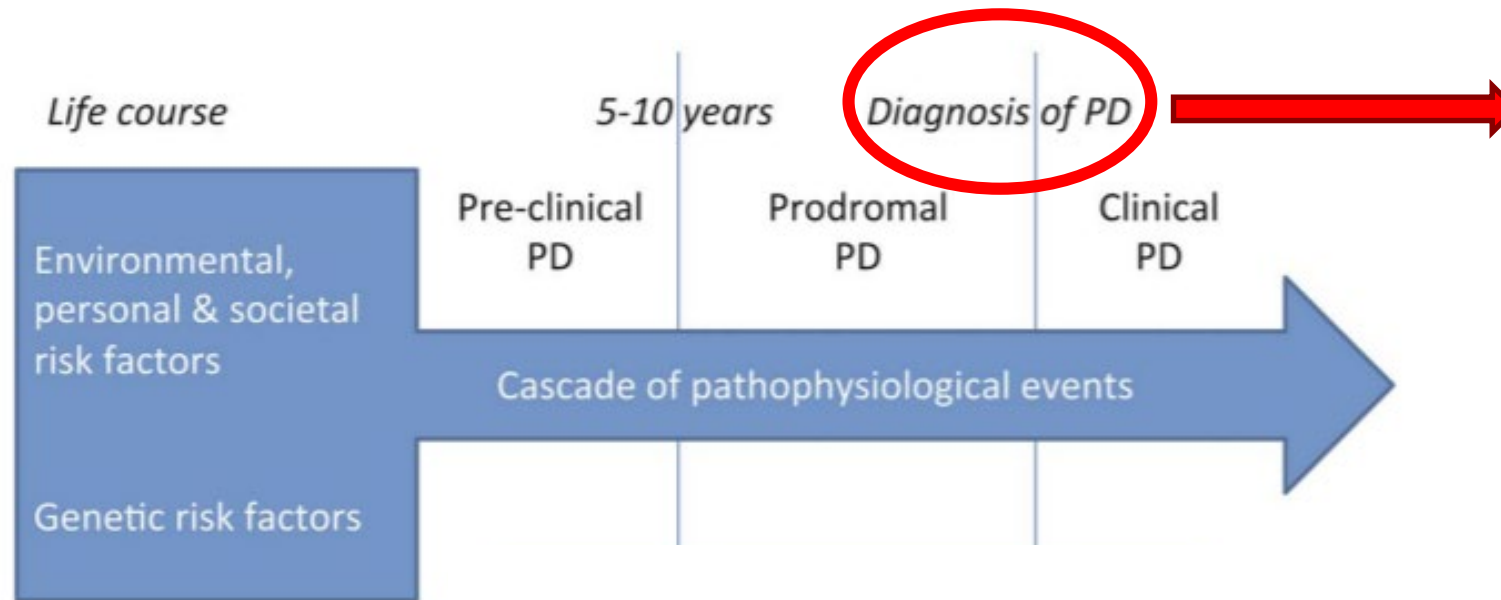
Yang W et al. Nature Partner Journals Parkinsons Dis. 2020



Parkinson disease is a clinical diagnosis

DaTscan





Noyce AJ et al J Neurol Neurosurg Psychiatry 2016

Symptoms

- Slowness of movement (bradykinesia)
- Stiffness (rigidity)
- Resting tremor
- Walking/balance problems

Slowness of movement



- Early may be confined to distal muscles

I'm afraid I might fall.

- Later have difficulty rising from chair and generalized slowing of voluntary movements
- Facial, vocal and cognitive manifestations

Resting tremor

- Presents at rest and usually abates when affected limb performs a motor task
- Unilateral, 4-6 Hz, distal part of extremity
- Can occur intermittently and vary in intensity

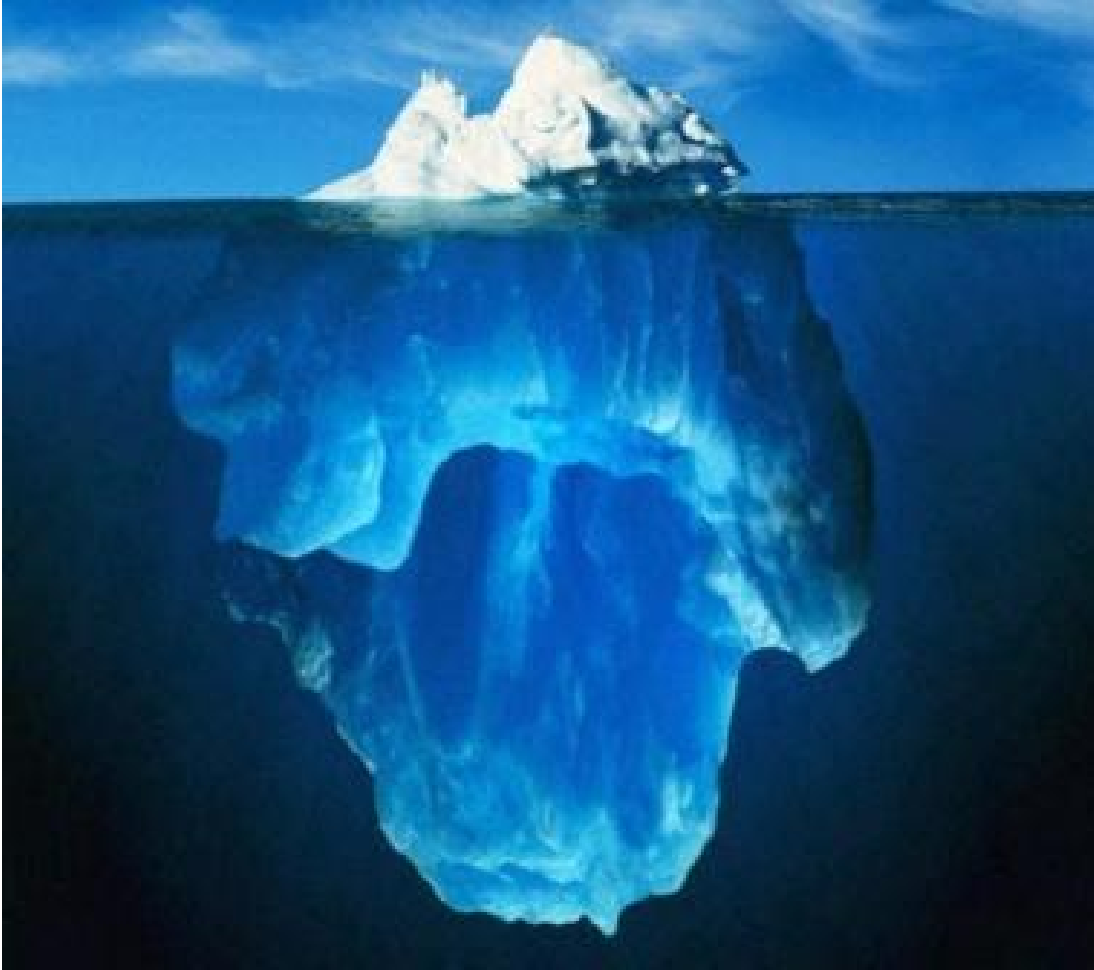


Rigidity

- Increased resistance to passive movement of limb segment
- Unclear to what degree contributes to motor impairment

Balance and gait problems

- Postural instability
- Pull test
- Freezing of gait
 - Start hesitation



Motor symptoms



Non-motor symptoms