



جامعة الإمام عبد الرحمن بن فيصل
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Diagnosis of Parkinson's Disease

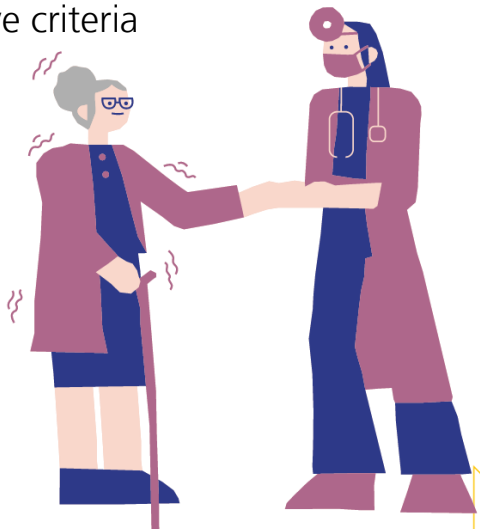


What is MDS-PD criteria?

MDS-PD criteria involves both motor and non-motor symptoms. The most important and essential criterion is parkinsonism which consists of bradykinesia with at Least 1 of rest tremor or rigidity.

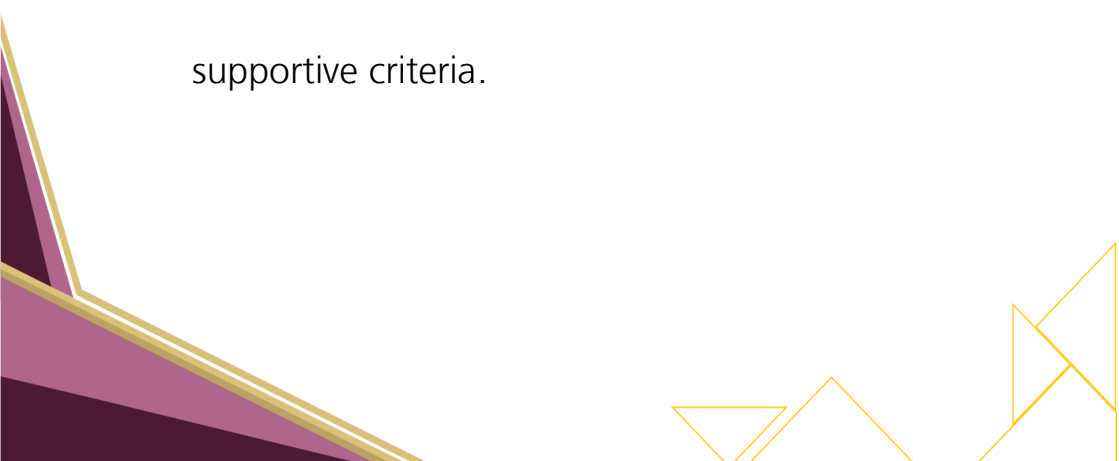
To have a diagnosis of **Clinically Established PD**, it needs:

1. Absence of absolute exclusion criteria
2. At least two supportive criteria
3. Absence of red flags



What is MDS-PD criteria?

To have a diagnosis of **Clinically Probable PD**, it needs:

1. Absence of absolute exclusion criteria
 2. Presence of red flags counterbalanced by supportive criteria (maximum number of red flags is two):
 - If one red flag is present, there should be at least one supportive criterion.
 - If two red flags are there, then there should be two supportive criteria.
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How to Diagnosis of Parkinsonian disease?

Bradykinesia (slowness of initiation of voluntary movement) and at least one of the following:

- Muscle rigidity.
- Rest tremor.
- Postural instability.

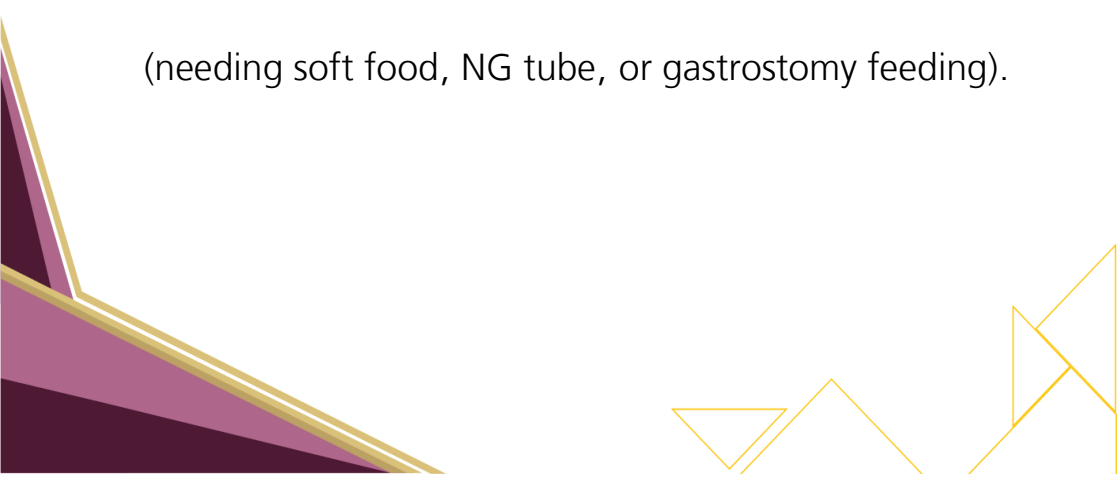
What are the red flags about Parkinson's disease?

1. Rapid progression of gait impairment requiring regular use of wheelchair within 5 years of onset.



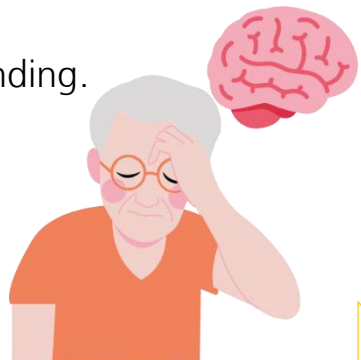
What are the red flags about Parkinson's disease?

2. A complete absence of progression of motor symptoms or signs over **5 or more years** unless stability is related to treatment.
3. Early bulbar dysfunction is characterized by the presence of one of three symptoms within the **first five years** of the disease: severe dysphonia, dysarthria (mostly incomprehensible speech), or severe dysphagia (needing soft food, NG tube, or gastrostomy feeding).



What are the red flags about Parkinson's disease?

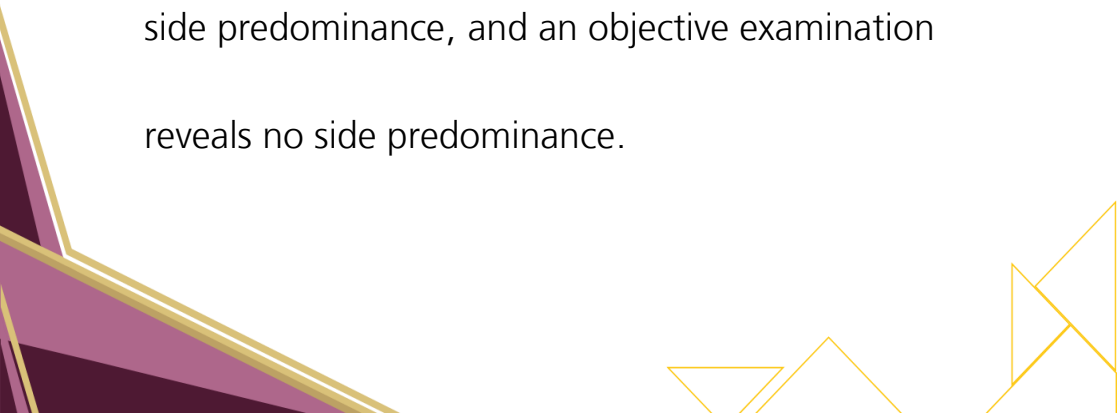
4. **Inspiratory respiratory dysfunction** which is defined as either throughout-day or night-time inspiratory stridor or frequent inspiratory sighs
5. Severe autonomic failure during the **initial five years** of disease. This may include:
 - **Orthostatic hypotension**: orthostatic drop in blood pressure of at least **30 mm Hg systolic** or **15 mm Hg diastolic** within **3 minutes** of standing.



What are the red flags about Parkinson's disease?

- Severe urinary incontinence or retention in the first five years of the disease, which is not just functional incontinence, except for long-term stress incontinence in females. Urinary retention in males must be accompanied with erectile dysfunction and not be the result of prostate disease.
- 6. Repeated falls (more than once per year) within 3 years of onset
- 7. The presence of disproportionate anterocollis (dystonic in nature) or contractures of hand or feet.

What are the red flags about Parkinson's disease?

8. **Unexplained pyramidal tract signs** (pyramidal weakness or clear pathologic hyperreflexia, with the exclusion of mild reflex asymmetry and isolated extensor plantar response).
 9. **Bilateral symmetric Parkinsonism** during the course of the disease. Both the patient and the caregiver report symmetric onset of symptoms without any apparent side predominance, and an objective examination reveals no side predominance.
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What are the red flags about Parkinson's disease?

10. The absence of any common non-motor disease signs after five years of disease, including Sleep dysfunction (rapid eye movement sleep behavior disorder, and insomnia related to maintaining sleep) or autonomic dysfunction (symptomatic orthostasis, daytime urinary urgency) or Psychiatric disorders (anxiety, or hallucinations.)



What are the methods of x-ray diagnosis?

Imaging for PD include:

- Dopamine transporter single-photon emission computed tomography (SPECT) scan.
- Dopamine transporter scan (DaT-scan).
- Magnetic resonance imaging of brain (MRI brain).



Sources and References:

- MDS clinical diagnostic criteria for Parkinson's disease. *Movement Disorders*, 30(12), 1591–1601.
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- Diagnostic test accuracy of the Montreal Cognitive Assessment (MoCA) for cognitive impairment in Parkinson's disease: a systematic review and meta-analysis. In: University of York Centre for Reviews and Dissemination (UK). 2015. Available from:
<https://www.ncbi.nlm.nih.gov/books/NBK379760/>

Review and audit:

The content of this booklet was reviewed by consultants of the Department of Neurology at King Fahd University.

Department of Neurology

Health Awareness Unit

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