

THE LANCET Neurology

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Tolosa E, Garrido A, Scholz SW, Poewe W. Challenges in the diagnosis of Parkinson's disease. *Lancet Neurol* 2021; **20**: 385–97.

Suppl. material - MDS Criteria for a Clinical Diagnosis of PD (Postuma et al. 2015)

Presence of a parkinsonian syndrome by expert clinical exam

- *Bradykinesia* plus at least one out of:
- *4-6-Hz rest tremor, limb rigidity*

Supportive clinical criteria

- Excellent response to levodopa
- Presence of levodopa-induced dyskinesia
- Rest tremor of a limb
- Presence of either olfactory loss or sympathetic cardiac denervation (MIBG scintigraphy)

Exclusion criteria

- Unequivocal cerebellar signs
- Downward vertical gaze palsy
- Diagnosis of FTD (*behavioral variant or PPA*) within 5 years
- Parkinsonism restricted to legs for > 3 yrs.
- Exposure to anti-DA drugs consistent with (dose, timing) drug-induced parkinsonism
- Absence of L-Dopa response
- Cortical sensory loss, limb apraxia, progressive aphasia
- Normal functional imaging of presynaptic DA system

'Red Flags' for alternative Dx

- Rapid progression of gait impairment (wheelchair within five years)
- No progression over 5 yrs
- Severe dysphonia, dysarthria or dysphagia within 5 years.
- Inspiratory stridor
- Severe autonomic failure within 5 years (symptomatic OH, urinary incontinence or retention)
- Recurrent falls within 3 years
- Disproportionate antecollis or limb contractures within 10 years
- Absence of typical PD non-motor symptoms over 5 years
- Persistent motor symmetry

Clinically Established PD

- Anchored on bradykinesia plus at least one out of rest tremor and rigidity
- At least 2 supportive criteria
- No exclusion criteria
- No "red flags"

Clinically Probable PD

- Anchored on bradykinesia plus at least one out of rest tremor and rigidity
- No exclusion criteria
- Presence of maximally 2 red flags' which must be counterbalanced by equal number of supportive criteria

*Abbreviations: MIBG 123 I-MIBG Myocardial Scintigraphy; FTD frontotemporal dementia; PPA primary progressive aphasia; DA Dopamine; PD Parkinson's disease