

PARKINSON-PLUS SYNDROMES

FACTS

- The terms “parkinsonism” or “parkinsonian” are not diagnoses, but rather meaning slow, stiff, or tremor-like movements, affected speech, and change in gait or walking pattern.
- There are many causes of parkinsonism, including Parkinson’s disease (PD) and certain gastrointestinal and psychiatric medications.
- Parkinson-plus syndromes are distinct neurodegenerative diseases that resemble PD but have some additional challenging features and different changes in the brain.
- These disorders typically do not respond to levodopa, the mainstay of PD treatment.
- Parkinson-plus syndromes tend to have a poor prognosis.

TYPES

Progressive supranuclear palsy (PSP)

- Symmetric slowness and stiffness with very early loss of balance and subsequent falls
- Impaired eye movements that cause double vision
- Tremors usually not present
- Often stiff, rigid neck
- Spontaneous, unprovoked laughing and crying
- Possible shrinkage in the midbrain

Multiple System Atrophy (MSA)

- Frequent and severe drops in blood pressure, which cause fainting spells
- Incontinence
- MSA-P (parkinsonian variant) – A slow and stiff subset
- MSA-C (cerebellar variant) – A subset with poor coordination and slurred speech
- Possible shrinkage in the cerebellum

Parkinson's Disease or Lewy body Dementia (PDD or LBD)

- Appears as a cross between Alzheimer's and Parkinson's
- Cognitive problems include:
 - Memory loss
 - Visual hallucinations
 - Delusions
 - Frequent changes in level of alertness
- Physical signs of parkinsonism including slow movement, stiffness, and tremors develop a year or more after the cognitive issues begin
- Can be overly sensitive to medications

Corticobasal syndrome or corticobasal degeneration

- Also called useless hand syndrome
- Rigidity and jerking movements on one side of the body
- May experience alien limb phenomenon where one arm or one leg will move without conscious control of the individual
- Possible shrinkage in various lobes of the brain resulting in difficulty with language, visuospatial function, or behavior

Vascular parkinsonism

- Symptoms result from multiple small strokes in the basal ganglia
- Multiple small strokes may precede the signs and symptoms of parkinsonism
- Usually affect both sides of the body
- Usually no tremors
- Sometimes there is lower body parkinsonism, in which only the gait is affected but the upper body is spared
- Often resembles PSP (described above)
- Brain scans show multiple tiny strokes scattered throughout the basal ganglia

Wilson's disease

- Rare disorder of copper metabolism causing accumulation of copper in the brain, liver, and eyes
- Important to screen anyone younger than 40 with a movement disorder, because it may be curable
- Symptoms are a combination of:
 - Movement disorder
 - Cognitive decline
 - Severe psychiatric problems
- Symptoms include:
 - Slowness
 - Stiffness
 - Tremors
 - Uncoordinated movement
 - Abnormal twisting muscle contractions
- Diagnosed with blood and urine tests, and an eye exam to look for copper deposits