



Recognizing the Cardinal Features of Parkinson's Disease

A Quick Clinical Guide for Healthcare Professionals

Parkinson's disease (PD) is a progressive neurological condition primarily affecting movement. Early recognition of the core motor symptoms can help support timely diagnosis, referral, and appropriate care planning.

Clinically, Parkinson's disease is characterized by **four cardinal motor features**. These symptoms often begin gradually and may initially affect one side of the body.

The Four Cardinal Features of Parkinson's Disease

1. Bradykinesia (Slowness of Movement)

Bradykinesia is the most important feature required for a Parkinson's diagnosis.

It refers to a slowness and reduction in voluntary movement.

Common observations may include:

- Slower walking or difficulty initiating movement
- Reduced arm swing while walking
- Difficulty with fine motor tasks (buttoning, handwriting)
- Smaller handwriting (micrographia)
- Reduced facial expression (masked facies)
- Soft or reduced speech volume

Bradykinesia often affects daily tasks and may lead individuals to describe feeling “stiff” or “slow.”

2. Resting Tremor

A Parkinson's tremor typically occurs when the affected body part is at rest and often improves with intentional movement.

Characteristics may include:

- Usually begins in one hand or finger
- Described as a “pill-rolling” tremor between thumb and forefinger
- May also affect the foot, chin, or jaw
- Often more noticeable when the person is relaxed or distracted

Not all individuals with Parkinson’s experience tremor.

3. Rigidity (Muscle Stiffness)

Rigidity refers to increased muscle tone that causes stiffness and resistance to passive movement.

Signs may include:

- Stiff arms, legs, or neck
- Reduced range of motion
- Muscle discomfort or aching
- Difficulty with turning or posture changes

On examination, clinicians may detect “cogwheel rigidity,” a ratchety resistance when moving a limb.

4. Postural Instability

Postural instability refers to impaired balance and difficulty maintaining upright posture.

This symptom often develops later in Parkinson’s disease but may include:

- Stooped posture
- Difficulty recovering balance
- Short, shuffling steps
- Increased risk of falls

Clinicians may assess balance using a pull test, observing how well a patient regains stability.

Diagnostic Considerations

For a clinical diagnosis of Parkinson’s disease:

- **Bradykinesia must be present**, and
- At least **one additional feature** must also be present:
 - Resting tremor
 - Rigidity

Postural instability typically develops later in the disease course.

Diagnosis is based on clinical evaluation, as there is currently no single definitive laboratory test for Parkinson's disease.

Important: Parkinson's Is More Than a Movement Disorder

In addition to motor symptoms, individuals may experience **non-motor symptoms**, which can significantly affect quality of life.

These may include:

- Sleep disturbances
- Constipation
- Depression or anxiety
- Loss of smell
- Fatigue
- Cognitive changes
- Autonomic dysfunction (blood pressure changes, bladder issues)

Non-motor symptoms may appear years before motor symptoms in some individuals.

Supporting Individuals Living with Parkinson's

Early recognition and appropriate care can help individuals maintain independence, safety, and quality of life.

Healthcare professionals play an important role in:

- Recognizing early symptoms
- Supporting medication timing and adherence
- Monitoring mobility and fall risk
- Identifying swallowing or cognitive changes
- Connecting individuals with appropriate resources

Wisconsin Parkinson Association

The Wisconsin Parkinson Association (WPA) provides education, resources, and community programs to support individuals living with Parkinson's and the professionals who care for them.

Healthcare providers and facilities can access additional educational materials and training resources through WPA.

Learn more at:

wiparkinson.org

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