

Parkinson's Disease: Review Questions

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QUESTIONS

Choose the single best answer for each question.

- Parkinson's disease consists of which of the following signs?**
 - Postural instability
 - Bradykinesia
 - Tremor
 - Cogwheel rigidity
 - All of the above
- The most common initial presentation of a patient with Parkinson's disease includes which of the following?**
 - Age range 50 to 70 years
 - Bilateral tremor
 - Decreased dexterity
 - Age range 50 to 70 years and decreased dexterity
 - All of the above
- Tremor in Parkinson's disease has which of the following characteristics?**
 - Frequency of 2 to 3 Hz
 - Most apparent when limb is unsupported
 - Most apparent during intension
 - Frequency of 2 to 3 Hz and most apparent when limb is unsupported
 - None of the above
- In Parkinson's disease, bradykinesia can be described as:**
 - Reduced movement in the lower extremities
 - Increased amplitude with any movement
 - Flexor/extensor weakness
 - All of the above
 - None of the above
- Which of the following are symptoms of Parkinson's disease?**
 - Sensory symptoms
 - Autonomic dysfunction
 - Seborrheic dermatitis
 - All of the above
 - None of the above
- The rigidity in Parkinson's disease is associated with which of the following?**
 - Flexor contraction
 - Extensor contraction
 - Contraction of the limbs and neck
 - Flexor contraction and contraction of the limbs and neck
 - All of the above

(turn page for answers)

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EXPLANATION OF ANSWERS

1. **(E) All of the above (postural instability, bradykinesia, tremor, cogwheel rigidity).** The hallmarks of Parkinson's disease are tremor, rigidity, bradykinesia, and postural instability. In addition, more advanced stages of disease include cogwheel rigidity, akinesia, masked face, reptilian stare, drooling, and inarticulate speech.
2. **(D) Age range 50 to 70 years and decreased dexterity.** Patients with Parkinson's disease typically present between the ages of 50 to 70 years, with unilateral tremor and a history of decreased dexterity in the affected limb. Also present in patients with Parkinson's disease may be a feeling of a lack of power in the limb, discomfort of the limb, and changes in writing (eg, micrographia). Family members may also report alterations in posture and increased time to perform activities of daily living in the patient with Parkinson's disease.
3. **(E) None of the above (frequency of 2 to 3 Hz, most apparent when limb is unsupported, most apparent during intension).** Parkinson's disease tremor occurs at rest, with a frequency of 4 to 5 Hz. Tremor is most apparent when the limb is fully supported and at rest. Tremor decreases in relaxation and ceases during sleep. The resting tremor can be increased with stress and decreased with intension or action.
4. **(E) None of the above (reduced movement in the lower extremities, increased amplitude with any movement, flexor/extensor weakness).** Bradykinesia can best be described as a slowness of movement that occurs diffusely. Bradykinesia encompasses any and all movements and can be manifest as it progresses with a decrease in amplitude of movement as

well as rhythm of movement. In more severe Parkinson's disease, bradykinesia can progress to akinesia, in which a paucity of movement and a loss of tremor and rigidity occur.

5. **(D) All of the above (sensory symptoms, autonomic dysfunction, seborrheic dermatitis).** Sensory symptoms, autonomic dysfunction, and seborrheic dermatitis are all possible symptoms of Parkinson's disease. In Parkinson's disease, sensory symptoms are reported in approximately 10% of patients, manifest by an imprecise numbness, tingling, stiffness, and abnormal temperature sensation. These symptoms typically occur without any demonstrable deficits on neurologic examination. Autonomic dysfunction can be manifest by orthostatic hypotension, gastrointestinal dysmotility, urinary bladder dysfunction, and body temperature dysregulation. The incidence of these findings has not been well defined, although symptoms of autonomic dysfunction are thought to occur in a minority of patients. Seborrheic dermatitis occurs frequently in patients with Parkinson's disease; the etiology of the dermatitis in these patients is unknown and is not thought to be caused by the anti-parkinsonian medications.
6. **(E) All of the above (flexor contraction, extensor contraction, contraction of the limbs and neck).** The rigidity in Parkinson's disease involves both the flexor and extensor musculature and often is particularly present in the limbs and neck. Evaluation of the resistance to passive manipulation often appreciates the underlying tremor, manifest as "cogwheeling." This tone is not velocity dependent like spasticity and is often most noticeable during slow passive movements.

NEUROLOGY

A current list of certification and recertification examination dates and registration information is maintained on the American Board of Psychiatry and Neurology Web site at <http://www.abpn.com>.

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