

Several of these multiple-choice questions were originally published in *Continuum: Lifelong Learning in Neurology—Movement Disorders, Volume 22, Issue 4, August 2016* based on the content in the issue developed by the following faculty:

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11. A 55-year-old right-handed man presents with a 1-year history of tremor and increasingly frequent falls. The tremor has always been more noted in his right hand, is approximately 5 Hz, and is present at rest and decreases with activity. The falls, which began around the same time that he noted the tremor, are not preceded by any presyncopal symptoms, occur “randomly,” and are not caused by tripping over objects or other obvious explanations. The only other symptoms he endorses are some decrease in his sense of smell and chronic constipation, both of which began a few years before the tremor. He has otherwise been healthy with no chronic medical problems. No one in his immediate family has a history of tremor. His examination is significant for the right hand tremor, which is present at rest and which reemerges with sustention. Mild right wrist rigidity is revealed by augmentation. Which clinical feature of this patient’s history raises a red flag suggesting an atypical parkinsonian syndrome?

- A. age of onset
- B. asymmetric onset of tremor
- C. decrease in tremor with activity
- D. frequent falls early in the clinical course
- E. olfactory impairment before the onset of motor symptoms

12. A 56-year-old man who was diagnosed with Parkinson disease 5 years ago presents with increased stiffness. He is maintained on carbidopa/levodopa 25 mg/100 mg 4 times a day and pramipexole 1.5 mg 3 times daily. Initially, he found the treatment to be extremely effective, but the patient notes that over the past year he can feel when he needs the next dose. The patient feels very stiff and slow with worsening tremor about an hour before his next dose of carbidopa/levodopa. What is the most appropriate next step?

- A. deep brain stimulation
- B. entacapone
- C. infusional levodopa/carbidopa intestinal gel
- D. ropinirole
- E. trihexyphenidyl

13. A 22-year-old woman in her third trimester of pregnancy develops repetitive, fairly stereotypical but nonrhythmic involuntary facial grimacing. In the subsequent days she is noted to have choreiform movements of her arms. She has also become somewhat disinhibited during this time period. Her pregnancy has otherwise been uneventful. She has had two prior miscarriages. She has no family history of neurologic disease. She denies any other neurologic or systemic symptoms. Her neurologic examination is remarkable only for the choreiform movements of her arms as well as facial grimacing. Which of the following is the most likely diagnosis?

- A. benign hereditary chorea
- B. chorea gravidarum
- C. Huntington disease
- D. hypothyroidism
- E. McLeod syndrome

14. A 70-year-old man with a 15-year history of Parkinson disease is brought to clinic by his family with concerns for dementia. Two years ago, his family noted that he was beginning to have increasing difficulty with memory for recent events as well as a tendency to use shorter words and sentences and to have difficulty understanding others. Neuropsychiatric testing confirms significant deficits in memory and semantic fluency as well as visuospatial function, without evidence of significant depression. No contributory conditions are detected upon examination, MRI of the brain, or screening laboratory studies. Which of the following medications has been approved by the US Food and Drug Administration (FDA) for the treatment of this man's cognitive disorder?

- A. atomoxetine
- B. memantine
- C. quetiapine
- D. rivastigmine
- E. selegiline

15. A 69-year-old man presents with a tremor in his right hand that developed 1 week ago and has become quite disabling. On examination, he has a mild resting tremor in the right hand. The tremor worsens when he holds his arms outstretched and is especially exacerbated by performing a task with his right hand, such as drawing a spiral or pouring water into a cup. What is the most likely cause of the tremor?

- A. dystonic tremor
- B. essential tremor
- C. fragile X tremor-ataxia syndrome
- D. midbrain infarct
- E. Parkinson disease

16. A 10-year-old girl presents for evaluation of muscle stiffness and abnormal gait. Her symptoms began at age 8 and have been progressing. Initially, her feet would turn inward when walking, and more recently she reports that her thighs feel very tight. A family history of dystonia exists in her mother and a maternal aunt. On examination, she demonstrates dystonic posturing of her left foot, and when walking, she develops dystonic posturing in both lower extremities. What is the most appropriate initial therapy?

- A. benztropine
- B. levodopa
- C. onabotulinumtoxinA
- D. tetrabenazine
- E. trihexyphenidyl

17. A 17-year-old boy presents for evaluation of tremor. His symptoms started 6 months ago and have been progressively worsening. He reports a tremor in his arms and a sense of tightness in his limbs and face. He has no family history of neurologic disease. Neurologic examination is notable for facial dystonia, proximal, bilateral upper extremity high-amplitude tremor, and mild symmetric rigidity. Which of the following additional neurologic signs is most likely to be present in this patient?

- A. Babinski sign
- B. distal symmetric sensory loss
- C. fasciculations
- D. Kayser-Fleischer rings
- E. reduced rectal tone

18. A 64-year-old man with early Parkinson disease has been maintained on rasagiline for 10 months. He presents because his symptoms, which had initially stabilized, seem to be worsening over the past 2 months. He describes a sense of stiffness in his left arm as well as difficulty keeping up with his spouse when they are walking outside. On examination, he is noted to have decreased blink rate, bilateral upper extremity rigidity and bradykinesia (left greater than right), mild resting tremor in the left hand, and mildly stooped posture with no retropulsion. Which of the following is the most appropriate next step?

- A. add amantadine
- B. add benztropine
- C. add droxidopa
- D. add rotigotine
- E. change rasagiline to selegiline

19. A 46-year-old man presents for evaluation of tremor that began 2 years ago. The tremor initially did not bother him, but has worsened to the point where it interferes with his handwriting. He takes no medications and has a family history of Parkinson disease in his grandfather. Neurologic examination is significant for asymmetric, bilateral postural tremor of the outstretched hands. The tremor is also noted while the patient draws a spiral and holds a cup. No rigidity or bradykinesia is seen. What is the most likely diagnosis?

- A. dystonic tremor
- B. essential tremor
- C. Parkinson disease
- D. psychogenic tremor
- E. Wilson disease

20. A 56-year-old man presents for evaluation of gait instability and frequent falls. His symptoms started 4 years ago and have been progressively worsening. The patient also reports several episodes of syncope with standing, erectile dysfunction, and reduced voice volume. He has no family history of neurologic disease. Neurologic examination demonstrates masked face, reduced blink rate, scanning dysarthria, nystagmus, symmetric appendicular rigidity, titubation, and wide-based unsteady gait. On

orthostatic blood pressure testing, his systolic blood pressure drops 30 points when going from supine to standing, without any change in pulse. Brain MRI demonstrates brainstem and cerebellar atrophy. What is the most likely diagnosis?

- A. Friedreich ataxia
- B. multiple system atrophy
- C. paraneoplastic cerebellar degeneration
- D. Refsum disease
- E. spinocerebellar ataxia type 6

21. Which of the following patients with Parkinson disease is most likely to develop an impulse control disorder from dopamine agonist therapy?

- A. a 42-year-old man
- B. a 42-year-old woman
- C. a 71-year-old man
- D. a 71-year-old woman
- E. an 87-year-old man