

### Chapter 33. Parkinson Disease, Self-Assessment Questions

1. Patients with Parkinson disease (PD) have both motor and nonmotor symptoms. Which of the following statements regarding nonmotor symptoms associated with PD is *true*?
  - A. Depression is common in PD and can become worse when starting a COMT inhibitor
  - B. Diarrhea is usually problematic throughout the course of PD in most patients
  - C. Sleep problems are related to drug therapy for PD and can easily be treated by changing medications
  - D. Improving the on time may improve select nonmotor symptoms
  - E. The risk of falls in patients with PD is similar to that of patients without PD
  
2. BB, a 75-year-old man with PD, comes to the pharmacy to pick up his prescriptions. He is currently taking Sinemet, ropinirole, and rasagiline. His wife tells you that for the last month after starting the ropinirole her husband has been talking to people who are not present. BB does not seem bothered by the hallucinations. Which of the following is appropriate to minimize BB's hallucinations?
  - A. Decrease the dose of Sinemet or ropinirole
  - B. Switch rasagiline to a COMT inhibitor
  - C. The hallucination should improve without intervention as he becomes used to the medications changes
  - D. Add low dose quetiapine
  - E. A and D
  
3. CC has had PD for 10 years. He takes one carbidopa/levodopa 25/100 mg tablet at 8 AM, 2 PM, and 8 PM, and he reports that the 8 AM dose and 2 PM dose wear off 1 to 2 hours early.

Which of the following options would be *best* to minimize early wearing off symptoms for this patient?

- A. Administer levodopa with food and add a dopamine agonist
- B. Change to carbidopa/levodopa liquid formulation
- C. Increase each carbidopa/levodopa dose by one tablet
- D. Decrease the dosage of carbidopa to 10 mg
- E. Change dose times of carbidopa/levodopa to 8 AM, Noon, 4 PM and possibly 8 PM if needed

4. DD is a newly diagnosed patient with PD. Which of the following statements regarding treatment with MAO-B inhibitors is *true*?

- A. Greatest efficacy has been seen in late-stage PD
- B. Neuropsychiatric effects such as depression are common and problematic
- C. Insomnia is more common with selegiline than with rasagiline
- D. Dyskinesias usually improve when adding a MAO-B inhibitor
- E. They are proven to be neuroprotective

5. You are managing the drug therapy of a 60-year-old female patient diagnosed with PD 2 years ago who has not been on medications previously. She is a piano teacher and now complains of slowness and worsening tremor in her right hand, making it difficult for her to work. Based on this information, what is your recommendation?

- A. Tolcapone
- B. Pramipexole
- C. Amantadine
- D. Selegiline

- E. Delay treatment
6. Which of the following associated symptoms of PD will *not* improve with lowering the dose of PD medications?
- A. Psychosis
  - B. Depression
  - C. Orthostatic hypotension
  - D. Sleep disturbances
  - E. Nausea
7. A new patient with Parkinson disease comes to the pharmacy with a prescription for pramipexole 0.25 mg at bedtime. Which of the following is the most common adverse effect of pramipexole?
- A. Obsessive behavior
  - B. Livedo reticularis
  - C. Nausea
  - D. Thickening of heart valves
8. A patient comes into your clinic for a “second opinion.” He was told that his PD symptoms were mild and he should delay starting medicine. Which of the following are reasons for delaying levodopa treatment?
- A. Nonpharmacologic treatment may improve symptoms
  - B. Dopamine agonists are equally effective to levodopa in controlling motor symptoms
  - C. The later levodopa is started, the later depression symptoms start

- D. The risk of motor fluctuations is greater in patients starting levodopa versus a dopamine agonist
  - E. Starting with a monoamine oxidase (MAO-B) inhibitor decreases the risk of drug interactions
9. An 82-year-old man is diagnosed with early PD. His symptoms are mild constipation and tremor in his right hand that are affecting his quality of life. Which of the following medications would you suggest starting?
- A. Amantadine
  - B. Levodopa
  - C. Tolcapone
  - D. Entacapone
  - E. Pramipexole
10. A 75-year-old man receives a new prescription for Sinemet 10/100 TID, as he was just diagnosed with Parkinson disease. He also takes iron and vitamin C supplements for Restless Legs Syndrome. Which of the following is appropriate?
- A. Tell the patient that he should take Sinemet every other day to allow for drug-free days and add rasagiline for neuroprotection
  - B. Call the physician and suggest that the prescription be changed to Sinemet 25/100
  - C. Tell the patient that he should take both his medicines at the same time to improve compliance
  - D. Advise the patient to space the iron and levodopa dosing by 2 hours
  - E. B and D are true

11. Which treatment symptom pair is the best initial treatment for the nonmotor symptoms of PD?
- A. Treat seborrhea with dandruff shampoos
  - B. Treat postural hypotension with prednisone
  - C. Treat constipation with amantadine
  - D. Treat hallucinations with chlorpromazine
  - E. Treat nausea with promethazine
12. A 65-year-old patient with Parkinson disease asks you to explain which surgical procedure could be an option for him. Based on available evidence, which of the following is the best answer at this time?
- A. Pallidotomy
  - B. Deep-brain stimulation
  - C. Thalamotomy
  - D. Spheramine transplantation
  - E. None of the above are options
13. KM is a 68-year-old woman with a history of Parkinson disease on Sinemet 25/100 (dosed at 7 AM, 11 AM, 2 PM, 7 PM). The patient reports that she has trouble initiating movements on some days and that she is constantly worried about falling. She tried changing the timing of her medications, but stopped because she became increasingly “off.” She also reports new symptoms of anxiety and apathy. Which of the following is true?
- A. Adding a COMT inhibitor would increase on time and possibly help her symptoms

- B. The patient could be suffering from freezing episodes, which may be exacerbated by her anxiety
  - C. Adding a benzodiazepine may help with her anxiety, but may also increase her risk of falls
  - D. B and C
  - E. All of the above
14. MM is a 60-year-old man who has come in for evaluation of the following symptoms: increased sadness, constipation, urinary frequency, slowness, and mild tremor in his right hand. Which of the following statements is *true* about the onset of PD symptoms and the treatment goals?
- A. Sinemet should be started as soon as possible to minimize the demyelization of dopamine neurons
  - B. Constipation is a very common autonomic symptom of PD and may precede the motor symptoms
  - C. Sinemet and surgery can stop the progression of symptoms
  - D. Sadness, constipation, and urinary frequency can be associated symptoms of PD but are not treatable with medications
  - E. Maintaining an active physical activity program has little effect on the progression of symptoms

15. ML is a 65-year-old Asian man who presents with symptoms of tremor, slowness, and stiffness. His current medications include loxapine, atorvastatin, hydrochlorothiazide, and metoclopramide. Which of the following medications could contribute to his PD symptoms?

- A. Loxapine
- B. Atorvastatin
- C. Metoclopramide
- D. A and B
- E. A and C

**Answers**

1. D

2. E

3. E

4. C

5. B

6. B

7. C

8. D

9. B

10. E

11. A

12. B

13. E

14. B

15. E