Chapter 41. Sleep Disorders, Self-Assessment Questions

1. AD is a 58-year-old man who presents to your clinic with the complaint that he “just can’t sleep at night.” Upon further questioning, he reports that he typically falls asleep without problem but wakes up multiple times throughout the night. Which of the following sleep disorders could AD possibly have?
   A. Insomnia
   B. Obstructive sleep apnea
   C. Narcolepsy
   D. Restless legs syndrome
   E. All of the above

2. RS is a 28-year-old man with a history of obsessive-compulsive disorder who reports that he kicks his legs during the night, which wakes him up. He reports that he does not really have any symptoms of restless legs syndrome, but the leg kicking frequently awakens him in the middle of the night and causes him to be sleepy during the daytime. RS has a body mass index of 21 kg/m² and is normotensive, and his wife says he does not snore or stop breathing during sleep. What would you recommend for RS?
   A. Temazepam 15 mg at bedtime
   B. Polysomnography
   C. Pramipexole 0.5 mg at bedtime
   D. Multiple sleep latency test
   E. Gabapentin 300 mg at bedtime

3. Regarding therapies for the treatment of insomnia all of the following are correct except:
A. Sedating antidepressants are commonly used to treat insomnia despite few good studies that document efficacy for insomnia.

B. Nonbenzodiazepines (zolpidem, zaleplon, eszopiclone) are generally associated with less rebound insomnia than traditional benzodiazepines.

C. Based on efficacy studies, BZDRAs and ramelteon are the drugs of choice for the treatment of insomnia.

D. Suvorexant is an orexin receptor antagonist used for insomnia that is novel because it is not a controlled substance.

E. All of the above are correct.

4. Which of the following is a consequence of unidentified and untreated sleep disorders?

   A. Hypertension
   B. Motor vehicle accidents
   C. Excessive daytime sleepiness
   D. Irritability
   E. All of the above

5. BB is a 48-year-old man with a history of RLS. Over the past year, his RLS has gotten worse, and he has increased the dose of his pramipexole therapy to 1 mg prior to bedtime. His symptoms started appearing earlier in the day, and he had new symptoms in his arms. What strategy should be implemented to manage his symptom augmentation?

   A. Switch to a shorter-acting dopaminergic agent
   B. Switch to a longer-acting dopaminergic agent
   C. Increase the dose of pramipexole
D. Check serum ferritin and replete iron if necessary
E. Both B and D

6. TQ is a 51-year-old woman who presents to your clinic today with a complaint of difficulty initiating sleep. She goes to bed at 10 PM and awakens at 6 AM but frequently does not fall asleep for 1.5 to 2 hours. This problem has persisted for 9 months. TQ also has a history of alcohol abuse. Based on the available information, which agent would be the best choice to treat TQ’s complaint?
   A. Ramelteon
   B. Temazepam
   C. Flurazepam
   D. Eszopiclone
   E. Amitriptyline

7. BL is a 24-year-old college student with narcolepsy (no cataplexy) who is taking methylphenidate 20 mg/day (he takes this at 8 AM before his first class). Currently, this works well at reducing sleepiness in the morning, but next semester, BL will have morning and late afternoon classes and is worried he will not be able to stay awake for afternoon classes. Which of the following might be the best strategy for the upcoming semester?
   A. Methylphenidate 10 mg twice daily (8 AM and 6 PM)
   B. Methylphenidate 20 mg SR twice daily and 10 mg prn afternoon sleepiness
   C. Dextroamphetamine 10 mg/day (8 AM)
   D. Sodium Oxybate 2.25 g at bedtime and 3 hours later
   E. Selegiline 10 mg/day at 8 AM
8. JM is a 38-year-old man traveling to Europe on business. He asks you for a recommendation to treat jet lag upon his arrival. Based on the available evidence, which agent would you recommend?

   A. Valerian
   B. Diphenhydramine
   C. Mirtazapine
   D. Melatonin
   E. Quazepam

9. A patient presents to the clinic and tells you that he is looking for something to help him fall asleep at night. He reports that he frequently goes to bed and cannot fall asleep for 2 or 3 hours, so he lies in bed and watches television. Upon further questioning, he relays the following information about his sleep and medical history:

   **SH:** Retired and married with two grown children. No tobacco use. Does not drink alcohol or caffeine. He exercises at the health club in the mornings.

   **Sleep patterns:**

   Goes to bed on average at 11 PM and awakens with alarm at 6 AM but frequently does not fall asleep until 1 or 2 AM. No awakenings after he is asleep. No reports of limb restlessness. Tired in the daytime and naps for about an hour each afternoon but thinks it is related to inadequate sleep time. What would you recommend to the patient to improve his sleep hygiene?

   A. Instruct him not to exercise; it may contribute to his complaint.

   B. Instruct him to continue watching television in bed; it will help him fall asleep more easily.
C. Recommend he drink alcohol in the evening to take the edge off.

D. Instruct him to avoid daytime naps.

E. Recommend all of the above.

10. GR is a 58-year-old man with obstructive sleep apnea (OSA) and hypertension. He is currently using continuous positive airway pressure (CPAP) therapy (8 cm of water pressure [0.8 kPa]) for his OSA and uses it about 6.5 hours each night. His Epworth Sleepiness Scale score was 19 out of 24 when he first started CPAP, and it has improved, but he is still sleepy (current score, 14 out of 24). He has not gained any weight since starting CPAP therapy. What would be the best recommendation for GR?

A. He should start methylphenidate 20 mg SR in the morning for his daytime sleepiness.

B. He should increase his CPAP pressure to 12 cm water pressure (1.2 kPa).

C. He should start dextroamphetamine/amphetamine 30 mg XR in the morning for his daytime sleepiness.

D. He should start modafinil 200 mg in the morning for daytime sleepiness.

E. None of the above.

11. In the treatment of restless legs syndrome, which of the following are disadvantages to the various treatments?

A. Levodopa-carbidopa—application site reactions

B. Pramipexole—risk of compulsive behaviors

C. Gabapentin enacarbil—high risk of symptom augmentation

D. Zaleplon—constipation

E. All of the above
12. DP is a 46-year-old woman who presents with a complaint of difficulty initiating sleep. After a careful sleep history, you rule out other potential sleep disorders and want to start her on drug therapy for her insomnia. Which of the following would be the best recommendation?
   
   A. Amitriptyline 10 mg at bedtime
   B. Flurazepam 15 mg at bedtime
   C. Zaleplon 5 mg at bedtime
   D. Doxepin 3 mg at bedtime
   E. None of the above

13. A patient with restless legs syndrome has been taking ropinirole 1 mg before bedtime to treat her symptoms. She takes her ropinirole at 7 PM, goes to bed at 9 PM, and wants to awaken at 6 AM for work. She explains that ropinirole helps her before going to bed and for the first few hours of sleep, but her symptoms reemerge around 3 AM, causing her to awaken too early. Her serum ferritin is 88 ng/mL (mcg/L; 198 pmol/L). What is happening with this patient’s therapy?
   
   A. Patient is experiencing tolerance to the ropinirole.
   B. Patient is experiencing symptom augmentation.
   C. The ropinirole has worn off at 3 AM due to relatively short half-life.
   D. Patient is experiencing morning symptoms due to iron deficiency.
   E. All of the above.

14. DH is a 34-year-old woman with a history of narcolepsy with cataplexy. She takes modafinil (Provigil) 200 mg each morning and 200 mg at noon to help control her sleepiness but does not receive much benefit from it. Her Epworth Sleepiness Scale
score was 19 out of 24 today in clinic. She reports that she is most sleepy in the middle of the afternoon. She had not previously been on therapy for cataplexy. Today, she reports that her cataplexy has worsened and that she wishes to try something to help. What regimen would you recommend to better control DH’s narcolepsy and cataplexy?

A. Switch to methylphenidate 20 mg SR in the morning and at noon and add venlafaxine 75 mg/day.
B. Increase her modafinil to 400 mg in the morning and 200 mg at noon.
C. Keep modafinil dose the same and add venlafaxine 75 mg in the morning.
D. Switch to methylphenidate 10 mg taken in the morning.
E. Switch to dextroamphetamine 5 mg in the morning and fluoxetine 10 mg in the morning.

15. VF is a 74-year-old man who is accompanied today in your clinic by his wife. She reports that for the past few months, VF thrashes around in bed violently during the latter half of the night (one to two times per week). He has flown out of bed on occasion and bruised his arm by hitting the wall. When asked about these episodes, he replies that he is usually dreaming about a struggle before he wakes up. What is the best diagnosis and matching appropriate therapy for VF?

A. NREM parasomnia—sleep walking—clonazepam
B. NREM parasomnia—night terrors—bupropion
C. REM parasomnia—REM behavior disorder—clonazepam
D. Periodic limb movements of sleep—ropinirole
E. Restless legs syndrome—gabapentin
Answers

1. E
2. A
3. D
4. E
5. E
6. A
7. B
8. D
9. D
10. D
11. B
12. C
13. C
14. A
15. C