## Patient <br> Management Exercise <br> Disorders of Sleep

This exercise is designed to test your comprehension of material presented in this issue of FOCUS as well as your ability to evaluate, diagnose, and manage clinical problems. Answer the questions below, to the best of your ability, on the basis of the information provided, making your decisions as you would with a real-life patient.

Questions are presented at "decision points" that follow a section that gives information about the case. One or more choices may be correct for each question; make your choices on the basis of your clinical knowledge and the history provided. Read all of the options for each question before making any selections. You are given points on a graded scale for the best possible answer(s), and points are deducted for answers that would result in a poor outcome or delay your arriving at the right answer. Answers that have little or no impact receive zero points. On questions that focus on differential diagnoses, bonus points are awarded if you select the most likely diagnosis as your first choice. At the end of the exercise you will add up your points to obtain a total score.

> Issues of sleep disturbances span many psychiatric and nonpsychiatric conditions. Impaired sleep has been linked with increased disability, morbidity, and mortality, so effective evaluation and treatment have great importance.

## Vignette part 1

Shirley is a 32-year-old woman who was referred to you by her primary care physician. She had initially sought care there but has been referred for specialty care because she was still symptomatic after many weeks of unsuccessful interventions. Her chief complaint remains "I can't sleep and I'm too tired all the time."

Shirley is a married mother of two girls (ages 6 and 1.5 years) and is currently staying at home to take care of the children. Before stepping out of the workforce, she had been a mid-level administrator at the local hospital. According to the chart notes you've received, she had been in her usual state of good health until about 4 months ago, when she noted that she was feeling tired all the time and had
poor-quality sleep. She had originally reported to her primary care physician (PCP) that she would lie in bed for over an hour when trying to go to sleep,

[^0]tossing and turning and "with my head full of thoughts." She felt drowsy during the day and sometimes would nod off in the afternoon when her younger daughter took a nap. She had denied feeling "depressed" but did endorse having an illdefined, "free-floating anxiety" and irritability that was present much of the time. Her appetite was diminished, but she welcomed this as she was still trying to lose 30 pounds she had gained during her pregnancy. The chart noted that she had some indigestion on review of systems.
In the consultation request and chart notes, her PCP indicates that prior efforts with attention to sleep hygiene (i.e., cool room, no TV/reading/computer use in bed, and so on) and a 2 -week trial of lorazepam $(0.5 \mathrm{mg})$ at bedtime had been unsuccessful.

## Decision Point A:

Before meeting the patient for your evaluation visit, which item ranks most highly in your thinking as to the potential etiology of the patient's sleep disturbance? Points awarded for correct and incorrect answers are scaled from best $(+3)$ to unhelpful but not harmful (0) to dangerous ( -3 ).

| A1._ Obstructive sleep apnea |  |
| :--- | :--- |
| A2._ Gastroesophageal reflux |  |
| A3._ Familial disturbance |  |
| A4._ | Substance use related |
| A5._Depression and/or an anxiety |  |
|  | disorder |

## Vignette part 2

As you collected your own history and examination data, you were struck by how exhausted and depleted Shirley appeared. She reported anxieties and an internal sense of dread but appeared psychomotor slowed. She reported that she drinks two cups of coffee a day, both before 2 p.m.; she denied any recent use of alcohol, drugs of abuse, or herbal/ botanical agents. She also endorsed feeling irritable ("short fuse with my kids"), experiencing a loss of interest in playing with her daughters ("they just wear me out"), having a loss of appetite with 7 pounds of weight loss over the past 2 weeks, having insomnia (difficulty falling and staying asleep), being slowed down, having profound fatigue and loss of energy, feeling that she is "failing" in her roles as a mother and as a wife, and having periods of being unable to concentrate long enough to help her 6 -year-old with homework assignments. She reported that "life can't go on like this," but she denied any thoughts of self-harm or suicide. She re-
ported that she does not snore and has no symptoms of heartburn or indigestion.
Because you practice measurement-based care, you had her complete the Quick Inventory of Depressive Symptomatology (Self-report) (QIDS-SR) 16 -item questionnaire before you began your evaluation. Her answers confirmed the data you had elicited in the interview, and her score of 14 indicated a moderate level of symptom severity.

She had never before taken psychotropic medications other than the lorazepam prescribed by her PCP. Her mother may have been depressed when the patient was a little girl, but her memories are imprecise. Shirley has a younger sister who is alive and well.

## Decision Point B:

What recommendation do you offer the patient at this point?

B1.___ Offer a trial of an antidepressant; citalopram is covered on her formulary.
B2.___ Use a higher dose of lorazepam ( $0.5-\mathrm{mg}$ tablets): two at bedtime with an option to take one more if she is still awake 1 hour later.
B3.___ Refer her for polysomnography in a sleep laboratory before changing treatment.
B4.__ Defer treatment until the patient has completed 3 weeks of a nightly sleep diary.

## Conclusions

You convince Shirley that a trial of a selective serotonin reuptake inhibitor may help her to feel better, both for her sleep and for other aspects of her current distress. She also wishes to continue lorazepam at a higher dose, because it did help her fall asleep sometimes (partial response). She is willing to keep a sleep diary and bring it back at her next visit.

She returns after 2 weeks and reports that she is feeling somewhat better. Her awakenings in the middle of the night have decreased from every night to only three times in a week. Her daytime irritability has also improved, as has her energy. She had some gastrointestinal side effects in the first week of her new regimen, but followed your guidance about taking the antidepressant after eating breakfast and had been able to tolerate it adequately.

She returns again after 4 weeks of treatment and feels significantly better. Her QIDS-SR score has
fallen to 7 , nearly into the range of remission. She tells you that keeping the diary has helped her focus on the thoughts attached to her anxieties, and she has seen connections to aspects of her remote history that did not previously seem relevant. When she was 6 years old, her father had an extramarital affair that introduced a great deal of emotional turmoil into her family of origin. Because her older daughter has recently turned 6 , she thinks she may have thought more about her own childhood experiences at that age, and acknowledged having fears that her own husband would lose interest in her (because she was irritable, overweight, and intellectually sluggish) that may have been triggered by these recollections. She reports that her husband found her weeping one day and she told him of her fears. They had a long talk and he reassured her that his love for her was strong, that he was not going to behave as her own father had, and that actually he would enjoy spending more "grown-up" time with just the two of them but had not pressed the issue because she had seemed so tired. She reported they let their daughters have a sleepover at a friends' home the previous Saturday night and had been able to enjoy each other's company anew without the pitter-patter of little feet as an interruption.

## Answers: scoring, relative WEIGHTS, AND COMMENTS

## Decision Point A:

A1.__ Obstructive sleep apnea. +1 Obstructive sleep apnea (OSA) is often linked to excess weight and increased "floppiness" in the soft tissues of the airway. Depending on the individual patient and where the weight is distributed, an extra 30 pounds might or might not be enough to lead to OSA.
A2.___ Gastroesophageal reflux disease. +1 Gastroesophageal reflux disease symptoms can be related to posture and be worse at night, when lying down challenges the competence of a weakened gastroesophageal sphincter. Elevated in-tra-abdominal pressure from obesity can add to this issue.
A3.___ Familial disturbance. +1 The patient has two small children at home. Are they sleeping through the night in their own beds? Do they
awaken and try to climb into Shirley's bed? The chart does not address these issues.

A4.__ Substance use related. +2 A wide variety of substances can interfere with sleep. In addition to alcohol or drugs of abuse, energy drinks can interfere with sleep if taken in the hours before bedtime. Herbal and botanical agents also can be stimulating soon after ingestion and thus should be avoided near bedtime or may be initially sedating with the potential to trigger insomnia in withdrawal states (e.g., valerian root). The chart gives no indication of whether substance use was investigated, but the widespread problem of substance use in society makes clarification worthwhile.

A5.__ Depression and/or anxiety disorder. +3 Insomnia is a diagnostic component for major depressive disorder and generalized anxiety disorder in DSM-IV-TR and accounts for 3 of the 17 items of the original Hamilton Depression Rating Scale. Patients may not endorse feelings of "depression" to their PCPs for fear of being labeled "crazy" and of the issues concerning stigma and "preexisting condition" with a mental illness diagnosis in their insurance records. Not for this patient, but as a general point, the "masked depression" of elderly individuals often is characterized by anhedonia being endorsed more than depressed mood per se. The chart does not indicate either the presence or absence of rest of the 9 symptom areas of major depressive disorder.

## Decision Point B:

B1.___ Antidepressant treatment. +3 The patient has endorsed enough symptoms to establish the presence of a major depressive episode, apparently without any history suggestive of manic or hypomanic episodes. Anxiety symptoms are present as well and suggest comorbid generalized anxiety disorder. The patient's insurance will cover citalopram,
mirtazapine, and paroxetine. Given the patient's struggles with weight, and your wish not to exacerbate any obstructive sleep apnea concerns, you elect to start citalopram at 20 mg every morning.

B2.___ Address symptoms with a higher dose of lorazepam. +2 Benzodiazepines can help acutely to address the anxious ruminations that are part of Shirley's early evening insomnia. Concerns about dependency suggest that this should not be the only component of treatment, but perhaps used briefly (several weeks), for example, while waiting for a selective serotonin reuptake inhibitor (SSRI) to yield a benefit.

B3. Polysomnography. 0 Useful diagnostic data can be obtained from a sleep polysomnographic study, including data on sleep architecture, arousals and oxygen desaturations associated with apneic periods, and restless leg syndrome. Given that this examination would be disruptive to the patient and her family and may take some time to arrange if insurance is to cover it, it may be prudent to try another empiric intervention first.

B4.__ Sleep diary observations first. -2

Sleep diaries can help gather observations over several weeks and prospectively track a patient's sleepwake patterns. Actual sleep-wake times, duration of time in bed, and day-to-day variability in sleep-wake times and other events can be observed without reliance on recall. Ongoing stressors or other events can be recorded as well, to permit an examination of any patterns. Rather than delaying treatment initiation until after these data are collected, many clinicians instead would have the patient start a sleep diary to monitor effects of a new treatment.

| YOUR TOTAL |  |
| :--- | :--- |
| Decision Point | Score |
| A |  |
| B |  |
| TOTAL |  |

## References

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## NOTES

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[^0]:    CME Disclosure
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    In the past 5 years, Dr. Cook has received grant support from Aspect Medical Systems, Cyberonics, Eli Lilly and Company, the John A. Harfford Foundation, MedAvante, the National Institutes of Health, Neuronetics, Novartis, Pfizer, and Sepracor as Principal Investigator or CoInvestigator; has served as a consultant to Ascend Media, Bristol-Myers Squibb, Cyberonics, Eli Lilly and Company, Forest Laboratories, Janssen, Neuronetics, Scale Venture Partners, and the U.S. Department of Justice; and has been a member of the speakers' bureau for Bristol-Myers Squibb, CME LLC, Medical Education Speakers Network, Pfizer, and Wyeth. Dr. Cook is not a shareholder in pharmaceutical or medical device companies; his patents are assigned to the University of California.

