

# Putting Prevention into Practice

*An Evidence-Based Approach*

## Screening for Obstructive Sleep Apnea in Adults

ROBERT J. McNELLIS, MPH, PA, *Medical Officer, U.S. Preventive Services Task Force Program, Agency for Healthcare Research and Quality*

SHAVONDA THOMAS, MD, MPH, *Preventive Medicine Resident, University of North Carolina School of Medicine*

► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2017/0715/od1.html>.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/obstructive-sleep-apnea-in-adults-screening>.

This series is coordinated by Sumi Sexton, MD, Associate Deputy Editor.

A collection of Putting Prevention into Practice published in *AFP* is available at <http://www.aafp.org/afp/pip>.

**CME** This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 85.

### Case Study

R.K. is a 52-year-old white man who presents to your office for a preventive health visit. He is overweight and has a history of hypertension and hyperlipidemia, which are stable and well controlled with medication. One of his coworkers was recently diagnosed with obstructive sleep apnea (OSA), and R.K. wants to know if he should be screened, although he is not aware of any symptoms.

### Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), which one of the following approaches to screening for OSA is appropriate for this patient?
  - A. He should be screened using a portable home sleep monitor because there is adequate evidence that screening for OSA improves all-cause mortality in adults.
  - B. He should be screened using polysomnography because there is convincing evidence that screening for OSA provides clinically relevant benefits in asymptomatic adults.
  - C. He should be told that there is uncertainty about the balance of the potential benefits and harms of screening for OSA in adults.
  - D. He should not be screened for OSA because he has no symptoms.
2. Which of the following statements about risk factors for OSA are correct?
  - A. Alcohol and sedative use have been shown to increase the risk of OSA.
  - B. Women who are postmenopausal are at increased risk of OSA.
  - C. Higher body mass index is associated with an increased risk of OSA.
  - D. Craniofacial abnormalities, including retrognathia, are associated with decreased risk of OSA.
3. Which one of the following statements about the epidemiology of OSA in the United States is correct?
  - A. The rate of progression from mild to moderate-to-severe OSA has been well characterized and established in clinical practice.
  - B. The current prevalence of mild OSA in the United States is estimated at less than 10%.
  - C. OSA is more common in women than in men.
  - D. The prevalence of OSA increases with age.

Answers appear on the following page.

## Answers

**1. The correct answer is C.** The USPSTF found insufficient evidence to assess the balance of benefits and harms of screening for OSA in asymptomatic adults.<sup>1</sup> In patients without symptoms, it is appropriate to discuss the uncertainty about the benefits and harms of screening for OSA. The USPSTF found evidence that portable home sleep monitors are generally accurate for diagnosing OSA in patients who are being evaluated for suspected OSA, but there is no clear evidence on how portable sleep monitors would perform in screen-detected populations, and no evidence on the effects of screening on all-cause mortality. Although the American College of Physicians recommends polysomnography for diagnosing OSA, the USPSTF found no evidence about its use as a screening test in asymptomatic populations. Adults with symptoms should be managed appropriately. Most primary care physicians do not routinely screen for OSA; however, the evidence at this time is insufficient to recommend for or against screening in patients without symptoms.

**2. The correct answers are B and C.** There are several factors associated with an increased risk of OSA. These include male sex, older age (40 to 70 years), postmenopausal status, higher body mass index, and craniofacial and upper airway abnormalities. Evidence on other risk factors, such as

smoking, alcohol and sedative use, and nasal congestion, is sparse or mixed.

**3. The correct answer is D.** The prevalence of OSA appears to increase with age through a person's 60s and 70s and then plateaus. The USPSTF identified a number of research gaps during its review of the evidence,<sup>2</sup> including a lack of data on the natural history of OSA and progression rates from mild to severe OSA. Based on data from the 1990s, the estimated prevalence of OSA in the United States is 10% for mild OSA and 3.8% to 6.5% for moderate-to-severe OSA. More recent estimates widely vary, but prevalence may be higher than in the 1990s, given the increasing prevalence of obesity. Studies have shown that OSA is two to three times more likely in men than in women, although the difference narrows after menopause.

The views expressed in this work are those of the authors, and do not reflect the official policy or position of the University of North Carolina School of Medicine or the U.S. government.

## REFERENCES

1. US Preventive Services Task Force. Screening for obstructive sleep apnea in adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2017;317(4):407-414.
2. Jonas DE, Amick HR, Feltner C, et al. Screening for obstructive sleep apnea in adults: evidence report and systematic review for the US Preventive Services Task Force [published correction appears in *JAMA*. 2017;317(12):1278]. *JAMA*. 2017;317(4):415-433. ■