Case Study

A seven-year-old boy presents with his mother for a routine well-child visit. He does not report any problems, his medical history is unremarkable, and he has no family history of heart disease or diabetes mellitus. During the physical examination, you note that he is obese, with a body mass index (BMI) in the 96th percentile for his age and sex.

Case Study Questions

1. According to the U.S. Preventive Services Task Force (USPSTF), what is the most appropriate course of action for this patient?
   - A. This patient does not require any interventions.
   - B. Briefly discuss diet and physical activity with the patient’s mother.
   - C. Briefly discuss diet and physical activity with the patient alone.
   - D. Offer or refer the patient to a specialty clinic that provides more than 25 hours of comprehensive counseling and other interventions.

2. The patient’s 14-year-old sister is scheduled for a sports physical examination. In reviewing her medical record, you find that she is obese based on her BMI. Which one of the following interventions does the USPSTF recommend for her?
   - A. Prescribe orlistat and have the patient follow up with you in four weeks.
   - B. Prescribe orlistat and offer or refer the patient to a specialty clinic for high-intensity behavioral counseling and other interventions.
   - C. Offer or refer the patient to a specialty clinic that provides more than 25 hours of comprehensive counseling and other interventions.
   - D. Counsel the patient’s mother on the importance of proper diet and physical activity.

3. According to the USPSTF, what is the appropriate interval for screening children and adolescents for obesity?
   - A. There is no evidence to support a specific interval for obesity screening.
   - B. Once a year.
   - C. Once every two years.
   - D. Once every six months.

Answers appear on the following page.
Putting Prevention into Practice

Answers

1. The correct answer is D. The USPSTF recommends that children six years and older be screened for obesity (defined as an age- and gender-specific BMI at or above the 95th percentile). Children who are obese should be offered or referred for comprehensive, intensive behavioral interventions. The USPSTF found insufficient evidence for screening children younger than six years.

The USPSTF found adequate evidence that multi-component, moderate- to high-intensity behavioral interventions can yield short-term (up to 12 months) improvements in weight status in children and adolescents who are obese. Moderate- to high-intensity interventions are defined as involving more than 25 hours of contact with the child and/or the family over a six-month period.

There is limited evidence on the long-term (beyond 12 months) sustainability of absolute and/or relative decreases in BMI after interventions. Also, it is not known whether these interventions will result in similar improvements in children who are overweight but not obese.

2. The correct answer is C. The USPSTF found that interventions combining pharmacologic agents with behavioral interventions resulted in only modest short-term improvement in weight status in children 12 years and older. The magnitude of the harms of these drugs in children is uncertain. There are also no long-term data on the maintenance of improvement after discontinuation of medications.

Orlistat is a lipase inhibitor that has been approved for use in children 12 years and older. Sibutramine (Meridia), a centrally acting appetite suppressant, was withdrawn from the U.S. market in October 2010 because of clinical trial data indicating an increased risk of heart attack and stroke. Physicians should not prescribe this medication to their patients.

3. The correct answer is A. The USPSTF did not find evidence about appropriate intervals for screening for obesity in children and adolescents. Height and weight, which are used to calculate BMI, are routinely measured during health maintenance visits.

SOURCES
