CHAPTER 14. ASTHMA, SELF-ASSESSMENT QUESTIONS

1. Which one of the following is a common symptom of chronic asthma?
   A. Cyanosis
   B. Wheezing
   C. Hypoxemia
   D. Edema
   E. Nasal congestion

2. Which one of the following comorbid conditions may worsen asthma control?
   A. Obesity
   B. Hypertension
   C. Diabetes
   D. Hyperlipidemia
   E. Otitis media

3. Which one of the following situations indicates controlled asthma?
   A. Using one canister of albuterol each month
   B. Exercising with SABA use before the activity
   C. Waking at night only three times a week with a cough
   D. Visiting the emergency department one time in the past year for asthma
   E. Missing school once a month because of asthma symptoms

4. An 11-year-old boy with asthma reports using albuterol once or twice in the past month. He is able to play soccer well by using albuterol before games. He denies waking at night, and his last spirometry reading FEV₁/FVC was 88% (0.88). What additional asthma treatment is appropriate for this patient?
A. Montelukast
B. Salmeterol
C. Prednisone
D. Ciclesonide
E. No additional medication needed

5. Which one of the following educational strategies may help an asthma patient with worsening asthma from cats, strong odors, gastroesophageal reflux disease (GERD), cold air, and upper respiratory infections?
A. Have pets groomed monthly
B. Use bleach to clean the bathroom once a week
C. Take medication for GERD as needed for symptoms
D. Wear a scarf to cover the nose and mouth during cold winter months
E. Obtain an influenza vaccine after the age of 65

6. The optimal delivery method of albuterol for a typical 16-year-old asthma patient is:
A. Nebulization
B. Oral solution
C. MDI with a valved-holding chamber and mask
D. MDI
E. Oral tablet

7. Which one of the following medications requires monitoring of growth in children?
A. Montelukast
B. Zileuton
C. Theophylline
D. Fluticasone
E. Omalizumab

8. During pregnancy, which one of the following medications is preferred as the long-term control medication?
   A. Budesonide
   B. Theophylline
   C. Montelukast
   D. Omalizumab
   E. Zafirlukast

9. Dosing for omalizumab is based on which of the following criteria?
   A. Age
   B. Renal function
   C. Baseline IgE levels
   D. Liver function
   E. Baseline severity of asthma

10. A 25-year-old woman is taking levalbuterol and formoterol for her poorly controlled asthma. Which one of the following therapeutic recommendations is most appropriate for her?
    A. Switch formoterol to tiotropium
    B. Add fluticasone DPI to her regimen
    C. Switch formoterol alone to budesonide/formoterol MDI
    D. Add montelukast to her regimen
    E. Discontinue levalbuterol and continue formoterol
11. Proper use of inhaled corticosteroids includes:
   A. Priming the inhaler before each use
   B. Checking to see if the inhaler is empty by shaking the inhaler
   C. Discontinuing inhaled corticosteroids while oral corticosteroids are being used
   D. Waiting to use the medication until an acute asthma exacerbation occurs
   E. Rinsing the mouth after each use

12. Which one of the following medications may worsen asthma control?
   A. Carvedilol
   B. Furosemide
   C. Losartan
   D. Varenicline
   E. Atorvastatin

13. A 15-year-old boy with a diagnosis of moderate, persistent asthma returns to his physician's office. He has had no exacerbations in the last 2 years, and he has no complaints about his current regimen of fluticasone 220 mcg, 1 puff twice daily, montelukast 10 mg daily, and albuterol as needed. After 3 months of well-controlled asthma, which one of the following therapeutic recommendations is recommended?
   A. Discontinue albuterol
   B. Lower the dose of fluticasone
   C. Switch fluticasone to salmeterol
   D. Lower the dose of montelukast
   E. Switch albuterol to levalbuterol
14. A 21-year-old woman with asthma calls the clinic very short of breath and wondering if she should initiate prednisone. She has been using her albuterol via nebulization every 2 hours with minimal relief of her wheezing and shortness of breath. Her peak flow is 180 L/min and her personal best is 400 L/min. What therapeutic recommendation is best in this situation?

A. Stop all medications and call 9-1-1
B. Start prednisone at home and continue albuterol nebulization until her peak flow is greater than 70% of her personal best
C. Double the dose of her ICS/LABA inhaler
D. Discontinue albuterol and start ipratropium nebulization
E. Initiate prednisone at home, continue albuterol MDI, and proceed to the emergency department

15. Which one of the following statements is true about treatment of an asthma exacerbation in the hospital?

A. Corticosteroids are administered intravenously for the fastest onset of action
B. Oxygen therapy is initiated for all patients
C. Albuterol may be administered continuously via nebulization
D. Inhaled corticosteroids are discontinued while in the hospital
E. Corticosteroid dosing in the hospital is double that of outpatient use

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