Chapter 2: The Physical Examination and Its Basis in Physiology

MULTIPLE CHOICE

1. When would induced hypothermia be indicated?
   a. During brain surgery
   b. During bowel surgery
   c. To break a fever
   d. To treat carbon monoxide poisoning

   ANS: A
   There are times during brain or cardiac surgery that hypothermia is induced to lower the patient's metabolism so that less oxygen is needed by the body. If a patient has a high fever, measures are taken to lower it but not to the point of hypothermia. Carbon monoxide poisoning is not treated by hypothermia.

   REF: p. 12

2. Your 50-year-old patient has a heart rate by palpation of 120 bpm. How should this be interpreted?
   a. Within the normal range for an adult
   b. An error since a stethoscope was not used
   c. Bradycardia
   d. Tachycardia

   ANS: D
   In an adult, a heart rate of >100/minute is considered to be tachycardia. A heart rate of less than 60/minute in an adult is considered to be bradycardia. Palpation and auscultation are both acceptable to check heart rate.

   REF: p. 15

3. Tachypnea may be the result of:
   1. hypoxemia.
   2. hypothermia.
   3. fever.
   4. sedation.
   a. 2, 4
   b. 1, 3
   c. 2, 3, 4
   d. 1, 2, 3, 4

   ANS: B
   Tachypnea may be the result of hypoxemia, fever, and other causes. Hypothermia and sedation will usually result in bradycardia.

   REF: p. 15

4. Your 50-year-old patient would be said to have hypotension when her:

a. blood pressure is 130/90 mm Hg.
b. blood pressure is 85/55 mm Hg.
c. heart rate is 55 bpm.
d. pulse pressure is 40 mm Hg.

ANS: B
In an adult, hypotension is defined as a blood pressure of <90/60 mm Hg. A heart rate of 55 bpm would be bradycardia. Pulse pressure is normally about 40 mm Hg.

REF: p. 18

5. A dull percussion note would be heard in all of the following situations EXCEPT:
a. atelectasis.
b. pleural thickening.
c. chronic obstructive pulmonary disease (COPD).
d. consolidation.

ANS: C
Because of hyperinflation, a patient with COPD would have a hyperresonant percussion note. All of the other listed options would result in a dull percussion note.

REF: p. 27

6. Rhonchi are associated with:
1. inspiration typically.
2. airway secretions.
3. bronchial asthma.
4. expiration typically.
a. 2, 4
b. 3, 4
c. 2, 3, 4
d. 1, 2, 3

ANS: A
Rhonchi are associated with excessive airway secretions and more typically heard during expiration, not inspiration. Wheezes are an expiratory sound associated with bronchial asthma.

REF: pp. 26, 28

7. While assessing an unconscious patient, you observe that her breathing becomes progressively faster and deeper and then progressively becomes slower and more shallow. After that, there is a period of apnea before the cycle begins again. This breathing pattern would be identified as:
a. Cheyne-Stokes.
b. tachypnea.
c. Kussmaul.
d. hyperventilation.

ANS: A

The abnormal breathing, pattern called Cheyne-Stokes is identified by progressively faster and deeper breathing which then progressively becomes slower with more shallow breathing. After that, there is a period of apnea before the cycle begins again. Tachypnea is rapid breathing. Kussmaul breathing is consistently fast and deep breathing. Hyperventilation is confirmed by a low carbon dioxide level.

REF: p. 17

8. Benefits of pursed-lip breathing include that it:
   1. stabilizes airways.
   2. offsets air trapping on exhalation.
   3. generates a better gas mixing breathing pattern.
   4. slows the respiratory rate.

   a. 1
   b. 2, 3
   c. 1, 2, 3
   d. 1, 2, 3, 4

   ANS: D
   All of the listed options are benefits of pursed-lip breathing in a patient with an airway obstruction problem such as asthma or COPD.

   REF: p. 38

9. Your patient has come into the emergency department with a complaint of centrally located constant pain. What is his most likely problem?
   a. Pleurisy
   b. Myocardial ischemia
   c. Pneumothorax
   d. Fractured rib

   ANS: B
   Often, a patient with myocardial ischemia will complain of centrally located constant pain. The pain may also radiate down an arm or up the neck.

   REF: p. 40

10. Your patient with bronchiectasis has a productive cough. As the respiratory therapist, what should you be evaluating about the patient's sputum?
    1. Color
    2. Odor
    3. Amount
    4. Consistency

    a. 3
    b. 3, 4
    c. 1, 2
    d. 1, 2, 3, 4

    ANS: D

The respiratory therapist should evaluate a patient's sputum for color, odor, amount, consistency, and any other significant factors. This could include time of greater or smaller amounts or a change in consistency after inhaling a mucolytic medication.

REF: pp. 44-45