

# Acute Chest Syndrome

Aaron W. Bernard, MD

This month's quiz is based on the article "Acute Chest Syndrome," which begins on page 15 of this issue. Choose the single best answer for each question.

**1. Which of the following are believed to be the most common causes of acute chest syndrome (ACS)?**

- (A) Excessive narcotic administration and excessive hydration
- (B) Fat emboli and infection
- (C) Infection and excessive hydration
- (D) Rib infarction and infection
- (E) Thromboembolism and rib infarction

**2. Which of the following organisms are the most common infectious causes of ACS?**

- (A) *Chlamydia pneumoniae* and *Mycoplasma pneumoniae*
- (B) *Klebsiella pneumoniae* and influenza virus
- (C) *Staphylococcus aureus* and respiratory syncytial virus
- (D) *Streptococcus pneumoniae* and *Klebsiella pneumoniae*
- (E) *Streptococcus pneumoniae* and *Mycoplasma pneumoniae*

**3. What are the most common presenting symptoms of ACS in children?**

- (A) Chest pain and fever
- (B) Cough and hemoptysis
- (C) Fever and cough
- (D) Hemoptysis and extremity pain
- (E) Shortness of breath and chest pain

**4. Which laboratory abnormality is associated with worse outcomes in patients with ACS?**

- (A) Decreased hemoglobin concentration
- (B) Decreased platelet count
- (C) Decreased potassium level
- (D) Elevated sodium level
- (E) Elevated white blood cell count

**5. Which of the following is NOT a treatment modality for ACS?**

- (A) Antibiotics
- (B) Bronchodilators
- (C) Incentive spirometry
- (D) Nitroglycerin
- (E) Transfusion therapy

**6. Which therapy initiated in patients with painful crisis upon admission to the hospital has been shown to decrease the incidence of ACS?**

- (A) Antibiotics
- (B) Corticosteroids
- (C) Hydroxyurea
- (D) Incentive spirometry
- (E) Nitric oxide

**7. Which of the following are TRUE statements regarding chest radiography and ACS?**

- (A) A new infiltrate on chest radiograph in conjunction with one other clinical sign or symptom (chest pain, cough, fever, wheezing, tachypnea) defines ACS
- (B) The clinical severity of disease and the patient's degree of hypoxia may not be appreciated on the initial chest radiograph
- (C) A single negative chest radiograph excludes the diagnosis of ACS
- (D) A and B
- (E) All of the above

For answers, see page 26.

Dr. Bernard is a resident physician, Department of Emergency Medicine, University Hospital, University of Cincinnati, Cincinnati, OH.

**Answers to the Clinical Review Quiz which appears on page 38. The article on acute chest syndrome begins on page 15.**

1. (B) Fat emboli and infection
2. (A) *Chlamydia pneumoniae* and *Mycoplasma pneumoniae*
3. (C) Fever and cough
4. (B) Decreased platelet count
5. (D) Nitroglycerin
6. (D) Incentive spirometry
7. (D) A and B

Copyright 2007 by Turner White Communications Inc., Wayne, PA. All rights reserved.