

I. Read the text and answer 10 questions to it.

Coronaviruses, Including SARS and MERS

Human coronaviruses (HCoVs) are associated most frequently with the common cold, an upper respiratory tract infection characterized by rhinorrhea, nasal congestion, sore throat, sneezing, and cough that can be associated with fever. Human coronavirus infections can also be associated lower respiratory tract infections, including bronchiolitis, croup, and pneumonia, primarily in infants and immunocompromised children and adults.

SARS-CoV, the HCoV responsible for the 2002-2003 global outbreak of severe acute respiratory syndrome (SARS), was associated with more severe symptoms, although a spectrum of disease, including asymptomatic infections and mild disease, occurred. SARS-CoV disproportionately affected adults, who typically presented with fever, myalgia, headache, malaise, and chills followed by a nonproductive cough and dyspnea generally 5 to 7 days later. Approximately 25% of infected adults developed watery diarrhea. The overall associated mortality rate was approximately 10%. The case-fatality rate in people older than 60 years approached 50%. Typical laboratory abnormalities included lymphopenia and increased lactate dehydrogenase and creatine kinase concentrations.

Pneumothoraces and other signs of barotrauma were common in critically ill patients receiving mechanical ventilation.

SARS-CoV infections in children are less severe than in adults; notably, no infant or child deaths from SARS-CoV infection were documented in the 2002-2003 global outbreak.

MERS-CoV, the HCoV associated with Middle East respiratory syndrome (MERS), can also cause severe disease. MERS-CoV is associated with a severe respiratory illness similar to SARS-CoV, although a spectrum of disease, including asymptomatic infections and mild disease, can occur. Patients commonly present with fever, myalgia, chills, shortness of breath, and cough. Approximately 25% of patients also experience vomiting, diarrhea, or abdominal pain. Rapid deterioration of oxygenation with progressive unilateral or bilateral airspace infiltrates on chest imaging may follow, requiring mechanical ventilation. The case-fatality rate is high, estimated at nearly 50%. To date, most infections have been reported in male adults with comorbidities, such as diabetes, chronic renal disease, hypertension, and chronic cardiac disease.

1. Choose the correct statement.

A. Gastrointestinal symptoms are common for neither SARS nor MERS

☒ **B.** Gastrointestinal symptoms are quite common for SARS and MERS

C. Gastrointestinal symptoms are quite common for MERS only

D. Gastrointestinal symptoms are quite common for SARS only

2. In rare cases, coronaviruses can cause pneumonia.
- ☒ A. True
 - ☐ B. False
 - ☐ C. Not given
3. During the SARS outbreak, the lethal cases happened only among adults.
- ☒ A. True
 - ☐ B. False
 - ☐ C. Not given
4. Pneumothorax was a common complication of SARS.
- ☒ A. True
 - ☐ B. False
 - ☐ C. Not given
5. For which category of people was the SARS infection the most dangerous?
- ☐ A. For children
 - ☐ B. For elderly patients
 - ☒ C. For adults
 - ☐ D. For newborns
6. Choose the correct statement.
- ☐ A. The highest fatality rate for coronavirus infection was during the SARS outbreak
 - ☐ B. The highest fatality rate for coronavirus infection was for neonatal patients
 - ☐ C. There have never been any cases of death related to coronavirus infection
 - ☒ D. The highest fatality rate for coronavirus infection was during the MERS outbreak
7. For which category of people was the MERS infection the most dangerous?
- ☒ A. For people who had any comorbidities
 - ☐ B. For asymptomatic patients
 - ☐ C. For males
 - ☐ D. For intubated patients
8. What are the laboratory findings in patients with SARS?
- ☐ A. The reduced amount of lactate dehydrogenase
 - ☐ B. There are no laboratory changes
 - ☐ C. The elevation of the level of lymphocytes
 - ☒ D. The decreased level of lymphocytes
9. Human coronaviruses are always associated with the symptoms of the common cold.
- ☒ A. True
 - ☐ B. False
 - ☐ C. Not given
10. Choose the correct statement.
- ☐ A. Coronaviruses has existed for a long time and most commonly are associated with the common cold
 - ☒ B. Coronavirus infection first appeared in 2002, when the global outbreak of SARS has happened
 - ☐ C. Coronavirus infection has never been widespread among humans
 - ☐ D. MERS is the biggest outbreak of coronavirus infection —

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