

# QUESTION 25 (10%)

QUESTION: A 25-year-old male patient presents with a 2-week history of weight loss, fatigue, and intermittent fevers. He reports a recent visit to a friend who has been hospitalized with tuberculosis. Physical examination is unremarkable. Laboratory studies show a hemoglobin of 12 g/dL, hematocrit of 35%, and a white blood cell count of 10,000/mm<sup>3</sup> with a normal differential. A chest X-ray shows a cavitary lesion in the upper lobe of the right lung. Which of the following is the most likely diagnosis?

ANSWER: **Primary tuberculosis**

EXPLANATION: The patient's symptoms (weight loss, fatigue, fevers) and chest X-ray findings (cavitary lesion in the upper lobe) are consistent with primary tuberculosis. The patient's recent contact with a friend who has been hospitalized with tuberculosis further supports this diagnosis. The laboratory studies are within normal limits, which is typical for primary tuberculosis. The differential diagnosis includes secondary tuberculosis, which typically presents with a more chronic course and a cavitary lesion in the lower lobe of the lung. Other causes of cavitary lesions, such as fungal infections or vasculitis, are less likely given the patient's symptoms and contact history.

ANSWER CHOICES:

- A. Primary tuberculosis
- B. Secondary tuberculosis
- C. Fungal infection
- D. Vasculitis