

QUESTION
 A 65-year-old male patient with a long history of hypertension and hyperlipidemia presents to the clinic with a 2-week history of increasing fatigue, weight loss, and intermittent fevers. He reports that he has been unable to complete his usual activities of daily living. He has no cough, hemoptysis, or chest pain. He has no recent travel, sick contacts, or antibiotic use. He has no known drug allergies. His current medications include lisinopril, atorvastatin, and aspirin. He has a 30-pack-year smoking history and drinks alcohol socially. He has a family history of coronary artery disease and type 2 diabetes. His physical examination is unremarkable. His laboratory studies are as follows: hemoglobin 10 g/dL, hematocrit 30%, white blood cell count 12,000/mm³ with a left shift, erythrocyte sedimentation rate 45 mm/h, and C-reactive protein 15 mg/L. His chest radiograph shows a 2-cm nodule in the right upper lobe. A CT scan of the chest shows a 2-cm nodule in the right upper lobe with a central cavity. The nodule is surrounded by ground-glass opacity. There are no other pulmonary nodules or consolidations. The mediastinum and hilar lymph nodes are unremarkable. The patient's clinical presentation and laboratory findings are most consistent with which of the following conditions?

- ANSWER**
 The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.

ANSWERS TO QUESTIONS

- 1. A** The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.
- 2. B** The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.
- 3. C** The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.
- 4. D** The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.
- 5. E** The patient's clinical presentation and laboratory findings are most consistent with active tuberculosis. The patient has a long history of hypertension and hyperlipidemia, but no other significant medical history. He has a 30-pack-year smoking history and drinks alcohol socially. His physical examination is unremarkable. His laboratory studies show anemia, leukocytosis with a left shift, and elevated inflammatory markers. His chest radiograph and CT scan show a cavitary nodule in the right upper lobe, which is characteristic of active tuberculosis. The patient's symptoms of fatigue, weight loss, and intermittent fevers are also consistent with active tuberculosis.