

QUESTION

1. A 60-year-old male with a long history of hypertension and type 2 diabetes mellitus presents to the clinic with a 3-month history of progressive weight loss, fatigue, and intermittent fevers. He reports a cough that is worse in the morning and has noticed some blood-tinged sputum. He has no chest pain and no shortness of breath. He is a former smoker (quit 15 years ago) and drinks alcohol socially.

On physical examination, his vital signs are stable. He appears thin and well-appearing. There is no tachypnea, hyperinflation, or wheezing. The heart is normal in size and rhythm. There are no murmurs, rubs, or gallops. Lung examination reveals clear lungs with normal breath sounds and no crackles or wheezes. The abdomen is soft and non-tender. There are no lymphadenopathy or splenomegaly. He is afebrile and has no night sweats.

Initial laboratory tests are as follows:

Test	Result	Reference Range
Complete Blood Count (CBC)	WBC: 10,000/mm ³	4,000-11,000/mm ³
Hemoglobin (Hb)	12.5 g/dL	12-16 g/dL
Hematocrit (Hct)	38%	37-47%
Platelets	150,000/mm ³	150,000-400,000/mm ³
Erythrocyte Sedimentation Rate (ESR)	45 mm/hr	<20 mm/hr
C-reactive protein (CRP)	10 mg/L	<10 mg/L
Beta-2-microglobulin	3.5 µg/L	<3.5 µg/L
Procalcitonin	0.05 ng/mL	<0.1 ng/mL
Tumor Markers (CEA, CA-125, AFP)	All within normal limits	

Further workup includes a chest CT scan showing a 2-cm nodule in the right upper lobe and a 1-cm nodule in the left lower lobe. There is no hilar lymphadenopathy or pleural effusion. The patient is scheduled for a PET-CT scan.

ANSWER



2. A 60-year-old male with a long history of hypertension and type 2 diabetes mellitus presents to the clinic with a 3-month history of progressive weight loss, fatigue, and intermittent fevers. He reports a cough that is worse in the morning and has noticed some blood-tinged sputum. He has no chest pain and no shortness of breath. He is a former smoker (quit 15 years ago) and drinks alcohol socially.

On physical examination, his vital signs are stable. He appears thin and well-appearing. There is no tachypnea, hyperinflation, or wheezing. The heart is normal in size and rhythm. There are no murmurs, rubs, or gallops. Lung examination reveals clear lungs with normal breath sounds and no crackles or wheezes. The abdomen is soft and non-tender. There are no lymphadenopathy or splenomegaly. He is afebrile and has no night sweats.

Initial laboratory tests are as follows: