SCENARIO

A 32 –year-old shopkeeper is brought to the emergency room with a cough productive of sputum mixed with blood. He first noticed a cough about 2 months ago, but it was nonproductive. In the past several days his sputum production has increased and become mixed with blood. He also notices weight loss during this period of 2 months. He also has fever up to 100.8*F with sweating especially at night for the last one month.

On clinical examination, he is lean thin male. His vital signs are normal. His head and neck examination is normal. He has no palpable lymph node in his neck or axilla. His chest examination reveals bronchial breath sounds with increase vocal resonance over the left upper chest. A chest x-ray shows a cavity along with infiltrate of the left upper lobe.