

QUESTION

10. A 20-year-old male patient presents with a 2-week history of weight loss, decreased appetite, and fatigue. He reports a recent episode of coughing up blood. Physical examination reveals a 1.5-cm, well-circumscribed, firm nodule in the right lung base. A chest CT scan shows a 2-cm, spiculated nodule in the right lower lobe. The patient has no significant past medical history and is a non-smoker. What is the most likely diagnosis?

- A) Adenocarcinoma
- B) Squamous cell carcinoma
- C) Small cell carcinoma
- D) Metastatic disease
- E) Hamman-Rich syndrome



ANSWER: A
This patient has a 2-cm, spiculated nodule in the right lower lobe, which is highly suspicious for primary lung cancer. The most common type of primary lung cancer is adenocarcinoma, which typically presents as a peripheral, spiculated nodule. The patient's symptoms of weight loss, decreased appetite, and fatigue are also consistent with a diagnosis of lung cancer.

Hamman-Rich syndrome is a rare condition characterized by a sudden onset of respiratory distress and cyanosis, often associated with a history of alcohol consumption. It is thought to be caused by a severe form of pulmonary edema. The patient's symptoms and physical findings are not consistent with this diagnosis.

Small cell carcinoma is a highly aggressive type of lung cancer that typically presents as a central, well-circumscribed nodule. The patient's nodule is peripheral and spiculated, which is more characteristic of adenocarcinoma. Additionally, small cell carcinoma is often associated with paraneoplastic syndromes, such as ectopic hormone production, which is not mentioned in the patient's history.

Metastatic disease is a possibility, but the patient has no significant past medical history and is a non-smoker, which makes this diagnosis less likely. The patient's symptoms and physical findings are more consistent with a primary lung cancer diagnosis.

Squamous cell carcinoma is a type of lung cancer that typically presents as a central, well-circumscribed nodule. The patient's nodule is peripheral and spiculated, which is more characteristic of adenocarcinoma. Additionally, squamous cell carcinoma is often associated with paraneoplastic syndromes, such as ectopic hormone production, which is not mentioned in the patient's history.

Adenocarcinoma is the most common type of primary lung cancer, accounting for approximately 40% of all lung cancer diagnoses. It typically presents as a peripheral, spiculated nodule, which is consistent with the patient's findings. The patient's symptoms of weight loss, decreased appetite, and fatigue are also consistent with a diagnosis of lung cancer.

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