EXACERBATION ESCALATION: A CASE OF COPD
EXACERBATION DUE TO A UNIQUE CAUSE

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Introduction

Endobronchial carcinosarcoma (EBCS) is a rare tumor representing 0.1% of lung malignancies. These tumors generally have a poor prognosis due to late diagnosis. Although rare, most cases of known EBCS have presented with similar symptoms as COPD exacerbations. Because of this, EBCS is more difficult to diagnose in the setting of frequent COPD exacerbations. While COPD exacerbations typically resolve with treatment, patients with EBCS decline despite treatment. The case below highlights a rare cancer as well as the need for proper screening.

Discussion

Lung cancer is the third most common cancer and the leading cause of cancer death in the U.S. The most important risk factor for lung cancer is smoking, which results in approximately 85% of all U.S. lung cancer cases. The incidence increases with age and occurs most commonly in persons aged 55 years or older. The USPSTF recommends annual screening with low dose CT of patients 55 to 80 years old who have a 30 pack year history and currently smoke or have quit within the past 15 years. Additionally, many patients with a 30 pack year history or more have COPD and resultant exacerbations. Common symptoms of exacerbations (productive cough and dyspnea) are similar to the symptoms of EBCS and some other lung cancers and can be misleading. This makes screening in the COPD patient population even more crucial to avoid missing a diagnosis of cancer.

Case Description

- A 62 y/o male smoker with a 30 pack-year history presented to the clinic for a follow-up from an emergency department (ED) visit for COPD exacerbation.
- He had a low dose CT scan done at 60 years old to screen for lung cancer. This was read as normal. He failed to return for an annual follow up screen the following year.
- In the ED, a chest x-ray was negative, and the patient was treated with oxygen and nebulized albuterol.
- Six days later, he returned for worsening symptoms, prompting a CT scan which revealed an abnormality in the right main stem bronchus (Figure 1).
- He was referred to pulmonology who performed bronchoscopy demonstrating a mass (Figure 2) that was later identified as endobronchial carcinosarcoma.
- After the bronchoscopy the patient developed hypoxic respiratory failure. He was re-intubated and transferred for mass debulking surgery.

Conclusions

Physicians frequently manage patients with COPD. Because exacerbations have similar symptoms to EBCS and other lung cancers, screening COPD patients per the USPSTF guidelines could be a life saving measure that physicians should initiate. This case raises awareness of an uncommon cancer and demonstrates the importance of following screening guidelines per the USPSTF in patients with COPD exacerbations and a smoking history.

References