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MEDICAL IMAGE

A rare and unexpected cause for bronchiectasis

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A 44-year-old woman with longstanding asthma was referred for worsening cough over a 2-year period. She reported frequent exacerbations, with purulent sputum and occasional small volume haemoptysis. Smoking history was minimal (1.5 pack years). She had a prolonged history of sinus infections and documented prior pneumonia, pertussis infection, but no known TB exposure.

Sputum grew *Haemophilus influenzae* but was negative for atypical organisms including mycobacteria. Radiology showed severe cystic bronchiectasis within the left lower lobe (Figure 1). PET CT imaging showed the lesion to be non-FDG avid, with no significant lymphadenopathy. Bronchoscopy revealed an obstructing polypoid lesion at the orifice of the left lower lobe (Figure 2). Multiple biopsies and brushings demonstrated only normal bronchial mucosa.

Following discussion at the lung cancer multidisciplinary meeting the patient underwent left lower lobe lobectomy.

Figure 1. CT chest showing collapse and cystic bronchiectasis of left lower lobe

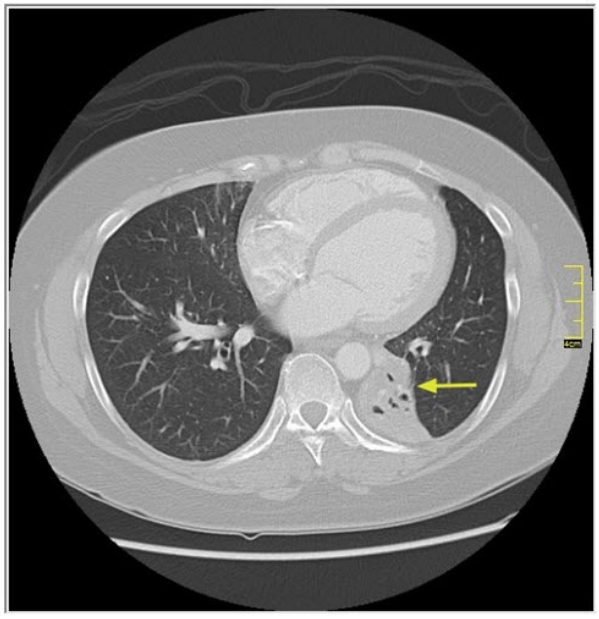
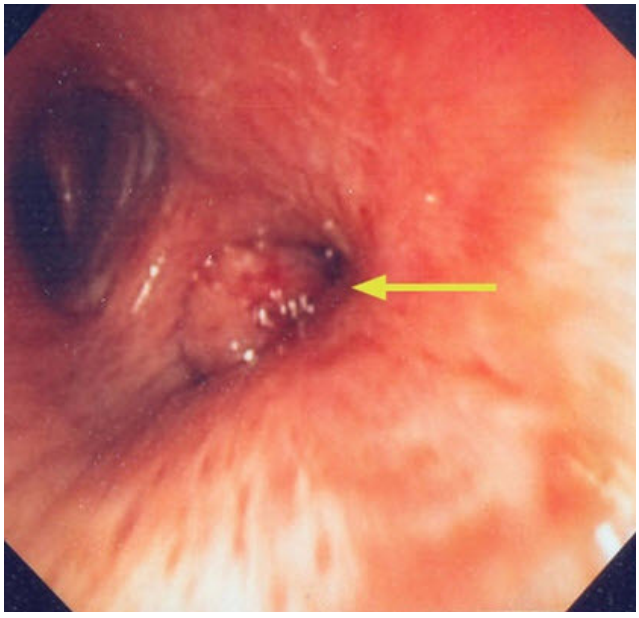


Figure 2. Bronchoscopic view from left main bronchus showing polypoid lesion in left lower lobe orifice



What is the diagnosis?

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Answer and Discussion

Histology demonstrated chronically inflamed but normal mucosa overlying the lesion. The core of the lesion was hyalinised, cytologically bland fibrous tissue demonstrating features of a *pulmonary fibroma*.

Benign endobronchial neoplasms are extremely rare, comprising less than 10% of bronchial tumours.[1] Most malignant lesions of the tracheobronchial tree originate from the mucosa, whereas benign neoplasms usually stem from mesenchymal structures.[2]

Prognostic information is limited due to the rarity of these lesions, however, similar case reports have demonstrated no recurrence at 12 months and almost 4 years respectively.[3,4]

Learning points

- This case highlights the importance of bronchoscopic evaluation in the presence of lobar collapse, especially in a young patient.
- There is a definite role for surgery in bronchiectasis when associated with endobronchial neoplasms, or when disease is severe and localised to a single lobe.

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