A 50-year-old man presented with cough, wheeze, intermittent haemoptysis and progressive dyspnoea. He had no relevant past history. On examination, he was hypoxic but haemodynamically stable. Results of routine blood tests, including full blood count, urea and electrolyte levels, and erythrocyte sedimentation rate, were within normal ranges. Pulmonary function tests confirmed severe airway obstruction and diffusion impairment. A chest x-ray revealed multifocal areas of nodularity and consolidation in both lungs (Figure, A). A computed tomography scan showed thickening and calcification of the bronchial walls with multiple cavities and nodules throughout both lungs (Figure, B). A virtual bronchoscopy revealed irregular narrowing of the right main bronchus (Figure, C; arrows), and a bronchial biopsy confirmed pulmonary amyloidosis (light-chain type).

Pulmonary amyloidosis occurs in three forms: tracheobronchial (the most common, which is limited to central airways and which this case exemplifies), diffuse and adenopathy-associated. Nearly all cases are of the light-chain type. Treatment is difficult and controversial; repeated bronchoscopic resection is conventional, but the role of external beam radiotherapy in tracheobronchial amyloidosis has also been described.

Kshitij Mankad, Radiologist
Michael J Darby, Radiologist
Leeds Teaching Hospitals NHS Trust, Leeds, UK.
drmankad@gmail.com