Pulmonary sequestration in an adult patient without prior pulmonary conditions

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DESCRIPTION

A 36-year-old man with peptic ulcer disease presented to the emergency department with a 2-day history of haemoptysis and cough. Though he had no prior pulmonary symptoms, he noted progressive chest tightness and shortness of breath. He had no fever or night sweats. Vital signs were afebrile and normotensive without tachycardia and tachypnoea. Physical examination was notable for diminished breath sounds at the left posterior base without coarse crackles. Electrocardiogram did not

Figure 1 A CT angiography of the chest showing anomalous systemic arterial supply from the descending aorta to the left lower lobe basal segments.

Figure 2 Digital subtraction angiography after embolisation with coils and vascular plug.

Patient's perspective

I am grateful for timely diagnostic studies and treatment during my hospital stay. At follow-up a month after the surgery, my symptoms had resolved.

Learning points

- ▶ Pulmonary sequestration is a rare congenital malformation, but some patients can be diagnosed in adulthood.
- ▶ Pulmonary sequestration might be considered as a differential diagnosis in an otherwise healthy adult presenting with cough and haemoptysis.
- ▶ Endovascular embolisation followed by surgery can be a valid treatment approach in patients with pulmonary sequestration.

show any ischaemic changes. Testing showed unremarkable complete blood count, renal function, and electrolytes with a negative COVID-19 test. A computed tomographic angiography of the chest showed anomalous systemic arterial supply from the descending aorta to the left lower lobe basal segments (figure 1), a finding referred to intralobar lung sequestration (ILS). It also showed ground-glass opacities and focal consolidation at the left lower lobe. Pulmonary angiogram redemonstrated the anomalous arterial supply. Embolisation with coils and vascular plug was successfully performed (figure 2). He was also treated with antibiotics to treat pneumonia. The patient was discharged 2 days after the procedure. A month later, he underwent an elective left lower lobectomy with ligation of the aortic arterial supply to the lesion. Although most patients with ILS present with recurrent respiratory infection, some may not have episodes of any pulmonary symptoms (including pneumonia) until adulthood, or may be identified incidentally in imaging studies.¹

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Case reports provide a valuable learning resource for the scientific community and can indicate areas of interest for future research. They should not be used in isolation to guide treatment choices or public health policy.

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