Clinical Image

Extralobar Pulmonary Sequestration With an Aneurysmatic Arterial Supply

Secuestro pulmonar extralobar con aporte arterial aneurismático

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A 45-year-old healthy man was referred to Pulmonology outpatient department with persistent cough and wheezing, without other symptoms. Chest radiograph showed a homogeneous mass near the right cardiophrenic angle. Thoracic CT scan revealed a 15 cm × 8.2 cm heterogeneous, vascular-like, fusiform lesion located under atelectatic, sequestrated lung parenchyma below the lower right lung lobe (Fig. 1A and B). The lesion had signs of mural thrombosis (Fig. 1C) and communicated proximally with an anomalous arterial branch from systemic circulation and distally with sequestrated lung parenchyma, with venous drainage into the pulmonary veins (Fig. 1C and D).

Bilateral sequential thoracotomy with proximal ligation of the anomalous systemic artery, surgical repair of the aneurysm and wedge resection of adjacent sequestrated lung was performed with no postoperative complications. Histopathology supported the diagnosis of extralobar intrathoracic pulmonary sequestration supplied by an anomalous aneurysmatic artery.

Post-operative thoracic CT scan was unremarkable. The patient remains asymptomatic.

Pulmonary sequestration consists of aberrant, congenital formation of segmental lung tissue unconnected with the tracheobronchial tree and pulmonary arteries, supplied by a systemic artery. Extralobar sequestration is the least common type and has male predilection. 1,2 In this case, the risk of spontaneous aneurysm rupture and the high surgical risk were major concerns.

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References