Mediastinal Bronchial Artery Aneurysm Mimicking a Subcarinal Tumor

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An 82-year-old male with bronchiectasis was admitted to our hospital because of hemoptysis. A chest computed tomography (CT) showed a round mass measuring 33 mm in diameter under the tracheal bifurcation (fig. 1). To distinguish between an artery and a tumor, a contrast-enhanced CT was performed which revealed a homogeneously enhanced mass that indicated a mediastinal bronchial artery aneurysm (fig. 2). For further evaluation and endovascular treatment, bronchial arteriography was performed and confirmed a mediastinal bronchial...

Fig. 1. Chest CT showing a mass (arrow) in the subcarinal region.

Fig. 2. Contrast-enhanced CT showing the enhanced mass (arrow) suggesting a bronchial artery aneurysm.
Bronchial artery aneurysms, which can be found in the lung and mediastinum, are classified as congenital or secondary; the latter are caused by inflammation or hyper blood-stream conditions, such as bronchiectasis, infection, or cancer [1]. Mediastinal bronchial artery aneurysms sometimes have a radiological appearance similar to that of mediastinal tumors [1]. Although bronchial artery aneurysms may be rare, pulmonologists and bronchoscopists should be familiar with the disease. While performing an examination, one can mistake an aneurysm for a tumor and instead perform a transbronchial needle aspiration, which has been reported to cause significant bleeding [2].

Fig. 3. Bronchial arteriography showing a mediastinal bronchial artery aneurysm (arrow) arising from the left bronchial artery.

References
