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## Enlarged bronchial artery in a patient with lung tumor and hemoptysis

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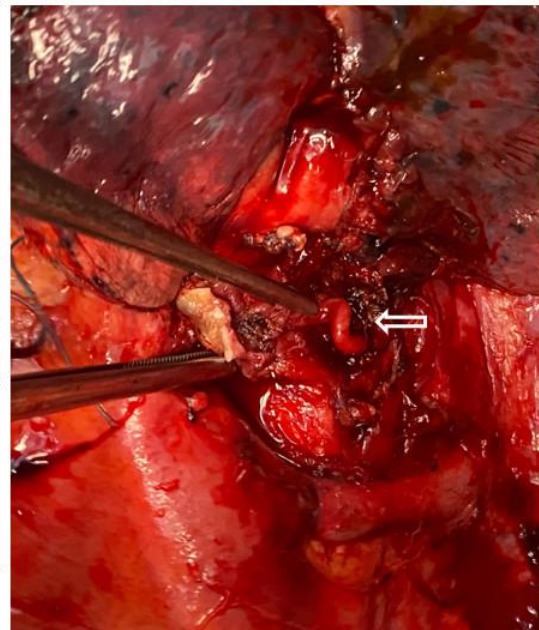
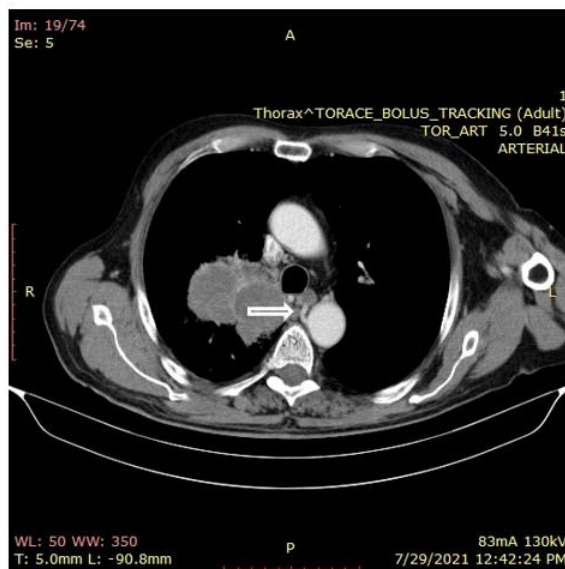


Fig.1 CT *spect* showing right *upper* lobe mass and enlarged right bronchial artery [arrow]

Fig.2- enlarged right bronchial artery [arrow]

**Keywords:** *lung cancer, bronchial artery, hemoptysis*

A 57-year-old male patient, heavy smoker with no significant past medical history, was admitted for hemoptysis, dyspnea and weight loss. Laboratory results showed mild anemia (hemoglobin 10.2 g/dL) and elevated CRP 10.2 g/dL. Computed tomography showed a right upper lobe lung tumor with negative fiberoptic bronchoscopy. A right upper lobectomy was performed and during dissection of the right upper bronchus an enlarged right bronchial artery was found. The bronchial artery was dissected, ligated, and transected without injury.

Bronchial artery injury is the second most common vascular injury in lung surgery. As it originates from the aorta, the amount of blood loss can reduce visibility in the surgical field. Enlargement of the bronchial artery is less common and may be a risk factor for hemoptysis in this patient, especially if its caliber exceeds 2 mm and becomes more tortuous (1).





In addition to lung cancer, other underlying causes of bronchial artery anomalies include bronchiectasis, aspergilloma, lung abscess and cystic fibrosis. In such cases, bronchial artery embolization is often performed in the presence of varying degrees of hemoptysis that cannot be controlled by conservative measures (2).

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Pages: 3-4

