

Clinical Image

Incidental Finding of an Arterio-arterial Fistula Between Non-bronchial Systemic Arteries and a Pulmonary Artery in a Cancer Patient[☆]



Hallazgo incidental de fístula arterio-arterial entre arterias sistémicas no bronquiales y una arteria pulmonar en paciente oncológico

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We report the case of an asymptomatic 43-year-old patient with a history of synovial sarcoma of the right lower extremity treated 2 years previously. A follow-up computed tomography (CT) revealed a fistula between 2 non-bronchial systemic arteries (a branch of the left internal mammary artery and the inferior phrenic artery on the same side) and a pulmonary artery of the lower segment of the lingula (Fig. 1). No pulmonary lesions typically associated with hypertrophy of the systemic arteries of the chest, such as bronchiectasis, pulmonary developmental abnormalities (pulmonary sequestration), pulmonary atresia, or chronic pulmonary thromboembolism, were observed. Given the lack of

symptoms, embolization of the systemic feeding arteries was ruled out.

Fistulas between systemic arteries and pulmonary arteries are uncommon left-right shunts and may be congenital or, more often, acquired. The systemic arteries most frequently involved are the bronchial arteries, the presenting symptom is usually hemoptysis, and the treatment of choice is embolization. We have not found any case in the literature of congenital fistula between 2 non-bronchial systemic arteries (internal mammary and inferior phrenic artery) and a pulmonary artery.

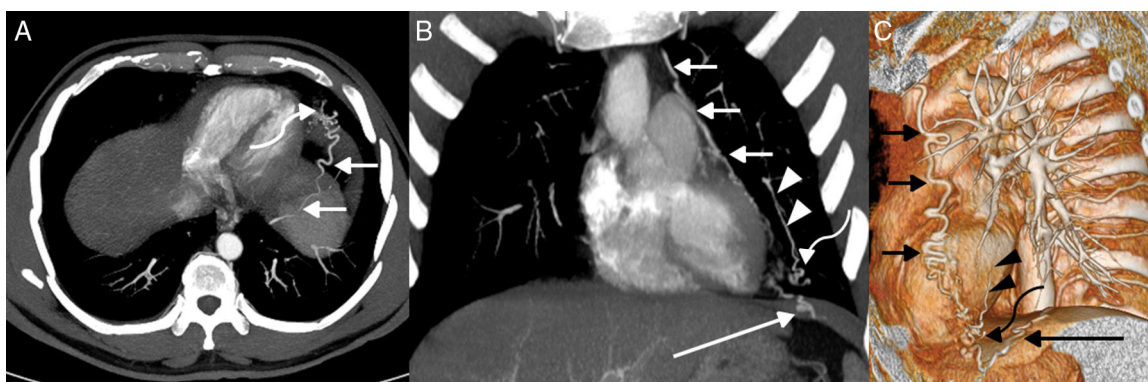


Fig. 1. (A) Axial CT maximum intensity projection (MIP) reconstruction showing hypertrophy of the left inferior phrenic artery (straight arrows). Note the vascular tangle in the lower segment of the lingula (curved arrow). (B) Coronal CT MIP reconstruction showing hypertrophy of a branch of the left internal mammary artery in the lateral surface of the mediastinum (short arrows) and hypertrophy of the left inferior phrenic artery (long arrow). Note the vascular tangle in the lingula (curved arrow) and the pulmonary artery drainage (arrow heads). (C) 3-D reconstruction (volume rendering) of the chest CT, offering a better view of the fistula between the systemic arteries (branch of the left internal mammary artery, short arrows; left inferior phrenic artery, long arrow) and a pulmonary artery in the lingula (arrow heads). The curved arrow indicates the vascular tangle communicating the 3 vessels.

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