

Fistulous Communication Between Left Pulmonary Artery and Left Atrial Appendage

A 7-year-old girl presented in outpatient clinic with history of fever, cough and cold since 3 days. On auscultation, continuous murmur was observed. Apart from nasal congestion, rest of the physical examination was unremarkable. There was no significant perinatal history.

A 2-dimensional echocardiogram showed increased pulmonary venous return with normal pulmonary venous drainage which lead to suspicion of some fistula. Cardiac computed tomography angiography (Figures 1 and 2) showed an abnormal vessel connecting inferior aspect of left pulmonary artery (near the bifurcation of pulmonary trunk) to left atrial appendage, suggestive of a congenital pulmonary arteriovenous fistula. Maximum diameter of fistulous communication was 5 mm. Right ventricular outflow tract was dilated (Figure 2). However, main pulmonary artery and right ventricle were normal. Normal pulmonary veins opening in left atrium were noted.

Fistulous communication between pulmonary artery and left atrium (LA) is very rare with first such case described by Friedlich et al.¹ Right pulmonary artery communicating with LA is the most common type of fistula.² Left pulmonary artery (LPA) communicating with LA is exceedingly rare. To the best of authors' knowledge, only 4 such cases have been reported till date.²⁻⁵ In our case, LPA is seen communicating with left atrial appendage. Only 1 such case has been reported in the literature before.² Surgery is required to prevent complications like rupture, hemoptysis, paradoxical embolism, and polycythemia. Surgical ligation of the anomalous vessel is sufficient.²

E-PAGE ORIGINAL IMAGE

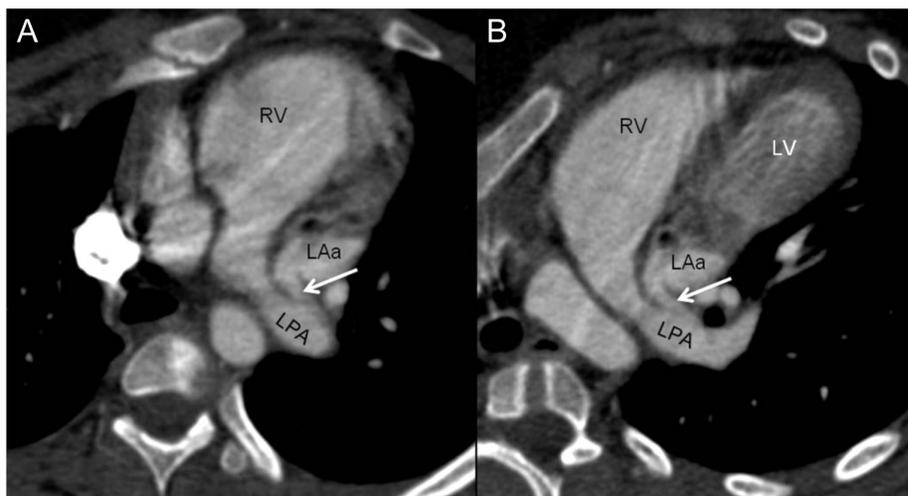


Figure 1. Cardiac computed tomography angiogram axial image (A) and curved multiplanar reconstruction image (B) showing fistula (arrows in A and B) between left pulmonary artery and left atrial appendage. LPA, left pulmonary artery, LAa, left atrial appendage, RV, right ventricle, LV, left ventricle.

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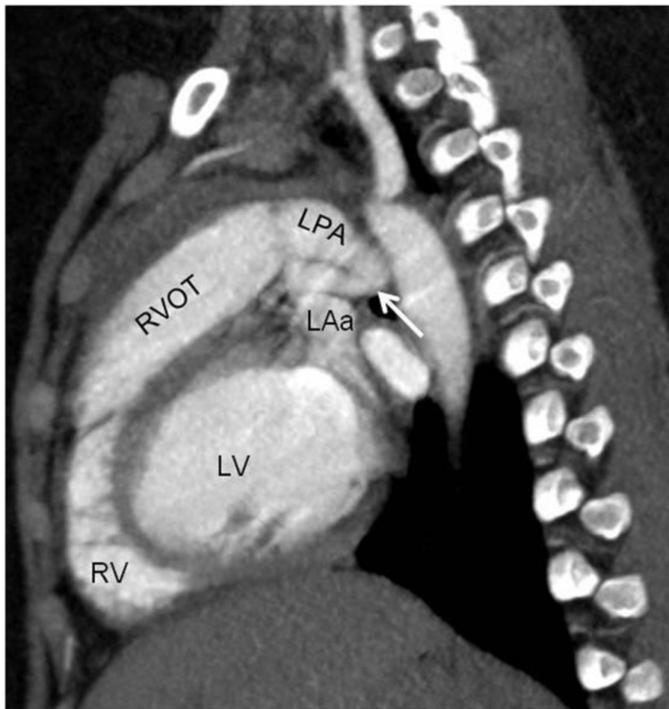


Figure 2. Cardiac computed tomography angiogram sagittal reconstructed image showing fistula (arrow) between left pulmonary artery and left atrial appendage. LPA, left pulmonary artery; LAa, left atrial appendage; RV, right ventricle; RVOT, right ventricle outflow tract; LV, left ventricle.

Informed Consent: Written informed consent was obtained from the patient's parent.

Declaration of Interests: The authors have no conflict of interest to declare.

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