

## Images in Congenital Cardiac Disease

# Anomalous origin of the left subclavian artery from the pulmonary artery

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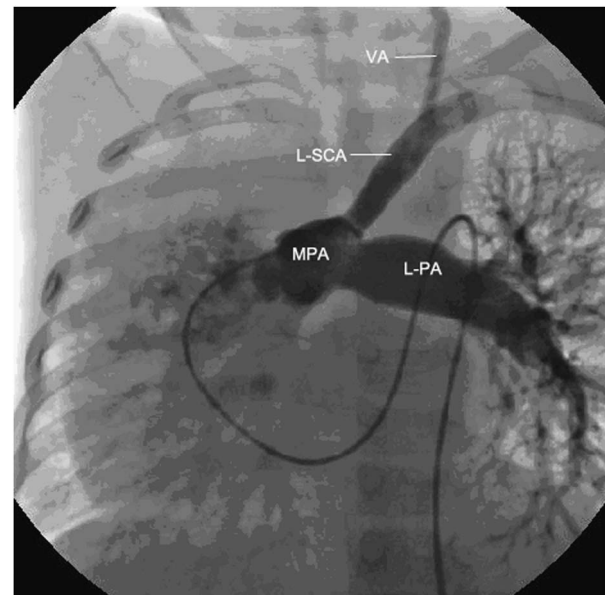
**Abstract** Isolated left subclavian artery from the pulmonary trunk is a rare congenital cardiovascular malformation. In this report, we present the images of ascending aortic aneurysm and left subclavian artery originating from the pulmonary artery in a 4-year-old girl in addition to her congenital cardiac pathology.

**Keywords:** Isolated left subclavian artery; pulmonary artery; ascending aorta; aneurysm; atrioventricular block

Received: 27 February 2013; Accepted: 21 April 2013; First published online: 24 May 2013

A 4-YEAR-OLD GIRL WAS REFERRED FOR THE treatment of her congenital cardiac pathology in a severe heart failure state. She had a complete atrioventricular block with a heart rate of 60 beats/minute. The blood pressures on right and left arms were 105/55 and 65/40 mmHg, respectively. Echocardiography indicated mesocardia, single atrium, double-outlet right ventricle with subaortic ventricular septal defect, severely hypoplastic mitral valve, moderate hypoplasia of the left ventricle, pulmonary stenosis, ascending aortic aneurysm, and pulmonary hypertension. Cardiac catheterisation confirmed the diagnosis (Supplementary material 1); however, the left subclavian artery was isolated and originated from the pulmonary artery (Fig 1; Supplementary material 2). The pulmonary artery pressure was measured to be 80/46/60 mm Hg. Computerised tomography of the chest showed the left subclavian artery originating from the pulmonary artery and the ascending aortic aneurysm measuring 55 mm (Figs 2a and b).

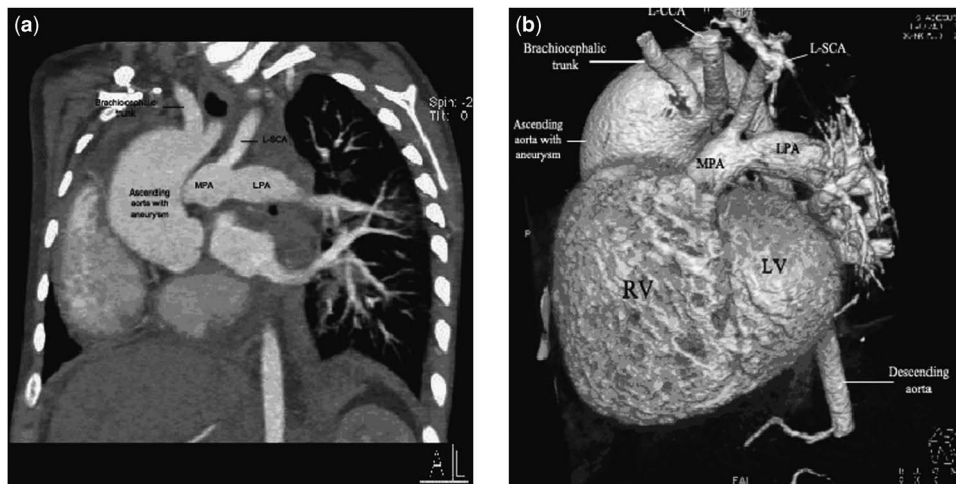
She underwent ventricular pacemaker implantation and anticongestive therapy for the first-stage



**Figure 1.** Cardiac catheterisation showing the isolated left subclavian artery originating from the pulmonary artery. MPA = main pulmonary artery; L-PA = left pulmonary artery; L-SCA = left subclavian artery; VA = vertebral artery.

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palliation of her condition and was scheduled for consecutive interventions.



**Figure 2.**

(a) Computerised tomography showing the anomalous origin of the left subclavian artery from the pulmonary artery and the ascending aortic aneurysm. (b) 3D reconstructions of the computerised tomography images showing the left subclavian artery originating from the pulmonary artery. MPA = main pulmonary artery; LPA = left pulmonary artery; L-CCA = left common carotid artery; L-SCA = left subclavian artery.

### Financial Support

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

### Conflicts of Interest

None.

### Supplementary materials

For supplementary material referred to in this article, please visit <http://dx.doi.org/10.1017/S1047951113000735>