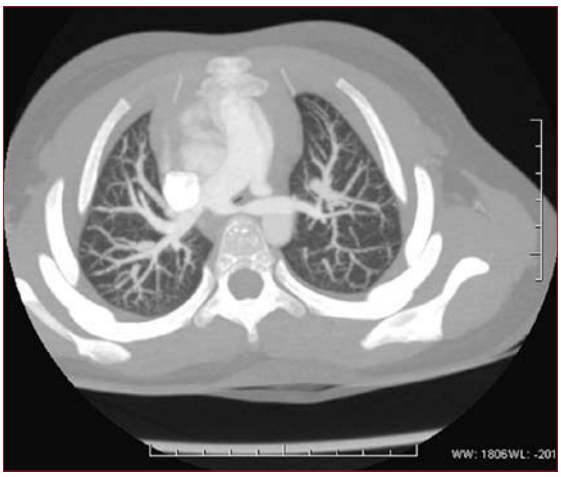

Figure 1.

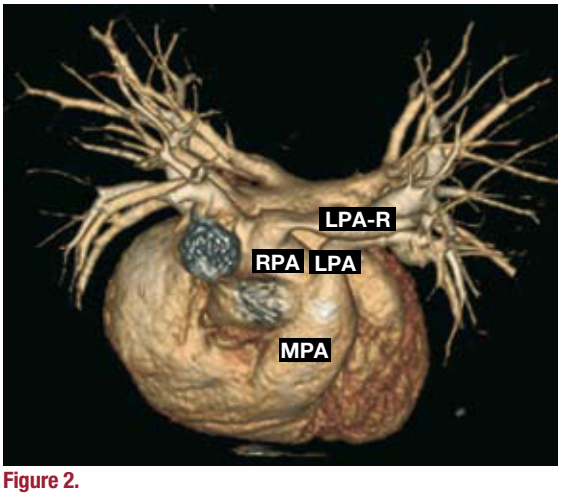

Figure 2.

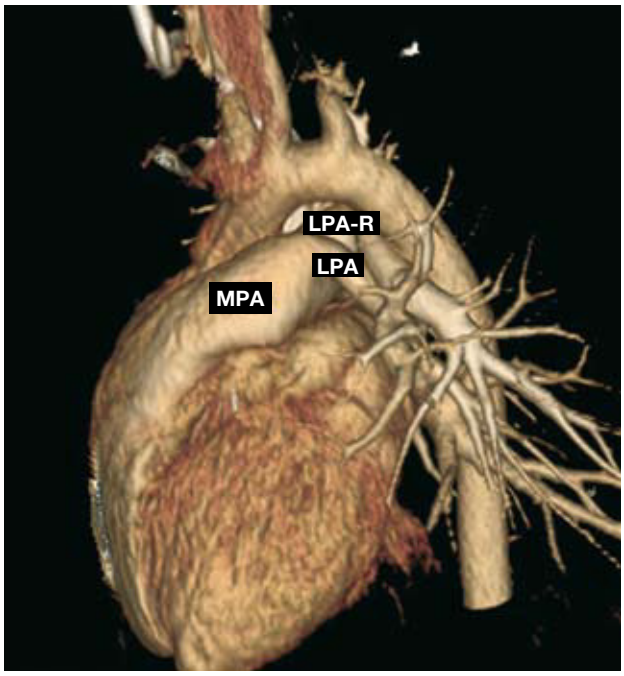

Figure 3.

Partial Left Pulmonary Artery Sling

An anomalous origin of the left pulmonary artery from the right pulmonary artery, known as pulmonary artery sling, is a rare congenital condition, with an incidence of 3% to 6% of all aortic arch anomalies.

Partial anomaly of the left pulmonary artery is an even rarer variant, defined as coexistence of a normal left pulmonary artery and an anomalous component from the right pulmonary artery. When the anomalous vessel arises posterior to the trachea, the condition is referred to as partial pulmonary artery sling, and it can be a cause of airway deterioration.

We present the case of a 5-year-old girl referred to our pediatric cardiology unit for stridor, present since birth. An ejection systolic murmur was detected over the pulmonary artery, and echocardiographic study showed that the pulmonary artery bifurcation was not in its usual location.

Computed tomography angiography confirmed our suspected diagnosis of airway compression caused by a vascular ring (Figure 1). Angiographic reconstructions were carried out in anterior (Figure 2) and lateral (Figure 3) views. The main pulmonary artery (MPA) divided to form the right pulmonary artery (RPA) and a left pulmonary artery (LPA) that mainly irrigated the upper lobe. Another left pulmonary artery that originated in the right pulmonary artery (LPA-R) ran behind the trachea and preferentially irrigated the inferior lobe.

At the time of writing, the patient is pending surgery. The proposed technique is to disinsert the artery from its anomalous origin, uncross it from the bronchus, and reinsert it in the LPA.

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