A rare congenital anomaly: Pulmonary atresia and abnormal origin of right pulmonary artery

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A 22 year-old woman presented with dyspnea, central cyanosis and a pulsatile mass on her left neck. Echocardiography showed subaortic ventricular septal defect, aortic overriding and pulmonary atresia. Pulmonary valve and main pulmonary artery (PA) could not be visualized by echocardiography. Multi-detector computed tomography and selective right pulmonary angiography showed the right PA arising from the distal portion of the arcus aorta after the left subclavian artery, but the left PA could not be visualized. The left PA was supplied by collateral vessel from the right PA. Anomalous origin of a PA from the aorta is a rare malformation. The combination with pulmonary atresia and right PA arising from the arcus aorta has not previously been demonstrated in the literature (Figs. 1, 2).

Conflict of interest: none declared

Figure 1. Axial computed tomography image showing right pulmonary artery (PA) arising from the arcus aorta.

Figure 2. Three-dimensional volume rendering image showing right pulmonary artery (PA) arising from the distal portion of the arcus aorta after the left subclavian artery, but the origin of left PA cannot be visualized. Left PA being supplied by collateral vessel from right PA.