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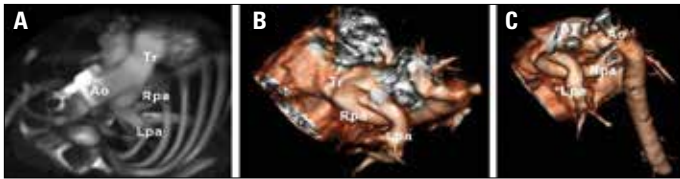
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## Crossed pulmonary arteries associated with persistent truncus arteriosus and right aortic arch on the three-dimensional computed tomographic imaging

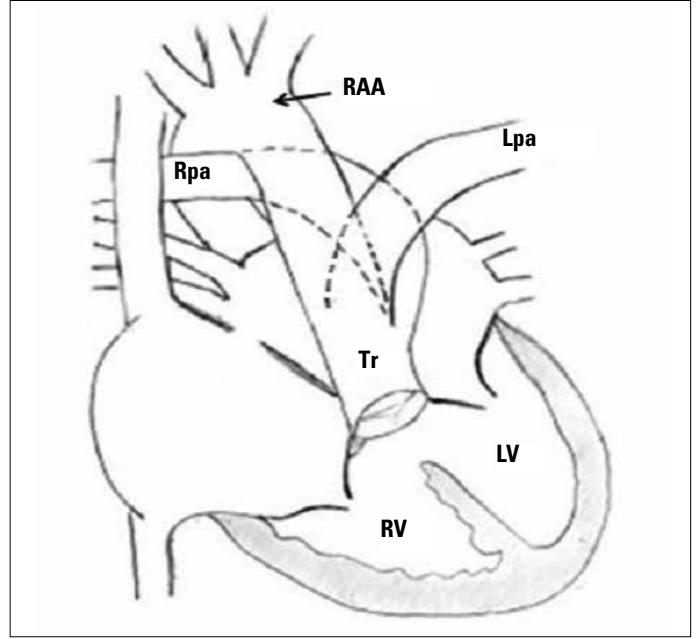
*Üç boyutlu bilgisayarlı tomografik görüntülemeye persistan trunkus arteriyozus ve sağ aortik arkus ile ilişkili çaprazlaşan pulmoner arterler*

A 33-year-old gravida 2, para 1 woman was referred to our pediatric cardiology unit at the 19<sup>th</sup> week of gestation with suspicion of cardiac anomaly. Fetal echocardiography revealed type 1 truncus arteriosus and right aortic arch. A female infant weighing 3200 gram was delivered at 38<sup>th</sup> week of gestation. Her cardiac pathology was confirmed by postnatal echocardiography. Moreover, we suspected crossed pulmonary arteries, because the pulmonary bifurcation was not shown by two-dimensional echocardiography. A three dimensional (3D) contrast-enhanced 64-multislice computed tomography (MSCT) revealed crossed pulmonary arteries. The main pulmonary artery arose from the posterior aspect of the truncus and the ostium of the left pulmonary artery was lying to the right and superior to the right pulmonary artery (Fig. 1, 2).



**Figure 1. A MSCT image of the crossed pulmonary arteries, B 3D-MSCT image from left posterior view demonstrating the truncus arteriosus and the crossed pulmonary arteries, C 3D-MSCT image from posterior view demonstrating the crossed pulmonary arteries**

Des A - descending aort, Lpa - left pulmonary artery, MSCT - multislice computed tomography, Rpa - right pulmonary artery, Tr - truncus



**Figure 2. Schematic drawing of crossed pulmonary arteries with persistent truncus arteriosus**

LV - left ventricle, RV - right ventricle

Crossed pulmonary arteries are a rare cardiac abnormality that often associates with congenital heart disease such as ventricular septal defect, right aortic arch, interrupted aortic arch and truncus arteriosus and chromosomal abnormalities such as chromosome 22q11 deletion. Detection of crossed pulmonary arteries may be an important marker to the diagnosis of cardiac and chromosomal abnormalities. The failure of imaging bifurcation of the pulmonary arteries on echocardiography might be a clue for the diagnosis of crossed pulmonary arteries.

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