

Aortic atresia: A case report

Aortik atrezi: Olgu sunumu

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A 1 day-old male newborn with the diagnosis of pulmonary atresia revealed with fetal echocardiography was admitted because of tachypnea. He was acyanotic, and he had intercostal retractions. Physical examination revealed a systolic murmur (grade 2/6) best heard at the 4th left intercostal space. Peripheral pulses were palpable and oxygen saturation was 92%. No significant changes were detected on standard 12-lead-electrocardiogram. Postnatal transthoracic echocardiography revealed absence of left ventricular outflow with large perimembranous ventricular septal defect and normal size of right and left ventricles. There was retrograde filling of the ascending aorta via patent ductus arteriosus. Prostaglandin E1 infusion was initiated to maintain patent ductus arteriosus. Cardiac catheterization was performed to demonstrate aortic morphology. Aortography depicted a hypoplastic ascending aorta without any communication between aorta, and left ventricle. Coronary arteries had normal branching and originated from the atretic end of the ascending aorta. Hypoplastic ascending aorta seemed to be a main coronary artery trunk (Video-1, Figure 1). The patient was considered as unavailable for corrective surgery and died 3 days after his birth while under prostaglandin E1 infusion and appropriate supportive treatment.

Most cases with aortic atresia with left ventricular hypoplasia are grouped in the category of hypoplastic left heart syndrome^(1,2). Few cases with a normal left

ventricular configuration have been published⁽³⁾. Aortic atresia or severe aortic stenosis and left ventricular outflow tract obstruction with two functionally adequate ventricles are sometimes treated by Norwood palliation followed by late biventricular repair⁽⁴⁾. Actually this anomaly is not compatible with life and most of the fetuses are expected to die in utero or during the neonatal period^(3,4).

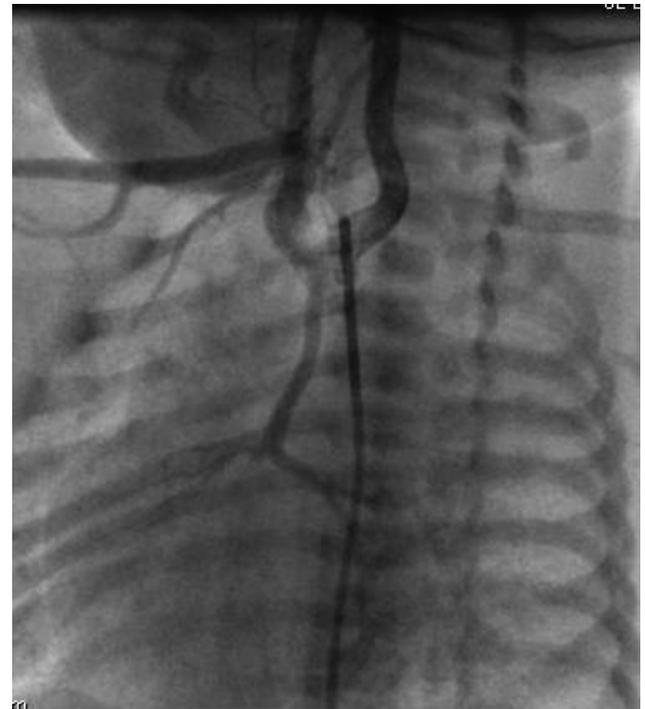


Figure 1. A hypoplastic ascending aorta appears to be a main coronary artery and coronary arteries with normal branching on aortography.

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