AORTOPULMONARY FISTULA CLOSURE IN INFANT

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HISTORY AND PHYSICAL

A 4 months old and 6.5 kg weighted boy was presented in our hospital with signs of heart failure including shortness of breath and breaks during feeding. Physical examination revealed significant left parasternal systolic and diastolic murmur and an enlargement of the heart to the left.

IMAGING

Echocardiogram showed communication between ascending aorta above sinuses of Valsalva and main pulmonary artery (diameter 4 mm; length 5 mm) with left to right shunt, a LVEDV indexed to BSA of 92 ml/m^2 and moderate pulmonary hypertension (RVSP 40 mmHg)

INDICATION FOR INTERVENTION

Symptomatic aortopulmonary fistula with pulmonary hypervolemia and left heart overload

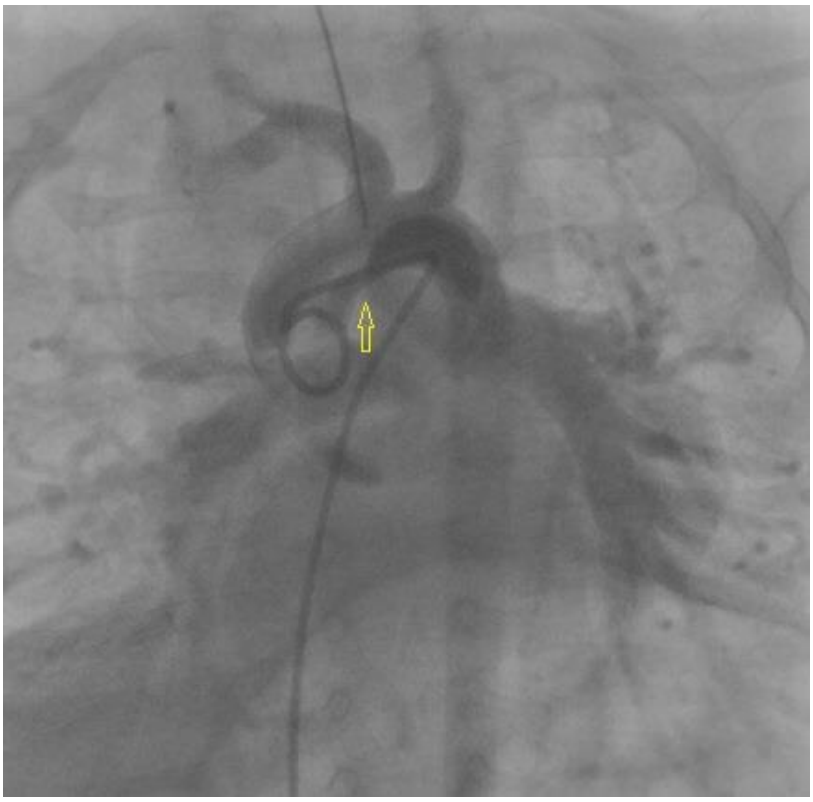
INTERVENTION

After right common femoral vein puncture, the diagnostic catheter was advenced through the vena cava inferior, right atrium, right ventricle, pulmonary artery across the fistula into the ascending aorta. Aortogram and echocardiographic confirmed the diagnosis of aortopulmonary fistula. Symmetric VSD occluder (4 mm size) was placed into the fistula trough a 6F sheath. After right femoral artery puncture a control aortography was performed showing no residual shunt or occluder displacement, which was also confirmed by transthoracic echocardiography. There were no immediate and long-term complications of femoral vessels puncture.

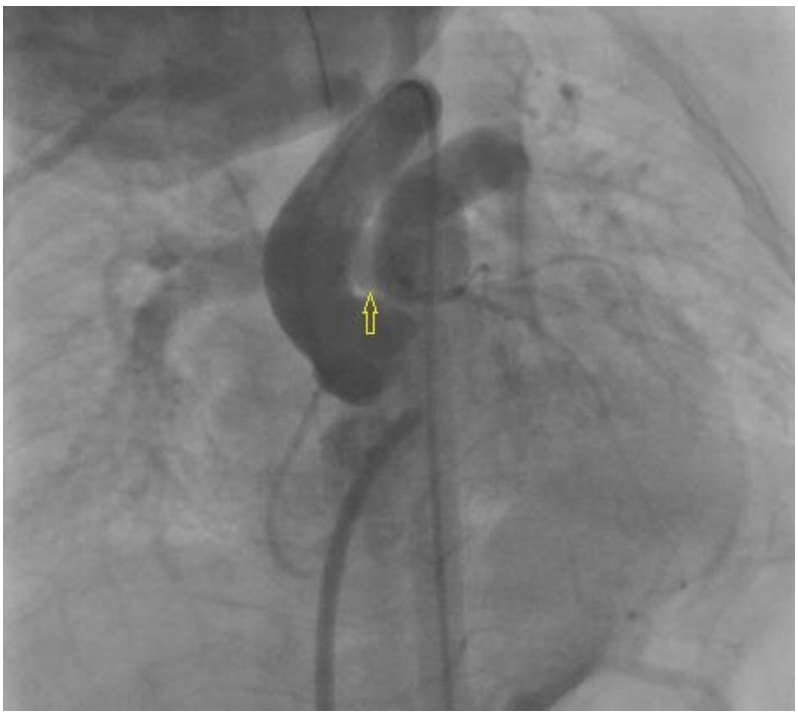
The 1 year follow-up including echocardiography was uneventful.

LEARNING POINTS OF THE PROCEDURE

Aortopulmonary fistula is a rare condition and can present with a heart failure in very young age. Endovascular occlusion could be a treatment of choice in such cases with good results



Yellow arrow – aortopulmonary fistula



Yellow arrow – VSD occluder