

Aorta-Right Atrial Tunnel Closure with Transcatheter Technique: A Case of 3 Years Old Child

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Introduction (or Basis or Objectives): Aorta-atrial tunnel is a rare and severe congenital disorder which can lead to death if untreated. A girl with persistent murmur in her left upper sternal border (8 months after PDA closure) was catheterized due to continuous flow from left coronary sinus to right atrium in echocardiography. An aneurysmatic tunnel sized 5,5 mm in diameter and 4 cm in length was closed by Amplatzer vascular plug 4 device. This case is important of being the first that aorta atrial tunnel was closed by vascular plug 4 device successfully.

Methods: 3 year old girl was referred to our center for continuing murmur 8 months after PDA closure. In her physical examination continuous murmur is heard in her right upper sternal border. Continuous flow from wide left coronary sinus to right atrium thru a tunnel was seen in transthoracic echocardiography. 30 mmHg pressure gradient was measured by continuous wave Doppler. Also Amplatzer ductal occluder –1device in ductus arteriosus and small apical muscular VSD were noticed. In angiography oxygen saturation in middle part of right atrium: was measured as 99%, in upper part: 83 %, right ventricle: 90 %. An aneurysmatic tunnel sized 4 cm in length and, 5,5 mm in diameter was seen (Picture 1). Tunnel was closed by vascular plug 4 device (picture 2). By aortic root angiography device remained stable in tunnel orifice and minimal shunt was seen through the device.

Results:Continuous murmur was disappeared in control examination of patient. Residual shunt wasn't seen in tunnel by transthoracic echocardiography. She was still followed by regular visits in our clinic.

Conclusions: In this study, we aimed to report the closure of extremely rare defect: aorta-RA tunnel, by Amplatzer vascular plug 4.

