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Transcatheter closure of the aortopulmonary window in a symptomatic infant using the Amplatzer ductal occluder

Aortopulmonary (AP) windows are conventionally closed by surgery and reports of transcatheter closure are confined to either asymptomatic or residual defects after surgical closure.

We report transcatheter closure of a 4 mm distal AP window with an 8×6 mm Amplatzer duct occluder in a 1-year-old boy weighing 7 kg who presented in cardiac failure with a continuous murmur. The defect appeared ideally suited to transcatheter closure on echocardiography. Femoral arterial and venous access was obtained; aortograms were performed in a right anterior oblique (RAO) view, and lateral projections showed a distal AP window, well away from the aortic valve with an otherwise normal arch and branch pulmonary arteries (panel A). The mean pulmonary artery pressure was raised at 39 mm Hg with a Qp:Qs ratio of 1.8. A 7F long sheath (Cook) was exchanged over a Roadrunner wire through the AP window into the ascending aorta and positioned close to the mouth of the window where a repeat angiogram was performed in RAO projection. An 8×6 mm Amplatzer PDA device was then introduced through the sheath and the retention disc released in the aorta. The whole assembly was withdrawn until the edges of the disc were snug with the wall of the aorta. The device was released in stable position and post-procedure aortograms showed good device position flush with the aortic wall (panel B) (see supplementary files available at <http://heart.bmj.com/supplemental>).

The pulmonary artery mean pressure dropped to 24 mmHg after occlusion of the AP window. A post-procedure echocardiogram showed good device position and no significant gradients in the pulmonary artery and ascending aorta at 1-month follow-up.

Supplementary files available at
<http://heart.bmj.com/supplemental>

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