

Hypoplastic Left Heart Syndrome Combined Imaging – Angiography and MRI

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Patient history

3-day-old baby boy, weight 2.5 kg.

Diagnosis

Hypoplastic left heart syndrome.

Therapy planning

At three days of life, after consultation with the family, the management decision was to follow single ventricle palliation towards an eventual Fontan procedure. The first stage of palliation was either a standard Norwood operation or

a hybrid procedure. Because of the child's size it was determined that the hybrid procedure would be a better option.

Treatment

The child was anesthetized and underwent a pre-procedural MRI to define the anatomy. (Fig. 3) Following the MRI, the child was moved into the angiography suite while under the same anesthetic. A bilateral pulmonary artery banding procedure and insertion of a

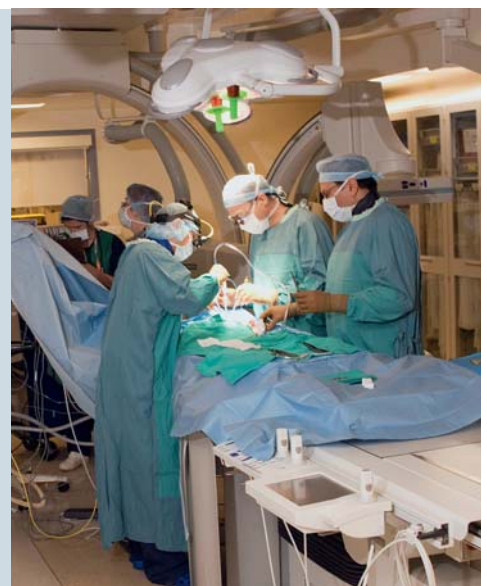
stent into the arterial duct through the main pulmonary artery was successfully performed.

Comments

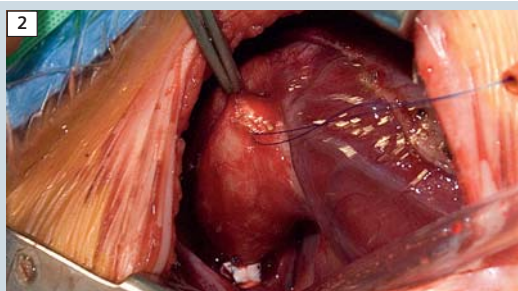
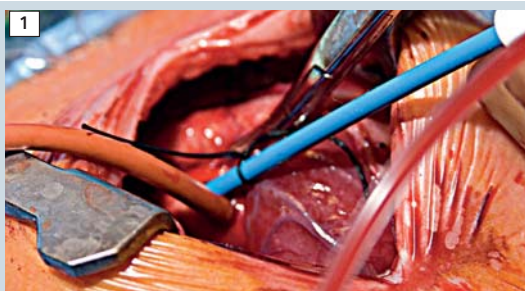
The child recovered well, was extubated on day three following the procedure and returned home on day seven.

Contact

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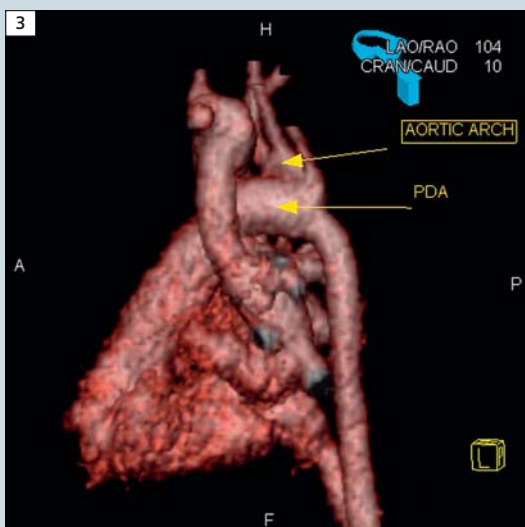


Treatment at the biplane AXIOM Artis dBC angiography system with the C-arm in park position for best patient access.

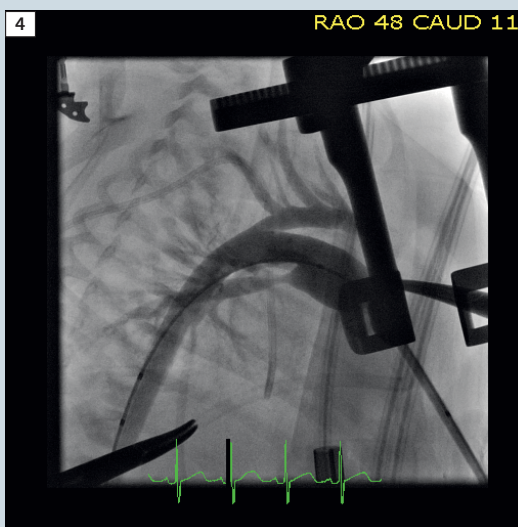


1 Placement of sheath into main pulmonary artery for insertion of the stent into the arterial duct.

2 Band (white) around right pulmonary artery.



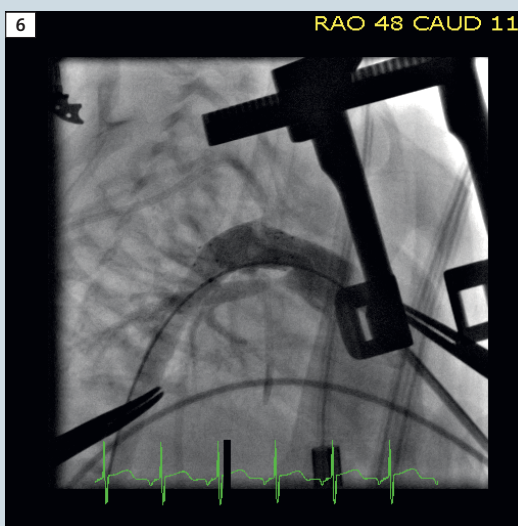
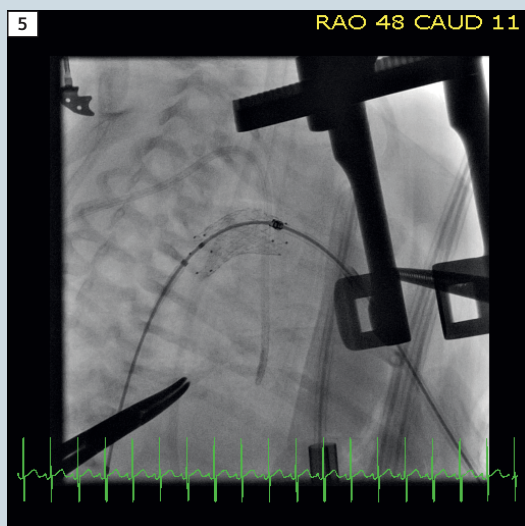
3 MR image of hypoplastic left heart syndrome before hybrid treatment.



4 Banded pulmonary arteries, Patent Ductus Arteriosus injection.

5 Opened stent in PDA.

6 Angiogram of ductal stent in position.



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