

P-313*

Ductus Arteriosus Stent Implantation in Comparison with Surgically-created Shunts

Amoozgar H.(1), Cheriki S. (1) Borzooe M.(1), Ajami G.H.(1), Soltani M.(1) Ahmadipour M.(1), Peiravian F.(2), Amirghofran A.A.(3)

Division of pediatric cardiology, Department of pediatric, Shiraz university of medical sciences, Shiraz, Iran(1);Kazeron Azad University, Pediatric cardiology, Kazeron, Fars, Iran(2);Shiraz University of medical sciences, Cardiac surgery Department, Shiraz, Fars, Iran(3)

Objectives: The present study aims to report the researchers' experience with the safety, efficacy, short-term outcome, and complications of patent ductus arteriosus (PDA) stenting in neonates with ductal-dependent pulmonary circulation in comparison with surgically-created shunts.

Methods: Between April 2009 and April 2011, 18 infants with duct-dependent pulmonary circulation underwent cardiac catheterization for PDA stenting as the first palliative procedure in a referral center, and 20 infants were treated with surgical aortopulmonary shunts in another center. Follow-up included clinical examination, echocardiography, oxygen saturation and cardiac catheterization studies.

Results : Access and stenting for PDA was successful in 15 patients (83.3%). Mean procedure and fluoroscopy time were 58.43 ± 41.25 minutes and 18.81 ± 5.64 minutes, respectively. Three patients (30%) in the stented group and 6 (30%) in the surgical group ($P=0.09$) died. After a 6-month follow-up, no patients had significant stent stenosis requiring re-intervention. There was no statistically significant difference in the increase of oxygen saturation in the two groups after the procedure and 6 months after the procedure ($P>0.5$). Left pulmonary artery diameter, McGoon's ratio and Nakata index were not statistically significant in the groups ($P>0.05$), but right pulmonary diameter was larger in the stented group (5.01 ± 0.45 vs. 4.1 ± 0.49 , $P=0.0001$).

Conclusions: Stenting for PDA is an appropriate alternative to surgical shunt creation in many patients with duct-dependent circulation. In our sample, there was no significant difference between short-term procedural related outcome and mortality.

* former **PW3-8**