

surgery and cardiac resynchronization therapy did not appear to significantly improve the clinical results. Cox regression evidenced lesser improvement in quality-of-life domains among patients with ischemic cardiomyopathy.

**Conclusions:** The cardiac support device obtains reverse remodelling of the left ventricle, and allows stable improvement in the quality of life until the 2<sup>nd</sup> year post-implantation. The integration of different and complementary strategies (cardiac support device, resynchronization therapy and aggressive treatment of functional mitral regurgitation) may represent the key of success for the more complex patients.

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## CRT-147

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### The Tri-dimensional Complete Ring: A Novel Device For More Efficient Tricuspid Valve Repair. Initial Results

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**Background:** The interest for the tricuspid valve increased significantly as well among cardiologists as among surgeons. The reason is double: on one hand, the severe tricuspid regurgitation occurring occasionally after isolated mitral valve replacement; on the other hand, development of the three-dimensional echocardiography allowing a more pronounced exploration of the tricuspid valve and right ventricle functions. Because annuloplasty remains the gold standard technique in tricuspid surgery, our aim was to evaluate the impact of our tri-dimensional complete ring in improving the short and long term outcomes of this conservative surgery.

**Methods:** This is a prospective study including 30 patients (Mean age was 25 years). All of them were operated on for rheumatic left sided valves disease associated with grade III functional tricuspid regurgitation. Our new tri-dimensional complete ring was used for tricuspid valve repair. The average time of implantation was five minutes. The complete structure and the modulated flexibility of this new ring, exclusively made of PTFE and well tolerated material as demonstrated by our experimental and histological studies, are expected to respect and restore the physiology annulus, and finally lead the septal leaflet to take part to the valvular coaptation.

**Results:** There was no hospital mortality and no major complications. Mean follow-up was 12 months. No significant tricuspid regurgitation was observed either at discharge or during follow up. Furthermore, 3D echocardiography showed a good remodeling of the tricuspid annulus and a significant improvement of right ventricular function.

**Conclusions:** The tri-dimensional complete ring allows a more physiologic, cheaper and faster repair of the tricuspid valve. Furthermore, our ring made exclusively from PTFE seems to be rapidly endothelialized and more resistant to infection. Whereas short and mid term results are good and promising, longer follow up is required to confirm these trends.

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## CRT-148

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### Ductal Stenting In Neonates With Duct Dependant Circulation: The Genuine And Feasible Option

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**Introduction:** Duct dependant circulation in a neonate presents as a life threatening emergency. These patients can survive only if duct patency is maintained for the time before they are taken up for a planned staged surgery. Surgical palliative shunt, a surgical option or ductal stenting, a catheter based intervention can be performed in such patients.

**Objective:** We performed ductal stenting in 8 babies with duct dependant circulation with an objective to observe our results.

**Patient and Methods:** 8 babies with age ranging from 22 hours to 18 days underwent ductal stenting (table 1). Procedure was performed under deep sedation. Venous and arterial access was obtained by Scheldinger's technique. Bare metal stents were used in all patients. Mean procedure time was 48 minutes while fluoroscopy time was 14 minutes.

**Table 1**

No	Age	Sex	Weight (kg)	Diagnosis	Stent size (mm)
1	22 hrs	M	2.8	HLHS	8 × 28
2	3 days	F	2.4	Tricuspid & Pulm atresia	3.75 × 18
3	3 days	F	2.85	HLHS	7 × 30
4	2 days	F	2.35	HLHS	8 × 24
5	18 days	F	2.7	Single ventricle, Pulm atresia	4 × 20
6	16 days	M	3.1	Dextrocardia, Pulm atresia	3.5 × 22
7	5 days	M	2.2	Pulm atresia	3.5 × 16
8	6 days	M	2.5	Pulm atresia	3.75 × 22

**Results:** The procedure was successful in all patients. 5 patients with pulmonary atresia underwent Glenn shunt at age of 6 - 7 months and are growing well while 3 patients with HLHS survived only for next 3 - 4 weeks only as next surgery (bilateral PA banding) could not be done in them.

**Conclusions:** Ductal stenting is a feasible option for initial management of patients with ductal dependant circulation till the patient is taken up for definitive surgery.

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## CRT-149

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### Results Of Adenosine Vasoreactivity Testing In Pulmonary Hypertension By Basilar And Radial Access

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**Background:** Pulmonary Hypertension is a frequent disease in third level hospitals, with elevated morbidity and mortality in short time. To choose the medical treatment is fundamental to do a pulmonary vasoreactivity test.

**Objective:** To show and classify the results of the vasoreactivity test in the different groups of pulmonary Hypertension, done by basilar and radial Access.

**Material and Method:** By consecutive simple we captured cases in which left and right catheterism is done in patients with pulmonary hypertension, since November 2010 to January 2012. By basilar access we did the right catheterism, oximetries and pressure are registered, in superior vena cava, inferior vena cava, Right Ventricle and Pulmonary Trunk. By radial Access pressures and oximetries are registered in aorta and Left Ventricle. Cardiac output is determined by Fick Method. The vasoreactivity was evaluated with adenosine infusion in the pulmonary trunk, in doses of 100 mcg/kg/min with a maximum of 12 mgs. A positive test is considered when Mean Pulmonary arterial pressure (mPAP) decrease more than 10 mmHg or a (mPAP) less than 40 mmHg without affection of the cardiac output.

**Results:** 92 procedures were done, 57% women, mean age 44 years, 58 patients of the group 1, 22 of the group 2, 7 of the group 3 and 5 of the group 4. Only 8% of the patients responded to adenosine infusion, 6 patients from the group 1 and 1 patient from de group 3 (Pulmonary Hypertension classification, Dana Point 2008). The mPAP decreased on average of 17 mmHg, and it was sustained in average 7.2 minutes. All procedures were done successfully and same day discharge. Complications: 2 patients referred severe chest pain with the adenosine infusion, but not persistent electrocardiographic abnormalities are founded. 10% of patients presented pain in the Access site that was controlled with analgesics.

**Conclusions:** Basilar and radial Access was accepted in 100% percent of the patients, and all are same day discharged. There were no major complications and the vasoreactivity test was positive only in 8% of the patients, principally patients of the group 1.