

Abstract No. **20**

Category: **Heart Failure and Cardiomyopathies**

Title: **perventricular closure of congenital muscular ventricular septal defects in patients with associated congenital complex lesions and others with acquired traumatic defects**

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Abstract:

Background: when Muscular Ventricular Septal Defects (VSDm) have hemodynamic repercussion and are associated with other complex lesions these represents a clinical challenge. In most of cases they are taken to palliative treatments such as trunk cerclage or pulmonary cerclage sometimes included in hybrid treatment. Some years ago, an alternative within the context of the definitive correction also perventricular closure has shown as a good treatment alternative for patients with acquired VSD.

Methods: A retrospective cases serie of patients with acquired and congenital VSDm and associated lesions, who underwent closure of the defect with per ventricular technique, is presented. in congenital lesion, closure of defect were done with the use of VSD occlusion devices between cannulation and before entering extracorporeal circulation for definitive correction of the other injuries. Short and medium term follow-up was done up to 21 months.

Results: 12 patients were included, all of them from the interventional cardiology from a single center. Age median 36 months (1 – 444) 66.6% (8) patients were male. 66.6% (8) patients had congenital muscular VSD diagnosis. 5 (50%) cases with palliative procedures. One patient had previous history of significative residual shunt associated to Fallot with pulmonary valve agenesis reparation in Extracorporeal circulation. Five cases of aortic obstruction repair, in one patient severe pulmonary hypertension were present and three patients (27.7%) with acquired lesions. Follow-up of perventricular closure, did not show significant residual shunt in patients. Right ventricular dysfunction was attributed to the palliation type or previous correction. 1 dead is reported 3-week after intervention not associated with per-ventricular management and related to the immunodeficiency condition of the patient. 1 failure in procedure is reported in patient with vehicle chest trauma.

Conclusion: per ventricular closure of VSDm with devices is a safe technique, it facilitates the identification of defect in the septum decreasing the possibility of residual shunt, its technique represents mortality and morbidity reduction