Fetal Cardiac Interventions: 12-year experience and results in Argentina

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Introduction: Fetal Cardiac Interventions (FCI) have been proposed in order to improve outcome in certain types of congenital heart disease that may progress during pregnancy leading to irreversible myocardial or pulmonary damage. The aim of this study is to report our group’s experience and results in performing FCI.

Methods: Medical records of patients selected for FCI between January 2005 and November 2017 were reviewed. Measures of central tendency and frequency distributions were calculated.

Results: There were 48 patients selected for FCI, 22 with critical aortic stenosis evolving to hypoplastic left heart syndrome (HLHS); 6 with dysplastic mitral valve, critical aortic stenosis and severely restrictive foramen ovale (FO); 4 with HLHS and severely restrictive FO; 12 with critical pulmonary stenosis or pulmonary atresia; 4 with severe pericardial effusion. Fetal aortic valvuloplasty was performed in 17 patients, fetal pulmonary valvuloplasty in 3 cases, atrial septum dilatation in 3 fetuses and in 2 of them with stent placement, and pericardiocentesis was performed in 3 fetuses. After 8/26 (30.7%) procedures there was fetal demise within 48hs after FCI. There were no associated significant maternal complications.

Conclusions: Fetal cardiac interventions of selected patients in a specialized centre are feasible, with an acceptably low rate of fetal demise and no significant maternal complications.