



RISK FACTORS FOR DECREASED LEFT VENTRICULAR SYSTOLIC FUNCTION IN POST-TRANSCATHETER CLOSURE OF PATENT DUCTUS ARTERIOSUS IN PEDIATRIC FILIPINO PATIENTS IN A TERTIARY GOVERNMENT HOSPITAL IN THE PHILIPPINES

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Background:

Previous studies have reported left ventricular dysfunction after closure of patent ductus arteriosus. However, risk factors for this phenomenon have yet to be elucidated.

Objectives:

To identify the risk factors for decreased left ventricular systolic function in post-transcatheter closure of patent ductus arteriosus in Filipino pediatric patients.

Methods:

A retrospective study was done involving all patients who underwent transcatheter closure of patent ductus arteriosus from January 2015 to March 2020. The factors associated with left ventricular dysfunction after PDA transcatheter closure were analyzed using logistic regression.

Results:

Among 545 patients who underwent transcatheter PDA closure during the study period, there were 45 patients who developed left ventricular dysfunction after the procedure. Risk factors associated with LV dysfunction were: belonging to the 5-9 year old age group; having normal weight for age; PDA size > 5mm; left atrial size z score > 2; left ventricular end diastolic diameter z score > 4; and presence of regurgitations in 2 or more valves before device closure. Three patients remained to have left ventricular dysfunction at 1 month follow-up.

Conclusion:

Left ventricular dysfunction after closure of patent ductus arteriosus is more likely to occur in older patients with larger PDA sizes and echocardiographic signs of left sided volume overload and valve regurgitations at baseline.