



AC063

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

ASSOCIATION OF LEFT VENTRICULAR FUNCTION WITH PULMONARY HYPERTENSION IN PATIENTS WITH HYPERTENSIVE HEART FAILURE.

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Background: Pulmonary hypertension (PH) frequently complicates hypertensive heart failure worsening functional status and outcomes. Left ventricular systolic and diastolic dysfunction contribute to elevated left ventricular filling pressure and result to the development of PH. This study evaluated the association between left ventricular function and PH in patients with hypertensive heart failure(HHF).

Methodology: A cross sectional study consisting of 114 hypertensive heart failure patients. Trans thoracic echo was done to assess left ventricular systolic and diastolic function and estimate pulmonary artery systolic pressure. Multi variable logistic regression was used to evaluate the independent association between left ventricular function and PH.

Result: Patients with PH had lower left ventricular ejection fraction and higher grades of diastolic dysfunction than those without pulmonary hypertension. Left ventricular systolic and diastolic function were significantly associated with pulmonary hypertension ($p = 0.007$ and $p = 0.003$ respectively). On multivariable logistic regression analysis, grade III left ventricular diastolic dysfunction was an independent predictor of PH. (OR 59.20, 95% CI = 2.22 -1576.3; $p = 0.015$).

Conclusion: PH is significantly associated with left ventricular systolic and diastolic function in patients with HHF. Echocardiographic assessment of left ventricular function will aid in early identification and risk stratification of patients at risk of pulmonary hypertension

Keywords: Pulmonary hypertension, Hypertensive heart failure, Left ventricular function.