

Abstract No. **41**

Category: **Non Invasive Imaging**

Title: **Correlation Between Pulmonary Capillary Wedge Pressure and Diastolic Dysfunction**

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Abstract:

Background: High pulmonary capillary wedge pressure (PCWP) strongly suggests high left ventricular pressure. Transthoracic echocardiogram (TTE) offers different ways to evaluate diastolic dysfunction.

Methods: To evaluate the correlation between PCWP measured by right heart catheterization (RHC) and diastolic function evaluated by TTE we design a retrospective study in a High-Complexity Hospital in Cali, Colombia. Patients with complete diastolic function evaluated by TTE and RHC performed for different indications were included. Variables were obtained from institutional databases. A correlation between echocardiographic variables and PCWP was made. Algorithm of diastolic dysfunction was based on data from the American Society of Echocardiography.

Results: 43 patients were included, age 51 ± 12.2 years, 59% males. 56% of patients underwent cardiac transplant evaluation, 16% underwent pulmonary hypertension workup and 14% underwent liver transplant evaluation. From data included (table 1), a moderate correlation was found with E/A relation ≥ 2 analyzed by the algorithm for diastolic dysfunction grade III. Drawing a ROC curve with E/A relation, the area under the curve is 0.75. All others variables showed poor correlation with PCWP.

Conclusion: To evaluate diastolic dysfunction, PCWP correlates moderately with E/A ≥ 2 and with the algorithm for diastolic dysfunction grade III. Invasive evaluation (PCWP) had no good correlation with other TTE variables.