

Abstract No. **43**

Category: **Non Invasive Imaging**

Title: **Prognostic Value of Tricuspid Regurgitation Velocity and Probability of Pulmonary Hypertension in Hospitalized Patients**

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Abstract:

Background: Ecocardiographic probability of Pulmonary hypertension (PH), and specifically tricuspid regurgitation velocity (TRV) play a role as prognostic factors in certain populations.

Methods: Prospective cohort study, hospitalized patients who had transthoracic echocardiogram, with a measurable TRV were included. Follow-up was performed to evaluate mortality and rehospitalization at 3 months, proportions were calculated by groups and were compared using Chi square test; Survival curves were performed.

Results: 323 patients were included, 225 (69.7%) with TRV \leq 2.8 m/s (low), 67 (20.7%) with TRV intermediate (2.8 - 3.4 m/s), and 31 (9.6%) with TRV $>$ 3.4 m/s (high). Patients with high TRV had a higher risk of in-hospital mortality (OR 3.1 CI 1.03 - 9.5), followed by those with intermediate TRV (OR 2.9 CI 1.2 - 6.9). Mortality at three months was also higher in intermediate (OR 3.84 CI 1.82 - 8.11), and high TRV (OR 3.57 CI 1.34 - 9.47). There were no significant differences in rehospitalization at 3 months, and the composite outcome (death and rehospitalization), there was an increased risk in patients with intermediate TRV (OR 2.1 CI 1.19 - 3.68). Patients with high probability of PH had a higher risk of in-hospital death (OR 3.1 CI 1.03 - 9.5), but there were no differences in rehospitalization. Mortality at 3 months was significantly higher in the high probability group (OR 4.58 CI 1.98 - 10.1), followed by those with intermediate probability (OR 3.29 CI 1.42 - 7.62). The composite outcome was more frequent in patients with intermediate and high probability of PH.

Conclusion: Both the TRV and probability of PH have prognostic value in terms of in-hospital and 3 months mortality. The risk is increased even in patients in the intermediate TRV range and intermediate probability of PH. There are no significant differences in regard to rehospitalization.