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☆ **Spotlight on Special Topics**

MODERATE/SEVERE MITRAL REGURGITATION AND TRICUSPID REGURGITATION ASSOCIATED WITH INCREASED MORTALITY IN HOSPITALIZED PATIENTS WITH COVID-19

Poster Contributions
Saturday, May 15, 2021, 2:45 p.m.-3:30 p.m.

Session Title: Spotlight on Special Topics: COVID 3
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)

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Background: The impact of pre-existing valvular heart disease (VHD) in patients hospitalized for COVID-19 has not been studied. We aim to determine the association with outcomes in VHD patients hospitalized with COVID-19.

Methods: This was a retrospective, single-center study at a tertiary medical center. All patients that were hospitalized with COVID-19 between March 1 and August 1, 2020 and had an echocardiographic study within the last 3 years were included in this study (n=460). Presence of VHD was assessed by Cardiac Intelligence™ (Mpirik, Milwaukee, WI).

Results: 460 patients were included in this study, 56% male and 44% female. 61 (13%) had VHD. 35 (8%) patients had moderate or severe mitral regurgitation (MR) or tricuspid regurgitation (TR). Moderate or severe MR/TR was associated with higher mortality rates compared to the control group (43% vs 25%, p=0.02). The moderate or severe MR/TR group had shorter median length of stay (LOS) (9 days vs 12.5 days, p=0.05). In deceased patients the median LOS was shorter in MR/TR patients (8 days vs 17.5 days, p=0.01), while there was no significant difference in their counterparts (9.5 days vs 11 days, p=0.30) (Figure 1).

Conclusion: Our findings suggest that patients with moderate or severe MR/TR have higher rates of mortality. Shorter LOS of the moderate or severe MR/TR group was explained by stratifying based on mortality thus suggesting that patients with moderate or severe MR/TR are more critically ill from their COVID-19 infection.

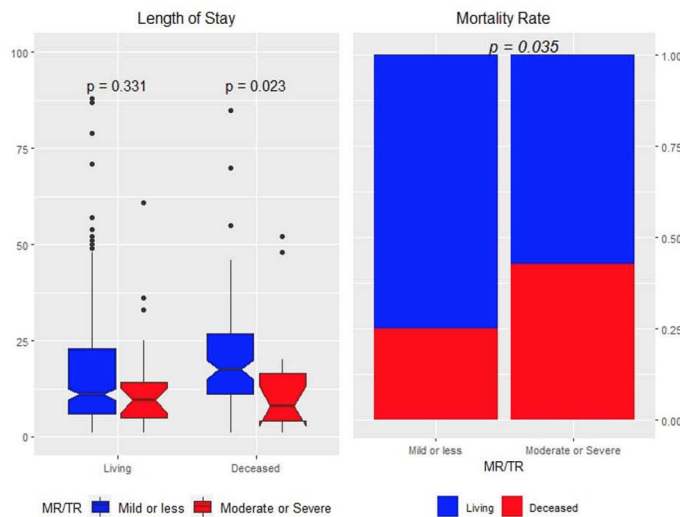


Figure 1. Length of stay and mortality rates of patients hospitalized due to COVID-19 with moderate or severe MR/TR compared to those with no or mild MR/TR.
MR= mitral regurgitation TR= Tricuspid regurgitation