



Impact of CVD on Mortality in Patients Hospitalized with COVID-19 Infection is Varied among Race

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Short commentary

We read the recent paper in the journal by Lala et al. [1]. Investigated the impact of myocardial injury in patients hospitalized infected by COVID-19. A similar investigation, including fewer patients hospitalized, was also published recently [2,3,4]. We completely agree that troponin elevation among patients hospitalized with COVID-19 is associated with a higher risk of mortality [1].

The authors claimed that increased age, BMI and higher illness severity were associated with increased risk of death while gender, race/ethnicity and risk factors for CVD and CVD were

not. However, the conclusion is constrained to the portion of patients with abnormal initial troponin levels (mildly elevated and elevated troponin >0.03 ng/mL). When we compared the data of abnormal troponin concentration and risk factors for CVD and CVD in the paper. We found that the percentage of Asian and Pacific Islander patients with abnormal troponin levels is lower than White and African Americans, even them with a similar or higher proportion of risk factors for CVD and CVD (Table 1). Generally, individuals with CVD presented with more elevated initial troponins than those without CVD due to injured myocardium [1,2]. We supposed all patients with abnormal tro-



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ponins were attributed to risk factors for CVD and CVD. But only half (47.62 - 54.39%) of the portion of patients were detected abnormal troponin levels. It is far lower than White and African American (80.11 - 80.22%) (Table 1). Thus, we speculate that the mortality of Asian and Pacific islander COVID-19 patients hospitalized with risk factors for CVD and CVD is far lower than White and African Americans. In other words, myocardial injury is more prevalent in White and African Americans with risk factors for CVD and CVD.

Conclusion

In conclusion, we believe that Lala et al. [1]. Performed an excellent quality study, but it also essential to further explore the different outcomes of patients hospitalized with COVID-19 infection among Race in the future.

Table 1: Abnormal troponin and cardiovascular risk factors of patients from different Race.

Race	All Patients	Abnormal Troponin (>0.03 ng/mL)	Risk Factors for CVD and CVD	Abnormal / Risk Factors and CVD (%)
White	634	257 (40.54)	318 (50.16)	80.82
African American	700	302 (43.14)	377 (53.86)	80.11
Asian	105	31 (29.52)	57 (54.29)	54.39
Pacific Islander	29	10 (34.48)	21 (72.41)	47.62
Other	1157	351 (30.34)	555 (47.97)	63.24
Unknown Race	111	24 (21.62)	34 (30.63)	70.59

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