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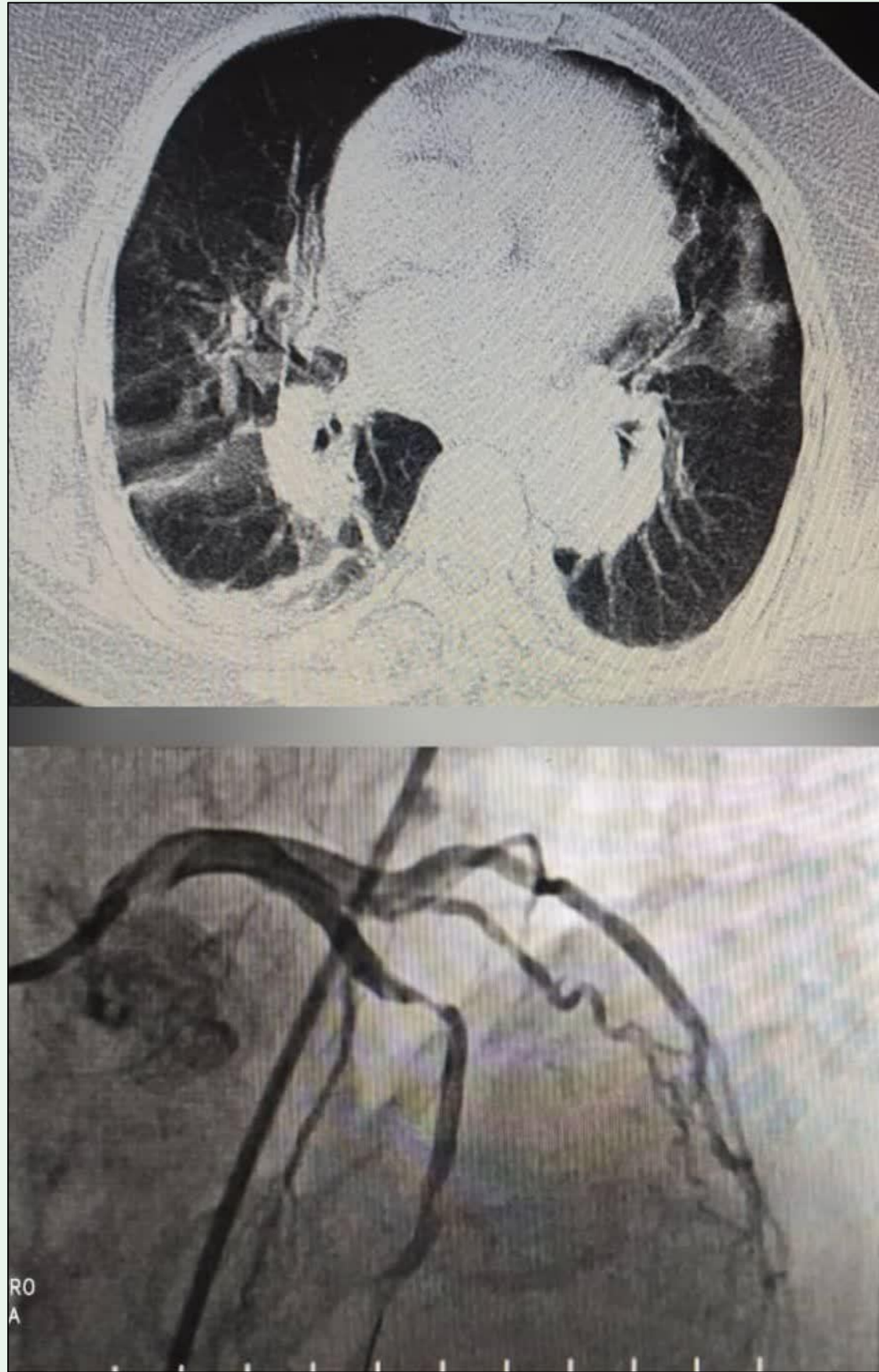
The relationship between severity of coronary artery disease in angiography and incidence of short-term major cardiovascular events of patients with Covid-19 and myocardial infarction

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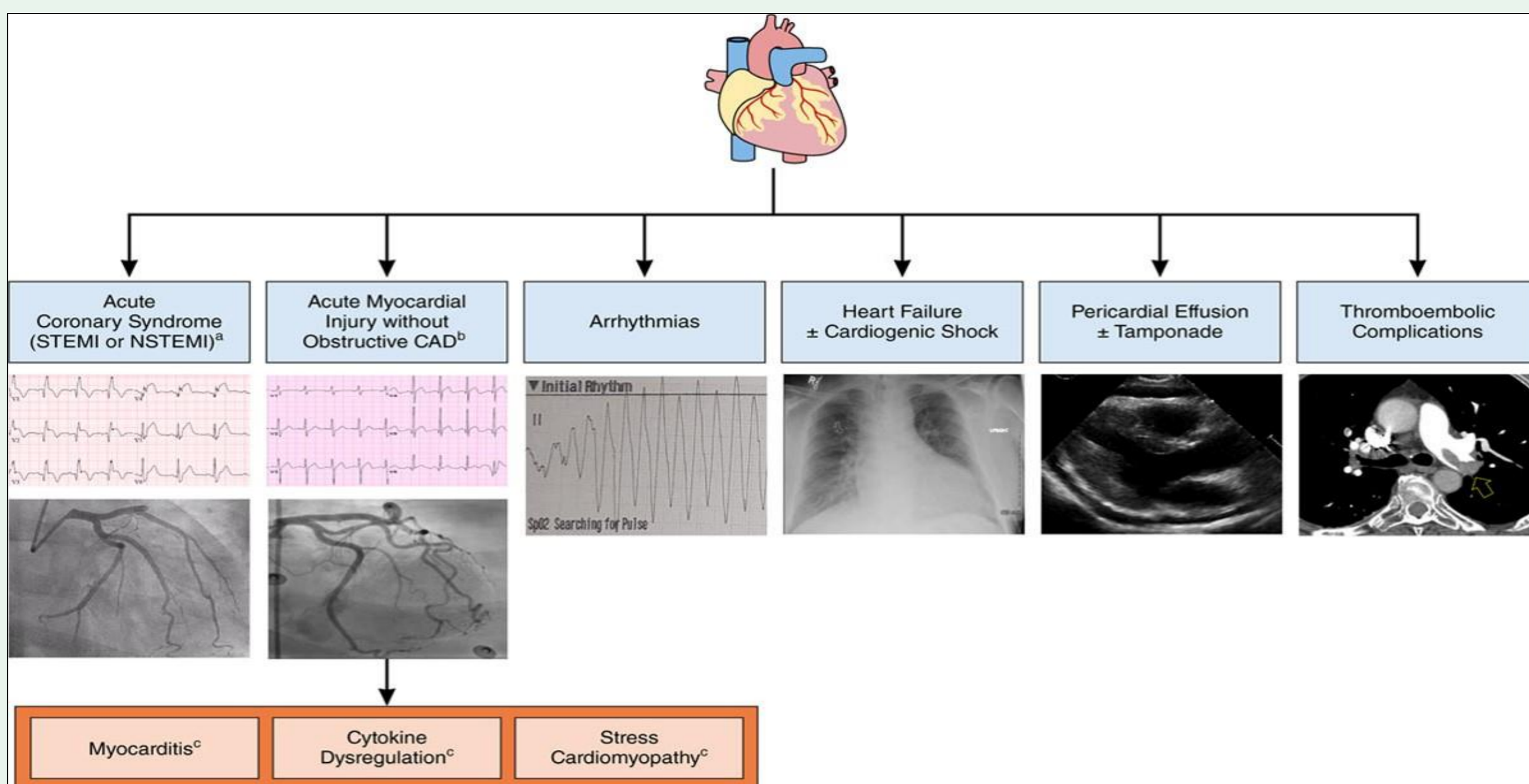
Introduction

Coronary artery disease (CAD) had been frequently recognized as a risk factor for poor prognosis in COVID-19 patients. Syntax score is an invasive coronary angiographic-based tool that is essentially used to determine the severity of CAD. In this study we aim to investigate the prognostic significance of syntax score for mortality and morbidity among COVID-19 patients.



Materials and Methods

In this cross-sectional study we have included patients with confirmed COVID-19 diagnosis who underwent percutaneous coronary intervention (PCI). The CAD complexity were measured by Syntax score base on angiographic records and echocardiographic variables were documented. The laboratory data were obtained from HISS database of the hospital. All patients were followed up during one month after discharge for new cardiovascular events, re-hospitalization, heart failure (HF), stent thrombosis, cerebrovascular accidents, and death.



Conclusion

The present study did not find significant association between adverse outcomes and syntax score in COVID-19 patients referred for PCI. Acute kidney injury and duration of ICU stay was found to be the main factor predicting re-hospitalization and HF. Future studies are needed to confirm these findings.

Results

In one month, 108 patients were included in the study. The mean age was 64.8 ± 11.6 and 74 % were male. In the cox regression model, no association were found between Syntax score and the composite outcomes. In the univariate cox proportional HR model; MPV, LDH and ESR were found to have predictive significance for in-hospital death. AKI was resulted to be significantly associated with re-hospitalization in multivariate analysis.

References

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