

Demographic analysis and clinical outcomes of COVID-19 and myocardial infarction from a tertiary care centre in south India

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Back ground – COVID-19 is reported in India from March 2020. It is known to cause myocarditis, arrhythmias and heart failure. COVID-19 infection has been proposed to be associated with myocardial infarction.

PURPOSE –We intent to study outcomes of acute coronary syndrome associated with COVID-19 patients .

METHODS – This is a single center case-control study done in an University hospital in south India , from May 2020 to October 2020 . Data of patients who came with acute coronary syndrome (ACS) with COVID- 19 were collected retrospectively from the hospital database. The clinical outcomes of the these patients were compared with the patients who were admitted in the hospital for ACS without COVID -19 in the same period.

RESULTS – 508 patients were admitted between May 2020 to October 2020 with ACS and out of which 58 patients were positive for COVID-19 and 450 patients were COVID-19 negative. In COVID positive group, most of the patients were above 50 years with 17 % of them being female sex. 60 % were having diabetes and 44.8 % had hypertension . 55% of them had STEMI with the rest being NSTEMI-ACS . 43.1 % patients were thrombolysed . 25% patients underwent revascularization either with PCI / CABG . 10.3% died in the COVID -19 positive group , at the same time there were only 2.2 % deaths in the control group . Most the patients were asymptomatic COVID-19 at presentation . Among the symptomatic COVID-19 patients the onset of myocardial infarction after COVID-19 ranged from 9 – 90 days .

CONCLUSION – Acute coronary syndrome in COVID-19 patients can present as late as 3 months after index infection, and these patients had higher mortality compared with those who did not have COVID -19 .