

Cardiovascular complications of novel Wuhan Coronavirus (COVID-19) – A 2020 update

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Opinion

Novel Wuhan Coronavirus (COVID-19) induced unusual viral pneumonia was first reported in Wuhan city, China during December 2020. Milder version of coronavirus like severe acute respiratory syndrome coronavirus (SARS-CoV) with mortality of 10% and the Middle East respiratory syndrome coronavirus (MERS-CoV) with mortality of 37% were reported earlier. Acute respiratory distress syndrome with cytokine storm may be the reason for increased mortality in Novel Wuhan Coronavirus COVID-19. Clinical presentation of Novel Wuhan Coronavirus COVID-19 is similar to SARS but the mortality rate is documented high among the COVID-19 patients.^{1,2}

Upto 40% of the admitted COVID-19 patients had cardio-vascular diseases. Elevated cardiac troponin which is suggestive of virus load induced cardiac injury was seen in 7.2% of admitted patients. Arrhythmias were seen in 16.7%. Known coronary artery disease and heart failure patients are at a higher risk when compared to others. We can expect cardiac arrest due to acute myocarditis, acute myocardial infarction, and rapid-onset heart failure.³ In previous outbreaks of SARS/MERS patients with HFrEF had higher requirement of ventilators.⁴ As of now there is no anti-viral treatment proven to be effective for Novel Wuhan Coronavirus COVID-19. Lopinavir and Ritonavir is widely using as per its previous data on SARS and MERS. Use of steroids is controversial as it has no proven benefits on mortality.

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Conflicts of interest

The authors declare that they have no conflicts of interest.

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Author's contributions

Rajesh Rajan participated in data analysis and manuscript preparation. Mohammed Al Jarallah participated in manuscript preparation. Raja Dashti participated in the drafting of manuscript. All authors have read and approved the manuscript.

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