

Impact of COVID-19 on the Cardiovascular System

Shanthi Mendis*

**Geneva Learning Foundation, Switzerland*

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ABSTRACT

Current evidence indicates an inextricable link between coronavirus disease 2019 (COVID-19) and cardiovascular diseases (CVDs). Age, obesity and male sex are potent shared risk factors which link the two conditions. Although severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) principally affects the lungs, about two thirds of patients demonstrate some cardiac involvement including new-onset cardiac dysfunction during the course of the illness. As outlined in this video, cardiovascular manifestations of COVID-19 are complex with patients presenting with one or more of the following: myocarditis, acute myocardial infarction, stroke, cardiomyopathy, heart failure, arrhythmias, acute pericarditis, and venous thromboembolism. Preexisting CVDs such as hypertension and coronary heart disease make people more vulnerable to SARS-CoV-2 infection. Preexisting CVDs also adversely impact clinical outcomes of COVID-19. Adjusting health service delivery to effectively meet the cardiac and stroke care needs of people during the pandemic remains a challenge. Doctors caring for COVID-19 patients need to be aware of the potential cardiovascular side effects of various therapies used for treating SARS-CoV-2 infection, including chloroquine/hydroxychloroquine and azithromycin. Today, nine months after COVID-19 emerged, science has given us a better understanding of COVID-19. Further research is essential to gain an in-depth insight into the underlying mechanisms that shape the close interplay between SARS-CoV-2 infection and CVDs. Further reading: The COVID-19 Story. <https://www.amazon.co.uk/COVID-19-Story-CoronaVirus-Disease-2019-ebook/dp/B08MQJ934F>

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Corresponding author: Shanthi Mendis, MBBS, MD, FRCP, FACC, Geneva Learning Foundation, Geneva, Switzerland, E-mail: prof.shanthi.mendis@gmail.com

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