Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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JACC May 11, 2021
Volume 77, Issue 18

Complex Clinical Cases

COVID-19 TRIGGERED ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION

Poster Contributions
Saturday, May 15, 2021, 1:15 p.m.-2:00 p.m.

Session Title: Complex Clinical Cases: FIT COVID-19 1
Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Having now been defined as a pandemic and infecting over 13 million people in the United States alone, COVID-19 has been found to have debilitating and potentially lethal complications. Commonly defined as a respiratory virus latching onto the ACE2 receptor leading to mild to severe respiratory complications, nonspecific flu like symptoms, and a hypercoagulable state. There have been very few cases reported in literature of sequelae of hypercoagulation due to COVID-19 such as stroke or myocardial infarction.

Case: A 33-year-old male with a medical history only significant for COVID-19 infection presented to the emergency department (ED) with progressively worsening, 7 out of 10, non-radiating, neck and chest pain without any shortness of breath or palpitations. He was vitally stable and physical exam was unremarkable but was noted to have ST-segment elevations in the inferior-lateral leads on electrocardiogram. Initial troponin levels were 39.35 ng/mL (normal value <0.04 ng/dL).

Decision-making: He was immediately loaded with 325 mg of aspirin, 180 mg of ticagrelor, and 4000 units of heparin and taken emergently to the catheterization lab where he was given an additional 6000 units of heparin. He was found to have complete occlusion of the proximal right coronary artery and 70% occlusion of the right proximal lateral artery and received 2 resolute onyx drug-eluding stents. Post cardiac catheterization echocardiogram showed an ejection fraction of 55-60% with inferior hypokinesis. He was then transferred to the cardiac intensive unit for observation where his troponin peaked at 73.48 ng/mL. 24 hours later he remained asymptomatic and stable and was transferred to the telemetry floors ultimately being discharged within 72 hours of admission on dual antiplatelet therapy for at least one year.

Conclusion: Our case aims to express the possible cardiovascular complications of COVID-19 in a patient without any risk factors or history predisposing to cardiac disease, making the presentation even more striking. Current treatment regimens for COVID-19 now includes anticoagulation in order to prevent hypercoagulable sequalae and decrease patient morbidity and mortality.