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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Complex Clinical Cases

RAPID RECOVERY OF COVID-19 RELATED MYOPERICARDITIS

Poster Contributions
For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Covid
Abstract Category: FIT: Coronavirus Disease (COVID-19)

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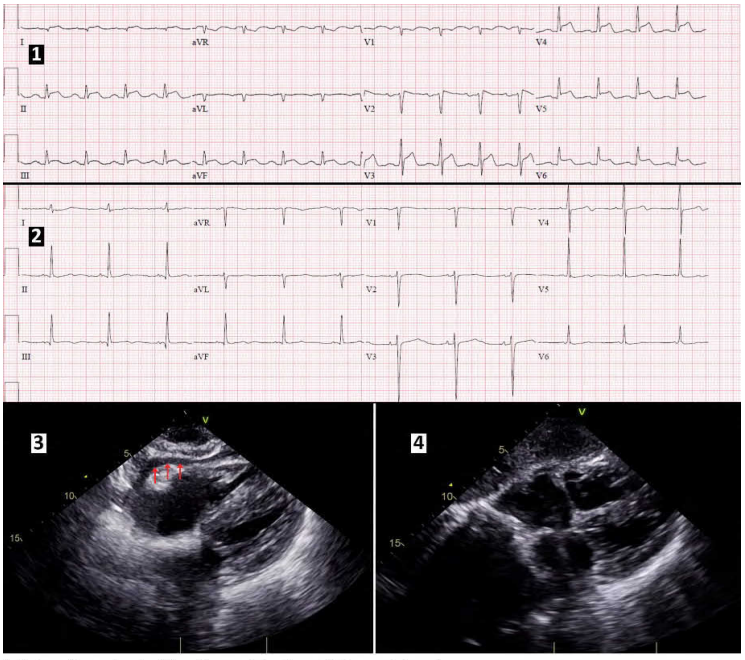
Background: Coronavirus disease 2019 (COVID-19) has multiple cardiovascular implications due to direct or indirect cardiac injury by cytokine release.

Case: 59-year-old female presented with lethargy and altered mental status. She was hypothermic to 92.9 F, hypoglycemic to 50 mg/dL, and hypoxic to SpO2 of 70% with cyanotic features requiring intubation for airway protection. Electrocardiogram (EKG) showed diffuse ST-segment elevations and PR-segment depression. Pro-BNP level was 12400 pg/mL. Troponin was high and increasing; peaking on day 2 at 2.31 ng/mL.

Decision-making: Hydrocortisone, levothyroxine, and broad-spectrum antibiotics were started. Subsequently, COVID-19 PCR was positive. She was unvaccinated against COVID-19. Echocardiogram showed ejection fraction (EF) of 20%, thickened myocardium and small pericardial effusion. Lactate dehydrogenase (LDH) was greater than 2500. Colchicine and dexamethasone were given due to presumed COVID-19 myopericarditis. Cardiac catheterization wasn't performed due to worsening renal function. Repeat echocardiogram five days later showed EF of 69%, resolution of pericardial effusion and EKG changes. Rheumatological and endocrinological workups were negative.

Conclusion: COVID-19 associated with elevated LDH can cause myopericarditis and cardiomyopathy, likely due to cytokine-mediated injury to myocytes. Intravenous Immunoglobulin (IVIG) has shown promising results; however, no certain treatment recommendations are available.



1: Electrocardiogram showing diffuse ST-segment elevations and PR-segment depressions
2: Repeat electrocardiogram with resolved ST-segment changes
3: Initial echocardiogram with pericardial effusion and myocardial wall thickening
4: Repeat echocardiogram 5 days later showing resolved pericardial effusion