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

UNICUSPID AORTIC VALVE CONCOMITANT WITH INFECTIVE ENDOCARDITIS AND SEVERE AORTIC REGURGITATION IN A PATIENT WITH COVID-19

Poster Contributions
Monday, May 17, 2021, 10:45 a.m.-11:30 a.m.

Session Title: Complex Clinical Cases: FIT Covid-19 3
Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Unicuspid aortic valve (UAV) is a rare congenital heart disease. We report a case of a young male who presented with COVID-19 and found to have UAV concomitant with infective endocarditis (IE) and severe aortic regurgitation (AR).

Case: 28-year-old male with history of polysubstance abuse presented with worsening generalized weakness, fever, cough, and respiratory distress. COVID-19 PCR was positive. He developed acute hypoxic respiratory failure requiring mechanical ventilation. Hospital course was complicated by septic shock requiring multiple pressors, MRSA pneumonia, serratia marcescens bacteremia, PEA arrest due to hypoxia, acute kidney injury requiring hemodialysis, and acute liver failure.

Decision-making: TTE revealed low normal LVEF, moderate-severe AR, and prolapsing aortic valve leaflet. TEE revealed UAV with vegetation on AV leaflet and severe AR. Cardiothoracic surgery recommended aortic valve replacement after medical optimization. Prognosis of patients with UAV complicated by IE and severe AR and sepsis with multi organ failure is very poor. In our case, his condition was further complicated by COVID-19. Our case possessed unique challenges in management of this rare disease during COVID-19 pandemic. Unfortunately, our patient eventually succumbed due to complications from multi organ failure.

Conclusion: We discussed a case of a patient with COVID-19 with multi organ failure who is found to have UAV concomitant with IE and severe AR.