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COVID-19: The Cause or the Confounder

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Abstract: A 59-year-old male with no known co-morbidities was admitted to a private hospital for complaints of fever and cough and was diagnosed to haveCOVID-19. CT of the thorax revealed the involvement of 50% of the lungs. Screening ECG and ECHO were normal. The patient was treated with oxygen therapy and drugs and was discharged after 12 days of admission. Post-discharge, the patient remained symptom-free and continued his work. After one month, the patient developed a fever for three days, for which he took antipyretics. Subsequently, the patient developed sudden onset breathlessness, which rapidly progressed to grade 4 NYHA, and developed a cough as well. Suspecting COVID-19 reinfection, the patient visited a nearby hospital, where COVID-19 rt-PCR swabs turned out to be positive, and was referred to our hospital. On receiving, the patient had diffuse lung crepitations and a diastolic murmur in the neo-aortic area. CT thorax revealed pulmonary edema with areas of consolidation. ECHO revealed vegetation on the aortic valve with severe aortic regurgitation. Blood cultures were taken, which revealed the growth of Enterococcus faecalis. The diagnosis of infective endocarditis was made, and the patient was started on appropriate treatment. COVID-19 has effects on various systems, including the cardiovascular system. Even though infective endocarditis is common in the elderly with valvular heart disease, this patient had developed infective endocarditis in an apparently normal aortic valve. Infective endocarditis and COVID-19 can have similar presentations leading to diagnostic difficulties. COVID-19, affecting the heart valves causing valvulitis and predisposing them to the development of infective endocarditis, is also an area to be explored.

Keywords: aortic regurgitation, COVID-19, infective endocarditis, valvulitis

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