

COVID-19 Related Myopericarditis in A 29-year-old Patient: A Case Report

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The manifestations of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), also known as COVID-19, are mainly characterized by respiratory symptoms. However, cardiac manifestations such as acute myopericarditis have been reported to be associated with COVID-19 infection. A 29-year-old female patient presented with a 2-day history of fever, cough, runny nose, and myalgia, and tested COVID-19 positive at Penang General Hospital, Pulau Pinang, Malaysia. On day 2 of admission, the patient complained of acute onset central chest pain, radiating to her back, associated with cold sweat, shortness of breath and generalised body ache. On examination, tachycardia and tachypnoea were elicited. The serial electrocardiography (ECG) showed persistent non-specific sinus tachycardia. Troponin T level was elevated at 99 ng/L (normal <15 ng/L) and creatine kinase (CK) was at 10990 U/L (normal: <190 U/L). Her chest radiograph revealed cardiomegaly and otherwise clear lung field. CT pulmonary angiogram demonstrated evidence of bilateral pleural effusion and pericardial effusion and ruled out pulmonary embolism. The diagnosis of myopericarditis was established based on clinical, electrocardiographic, radiological, and biochemical findings. She was treated successfully with IV morphine, oral colchicine, ibuprofen, and oxygen therapy. A follow-up echocardiogram 10 weeks post-COVID demonstrated complete resolution of pericardial effusion, with an ejection fraction of >70%. COVID-19 patients may develop severe cardiac complications such as myopericarditis. Clinicians should have a high index of suspicion of COVID-related myopericarditis in COVID-19 management. Further study should be implemented to investigate the association between COVID-19 and myopericarditis.

Keywords: COVID19, Myopericarditis, Pericarditis

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