

## **PP10 COVID-19: NOT JUST A RESPIRATORY DISEASE**

N MOHD KAMIL<sup>1</sup>, NF ABD RAHMAN<sup>2</sup>

<sup>1</sup> *HOSPITAL SIBU, SARAWAK, MALAYSIA*

### **INTRODUCTION:**

Cardiac manifestations of coronavirus disease 2019 (COVID-19) are common but could be missed because patients might be asymptomatic with or without clinical signs, or symptomatic of heart failure, which could easily be misperceived as non-cardiac. We present a case of a 25-year old gentleman without any medical illnesses, who was diagnosed with COVID-19 myocarditis.

### **CASE:**

This patient was initially admitted to Low-Risk Quarantine and Treatment Centre for mild COVID-19. Upon daily assessment, he complained of intermittent palpitations and noted to be persistently tachycardic; hence was sent to Hospital Sibü. In the Emergency Department, he had a transient episode of symptomatic bradycardia which was spontaneously reverted. Soon afterwards, he developed supraventricular tachycardia that was initially resistant to adenosine but eventually reverted with verapamil.

### **RESULTS:**

He had type one respiratory failure, his troponin was raised, and his chest X-ray showed bilateral ground glass opacities. His subsequent electrocardiogram (ECG) showed sinus rhythm with paroxysmal ventricular and atrial contractions. He underwent Computed Tomography Pulmonary Angiogram (CTPA) which showed features of organizing pneumonia but no evidence of pulmonary embolism. He was admitted to the Intensive Care Unit

(ICU), responded well to antiviral and high-dose steroid therapy, and was discharged well after a week.

### **DISCUSSION:**

COVID-19 could lead to myocardial injury directly via viral-induced myocarditis or secondary to stress, hypoxia, ischaemia, cytokine storm, or right heart strain. Researchers suggested that these coronaviruses might have cardiotropism effect on infected animals. COVID-19 patients with new-onset heart failure or ECG abnormalities including cardiac arrhythmias, combined with elevated troponin level, should point towards the diagnosis of myocarditis or myocardial injury. Further assessment would only be necessary if it would change the treatment; and the long term effects of these patients are still unknown.

### **CONCLUSION:**

COVID-19 myocarditis is challenging to manage because of its chameleonic manifestations and restrictions of further diagnostic modalities due to the disease transmissibility. Nevertheless, a high index of suspicion could help prevent potential morbidities and mortalities