Fatal Intruder to the Heart in COVID-19 Pandemic

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ABSTRACT

Introduction: Coronavirus disease (COVID-19) is the disease caused by a new coronavirus called SARS-CoV-2, which commonly demonstrates respiratory complications from mild upper respiratory tract infection (URTI) to severe Acute Respiratory Disease (ARDs). Yet, there is increasing number of patients who presented to our emergency department (ED) with cardiac complaints only. The objective of this clinical case report is to highlight this unusual presentation to raise our alertness when dealing with our patients during this pandemic. **Methods**: Three different ages of patients presented to our ED with different cardiac manifestations which are palpitation, epigastric pain and also left sided chest pain respectively. They also presented with different ECG findings. Without any respiratory symptoms, those three patients had positive COVID-19 Antigen Rapid Test Kit (RTK-Ag). **Results**: The pathophysiology of myocardial injury in COVID-19 patients is still unclear and lack of substantial evidences. Few studies showed COVID-19 infection can lead to arrhythmia; myocarditis; heart failure as late consequence, or even death. COVID-19 infection is truly a fatal intruder to the heart. **Conclusion**: This case report demonstrates the need for further studies and investigations for cardiovascular system in handling COVID-19 patients for early detection, in order to provide better hospitalisation treatment and improve patients' prognosis, or even post-recovery care.

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A Life Threatening Time Bomb in Your Lung: A Rare Cause of Hemodynamic Instability in Young Adult

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ABSTRACT

Introduction: Spontaneous hemopneumothorax (SHP) is a rare and potentially life-threatening. From all spontaneous pneumothorax cases, the incidence of SHP has been reported about 1-12%. **Methods:** The objective of this clinical case report is to highlight the importance of early recognition, proactive management and also early consideration of surgical intervention in dealing SHP patients. **Results:** A 38-year-old Asian gentleman with no known medical illness presented with sudden onset of left sided chest pain and shortness of breath. He was an active smoker with 20 packs year of smoking. On arrival, patient was hemodynamically unstable. Cardiopulmonary examination revealed significant reduced air entry over left lower zone with hyper-resonance percussion. Chest X-ray demonstrated left pneumothorax with left lower zone pleural effusion. Thoracostomy tube was inserted over the left lung. Subsequently, patient underwent blood transfusion in view of hypotension and significant drop in haemoglobin. A CECT thorax and CT Angiography thorax were done. Surgical team inserted second thoracostomy tube over the left lung. A total of 1.9 liters of blood was drained out from both chest tubes within 6 hours. Patient was then transferred to cardiothoracic centre (CTC) Hospital Penang for surgical intervention. This case report demonstrates the need for establishing a clear basic guideline in the management of spontaneous hemopneumothorax, in order to improve patient's prognosis and also early consideration of surgical intervention. **Conclusion:** In future, transthoracic ultrasonography can be considered as a bedside tool to differentiate bullous emphysema from pneumothorax.