PP90 THE COLLAPSING COVID-19 PATIENT - ARE YOU CONSIDERING ACUTE PULMONARY EMBOLISM?

FAREENA ZAHARI, JYO CHONG, NORDIANAH ABDUL RAHMAN, RIDZUAN MOHD ISA[1]

[1] *HOSPITAL AMPANG, SELANGOR, MALAYSIA*

INTRODUCTION

The Coronavirus disease 2019 (COVID-19) is associated with an increased risk of thromboembolism. This case report highlights the diagnostic challenges of pulmonary embolism (PE) in cardiac arrest during the COVID-19 pandemic and emphases the role of point of care ultrasound (POCUS) on its diagnostic and therapeutic management.

CASE DESCRIPTION

We report on a 62years old slightly overweight gentleman, with no previous medical illness. He developed a witnessed non shockable cardiac arrest in the ambulance while he was enroute to the hospital. An Advance Cardiac Life Support protocol was initiated and continued in the resuscitative zone of the emergency department. A provisional diagnosis of massive PE with obstructive shock was made following the evidence of right ventricular (RV) dysfunction on bedside ECHO and a positive two-point compression test over the swollen right lower limb. A sustained return of spontaneous circulation (ROSC) was only achieved after the IV administration of thrombolysis, and a subsequent CT pulmonary angiogram (CTPA) confirmed the diagnosis of PE. Further history revealed that he had cough for 1 week associated with lethargy and dyspnea. PCR for COVID-19 was positive. However, no obvious risk factors for PE were noted.

DISCUSSION

PE has been associated with 5 – 13% of cardiac arrest patients. However, with the spread of the COVID-19 pandemic and the hypercoagulable nature of the disease, it is unclear if the prevalence of PE in cardiac arrest has increased. The diagnostic challenges also occur in PE associated cardiac arrest related to COVID-19 as the risk factors are dissimilar to the classical risk factors. Well's score was demonstrated to be unreliable. Therefore, a strong clinical suspicion and the use of POCUS to identify obstructive shock caused by PE is essential in cardiac arrest associated with COVID-19.

CONCLUSION

We reaffirm the use of POCUS in COVID-19 related cardiac arrest. POCUS is an important bedside tool that can help in the rapid identification of thromboembolic events manifestation of COVID-19 disease during the current pandemic and is potentially lifesaving.

KEYWORDS: Pulmonary Embolism, POCUS, COVID-19