

PP54 THREE IS A CROWD

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INTRODUCTION

Coronavirus Disease 2019 (COVID-19) presents with various clinical manifestations from asymptomatic to severe respiratory distress, multiple organ dysfunction and death. Hypercoagulable state in COVID 19 increased risk of venous thromboembolism with pulmonary embolism (PE) as the commonest manifestation. Aortic dissection (AD) which has similar presentation to PE but with lower incidence rate, should be considered as differential. Immediate accurate diagnosis of these scenarios is crucial to initiate the appropriate interventions.

CASE DESCRIPTION

22 year-old male, underlying hypertension and history of COVID 19, presented with dyspnea. Clinically he appeared tachypneic, hypertensive and tachycardic. Systemic examination was unremarkable. Electrocardiogram showed sinus tachycardia with S1Q3T3. Chest X-ray showed no widened mediastinum and clear lung field. Echocardiogram showed aortic root was 4.5cm, minimal pericardial effusion, descending aorta was 2.2 x 2.4 cm, abdominal aorta showed intimal flap, no right ventricle dilatation. Computed tomography angiogram was done and showed bilateral lower lobe segmental branch PE and extensive AD from aortic root to iliac artery. This patient was treated

as PE and chronic AD (cAD), and was started on anti-coagulant.

DISCUSSION

PE as a complication of COVID-19 is well documented and leads to high mortality. Typical presentation is dyspnea and chest pain. Treatment is anticoagulant and thrombolysis for massive/sub-massive PE. AD may also present similarly but treatment is totally the opposite. Although rare, PE and AD can present concomitantly and poses a management conundrum. An acute AD is associated with very high mortality while cAD have a slightly better prognosis. cAD presentation can be vague, non-specific and usually occurs after 2 weeks. The general prognosis depends on the location of the dissection and the extent to which corresponding vessels. In view of the diagnoses, our patient was treated conservatively with close monitoring, vigilant blood pressure control and frequent consultation with cardiologist. Patient was started on anti-coagulant prior to discharge with early follow-up.

CONCLUSION

AD and PE can mimic each other and could present simultaneously especially where there is a history of hypercoagulable state in COVID 19. Therefore, clinicians should have a high degree of clinical suspicion in approaching such cases.

KEYWORDS

Aortic dissection, pulmonary embolism, COVID 19