## **COVID-19 and Aortic Thrombus: A Deadly Combination**

Omar Y. Alkhaja, BSc, MD\* Abdulla A. Khaled, BSc, MD\*\*

## **ABSTRACT**

Background: Coronavirus disease 2019 (COVID-19) continues to be associated with additional presentations and complications. COVID-19 can affect the extra-pulmonary system and alter the pathophysiology of the arteriovenous system leading to thromboembolic complications. We present here a case of COVID-19 associated with aortic arch thrombus in a patient on anticoagulants.

Case report: A 58-year-old male with diabetes mellitus and bronchial asthma was admitted to the intensive care unit (ICU) with severe acute respiratory syndrome where he was immediately placed on antivirals and antibiotics as well as therapeutic doses of anticoagulants. In the 8th day of admission, he was found to have elevated D-dimer and inflammatory markers. His chest radiography showed worsening bilateral air space opacities particularly in the periphery of the left lung. Computed tomography (CT) angiography of the pulmonary arteries (CTPA) revealed acute thrombus in the aortic arch with bilateral extensive pulmonary consolidations and ground glass opacities. He was immediately placed on heparin infusion and discharged on the 18th day in stable conditions.

Conclusion: Despite the administration prophylactic dose of anticoagulants, COVID-19 patients have the risk of developing arterial or venous thrombosis that can lead to an urgent need to understand the process of this complication to reduce delayed diagnosis and mortality.

Keywords: COVID-19, Aortic thrombus, Elevated D-dimer, Anticoagulants

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E-mail: Abdulla3likhaled@gmail.com

Mohammed Bin Khalifa Specialist Cardiac Centre Bahrain.

<sup>\*\*</sup> Department of Radiology

Bahrain Defense Force Hospital

Bahrain.