Confusing elements in a COVID-19 patient

Vassili Panagides¹, Eloi Prudhomme¹, Claire Stein¹, and Jennifer Cautela¹

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Abstract

We herein present illustrative clinical images of a large intra cardiac thrombus of a 72 year old man presenting with a SARS-CoV-2 viral infection.

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Vassili Panagides¹, MD; Eloi Prudhomme², MD; Claire Stein², MD, Jennifer Cautela³, MD

- 1: Aix Marseille University, intensive care unit, Department of Cardiology, Hopital Nord, Marseille, France
- 2 : Assistance Publique Hôpitaux de Marseille, Hôpital Nord, Médecine Intensive Réanimation 13015 Marseille, France
- 3: Heart Failure and Valvular Heart Diseases Unit, Department of Cardiology, Mediterranean University Cardio-Oncology Center (MEDI-CO Center), Hôpital Nord, Aix-Marseillel University, Marseille, France

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Short abstract: We herein present illustrative clinical images of a large intra cardiac thrombus of a 72 year old man presenting with a SARS-CoV-2 viral infection.

Image:

A 72-year-old man was referred for acute respiratory failure associated with cough and fever. He had a past medical history of chronic obstructive pulmonary disease and ischemic cardiopathy. His baseline medication included a dual anti platelet therapy. Few hours after his admission we noticed a rapid degradation of his lung function requiring oro-tracheal intubation and he was transferred to the intensive care unit. We performed a real-time reverse transcriptase-polymerase chain reaction of lower respiratory tract aspirate that was positive for SARS CoV-2. His chest computed tomography (CT) had typical manifestations of the disease with consolidation and reticular pattern, without visible pulmonary embolism. High fever motivate the realization of blood culture that showed a bacteremia of Staphylococcus lugdunensis. Thus, we performed a trans-esophageal echocardiography that showed two surprising elements. First, we discovered a thin structure in the anterior agric sinus that could have been mistaken with a vegetation. It appears that it was the stent struts of the right ostial coronary artery (Panel A and B) confirmed by CT. We also discovered a lobulated fixed mass which was related to the atrial septum ($Panel\ C\ and\ D$). In the clinical context of SARS-CoV-2 infection, the main diagnosis suspected was a large thrombus. The severity of the patient did not allowed us to perform other exams to rule out any differential diagnosis. This interesting case highlights the serious pro-coagulable state in this devastating disease and the interest of repeating cardiac imaging even in the absence of pulmonary embolism (1,2).

Legend:

Panel A: Short axis view of the aortic valve

 $Panel\ B$: Longitudinal view of the aorta

Panel C: Pulmonary injected acquisition of the chest computed tomography

 $Panel\ D$: View of the interatrial septum

Ao: aorta; LA: left atrium; LV left ventricle; RA: right atrium; RV: right ventricle

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