


Complete aortic thrombosis in SARS-CoV-2 infection

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A 74-year-old man with a history of diabetes mellitus, coronary artery disease, and previous myocardial infarction presents to the emergency department with cardiogenic shock. Cardiopulmonary resuscitation and emergency care were performed. The patient's consent for publication was obtained.

His laboratory values were remarkable for leucocytosis of 25.2 cells/L (4.5–11.0), PT 17.2 s (12–14.5), INR 1.9 U (<1.0), PTT 30.9 s (23.9–36.6), and d-dimer >20 µg/mL (<0.5). C-reactive protein was significantly elevated at 226.3 mg/L (0–5), creatine phosphokinase was 178 U/L (30–178), and lactate dehydrogenase 1405 U/L (<205).

Three-dimensional computed tomographic (CT) angiography revealed the complete thrombotic occlusion of the aorta, arising from the descending aorta and including all the visceral arteries, celiac trunk, superior mesenteric artery, and left and right renal arteries (Panel A; [Supplementary material online, Video S1](#)). Multifocal ground-glass opacities were visualized in the bilateral lungs (Panels B and C). Diagnosis of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was confirmed by reverse transcriptase–polymerase chain reaction analysis. The patient died immediately after the CT scan.

COVID-19 infection due to the SARS-CoV-2 virus has shown to be associated with a hypercoagulable state. Excessive inflammation triggered by the cytokine storm, the massive macrophages, and platelet activation and endothelial dysfunction should be associated with the development of coagulopathy.

[Supplementary material](#) is available at *European Heart Journal* online.

Conflict of interest: The authors have submitted their declaration which can be found in the article [Supplementary Material online](#).

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