Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Complex Clinical Cases

INCIDENTAL DISCOVERY AND MANAGEMENT OF LARGE VESSEL ARTERIAL THROMBI-IN-SITU IN SARS-COV-2

Poster Contributions
For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Covid
Abstract Category: FIT: Coronavirus Disease (COVID-19)

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Background: Arterial in-situ thrombi are extremely uncommon but have been reported in severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Optimal management of these events is evolving, and long-term outcomes are not well defined.

Case: A 63 year-old man without significant medical history presented with symptoms of accelerating respiratory illness diagnosed as COVID-19. CT imaging of the chest revealed sub-segmental pulmonary emboli and multiple large thrombi in the descending thoracic and abdominal aorta, as well as at the left renal and femoral artery branch points. Thrombi were abluminal, adjacent to the vessel walls with calcified atherosclerotic plaques.

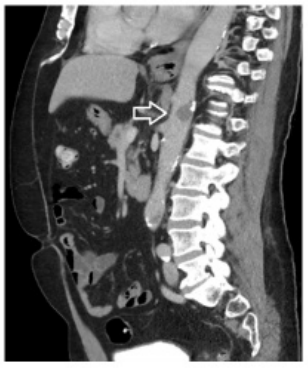
Decision-making: Hypercoagulable work-up was unrevealing. LV systolic function was normal, and no arrhythmia was documented to explain arterial thrombi. In addition to supportive COVID-19 care, systemic anticoagulation with low-molecular weight heparin was initiated, and subsequently transitioned to an anti-Xa oral agent. Repeat CT angiography at 4 week follow up demonstrated complete resolution of arterial thrombi.

Conclusion: In addition to the venous thromboembolic events, SARS-CoV-2 may lead to large vessel arterial in-situ thrombi despite preserved cardiac output and in the absence of arrhythmia. Despite the significant thrombotic burden, the associated coagulopathic state appears to be both acquired and transient, resolving with the acute systemic process and prospective anticoagulation.

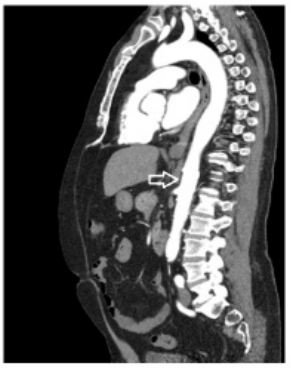
Evolution of Large Vessel Arterial Thrombi-in-Situ in SARS-CoV-2

Baseline 2020 CT demonstrating calcific disease of the descending and abdominal aorta, but no evidence of chronic thrombus

2021 CTA Chest for assessment of pulmonary embolic disease reveals incidental descending and abdominal aortic thrombi. *In coronal view*



2021 CT Chest and Abdomen demonstrating abluminal aortic thrombi adjacent to the vessel walls with calcified atherosclerotic plaques. *In sagittal view.*



2021 CTA follow up study obtained 4 weeks after initial diagnosis demonstrating interval resolution of aortic thrombi. *In sagittal view.*