



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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

☆ **Complex Clinical Cases**

COVID COAGULOPATHY ASSOCIATED AORTIC THROMBUS, PULMONARY EMBOLI, WITH RETROPERITONEAL HEMATOMA: A THERAPEUTIC DILEMMA

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)

Authors: *Sangeetha Isaac, Mohammed Afraz Pasha, Richi Kashyap, Jan Westerman, North Alabama Medical Center, Florence, AL, USA*

Background: Endotheliitis due to the direct effect of SARS-CoV-2 on vascular endothelial cells and hypercoagulability induced by COVID-19 infection has been postulated to cause thrombosis in these patients. Although there is substantial evidence of venous thromboembolic (VTE) events in patients with COVID-19, data on the incidence of arterial complications is limited. We present a patient with arterial and extensive venous thrombosis secondary to COVID-19 with significant hemorrhagic complications.

Case: A 64-year-old lady with no past medical history presented with acute onset dyspnea and was diagnosed with COVID-19 pneumonia. She had acute hypoxic respiratory failure requiring mechanical ventilation. D-dimer was 17.48 µg/mL and CTA chest revealed a large thrombus (27 mm craniocaudally) within the descending thoracic aorta and acute bilateral pulmonary emboli. Heparin infusion was initiated but she subsequently developed left rectus sheath hematoma and retroperitoneal hematoma.

Decision-making: Emergent transfusion with 5 units of red blood cells administered and Inferior Vena Cava filter placed due to hemorrhagic complication. She, unfortunately, developed multiorgan failure leading to death.

Conclusion: Nonrandomized studies recommend thrombosis prophylaxis when sepsis-induced coagulopathy (SIC) score ≥ 4 or D-dimer > 3.0 µg/mL. We present a rare case of aortic thrombus associated with COVID-19 coagulopathy. Further studies are needed for recommendations on optimal therapy.

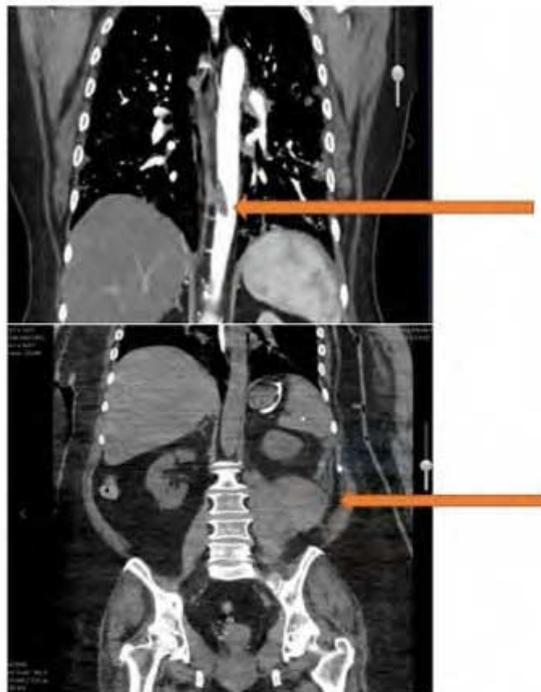


Image 1: Showing Aortic thrombus measuring 27 mm in the craniocaudal dimension.

Image 2: Left-sided retroperitoneal hematoma