

A patient with Factor V Leiden mutation who developed a Pulmonary Embolism and Deep Vein Thrombosis post Covid

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Introduction: A well-known sequelae of infection with Covid-19 is coagulopathy, which presents as a prothrombotic state in the acute and chronic phases of infection. Current literature outlines the incidence of Covid coagulopathy in patients without a previous history of hypercoagulability, however few sources have examined the consequences of Covid coagulopathy in patients with existing prothrombotic states. We present a case of a patient with a known hypercoagulable condition presenting with covid coagulopathy.

Case Presentation: A 53-year-old male with a past medical history of Factor V Leiden mutation on warfarin, atrial fibrillation, and Covid pneumonia complicated by hypoxic respiratory failure 6 weeks ago presented to the emergency department at the University of Toledo with a chief complaint of bilateral arm pain of 2 days duration, along with redness and swelling of his arms. Patient reportedly had a supratherapeutic INR of 8.8 two days prior to presentation, and became subtherapeutic after vitamin K administration, with an INR of 1.64 one day prior to presentation. In the ED, physical exam was notable for diminished pulses in the upper extremities. CT of the upper extremities was negative for arterial occlusion, but CTA chest did reveal a pulmonary embolism. Patient had recurrent pain in the arms, and on day 3 of admission, ultrasound of the upper extremities revealed bilateral deep venous thromboses.

Conclusion: Patients with known thrombophilic disorders are at risk for covid coagulopathy. Closer monitoring of anticoagulation therapies is warranted for these patients who contract Covid-19 to minimize the risk of thromboembolic events.