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STEMI IN A COVID-19 PATIENT WITH FACTOR V LEIDEN ON DIRECT-ORAL ANTICOAGULATION THERAPY

Moderated Poster Contributions
Complex Clinical Cases Moderated Poster Theater 3_Hall C
Saturday, April 2, 2022, 10:45 a.m.-10:55 a.m.

Session Title: CVT Team Work Makes the Dream Work: Exemplary Team-Based Cases!
Abstract Category: CVT: Coronavirus Disease (COVID-19)
Presentation Number: 1010-11

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Background: Factor V Leiden (FVL) is the most common inherited form of thrombophilia implicated in increasing baseline risk of venous and arterial thromboembolism. In this case, we describe a rare report of COVID 19 associated ST elevation Myocardial Infarction (STEMI) in a patient with a baseline FVL mutation, while on anticoagulation with Direct Oral Anticoagulants (DOAC) therapy.

Case: A 75-year-old male with past medical history of coronary artery disease, FVL complicated by recurrent deep vein thromboses and pulmonary emboli on DOAC (apixaban) therapy presenting for acute hypoxic respiratory failure secondary to COVID 19 infection in the setting of elevated inflammatory markers. Acute ST-elevations on telemetry leads with EKG performed confirming acute anterolateral ST-elevation myocardial infarction. Emergent coronary angiography demonstrated total occlusion of middle left anterior descending (LAD) artery. Subsequent thrombectomy revealed large intra luminal thrombus. A total of 3 stents were placed to the mid-distal LAD.

Decision-making: We report a rare case of a thrombotic STEMI in a patient with acute COVID-19 infection, elevated inflammatory markers, and preexisting FVL mutation on DOAC therapy. In patients with COVID-19 and underlying factors contributing to hypercoagulability, providers should have a high suspicion for thrombotic states and a low threshold for cardiac catheterization as early thrombectomy and initiation of anticoagulation may reduce risk of mortality.

Conclusion: Providers should consider prompt and aggressive anticoagulation strategies coupled with a low threshold to pursue diagnostic testing in patients with COVID-19 and pre-existing hypercoagulability disorders. Multidisciplinary patient care involving hematology is specifically indicated in these circumstances.