

Mural Ascending Aortic Thrombus In A Patient With Recent COVID 19 Infection

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Introduction

In COVID-19 patients, coagulation abnormalities and thrombosis are frequently found in both arteries and veins, despite prophylactic anticoagulation. The main thrombotic complications are deep vein thrombosis, microvascular thrombosis, and pulmonary embolism.

Case Presentation

A 49-year-old male with past medical history of type II diabetes mellitus and COVID 19 who presented with diabetic keto-acidosis, Non ST segment Elevation Myocardial Infarction and new onset superior cerebellar ischemic stroke. On trans-thoracic echocardiography, left ventricular ejection fraction was 20-25% with severe hypokinesis of the basal, mid inferior, lateral walls. Also, 1.9 cm x 1.2 cm well-circumscribed thrombus, attached to the greater curvature of the ascending aorta, superior to the right coronary cusp of the aortic valve was noted.

He was started on therapeutic enoxaparin and dual anti platelet therapy. CT angiography and trans-esophageal echocardiography 3 days later showed absence of the aortic mass, and total occlusion of the mid right coronary artery. There were no new neuro-vascular complications during his hospital stay and he was discharged on 20 mg rivaroxaben.

Discussion

Although venous thrombosis is well document in literature many cases of arterial thrombosis are now being reported with patients presenting with stroke and myocardial infarctions.

Although thrombus in the ascending aorta is rare due to the high pressure and high blood flow in this region, many cases of this are being documented . These thrombi can cause serious complications by embolizing to viscera and extremities causing infarcts. Treatment with therapeutic anticoagulation and a close watch for embolic events is recommended. Prophylaxis with anticoagulation is important to prevent these, but the dose and duration of is still being studied.