

# Left Ventricular Thrombus in Setting of COVID Myopericarditis

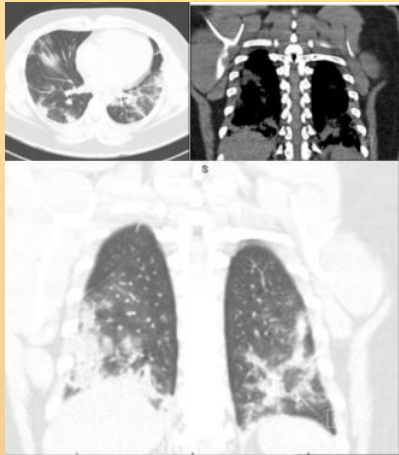
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## Introduction

COVID has been shown to induce acute arrhythmias, acute cardiac injury, acute-onset heart failure, myocardial infarction, myocarditis, and cardiac arrest

Myopericarditis is relatively common and usually shows a benign evolution.(2) However frequencies have been as high as 20% in critically ill COVID patients.

This is a unique case of complications associated with COVID myopericarditis.



## Case Report

32 yo healthy male recently diagnosed and conservatively treated for COVID after presenting with shortness of breath and chest CT showing bilateral returns to ED with positional chest pain.

Laboratory tests (Table 1) were initially unremarkable. Electrocardiogram showed ST elevation in anterolateral and inferior leads with no reciprocal changes.

Troponins quickly rose to 13.28 within 12 hours. He was started on colchicine and aspirin for concerns of pericarditis with resolution of chest pain

TTE revealed an ejection fraction of 45% with severe apical hypokinesis.

Repeat EKG after 2 days showed findings suggestive of anterolateral infarct.

A CT angiogram showed left ventricular ~1cm in diameter hypodense mass concerning for LV thrombus but no CAD.

The patient was started on apixaban over warfarin per request.

Discharged on colchicine and apixaban.

## Discussion

COVID myocarditis is frequently treated symptomatically based common resolution without intervention. However we should be aware of the rare complication of mural thrombi associated with this condition and consider early cardiac imaging. Early treatment can lead to prevention of thrombi and further complications associated with their treatment.

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2. Imazio M, Cecchi E, Demichelis B, et al. Myopericarditis versus viral or idiopathic acute pericarditis. *Heart* 2008;94:498-501.
3. Miró, Ó, Llorens, P., Jiménez, S., Pífera, P., Burillo-Putze, G., Martín, A., ... González del Castillo, J. (2020). Frequency of five unusual presentations in patients with COVID-19: Results of the UMC-19-S1. *Epidemiology and Infection*, 142, E189. doi:10.1017/S0950268820001910

