

Cardiovascular risk factors predict who should have echocardiographic evaluation in long COVID

Leonardo Tamariz¹, Mathew Ryan¹, George Marzouka R¹, Elizabeth Bast², Nancy Klimas³, and Ana Palacio¹

¹University of Miami School of Medicine

²VA Miami Healthcare System

³Nova Southeastern University

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Abstract

Background: The need for echocardiograms among patients with long COVID is debatable. Our aim was to evaluate the prevalence of left ventricular (LV) dysfunction and identify predictors. **Methods:** We conducted a cross-sectional study and included all consecutive patients enrolled in our post-COVID clinic. We included patients who had an echocardiogram and had no previous known heart disease. We defined LV dysfunction as a low ejection fraction or grade II to grade III diastolic dysfunction on an echocardiogram with evidence of elevated filling pressures. We calculated the prevalence of heart disease and predictors of heart disease using logistic regression. **Results:** We included 217 post-COVID patients enrolled in the clinic. The prevalence of LV dysfunction is 24%;95% CI 18-30. Predictors of heart disease include older age and a previous history of hypertension and diabetes or having an intermediate or high ASCVD score. Patients with low ASCVD score did not have low ejection fraction on the screening echocardiograms. **Conclusion:** Our study found a considerable number of patients with LV dysfunction. Older patients with cardiovascular risk factors are at risk of long COVID associated heart disease.

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