3-8-2022

DON'T BLAME THE VACCINE

Philip Vendittelli

Nicholas Coriasso

Andrew Boshara

Tarek Makki

Cristina Tita

See next page for additional authors

Authors

Philip Vendittelli, Nicholas Coriasso, Andrew Boshara, Tarek Makki, Cristina Tita, and Rami K. Zein

ACC22
APRIL 2 - 4 | WASHINGTON, DC

2570
JACC March 8, 2022
Volume 79, Issue 9, suppl A

Complex Clinical Cases

DON'T BLAME THE VACCINE

Poster Contributions
For exact presentation time, refer to the online ACC.22 Program Planner at https://www.abstractsonline.com/pp8/#!/10461

Session Title: Complex Clinical Cases: FIT Flatboard Poster Selections -- Heart Failure and Cardiomyopathies
Abstract Category: FIT: Heart Failure and Cardiomyopathies

Authors: *Philip Vendittelli, Nicholas Coriasso, Andrew Boshara, Tarek Makki, Cristina Tita, Rami Kassem Zein, Ascension St. John Hospital and Medical Center, Detroit, MI, USA, Henry Ford Health System, Detroit, MI, USA*

Background: The mRNA COVID vaccine is a rare cause of myocarditis in young patients. We describe a case of cardiogenic shock with extensive workup ruling out COVID vaccine induced myocarditis.

Case: 42-year-old female who drinks 5 Monster energy drinks and 3-4 cups of coffee daily presented to the hospital with palpitations two weeks following her mRNA COVID vaccine. EKG showed atrial tachycardia with heart rates of 160 beats per minute. Adenosine and Lopressor were administered resulting in hemodynamic instability requiring norepinephrine. An echocardiogram showed dilated cardiomyopathy with ejection fraction of 15%. Right heart catheterization was performed, and the cardiac index was 1.22 L/min/m^2, systemic vascular resistance was 1918 dynes*sec*cm^{-5} and wedge pressure was 31 mm Hg. The patient was started on nitroprusside, furosemide, and milrinone drips and she began to improve. The patient was adamant the vaccine is what triggered her heart failure and extensive testing was performed to rule out COVID vaccine induced myocarditis. Workup showed normal coronary arteries and no evidence of infiltrative disease or myocarditis on cardiac MRI. The etiology was from tachycardia induced cardiomyopathy triggered by excessive stimulants and the patient had successful atrial tachycardia ablation of the right superior pulmonary vein. She was discharged on medical therapy for heart failure and advised to stop drinking energy drinks.

Decision-making: Once the patient did not respond to the rate controlling agents an echocardiogram showed reduced ejection fraction. Right heart catheterization confirmed cardiogenic shock and nitroprusside and milrinone were started to help reduce afterload and improve contractility. Workup to exclude COVID induced myocarditis lead to the diagnosis of tachycardia induced cardiomyopathy and atrial tachycardia ablation was performed.

Conclusion: We report a case of cardiogenic shock with workup diagnosing tachycardia induced cardiomyopathy induced from a combination of excessive monster energy drinks and coffee. She was treated successfully with afterload reduction, inotrope support, and atrial tachycardia ablation.