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Brief Report

Trump Cardiomyopathy: A New Form of Takotsubo Cardiomyopathy

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ABSTRACT

An 84-year-old man developed angina while watching televised coverage of the President Trump impeachment hearings and presented to the emergency department with positive cardiac biomarkers and EKG changes indicative of ST-elevation myocardial infarction. Echocardiogram and coronary angiography were consistent with non-ischemic, 3 vessel coronary artery disease with apical hypokinesis resulting in the diagnosis of Takotsubo Cardiomyopathy. This case is the first report of politically-induced cardiomyopathy and warrants further evaluation of political stress as an etiology of cardiac events. (*J Cardiac Fail* 2020;00:1-3)

Takotsubo cardiomyopathy is a stress-induced apical ballooning of the left ventricle in the absence of angiographically significant coronary artery stenosis. It can mimic the symptoms and biomarker profile of myocardial infarction. Triggering events, such as loss of a loved one, psychological trauma and acute anxiety, can cause a catecholamine surge, possibly leading to coronary artery vasospasm and decreased oxygen delivery.⁴ Although most cases resolve with medical management, serious complications, such as heart failure, cardiogenic shock, thromboembolism, and ventricular rupture can occur.²

The etiologies of psychological distress that result in chest pain vary extensively. In the United States, a growing number of mental health specialists have identified a common source of stress: politics. Labeled "Trump Anxiety Disorder," psychiatrists have described a phenomenon of fear and anxiety related to current domestic politics.⁸ In this report, we describe a patient who became emotionally distraught due to political events and, in turn, developed stress-induced cardiomyopathy.

An 84-year-old male with a medical history of hypertension, hyperlipidemia, pulmonary embolism, and coronary artery disease presented to the emergency department with substernal chest pain. He reported above-average physical fitness and had a normal body mass index (21). The patient said he had been raking leaves the morning of the event but denied having any symptoms during the activity. Chest pain started several hours later, while he was watching televised coverage of the President Trump impeachment hearings. He stated that he became "extremely disturbed and shook up" due to the news coverage and noted sudden onset of chest discomfort. The patient denied contemporaneous stressors, such as familial, financial or social misfortunes. He sought medical attention within 30 minutes. The initial examination showed anterior ST-elevation, which is a concern for acute myocardial infarction (Fig. 1a), and the patient was taken for urgent cardiac catheterization. Angiography was indicative of nonobstructive 3-vessel coronary artery disease with diffuse apical hypokinesis (Fig. 1b,c). The study showed mild calcification with 10%-20% of normal flow in the left anterior descending artery; the left circumflex had 10% of normal flow, and the distal right coronary artery had 50% stenosis. There were no findings indicating embolism or other culprit physiology. The echocardiogram showed a left ventricular ejection fraction of 25%-30% with abnormal wall motion, including apical hypokinesis that is suggestive of stress-induced cardiomyopathy. A previous echocardiogram obtained $2^{1}/_{2}$ years earlier had demonstrated normal left ventricular ejection fraction and normal wall motion (Fig. 2). The patient's symptoms resolved after catheterization, and he was started on carvedilol, aspirin

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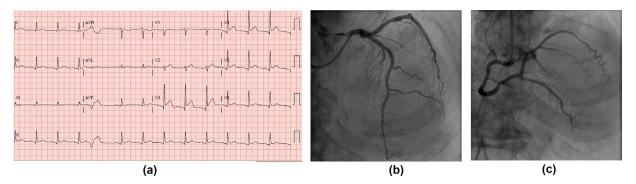


Fig. 1. Angiography indicative of nonobstructive 3-vessel coronary artery disease with diffuse apical hypokinesis.

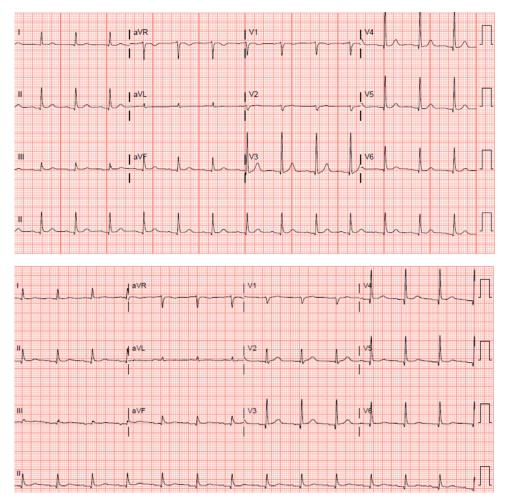


Fig. 2. (a) ECG 18 months prior to presentation, which shows normal sinus rhythm. (b) ECG at discharge, showing improvement of ST elevation and resolution of ischemia

and pravastatin in addition to his prior-to-admission hypertension regimen of lisinopril. He was discharged home with a plan to undergo cardiac rehabilitation and a repeat echocardiogram as an outpatient. At the time of follow-up evaluation (106 days after the initial presentation), the repeat echocardiogram showed normalization of the left ventricular ejection fraction and mild hypertrophy of the basal septum. This case illustrates the potential cardiac manifestations of distress related to political events. Although we cannot infer causation with certainty, the impact of political events on mental health has been well described,^{1,3,5,6} and to our knowledge, this may be the first report of a hospitalization due to politically induced stress cardiomyopathy.

The diagnosis of Trump Anxiety Disorder has been playfully discussed in medical journals and news outlets,^{1,3,5-8}

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but it appears that the "condition" may carry unexpected health risks that could be heightened in a presidential election year. In turn, we suggest that Trump Anxiety Disorder should be added to the list of potential triggers of Takotsubo cardiomyopathy.

Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.card fail.2020.05.016.

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