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Letter to Editor

LETTER TO EDITOR

Reply to 'Letter to the editor: Myocarditis should be considered in those with a troponin rise and unobstructed coronary arteries following PfizerBioNTech COVID-19 vaccination'

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Dewar Editor, We thank Dr Ioannou[1] for the comments and insight in response to our recent article, A spectrum of cardiac manifestations post PfizerBioNTech COVID-19 vaccination.

The patient in question presented with symptoms of myocardial ischemia with palpitations and shortness of breath post PfizerBioNTech COVID-19 vaccination. There was also a dynamic rise and fall of cardiac troponin, with the follow trend of 39 ng/l (first set), 108.9 ng/l (second set) and 180 ng/l (third set). This was in keeping with the fourth universal definition of myocardial infarction.[2] However, the coronary angiogram demonstrated unobstructed coronary arteries. The transthoracic echocardiogram also revealed preserved left ventricular ejection fraction of 60%. Without the lack of an obvious cause for the elevated troponin, myocardial infarction without obstructive coronary artery disease (MINOCA) was used as the dynamic working diagnosis while the underlying mechanism was explored.

Cardiac magnetic resonance (CMR) plays a pivotal role for the diagnosis of individuals with MINOCA, with its utility in identifying infarcted tissue or typical myocarditis pattern of late gadolinium enhancement. The Cardiology team offered CMR to the patient during the inpatient admission, but the patient chose not to proceed with this. In the outpatient follow-up clinic 1-month post-discharge, she was again offered to undergo CMR imaging, but has declined. She remained clinically well and asymptomatic during the outpatient review.

We thank Dr Ioannou for his insightful comments relating to our article. As rightly pointed out, vaccine-induced myocarditis has been well described in the medical literature.[3–6] In our patient with elevated troponin and non-obstructed coronary arteries, myocarditis should be considered as a differential diagnosis following the COVID-19 vaccination. CMR should be considered in patients with the working diagnosis of MINOCA, although the patient declined further investigation in this particular case.

Conflict of interest. None declared.

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