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Letter to the Editor

Response to most of the patients classified under "Myocardial infarction with non-obstructive coronary arteries (MI-NOCA)" have either no MI or no NOCA

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Your letter brings up important points that we would like to address. We disagree with your conclusion that because there was no evidence of infarction on MRI in 81% of our study cohort, these patients did not have MI. It is recognized in the ESC position paper on MI with nonobstructive coronary arteries (MINOCA) that peak troponin >100 times the upper limit of normal may be observed in the absence of LGE [1]. MRI findings of LGE are not required in the universal definition of MI.

In our experience studying the mechanisms of MINOCA, ST elevation on ECG does not imply missed obstructive coronary disease. Despite careful angiography review of all cases of MINOCA at our center, we have rarely identified missed obstructive disease. We cannot rule out the possibility of transient occlusion before angiography, such as due to coronary artery spasm or thrombosis with spontaneous thrombolysis, however.

Spontaneous coronary artery dissection (SCAD) can present as MINOCA. While the majority of SCAD cases result in obstruction of >50% of the coronary lumen, up to 13% of SCAD cases are non-obstructive and meet AHA/ESC criteria for MINOCA [1–3].

We defined takotsubo syndrome (TTS) in accordance with established CMR criteria [4]. While the presence of subtle LGE in TTS has been described, we believe these patterns are unlikely to be misclassified as myocarditis, which commonly demonstrates a pattern of patchy subepicardial or midwall LGE [5]. The finding of LGE on CMR in patients with suspected TTS should prompt clinicians to consider an alternate diagnosis of apical infarction or missed SCAD.

Conflict of interest

Dr. Reynolds received OCT catheters for a research study, from Abbott Vascular.

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