

**The Electrocardiographic Waves of the Octopus Trap:
Takotsubo Cardiomyopathy Masquerading as Acute Myocardial Infarction**

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Abstract:

Takotsubo cardiomyopathy, also known as stress-induced cardiomyopathy, is a syndrome of transient ventricular dysfunction arising in the wake of significant physical or emotional distress. Often presenting with chest pain and dyspnea, and at times with evidence of cardiac biomarker and ST-segment elevations, this condition may be clinically indistinguishable from acute coronary syndrome, necessitating cardiac catheterization with coronary angiography.

The absence of obstructive coronary lesions constitutes an important aspect of the revised Mayo Clinic criteria for diagnosis. Despite this, several studies have also sought to characterize electrocardiographic changes associated with Takotsubo cardiomyopathy, and this is of particular importance in cases in which angiography is not pursued on initial presentation.

Here, we describe a case of stress-induced cardiomyopathy with electrocardiographic evidence of large R waves merging into diffuse ST-elevations, with resultant formation of monophasic QRS-ST complexes. In the setting of severe underlying illness and characteristic echocardiographic findings, and with consideration of the improbability of multi-vessel distribution occlusion, coronary angiography was deferred in the acute setting in favor of conservative management. Nuclear stress imaging performed following resolution of infection revealed recovery of left ventricular ejection fraction without obvious wall motion abnormalities and return to electrocardiographic baseline.