

# Author Reply to Letter to the Editor: Silent and Malignant Early Repolarization Syndrome Mimicking Hyper-Acute ST Elevation Myocardial Infarction

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**Key Words:** Early repolarization • Idiopathic ventricular fibrillation

The article entitled “Silent and Malignant Early Repolarization Syndrome Mimicking Hyper-acute ST Elevation Myocardial Infarction” was published in the Journal of Acta Cardiologica Sinica in July 2016.<sup>1</sup> Eyuboglu et al. referenced the important issue of accurate early repolarization syndrome (ERS) diagnosis in this case report, and their concern that the absence of end QRS slur or notch did not fulfill the diagnostic criteria of ERS.

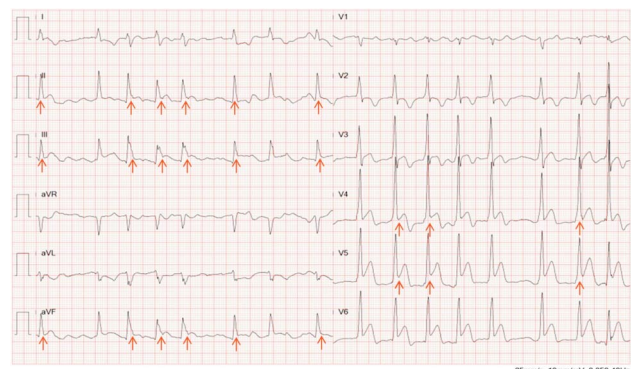
According to a consensus report, ERS is defined as either QRS slur or notch combined with J point elevation  $\geq 1$  mV in at least two contiguous leads.<sup>2</sup> Morphological pattern or amplitude of QRS slur may be subject to day-to-day and beat-to-beat fluctuation.<sup>2,3</sup> This is considered as J wave fluctuation, which is also concurrent with ST segment change, especially in some patients with adrenaline use.<sup>3</sup> In our case, 12-lead electrocardiography (ECG) showed insignificant, fluctuated and intermittent QRS slur and J point elevation  $\geq 1$  mm in the inferior and inferolateral leads (Figure 1 arrows). Spontaneous accentuation of QRS slur and J wave variation can be observed after cardiopulmonary resuscitation. Moreover, horizontal ST-segment in inferior leads can al-

ternatively also help us to identify the malignant form of ERS.<sup>4</sup>

In conclusion, we reported one patient with malignant ERS who presented with insignificant, fluctuated QRS slur and dynamic J wave in a 12-lead ECG. Our case did not demonstrate typical QRS pattern of ERS that Haissaguerre et al. reported previously.<sup>2</sup> However, this case may indicate that even though an atypical pattern of ERS is observed, this may still pose a potential risk of fetal ventricular arrhythmia. Such is the importance of our case presentation, which can help to distinguish atypical or occult malignant ERS from benign early repolarization pattern.

## ACKNOWLEDGEMENTS

The study was supported by 105swf06 Wan Fang Hospital Taipei Medical University.



**Figure 1.** A 12-lead ECG showed atrial fibrillation with moderate ventricular response and insignificant, fluctuated QRS slur and dynamic J wave in inferior and inferolateral leads (arrow).

Received: September 22, 2016 Accepted: November 28, 2016

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### CONFLICT OF INTEREST

Nil.

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