



Letter to the Editor

Some thoughts about the predictive role of heart rate in takotsubo syndrome



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To the Editor:

I enjoyed the study by Arcari et al. [1] about the evaluation of the heart rate (HR), as a predictor of in-hospital course of patients with takotsubo syndrome (TTS). The authors stratified 221 consecutive patients with TTS and complete data in 3 groups, based on the admission electrocardiogram (ECG) HR, and found that a HR >95 beats per min, along with a low left ventricular ejection fraction, independently predicted patients with severe pump failure and major arrhythmias [1]. I have 2 inquiries and one comment for the kind consideration of the authors: 1) Although this study's HR metric is a well-established prognostic marker for various diseases, one wonders how the mean value of *all* recorded, and determined by ECGs, HRs, during the 1st 6 h, 12 h, or 24 h compare to the former in determining clinical outcomes; of course such metric should be evaluated only in patients without atrial fibrillation, and those who have not received catecholamines or β -blockers [2]. 2) Did the authors encounter patients with bradycardia in the subacute phase of TTS, as previously described [3]. 3) HR is a crude way in

evaluating the status of the activity of the autonomic sympathetic nervous system (ASNS) [1], and thus it would be of importance in the future to assess HR in parallel with the monitoring of the ASNS via a recently available technology based on routine ECG electrode "hook-ups", for acquisition/analysis of thoracic 500–1000 Hz electrical signals, a surrogate of stellate ganglia input to the heart [4].

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References

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