Letters to the Editor Anatol J Cardiol 2016; 16: 217-28

The electrical storm can be defined as ≥3 life-threatening ventricular arrhythmia within a 24-h period and may cause implantable cardioverter defibrillator discharges, resulting in morbidity and mortality. The electrical storm in adults with ischemic heart failure is common. However, the electrical storm might be the initial presentation of arrhythmogenic right ventricular cardiomyopathy (ARVC), although ARVC usually presents with sustained ventricular tachycardia or sudden cardiac death (2). Moreover, some patients with ARVC may have unusual presentations such as acute coronary syndrome or heart failure (3). In clinical practice, if ARVC is not considered as a possible cause of ventricular arrhythmias. the diagnosis might be overlooked because of the requirement of a different diagnostic approach for the diagnosis of ARVC according to the modified criteria (4). In the study by Özcan et al. (1), it would be better to evaluate the patients for cardiomyopathies, including ARVC, in terms of diagnostic and therapeutic management.

Although ventricular tachycardia frequency is reduced after catheter ablation, the incidence of rapid ventricular arrhythmia during long-term follow-up is still common in patients with ARVC. In addition, catheter ablation may not be able to cure ventricular arrhythmia in ARVC, and cardiac transplantation can be the only choice for the treatment of the electrical storm in a patient with ARVC (5). In this large cohort with the electrical storm reported by Özcan et al. (1), it will be valuable to determine whether some patients have undergone cardiac transplantation because of the electrical storm.

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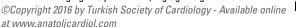
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## Author's Reply

To the Editor.

We would like to thank the authors of the paper entitled "Electrical storm might be the initial presentation of arrhythmogenic right ventricular cardiomyopathy" for their interest in our article published in Anatol J Cardiol 2015 (1). The authors suggested arrhythmogenic right ventricular cardiomyopathy (ARVC) among possible diagnoses for patients who presented with incessant ventricular tachycardia (VT). Firstly, the VT ECG's presented by us highlighted the left ventricule (LV) as the source of arrhythmia and not consistent with epicardial VT. Sinus ECG's did not show the features of ARVC. None of the patients had family history for sudden death. Our patient group was defined as ischemic cardiomyopathy after we performed coronary angiograms at our center or if they had undergone the same at another hospital and was documented to us. If they underwent CABG surgery, they were also included in that group. We also conducted nuclear imaging studies for some patients. Prior to ablation, all of the patients underwent echocardiography, which was performed by experienced physicians, and none of the patients were reported as having abnormalities recalling ARVD. During the electrophysiological study, mapping demonstrated that an abnormal electrogram and scar regions were present in the LV. As known, ARVD-related VT's generally have substrates at the epicardium, and our unipolar recording above 8.27 mV endocardially. We defined LAVA's, late potentials, and diastolic potentials in LV, and all these locations checked with pacing to delineate long stimulus to QRS to define slow conduction zones. Our pace mapping inside LV were also matched with clinical VTs. Procedures that were performed during VT were entrained with concealed fusion, and post-pacing intervals showed that re-entry circuits were present in LV. During follow up, none of our patients underwent cardiac transplantation for incessant VT. However, the issue raised by the authors is important, and one should keep in mind the differential diagnoses for patients presented with the electrical storm.

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