Electrical Storms of Brugada Syndrome Patients were successfully Ablated by Ablation: 3 case report from Hanoi Vietnam

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Introduction: Not uncommonly, Brugada syndrome (BrS) is associated with electrical/VF storms that could result in death and even in patients who have an ICDs whose battery are rapidly drained. Psychological trauma from incessant shocks are common and often the patients wish to die than continue to suffer from ICD shocks. Isoproterenol or quinidine, while effective in some patients, are often ineffective in some and not available in many countries like Vietnam causing management crisis. We report 3 such ES patients who were effectively treated with catheter ablation.

Methods: Method: 3 BrS patients who were males (P1, P2, P3) and are 57, 59 and 66 years old respectively. ECG pattern: P1 & P2 had spontaneous type I Brugada ECG pattern but P3 had ajmaline provoked type 1 Brugada ECG. P1 & P2 had also Early Repolarization pattern on the inferior leads Clinical feature: P1 max 5 shocks per year on amiodarone 200 mg/day, P2 max 150 shocks 1 days total 400 shocks on 2 ICD on amiodarone 200 mg per day, P3: 152 shocks on ICD1 and 59 shocks on ICD 2 with quinine (antimalaria); Procedure RF epicardial ablation: P1 required 2 ablations: January 2016 at the anterior RVOT substrates and the second time May 2016 Inferior epicardial substrates, P2 January 2017 and P3 June 2019. Ablation end Points: elimination all late potentials (LP) Follow up: clinical symptoms, ECG, Echocardiography, ICD check every 1 or 3 months. All 3 patients were done pro bono at Bumrungrad International Hospital, Bangkok Thailand.

Result: all 3 cases became VF free and no recurrent ICD discharge, Brugada ECG has been normalized. Echocardiography is normal.

Conclusion: Epicardial ablation in BrS and combined syndrome of BrS and Early Repolarization with Electric Storm are effectiveness in preventing recurrent VF episodes, improves quality of life, reduces healthcare expenses due to extended battery life of ICD.