An Early Repolarization Syndrome in a 39 year-old male presenting with Sudden Cardiac Death and treated with ICD: A Case Report

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Abstract

An Early Repolarization Syndrome is a rare clinical entity and is a significant cause of idiopathic ventricular fibrillation responsible for sudden cardiac death. We presented a case of a 39 year-old male with no known co-morbidities who had ventricular fibrillation-related cardiac arrest. A 12-lead electrocardiography showed a notched J wave with downsloping ST segment on lead II,III,aVF and V4-V6. Echocardiography showed preserved left ventricular systolic function with no regional wall motion abnormalities, and coronary angiography showed normal coronaries. A Type 2 Early Repolarization Syndrome was diagnosed, and an implantable cardioverter defibrillator was inserted. Early repolarization syndrome is associated with J point elevation, and the more leads involved and a downsloping ST segment pattern as seen in our patient is a predictor of an increase risk for arrhythmogenicity. In summary, we report a case of a Type 2 early repolarization syndrome induced idiopathic ventricular fibrillation treated with ICD.

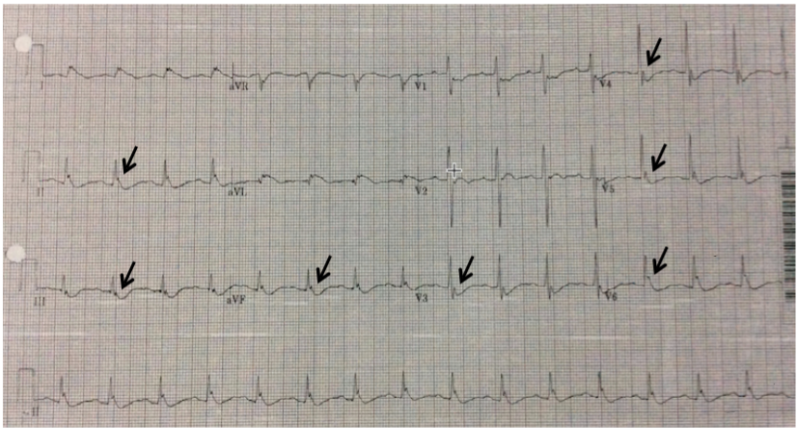


Figure 1. A twelve-lead ECG showing J-point elevation in leads II, III, aVF, V3, V4, V5, and V6 associated with downsloping ST segment (arrow)

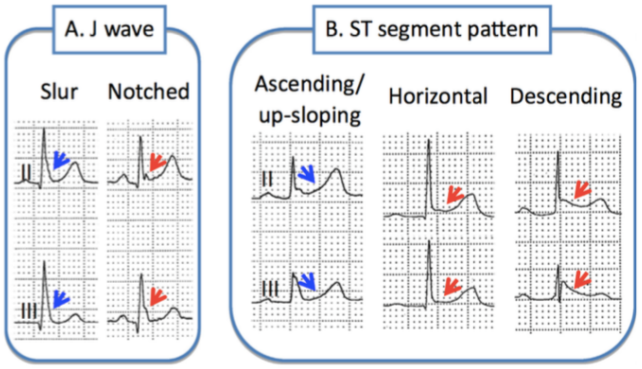


Figure 2: . A.The J wave may be distinct or appear as a slur. Patients with a distinct J wave have a worse prognosis. B. The ST segment may be upsloping, horizontal or descending, the latter two are associated with worse prognosis.

IMAGE

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BIOGRAPHY

Jennilyn O'yek has completed doctor of medicine at University of the East Ramon Magsaysay Medical Center and finished her Internal Medicine training at Capitol Medical Center. She is currently on her 2nd year cardiology fellowship at Philippine Heart Center.

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