Atypical Brugada ECG Phenotype Involving ST-Segment Elevation in Lateral Leads

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A healthy 38-year-old male was referred to our department for syncope evaluation. The history was otherwise unremarkable and the family history was negative for cardiovascular disease and sudden death. The ECG on admission showed a type 2 pattern of Brugada syndrome. An ajmaline test induced the diagnostic type 1 pattern of Brugada syndrome. Structural heart disease was ruled out by echocardiography and coronary angiography. Other potential causes of the ECG abnormalities (e.g. electrolytes, medication) were also excluded. During an episode of atrial fibrillation, he developed J-point and ST-segment elevation with a saddleback configuration in the left lateral leads (I, aVL) (Figure 1). Our patient received an implantable cardioverter defibrillator. This case demonstrates that the ECG features of Brugada syndrome are highly variable within a single individual. Early repolarization features in inferolateral leads are commonly seen in Brugada syndrome. However, atypical ECG features of Brugada syndrome in lateral leads have rarely been described.

References

**Figure 1.** ECG during an episode of atrial fibrillation showing J-point and ST-segment elevation in the left lateral leads (I, aVL) in a patient with Brugada syndrome.