

## Suppression of Electrical Storm by Oral Quinidine in a Patient with Brugada Syndrome

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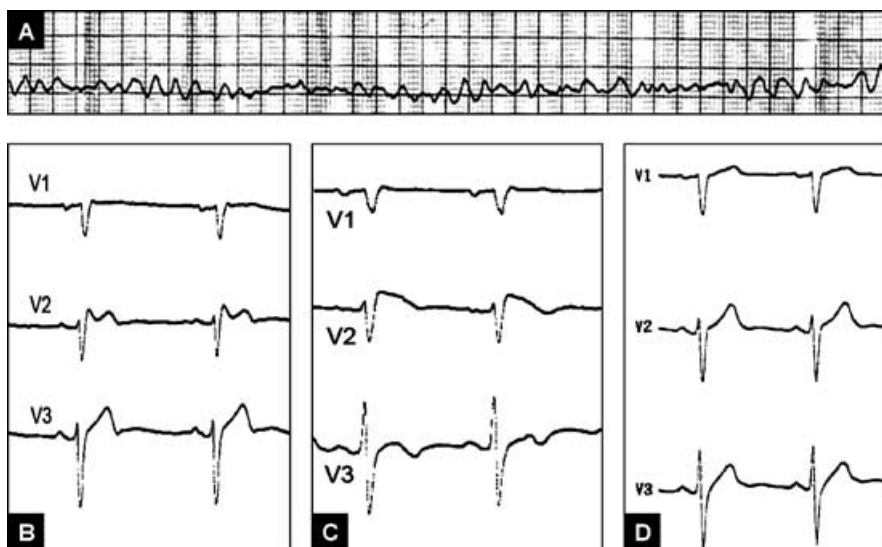
A 41-year-old man was referred to our center because of two episodes of resuscitated cardiac arrest over 3 months. His medical and family histories were unremarkable, except for mild nocturnal palpitations. Rhythm recorded during resuscitation was ventricular fibrillation (Fig. 1A). Resting ECG showed normal sinus rhythm, normal axis, PR interval of 160 msec, QRS duration of 103 msec, and QT interval of 350 msec. A prominent J wave and ST-segment elevation was seen in right precordial leads (Fig. 1B). No evidence of structural heart disease was found. Resting ECG was not typical for Brugada syndrome, thus pharmacologic provocation was per-

formed. Procainamide infusion (10 mg/kg intravenous over 10 minutes) unmasked covered type ST-segment elevation in right precordial leads confirming the diagnosis of Brugada syndrome (Fig. 1C). Because of aborted cardiac death and typical Brugada changes in provoked ECG, a single chamber ICD (Marquis VR 7230, Medtronic Inc., Minneapolis, MN, USA) was implanted. Ten days after implantation, the patient experienced nine episodes of ICD discharges over 2 days (mostly during the sleeping hours). All ICD discharges were appropriate and successfully terminated all ventricular fibrillation (VF) episodes. Finally, we decided to administer slow-release oral quinidine (900 mg/day) for control of electrical storm. Following quinidine administration, ECG abnormalities normalized (Fig. 1D), unifocal PVCs were suppressed and nocturnal palpitations relieved. Noninvasive electrophysiologic study performed via ICD failed to induce any ventricular tachyarrhythmias. During the 19-month follow-up, the patient has been symptom-free and no ICD discharges reported.

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**Figure 1.** **A:** This rhythm strip (ventricular fibrillation) recorded from the patient during cardiopulmonary resuscitation. **B** and **C** illustrate conversion of saddle-back ST-segment elevation in right precordial leads to typical covered-type pattern following procainamide infusion, respectively. **D:** Shows ST-segment normalization following quinidine administration.