Electrocardiographic Changes Upon Tricyclic Antidepressant Administration Mimicking Brugada Syndrome

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A 60-year-old man was admitted to our hospital with severe depression. An electrocardiogram (ECG) recorded on admission showed incomplete right bundle branch block without significant ST-T wave changes. Treatment with a tricyclic antidepressant (TCA) clomipramine (1) (75 mg/day) was initiated. Lithium (2) (400 mg/day) was added five months later, and an ECG recorded at that time showed slight ST elevation in leads V1-V2. With an increase in the dose of clomipramine (150 mg/day) and the addition of the TCA nortriptyline (50 mg/day) after an additional 4.5 months, an ECG showed similar ST elevation and T-wave inversion in V1-V2. Clomipramine was decreased to 50 mg/day; however, the dose of nortriptyline was increased to 100 mg/day. An ECG recorded five days later showed a type-1 Brugada pattern. Therefore, the clomipramine, nortriptyline and lithium were discontinued. An ECG recorded 21 days later showed no ST elevation. Pilsicainide did not reproduce the ST segment elevation. In addition, serial ECG recordings showed no Brugada pattern.

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References