Resolution of Brugada-pattern ECG after withdrawal of the selective serotonin reuptake inhibitor paroxetine

V Sawhney, G Thomas, P Webster, et al.

Heart 2010 96: 1165-1166 originally published online May 16, 2010
doi: 10.1136/hrt.2009.184630
A 48-year-old school teacher was transferred to our institution after a syncopal episode, with unconsciousness lasting for approximately 1 min. A similar episode had occurred several years previously but had not been investigated. She had a diagnosis of obsessive-compulsive disorder and depression, for which she was taking paroxetine 10 mg daily. There was no family history of syncope or sudden death. Physical examination was unremarkable. A 12-lead ECG was recorded (figure 1A), which showed coved ST-segment elevation in leads V1 and V2 suggestive of type 1 Brugada syndrome.\textsuperscript{1} A transthoracic cardiac echocardiogram and cardiac magnetic resonance scan were performed, which revealed no structural abnormalities. Invasive electrophysiological testing revealed normal cardiac intervals and

**Figure 1** (A) Admission 12-lead ECG recording with Brugada-type ST-segment elevation in leads V1 and V2. (B) Resolution of ST elevation following withdrawal of paroxetine.
no inducible atrial or ventricular arrhythmias with programmed electrical stimulation. After psychiatric review, withdrawal of paroxetine was performed with complete resolution of the Brugada syndrome pattern on the 12-lead ECG (figure 1B). The patient was counselled and discharged after placement of an implantable loop recorder device. Subsequently, ECGs obtained from all first-degree relatives did not exhibit the Brugada pattern. The Brugada syndrome ECG is known to occur in response to various psychoactive medications including tricyclic antidepressants, tetracyclic antidepressants neuroleptic agents, lithium and selective serotonin reuptake inhibitors (fluoxetine). However, this is the first reported case to our knowledge of such a response to the selective serotonin reuptake inhibitor paroxetine.

V Sawhney, G Thomas, P Webster, R Schilling
Barts and the London NHS Trust, London, UK

Correspondence to Prof Richard Schilling, Department of Cardiology, St Bartholomew’s Hospital, 60 Bartholomew Close, London EC1A7BE, UK; r.schilling@qmul.ac.uk

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

Heart 2010;96:1165—1166. doi:10.1136/hrt.2009.184630

REFERENCES