

## Long QT syndrome misdiagnosed and mistreated as a seizure disorder for eight years

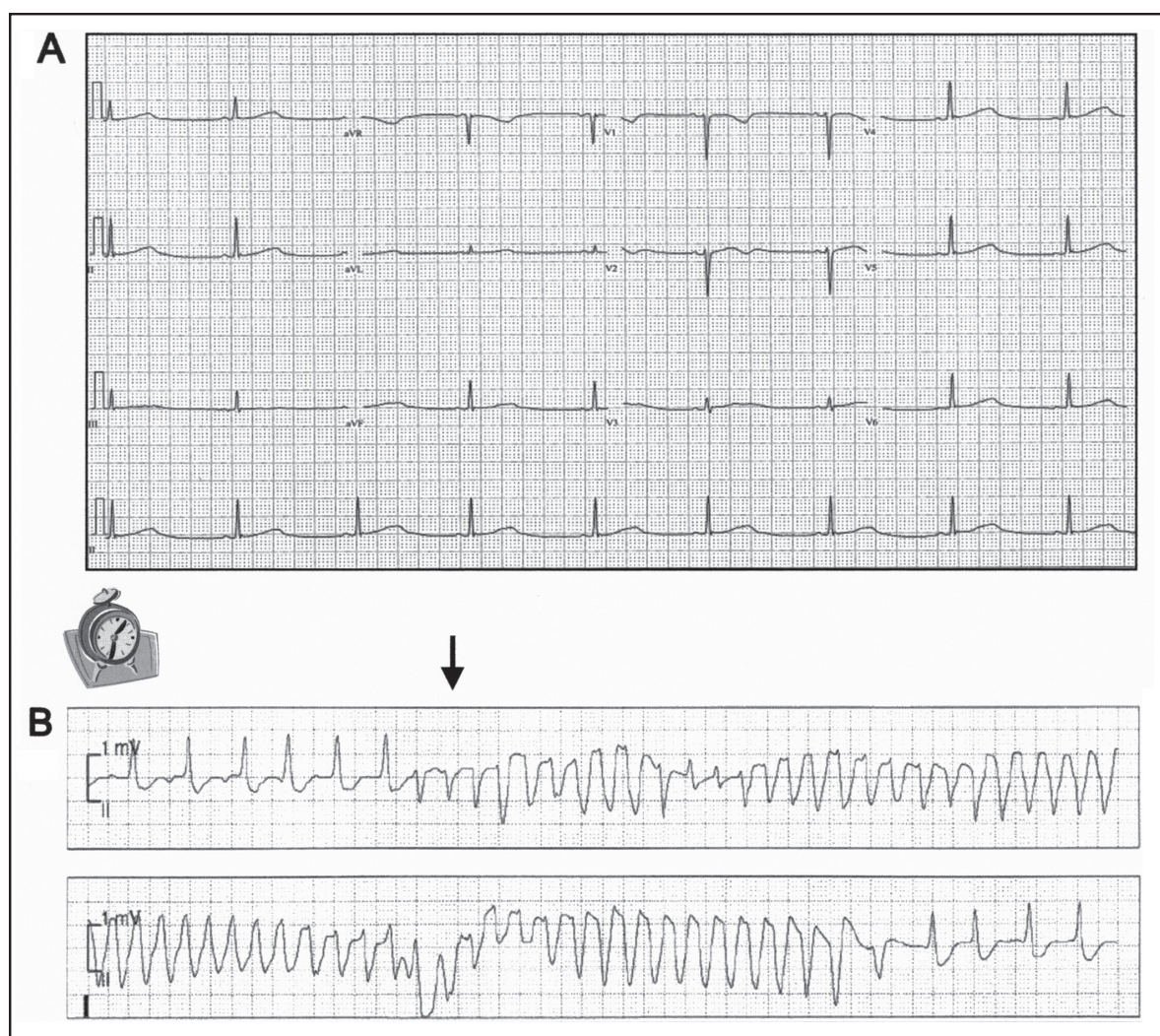
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The case of a 19-year-old girl who was treated since she was 11 years of age for what was thought to be a seizure disorder is presented. Various anticonvulsants (carbamazepine, zonisamide and oxcarbazepine) were unsuccessful. Cardiology consultation was sought for the episodes of loss of consciousness that were noted to accompany her seizures. A thorough patient history suggested that her events correlated with sounds (eg, pager, alarm, fire truck). A 12-lead electrocardiogram (ECG) showed a prolonged QT interval (Figure 1A), and an ECG strip revealed torsade de pointes (Figure 1B) on awakening with an alarm clock. A beta-blocker was started, followed by implantation of an intracardiac defibrillator.

The correct diagnosis of long QT syndrome type 2, which is associated with ventricular tachycardia triggered by auditory stimuli, can be made by standard ECG methods as well as by obtaining a thorough patient history. The present case illustrates that long QT syndrome can convincingly masquerade as epilepsy, delaying treatment and exposing the patient to a high risk for sudden cardiac death (1).

### REFERENCE

1. Hunt DP, Tang K. Long QT syndrome presenting as epileptic seizures in an adult. *Emerg Med J* 2005;22:600-1.



**Figure 1** A A 12-lead electrocardiogram showing a prolonged QT interval. B An electrocardiogram strip showing torsade de pointes on awakening with an alarm clock (arrow)

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