A 28-year-old man was admitted to the Emergency Department because of palpitations. The electrocardiogram demonstrated wide QRS complex tachycardia with right bundle branch morphology and superior axis (Figure B). He had an ECG taken 1 week previously showing a short QT interval (<300 ms) with a normal QRS duration and an absent ST segment (Figure A).

No other aetiology, including hypercalcaemia, hyperkalaemia, tachycardia, hyperthermia, acidosis, and alterations of the autonomic tone, was present for the short QT interval. And nor did he take any drug that could shorten the QT interval. He was, therefore, subjected to invasive electrophysiological study, during which he showed short atrial and ventricular effective refractory periods (180 and 160 ms, respectively). Wide complex tachycardia was induced with programmed stimulation and was in favour of left septal ventricular tachycardia (VT) (common type; posterior fascicular). The ablation of the VT was thereafter performed successfully.

The risk for an arrhythmic event is high in patients with short QT syndrome, triggering palpitation, syncope, pre-syncope, or sudden cardiac death due to ventricular arrhythmia.

The case we introduced herein is noteworthy in that it demonstrates the association between a short QT interval and VT. This is the first report of this combination in the literature.