Spontaneous electrocardiographic changes after syncope in a patient with Brugada syndrome: importance of serial ECG recordings

A 45-year-old previously healthy man was admitted to the emergency unit one hour after a syncopal episode. He was not taking any medication and there was no family history of syncope or sudden cardiac death. At physical examination, there was no abnormality. His blood pressure was measured as 115/70 mmHg, and heart rate was 75/min and regular. ST segment elevation on admission electrocardiogram (ECG) was not observed and cardiac markers were normal. On second ECG there was an ST segment elevation but he did not describe chest pain. Transthoracic echocardiography was performed. There was no wall motion abnormality. Then serial ECGs were obtained approximately at 1-hour interval. We have seen that ST segment elevation changed from saddleback to coved in leads V1-V2 on serial ECGs (Fig. 1). Brugada syndrome diagnosis was confirmed definitely with type I ST segment elevation (coved type) and syncope in this subject. There was no medical treatment or environmental status, which may lead to unmasking of the Brugada ECG phenotype in this patient. Coronary angiography was performed to exclude significant coronary artery disease. Coronary angiogram showed normal coronary arteries. He underwent implantation of an intracardiac defibrillator in another center.

Spontaneous electrocardiographic fluctuations may occur in a short time period after syncope, therefore detailed serial ECGs are useful for unmasking the Brugada ECG pattern in these patients.

Exercie-induced T wave normalization in a patient with stable angina pectoris

A 48 years old man presented with dyspnea and chest pain, provoked by exercise. He was hypertensive for 20 years and had dyslipidemia for 3 years. He had never smoked. His brother died due to myocardial infarction at 51 years of age old. Electrocardiogram showed T wave inversion in precordial V3, V4 derivations at rest (Fig. 1). All cardiac enzymes were within normal limits. Treadmill exercise test was performed and revealed that T wave inversion became positive in V3, V4 derivations without ST segment elevation.