ECG Contest

Response to ECG, October 2020

Respuesta al ECG de octubre de 2020

Francisco Ribes,* Ángel Martínez-Brótons, and Ricardo Ruiz-Granell

Unidad de Arritmias, Servicio de Cardiología, Hospital Clínico Universitario de Valencia, Valencia, Spain

The correct solution is number 4. Palpitations and exercise-induced presyncopal sensation, along with frequent ventricular extrasystoles and repolarization changes in the right precordial leads, is a strong indicator of arrhythmogenic cardiomyopathy. Gadolinium uptake in the right ventricular free wall is associated with a particularly serious condition and risk of sudden cardiac death.1 Progressive onset of tachycardia is observed during exercise with a sharp decrease in cycle length once tachycardia becomes established (response 1, incorrect). Tachycardia presents with pleomorphism and, after several beats, becomes regular (response 2, incorrect). Finally, the cycle length (260–270 ms) is not typical of atrial flutter (response 3, incorrect). Genetic testing was performed. Heterozygous PKP2 mutation, which is typical of arrhythmogenic cardiomyopathy, was detected. A dual-chamber defibrillator was implanted,2 and treatment initiated with sotalol. Genetic screening of family members was performed and exercise was contraindicated.

REFERENCES