### **ECG Contest**

## Response to ECG, October 2020

# Respuesta al ECG de octubre de 2020

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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. 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, and treatment initiated with sotalol. Genetic screening of family members was performed and exercise was contraindicated.

### **REFERENCES**

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