ECG Contest

Response to ECG, July 2020

Respuesta al ECG de julio 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 electrocardiograms show a constant 1:1 A/V ratio. His activation always precedes local ventricular activation and QRS onset, so a ventricular origin can be ruled out¹ (response 1, incorrect). Transient narrowing of QRS leads to shortening of the time from activation of the His-Purkinje-ventricular system to the earliest atrial activation (HA interval), showing that the atrial cycle depends on preceding ventricular activation; this rules out atrial tachycardia and intranodal re-entry (responses 2 and 4, incorrect). In view of the above, along with the observation that the time from His-Purkinje-ventricular activation to the first atrial activation (HA) is longer during left bundle branch morphology than with narrow QRS, a hidden left accessory pathway is confirmed to be present.² Thus, during left bundle branch block, the ventricular circuit is extended and the activation front has to travel through more tissue to reach the atrium (response 3, correct).

REFERENCES


* Corresponding author:
E-mail address: fribestur@gmail.com (F. Ribes).

1885-5857 © 2019 Sociedad Española de Cardiología. Published by Elsevier España, S.L.U. All rights reserved.