

ECG Contest

## Response to ECG, July 2020

### Respuesta al ECG de julio de 2020

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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 out<sup>1</sup> (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.<sup>2</sup> 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

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