

## ECG Contest

## Response to ECG, December 2017



## Respuesta al ECG de diciembre de 2017

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The correct response (positive exercise test, coronary angiography should be performed) is number 4. In the electrocardiogram, there is a change in the electrical axis consistent with left bundle branch hemiblock and the development of complete right bundle branch block at the time of peak exercise and coinciding with chest pain. These electrocardiographic changes, uncommon during exercise testing and not associated with ST segment changes, have been associated with the presence of underlying coronary artery disease and extensive myocardium at risk of damage, particularly in the case of lesions in the left anterior descending artery.<sup>1,2</sup> Exercise testing is considered positive for inducible ischemia (response 1 and 2, incorrect) and, given the high risk, coronary angiography was requested (response 3, incorrect). This study showed moderate in-stent restenosis in the left main coronary artery and extensive in-stent restenosis in the left anterior descending artery (Figure). It was therefore decided to perform surgical coronary revascularization.

**Figure.****REFERENCES**

1. Fletcher GF, Ades PA, Kligfield P, et al. Exercise standards for testing and training: a scientific statement from the American Heart Association. *Circulation*. 2013;128:873–934.
2. Marcadet DM, Genet P, Assayag P, et al. Significance of exercise-induced left hemiblock. *Am J Cardiol*. 1990;66:1390–1392.

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