J-Point Elevation Induced by Double Master Two-Step Test

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A 73-year-old man visited our university hospital because he developed chest pain when walking. The chest pain worsened before the visit. Physical examination of the chest was unremarkable. The pulse was 73 beats/minute, the blood pressure 125/61 mmHg. ST-segment depression in leads V4-6 was observed just after the double master two-step test. Of note, J-point elevations with notched morphology appeared in leads aVL and V1,2 (Picture A, red arrows) when the heart rate increased to 124 beats/min (1 minute after the test) and 90 beats/min (2 minutes after the test). The J-point elevations disappeared 3 minutes after the test when the heart rate decreased to 88 beats/min. Subsequently, he underwent coronary angiography, which revealed a significant stenosis of 90% luminal reduction in the proximal portion of the left anterior descending artery (LAD) (Picture B, red arrow) and no significant stenosis in the left circumflex artery (LCX) or the right coronary artery (RCA).

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