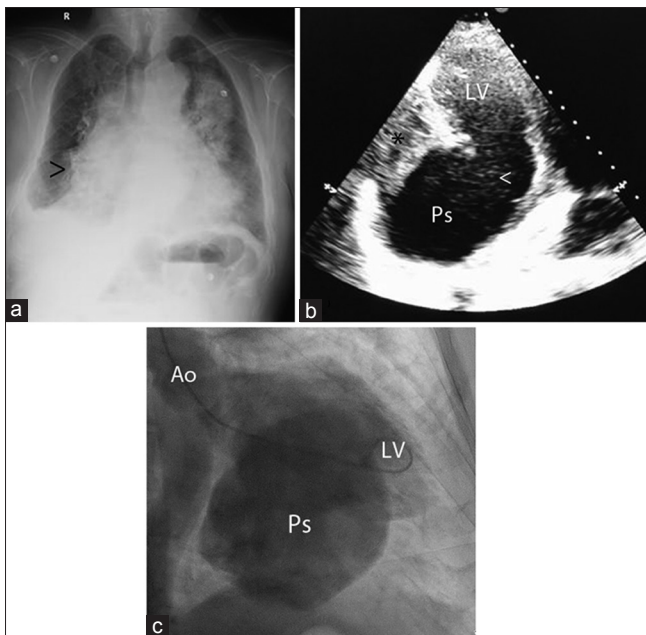


## Left ventricular pseudoaneurysm and syncope

Dear Editor,

Left ventricular (LV) pseudoaneurysms may be a complication of myocardial infarction that occurs when cardiac rupture is contained by pericardium.<sup>[1]</sup> We report a 59-year-old male patient who was brought to the emergency department due to progressive dyspnea and syncope. The 12 lead electrocardiogram showed a left bundle branch block, the blood testing a troponin I concentration of 0.35 ng/mL (normal range: 0.0-0.16),

the chest x-ray [Figure 1a] an enlargement of the right cardiac silhouette (arrowhead) and the transthoracic echocardiography [Figure 1b] a large sac at the inferior LV wall (80 × 78 mm) with a neck of 25 mm (arrow head) (sac-to-neck ratio <0.5) and a thrombus (asterisk). The LV angiography [Figure 1c] revealed a bulge (89 × 95 mm) in the inferior region and the coronary angiography showed a severe lesion in the middle segment of the left anterior descending artery [Figure 2a, arrow head] and



**Figure 1:** (a) Posteroanterior chest radiograph (b) Transthoracic echocardiogram in the apical two-chamber view (c) Left ventricular angiogram in the right anterior oblique projection. Ps: Pseudoaneurysm, LV: left ventricle, Ao: aorta

emergently to the operating room. Unfortunately, he died in the induction of the general anesthesia.

If neither continuity nor discontinuity of the myocardium can be demonstrated with echocardiography or angiography, surrogate markers such as the localization (inferior/posterior/lateral), the sac-to-neck ratio  $<0.5$ , the lack of surrounding coronary arteries at the saccular level and the presence of contrast liquid remaining for several beats after injection may be used in the identification of a ventricular pseudoaneurysm.<sup>[2-5]</sup>

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### Conflicts of interest

There are no conflicts of interest.

Efrén Martínez-Quintana, José María Medina-Gil<sup>1</sup>,  
Juan Lizandro Rodríguez-Hernández<sup>1</sup>,  
Fayna Rodríguez-González<sup>2</sup>

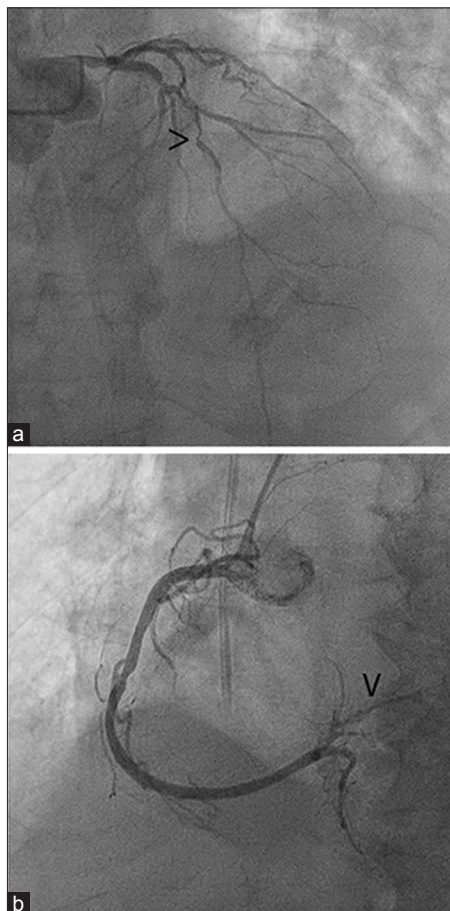
Cardiology Service, Insular-Materno Infantil University Hospital, University of Las Palmas de Gran Canaria, <sup>1</sup>Cardiology Service, Insular-Materno Infantil University Hospital, Las Palmas de Gran Canaria, <sup>2</sup>Ophthalmology Service, Negrín University Hospital of Gran Canaria, Las Palmas de Gran Canaria, Spain

### Address for correspondence:

Prof. Efrén Martínez Quintana,  
Servicio de Cardiología, Complejo Universitario Insular-Materno Infantil,  
Avenida Marítima del Sur s/n. 35016, Las Palmas de Gran Canaria, Spain.  
E-mail: efrencardio@gmail.com

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**Figure 2:** (a) Left coronary angiography in the anteroposterior cranial projection. (b) Right coronary artery in the left anterior oblique projection

in the posterolateral branch of the right coronary artery [Figure 2b, arrow head], the latter likely responsible for the acute coronary event. The patient was taken

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