



IMAGES IN INTENSIVE MEDICINE

# A shattered heart: Discovery of two lethal mechanical complications

## Las grietas del corazón: hallazgo de dos complicaciones mecánicas mortales

Alberto Garrido Callén\*, Irene Fernández Muñoz, Marta Martín Muñoz

Critical Care, Rey Juan Carlos Hospital, Móstoles, Madrid

Available online 30 August 2024

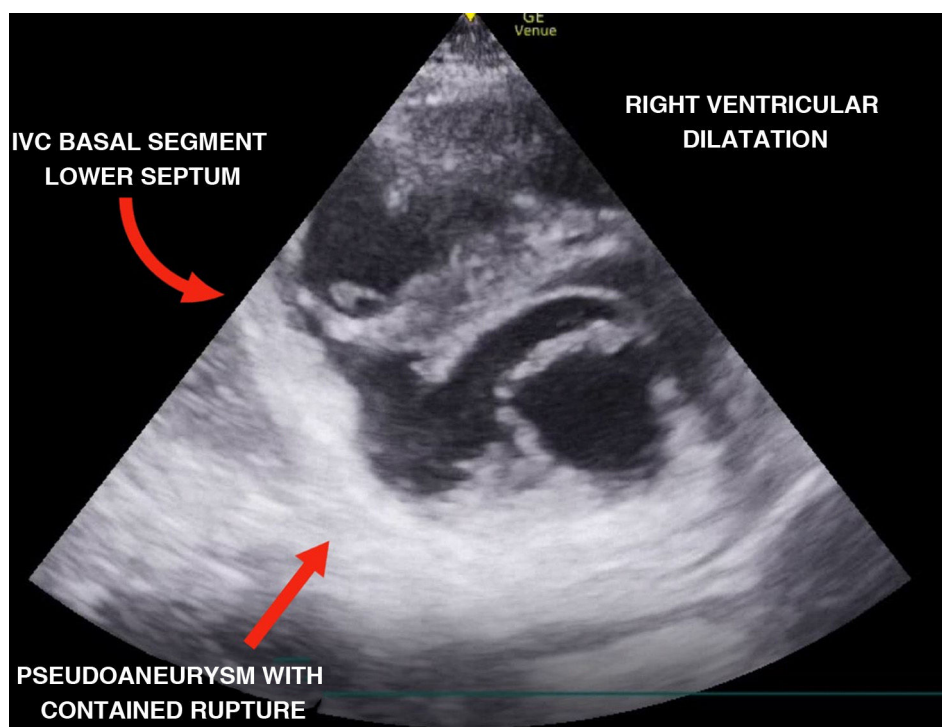


Figure 1

A 62-year-old woman with no personal history of disease was seen due to epigastric pain lasting four days, suffering a right-side pure hemi-motor lacunar stroke with anodyne

multimodal CT findings. The ECG tracing evidenced inferior ST-segment elevation with Q waves, and the patient was admitted to intensive care. Transthoracic echocardi-

DOI of original article: <https://doi.org/10.1016/j.medin.2024.07.004>

\* Corresponding author.

E-mail address: [alberto.garrido@hospitalreyjuancarlos.es](mailto:alberto.garrido@hospitalreyjuancarlos.es) (A. Garrido Callén).

<https://doi.org/10.1016/j.medicine.2024.08.001>

2173-5727/© 2024 Elsevier España, S.L.U. and SEMICYUC. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

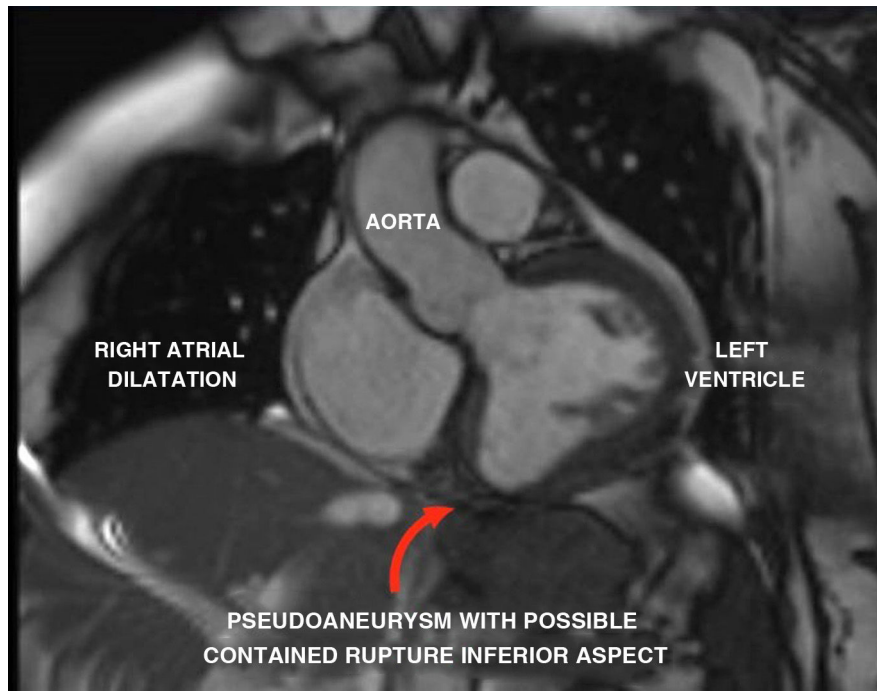


Figure 2

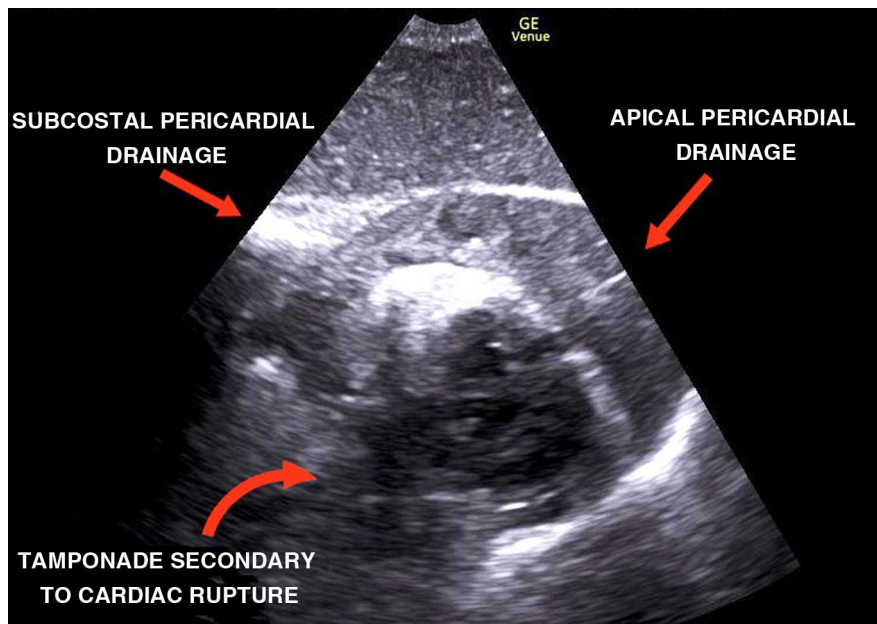


Figure 3

graphy showed septal-basal interventricular communication (IVC) presenting an akinetic inferior aspect with thinning and hyperechogenicity suggestive of pseudoaneurysm with possible contained myocardial rupture (Fig. 1, Video 1). Emergent surgery was discarded due to the neurological condition of the patient and surgical risk due to friability of the tissues. While in wait for the final decision, a cardiac MRI was performed (Fig. 2), after which the patient suffered cardiac arrest with pulseless electrical activity secondary to tamponade, with futile resuscitation efforts (Fig. 3, Videos 2 and 3). Mechanical complications following acute myocardial

infarction, while unusual nowadays, remain a potentially fatal and time-dependent disorder in which imaging techniques such as echocardiography continue to play a key role.

## Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.medine.2024.08.001>.