

## Image in cardiology

## Apixaban and intraventricular thrombus resolution in a patient with an AMI



## Apixabán y resolución de trombo intraventricular en un paciente con IAM

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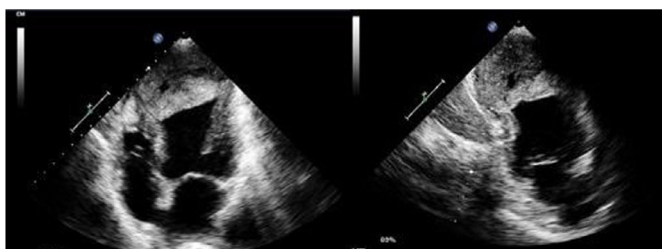


Figure 1.

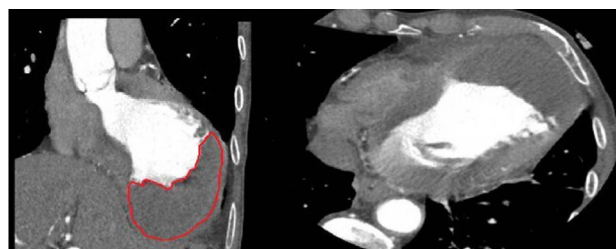


Figure 2.

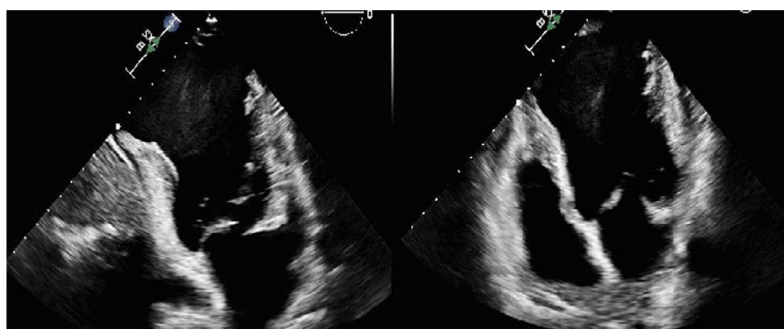


Figure 3.

A 78-year-old man, who was an active smoker, presented with a 2-week history of chest pain, dyspnea and orthopnea. On examination, he was tachypneic and had bilateral basal crepitations. Chest X-ray showed bilateral alveolar edema, and blood tests revealed raised troponin and NT-proBNP. Electrocardiogram showed ST elevation in  $V_1$  to  $V_5$  and Q waves, compatible with acute pulmonary edema secondary to acute evolving anterior myocardial infarction. Transthoracic echocardiogram (figure 1, videos 1 and 2 of the supplementary data) showed a dilated left ventricle with a large dyskinetic apical region with a hyperechoic image within it ( $8 \times 6$  cm), indicative of intraventricular thrombus, and a left ventricular ejection fraction of 25%. Computed tomography (figure 2) showed a large apical thrombus in the left ventricle ( $3.1 \times 6.2 \times 9.6$  cm) occupying at least 50% of the cavity.

After finding some cases in the literature of intraventricular thrombus treated with direct oral anticoagulants (DOACs), the medical team decided to start anticoagulation with apixaban 5 mg/12 h.

The patient progressed well. One month after discharge, repeat echocardiogram showed no thrombus but persistence of the large apical aneurysm with slow flow through it (figure 3, videos 3 and 4 of the supplementary data).

Although the usual treatment is with heparin or vitamin K antagonists and there are no randomized clinical trials with DOACs, this case demonstrates the effectiveness of apixaban in resolving a large intraventricular thrombus in 6 weeks. Informed consent was obtained prior to publication.

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## **AUTHORS' CONTRIBUTIONS**

G.M. Heredia Campos wrote the case report. J. Perea Armijo was responsible for the investigations. M. Anguita Sánchez had a supervisory role.

## **CONFLICTS OF INTEREST**

None.

## **APPENDIX. SUPPLEMENTARY DATA**

Supplementary data associated with this article can be found in the online version, available at <https://doi.org/10.1016/j.recesp.2021.11.008>