



# Revista Española de Anestesiología y Reanimación

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## IMAGE OF THE MONTH

### Chest compressions as a rescue manoeuvre to maintain aortic valve opening during left ventricular distention syndrome on venoarterial ECMO

Compresiones torácicas como maniobra de rescate para mantener la apertura de la válvula aórtica durante el síndrome de distensión ventricular izquierdo en la oxigenación por membrana extracorpórea venoarterial

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A 62-year-old patient developed cardiogenic shock after acute myocardial infarction and was given venoarterial ECMO support with the extraction cannula placed in the left atrium (LAVA-ECMO). During ECMO he lost pulsatility. A transoesophageal echocardiogram was performed, showing no contractility, closure of the aortic valve, and spontaneous contrast in the left ventricle and aortic root (Fig. 1A and B,

Video 1). Valve opening was achieved with chest compressions (Fig. 1C, Video 2). A left intraventricular catheter was connected to the extraction cannula for definitive management (Fig. 1D, Video 3). Chest compressions can be a rescue measure to prevent left chamber thrombosis during left ventricular distention syndrome in which an active left ventricular drainage mechanism is established.

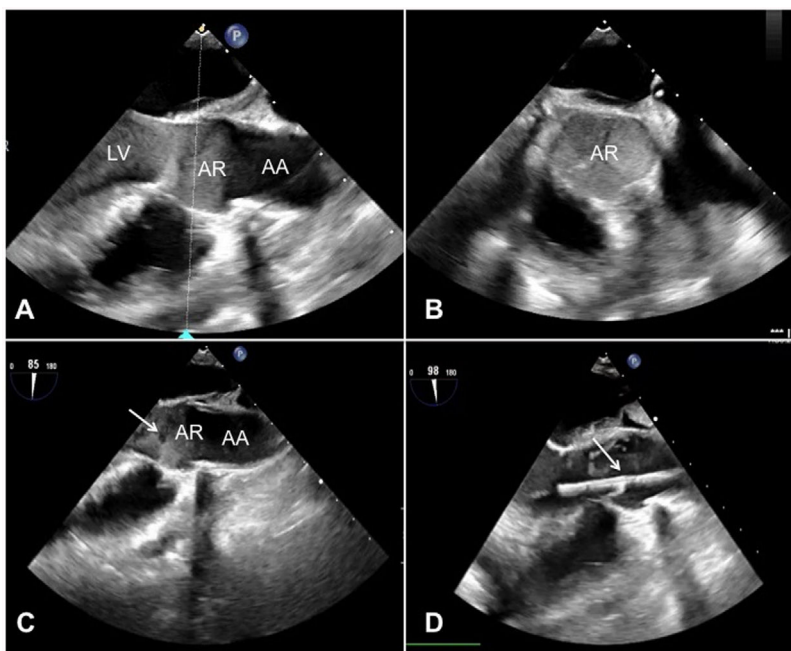
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**Figure 1** Transoesophageal echocardiography (TOE). A) 3-chamber view showing spontaneous echo contrast in the left ventricle and aortic root. B) Mid-oesophageal aortic valve short axis cross-section showing spontaneous echo contrast in the aortic root. C) 3-chamber view showing aortic valve opening (white arrow). D) Real-time TOE showing opening of the aortic valve (white arrow) after start of drainage (3-chamber view).

AA: Ascending aorta; AR: Aortic root; LV: Left ventricle.

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### Conflict of interest disclosure

The authors declare that they have no competing interests.

### Patient consent statement

Written informed consent for patient information and images to be published were provided by the patient or a legally authorized representative.

### 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.redare.2024.02.028>.