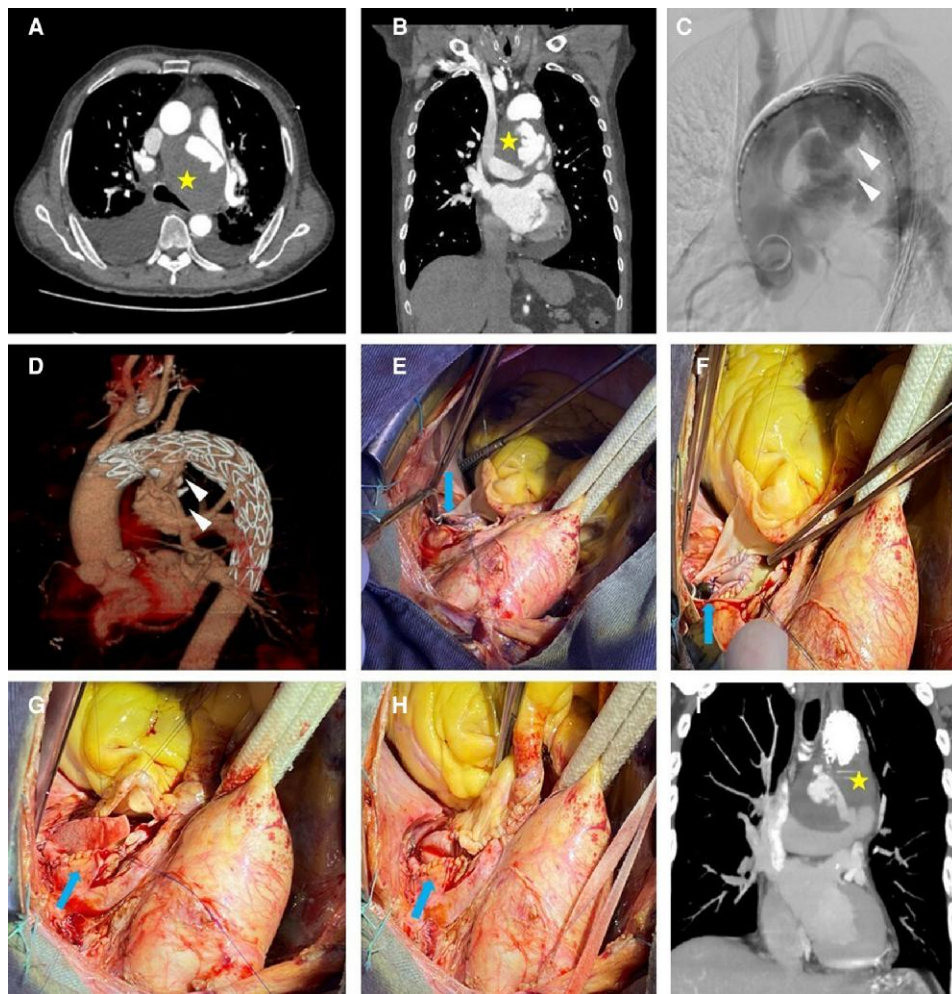


Aortopulmonary fistula mimicking ductus arteriosus aneurysm on imaging exams

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A 66-year-old man was admitted with a 2-week history of dry cough and shortness of breath. He had a history of active smoking, arterial hypertension, and Type 2 diabetes mellitus. Laboratory tests showed normal troponin. An electrocardiogram revealed sinus tachycardia and a chest X-ray showed mediastinal enlargement. After performing aortic computed tomography angiography, the initial hypothesis was a saccular aneurysm of the ductus arteriosus measuring $\sim 7.5 \times 6.7 \times 7.0$ cm with signs of imminent rupture that communicated to the left pulmonary artery associated with acute pulmonary thromboembolism in posterior subsegmental branches of the left lower lobe (asterisk, *Panels A and B*, [Supplementary material online, Videos S1 and S2](#)). He underwent an endovascular intervention, which showed a rupture of the aortic arch at the level of the emergence of the left subclavian artery (topography of the ductus arteriosus). Two thoracic aortic endografts Valiant Captivia with proximal FreeFlo configuration (Medtronic[®]), sizes 32/32/200 and 34/34/200 mm, were implanted. After the procedure, the flow was maintained through the fistula (arrowhead, *Panels C and D*, [Supplementary material online, Videos S3 and S4](#)). Subsequently, he underwent conventional surgery and observed an unchanged ductus arteriosus and erosion of the posterior wall of the left pulmonary artery secondary to a ruptured aortic aneurysm, tamponaded by an adherent thrombus (arrow, *Panels E and F*). Occlusion

of the erosion was performed with a bovine pericardial patch and fixation of the stents previously implanted in the aorta (arrow, *Panels G and H*). After surgery, the patient evolved with the improvement of dyspnoea, becoming asymptomatic. However, control angiotomography demonstrated the persistence of residual flow through the fistula (asterisk, *Panel I*).

Supplementary material

[Supplementary material](#) is available at *European Heart Journal – Case Reports* online.

Consent: The authors confirm that written consent has been obtained from the patient for the submission and publication of this cardiovascular flashlight, including images and associated text, in accordance with the COPE guidelines.

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