

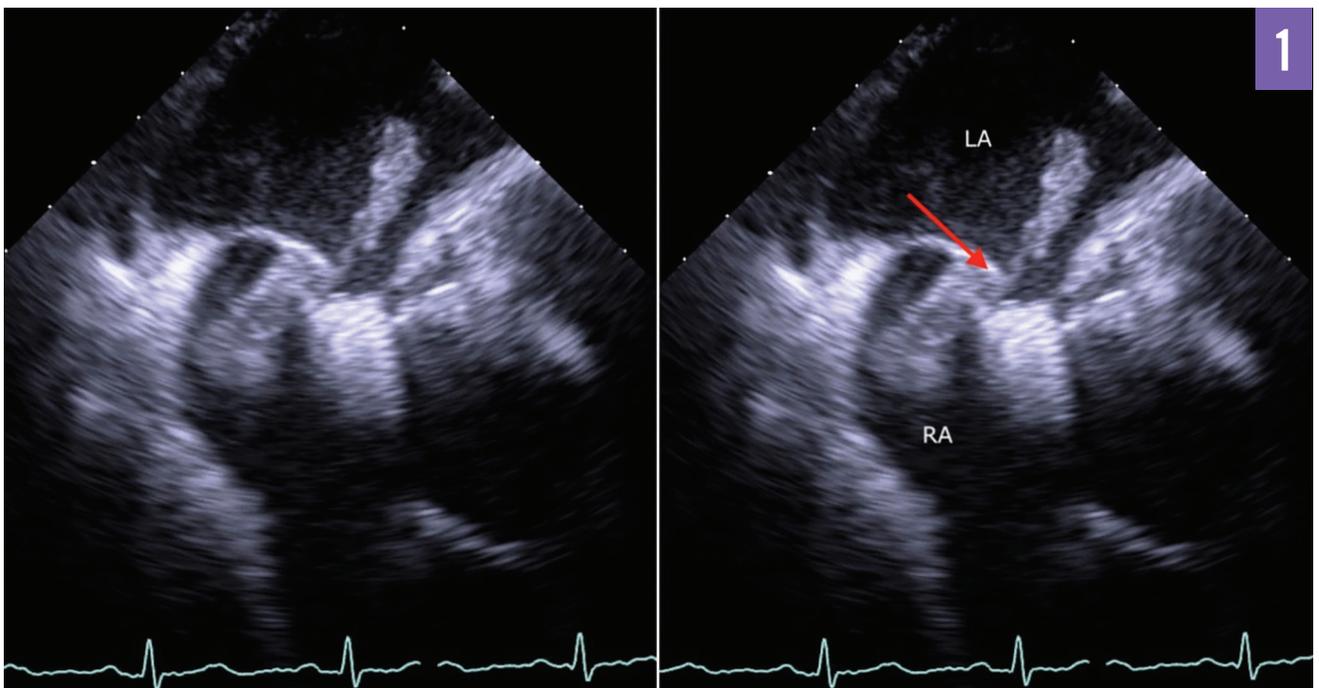
Foresee Your Next Patient

Caught in the Act: Thrombus Straddling a Patent Foramen Ovale

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A 74-year-old, morbidly obese, sedentary man presented with a 2-day history of acute-onset dyspnea. At presentation, he was significantly hypoxic and tachypneic, and physical examination revealed bilateral lower extremity edema.

Further workup with Duplex ultrasonography revealed bilateral deep venous thrombosis. Computed tomography angiography of the chest showed thrombi bilaterally in the pulmonary arteries, the atria, and the right ventricle, with evidence of right



TEE image demonstrating a thrombus traversing a patent foramen ovale (red arrow). Abbreviations: LA, left atrium; RA, right atrium.

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DISCLOSURES:

The authors report no relevant financial relationships.

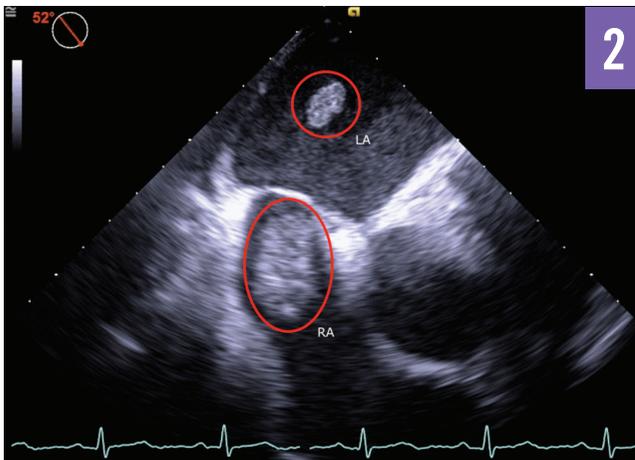
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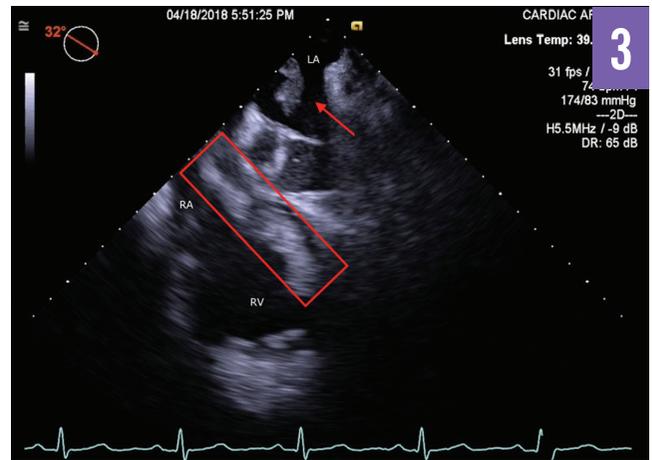
ventricular strain. Transthoracic echocardiography was limited due to the patient's body habitus.

Transesophageal echocardiography (TEE) demonstrated thrombi in transit through a patent foramen ovale (PFO) (**Figures 1 and 2; Video 1**, <https://www.consultant360.com/video/cardiology/caught-in-the-act-video-1>) and showed the presence of thrombi in all 4 chambers of the heart (**Figure 3; Video 2**, <https://www.consultant360.com/video/cardiology/caught-in-the-act-video-2>).

PFO is found in 20% to 25% of the adult population and is associated with cryptogenic stroke, with paradoxical embolization being the potential mechanism.^{1,2} Thrombi crossing through



TEE image demonstrating thrombi in both the right and left atria (marked in red). Abbreviations: LA, left atrium; RA, right atrium.



TEE Image depicting thrombus extension into the right ventricle and thrombi in the atria (marked in red). Abbreviations: LA, left atrium; RA, right atrium; RV, right ventricle.

a PFO is a well-known occurrence, but it is difficult to visualize because it occurs transiently.

Paradoxical embolization is a well-known mechanism of cryptogenic stroke and systemic embolization in patients with PFO. This is a medical emergency that requires immediate and appropriate management. Anticoagulation, surgical removal of large thrombi (especially in the left heart), and PFO closure are considered as mainstay treatment options. However, given his comorbidities, our patient was managed medically with intravenous thrombolysis and long-term anticoagulation, resulting in a successful outcome. Follow-up TEE revealed complete resolution of thrombi.

It remains unclear how PFO closure compares with systemic anticoagulation in the prevention of recurrent ischemic stroke. PFO closure is of moderate benefit compared with antiplatelet therapy alone in the prevention of recurrent ischemic stroke in adults up to 60 years of age.^{1,2} ■

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