


Clinical vignette

Impending paradoxical embolism

Peter Verhamme1*, Wim Anné1, Lieven Herbots1, Marion Delcroix2, and Paul Herijgers1

1Department of Cardiovascular Diseases, University Hospital Gasthuisberg, Catholic University of Leuven, Herestraat 49, 3000 Leuven, Belgium and 2Department of Pneumology, University Hospital Gasthuisberg, Catholic University of Leuven, Herestraat 49, 3000 Leuven, Belgium

* Corresponding author. Tel: +32 16 34 34 91; fax: +32 16 34 34 93. E-mail address: peter.verhamme@uz.kuleuven.be

A 52-year-old woman presented at the emergency department with deep vein thrombosis and pulmonary embolism (PE). Transthoracic echocardiography revealed right ventricular dysfunction and disclosed an echogenic serpentine mass in all four heart chambers, compatible with a thrombo-embolus crossing a patent foramen ovale (PFO) (Panels A and B). Impending paradoxical thrombo-embolism was confirmed with transoesophageal echocardiography (Panel C). The surgeon removed the 17 cm long intracardiac thrombus (Panel D) and the pulmonary emboli and closed the foramen ovale. Conventional anticoagulant therapy was initiated. Follow-up up to 1 year after surgery is uncomplicated.

An impending paradoxical embolus is an uncommon finding in patients with PE. Routine echocardiography in these patients would perhaps increase the incidence of finding a trapped thrombo-embolus in a PFO. Paradoxical embolism is clinically suspected in patients with cryptogenic stroke or peripheral arterial embolism and a PFO. A history of venous thrombo-embolism strengthens this clinical suspicion.

See online supplementary movie files available at European Heart Journal online.