A 56-year-old man was admitted with progressive dyspnea that started suddenly the previous day. Physical examination was normal. Pulmonary embolism was diagnosed on a computed tomography scan of the chest, which showed intraluminal filling defects in both pulmonary arteries and in the branches for the right lower lobe; it also showed a clot in the right atrium (Figure 1). Duplex ultrasonography revealed an underlying deep-vein thrombosis of the left popliteal vein.

Transthoracic echocardiography showed a fluttering thrombus trapped in the patent foramen ovale with floating parts in the right and left atrium (Figure 2; see Movies I and II in the online-only Data Supplement). Anticoagulant therapy with unfractionated heparin was started.

During the stay in the hospital, he started to suffer from a headache. The neurological examination was negative. Magnetic resonance imaging was performed, and it showed multiple supraventricular and ventricular hyperintense areas compatible with ischemic lesions (Figure 3). A second echocardiography revealed the dissolution of the thrombus (Figure 4). The patient was discharged in good clinical condition 11 days later and continued to receive anticoagulant therapy.

None.

Figure 1. A computed tomography scan at admission shows multiple intraluminal filling defects in both pulmonary arteries (A) and a thrombus in the right atrium (B).
Figure 2. Transthoracic echocardiography shows a fluttering thrombus trapped in the patent foramen ovale with floating parts in the right and left atrium. A, Long axis; B, short axis.

Figure 3. Magnetic resonance imaging in T2 multiple supraventricular and ventricular hyperintense areas.

Figure 4. Transthoracic echocardiography reveals the dissolution of the thrombus. A, long axis; B, short axis.
Fluttering Thrombus in Patent Foramen Ovale With Paradoxical and Cerebral Embolism
Luca Bonanni, Francesco Serafini, Michele Dalla Vestra, Ada Cutolo, Elisabetta Grolla and Fabio Presotto

Circulation. 2014;129:e343-e344
doi: 10.1161/CIRCULATIONAHA.113.008301
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2014 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://circ.ahajournals.org/content/129/8/e343

Data Supplement (unedited) at:
http://circ.ahajournals.org/content/suppl/2014/02/24/129.8.e343.DC1

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/
**Movie Legend**

**Movies 1A,1B.** Transthoracic echocardiography at admission, which shows a fluttering thrombus trapped in the patent foramen ovale with floating parts in the right and left atrium. 1A long axis; 1B short axis. Best viewed with Windows Media Player.

**Movies 2A,2B.** Second transthoracic echocardiography, which revealed the complete dissolution of the thrombus; 2A long axis; 2B short axis. Best viewed with Windows Media Player.