Late left atrial thrombosis of an Amplatzer patent foramen ovale occluder

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In February 2007, a 51-year-old man was admitted to the neurology department with aphasia. Diagnostic examination revealed a patent foramen ovale (PFO) that was successfully occluded with an Amplatzer occluder (AGA Medical Corp, Plymouth, Minn) in March of 2007. The postoperative course was uneventful. He received oral therapy with aspirin and Coumadin for 6 months.

Two and a half years later in December 2010, the patient returned to the hospital with aphasia. Cerebral computer scan showed a left frontal 9- × 7-mm lesion. Further diagnostic examination with transesophageal echocardiography revealed a huge mass in the left atrium directly on top of the Amplatzer occluder. A thrombus was suspected, so therapy with heparin and concomitant Coumadin (Bristol-Myers Squibb, New York, NY) was initiated. A complete hematologic survey, including platelet function and coagulation factors, showed no pathologic findings. In February 2011, transesophageal echocardiography verified that the left atrial mass had progressed (Figure 1). Magnetic resonance tomography could not distinguish between thrombus and myxoma, so cardiac surgery was scheduled.

During cardiac surgery, the Amplatzer PFO occluder and the left atrial mass were excised completely (Figure 2). The septal defect was closed with pericardium. The postoperative course was uneventful. Histology revealed an organized thrombus with proliferating connective tissue and capillaries (Figure 3).

DISCUSSION

Interventional occlusion for PFO is a standard procedure. Whether this is beneficial in contrast with medical therapy alone in patients with cryptogenic stroke will be analyzed.¹ Although right atrial thrombosis of an Amplatzer occluder has been reported,² thrombosis in the left atrium has not been. In a large series of 620 patients with the Amplatzer PFO occluder for secondary prevention of paradoxical embolism, only 2 small thrombi were seen on the atrial disk at 6-month follow-up, which resolved with oral

FIGURE 1. Transesophageal echocardiography shows the PFO Amplatzer occluder (AGA Medical Corp, Plymouth, Minn) (double arrow) with a mass in the left atrium (arrowhead).

anticoagulation. No thrombus was seen after a median follow-up of 2.6 years.³

CONCLUSIONS

This report describes a late large thrombosis of the atrial disk of an Amplatzer PFO occluder implanted 33 months after the initial implantation.

FIGURE 2. Explanted device with the mass sitting on the left atrial disk.

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FIGURE 3. Histology of the organized thrombus.

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