We report the case of a 69-year-old woman admitted for recurrent left atrial appendage (LAA) thrombosis occurring 8 months after implantation of an Amplatzer Cardiac Plug device.

The indication for LAA closure was paroxysmal atrial fibrillation with high thromboembolic risk (CHA2DS2-Vasc score, 4) and a history of intracranial bleeding 6 months previously under vitamin K antagonist with an international normalized ratio ranging from 2 to 3. The Amplatzer Cardiac Plug device (No. 28) was successfully implanted with the use of x-ray and transesophageal echocardiography. Considering neurological bleeding risk, only low-dose aspirin was delivered at discharge.

One month after device implantation, the patient remained asymptomatic, but persistent atrial fibrillation developed. Systematic transesophageal echocardiography and cardiac computed tomography showed a voluminous thrombus in the left atrium despite correct position without residual leak through the LAA occluder (Figure 1). Regarding the balance between bleeding and thromboembolic risk, dabigatran was started at a low dose (110 mg twice a day). After this therapy, transesophageal echocardiography and computed tomography control at 1 month revealed a complete prosthetic endothelialization under anticoagulation without residual thrombosis (Figure 2). Dabigatran was stopped, and 1 month later, computed tomography control found a recurrent voluminous thrombus in the same position (Figure 3). Dabigatran was restarted for an indefinite period, and the last computed tomography control (3 months later) showed partial regression of thrombosis (Figure 4).

LAA thrombosis after successful device implantation is uncommon. This observation demonstrates that close monitoring of an LAA occluder device is required before anticoagulation or dual platelet therapy is withdrawn. Antithrombotic therapy should probably be continued until complete device endothelialization occurs to avoid thrombus formation. However, the exact type and duration of antithrombotic therapy remain to be clearly defined.

Disclosures

None.
Figure 1. Voluminous thrombus (arrows) developed in the left atrium from the Amplatzer Cardiac Plug device detected by computed tomography (left) and transesophageal echocardiography (right).

Figure 2. Computed tomography (left) and transesophageal echocardiography (right) control 1 month after the start of anticoagulation therapy showed complete regression of thrombosis.

Figure 3. Computed tomography control 1 month after dabigatran discontinuation showed recurrence of the voluminous thrombus (arrow) in the left atrium.

Figure 4. Incomplete regression of left atrial appendage occluder device thrombosis (arrows) on the last computed tomography control.
Left Atrial Appendage Occluder Thrombosis After Successful Implantation
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