Six weeks after left atrium appendage occlusion with a 30-mm AGA Cardiac Plug (ACP), an asymptomatic 73-year-old woman presented for routine follow-up. At the time of implant, as shown in Figure A and B, the device position satisfied the 5 signs for correct implantation: tire-shaped lobe, disc/lobe separation, disc concavity, two thirds of the lobe distal to the circumflex coronary artery, and device aligned with the left atrium appendage longitudinal axis.

Follow-up 2-dimensional transesophageal echocardiography revealed dislocation of the ACP device, dancing in the left atrium (Figure C; Movie I in the online-only Data Supplement). To avoid open-heart surgery, a 24-Fr steerable sheath usually used for mitral valve clipping procedures was introduced into the left atrium after transseptal puncture.

Under fluoroscopy and transesophageal echocardiography guidance, the ACP device was snared by wrapping a 30-mm snare around its waist and stabilized by pulling it against the septum (Figure D and E, white arrow). Then, the distal screw of the ACP device was grabbed with a second snare (Figure E and F, black arrow) and successfully retracted into the sheath (Figure G and H; Movie II in the online-only Data Supplement). Despite a history of bleeding before the left atrium appendage occlusion therapy, the patient refused a second implantation attempt and was switched to rivaroxaban 15 mg daily. Follow-up was uneventful.

The 30-mm ACP device is equipped with the same number of barbs as smaller devices despite a much larger circumference being a potential reason for a higher risk of dislodgement. This will probably be solved by the new generation ACP occluder (Amulet) with an increased number of barbs.

Disclosures

Dr Schmidt received speaking honoraria from and is an advisory board member for Boston Scientific and St Jude Medical. The other authors report no conflict.

Key Words: device closure ■ dislodged LAA occluder ■ LAA occluder ■ retrieval device ■ transseptal puncture ■ transseptal retrieval

Figure. A and B, Two-dimensional transesophageal echocardiography (TEE) and fluoroscopy images showing the correct device position at implantation in left atrium appendage (LAA). The measured diameter was 25 mm. C, Follow-up 2-dimensional transesophageal echocardiography (TEE) revealing the dislocation of the AGA Cardiac Plug (ACP) device from LAA into the left atrium. D–H, Fluoroscopy images showing the transseptal retrieval of the dislodged ACP. After transseptal puncture, a 30-mm snare (white arrow) was used to wrap and stabilize the dislodged ACP (D); with a second snare (black arrow), the dislodged ACP was grabbed and successfully retracted into a 24-Fr steerable sheath usually used for mitral valve clipping procedures (E–H). LAO indicates left anterior oblique; and RAO, right anterior oblique.
Catch Me If You Can: Transseptal Retrieval of a Dislodged Left Atrial Appendage Occluder
Laura Perrotta, Stefano Bordignon, Alexander Fünkranz, Julian K.R. Chun, Holger Eggebrecht and Boris Schmidt

Circ Arrhythm Electrophysiol. 2013;6:e64
doi: 10.1161/CIRCEP.113.000671

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circep.ahajournals.org/content/6/4/e64

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation: Arrhythmia and Electrophysiology 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: Arrhythmia and Electrophysiology is online at:
http://circep.ahajournals.org//subscriptions/