Successful Percutaneous Retrieval of an Embolized Left Atrial Appendage Closure Device in the Left Ventricular Outflow Tract

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A 70-year-old man with a history of stroke due to persistent atrial fibrillation and intracranial hemorrhage (CHADS2 score 4, HAS-BLED score 4) was referred to undergo left atrial appendage (LAA) closure with the Watchman device (Boston Scientific Inc.). The LAA was successfully sealed with a 30-mm Watchman and the 4 signs for correct implantation were satisfied: position, anchoring, size, and seal (**Figure A**). However, on the day after the procedure, the Watchman was found to have embolized into the left ventricle outflow tract (LVOT) (**Figure B,C**). Fortunately, the patient remained hemodynamically stable, and percutaneous retrieval was performed after sufficient informed consent. After stabilizing

the device by antegrade snaring using a steerable sheath, two 25-mm goose neck snare catheters were inserted retrogradely through 25-cm long 16-Fr and 8-Fr short sheaths (Medikit Inc.) from both sides of the femoral artery. The legs and body of the Watchman were grasped and crushed with sustained traction inside the LVOT (**Figure D**) using the 2 snare catheters under intravenous β -blocker for longer duration of aortic valve opening. After the device was deformed small enough to be retracted from the LV into the ascending aorta, it was smoothly pulled backed inside the aorta and removed from the 16-Fr sheath without any complications (**Figure E**).

Disclosures

None.

Received May 20, 2021; revised manuscript received May 28, 2021; accepted May 31, 2021; J-STAGE Advance Publication released online July 2, 2021 Time for primary review: 3 days

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ISSN-1346-9843

Figure. (A) Transesophageal echocardiographic (TEE) image showing the appropriate device position in the left atrial appendage with no major leakage. The measured device diameter was 23.8 mm (compression rate 20.7%). (B,C) Transthoracic echocardiographic and TEE images showing the Watchman dislodged into the LV outflow tract. (D) Using goose neck snare catheters, the Watchman is grasped and crushed. (E) The Watchman outside the body immediately after retrieval.