



PERCUTANEOUS RETRIEVAL OF EMBOLIZED WATCHMAN DEVICE IN THE LEFT VENTRICULAR OUTFLOW TRACT ON THE DAY AFTER THE IMPLANTATION

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History and physical:

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) underwent left atrial appendage (LAA) closure with the Watchman device. The LAA was successfully sealed with a 30-mm Watchman and the 4 signs for correct implantation were confirmed: position, anchoring, size, and seal.

Imaging:

On the day after the surgery, the X-ray and Echocardiography showed the Watchman was embolized into the left ventricle outflow tract (LVOT).

Indication for intervention:

We considered open-heart surgical retrieval, but the patient and his family refused. Fortunately, the patient's hemodynamic was stable, and we tried to perform percutaneous retrieval.

Learning points of procedure:

After stabilizing the device by antegrade snaring using a steerable sheath from right femoral vein via atrium septum, two 25-mm goose neck snare catheters were inserted retrogradely through 25-cm long 16-Fr and 8-Fr short sheaths from both sides of the femoral artery. Transesophageal echocardiography (TEE) showed the device was larger than aortic valve orifice and it was impossible to pass. Therefore, the legs and body of the Watchman were grasped and crushed with sustained traction inside the LVOT using the 2 snare catheters. We confirmed the device was deformed smaller than the aortic valve orifice by TEE, and we retracted gently into the ascending aorta under intravenous β -blocker for longer duration of aortic valve opening. The device was smoothly pulled backed inside the aorta and removed from the 16-Fr sheath without any complications.



Most devices embolized into the left ventricle are reported to be retrieved by open heart surgery. In this case, we have successfully performed a percutaneous retrieval. We will share this nightmare complication and bail-out procedure of this case.

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