

Percutaneous Extraction of a Migrated Watchman Device After 7 Months

Abhishek Maan MD, ScM*, Mohit K. Turagam MD, MS*, Srinivas R. Dukkipati, MD* and
Vivek Y. Reddy MD*

* Helmsley Electrophysiology Center, Division of Cardiac Electrophysiology, Icahn School of Medicine at Mount Sinai, New York, NY

Address for correspondence:

Vivek Y. Reddy, MD
Helmsley Electrophysiology Center

Icahn School of Medicine at Mount Sinai
One Gustave L. Levy Place, PO Box 1030, New York, NY 10029.
Tel: +212-241-7114
Fax: +646-537-9691

Email: vivek.reddy@mountsinai.org

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Text

An 84-year-old man with persistent AF (CHA₂DS₂-Vasc 6) was referred because of a migrated 24-mm Watchman implanted 7 months prior. Prior to the procedure, an informed consent was obtained from the patient in keeping with the institution's clinical and research policies. Transesophageal echo (TEE) showed device malposition and protrusion outside the LAA along with a 90° tilt and peri-device leak (**Figure, Movies 1-3**).

Under general anesthesia, an extraction was performed using TEE, intracardiac echocardiographic and fluoroscopy. Using a femoral arterial approach, a 27-mm Watchman was positioned in ascending aorta for cerebroembolic protection, never released from the connecting wire (WAASP technique, **Movies 4-5**) (1). A 23-Fr non-deflectable sheath (Micra, Medtronic, MN) was advanced into right atrium, through which a 12-Fr deflectable sheath (Flexcath Advance, Medtronic) was placed transeptal. A 2.4 mm x 20 cm Raptor grasping device (US Endoscopy, Mentor, Ohio; **Figure**) was advanced through 12 Fr sheath to grasp the Watchman device. With sustained traction, the device was dislodged from the LAA into the 23 Fr sheath (**Figure, Movie 6**). A new 24 mm Watchman was then placed and the temporary Watchman in the aorta was removed. A follow up TEE showed stable position without significant peri-device leak.

This case demonstrates the safety and feasibility of malpositioned Watchman extraction re-implantation in the same setting (2).

References

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Legends

Figure: The endoscopic grasping tool (A) has a hybrid jaw configuration combining both alligator and rat tooth capabilities for enhance gripping. To remove the migrated Watchman device (B), a device was temporarily positioned in the ascending aorta for embolic protection (C), and the grasping tool was used to retrieve the device.

Movies 1-3: Transesophageal echocardiography shows the malpositioned Watchman device.

Movies 4-5: A Watchman device was positioned in the ascending aorta for embolic protection.

Movie 6: The Watchman device is removed with the grasping tool under fluoroscopy.

Figure

