



## **A dislodged left atrial appendage occlusion device rescued with a gastroenterological forcep: No technical frontiers**

**Authors:** Catarina M Costa, Ricardo Alves Pinto, João C Silva, Paula G Dias, Carla M Sousa,  
Filipe L Macedo

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## **A dislodged left atrial appendage occlusion device rescued with a gastroenterological forcep: No technical frontiers**

**Short title:** Gastroenterologic forcep rescues left atrial appendage occluder

Catarina M Costa<sup>1</sup>, Ricardo Alves Pinto<sup>1</sup>, João C Silva<sup>1</sup>, Paula G Dias<sup>1</sup>, Carla M Sousa<sup>2, 3</sup>,  
Filipe L Macedo<sup>2, 3</sup>

<sup>1</sup>Centro Hospitalar São João, Department of Cardiology, Porto, Portugal

<sup>2</sup>Centro Hospitalar São João, Cardiology Department, Porto, Portugal

<sup>3</sup>University of Porto, Faculty of Medicine, Porto, Portugal

### **Correspondence to:**

Catarina Martins da Costa, MD, MS,  
Department of Cardiology, Alameda Prof. Hernâni Monteiro,  
4200–319 Porto, Portugal,  
phone: +35 191 926 62 57,  
e-mail: catarinamarcosta@gmail.com

A 67-year old woman with atrial fibrillation and several hemorrhagic episodes was referred to percutaneous left atrial appendage occlusion (LAAO) [1]. We decided to perform LAAO with a Watchman FLX™ (Boston Scientific, Minneapolis, MN, US) under general anesthesia and with transesophageal echocardiogram (TOE) monitoring. In the Cath lab, TOE showed a windsock-shaped left atrial appendage (LAA) with a landing zone 20 × 23 mm and fluoroscopy suggested larger ostium size of 24 mm. Considering the borderline value in the sizing chart and anatomic characteristics, a 35-mm Watchman FLX™ (**Figure 1A and B**) [2].

After transseptal puncture, the device was deployed in the LAA fulfilling stability criteria (**Figure 1C**) [3]. However, immediately after releasing the device it dislodged to the left atrium in a perpendicular position to the LAA, and with significant peri and intra device leak (**Figure 1D**). Numerous percutaneous maneuvers to recapture were performed using the delivery catheter and two snares in simultaneous, unsuccessfully (Supplementary material, *Video S1*). An endomyocardial biptome of 6 Fr × 105 cm was also used to rescue the LAAO; though it was managed to catch the top of the device, the gripping power was not enough to remove it,

even after several attempts. Hence, we used a Rescue™ Alligator Long Grasping Forcep (Boston Scientific, Minneapolis, MN, US), mostly used in endoscopic procedures, that allows a higher grasping strength. This forcep was introduced within a 8.5 Fr × 71 cm Agilis NXT steerable introducer (Abbott Laboratories, Abbott Park, Chicago, IL, US) to orientate the forcep to the device, which manage to restrain it. To allow a safe removal, a 20 Fr × 65 cm GORE® DrySeal Flex Introducer Sheath (Gore, Newark, DE, United States), that was first given manually an arch shape to orientate to the septum and LAA, was gently leaned over the device making it softly close inside the sheath and push it outside (Figure 1E, Supplementary material, *Video S2*).

We reinforce that the procedure was performed under close TOE monitorization, with 3D echo offering most valuable guidance in this complex and risky retrieval, with no complication in the end. It was considered that the device dislodged due to oversizing. Therefore, a 31-mm Watchman FLX™ was after deployed, with complete sealing and no further complication (Figure 1F).

### Supplementary material

Supplementary material is available at [https://journals.viamedica.pl/kardiologia\\_polska](https://journals.viamedica.pl/kardiologia_polska).

### Article information

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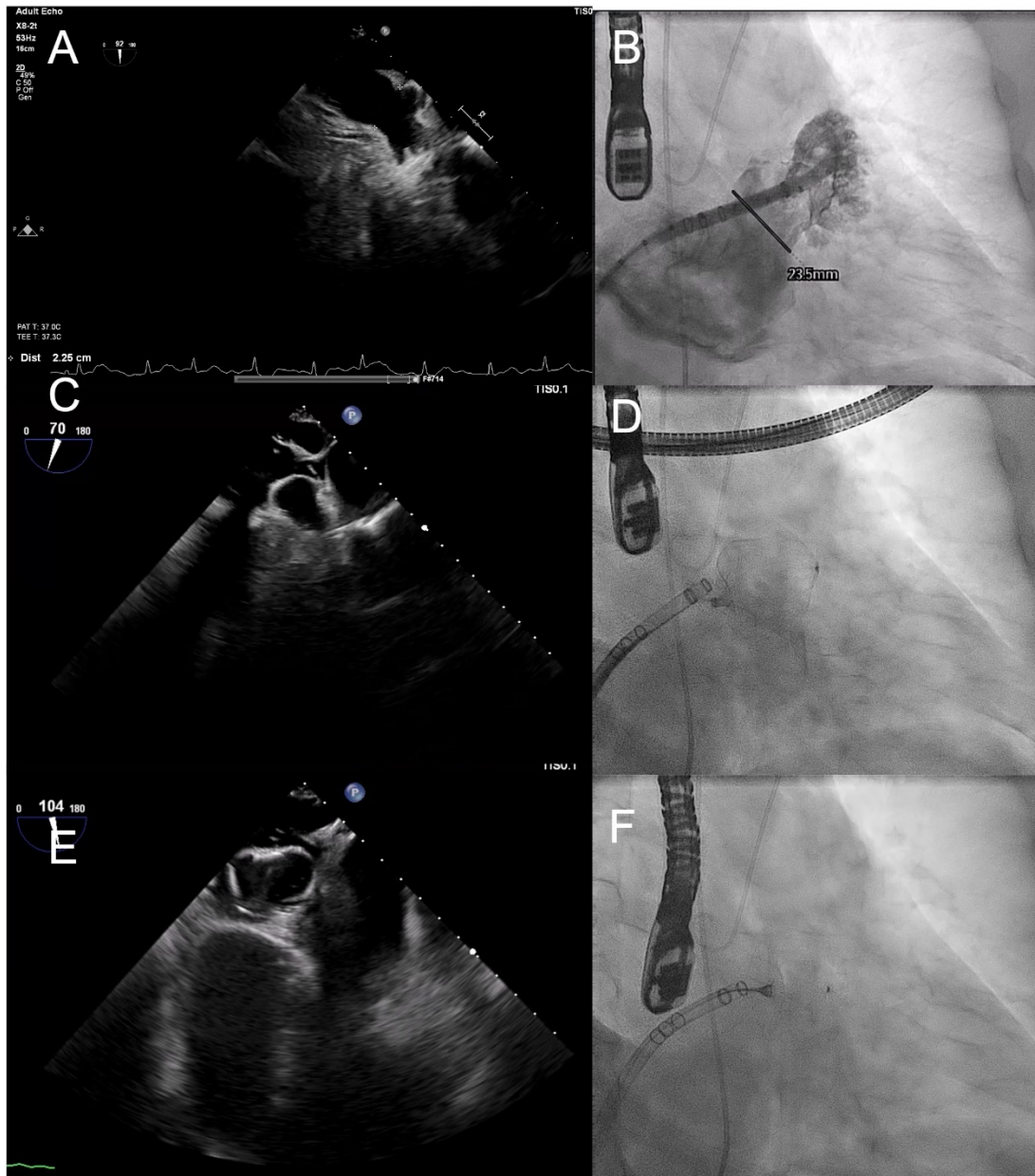
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**Figure 1.** Pre procedure measurements: (A) transesophageal echocardiogram (TEE) showed a landing zone 20 × 23 mm while (B) fluoroscopy suggested a 24 mm of diameter. C. The 35-mm Watchman FLX™ device fulfilling PASS criteria on TEE. D. After releasing, the device moved to the left auricle in a perpendicular position to the left atrial appendage (TEE). E.

Several attempts were performed to remove the device but only using a gastroenterological forcep it was captured and safely removed. **F.** A 31-mm Watchman FLX™ was after deployed, with complete sealing and no further complication