A dislodged left atrial appendage occlusion device rescued with gastroenterological forceps

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A 67-year-old woman with atrial fibrillation and several hemorrhagic episodes was referred for percutaneous left atrial appendage occlusion (LAAO) [1]. We decided to perform LAAO with a Watchman FLXTM (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 of 20 × 23 mm, and fluoroscopy suggested an ostium size of 24 mm. Considering the borderline value in the sizing chart and anatomic characteristics, we opted for a 35-mm Watchman FLXTM (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, with significant peri and intra-device leaks (Figure 1D). Numerous percutaneous maneuvers to recapture were performed using the delivery catheter and two snares simultaneously, with no success (Supplementary material, *Video S1*).

An endomyocardial bioptome of 6 Fr × 105 cm was also used to open the LAAO. Although we managed to catch the top of the device, after several attempts it was obvious the gripping power was not enough to remove the device. Hence, we used RescueTM Alligator Long Grasping Forceps (Boston Scientific, Minneapolis, MN, US), mostly used in endoscopic procedures, which have higher grasping strength. These forceps were introduced within an 8.5 Fr × 71 cm Agilis NXT steerable introducer (Abbott Laboratories, Abbott Park, Chicago, IL, US) to orientate the forceps toward the device, and this succeeded in restraining it. To guarantee safe removal, a 20 Fr 65 cm GORE® DrySeal FlexIntroducer Sheath (Gore, Newark, DE, US), first manually given an archshape to orientate it toward the septum, softly approached the Watchman device, folding it into the sheath and pushing it outside (Figure 1E, Supplementary material, *Video S2*).

We emphasize that the procedure was performed under close TOE monitoring, with 3D echocardiography offering the most valuable guidance in this complex and risky retrieval, with success in the end. We concluded that the device had dislodged due to oversizing. Therefore, a 31-mm Watchman FLXTM was deployed, with complete sealing and no further complications (Figure 1F).

Supplementary material

Supplementary material is available at https://journals.viamedica.pl/kardiologia_polska.

Article information

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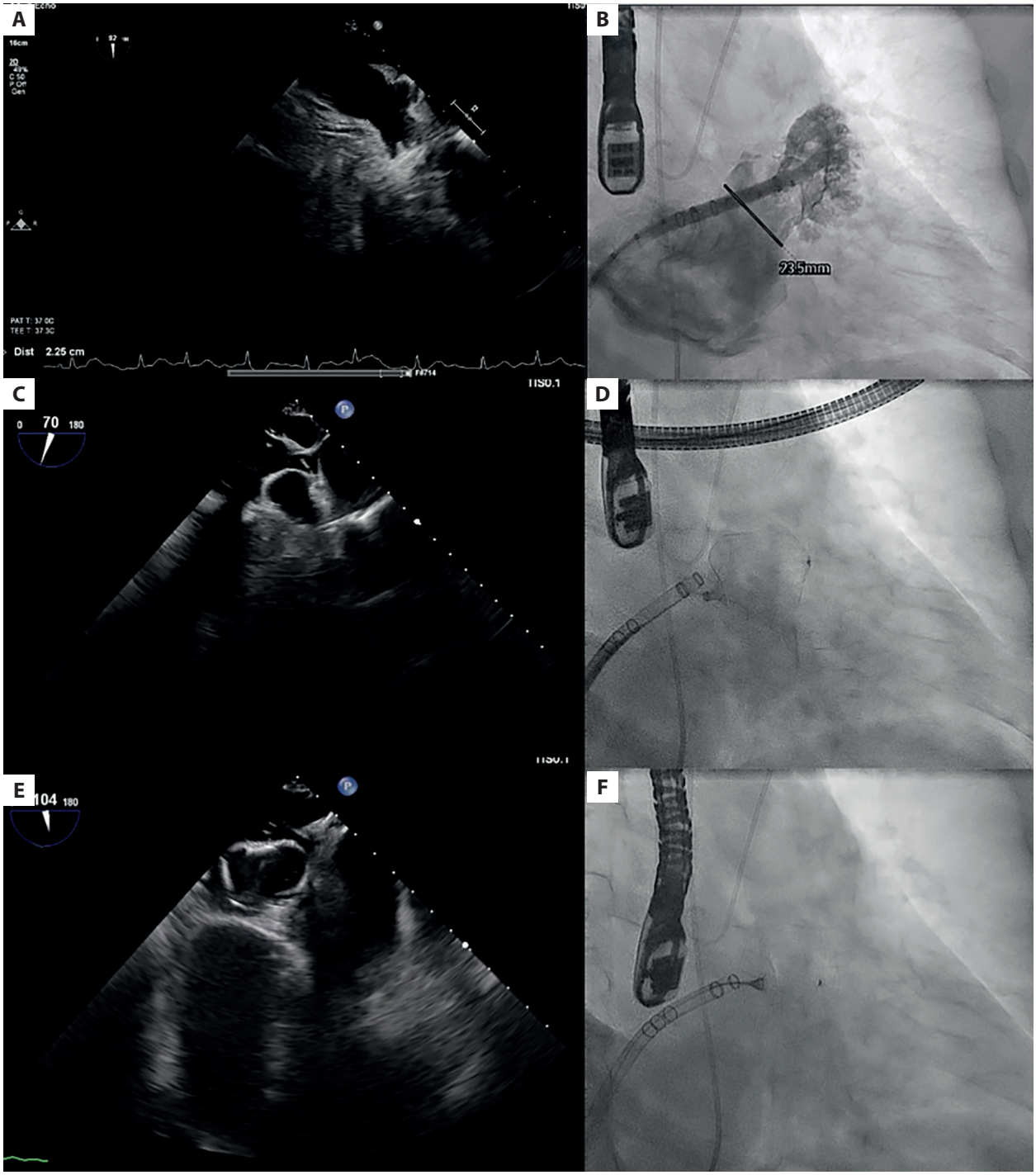

Figure 1. Pre-procedure measurements: (**A**) transesophageal echocardiogram (TEE) showed a landing zone of 20 × 23 mm while (**B**) fluoroscopy suggested a diameter of 24 mm. **C.** The 35-mm Watchman FLXTM device fulfilling the PASS (Position, Anchoring, Size, Seal) criteria on TEE. **D.** After releasing, the device moved to the left auricle in a perpendicular position to the left atrial appendage (TEE). **E.** Several attempts were made to remove the device, but only after using gastroenterological forceps, the device was captured and safely removed. **F.** A 31-mm Watchman FLXTM was deployed, with complete sealing and no further complications

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