

Percutaneous left atrial appendage closure containing thrombus

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An 85-year-old man with permanent atrial fibrillation was referred to our institution for percutaneous left atrial appendage (LAA) closure (LAAC). The patient had chronic renal disease (CRD) with glomerular filtration rate (GFR) 25 mL/min and under acenocumarol therapy had developed melaena due to colonic angiodysplasia with severe anemia (hemoglobin: 5.9 g/dL). Transesophageal echocardiography (TEE) revealed thrombus within LAA (Fig. 1A). LAAC using simultaneous cerebral protection with SentinelTM (Claret Medical, Santa Rosa, CA, USA) was scheduled. The procedure was performed under general anesthesia and guided by TEE. After transseptal puncture, heparin was administered and afterward SentinelTM was inserted through right radial artery (Fig. 1B). A LAmbréTM (Lifetech Scientific Corp., Shenzhen, China) 24/30 mm

for LAAC was chosen and contrast medium injection was avoided during the procedure. A partial umbrella delivery of LAmbré was carried out in front of the LAA and the whole system was advanced slowly within LAA trying not to touch the thrombus (Fig. 1C). Initially, the umbrella position seemed to be a little deep so the umbrella was partially recaptured and delivered again in a better position. Afterward, the cover part of the device was delivered and pulled back slightly so to achieve a proper positioning. TEE confirmed an adequate position and absence of any leakage while tug test manoeuvre revealed the device's stability. Hence, the LAmbré was ultimately released without incidence (Fig. 1D, **Suppl. Video 1**). SentinelTM was retrieved and no debris was identified in the system. The patient post-intervention course was uneventful.

Conflict of interest: None declared

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Received: 23.05.2021 Accepted: 8.06.2022

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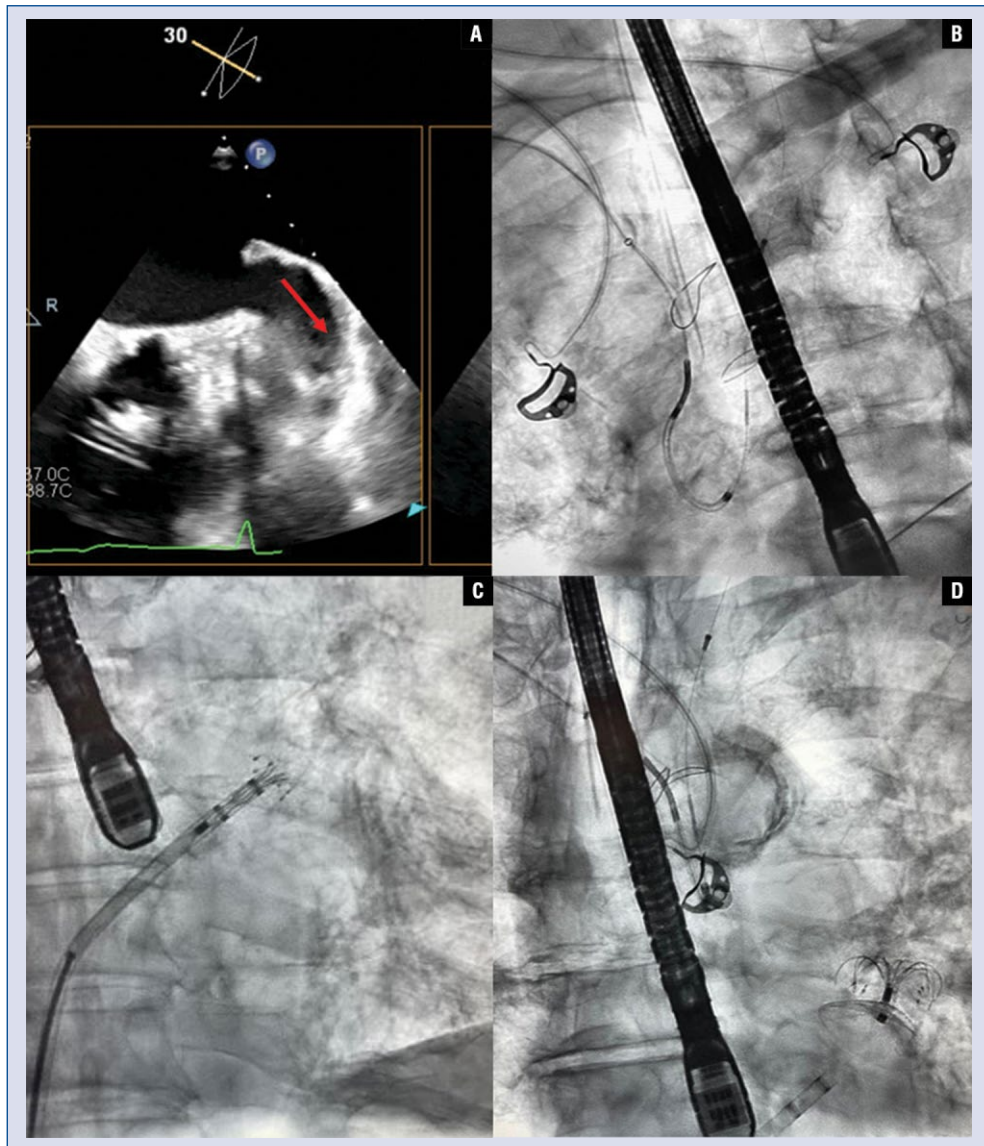


Figure 1. A. Left atrial appendage shows thrombus at its bottom; B. Sentinel with its two baskets is inserted into the right brachiocephalic trunk and left carotid artery; C. Partial delivery of umbrella in the left atrial appendage; D. Complete release of the device, showing umbrella and cover part in a good position.