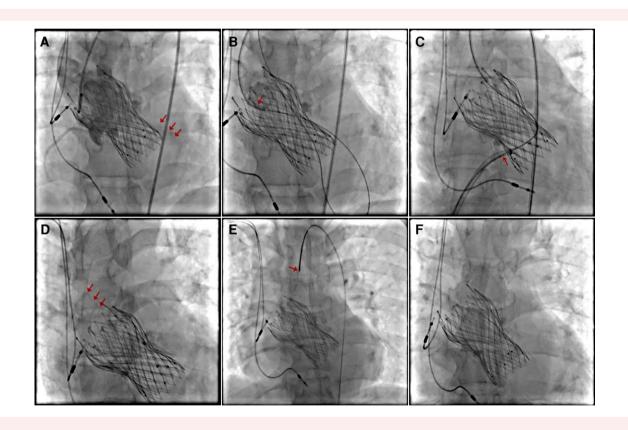
Jacket of guidewire detaching during interventional closure for peri-valvular leak after VIV TAVR

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Received 17 October 2022; first decision 22 November 2022; accepted 9 December 2022; online publish-ahead-of-print 16 December 2022



A 61-year-old male patient with severe aortic stenosis underwent valve-in-valve (VIV) transcatheter aortic valve replacement (TAVR)

and presented with a moderate prosthetic valve perivalvular leak (PVL) confirmed by an ascending aortogram (arrows) (Panel A and

Handling Editor: Asad Shabbir

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see Supplementary material online, Video S1). Interventional PVL closure was attempted. Although we used both retrograde and antegrade approaches to approach the defect, the guiding catheter (arrows) failed to cross the stent mesh along the guidewire after several attempts (Panels B and C). Therefore, we abandoned the interventional closure and withdrew the catheter and guidewire. After that, it was discovered that the super-slide hydrophilic guidewire's polyurethane jacket with tungsten (arrows) was detached and floating in the ascending aorta. (Panel D and see Supplementary material online, Video S2). Finally, it was successfully captured (arrow) and removed by a snare. (Panels E and F, and see Supplementary material online, Videos S3 and S4). The patient was referred to surgery for further treatment of PVL. The reason for the guiding catheter failing to cross could be that the overlapped stents after VIV TAVR generated smaller stent meshes, which also contributed to the jacket of the guidewire detaching with repeated procedures.

PVL is one of the complications after TAVR. Interventional closure could be selected with prudence for PVL after VIV TAVR.

Supplementary material

Supplementary material is available at European Heart Journal — Case Reports.

Consent: The authors confirm that written consent for submission and publication of this case report including images and associated text has been obtained from the patient in line with COPE guidelines.

Conflict of interest: None declared.

Funding: Y.S.C. was supported by grant from the National Natural Science Foundation of China (82070052).

Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.