

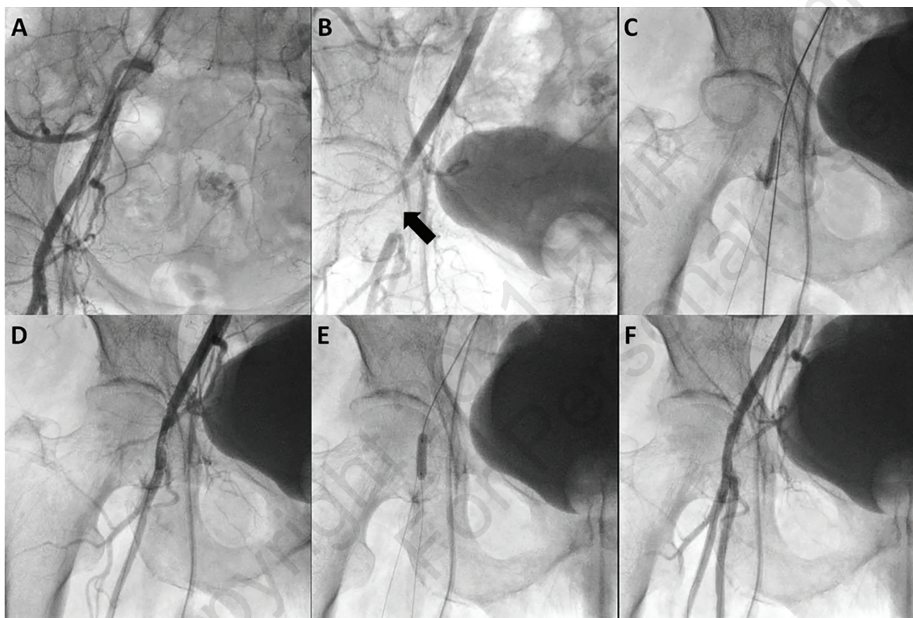


# Acute Occlusion of 14 Fr Femoral Access Site After Suture/Collagen Device Failure and Successful Transradial Recanalization

George Latsios, MD; Antonios Karanasos, MD; Andreas Synetos, MD; Costas Tsioufis, MD; Konstantinos Toutouzas, MD

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**FIGURE 1.** Following angio-guided puncture, 2 Proglide systems were placed. Vascular closure resulted in significant residual leakage; an additional AngioSeal device was applied. (B) The patient developed acute right FA occlusion. (C, D) The occlusion was treated, with partial flow restoration. (E) Four-minute inflation of a 5.0 mm non-compliant balloon in the profunda FA. (F) Flow was recovered, without residual stenosis or bleeding.

A 79-year-old woman underwent transfemoral transcatheter aortic valve implantation (TAVI) under conscious sedation using right femoral access for a 14 Fr, sheathless, Evolut-R system (Medtronic), and right radial artery as secondary access. Following angio-guided puncture (Figure 1A), 2 Proglide systems (Abbott Vascular) were placed for preclosure. TAVI procedure was uneventful. Vascular closure by tightening Proglide sutures resulted in significant residual leakage. We therefore used an additional AngioSeal device (Terumo).

After AngioSeal insertion, the patient developed acute right femoral artery (FA) occlusion (Figure 1B). We advanced a multipurpose 6 Fr guide catheter and attempted unsuccessfully to cross the occlusion with both standard and hydrophilic 0.035" wires. We finally crossed the occlusion with 2 coronary angioplasty wires (1 at the superficial FA and the other at the profunda

FA), and subsequently inflated a 3.0 mm coronary non-compliant balloon in the superficial FA for 60 seconds with partial flow restoration (Figures 1C, 1D), followed by 4-minute inflation of a 5.0 mm non-compliant balloon in the profunda FA (Figure 1E). Eventually, flow was recovered, without residual stenosis or bleeding (Figure 1F).

Our case demonstrates the need for caution when using a collagen-based closure device as bailout for failure of suture-based devices in large-diameter arterial access, as acute vessel closure is possible. Standard interventional cardiology techniques aided the rapid resolution of this complication, while radial artery as secondary access did not hamper our efforts.

From the 1st Department of Cardiology, Athens Medical School, Hippokration Hospital, Athens, Greece.

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Address for correspondence: Antonios Karanasos, MD, PhD, Hippokration Hospital, 114 Vas Sofias av, 11527, Athens, Greece. Email: akaranasos@hotmail.com