

IMAGES IN INTERVENTION

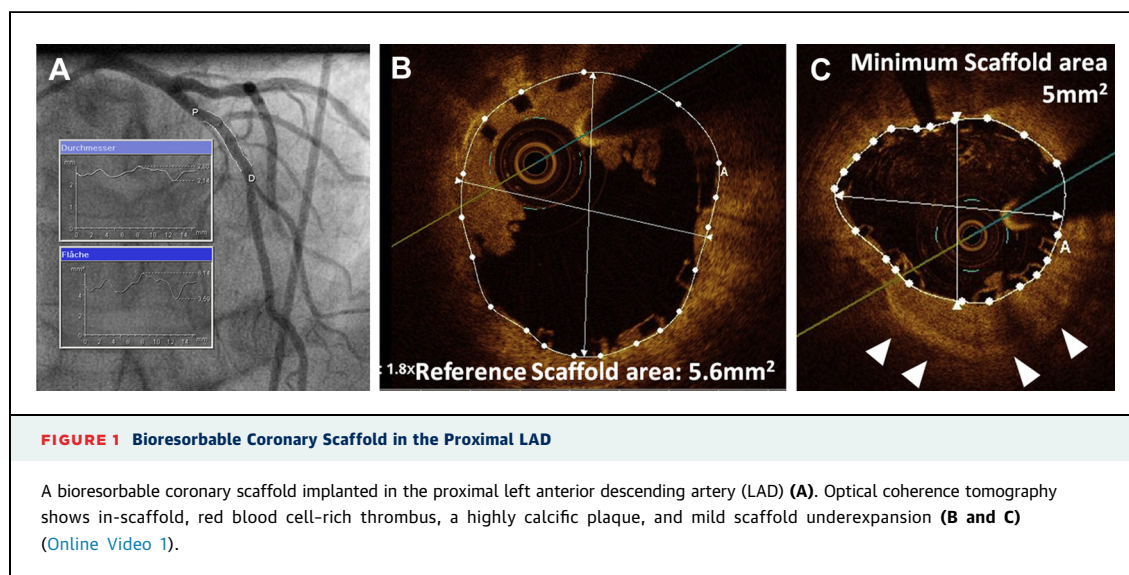
Immediate, Acute, and Subacute Thrombosis Due to Incomplete Expansion of Bioresorbable Scaffolds



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We discuss 3 cases of incomplete scaffold expansion leading to early in-scaffold thrombosis. The first case is that of a 64-year-old man who received a bioresorbable coronary scaffold (12 atm, 3.0 × 18 mm) in the proximal left anterior descending artery (Figure 1A). Ticagrelor was administered. 15 min later, the patient underwent emergency angiography for angina and anterior ST-segment elevation. Optical coherence tomography

(OCT) showed an in-scaffold, red blood cell-rich thrombus, a thin-cap calcific plaque, and mild scaffold underexpansion (Figures 1B and 1C, Online Video 1). The second case is that of a 53-year-old woman who received a scaffold (3.0 × 18 mm, 12 ATM) in the right coronary artery (Figures 2A and 2B). Ticagrelor was prescribed. Four days later, she presented with inferior ST-segment elevation. The vessel was completely occluded by intravascular thrombosis



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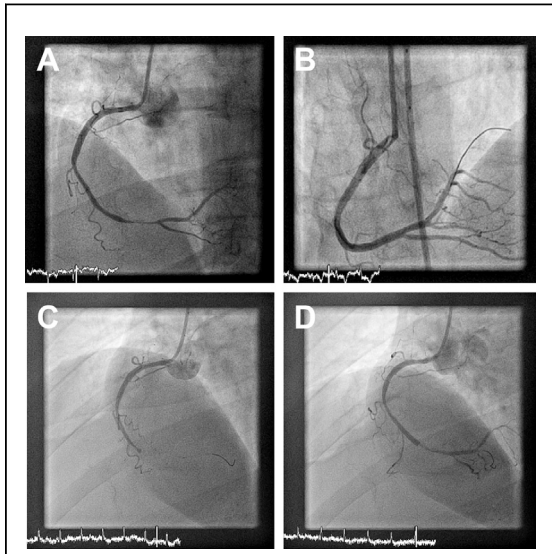


FIGURE 2 Scaffold in the RCA

A scaffold implanted in the right coronary artery (RCA) (A, B). Intravascular thrombosis on day 4 after implantation (C, D).

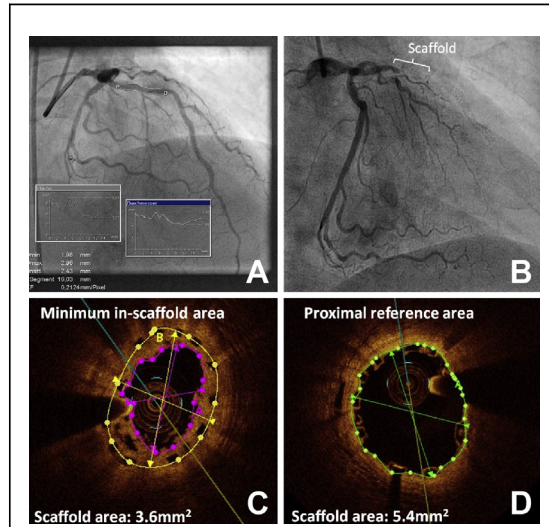


FIGURE 3 Scaffold in the Proximal LAD of a Diabetic Patient

A scaffold implanted in the proximal left anterior descending artery (LAD) of a diabetic patient (A). Optical coherence tomography demonstrated in-scaffold thrombosis (B), a severely calcified vessel (C), and incomplete scaffold expansion (D) (Online Video 2).

(Figures 2C and 2D). The third case is that of a 53-year-old diabetic woman who received a scaffold (2.5 × 18 mm, 14 ATM) in the proximal left anterior descending artery (Figure 3A). Ticagrelor was prescribed. Six days later, she returned with anterior ST-segment elevation and cardiogenic shock (Figure 3B). OCT demonstrated in-scaffold thrombosis, a severely calcified vessel, and incomplete scaffold expansion (Figures 3C and 3D, Online Video 2). OCT evidence of underexpansion emphasizes the importance of intracoronary imaging and effective, high-pressure postdilatation at the time of implantation.

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APPENDIX For supplemental videos, please see the online version of this article.