

A golden tube following bioresorbable scaffold implantation

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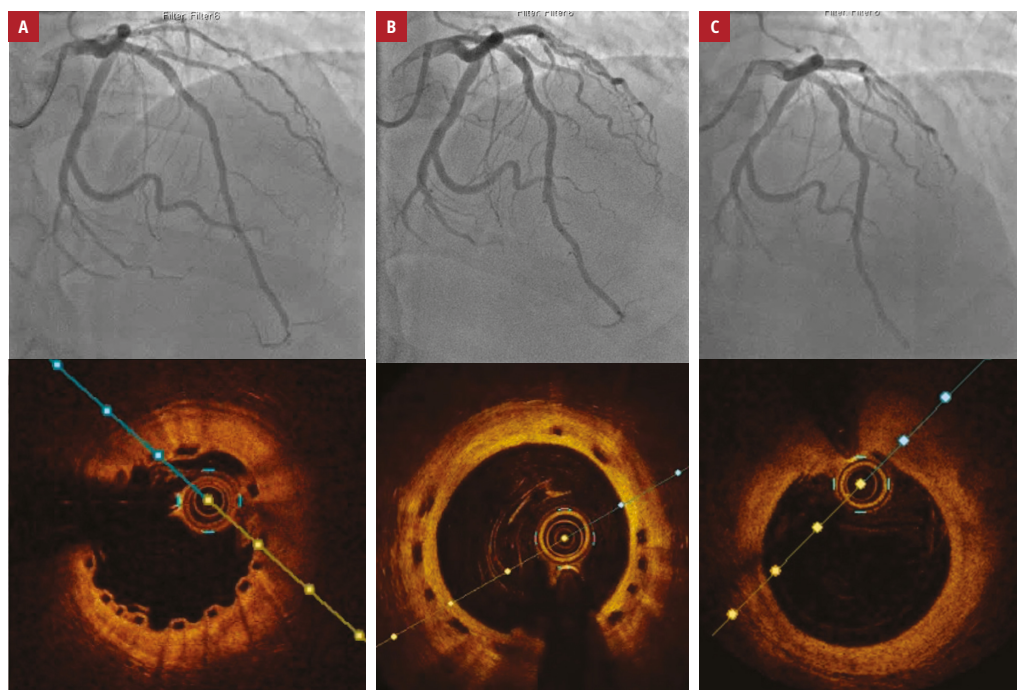


FIGURE 1 Angiography and optical coherence tomography in a patient with the diseased left anterior descending artery after bioresorbable scaffold implantation: **A** – well-apposed scaffolds at 6 months; **B** – continued good outcomes and persisting scaffolds at 2 years; **C** – continued good outcomes and complete resorption of the scaffolds at 5 years

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A 57-year-old man with crescendo angina presented with a long segment of the left anterior descending artery (LAD) affected by diffuse disease, which could not be surgically revascularized (Supplementary material, *Figure S1*). He was successfully treated with a hybrid strategy. Three overlapping vascular bioresorbable scaffolds (BRS) were implanted and, proximally, a drug eluting stent was placed to avoid loss of a large diagonal branch owing to the thickness of the scaffolds (Supplementary material, *Figure S2*). Angiography and optical coherence

tomography (OCT) at 6-month (*FIGURE 1A*; Supplementary material, *Figure S3*) and 2-year follow-up (*FIGURE 1B*; Supplementary material, *Figures S4* and *S5*) demonstrated positive remodeling of the vessel and persisting scaffolds that were fully endothelialized.^{1,2} The patient continued to be asymptomatic at 5 years, and the repeat angiogram with OCT demonstrated no restenosis. More importantly, there was complete resorption of the scaffolds, mimicking a golden tube on OCT (*FIGURE 1C*; Supplementary material, *Figures S6, S7, and S8*). The benefits of BRS are

best reaped in such long, diffuse lesions, especially in the LAD. With BRS, a full-metal jacket is avoided and, since the scaffolds are absorbed, it can potentially provide the future option of coronary artery bypass grafting. Our patient can potentially have a graft to his LAD in the future if he develops new disease that could not have been possible earlier owing to the diffuse nature of the disease. If BRS were to return for clinical use, it should be reserved for such long, diffuse LAD lesions to reap the full benefit from the resorbable technology. There are some studies in which nonuniform absorption of scaffolds have been reported,³ but this may be related to underlying tissue composition (fibrocalcific), which may hinder the resorption. In addition, it may also reflect how well the scaffolds were originally deployed (embedded versus just opposed to the vessel wall). Well-embedded scaffolds are probably well resorbed compared with the one just opposed.

SUPPLEMENTARY MATERIAL

Supplementary material is available at www.mp.pl/kardiologiapolska.

ARTICLE INFORMATION

CONFLICT OF INTEREST None declared.

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