"Full plastic jacket": 18-month follow-up after implantation of multiple overlapping bioresorbable vascular scaffolds

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A 77-year-old diabetic male with non-ST-segment elevation myocardial infarction underwent coronarography which showed diffuse disease of the left anterior descending (LAD) coronary artery (Figure 1A). Considering the length and the site of the lesion, a vessel reconstruction with multiple bioresorbable vascular scaffolds (BVS) (Absorb; Abbott Vascular, Santa Clara, CA, USA) implanted in overlap ("full plastic jacket") from the distal to the mid LAD was successfully performed (Figure 1B). The patient was discharged the day after PCI on dual antiplatelet therapy for 12 months. He has remained asymptomatic and free from cardiac events up to 18 months follow-up when he underwent scheduled angiographic follow-up which showed good angiographic and optical coherence tomography (OCT) results with only three over 1,018 (0.2%) struts uncovered (Figure 1C-Figure 1H, Moving image 1, Moving image 2). These images show that a "full plastic jacket" could be an

interesting strategy in case of diffuse disease, particularly when it involves the mid-distal LAD. Indeed, this reconstruction technique does not preclude an eventual future surgical revascularisation once BVS resorption is complete.

Conflict of interest statement

The authors have no conflicts of interest to declare.

Online data supplement

Moving image 1. OCT pullback showing follow-up result after multiple overlapping BVS (2.5×18 mm, 2.5×28 mm, 3.0×28 mm with overlap sites) implantation from distal to mid LAD.

Moving image 2. OCT pullback showing follow-up result after overlapping BVS implantation (3.0×28 and 3.0×18 mm with overlap site) in the mid LAD.

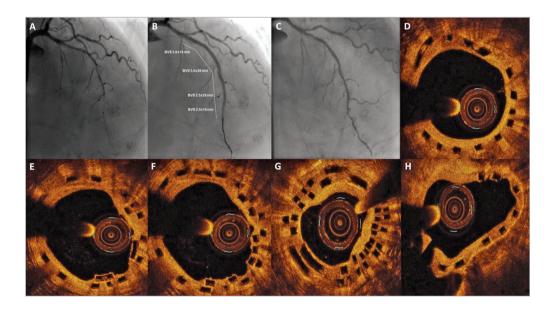


Figure 1. Complete LAD reconstruction with multiple overlapping BVS. A) Angiography shows a long LAD lesion. Immediate (B) and 18-month (C) angiographic results following overlapping BVS (2.5×18 mm, 2.5×28 mm, 3.0×28 mm and 3.0×18 mm) implantation from distal to mid LAD. OCT images after 18 months show that all BVS (recognisable with a box shape appearance of the struts) are patent and well apposed against the vessel from mid (D) to distal segments (H) passing to the three overlapping sites (E, F, G).

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