Bioresorbable vascular scaffold implantation for recurrent in-stent restenosis: an option in case of multiple failures?

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An 80-year-old male underwent coronary angiography for unstable angina. He had a history of multiple PCI in the LCx towards OM1 due to recurrent in-stent restenosis (ISR) (bare metal stent-ISR treated with drug-eluting stent [DES]; DES-ISR treated with cutting and non-compliant [NC] balloons; new DES-ISR treated with drug-eluting balloon). The angiography showed a recalcitrant multifocal ISR on OM1 (Figure 1A, Figure 1B). Although off-label, we treated the ISR with two (3.5×18 mm and 3.5×28 mm) bioresorbable vascular scaffolds (BVS; Absorb[™]; Abbott Vascular, Santa Clara, CA, USA) implanted in overlap from distal to proximal OM1. Post-dilatation was performed with a 3.5×21 mm NC balloon. Final angiographic (Figure 1C, Figure 1D) and IVUS (Figure 1E, Figure 1F) results were good as well as six-month angiographic follow-up (Online Figure 1A, Online Figure 1B). These

images show that BVS may be an option in case of recalcitrant ISR after failure of the conventional treatment.

Conflict of interest statement

The authors have no conflicts of interest to declare.

Online data supplement

Online Figure 1. A) & B) Six-month angiographic follow-up showing patency of the OM1 segment treated with in-stent BVS implantation.

Moving image 1. Pre-PCI IVUS pullback from the distal to proximal OM1 showing multiple strut layers and multifocal ISR.

Moving image 2. Final IVUS pullback following BVS implantation from distal to proximal OM1.



Figure 1. *A*) & *B*) Restenosis in the distal and proximal OM1 at baseline angiography. Final angiographic (C & D) and IVUS results at the proximal (E) and distal (F) ISR sites following in-stent BVS implantation.

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Online data supplement



Online Figure 1. *A*) & *B*) Six-month angiographic follow-up showing patency of the OM1 segment treated with in-stent BVS implantation.