Image in cardiology

Culotte Technique With a Bioresorbable Vascular Scaffold: 12 Months' Follow-up



Culotte con armazón vascular bioabsorbible: seguimiento a 1 año

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Figure 1.

Coronary angiography in a 60-year-old woman with non–ST-elevation acute coronary syndrome revealed occlusion of the first marginal branch (Figure 1A).

After predilatation, 2 branches of similar diameter were seen, with significant stenosis of the inferior branch and mild stenosis of the ostium of the superior branch (Figure 1B).

A 3 \times 28-mm Absorb (Abbott Vascular, California, USA) bioabsorbable vascular scaffold was implanted in the first marginal branch toward the inferior branch. After visualization of severe stenosis of the ostium of the jailed superior branch, a second 3 \times 18-mm Absorb scaffold was implanted using the Culotte technique, followed by kissing balloon dilatation with two 2.5-mm NC (noncompliant) balloons to

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Figure 2.



Figure 3.

6 atmospheres (to avoid overexpansion of the proximal zone) and subsequent postdilatation of the first marginal branch-inferior branch (3×15 -mm NC balloon) (Figure 1C).

Follow-up optical coherence tomography (Figure 2, video 1 of the supplementary material) revealed expansion and correct apposition of almost all of the struts. Some struts showed slight malapposition (Figure 2, asterisk). There was also marked malapposition of a strut possibly corresponding to a connector at the bifurcation (Figure 2, arrows).

The scheduled 12-month follow-up (Figure 1D, Figure 3, and video 2 of the supplementary material) showed adequate endothelial coverage, even in the proximal segment and at the malappositioned strut at the carina (Figure 3, arrows).

The case illustrates that, although treatment of bifurcations with bioresorbable vascular scaffolds is not an approved indication, satisfactory immediate and mid-term results can be achieved with this approach, as long as technical precautions are taken.

SUPPLEMENTARY MATERIAL

Supplementary material associated with this article can be found in the online version available at doi:10.1016/j.rec.2015.12.030.

