



IMAGE IN CARDIOLOGY

Late challenges after full plastic jacket in spontaneous coronary dissection



Desafios do *full plastic jacket* na dissecação coronária espontânea

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We report the case of a 38-year-old woman with a complicated spontaneous coronary artery dissection (SCAD) of the right coronary artery treated with sequential bioresorbable vascular scaffolds (BVS) making a ‘full plastic jacket’.¹ A good angiographic result was achieved (Figure 1A and B). Optical coherence tomography (OCT) showed slight persistence of the proximal dissection (Figure 1C) that was considered non-significant. At one-year follow-up, the patient was admitted for unstable angina. Angiography showed a contrast-filled perivascular space in the proximal segment (Figure 1D, arrow). On OCT, BVS struts were fractured and prolapsing into the lumen (Figure 1E, arrow) and there was a large false lumen with persistent entry flaps

(Figure 1E and F, asterisk, arrow). In order to seal the chronic dissection and deal with the fractured BVS struts, a covered coronary stent was implanted. There was angiographic and OCT success (Figure G and H) without BVS damage at the covered stent margins. After six months, follow-up angiography and OCT imaging confirmed a good result of the intervention (Figure 1I).

Although initial enthusiasm for BVS has waned after results of more recent clinical trials, complicated SCAD is considered a good indication for their use. This case demonstrates that even in this setting there may be non-acute complications that may not be apparent in a non-invasive clinical follow-up. Based on our findings we suggest a

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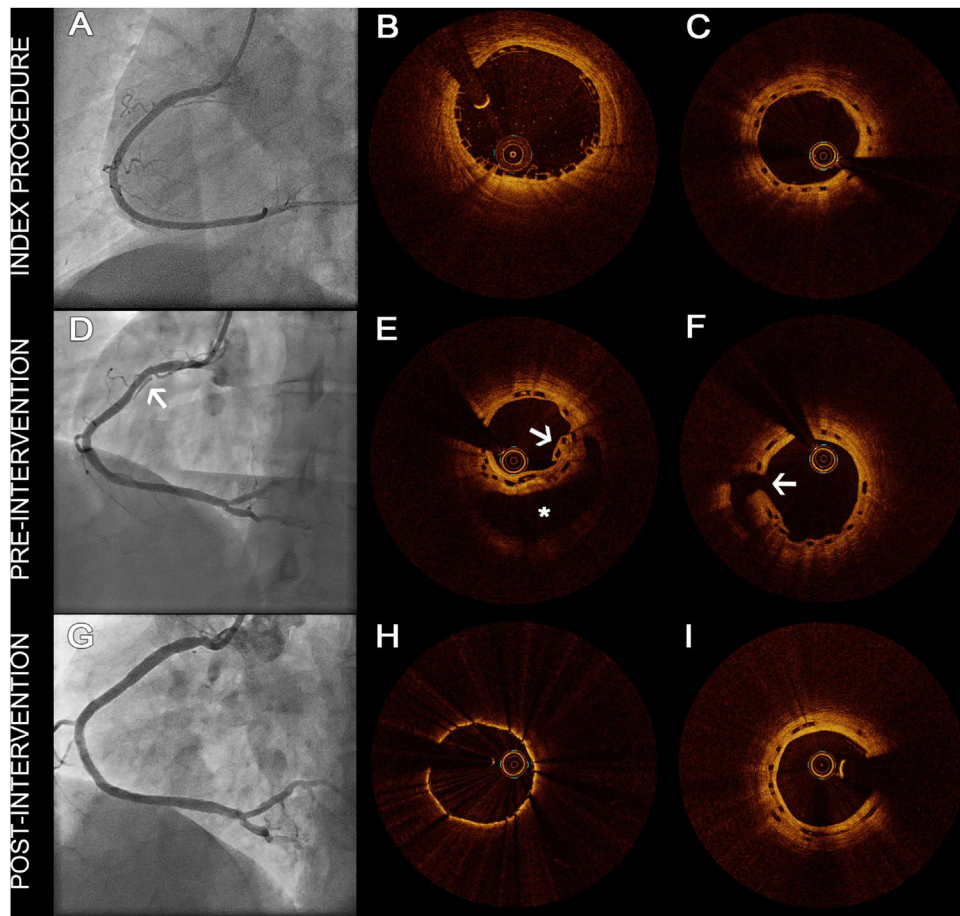


Figure 1 (A) Index right coronary angiography after angioplasty; (B) index optical coherence tomography (OCT) imaging after angioplasty; (C) index OCT imaging with residual proximal dissection covered by stent struts; (D) suspicious lesion, suggestive of a residual dissection/false aneurysm (arrow); (E) proximal BVS stents with a large hematoma (asterisk), overlapped struts and struts protruding into the lumen (arrow); (F) entry flaps of the residual proximal dissection (arrow); (G) final angiographic result after angioplasty; (H) final OCT showing correct stent expansion and sealing of the flaps; (I) six-month follow-up OCT with no signs of stent restenosis.

low threshold for angiographic and intravascular imaging assessment. Finally, the use of a covered stent in a case of BVS fracture and chronic dissection was safe and effective.

Conflicts of interest

The authors have no conflicts of interest to declare.

Reference

1. Ramalho AR, Silva Marques J, Oliveira Santos M, Matos V. Optical Coherence Tomography-Guided Full Plastic Jacket in Spontaneous Coronary Artery Dissection. *JACC Cardiovasc Interv.* 2017;10:413–4, <http://dx.doi.org/10.1016/j.jcin.2016.10.028>.