



Revista Portuguesa de  
**Cardiologia**  
Portuguese Journal of **Cardiology**  
[www.revportcardiol.org](http://www.revportcardiol.org)



## IMAGE IN CARDIOLOGY

# Bioresorbable scaffold adjustment in an ostial lesion with the Szabo technique

## Ajuste de plataforma biorreabsorvível em lesão ostial pela técnica de Szabo

Carlos Galvão Braga<sup>a,\*</sup>, Raymundo Ocaranza-Sánchez<sup>b</sup>, Santiago Gestal<sup>b</sup>, Ramiro Trillo<sup>b</sup>, José Ramón González-Juanatey<sup>b</sup>

<sup>a</sup> Cardiology Department, Hospital de Braga, Braga, Portugal

<sup>b</sup> Interventional Cardiology Department, Complejo Hospitalario Universitario de Santiago de Compostela, Santiago de Compostela, Spain

Received 13 October 2015; accepted 20 December 2015

The Szabo technique provides a unique way to accurately position a stent in ostial lesions, avoiding geographic miss and shifting of plaque to non-affected adjacent vessels.

A 64-year-old woman with dyslipidemia presented to the emergency department with unstable angina. Coronary angiography showed single-vessel disease, with severe proximal left anterior descending (LAD) artery stenosis and a critical bifurcation lesion of the mid LAD and the first major septal branch (Medina score 1,1,1) (Figure 1A and B). The left coronary ostium was cannulated with a 3.5F Extra Back-up® guide catheter, two BMW® wires were advanced to the LAD and the first septal branch, and the latter was treated with a 2.0 mm×15 mm drug-eluting balloon. After proximal and mid LAD predilation (Figure 1C), a 3.5 mm×28 mm Absorb GT1® bioresorbable scaffold (BRS) was advanced to the LAD, but deployment

was not performed, due to device movement and unstable scaffold position (Video 1). An anchor wire crossed through the proximal BRS trailing strut was advanced to the circumflex (Figure 1D, arrow), and the BRS was implanted in the ostial LAD, with a good angiographic result (Figure 1E). Intracoronary optical coherence tomography (OCT) showed optimal strut apposition (Figure 2A) and the small anchoring strut floating in the circumflex ostium, as depicted by the arrow in Figure 2B (OCT view from the LAD) and Figure 2C (three-dimensional OCT reconstruction view from the LAD).

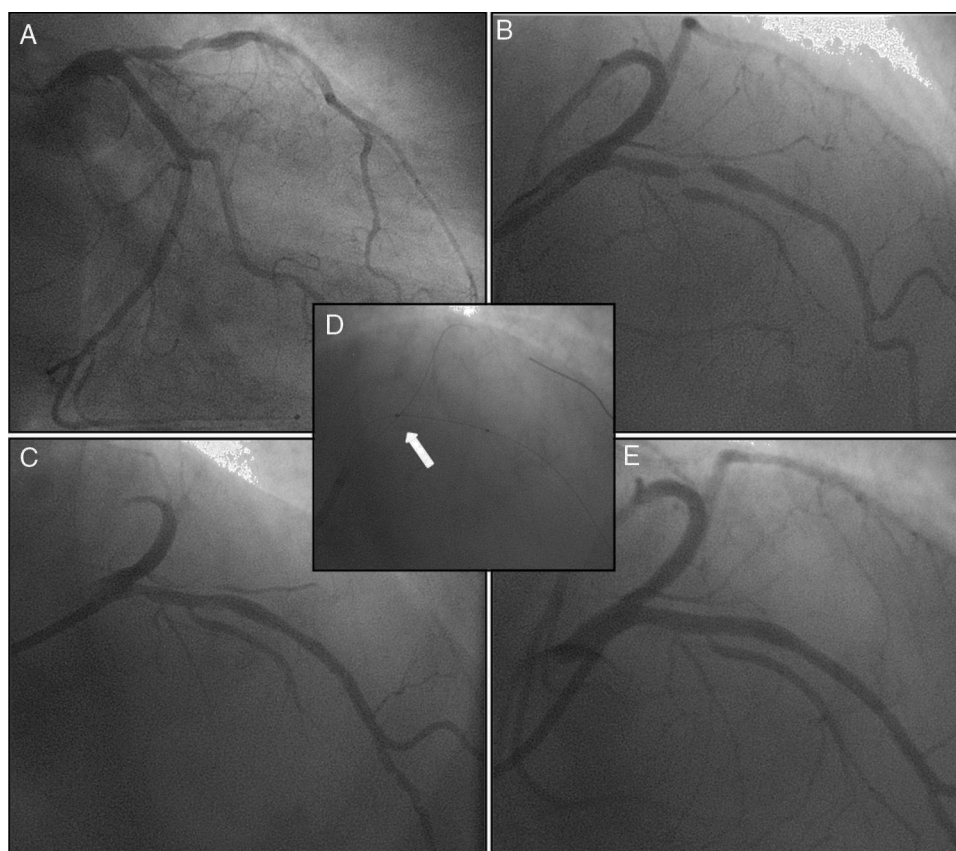
To our knowledge, this case reports for the first time the feasibility and safety of the Szabo technique in an ostial lesion with BRS implantation. The use of intracoronary OCT imaging enabled us to ensure and document an excellent result with this technique.

\* Corresponding author.

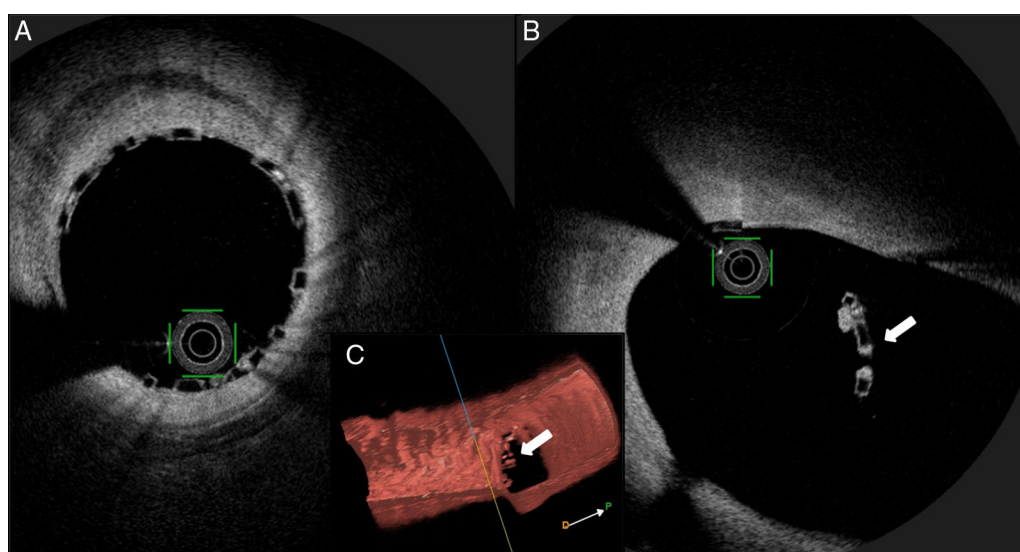
E-mail address: [carlos.galvaobraga@gmail.com](mailto:carlos.galvaobraga@gmail.com) (C. Galvão Braga).

<http://dx.doi.org/10.1016/j.repc.2015.12.012>

0870-2551/© 2016 Sociedade Portuguesa de Cardiologia. Published by Elsevier España, S.L.U. All rights reserved.



**Figure 1** Coronary angiography showing severe disease of the mid left anterior descending (LAD) artery, involving the bifurcation with the first major septal branch (Medina 1,1,1) (A and B); after angioplasty of the first septal branch with a drug-eluting balloon and LAD predilation (C), a bioresorbable scaffold was implanted in the mid LAD using the Szabo technique (D and E).



**Figure 2** Intracoronary optical coherence tomography revealing optimal strut apposition (A) and the small anchoring strut (white arrow) floating in the circumflex ostium; (B) two-dimensional view from the left anterior descending (LAD); (C) three-dimensional reconstruction, view from LAD.

## Ethical disclosures

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that no patient data appear in this article.

**Right to privacy and informed consent.** The authors declare that no patient data appear in this article.

## Conflicts of interest

The authors have no conflicts of interest to declare.

## Appendix A. Supplementary material

Supplementary material associated with this article can be found in the online version at [doi:10.1016/j.repc.2015.12.012](https://doi.org/10.1016/j.repc.2015.12.012).