

Reply to Letter to the Editor: “Pros and Cons of a Novel Coronary Stenting Technique for Medina 0.0.1 Lesions: Osdokina Crush”

To the Editor,

We would like to express our gratitude to the authors for carefully reading and analyzing our case report.¹ One of the most intriguing lesions in terms of percutaneous coronary interventions carried out in coronary bifurcation lesions is Medina 0.0.1 or isolated ostial side branch (SB) lesions.² Percutaneous coronary interventions techniques for Medina 0.0.1 lesions are generally divided into 2 categories in the literature: those that involve stenting the ostial lesion and those that involve balloon angioplasty with atherectomy on the ostial lesion.³ The most significant objection to balloon-based therapy is that it may increase the risk of target lesion revascularization and target vessel revascularization if ostial lesions with a high propensity to dissect and recoil are not covered by a “stent-scaffold”.³ There are several potential benefits in our described technique, the “OSDOKINA crush technique.”¹ First, a stent is used to completely cover the ostial lesion. Second, the SB stent is nano-protruding from the main branch. Third, an NC balloon is used in the main branch to crush nano-protruded stent components. In order to overcome the carina and plaque shift, there are two kissing balloon inflation. Lastly, to avoid main branch restenosis brought on by balloon-induced barotrauma, a 1:1 sized rug-eluted balloon is inflated at the main branch for 90 seconds at 14 atm. In order to fully explain the OSDOKINA crush technique to the valued readers, a high number of technical steps have been maintained in the case report’s published format. As can be seen, even the rewire phase is represented visually as a series of steps. You will see that, in overall use, it is not a particularly difficult technique. Additionally, it is clear from looking at the materials and tools used that it is comparable to the stenting techniques the authors compared.^{4,5} The application of the drug-coated balloon to the main branch is the only distinction. In addition to the methods based on stenting in the main branch, this aspect has the potential to be a “game changer.” In our center, we will conduct a randomized controlled study using the OSDOKINA crush technique in the intervention of Medina 0.0.1 lesions. We are currently awaiting ethics committee approval. I am hoping that as we work on this, we’ll be able to better determine whether it has the potential to be a “game changer.”

The advantage of complete ostium coverage is provided by the “inverted” provisional T stenting technique, which involves inserting the stent from the proximal main branch (PMB) into the SB.⁶ However, the main difficulties with this technique are the successes of complete stent apposition given various PMB and SB diameters and an ideal opening of the strut in front of the distal main branch. The methodical kissing balloon maneuver aids in getting past these obstacles. The kissing balloon maneuver, it has been argued, causes lesions in the endothelium that may lead to the occurrence of restenosis. There is no main branch stent implant in the OSDOKINA crush technique. A “nidus” to the main branch may remain after a stent is implanted in the main branch, which could lead to later complications like stent thrombosis and stent restenosis.⁷ In order to avoid barotrauma and microdissections on the vessel wall that could be caused by KBIs, the OSDOKINA crush technique applies a drug-eluted balloon (DEB) instead.



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LETTER TO THE EDITOR REPLY

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Recently, DEBs have been used frequently in bifurcation lesions.⁸ The treatment of de novo large vessel diseases with DEB has been demonstrated in recent studies to be non-inferior to drug-eluting stent.⁸⁻¹⁰ It would be wiser to hold off until the ALLIANCE study's findings, though. The provisional (reverse) double-kissing nano-Culotte stenting technique, another stent technique mentioned by the authors, also involves stent implantation in the main branch.⁵ On the main branch, a double stent layer is formed, even minimally. A "napkin effect" might be an issue if the SB single-protruded cell could not be expanded sufficiently. Additionally, if the bifurcation angle is extremely narrow, more than one strut may protrude. In contrast, when there is a very right bifurcation angle, both the superior and inferior SB stent struts may protrude. Even in these situations, there is not much metal layer overlap. Additionally, the tail wire technique can lead to wire kinking and stent dislodgement. The results of the technique in question over the long term would also be helpful.

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