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Reply to Letter to the Editor: "Single-Stent Double-Kissing Nano-Crush Technique for the Management of Side Branch Ostial Lesions: A Game Changer? Or Just Another Player in the Game?"

LETTER TO THE EDITOR
REPLY

To the Editor,

We would like to thank the authors[1] for reading and thoroughly analyzing our case report.[2] Isolated ostial side branch (SB) lesions, also known as Medina 0.0.1 lesions, are among the most fascinating lesions in terms of percutaneous coronary procedures performed in coronary bifurcation lesions.[3] Stenting the ostial lesion and balloon angioplasty with atherectomy on the ostial lesion are the 2 main types of percutaneous coronary interventional procedures for Medina 0.0.1 lesions in the literature.[4] The biggest argument against balloon-based treatment is that if ostial lesions with a high tendency to dissect and recoil are not covered by a "stentscaffold," it may increase the risk of target lesion revascularization and target vessel revascularization.[4] The "One Stent DOuble KIssing NAno CRUSH (OSDOKINA) technique," which we have outlined, has a number of potential advantages. The ostial lesion is first to be entirely covered with a stent. Second, the major branch has a nano-protruding SB stent. Third, nano-protruded stent components are crushed in the main branch using an non-compliant balloon. There are 2 kissing balloon inflations to overcome the carina and plaque shift. Finally, a 1 : 1 sized drug-eluted balloon is inflated at the main branch for 90 seconds at 14 atm to prevent balloon-induced barotrauma from causing main branch restenosis.

In 2022, in a study conducted by Ray et al,[5] the results of nano-crush stenting technique performed in CBL with an angle less than 70 degrees were examined with coronary computed tomography, fluid dynamics, and bench test. In this study, with a mean bifurcation angle of 47.3 ± 9.2 degrees, at least carinal metal load and at least abnormal flow dynamics were shown, and favorable long-term outcomes were reported. Therefore, it can be interpreted that the OSDOKINA technique can be used in narrow-angle SB angles, but clearer results will be obtained with bench tests. In our case report, there was no significant difference (>0.5 mm) between the distal and proximal main branch vessel diameters. For this reason, the 1 : 1 balloon/vessel diameter ratio we use maximizes the chance of osteal coverage with the indentation we obtain during the retraction of the SB stent; this is also described in the original nano-crush double-stent technique.[6] Of course, it can be further increased with intravascular imaging methods and stent enhancement techniques. We reviewed the study and the double-kissing nano-culotte technique pointed out by the esteemed authors.[7] It is especially advantageous that it is used in narrow-angle coronary bifurcation lesion.[7] Of course, an isolated ostial SB lesion may have an important place among revascularization techniques. However, in Medina 0.0.1 lesions, placing a stent on the main branch without disease would mean trying to solve a problem in a way that is likely to open the door to another problem in the future. It emerged in response to the question of whether OSDOKINA could be useful in Medina 0.0.1 lesion types without stenting the main branch, and the experiences of other operators can contribute to the literature and give us valuable information about the usefulness of

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this technique. The one-stent single -kissing nano-culotte technique pointed out by the authors sounds good. We hope this technique can be implemented in one case. In our case report, we mentioned the possibility of dissection that may occur during major branch ballooning and emphasized that this issue poses a serious limitation.[1] As is known, minor dissections often heal spontaneously and do not require additional percutaneous coronary intervention. Of course, it would be better to determine the dissections by intravascular imaging and understand their severity, but it depends on an important factor such as the centers' possession of these intravascular imaging (IVI) devices. We could not perform the OSDOKINA procedure using IVI in our center because we did not have IVI facilities at that time, but we are currently waiting for the ethics committee decision to start our OSDOKINA-intravascular ultrasound study. It may be reasonable to follow-up the future outcomes of patients treated with OSDOKINA with computed tomography angiography and seems likely to be a subject for future study.

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