

The Qualitative Assessment for Ostial Side Branch Disease in Isolated Non-Left Main Coronary Artery






Sol Ana Koroner Arter Olmayan İzole Ostial Yan Dal Hastalığının Kalitatif Olarak Değerlendirilmesi

To the Editor,

We recently read with great interest the article by Torun et al.¹ entitled "Long-Term Observational Study of the Isolated Ostial Diagonal Stenosis in Patients with Chronic Coronary Syndrome". We commend the authors for their work describing the prognostic impact of percutaneous intervention in long-term follow-up on the management of isolated ostial stenosis of diagonal arteries in patients with chronic coronary syndrome. However, we believe that there are several drawbacks that need to be addressed.

Among bifurcation lesions, those not accompanied by main vessel disease, and which have isolated ostial stenosis only in the side branch (SB), are classified as Medina 0.0.1.^{2,3} Such lesions, not considered true bifurcation lesions, constitute less than 5% of all bifurcation lesions. Moreover, when evaluating the severity of bifurcation lesions, they are considered the least significant.² Given the risk of main vessel damage in intervention techniques where the SB is addressed, optimal medical treatment has typically been the preferred initial strategy, especially in single-vessel disease. In the past, there was no safe, acceptable, and prioritized endovascular technique developed for Medina 0.0.1 bifurcation lesions. Consequently, ostial SB lesions were generally managed medically and were often excluded from interventional studies.³⁻⁶ In the expert opinion statement published by the Bifurcation Academic Research Consortium, an effort was made to establish standardization and comparability in studies focused on bifurcation lesions. This encompassed definitions, recommendations, and intervention indications for coronary bifurcation diseases, including Medina 0.0.1 lesions.⁷ The Bifurcation Academic Research Consortium emphasizes the importance of determining whether the SB is part of the left main coronary or is a non-left main coronary (non-LMCA). In classifying bifurcation lesions, it is crucial to consider the size and involvement of the SB. For non-LMCA bifurcation lesions, criteria have been established to indicate the prognostic significance of the SB.^{7,8} These criteria are rooted in quantitative measurements obtained from techniques such as coronary computed tomography angiography (CCTA), magnetic resonance imaging, myocardial perfusion exams, angiographic evaluations, and intracoronary imaging. For the SB to have prognostic importance in a non-LMCA bifurcation lesion, several findings need to be present.⁷ In coronary angiography, these findings include: I) the SB length > 73 mm; II) a size, number, highest (SNUH) score ≥ 2 ; III) if the SB is a diagonal artery, its diameter should be ≥ 2.5 mm; IV) if a single diagonal artery is required, a dominant diagonal artery coupled with a non-dominant circumflex artery should be present. In the CCTA examinations: I) the SB length should be > 73 mm, II) or the fractional myocardial mass should be > 10% as measured by myocardial segmentation software. Furthermore, the SNUH score was developed as an angiographic scoring system recommended for ascertaining the jeopardized myocardial mass, especially when a diagonal artery is in the SB. This score is derived by evaluating three criteria, and each criterion carries a score.⁷ These criteria are: 1) SB diameter >2.5 mm (1 point), 2) presence of only one SB (1 point), and 3) in cases when there is not a single SB, the goal is the absence of another SB distal to the target SB (1 point). In this study, had the authors provided a more comprehensive quantitative imaging assessment for diagonal arteries, the results might have been more optimal. Consequently, readers may question whether a more comprehensive qualitative and quantitative evaluation of the isolated ostial diagonal

LETTER TO THE EDITOR EDİTÖRE MEKTUP

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arteries was conducted using different imaging tools, including CCTA, before the percutaneous intervention.

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