

A case of imaging guided reintervention after two stents bifurcation PCI using mini-crush technique

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We present a case of a patient with previous history of primary PCI of the occluded RCA for a myocardial infarction of the inferior wall, who was treated for a significant Medina 1.1.1 coronary lesion of the LAD-D1 bifurcation with mini-crush technique. The patient was transferred to intensive care unit after primary PCI with a plan to treat bifurcation on the other occasion after discharge. However, the patient experienced persistent chest pain along with ECG changes showing ischemia of the anterior wall, and due to clinical unstable condition the patient was transferred to Cath lab for a PCI of LAD-D1 using two-stent mini crush technique with bare metal stents which were only available in adequate dimensions at the moment. The result of the intervention was satisfactory, with TIMI 3 flow in both side branch and main branch, and angiography follow-up was scheduled in 6 months. On control angiography, a significant in-stent restenosis was detected in both main branch and side branch, and an optical coherence tomography (OCT) - guided balloon dilatation of both main branch and side branch with final kissing was performed. In our case OCT was particularly beneficial as it clearly demonstrated that there was no under-expansion of the stents, with only formation of the new plaque that was most significant in the LAD just below the D1 branch, and not on the carina itself nor on the ostium of the side branch.

Key words: bifurcation, mini-crush