

1153 **Successful ostial stent implantation using real-time IVUS guidance in complex bifurcation lesions: two case reports**

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Case 1: A 79-year-old man was admitted for heart failure. Coronary angiography (CAG) revealed severe stenosis at LAD #7 just distal to the D1 branch (media (0,1,0)). Minimum contrast percutaneous coronary intervention was desirable for chronic kidney disease (eGFR 25 mL/min). Conventional IVUS marking requires contrast to confirm the stent position, therefore, we implanted SYNERGY XD 3.5×32 mm stent implantation at LAD #7 just distal using real-time IVUS guidance from D1 branch without contrast.

Case 2: A 69-year-old man with unstable angina underwent CAG. CAG showed LAD-CTO (Rentrop grade 3 collaterals from #14) and severe stenosis in LCx #12, the culprit lesion. IVUS revealed a continuous lesion extending to the ostium of #12. Despite multiple angiographic attempts, ostial visualization remained poor. Xience Skypoint 2.75×28 mm stent was deployed in the ostium of #12 with real-time IVUS guidance from #13.

Discussion: In both cases, conventional IVUS marking was inadequate due to contrast limitation or anatomical complexity. Real-time IVUS guidance allowed accurate stent position without contrast, especially in renal dysfunction or angiographically poor visualized bifurcation lesion. Moreover, through these two cases, we considered that design differences between the two stents might affect IVUS visibility.