

Drug-coated balloon angioplasty is a better option than stent-in-stent strategy for repetitive in-stent restenosis of the second-generation drug-eluting stents

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SeQuent Please, paclitaxel-coated balloon (PCB), is one of options for in-stent restenosis (ISR). We report here a case with repetitive ISR of the second-generation drug-eluting stents (G2-DES). PCB successfully stopped vicious cycle of ISR. A 72-year-old female with unstable angina underwent percutaneous coronary intervention (PCI). An everolimus-eluting stent (EES) was successfully implanted into her culprit lesion, mid-left circumflex artery (LCX). Angina pectoris recurred two months after PCI. Resolute zotarolimus-eluting stent (R-ZES) was successfully implanted into ISR located at a distal half of the EES-implanted segment. Three months after the second PCI, ISR recurred at a proximal half of the EES-implanted segment. Optical coherence tomography (OCT) visualized ISR with predominantly heterogeneous mixed-signal band pattern. R-ZES was successfully implanted into the ISR site, so that the inner surface of ESS was fully covered with two R-ZES. Four months after the third PCI, ISR was treated with plain old balloon angioplasty (POBA). Three months after the first POBA, ISR was re-treated with POBA. Seven months after the second POBA, coronary angiography revealed total occlusion of the stented segment. The occluded LCX was successfully recanalized. Paclitaxel was delivered into the segment with two SeQuent Please balloons. One and a half year after the PCB angioplasty, coronary angiography finally deferred PCI. OCT visualized homogeneous high-signal band pattern. PCB angioplasty was a better option than stent-in-stent strategy for repetitive ISR of G2-DES.