Sequel of Jailed Side Branch
– Four Years After Implantation With a Sirolimus-Eluting Stent –
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Coronary angiography of a 78-year-old man with effort angina pectoris showed tight stenosis at the proximal left anterior descending coronary artery (LAD; Medina classification 0;1;0, Figure 1, red arrow). We planned to put the stent at the proximal LAD, but a 2.5/23-mm Cypher sirolimus-eluting stent (Cordis, Johnson & Johnson, Miami, FL, USA) was used across the left circumflex coronary artery (LCx) due to proximal slipping. Although the orifice of the LCx was jailed by the stent, angiography showed mild stenosis without flow limitation, and intravascular ultrasound con-

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In myocardial infarction (TIMI) flow grade 3 is maintained. The LCx orifice in the present patient had been compromised by excessive neointimal formation over a period of 4 years. It has been reported that most non-apposed SB struts appear covered at follow-up but that neointimal healing is primarily impaired. Non-apposed struts have an irregular coverage (compared with the more uniform thin line of intimal thickening present in well-apposed DES struts), leading to SB restenosis. Should the overhanging strut in front of the SB orifice be avoided during FKBI or sequential dilation at the first procedure? FKBI can move the stent strut away from the SB but also could cause deformations of the stent in the main branch, resulting in stent malapposition, potentially increasing target lesion revascularization and even rates of stent thrombosis.

Sequential 2-step post-dilation of the SB and main vessel has been reported to be a simple and better procedure. Alegría-Barrero et al reported that the rate of stent malapposition was significantly reduced when OCT was used to confirm the re-wiring position, compared to angiography. OCT (2-D and 3-D)-guided SB re-wiring following FKBI may improve bifurcation stenting. In addition, when the stent strut is covered with thick neointima at follow-up, the stent strut is invisible on conventional 3D-OCT. The stent-enhanced 3D-OCT view is useful to understand the distribution of stent struts in such a situation.

Disclosures

None of the authors has any conflicts of interest to declare in relation to this investigation.

References

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