1086 One of the reentry techniques while the GW crossing through the true lumen from the large sub-intimal space to adventitia by using IVUS on CTO-PCI

A 64-year-old man with effort angina pectoris and left ventricular wall motion abnormalities admitted to our hospital. He received PCI and was stented on the proximal of left circumferential coronary artery (LCx). After 6 months later follow-up coronary angiography showed chronic total stent occlusion (CTO) on the proximal LCx (segment 11). The entry of CTO was blunt and branch and the exit of CTO was very small. The collateral channels were tiny and not interventional.

The duration of CTO was seemed over 6months and the length of CTO was longer than 20mm (J-CTO score was 2 points). The procedure seemed difficult because distal coronary running was not so clearly visualized. We expected that the success rate and the long-term patency were not so good and we explained the patient. But he strongly wished us to try PCI to improve his symptom. So we decided to try PCI on LCx-CTO. We advanced the Miracle Neo3 GW with Corsair from the entry of the CTO and advanced through the exit of CTO and changed the XTR GW on distal of exit of CTO.

The GW was crossing into the distal branch and confirmed by tip injection.

After pre-dilatation with 2mm-diameter balloon, IVUS identified, the GW entered into the distal true lumen via the large sub-intimal space.

So, under IVUS guidance, we managed the Conquest Pro 8-20 GW into the true lumen. The GW could penetrate into small true lumen to the outside of the lumen.

It was difficult to change the direction of the Conquest Pro 8-20 GW toward the true lumen.

Therefore, we delivered Corsair into inside of true lumen both by IVUS image and by the fluoroscopic position of IVUS mirror. After that we exchange the Conquest Pro 8-20 to conventional guidewire. The conventional one could pass easily through into true lumen to distal LCx, not outside of the vessel. IVUS revealed that the guidewire passed through true lumen all the way. Then we dilated true lumen again, stented (Segment13) and performed drug-coating balloon on instent restenosis (Segment11). Without complication (no extravasation), we finished the procedure. Conquest PRO 8-20 could penetrate the vessel's wall between true and false lumen but went outside the true lumen because it couldn't change the direction. Conventional guidewire couldn't penetrate the vessel wall but could pass through into true lumen without injury of vessel. Because the combination use of both two types guidewire via Corsair lead us to procedure success, we will report this case.