[INTERVENTIONAL MANAGEMENT]

Procedural step. Firstly, we performed antegrade approach from right femoral artery. We used 8Fr Launcher SL3.5 with side hole. Although we used the CTO wires, Gaia first and Gaia second, with Corsair 135cm, we could not cross the lesion. Then we tried parallel wire technique, Gaia second and Conquest pro with Crusade, but we also could not cross the lesion because of severe calcification. Secondly, we performed retrograde approach by using ipsi-collateral of septal branch. We succeeded to cross the septal branch by SION with Finecross 150cm, and advanced Gaia first to CTO lesion. However we could not advance Finecross because of severe calcification. We performed Reverse CART with 1.5mm balloon. Although we succeeded to cross the CTO lesion retrogradely by using Gaia first, we could not advance Finecross to the CTO lesion. Therefore we could not perform externalization. We decided to perform Rendez-Vous technique (we advanced Gaia first into the Corsair retrogradely) intra coronary artery, and we succeeded to advance the Corsair antegrade. Then, we changed the wire to Rota floppy Gold and performed rotational atherectomy. We implanted drug-eluting stents in the proximal and mid LAD. We succeeded revascularization of CTO.

Case Summary. Although we performed Reverse CART, we could not advance micro catheters to CTO lesion neither antegrade nor retrogradely because of severe calcification. Therefore, we could not perform externalization. We decided to perform Rendez-Vous technique intra coronary artery, and succeeded to revascularization of CTO. Rendez-Vous technique is sometimes useless for like this case.

TCTAP C-098
Severe 3 Vessel Disease Involving LM Bifurcation and LAD-CTO
Hideki Nishimura¹
¹Eiju General Hospital, Japan

[CLINICAL INFORMATION]
Patient initials or identifier number. N.M
Relevant clinical history and physical exam. A 73-year-old man was admitted due to effort related angina for lasting one month. The electrocardiogram showed no remarkable ST-T change. His coronary risk factors were hypertension, dyslipidemia and diabetes mellitus.

Relevant test results prior to catheterization. Exercise stress myocardial scintigram showed a reversible large sized perfusion defect in both LAD and RCA territory and demonstrated normal wall motion.

Relevant catheterization findings. LCAG showed severe stenosis in LM bifurcation and in both proximal LAD and LCX. In addition, CAG showed severe stenosis in distal LCX and CTO in mid LAD. RCAG showed severe stenosis in proximal RCA. Rentrop grade 3 collaterals from Conus, RV and distal RCA connected to septal branches and linked to distal LAD.

[INTERVENTIONAL MANAGEMENT]

Procedural step. The following CAG we performed PCI for RCA at the same time.

5 days later from 1st PCI, 2nd PCI was performed. Following PCI for distal LCX lesion, we performed Modified T stenting with conventional technique for LM bifurcation. After that, we started PCI for LAD-CTO by antegrade approach. We were completely unable to introduce IVUS catheter into septal branch beside CTO with several balloonings using scoring balloon. For some time, we continued parallel wire technique and IVUS guided wiring. But a guide wire could not advance into the CTO. IVUS information at the bifurcation of LAD and septal branch showed hard calcification in proximal LAD-CTO observed like as sandwiches. From IVUS information, we considered this calcification existed in the entry of CTO was an obstacle to pass through the CTO. So, we tried to penetrate the calcification by a hard wire under direct IVUS guidance and parallel wire technique, but these procedures failed to success. So, we changed hard wire to a floppy Sion wire with Corsair catheter. We manipulated a Sion wire with direct IVUS guidance. A Sion wire jumped into the CTO. We confirmed a Sion wire successfully slipped through the calcification gap from IVUS guidance and reached distal LAD by contralateral injection. After that, we performed POBA to LAD-CTO. After that, we implanted DES from distal part of LAD. Final angiogram showed successful complete re-vascularization for LCA.
Case Summary. We succeeded in performing re-vascularization for severe 3 vessel disease involving LM bifurcation and LAD-CTO. During the 2\textsuperscript{nd} procedure, GW selection was a key of success. Change of strategy from penetration to slip through the calcification gap was necessary for LAD-CTO in this case.

TCTAP C-099
Antegrad Parallel Wire Technique to Bail out of Failed Retrograde Procedure Using Bi-Directional 5 Fr Systems
Hidetsugu Sakai\textsuperscript{1}  
\textsuperscript{1}Kushiro City General Hospital, Japan

[CLINICAL INFORMATION]
Patient initials or identifier number. 84-03044-4
Relevant clinical history and physical exam. A 78 year-old lady who took antihypertensive agents was admitted due to syncope. All of her vital signs including blood pressure and pulse rate were normal, and electrocardiographic monitoring did not show any abnormal findings. Therefore, we thought that she suffered from neutrally mediated syncope. Although she had never complained of chest pain, we performed echocardiography because she and her family requested us to perform cardiac examination.

Relevant test results prior to catheterization. Echocardiography showed reduced wall motion of inferior territory, and left ventricular ejection fraction was 52 %. Next, we performed scintigraphic study, and stress perfusion images revealed reversible ischemia of inferior territory.