C037
Chronic Total Occlusion in Proximal Left Anterior Descending Artery with Previous Crossover Stent from Left Main Trunk to Circumflex.

[Case] A 79 year-old female with hypertension, diabetes mellitus and chronic kidney disease was admitted to our hospital due to acute coronary syndrome in right coronary artery (RCA) and left main trunk (LMT). Drug-eluting stents (DES) were deployed in RCA and from LMT to left circumflex artery (LCx) because left anterior descending artery (LAD) was totally occluded. We confirmed the complete apposition of all stents by intravascular ultrasound (IVUS). 10-months follow-up coronary angiography showed no stent restenosis.

[Target lesion] We tried staged-percutaneous coronary intervention for chronic total occlusion (CTO) in proximal LAD.

[Strategy] Firstly, we performed antegrade approach from left brachial artery with contralateral tip injection via conus branch. If we failed in antegrade approach, then tried to retrograde approach by using septal channel.

[Result] We succeeded in crossing the lesion by using XT-R with Corsair antegradely, but could not advance Corsair into the lesion. After pre-dilation by 1.5mm semi-compliant balloon, we could advance Corsair and exchange the wire to a soft wire. We could not make the guiding catheter coaxial to LMT though we wanted more back-up force. We suspected that the wire passed through the stent strut in the ostial LMT. After crossing the first diagonal branch (D1) with a soft wire to get a little more back-up force, IVUS revealed that the first wire in LAD crossed the stent strut in the ostial LMT and that the second wire in D1 passed through totally in-stent. We manipulated the second wire to LAD carefully and confirmed it passed through in-stent by IVUS. We dilated the LMT’s stent by 4mm semi-compliant balloon to make it completely apposed. We succeeded in making the guiding catheter coaxial to LMT with GuideLiner, which provided better stability. We deployed two DES from LMT to LAD. We succeeded revascularization of CTO in proximal LAD.