1128 A case of the effectiveness of using ELCA for CTO lesion with severe calcification

Case is 70 y.o. male. He was received endovascular therapy (EVT) for significant stenosis of left common iliac arrtery at another hospital. At that time, it was pointed out that the chronic total occlusion (CTO) of the right coronary artery (RCA) with anomalous origin and the significant stenosis of the left circumflex artery (LCX). He was transferred to our hospital because of percutaneous coronary intervention (PCI) for LCX, RCA. At first, we performed PCI for LCX with using a rotablation, drug eluting stent (DES) and drug coating balloon (DCB). Next, we performed PCI for RCA. Although it was difficult to engage the guiding catheter because of anomalous origin, we could engage the guiding catheter finally. We crossed guide wire using mirco catheter to RV brunch, but the IVUS could not pass calcified lesion before the CTO. Because there was severe calcified lesion before the CTO lesion, we used several guidewires, micro catheters, and small balloon catheters and anchor balloon technic. We could cross a guidewire to the CTO lesion finally, but any devices could not pass the CTO lesion. We knew that the CTO lesion had severe calcification, but we had no information about distal vessel; therefore it was too risky to use a rotablation. For that reason, we decided to perform Excimer laser coronary angioplasty (ELCA). We selected 0.9C catheter, performed ELCA several times. After all, 0.9C catheter was could not get through the CTO lesion. But, we could pass a small balloon catheter to the CTO after using ELCA. We performed IVUS using guide extension catheter after balloon dilatation. Similarly, we delivered stent from distal lesion to proximal lesion using guide extension catheter, and deployed three DESs.

We experienced the effectiveness of ELCA using for the CTO lesion with severe calcification.