1053 **A case of the stepwise approach of chronic total occlusion of right coronary artery with severe calcification**

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The 74 year-old male is a patient of old myocardial infarction with pulmonary edema 2 years ago. He received coronary angiogram, which showed CAD/left main with 3-V-D and chronic total occlusion (CTO) of Right coronary artery(RCA). Regarding his porcelain aorta, the cardiosurgen and the cardiologist performed shared decision making with the patient,and they decided hybrid surgery by Mini-coronary artery bypass surgery(CABG) of LIMA to left anterior descending arter (LAD) and then staged percutaneous coronary intervention (PCI) for left circumflex artery (LCX) and chronic total occlusion of RCA. So he received Mini-CABG for LAD by LIMA 2 years ago and successful PCI for left main to LCX 18 months ago. The coronary angiogram showed critical long segment with stenosis and severe calcification of RCA-P with ostium lesion and RCA-M and chronic total occlusion of RCA-D with LAD septal branch collateral supply to RCA-D and the J-CTO scores are 3 points. We performed stepwise approach of PCI for CTO of RCA with severe calcification one year ago and planned PCI via antegrade approach of RCA-CTO and contralateral coronary injection from left coronary artery. Regarding the long segment with critical stenosis and severe calcification of proximal part and middle part of RCA, we used the guding catheter of SAL 1.0 , 7 Fr and then the small balloon cannot pass or rupture through the lesion.We performed rotational atheroectomy for RCA-P and then RCA-M under the temporary pacemaker back-up for the lesion. We used tornus first to open RCA-ostium and then guiding extension of Guidezella (Boston,6.0, 140cm) and microcather of APT (1.7 Fr, 150cm) with XT-R (Asahi) to cross the lesion and then exchange to extra-support Rotawire of extra-floppy into RCA-D and used the rota-bur 1.25 with 150K bpm to peck the middle part of RCA several times to distal part of RCA and then down-sized cutting balloon (Wolverine; 2.25x6mm) with 18 bars and succeeded to open calcification with multiple cracks at RCA-P and RCA-M. Then we used non-complaince balloons and then put three drug-eluting stents from RCA-D to RCA-P. The patient stood the proecedure well without complication and his vital signs are stable. Then we succeeded the PCI for CTO of RCA with severe calcification via stepwise approach.