A Reattempt Case of PCI for Diffuse Subtotal Occlusion of RCA

[Target Lesion] Subtotal occlusion of mid-distal RCA with tortuosity, tricky microchannels and ulceration

[Present illness] in 2003, PCI for LAD was performed (PTCRA+BMS)

In Nov, 2013, Cardiac MR showed Ischemic change in RCA, LAD, LCx territory.

In 4th Dec, 2013, CAG revealed mid RCA subtotal, mid LAD 90%, prox LCx 90%.

Antegrade PCI for mid-distal RCA was unsuccessful because of tortuous vessel, large ulcers and tricky microchannels.

In 6th Dec, 2013 PCI for LAD and LCx (mid LAD Xience Xpedition 3.25x18mm, prox LCx-PL Xience Xpedition 3.5x38mm)

In Apr, 2017 PCI for RCA was done.

Strategy and procedure] Retrograde approach was mandatory to recanalize this lesion, because this case was second attempt and antegrade microchannels were very tricky. But I couldn’t detect the promising collateral channels because antegrade flow still remained.

Firstly balloon dilation in the proximal RCA was done to block the antegrade flow, then I performed contralateral injection and tip injection to identify the existence of the interventional collateral. Apical, LCx-PL and septal collateral channels seemed to connect the distal RCA. SUOH03 and Sion wire couldn’t pass the apical and LCx-PL collateral route. SUOH03 wire passed through the septal collateral channel, and I delivered the caravel to distal RCA with anchor balloon technique. Retrograde Sion black wire stuck at the bending portion of mid RCA and Caravel also couldn’t advance at the distal portion of RCA. I exchanged to Corsair pro, but it couldn’t also advance at the same position because of calcium.

Then I switched to antegrade approach. A 8Fr AL1SH guiding catheter was engaged in RCA. Antegrade Ultimate bros3 wire with Corsair advanced closely to retrograde knuckle shaped Sion black. After small balloon dilatation, I checked IVUS. Reverse CART with 3.5mm balloon was performed repeatedly. Finally the PILOT200 could pass the lesion Retrogradely. However even under trapping the retrograde PILOT 200 by KUSABI in the antegrade guiding catheter, Corsair couldn’t pass the distal portion anymore retrogradely. Then I exchanged microcatheter to Finecross GT, it could cross the lesion fortunately. After wire externalization with RG3, three DES were implanted from proximal to distal RCA with Guide-Extension catheter.

Final result] Final angiogram revealed successful revascularization for the subtotal occlusion of RCA.