

1090 A lotus root-like appearance in chronic total occlusion at right coronary artery.

**【Background】** Multi-channels in a coronary artery have been described as “lotus root-like appearance”, and it is sometimes difficult to cross the wire.

**【Case】** A 45-year-old man with hypertension, dyslipidemia and hyperuricemia was referred to our hospital for abnormal ECG. Because cardiac echocardiography showed abnormal wall motion in inferior, we suspected coronary artery disease. Coronary angiography (CAG) was performed, and revealed stenotic lesion at LAD and total occlusion at RCA (#7 90% #2 100%, Syntax score: 17). CAG and cardiac CT also suggested two occluded lesions at RCA (#2 and #3), and they did not clarify #4 AV-PD bifurcation. Cardiac CT showed aneurysmal change at #3 CTO. After the LAD PCI, we scheduled PCI to RCA CTO using bilateral femoral artery access with 7Fr and 8Fr 25 cm sheaths, respectively. The LCA was engaged with an SPB 3.5 SH 7 Fr guiding catheter (GC), and the RCA was engaged with an AL 1 SH 8 Fr GC. After XTR wire (Asahi Intec) pass through #2 CTO, tip injection by using caravel (Asahi Intec) was performed. It suggested that #3 had aneurysmal change and #3 might connected to #4. We attempt to negotiate the SION wire (Asahi Intec) to #4, however, it could not pass through RCA distal lesion. Because of poor quality vessel and bifurcation at distal cap, we switched our strategy to a retrograde approach through an interventional septal channel. SUOH 03 wire and corsair (Asahi Intec) passed through the septal channel to #4PD retrogradely. Tip injection from retrograde corsair suggested that #4PD connected to #3, however, SION black wire (Asahi Intec) was impossible to cross the lesion at #3 retrogradely. And then reverse controlled antegrade and retrograde subintimal tracking (CART) technique was applied with an Ikazuchi 2.5mm x15mm balloon (KANEKA medical), and retrograde Gaia 2nd wire (Asahi Intec) was successfully introduced into the proximal true lumen. Exchanged SION black wire from Gaia 2nd wire was advanced into the antegrade guiding catheter with the Corsair, and wire externalization was then completely achieved with a 330cm RG3 guidewire (Asahi Intec). Intravascular ultrasound (IVUS) revealed that #3 segment was composed of multiple channels called “lotus root-like appearance” with aneurysmal change. Subsequently, the SION blue guide wire (Asahi Intec) was crossed to #4AV with the SASUKE. Biodegradable polymer-everolimus-eluting stents (SYNERGY) (3.0 x 38 mm 3.5 x 28mm) (Boston Scientific) were deployed from the proximal to the distal RCA (#3 distal). Because IVUS showed incomplete apposition at aneurysmal dilatation site, post dilatation was added at the malapposition site with Nc Emerge 5.0 x 10mm (Boston Scientific). Consecutively, #4 bifurcation was treated with kissing balloon technique with two drug coated balloon (SeQuent Please 2.5 x 15mm, SeQuent Please 2.5 x 20mm) (NIPRO). Final coronary angiography showed a good result.