

1124 A difficult dilemma encountered during a successful revascularization of a chronic total occlusion in left anterior descending artery.

A 52-year-old male received coronary angiography after ROSC from OHCA with a shockable rhythm (via AED analysis). The results showed CAD with DVD (LM: patent, LAD: Ostium- to -M: CTO with collaterals from RCA -PDA branch to -LAD distal; LCX: -M to -D 50%; RCA P-M: 90% stenosis, M-D: 90% stenosis, -PDA: 50% stenosis). Staged PCI was performed. Via right femoral artery approach, A SAL 1/7 guiding catheter was engaged into RCA and a Fielder FC guide wire was advanced into RCA distal segment. A Sprinter Legend 2.0 mm x15 mm balloon was dilated at RCA distal with the pressure up to 18 atm. Then, a DESyne 3.5 mm x 18 mm drug eluting stent was deployed at RCA distal with pressure up to 12 atm. Instent-dilatation was performed using a NC Trek 2.5x15mm BC. Then, a BioMime 2.5 mm x 15 mm drug eluting stent was deployed at RCA-P to-M with pressure up to 10 atm. Post PCI result showed good TIMI 3 flow in RCA.

PCI for LAD CTO was performed one week later. Through right radial artery and left femoral artery approaches, An EBU 3.5/7 guiding catheter was engaged at left main ostium and a SAL 0.75/6 guiding catheter was engaged at RCA ostium. A Sion guide wire was advanced to LAD-D1 and a Trek 1.5 mm x 12 mm balloon was inflated at LAD-P with the pressure up to 8 atm. An IVUS was used to check CTO entry cap. A Fielder FC guide wire was tried to advance to LAD-D along with a Crusade double lumen catheter but was failed. The wire was escalated to Gaia second but was ended into false lumen. Therefore, retrograde approach was attempted. A Fielder FC guide wire was advanced to RCA-PDA branch along with a Caravel micro-catheter. A Fielder XTR guide wire was successfully advanced to LAD through the collateral vessel. The Fielder XTR GW was successfully advanced to the EBU guiding catheter but the microcatheter could not advance to LAD. A Trek 2.5 mm x 15 mm balloon was inflated inside the EBU catheter for anchoring but the microcatheter still couldn't be advanced. In the meantime, dropped blood pressure was noted and ECG showed ST elevation. Obstruction of retrograde collateral was suspected. We had to withdraw the retrograde microcatheter and attempt antegrade approach again. This time the Fielder FC guide wire was successfully advanced to LAD-D with the support of a Trek OTW 1.2 mm x 6 mm balloon catheter. POBA was then performed at LAD-P to -D using the OTW balloon with the pressure up to 14 atm. Another Trek 2.5 mm x 15 mm balloon was inflated at LAD-P to -M with the pressure up to 14 atm. IVUS confirmed the antegrade wire was in the true lumen. An XIENCE Alpine 2.25 mm x 28 mm DES was deployed at LAD-M to -D and another XIENCE Alpine 2.75 mm x 38 mm DES was deployed at LAD-ostium to LAD-M. Instent post dilatation was performed using a NC Trek 3.0 x 15 mm balloon with the pressure up to 20 atm. IVUS confirmed adequate apposition of the stents. Result of PCI showed TIMI 3 flow in LAD.