Case Summary:
In summary, we experienced the huge coronary artery hematoma by the ruptured balloon inflation in the subintimal space after the Reverse CART technique. The implanted EES was fractured because of the stent implantation into the huge coronary hematoma.
In conclusion, the coronary aneurysm formation after EES implantation is very rare compared with Sirolimus-Eluting Stent, so the stent fracture with aneurysm maybe one of the risk of stent fracture.

TCTAP C-087
Strategies of Limiting Contrast Use in Uremic Patient with Killip III Myocardial Infarction Receiving Ad-hoc Intervention to Chronic Total Occlusion
Shu-Kai Hanue, Chiung-Jen Wu
Kaohsiung Chang Gang Memorial Hospital, Taiwan

[Clinical Information]
Patient initials or identifier number:

[Interventional Management]
Procedural step:
A 66 y/o man had Diabetes mellitus, Chronic kidney disease stage V (serum creatinine 7.75mg/dl), Hypertension and had acute non-ST elevation MI with flash pulmonary edema and acute respiratory failure at this admission.
Diagnostic angiogram via left radial artery with 6F Terumo Ikari left 4.0 catheter showed LCX diffuse stenosis and RCA CTO.
After engaging LM ostium with a 6F Terumo Ikari left 4.0 catheter, MiniTrek 1.2x12mm and a 2.0x20mm balloons (Abbott) predicated the calcified stenosis. IVUS study defined the reference vessel size and lesion length, and a NC Trek 2.5x20mm balloon predicated the lesions. XIencePrime 3.0x38mm and 2.5x28mm stents (Abbott) were deployed at LCX from the ostium. High-pressure dilatation with NC Trek 3.0x15mm and 2.5x20mm balloons (Abbott) was done with optimal result. Ad hoc PCI to RCA CTO was intended to increase coronary perfusion in such a MI case with acute pulmonary edema related respiratory failure. Due to poor right radial pulse, right ulnar artery puncture with introducing 5F sheath showed occluded radial artery. 7F EBU 4.0 engaged left main ostium sheathless. Only 2 times of contrast injection before RCA stenting: one is selective septal branch angiogram indicating the collaterals to PDA, and the other is bilateral injection at ostial RCA and mid-RCA (through FineCross microcatheter (Terumo) after retrograde wiring with a 0.014 FineCross wire). Antegrade wiring with a 0.014 Conquest-12 wire with a FineCross microcatheter to mid-RCA and anchoring a MiniTrek 1.2x12mm balloon at coronary branch. Retrograde wiring with a Ultimatro3.5 wire into antegrade guiding catheter (white arrow). With “Rendezvous in Coronary” Technique, antegrade wire went into the retrograde microcatheter and then advanced to PDA. A MiniTrek 2.0x20mm balloon inflated at prox-to-distal RCA. NC Trek 3.0x15mm balloon predilated at prox-to-mid RCA. A Nobori 2.5x28mm stent deployed at mid-RCA (Terumo), and a XIencePrime 3.0x38mm stent to prox-RCA (Abbott). Post-dilated with the NC Trek 3.0x15mm balloon up to 28atm was done. After IVUS study, a 2.5x20mm stent balloon inflates at distal RCA. Final angiogram showed optimal result.
Only 30ml of contrast was used during RCA intervention!!

Case Summary:
This 66 year-old man had diabetes mellitus, chronic kidney disease stage V (serum creatinine 7.75mg/dl), Hypertension and had acute non-ST elevation MI with flash pulmonary edema and acute respiratory failure at this admission.
Diagnostic angiogram showed LCX diffuse stenosis and co-dominant RCA CTO.
After PCI to LCX, RCA CTO was done with limited contrast use under retrograde approach and IVUS guide. This procedure was successful and total contrast use was 170ml. The patient would be beneficial from revascularization of both LCX and RCA without significantly increase of contrast use.

TCTAP C-088
Repetitive Subacute Re-occlusion of RCA CTO Lesion via Retrograde PCI
Wei-Chun Huang
Kaoshingsg Veteran General Hospital, Taiwan

[Clinical Information]
Patient initials or identifier number:
11004594

[Interventional Management]
Procedural step:
The ALI short tip guiding was used. Then, Fielder FC wire was tried to cross the CTO lesion via Finecross microcatheter. However, we failed to cross the lesion via anterograde approach, even use of Ultimate 3gm and Conquest Pro wire. Then, different collateral channels were accessed, including septal channel, epicardial channel and AV groove channel. After repetitive test, the Sion wire was used to pass epicardial channel to distal segment of right coronary artery via support of Cosair microcatheter. However, the RCA CTO lesion cannot be passed by Ultimate 3gm wire. Finally, the RCA CTO lesion was crossed with Conquest Pro wire. Unfortunately, the retrograde guiding jumped into left ventricle during the procedure. Then, another antegrade Runthrough wire was used to pass the CTO lesion via the retrograde channel. Due to difficult delivery of DES to distal segment of RCA, the child in mother technique was used via Guideliner and Anchor technique. After stenting from orifice to PLV segment of RCA, TIMI III flow regained. Three days after discharge, the patient suffered from chest tightness. Mild CK enzyme elevation was noted. The coronary angiography revealed subacute reocclusion of proximal segment of RCA. However, the lesion cannot be passed by Runthrough wire. Ultimate 3gm and Progress 120T were used. Finally, the lesion was crossed by Conquest Pro wire. Another DES was delivered to distal of previous stent via Guideliner and Anchor technique. TIMI III flow regained. Then, Heparin and Ib-IIIa inhibitor were also prescribed for 2 days.
Two days later, follow up coronary angiography was arranged. However, reocclusion of proximal segment of RCA was noted. The lesion was opened with balloon angioplasty.

Retrograde Plan
1. Septal Channel 1
2. Septal Channel 2
3. Epicardial Channel
4. AV groove
Case Summary:
The patient is a case of successful retrograde PCI for RCA CTO lesion. Unfortunately, repetitive subacute reocclusion were noted even after another 2 times PCI. The possible reasons of repetitive reocclusion might be due to anatomy, long stent, inadequate distal runoff, diabetes mellitus, inadequate stent expansion or massive chronic thrombus over CTO lesion.

TCTAP C-089
A Case of PCI to LAD CTO After Balloon Embolization for Coronary Perforation

[Clinical Information]
Patient initials or identifier number: HLF.
Relevant clinical history and physical exam:
A 62 years old woman with diabetes came to our hospital for sudden onset dyspnea.

[Procedural step]
Emergent CAG showed LMT disease, CTO of LAD, diffuse stenosis of RCA and subtotal occlusion of LCX.

[Interventional Management]
Procedural step:
She suffered from cariogenic shock, therefore we decided emergent PCI at IABP and PCPS support. Conquest Pro was passed false lumen with coronary perforation. Coil embolization was needed for hemostasis. She recovered from pulmonary edema but heart failure was repeated. We tried second session of PCI. However the PCI to LAD CTO could not success because of coil embolization.

TCTAP C-090
In Stent Occlusion Is Not Always Easy
Shuichi Ishizuka, Kenya Nasu
Toyohashi Heart Center, Japan

[Clinical Information]
Patient initials or identifier number: M.H.
Relevant catheterization findings:
This was 2nd attempt for RCA in stent occlusive lesion.

[Procedural step]
Baseline coronary angiogram showed in stent occlusion at proximal RCA and collaterals from distal LCX and LAD. Firstly, right coronary was cannulated with an 8 Fr SAL 1.0 guiding catheter and left coronary was positioned with 7 Fr SPB 3.5 guiding catheter. Initially, the antegrade guidewire (Gaia 2nd with Corsair 2.6Fr microcatheter, Miracle 12g, Gaia 3rd and Confienza 8-20, in turn) from RCA was failed to advance to the arterial lumen distal to the CTO lesion in spite of parallel wire technique. So, we moved to the retrograde approach using the collateral branch from LCX to distal RCA.
There was tight lesion at distal LCX so that ST elevation and chest pain appeared while microcatheter crossing. We treated this lesion using rotational atherectomy and balloon. And then we advanced retrograde wire to distal RCA successfully. After balloon dilatation antegrade, we succeeded to advance the retrograde wire to SAL 1.0 guiding catheter. However, coursant of retrograde was stuck on stent. So we advanced retrograde wire to aortic arch in antegrade guiding catheter, at that place we advanced retrograde wire into the coursant of antegrade. Thereafter, coursant of antegrade passed CTO lesion and succeeded in externalization. After predilatations, we deployed everolimus eluting stent (3.5*28) at RCA. The final angiogram showed successful revascularization at RCA CTO lesion.