Occurrence of Coronary Artery Hematoma for Percutaneous Coronary Intervention to Right Coronary Artery Chronic Total Occlusion

Yuzo Akita
Osaka Saiseikai Izuo Hospital, Japan

[Interventional Management]

Procedural step:
We inserted the 8F sheath from Right femoral. We used the JR4.0SH 8F guiding catheter first. But this guiding catheter was not good back up, then we changed the guiding catheter to the AL1.0SH 8F. We started to cross the wire from antegrade using the SION wire and the Corsair135cm. This wire could not advance to the tight lesion. We changed the wire to the Ultimate3 wire. This wire advanced more distal. Then we tried to check the CTO entry by the micro catheter tip injection. We performed the tip injection without checked the back flow. We made the coronary artery hematoma at the RCA distal by the tip injection into the subintimal space. We left the Ultimate3 wire into the subintimal space. We removed the Corsair135cm using the 2.5mm balloon as a trapper balloon from the guiding catheter. Then we started the retrograde approach using the SION wire and Corsair150cm. We used the ipsilateral channel from proximal RCA to #4PD. The SION wire and the corsair150cm could pass to the RCA CTO distal exit. We changed the wire to the GAIA2nd. This wire could go into the subintimal space from retrograde. We performed the Reverse CART technique by using the 3.0mm balloon from the antegrade. We could get the externalization. We changed the wire to the RG3 from retrograde. Then we opened the CTO lesion using the 2.5mm balloon that we have already used as the trapper balloon. This balloon had pin hall rupture. The coronary artery hematoma was expanded because of this ruptured balloon inflation. After then we implanted 3DES from RCA proximal to #4PD. We could open the CTO lesion and get the good blood flow in the RCA.
In summary, we succeeded the PCI with the Reverse CART technique to the diffuse long RCA CTO lesion for 20 years. The coronary artery hematoma was made by the tip injection into the subintimal space. The ruptured balloon inflation into the subintimal tracking space after the Reverse CART technique made the coronary artery hematoma bigger.

In conclusion, we should check the back flow from the micro catheter before the tip injection. We should avoid the trapping balloon technique at the site of the guiding catheter side hall.

TCTAP C-080
Primary Angioplasty in a Single Surviving Vessel
Fatema Begum
United Hospital Limited, Bangladesh

Relevant clinical history and physical exam:
72 years old, Male, Diabetic, Hypertensive, known CKD. Presented with severe chest pain, shortness of breath of 08 hours duration. He was suffering from on and off chest pain treated another hospital as NSTEMI and treated with LMWH 03 days prior to attain our Hospital. During admission he was not able to lie flat due to shortness of breadth, Pulse 110/min, BP-120/80mm Hg, Bilateral basal creps upto mid zone. We planned to do primary angioplasty.

Relevant test results prior to catheterization:
ECG-ST elevation on LI, LII, LIII, AVF and ST depression on leads V2-V6 Echo-inferior wall grossly hypokinetic and anterior wall hypokineti c, LVEF-40% S.Creatinine 1.84mg%

Relevant catheterization findings:
Left main Coronary artery-60-70% stenosis on distal segment
Left Anterior Descending Artery-100% occluded from ostium
Right Coronary Artery-95% stenosis from proximal segment. Giving retrograde filling to left system

[Interventional Management]
Procedural step:
Primary angioplasty to Right Coronary Artery
Guiding Catheter-JR-4, 7F
Wire-BMW 0.014, Boppy
Balloon-2.5X15mm, Predilatation, 4.0X10mm for post dilatation
Stent-Resolute integrity-3.5X26mm
GP IIb-IIIa receptor Blockers after the procedure
07 days after primary angioplasty-Angioplasty LM to LAD was done
Guiding Catheter-XB3, 7F
Wire-Fielder XT-0.009, BMW 0.014
Micro catheter for wire negotiation
Balloon-1.5X15mm, 2.0X20mm both for predilatation. 3.5X15mm for post dilatation
Stent-Biomatrix flex 3.0X33mm

TCTAP C-081
Retrograde Operation on Acute Occlusion Caused by Dissection at Ostial of RCA
Yang Cao, Shu Sen-Yang
The First Affiliated Hospital of Harbin Medical University, China

Relevant clinical history and physical exam:
Male, 49y HT 5y, DM 2y
Complaint of paroxysmal chest pain under physical work for 1m, aggravated for 1 w.

Relevant test results prior to catheterization:
ECG: sinus rhythm, negative T wave in lead III
Glu: 7.76 mmol/L
TC: 3.16 mmol/L
TNI(-), CKMB(-)

Relevant catheterization findings:
Angiogram shows good retrograde from S2 to distal RCA.
LCX was semi-occlusion and we believe solve LCX can make the following procedure safe.

[Interventional Management]
Procedural step:
First time PCI
1. GC: AL0.75+GW: Miracle 3 through the occlusion to distal RCA. Finecross could not go through the occlusion. Trek 1, 25x6mm could not get across the occlusion, Tonus went through the lesion successfully.