Case 2
Due to limited materials, we decided to use ADO 10-8 that were the maximal size of device. Immediately after implantation, device embolized to d-Ao was found. We snared it in d-Ao and re implanted in PDA because the device could not put inside 8fr delivery sheath. We confirmed the device in PDA safely later on.

TCTAP C-132
Coronary Artery Fistula Coiling; Learning from Mistakes, Adapting and Innovating

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[Clinical Information]
Patient initials or identifier number:
Mrs. S

Relevant clinical history and physical exam:
Typical Chest Pain on Effort
Hypertension
Had previously went a PTCA on Proximal LAD
Had previously underwent surgical coronary artery fistula ligation

Relevant catheterization findings:
Patent Stent on Proximal LAD
Partially ligated coronary artery fistula from LAD to pulmonary artery

Large coronary artery fistula from ostial-proximal RCA to pulmonary artery (failed surgical coronary artery ligation)

[Interventional Management]
Procedural step:
We decided to coil the RCA coronary artery fistula (CAF). We were using transfemoral approach.
1. First attempt we use a guide catheter of JR 4.0 6f, Microcatheter progreat 2.4, guidewire of asahi fielder, micro coil tornado cook 8/4 mm.
2. Our first attempt failed to deploy the coil to the targeted site.
3. After trying for a while, the final coil position was blocking ostial RCA.
4. We decided to snare the coil using Sequre Snare System LTE SM 04
5. The first time snaring went out of trouble
6. We deploy the coil again using the same material but still we can’t get the coil to the targeted site, and this time the position even worse than our first attempt.
7. We decided to snare the coil again using the same snare.
8. When we snare for the 2nd time, the coil was stuck at the ostial of the RCA.
9. Eventually we managed to snare the coil out of the RCA but the position of the coil is in front of our guiding catheter.
10. We try to manipulate the coil, snare and guiding catheter, but it is no use
11. The coil was still stuck in front of the guiding catheter and introducer sheath.
12. We then use a Sapphire Balloon 2.0x20 mm, we insert the balloon to the guiding catheter, we inflate the balloon, so it entraped the microcatheter, snare and the coil. And then we pull out all those material simultaneously.
13. We reviewed what our mistakes was
14. Our 2nd attempt was using a guiding catheter of AL-1, microcatheter progreat, guidewire asahi fielder, and microcoil tornado cook 6/4 mm
15. The 2nd attempt of coil deployment went out of trouble. But it was not sufficient to close the CAF.
16. We asked for another coil but the insurance didn’t cover for more than 2 coil within a procedure.
17. We then utilize the first coil (which we assume at first to be broken). We trimmed the coil and deploy it to the CAF.
18. Deployment of used coil went perfectly fine, it reduces the CAF flow significantly yet it is not enough.
19. We then used the part of guidewire hi torque floppy as a coil substitute.
20. Deployment went out of trouble and at last the CAF was closed nicely.
Drug-eluting Stents
(TCTAP C-133 to TCTAP C-149)

TCTAP C-133
“Perfect Is Always the Enemy of Good” - A Good Lesson Revisit
Hoi Fan Danny Chow, C. L. Lau, Y. K. Lo
Hospital Authority, Hong Kong, China

[Clinical Information]
Patient initials or identifier number:
Ma. K.K
Relevant clinical history and physical exam:
73 years old gentleman with history of diabetes mellitus, hypertension, and ischemic heart disease presented with non-ST elevation myocardial infarction (NSTEMI) in 2002. He had percutaneous coronary intervention (PCI) on 5/11/2002 to middle right coronary artery (RCA) stented with an express II and PCI to proximal posterior descending artery (PDA) with 5/15 balloon. He had a 2nd PCI to proximal RCA on 11/2/2003 with Tsunami 3.0/15 and 3rd episode of PCI on 26/9/2003 with 2 overlapping taxus stent deployed to middle left anterior descending artery (LAD). He presented with another episode of NSTEMI 3/2013.
Relevant test results prior to catheterization:
Physical examinations of cardiovascular, respiratory, and abdominal system were unremarkable. Troponin I was 2.22 Ug/L. Echocardiogram on 14/3/2013 showed satisfactory left ventricular contraction with no significant valvular lesion.
Relevant catheterization findings:
Coronary angiogram on 18/4/2013 was initially done through right radial approach with Tiger II 6 French catheter and showed normal left main, middle LAD multiple calcified instant restenosis (ISR) LAD 70-80%, left circumflex (LCx) was small and non dominant, and proximal RCA showed 90% ISR and middle RCA 80% ISR.
[Interventional Management]
Procedural step:
PCI was done with JR4 6 French guiding catheter. RCA was wired with Sion.
Intravascular ultrasound (IVUS) insertion was attempted to assess RCA lesion but was unable to pass despite predilatation with tsunam 2.5/15, flextome 2.5/10, and harya 2.5/15 up to 18 ATM. Resolute integrity 2.75/14 was initially planned to be placed in middle RCA but still could not pass with frequent backing of guiding catheter, so the stent was placed in proximal RCA.
Guiding catheter was changed to 6 French AL1 for better support. RCA was rewired with sion wire. Flextome 2.5/10 was again inserted to prepare the middle RCA ISR however the flextome could not pass through the mRCA stent. The flextome was trapped in prCA stent during withdrawal. Multiple techniques to retrieve the trapped balloon were used. Reinfation of cutting balloon and pull failed. Then a buddy wire with Universal BMW wire with inflation of buddy balloon (including sapphire I 1.0/10, 1.2/15) along side the cutting balloon was attempted. Double guiding technique was attempted with another vascular access with right femoral approach with insertion of another 6 French SAL 0.75 guiding catheter but failed to engage the RCA. Later, a 5 in 6 ST01 catheter was used but failed to advance in the AL1 guiding catheter. Finally 6 Fr guideliner successfully retrieved the trapped cutting balloon with multiple manipulations. The original stent in proximal RCA was damaged with multiple manipulations and a second resolute integrity 3.0/15 was inserted to the proximal RCA. The middle RCA was not stented at the end and RCA showed TIMI III flow. LAD ISR was left for second stage.

Case Summary:
A 68 Y.O female presented with typical chest pain at exertion. Patient had history of PTCA and surgical coronary artery fistula (CAF) ligation 2 years prior. Coronary angiogram showed a patent stent at proximal LAD, partially ligated CAF from LAD to pulmonary artery (PA), and a large CAF from RCA to PA. The RCA CAF was then decided to be closed using microcoil embolization device. With transfemoral approach. The first attempt was using materials of JR 4.0 6F, microcather progreat 2.4, asahi fielder and microcol tornado cook 8/4 mm. The coil deployment went with trouble. The coil could not be seated to CAF perfectly, with the end result of the coil blocking ostead of RCA. The coil was then snared with secure snare system LTE SM 04. The second attempt to deploy the coil was done with the same difficulty. The coil was then snared again, but this second time, the snaring encountered some troubles. The coil stuck in front of the JR and introducer sheath. PTCA balloon (sapphire 2.0x20mm) was then used to help snare out the coil. After that we reviewed our mistakes. The second attempt was using different materials, AL-1 and microcoil with a smaller size (6/4 mm). The coil could then be deployed easily but it was not sufficient to close the CAF. Since the insurance didn’t cover for an additional coil, the coil from the first attempt and PTCA guidewire (hi torque floppy) was then used as a coil substitute. The end result was that the CAF was closed nicely using those materials.