Relevant clinical history and physical exam:
58 years old female visited our hospital due to exertional chest pain (CCS III)
She had history of hypertension for 10 years.

Relevant test results prior to catheterization:
Baseline ECG showed ST depression in II III aVF, V2~6.
Echocardiography showed normal left ventricular systolic function without regional wall motion abnormality.

Relevant catheterization findings:
Coronary angiogram revealed significant stenosis on mid LAD and Rentrop Class III collateral to distal RCA via septal perforators. Right coronary artery was nearly chronic total occlusion status. (Fig 1)
We decided to treat RCA first because of concerning about disastrous septal branch jail during LAD stenting.

[Interventional Management]
Procedural step:
A 6 Fr sheath was inserted through right radial artery and the right coronary artery was engaged with a 6 Fr Ikari guiding catheter. A 0.014 inch guidewire (Fielder XT, Asahi) with 1.25mm OTW balloon (Maverick, Boston Scientific) was inserted into the RCA.
Sequential balloon dilations using 1.2mm (Sapphire, OrbusNeich) and 2.5mm (Trek, Abbott) were performed. Then a 3.0x33mm Everolimus eluting stent (Xience Prime, Abbott) was placed at mid RCA.
We tried contrast injection to confirm the position of distal stent tip repeatedly. The stent was deployed at mid RCA lesion. At that time, bidirectional dissection was developed at proximal RCA lesion. However we did not recognize the events.
For the proximal stent positioning, additional contrast injection was performed, and the dye staining at ascending aorta was evidently seen. (Fig 2.)
After proximal stenting (Xience Prime, 3.5x33mm) labile moving dissection flap at RCAos was seen. Intravascular ultrasound (IVUS, iLab, Boston Scientific) showed collapsed RCAos by huge false lumen and intimal tearing. (Fig 3.)
To cover intimal tearing site and to maintain true lumen, additional stenting (Xience Prime 4.0x15mm) was done.

Case Summary:
Post PCI TTE and CT showed ascending aortic dissection and minimal pericardial effusion. Emergency surgery was considered at first. However, the patients denied immediate surgery and entry point of dissection was sealed. Therefore we decided to take close observation with surgical back up.
The patient was asymptomatic during PCI and observation. We repeatedly checked bed-side TTE for hourly to detect change of pericardial effusion and dissection size.
During the close observation, BP was maintained below 90 mmHg (systolic pressure) using nitroprusside and IV labetalol.
Follow up CT scan after 2 days, revealed decreased size of hematoma and amount of pericardial effusion.
Patient could discharge at 18 days after PCI without any sequelae. Effort chest pain was relieved.
Three months follow up CT revealed nearly complete resolution of hematoma.

TCTAP C-121
What to Do When the Balloon Can’t Pass the CTO Lesion
Jingang Zheng
China Japan Friendship Hospital, China

[Interventional Management]
Procedural step:
GW: AL 0.75, GW: RUNTHROUGH, MIRACLE, MC: finecross
With the bi-lateral injection, the guidewire went to the subintimal space. With the use of parallel technique, the antegrade wire eventually went into distal true lumen. However, the balloon can not pass through the lesion. What can we do?
I tried to use two small balloon dilation for more than 10 times, the use of another stiff wire to try destroy the lesion, the tornous, and buddy wire technique, the balloon still can not pass the lesion.
With the use of Finecross and Sion, the retrograde guidewire eventually pass through the lesion retrogradely. A 1.25*15 balloon went through the lesion, predilation was made. However, the antegrade balloon still can not pass through the lesion.
I have to send the retrograde wire to the RCA guiding catheter, externalize the guidewire, through that guidewire, the antegrade balloon was passed through the lesion, stents were delivered successfully.

Relevant clinical history and physical exam:
54 years old man
HT for 7 years
DM for 2 years

Relevant test results prior to catheterization:
ECG normal
CTA: LCX 75% stenosis, RCA: 50% stenosis

Relevant catheterization findings:
LAD: NORMAL
LCX: 50% Stenosis
RCA: mid RCA total occluded, some collateral from LAD

What to Do When the Balloon Can’t Pass the CTO Lesion
Jingang Zheng
China Japan Friendship Hospital, China

[Interventional Management]
Procedural step:
GW: AL 0.75, GW: RUNTHROUGH, MIRACLE, MC: finecross
With the bi-lateral injection, the guidewire went to the subintimal space. With the use of parallel technique, the antegrade wire eventually went into distal true lumen. However, the balloon can not pass through the lesion. What can we do?
I tried to use two small balloon dilation for more than 10 times, the use of another stiff wire to try destroy the lesion, the tornous, and buddy wire technique, the balloon still can not pass the lesion.
With the use of Finecross and Sion, the retrograde guidewire eventually pass through the lesion retrogradely. A 1.25*15 balloon went through the lesion, predilation was made. However, the antegrade balloon still can not pass through the lesion.
I have to send the retrograde wire to the RCA guiding catheter, externalize the guidewire, through that guidewire, the antegrade balloon was passed through the lesion, stents were delivered successfully.