[Interventional Management]

Procedural step:
- Target lesion: Seg.11 (an ostial LCX CTO with acute bend)
- Approach: right femoral
- Guiding catheters: 7Fr Launcher EBU3.75 (Medtronic)
- Microcatheter: Crusade (Kaneka), Corsair (Asahi)
- Guidewires: XT-R, Gaia First, SION blue (Asahi)
- Balloons: Mini Trek 2.0 mm (Abbott)
- Stents: Promus Element 2.25/16 mm, Promus Element 2.25/12 mm (Boston)
- IVUS: OptiCross (Boston)

A location of entry of the ostial LCX CTO was confirmed by IVUS examination. Then operator tried to penetrate proximal cap of the CTO using an XT-R guidewire supported with a Crusade double-lumen microcatheter. However, the XT-R was unable to advance into the CTO because the entry of the CTO had an acute bend. Next, the guidewire was exchanged for a Gaia First guidewire, which was able to penetrate proximal cap and advanced to middle of the CTO. Then, after a Corsair microcatheter was delivered along with the guidewire, the Gaia First was replaced with the XT-R guidewire. Consequently, the XT-R reached distal true lumen. After predilatation, two Promus Element stents were delivered to the lesion using the balloon anchor technique and successfully deployed to the CTO lesion.

Case Summary:
The Gaia guidewire is useful especially for an ostial CTO with an acute bend at entry.
Case Summary:

60 years old male gentleman, known diabetic, normotensive, history of effort dyspnea and angina class II x 6 months. ECG: Poor R Wave Progression in anterior leads. ECHO: Severe LV dysfunction. Thallium: Viable myocardium +. CAG; RCA, LCX and angina class II x 6 months. ECG: Poor R Wave Progression in anterior leads.

Case Summary:

We describe a case of stent deformation after a few minutes of coronary stenting. A 65 year-old gentleman, with diabetes mellitus and hypertension was admitted with effort dyspnea. He was given medical treatment, and was stabilized. He agreed for intervention this time, and cardiac catheterization was arranged in August 2013.

Relevant test results prior to catheterization:

Blood test and electrocardiogram before catheterization was unremarkable. Cardiac catheterization was arranged in August 2013.

Relevant clinical history and physical exam:

This was a 65 year-old gentleman, with diabetes, hypertension and benign prostate hypertrophy.

He was admitted in March 2013, for acute coronary syndrome. Electrocardiogram showed transient ST elevation over inferior leads. He had poor insight towards his own illness. He strongly requested discharge after medical treatment, and refused any cardiac intervention.

He was however admitted again in May 2013, for unstable angina. He was given medical treatment, and was stabilized. He agreed for intervention this time, and cardiac catheterization was arranged in August 2013.

Relevant catheterization findings:

Right dominant circulation
LMS: Mid to distal LMS ~40% stenosis
LAD: Proximal LAD ~70% stenosis. Ostial part of a large D1 ~70% stenosis, with retrograde supply to PDA and PL branch
LCX: Proximal LCX ~60% stenosis. Mid to distal LCX ~60% stenosis
RCA: Proximal RCA 50% tubular lesion. Mid to distal diffuse disease with total occlusion at distal RCA

Conclusion: Triple vessel disease with RCA total occlusion as a culprit
Plan: Patient refused CABG. For PCI to RCA and then staged PCI to LM/LAD/LCX

TCTAP C-117
A Challenging Case of Small Vessel Chronic Total Occlusion
Yam Hong Wong, Kok Ying-Lung, Yam Ping-Wa
Tuen Mun Hospital, Hong Kong, China

[Clinical Information]
Patient initials or identifier number:
WONG SW

Case Summary:

The occurrence of stent fracture is usually detected in the late follow-up of stenting. We describe a case of stent deformation after a few minutes of coronary stenting. A mid-40’s male patient with diabetes mellitus and hypertension was admitted with symptoms of effort angina pectoris. Angiographic examination revealed chronic total occlusion in mid right coronary artery (RCA) and severe stenosis in mid left circumflex artery. The distal RCA was filled by septal channels from the LAD. PCI was performed to RCA. After a failed antegrade CTO recanalization attempt, a retrograde approach via septal collaterals was tried and externalization was successfully done. Everolimus-eluting stents (EES) (3.5 × 23mm, 3.0 × 28mm, 2.5 × 28mm) were implanted in #2-3 at 12 atmospheres. Post-stenting angiography showed an excellent result and intravascular ultrasound (IVUS) examination revealed adequate expansion and apposition. After a few minutes, the guide wire was removed, the final imaging was performed. Surprisingly, the deformation of the stent was observed at hinge motion site. The patient did not present any anginal symptoms with dual antiplatelet therapy. Nine months later, repeated coronary angiography by scheduled follow up was performed. The angiogram demonstrated no significant narrowing of the stented segment but showed complete separation of stent. Stent deformation immediately after stenting is rare in our case is not reported. Therefore, we report the case with some considerations.

TCTAP C-116
Deformation of Everolimus-eluting Stent Immediately After Stenting: A Case Report
Kensaku Wada, Akihiro Kawamura
Kawachi General Hospital, Japan

[Clinical Information]
Patient initials or identifier number:
T.U.

Interventional Management

Procedural step:
The occurrence of stent fracture is usually detected in the late follow-up of stenting. We describe a case of stent deformation after a few minutes of coronary stenting. A mid-40’s male patient with diabetes mellitus and hypertension was admitted with symptoms of effort angina pectoris. Angiographic examination revealed chronic total occlusion in mid right coronary artery (RCA) and severe stenosis in mid left circumflex artery. The distal RCA was filled by septal channels from the LAD. PCI was performed to RCA. After a failed antegrade CTO recanalization attempt, a retrograde approach via septal collaterals was tried and externalization was successfully done. Everolimus-eluting stents (EES) (3.5 × 23 mm, 3.0 × 28 mm, 2.5 × 28 mm) were implanted in #2-3 at 12 atmospheres. Post-stenting angiography showed an excellent result and intravascular ultrasound (IVUS) examination revealed adequate expansion and apposition. After a few minutes, the guide wire was removed, the final imaging was performed. Surprisingly, the deformation of the stent was observed at hinge motion site. The patient did not present any anginal symptoms with dual antiplatelet therapy. Nine months later, repeated coronary angiography by scheduled follow up was performed. The angiogram demonstrated no significant narrowing of the stented segment but showed complete separation of stent. Stent deformation immediately after stenting like in our case is not reported. Therefore, we report the case with some considerations.

TCTAP C-117
A Challenging Case of Small Vessel Chronic Total Occlusion
Yam Hong Wong, Kok Ying-Lung, Yam Ping-Wa
Tuen Mun Hospital, Hong Kong, China

[Clinical Information]
Patient initials or identifier number:
WONG SW

Relevant clinical history and physical exam:

This was a 65 year-old gentleman, with diabetes, hypertension and benign prostate hypertrophy.

He was admitted in March 2013, for acute coronary syndrome. Electrocardiogram showed transient ST elevation over inferior leads. He had poor insight towards his own illness. He strongly requested discharge after medical treatment, and refused any cardiac intervention.

He was however admitted again in May 2013, for unstable angina. He was given medical treatment, and was stabilized. He agreed for intervention this time, and cardiac catheterization was arranged in August 2013.

Relevant test results prior to catheterization:

Blood test and electrocardiogram before catheterization was unremarkable. Electrocardiogram showed satisfactory left ventricular function with ejection fraction of around 58%. There were no regional wall movement abnormalities. Valves morphology was normal. There was a moderate and eccentric posterolateral mitral regurgitation jet.

Relevant catheterization findings:

Right dominant circulation
LMS: Mid to distal LMS ~40% stenosis
LAD: Proximal LAD ~70% stenosis. Ostial part of a large D1 ~70% stenosis, with retrograde supply to PDA and PL branch
LCX: Proximal LCX ~60% stenosis. Mid to distal LCX ~60% stenosis
RCA: Proximal RCA 50% tubular lesion. Mid to distal diffuse disease with total occlusion at distal RCA

Conclusion: Triple vessel disease with RCA total occlusion as a culprit
Plan: Patient refused CABG. For PCI to RCA and then staged PCI to LM/LAD/LCX