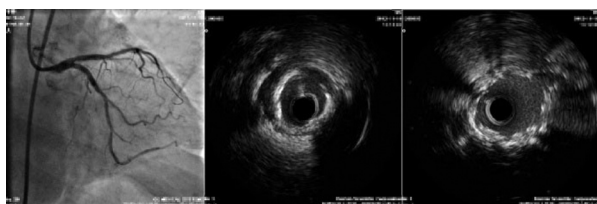
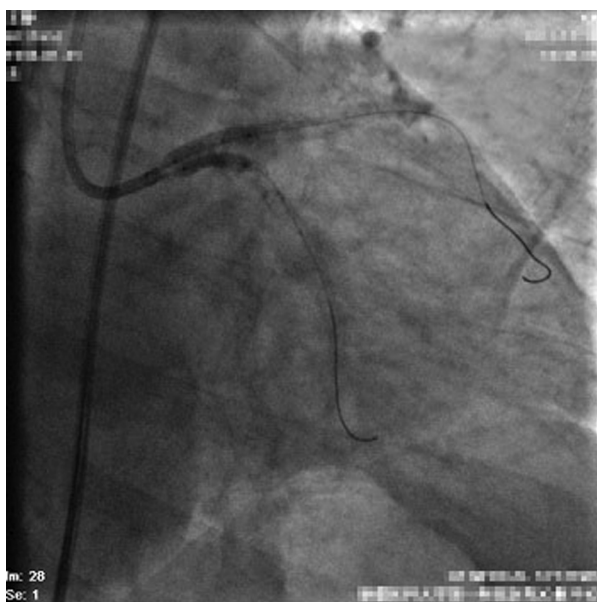


- 3) Then the IVUS was done and the result showed calcific plaque of distal LM and proximal LAD and LCX with severe stenosis.
- 4) A 2.5\*15mm balloon(TREK) to LM, LCX and LAD to do a predilatation. Then the LAD and LCX blood flow became better.
- 5) A 3.0\*23mm DES in LCX, 14atm and a 3.5\*28mm DES in LAD and LM, 20atm, using Crush technique.
- 6) A 3.0\*15mm balloon in LCX, 3.5\*15mm balloon in LAD; Final kissing, 12atm.
- 7) CAG and IVUS after PCI didn't show remain stenosis in LM, LAD and LCX.

**Case Summary:**

This case was finally diagnosed as a sever calcified plaque by IVUS. However, the calcified plaque is not typical in CAG, which shows a thrombotic feature in CAG. With the help of IVUS technic we did a successful PCI and no restenosis and incomplete stent apposition was found post PCI. What we can learn from this case is that IVUS has a high specificity and sensitivity in calcified lesion, we should make full rational use of this advantage to develop a better strategy.

**TCTAP C-061****Aneurysmal Formation and Endothelial Dysfunction Induced by Overdilation with Kissing Balloon Inflation During 3 years Follow-up After Drug-eluting Stent Implantation**

*Yoshinobu Murasato*

*New Yukuhashi Hospital, Japan*

**[Clinical Information]****Patient initials or identifier number:**

Case 1: 126832

Case 2: 127858

**Relevant clinical history and physical exam:**

Case 1: The patient was admitted due to cerebral infarction and in July, 2010. At that time, the coronary computed tomographic angiography revealed an asymptomatic, but significant LAD-diagonal bifurcation lesion.

Case 2: The patient was admitted due to new-onset of effort angina within a month in August, 2010.

**Relevant catheterization findings:**

Case 1: The CAG showed a 1-0-1 lesion in the LAD-diagonal bifurcation.

Case 2: The CAG revealed a 1-1-1 lesion in the LAD-diagonal bifurcation.

**[Interventional Management]****Procedural step:**

Case 1: The intervention was performed with trans-femoral approach (6Fr). The IVUS revealed a negative remodeling in the main vessel (MV) with tight stenosis in its proximal part and eccentric calcified lesion in the side branch (SB) ostium. The bifurcation lesion was treated with cross-over stenting using a 3.0/28mm Cypher select stent (SES) followed by kissing balloon inflation (KBI) with 2.5 and 2.25mm balloons.

The 9-month follow-up CAG did not show any restenosis or ectatic lesion in the treated site.

The 3-year follow-up CAG demonstrated restenotic lesions in both edge of the stent and ectatic lesion in the part of stent deployment. The LAD flow was deteriorated to TIMI grade I. The OCT revealed the complete intimal coverage of the roundly dilated stent in the distal MV, however, malaapposition and intra-strut halo were observed in the proximal MV. The overdilation by KBI might lead to destruction of internal elastic lamina and persistent inflammation, which resulted in ectatic degeneration after SES deployment.

Case 2: The intervention was performed via trans-radial approach (6Fr). The IVUS showed a positive remodeling with tight lesion in the MV and an eccentric fibrous lesion in the SB ostium. The lesion was treated with cross-over stenting using a 3.5/23mm Xience V stent (EES) followed by KBI with 3.5 and 2.75mm balloons.

In the 9-month follow-up CAG, the LCA was still spastic except for the stent-embedded area even after NTG injection, which suggested a possibility in the edge stenosis. The 15-month follow-up CAG showed some regression of the stenosis in both stent edges. The 3-year follow-up CAG revealed no stenotic lesion, which suggested the inflammation in the overdilated area may evoke the spasm. The OCT showed complete endothelialization on the EES. Since the vasospasm around the stent has been resolved according to the time course, the EES has a potential to sedate inflammation even in the overdilated area.

**TCTAP C-062****Thrombus or Calcified Nodule? Acute Coronary Syndrome Caused by Left Main Disease**

*Hidetaka Nishina*

*Tsukuba Medical Center Hospital, Japan*

**[Clinical Information]****Patient initials or identifier number:**

TN, 115504

**Relevant clinical history and physical exam:**

A 60 year old gentleman presented to the emergency department for progressive chest pressure at rest as well as on light exertion since 4 days prior to his presentation. His coronary risk factors included hypertension and prior history of cigarette smoking. He was normotensive on admission and the physical examination was unremarkable.

**Relevant test results prior to catheterization:**

A 12-lead electrocardiogram was normal and the echocardiogram showed preserved LV systolic function (LVEF 60%) without significant regional wall motion abnormality. The blood test results were also unremarkable except for positive troponin-T.

**Relevant catheterization findings:**

A 6Fr. sheath introducer was inserted in his right radial artery and coronary angiogram was performed using 5 Fr. diagnostic angiographic catheter. Selective left coronary angiogram revealed a round-shaped filling defect of the contrast at the distal left main coronary artery (LMCA) seen on the RAO caudal projection. On the cranial projections, this lesion was seen as an eccentric luminal narrowing with dense calcium deposit. There is also a moderate to severe disease in the mid left descending coronary artery (LAD). The left circumflex artery (LCX) and right coronary artery (RCA) had no significant disease.

**[Interventional Management]****Procedural step:**

After completion of the diagnostic coronary angiography, we thought the distal LMCA lesion represent either thrombus or nodular calcified plaque. We felt a larger