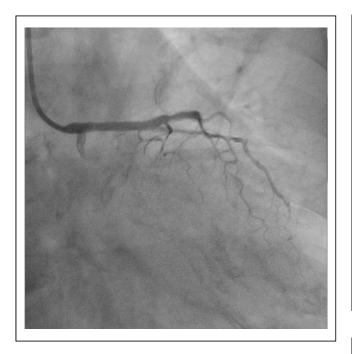
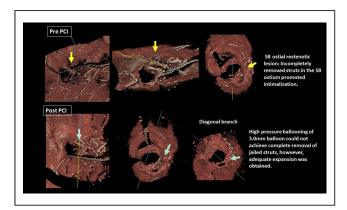
# JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY, VOL. 65, NO. 17, SUPPL S, 2015

## [INTERVENTIONAL MANAGEMENT]

Procedural step. A guiding catheter (IL3.5, 6Fr) was engaged via right radial artery and two floppy guide wires (GW) were advanced to the LAD and D1, respectively. Since a catheter of the optical frequency domain imaging (OFDI) could not be advanced to the D1, the pull back from the LAD was performed to investigate the GW crossing points in the D1 ostium. The3-dimentinal imaging clearly demonstrated that the ostium was divided into two chambers by the jailed struts with intimalization, which was removed incompletely by the previous final kissing balloon inflation. Since the GW was trapped in the proximal smaller chamber, its existence was changed to the distal larger chamber under the guidance of 3-dimentinal imaging. A scoring balloon (Score flex, 2.5/10mm) was inflated in the D1 ostium, however, adequate expansion or complete removal of the jailed struts was not obtained. Therefore, the side branch balloon was sized up to 3.0mm (Glider, 3.0/4mm) and inflated at14atm. Although ostial cross sectional area was dilated to 6.6mm<sup>2</sup>, it did not provide complete removal of the jailed struts due to the limitation of strut dilation in the Cypher stent, either. A drug-coating balloon (SeQuent Please 2.5/20mm) was inflated from the proximal LAD stent to the D1 stent and two everolimus-eluting stents were deployed in the restenotic lesions at the proximal and distal stent edges.





Case Summary. Incomplete removal of the jailed struts after culotte stenting was related to restenosis in the very late phase. Accurate assessment of the side branch ostium and confirmation of the GW crossing point using the 3-dimentional OFDI is useful for optimization of the bifurcation intervention.

# TCTAP C-057

Stent Thrombosis Following Side Branch Stenting for Medina 0,0,1 Coronary Bifurcation Lesion Caused by Metal Carina

Akimitsu Nasuno,¹ Atsushi Takagi <sup>1</sup>Saiseikai Kawaguchi General Hospital, Japan

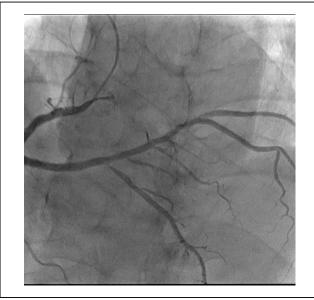
## [CLINICAL INFORMATION]

Patient initials or identifier number. 00230841

Relevant clinical history and physical exam. 78-year-old man with paroxysmal atrial fibrillation, hypertension, dyslipidemia presented chest pain on exertion. His height and weight were 166 cm and 67kg, respectively. On physical examination, there was no bruit at the neck or abdomen, no rales in his lung fields, no heart murmur, no pretibial edema and no significant neurological findings.

Relevant test results prior to catheterization. Electrocardiography was within normal limit, chest radiography revealed no abnormality, serial cardiac enzyme was unremarkable, and transthoracic echocardiography demonstrated normal left ventricular size and contractility.

Relevant catheterization findings. CAG revealed LCx was small, and there was no significant stenosis in LAD, but 90% stenosis was observed at the ostium of #4PD in super dominant RCA (Medina0,0,1).



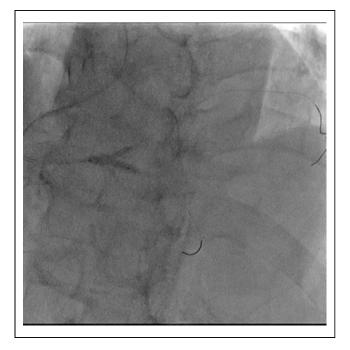






# [INTERVENTIONAL MANAGEMENT]

**Procedural step.** To gain the optimal coverage to the ostium of #4PD without the disadvantage of an excessive amount of metal in the main branch, we avoided the crossover stenting to #3-#4PD, but implanted BMS (ML8 2.75x23mm) to the ostium of #4PD with minimal protrusion to the main branch with the guidewire protection of #4PL. Angiographic result was satisfactory, but IVUS cannot pass toward #4PL. Since excess stent protrusion to the main branch was considered to disturb the device passage, we tried to cross the guidewire to the protruded stent strut, and dilated with the 2.5mm semi-compliance balloon, and the FKBT was performed with the 2.5mm balloon to the #3-#4PL and 2.75mm balloon to the #3-#4PD. Six months later, followup CAG revealed total occlusion with thrombus at the site of the stent. IVUS following predilation revealed an under expansion of the initial stent and protrusion of stent struts resulting in metal carina in the main branch. Ballooning either in main branch or side branch failed to dilate both arteries. Therefore, we re-wired the guidewire by IVUS guidance to minimize the struts-protrusion, then performed KBT and successfully dilated the lesion. Follow-up CAG performed after six months revealed no ISR at the site of the stent.





Case Summary. We experienced a case of stent thrombosis treated after single side branch ostial stenting for Medina 0,0,1 coronary bifurcation lesions. Stent thrombosis was supposed to be due to flow disturbance caused by under expansion of the stent and protruded stent struts into the main vessel. IVUS guided re-wiring a guidewire through the protruded stent struts was successfully performed by using multi-functional proven catheter, and then performed KBT and successfully dilated the lesion.

# **TCTAP C-058**

# Successful Side Branch Dilatation Using Glider Balloon for Left Main Stenting

Teppei Noda<sup>1</sup>

<sup>1</sup>Kansai Medical University, Japan

## [CLINICAL INFORMATION]

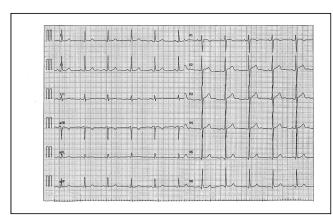
Patient initials or identifier number. S.O.

Relevant clinical history and physical exam. 68 year-old male with history of diabetes, chronic kidney disease stage V on dialysis was admitted to our hospital for Percutaneous Coronary Intervention (PCI) to just proximal Left Anterior Descending artery (LAD). He was asymptomatic and his physical examination was unremarkable.

**Relevant test results prior to catheterization.** The Electrocardiogram showed sinus rhythm and no ST-T changes.

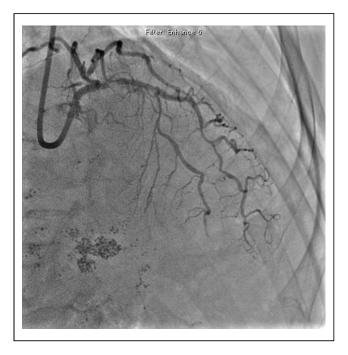
The Echocardiography showed normal Left Ventricular systolic function without regional wall motion abnormality.

Chest X-ray was unremarkable.



**Relevant catheterization findings.** Coronary Angiogram (CAG) showed severe stenosis in the proximal LAD with flow limitation and moderate stenosis in the distal Left Circumflex artery(LCX).





## [INTERVENTIONAL MANAGEMENT]

Procedural step. PCI was performed via femoral artery with a 7F JL4.0 guiding catheter. Our strategy was cross-over stenting from Left Main Trunk (LMT) to LAD for the just proximal LAD lesion. Sion and Sion blue wire were crossed to LAD and LCX, respectively. Intravascular ultrasound (IVUS) was failed to cross the lesion. Predilatation with Raiden 3 balloon 2.5-15mm was performed at LMT to LAD. IVUS could pass through proximal LAD, but not mid LAD because of the severe calcification. Xience Xpedition stent 2.5-15mm could be implanted to mid LAD with Guideliner catheter support. Subsequently, Nobori stent 3.0-28mm was implanted from proximal LAD to LMT ostium