

Ostium Lesion of Left Anterior
Descending Artery Could not
Classified by Medina Classification.

*Face the damping
Not gamble on it*



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Introduction

- Mr. Lin, 54 years old
- Presented with chest tightness and dyspnea on exertion for 3 months
- Personal history: Diabetes mellitus, hypertension, Atrial fibrillation, Hyperthyroidism
- Treadmill exercise test: Horizontal ST depression 2.1-2.6mm at lead II, III, AVF and V4-6

Coronary angiography(2017.04)

RCA



JR 4.0, 6Fr. Via left radial a.

Coronary angiography(2017.04)

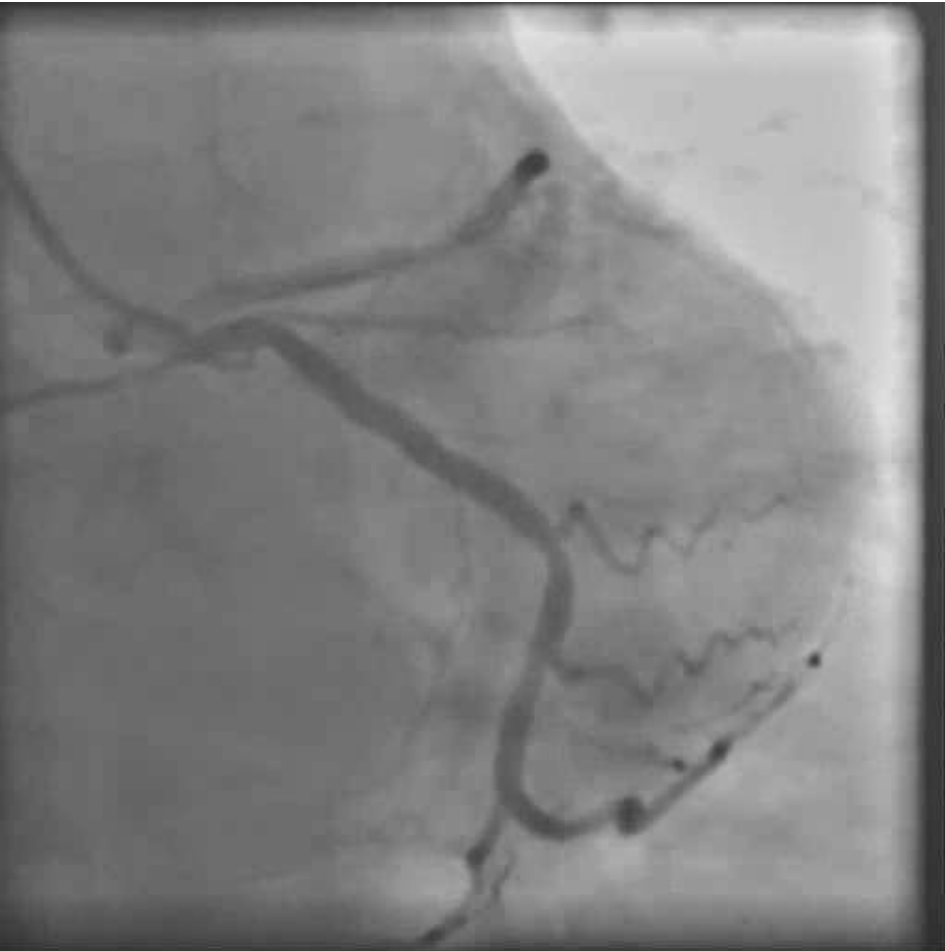
LAD



JL 3.5, 6Fr.via left radial a.

Coronary angiography(2017.04)

LCX



JL 3.5, 6Fr.via left radial a.

Coronary angiography(2017.04)

LAD



JL 3.5, 6Fr.via left radial a.

MILDLY

W

IMPROV

Shou



SURE

TING

LAD?

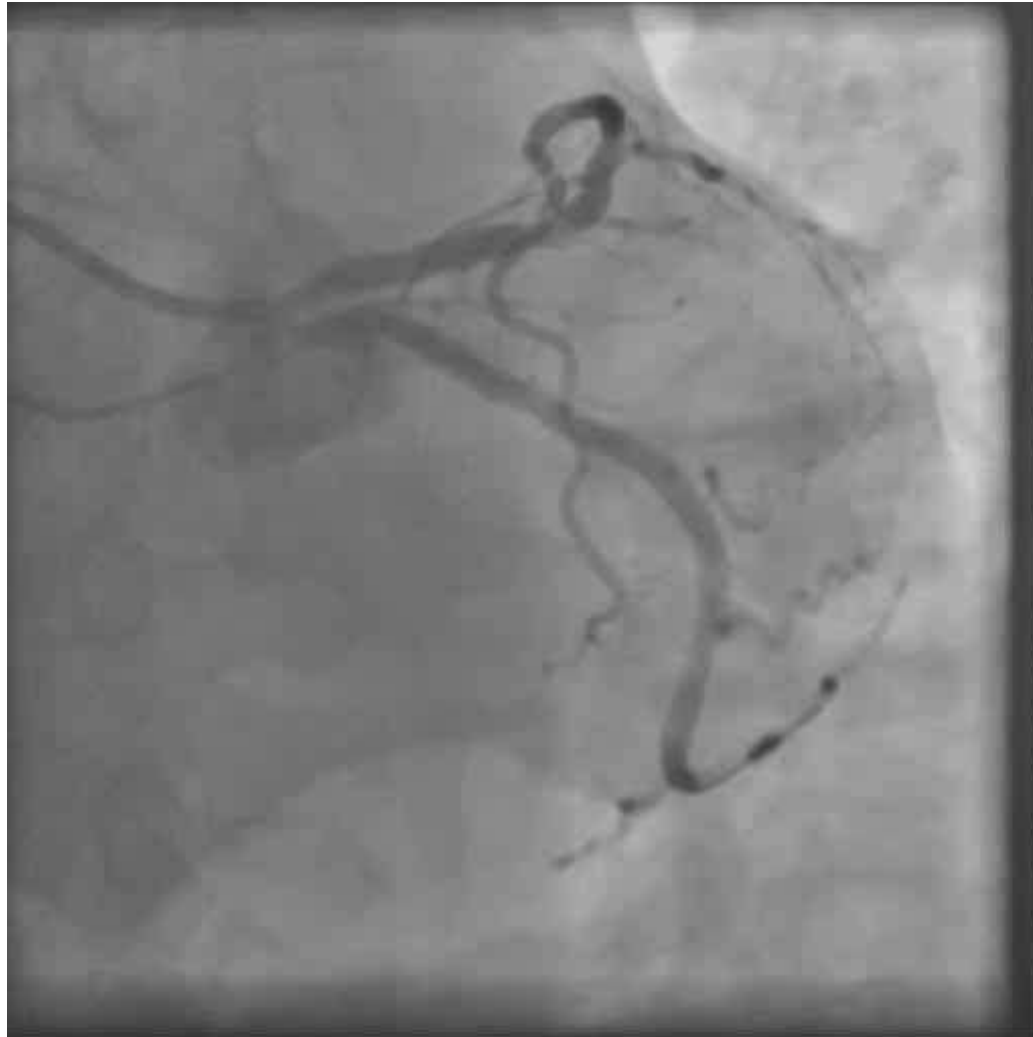
FFR, OCT seem not to be helpful
IVUS may be considered
But

Damping of the pressure is common with catheter tip
against the vessel wall

SOMETIMES, EVIL WINS



Coronary angiography(2017.04) LCX post-stenting(Ultimaster 3.5x15 14ATM)



Bosten JL 3.5, 6Fr.via left radial a.

The patient complained recurrent

Angina on exertion

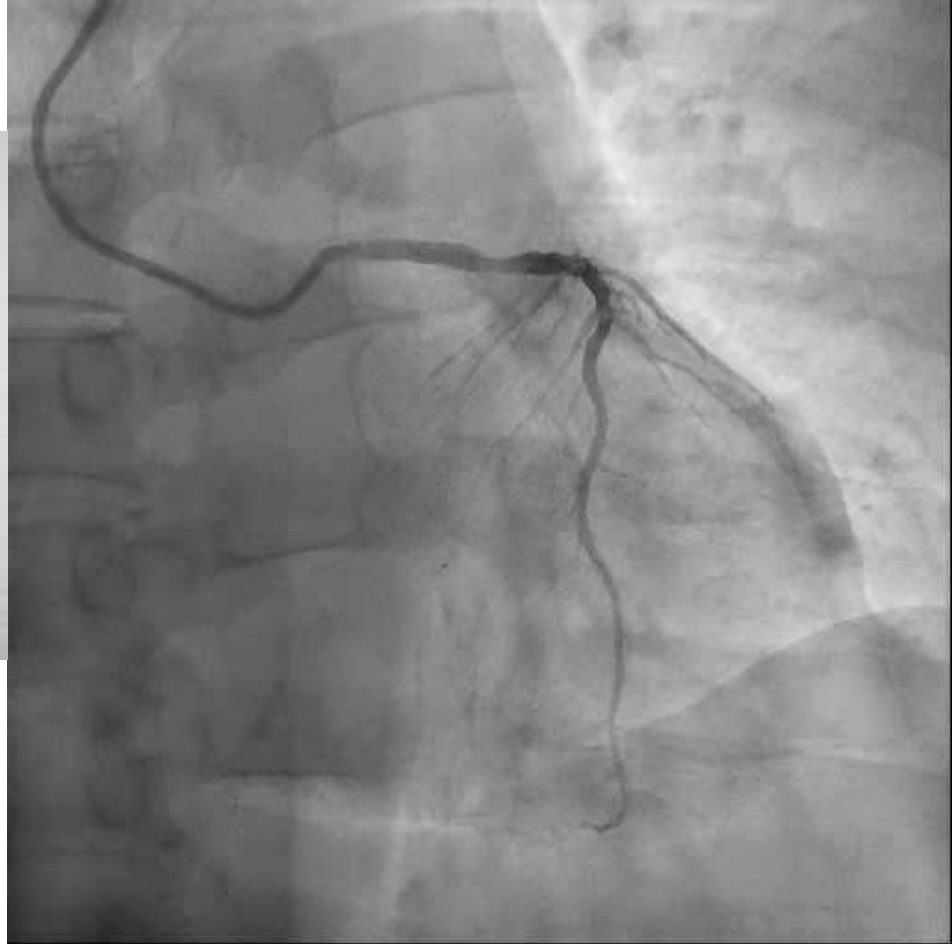
3 months later

ISR of DES in 3 months?

LAD ostium progress?

Coronary angiography(2017.07)

LCA



JL 3.5, 6Fr. Via left radial a.

Face the damping *Not gamble on it*

- Damping incidence 2.3%
- Incidence of true atherosclerotic ostial lesions 40.8% (**LM 51.6%**)
- LM ostial damping--**predictor for true atherosclerotic stenosis**

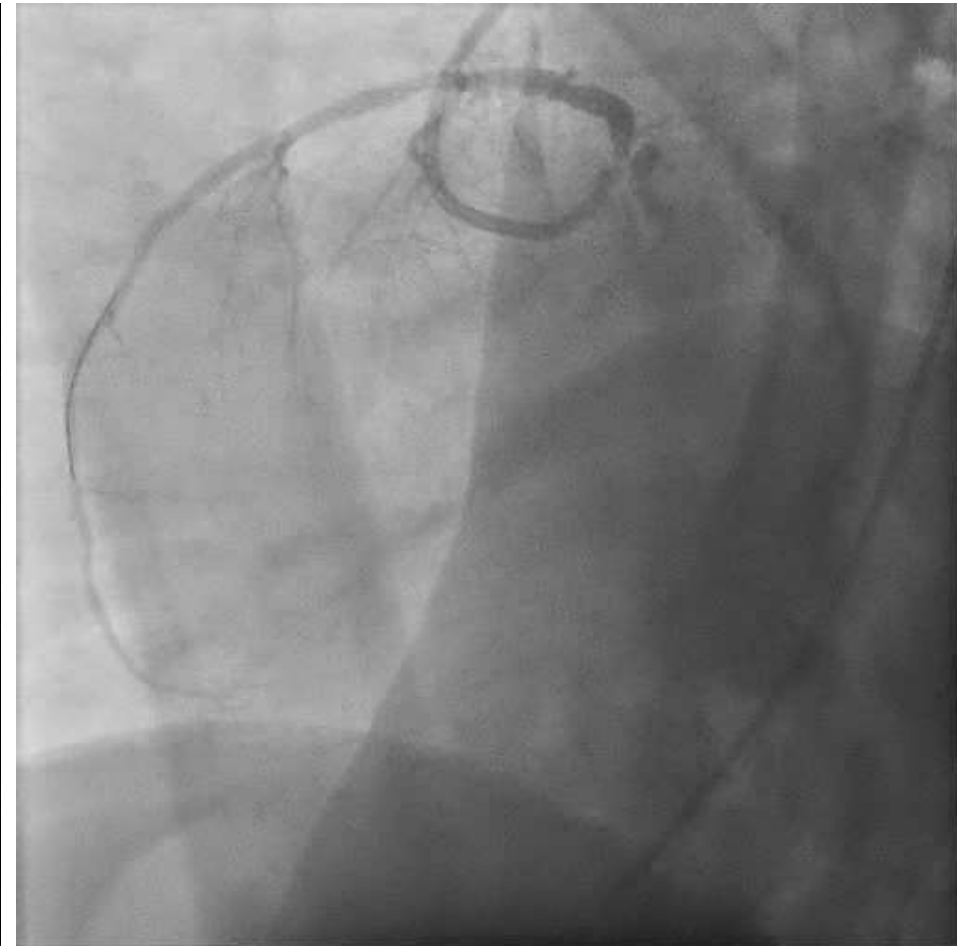
Prediction of Coronary Atherosclerotic Ostial Lesion with a Damping of the Pressure Tracing during Diagnostic Coronary Angiography

Ae-Young Her et al. Yonsei Med J 2016 Jan;57(1):58-63



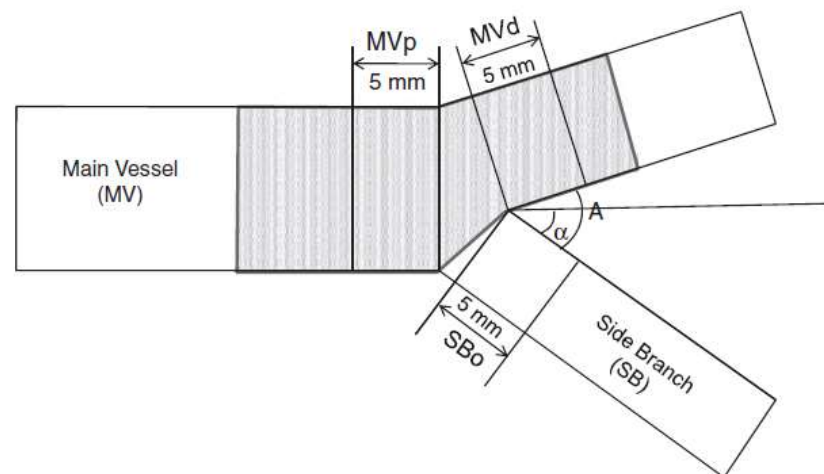
Coronary angiography(2017.07)

LAD



JL 3.5, 6Fr. Via left radial a.

The **carina shift**, not the plaque shift, is the major mechanism of side branch ostium compromise after MV stent implantation, and the carina shift is primarily influenced by **MVd lumen expansion**



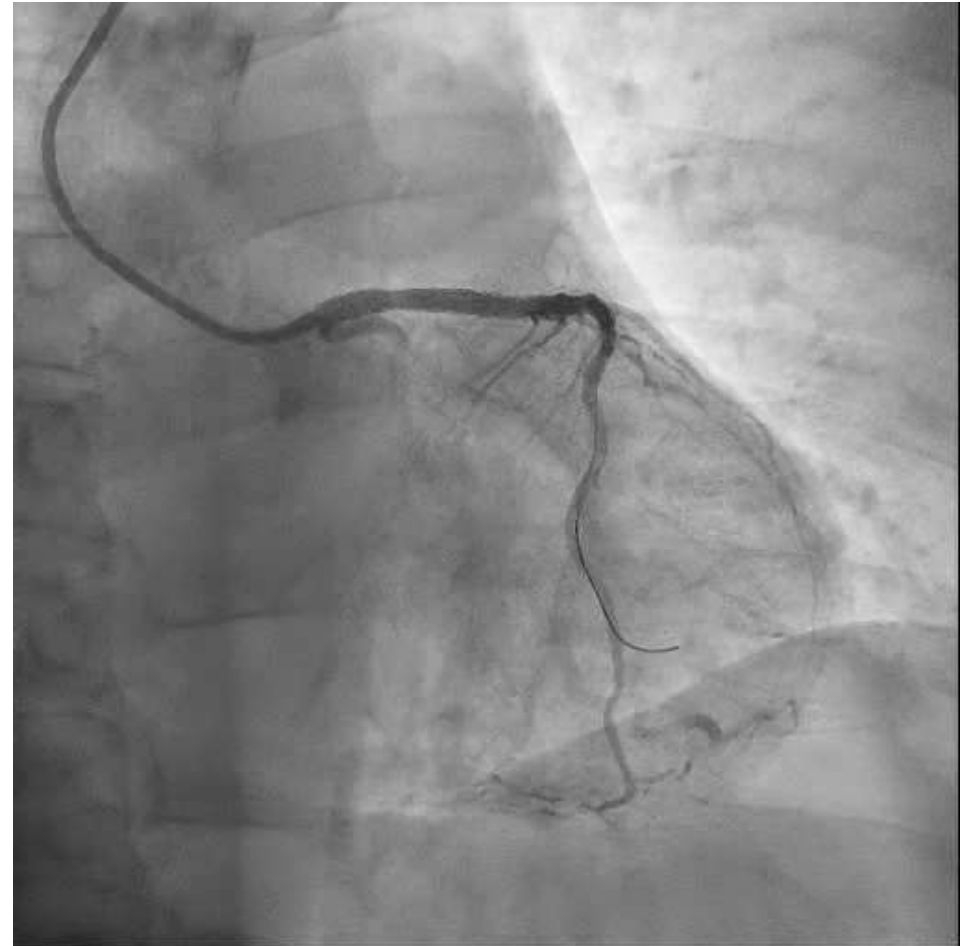
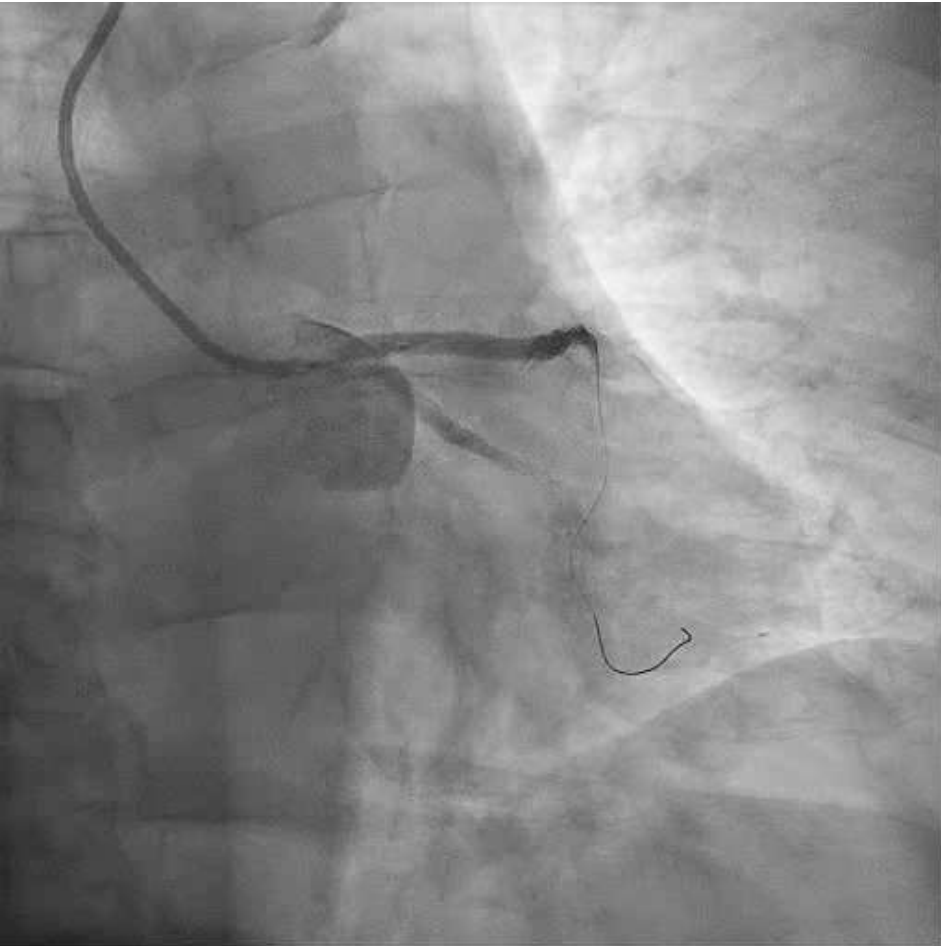
**Carina Shift Versus Plaque Shift for Aggravation of Side Branch Ostial Stenosis in Bifurcation Lesions
Volumetric Intravascular Ultrasound Analysis of Both Branches**

Jianqiang Xu et al. 2012;5:657-662; originally published online October 2, 2012 *Circ Cardiovasc Interv.*

IVUS—LAD ostium



Ostium stenting angiography

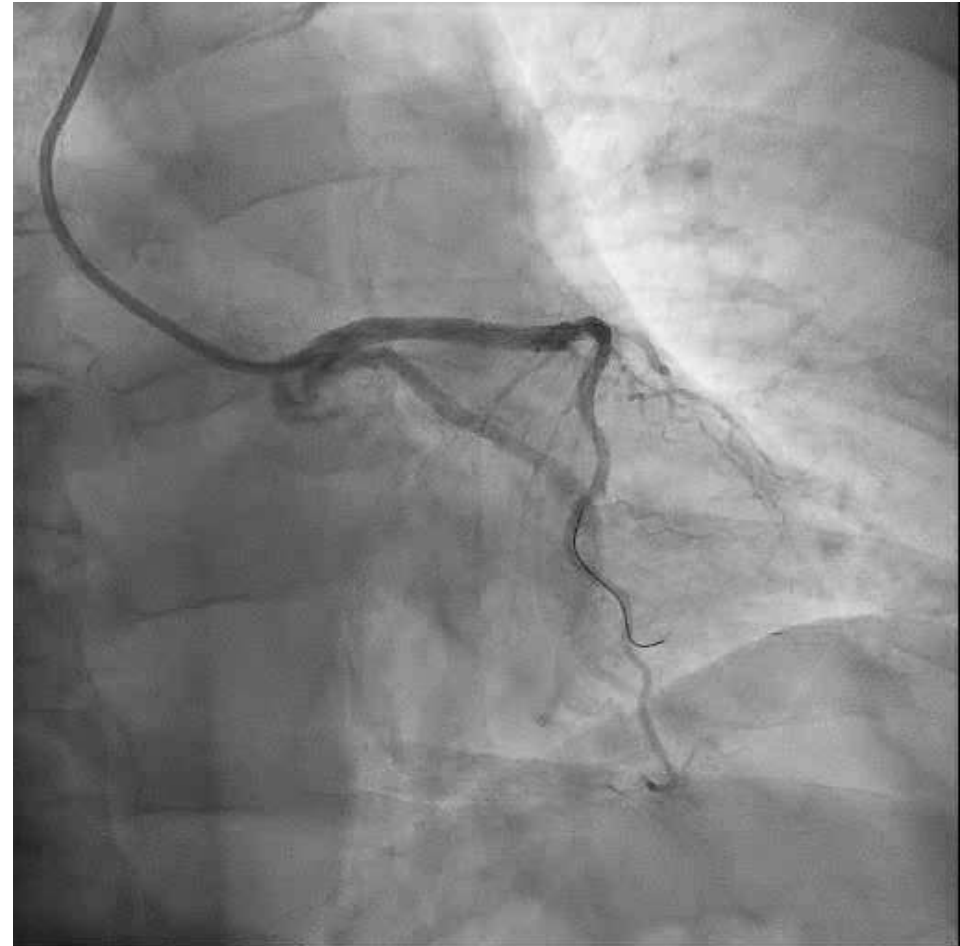


LAD-O:4.0x12mm 14ATM
LAD-m:4.0x23mm 12ATM

IVUS—post-stenting



Ostium post-dilation angiography



LAD-O:4.0x12mm post-dilation with Euphora 4.0x15mm 18ATM

Face the damping Not gamble on it

especially at LM ostium

- coronary CT is precise tool for coronary anomaly evaluation. (J Cardiovasc Med (Hagerstown). 2009 Mar;10(3):279-81; Korean Circulation Journal(Man Yong Hong, et al.)
<http://dx.doi.org/10.4070/kcj.2013.43.6.408>;

What do I learn after review this case?

- Optimal stenting for LAD ostium with coronary anomaly (absent or short LM) under **IVUS-guiding** and **CT evaluation** (help to decide whether double guiding catheter needed) could prevent the obstruction of LCX.

Thanks for your attention