



**UNIVERSITY
OF MALAYA
MEDICAL CENTRE**

Deceivingly Simple

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TCTAP 2017

April 25-27, 2017
Coex, Seoul, Korea

Disclosure

- I have nothing to disclose



Case presentation

- Madam TAM
- 72 year-old Chinese lady
- Underwent right TKR 2013 and left TKR 2014
- Hypertension on perindopril 8mg od and amlodipine 5mg od
- Worked up for potential kidney donor to son
- Having intermittent angina symptoms
- CCS class II
- MSCT coronary angiogram calcium score 689.5

Physical examination

- Well hydrated
- BP 140/56 mmHg
- PR 55 bpm
- SpO₂ 99%
- CVS DRNM
- Lungs clear

Investigations

- Hb 11.7
- Urea 2.7
- Creat 39
- eGFR > 90 mls/min
- INR 1.1
- APTT 35.6
- ALT 14
- Corr Ca 2.2
- Tchol 4.9
- LDL 2.7
- FBS 5.6

ECG

DOB: 19-May-1944 72 Years

Female

Race: N

Dept:

Unidentified Department

HR 68 [SR] - Sinus rhythm.....normal P axis, V-rate 50-99
[LVH/ST] - Probable LVH with secondary repol abnorm.....multiple LVH criteria
PR 167 [DM/OP] - Probable inferior infarct, old.....Q>35ms, II III aVF
QRS 90
QT 403
QTc 429

-- AXIS --

P 75

QRS 37

T 33

- ABNORMAL ECG -

Previous ECG:01-Dec-2014 11:23:11 - Normal Unconfirmed

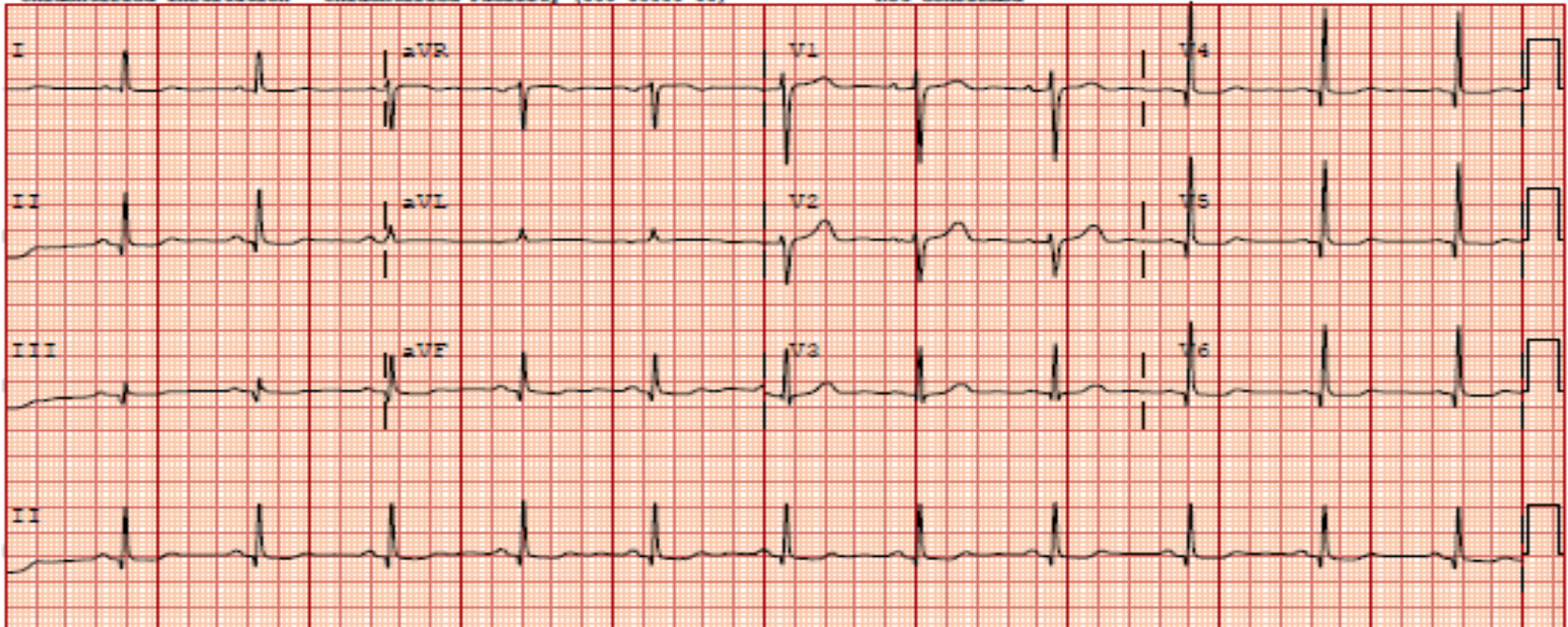
Order #: 31643445_172065

Standard 12

Requested By: x, x

Unidentified Institution - Unidentified Facility (000-00000-00)

Not confirmed



Device:

Speed: 25 mm/sec

Isch: 10 mm/mV

Chest: 10 mm/mV

F 50- 0.5-100 Hz W

PH1008 CL P7

Echocardiogram

Echo Finding:

Left Ventricle

The left ventricle is normal in size. No clot seen. There is normal left ventricular wall thickness. Normal left ventricular systolic function. LVEF = 73 %. Grade I (mild) diastolic dysfunction. No regional wall motion abnormalities noted.

Right Ventricle

The right ventricular systolic function is normal. Tricuspid annular plane systolic excursion = 27 mm. RVS' = 14 cm/s.

Atria

The left atrial size is normal. Right atrial size is normal.

Mitral Valve

The mitral valve is normal. There is no mitral regurgitation noted.

Tricuspid Valve

The tricuspid valve is normal. Trivial tricuspid regurgitation. Pulmonary artery systolic pressure = 25 mmHg.

Aortic Valve

The aortic valve is trileaflet. The aortic valve opens well. Trivial aortic regurgitation seen.

Pulmonic Valve

The pulmonic valve is not well seen, but is grossly normal. There is no pulmonic valvular regurgitation.

Great Vessels

The aortic root is normal size. The pulmonary artery is normal size.

Pericardium/Pleural

There is no pericardial effusion. There is no pleural effusion.

MMode/2D Measurements & Calculations

RVDd: 1.3 cm	LVIDd: 4.9 cm	FS: 42.9 %	% IVS thick: 77.8 %
IVSd: 0.90 cm	LVIDs: 2.8 cm	EDV(Teich): 112.8 ml	
IVSs: 1.6 cm	LVPWd: 0.90 cm	ESV(Teich): 29.6 ml	
	LVPWs: 1.1 cm	EF(Teich): 73.8 %	

Ao root diam: 2.2 cm	Lat Peak E' Vel: 7.9 cm/sec	Med Peak E' Vel: 3.8 cm/sec	EDV(Teich)2: 112.8 ml
Ao root area: 3.8 cm ²			
LA dimension: 2.9 cm			

Doppler Measurements & Calculations

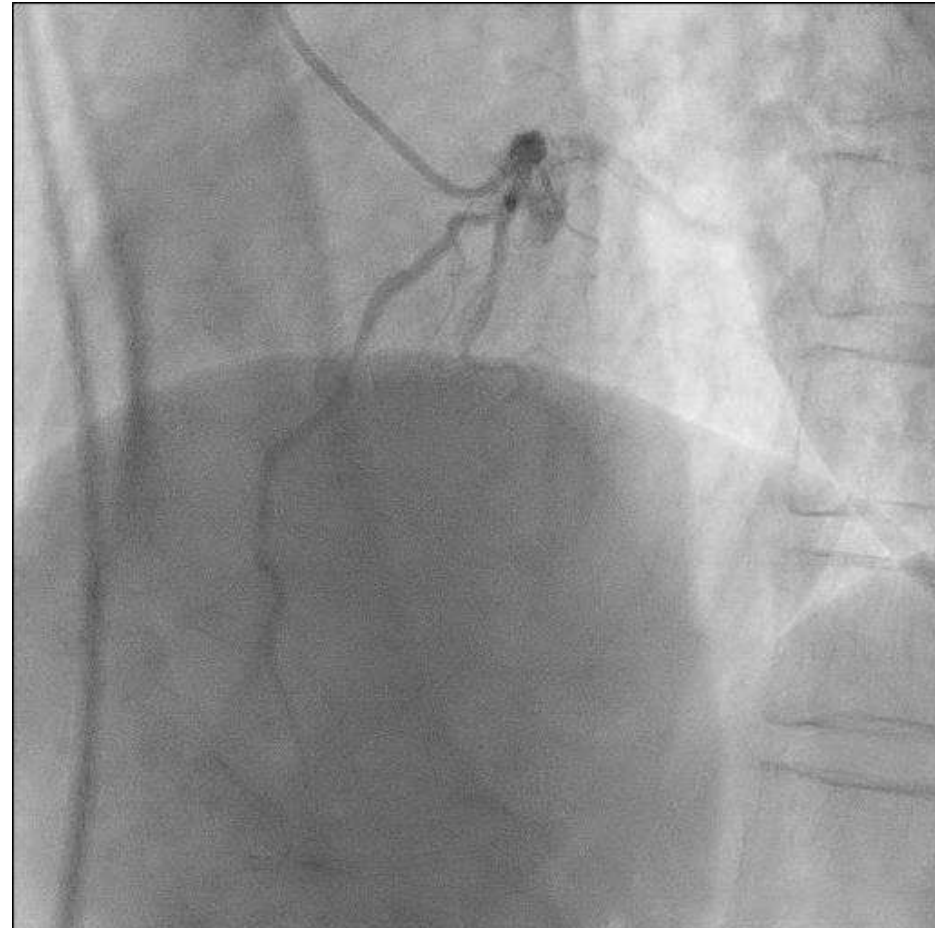
MV E max vel: 64.7 cm/sec	MV dec time: 0.28 sec	Ao V2 max: 185.0 cm/sec	TV V2 max: 199.3 cm/sec
MV A max vel: 109.0 cm/sec		Ao max PG: 13.7 mmHg	TV max PG: 22.8 mmHg
MV E/A: 0.59		Ao mean PG: 14.0 mmHg	
LV IVRT: 0.11 sec			

PA V2 max: 107.0 cm/sec

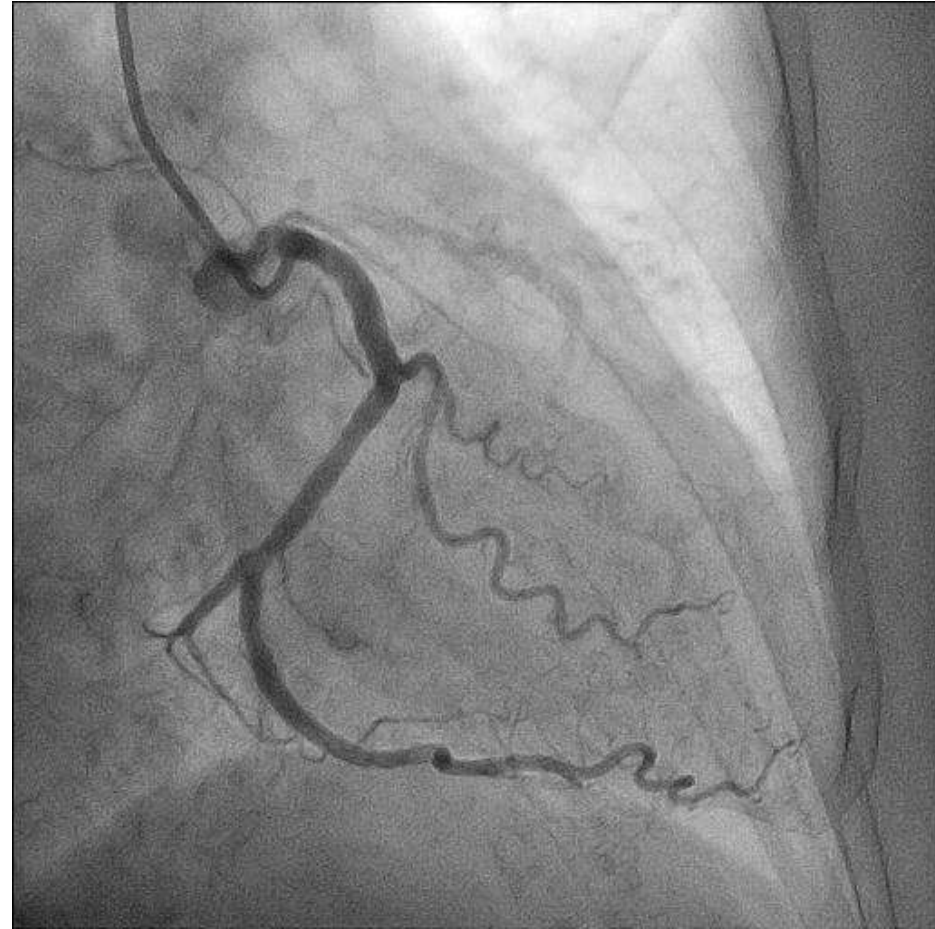
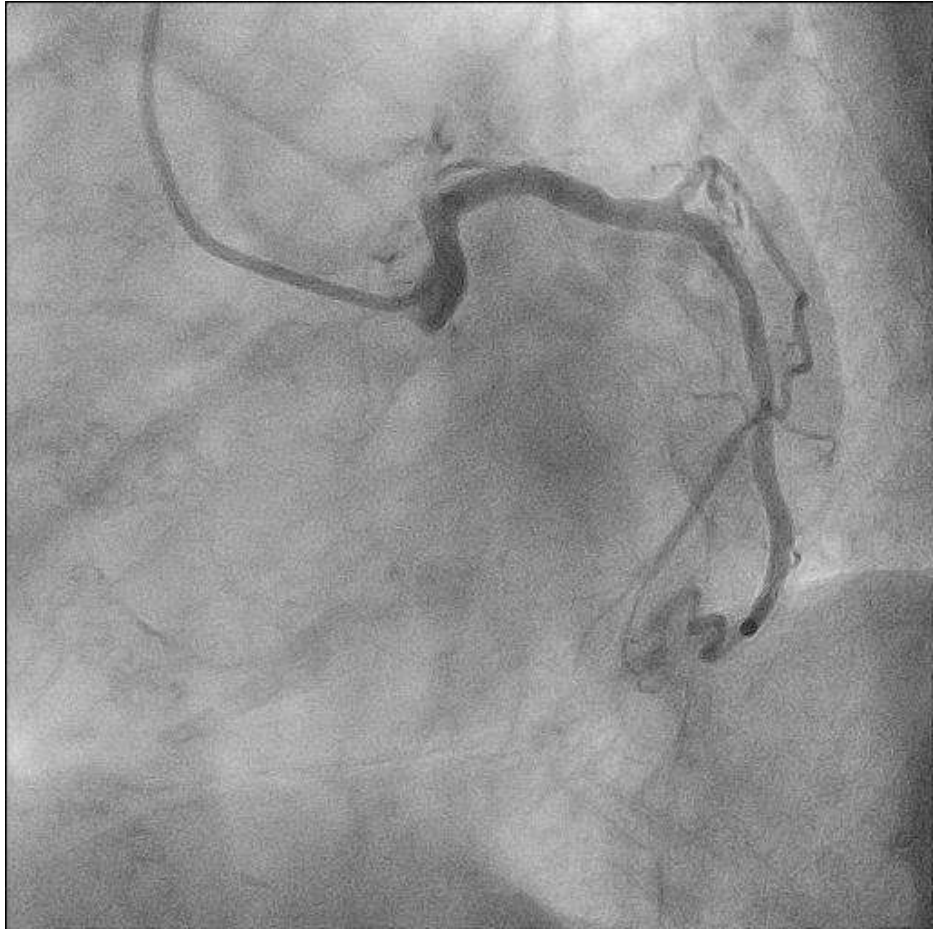
PA max PG: 5.0 mmHg

**FIRST CORONARY ANGIOGRAM
18TH OF JANUARY 2017**

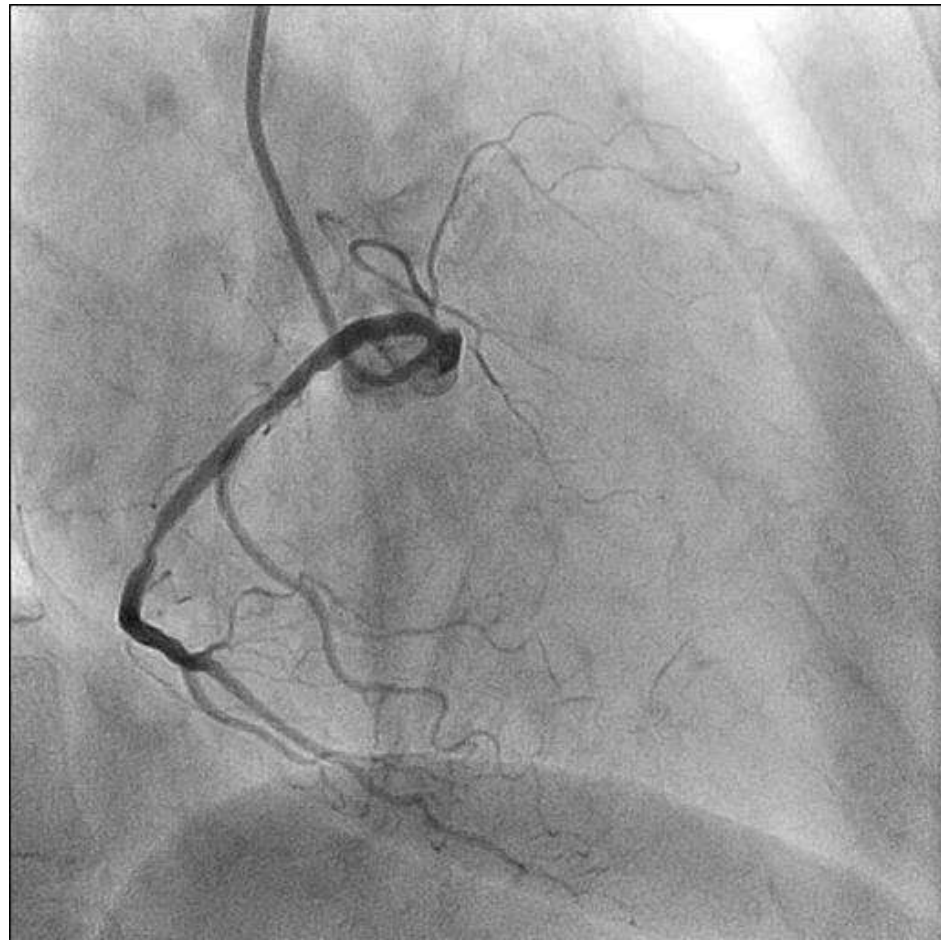
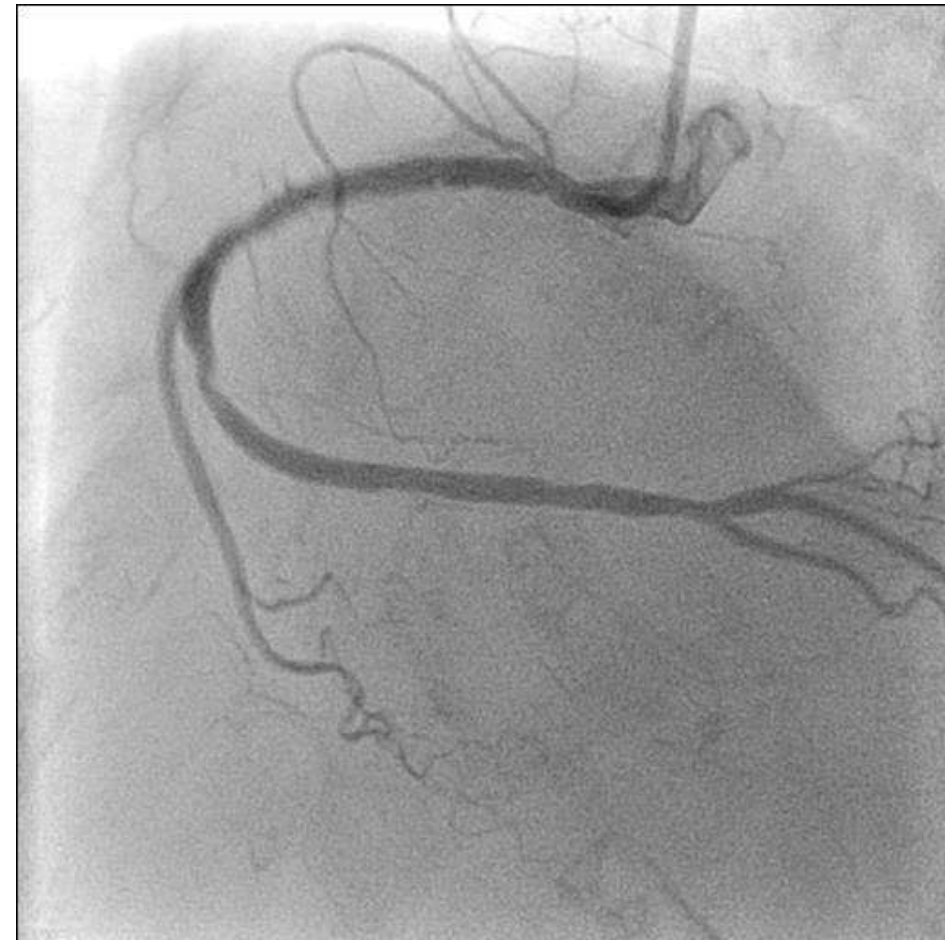
LAD diagnostic



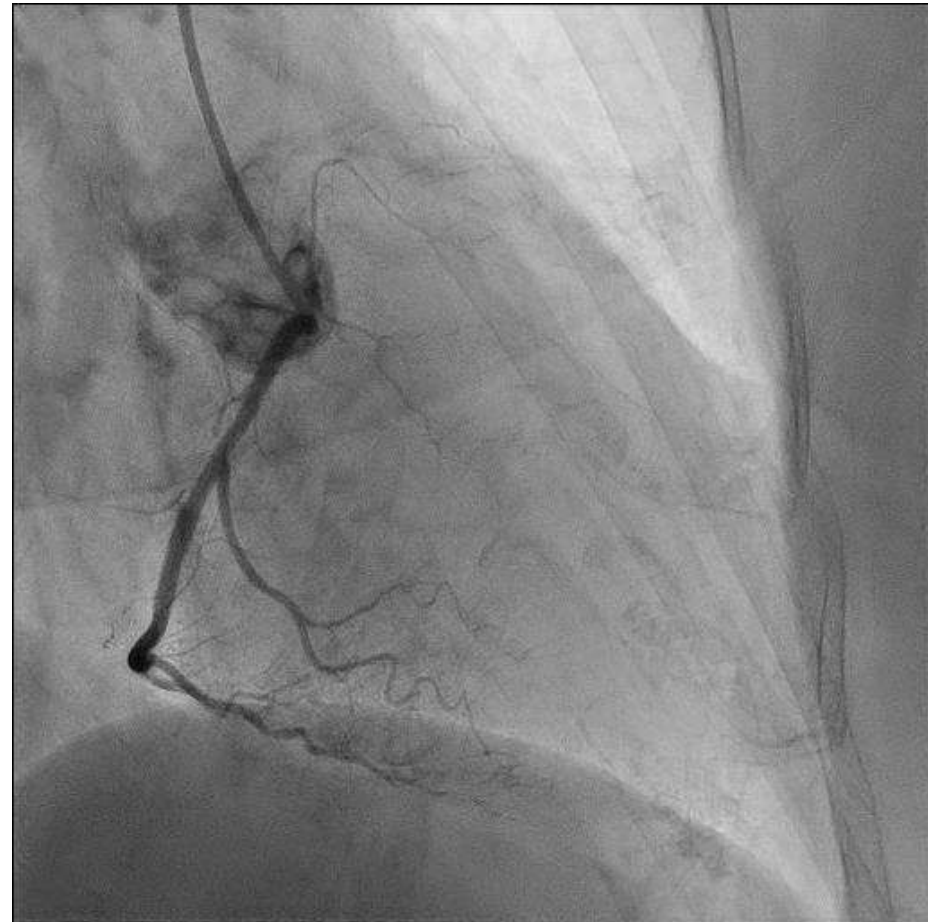
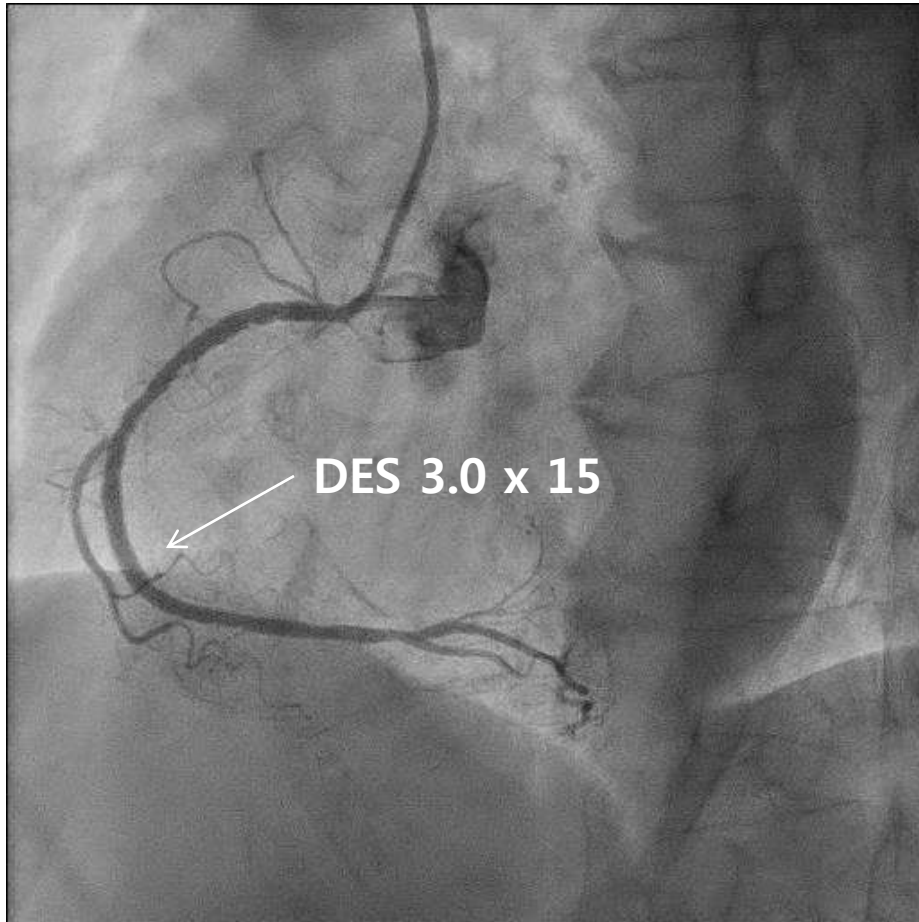
LCx diagnostic



RCA diagnostic



Post PCI mRCA

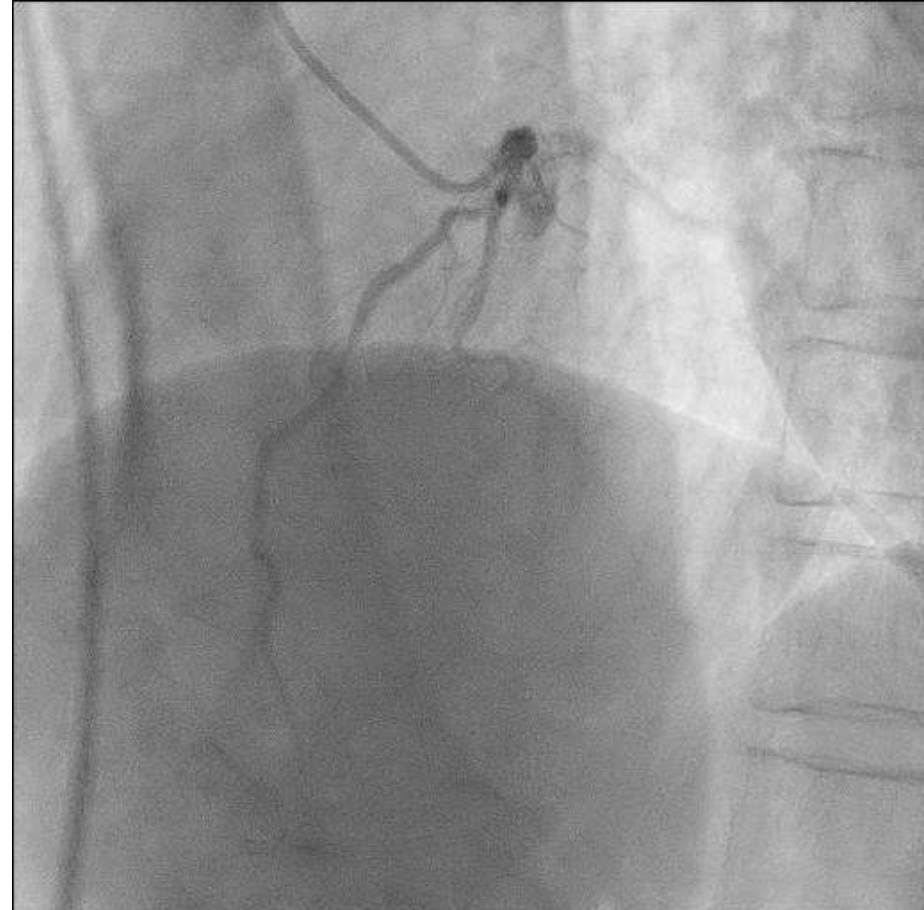


**SECOND CORONARY ANGIOGRAM
15TH OF FEBRUARY 2017**

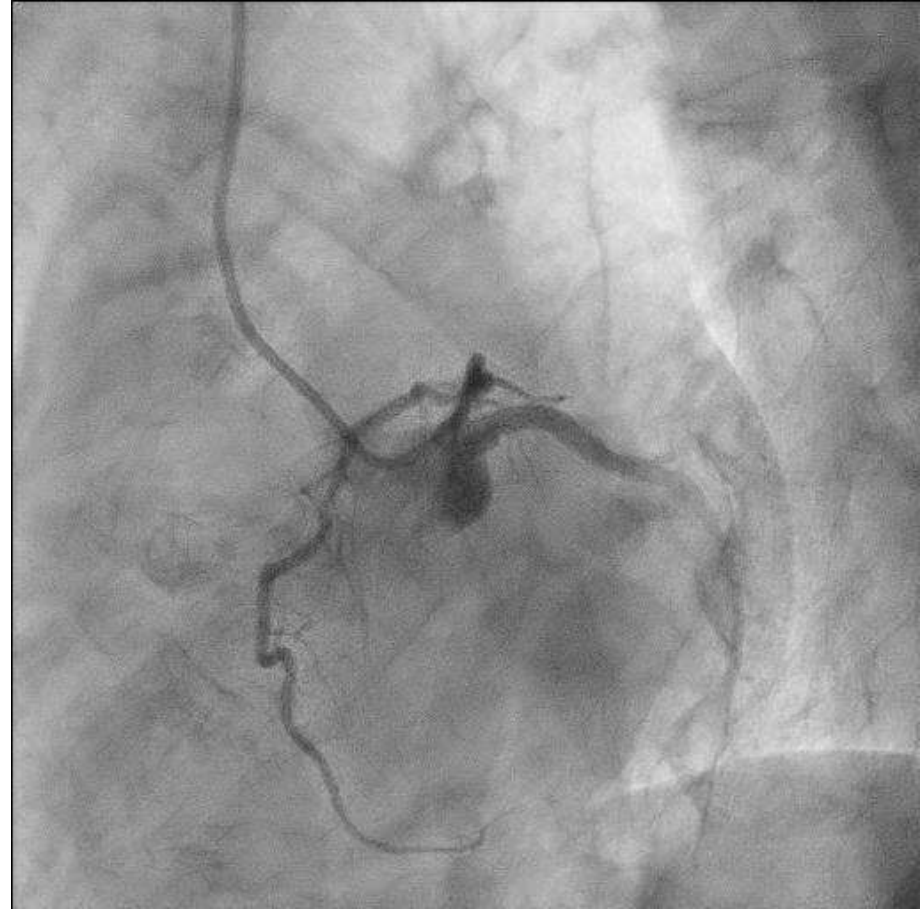
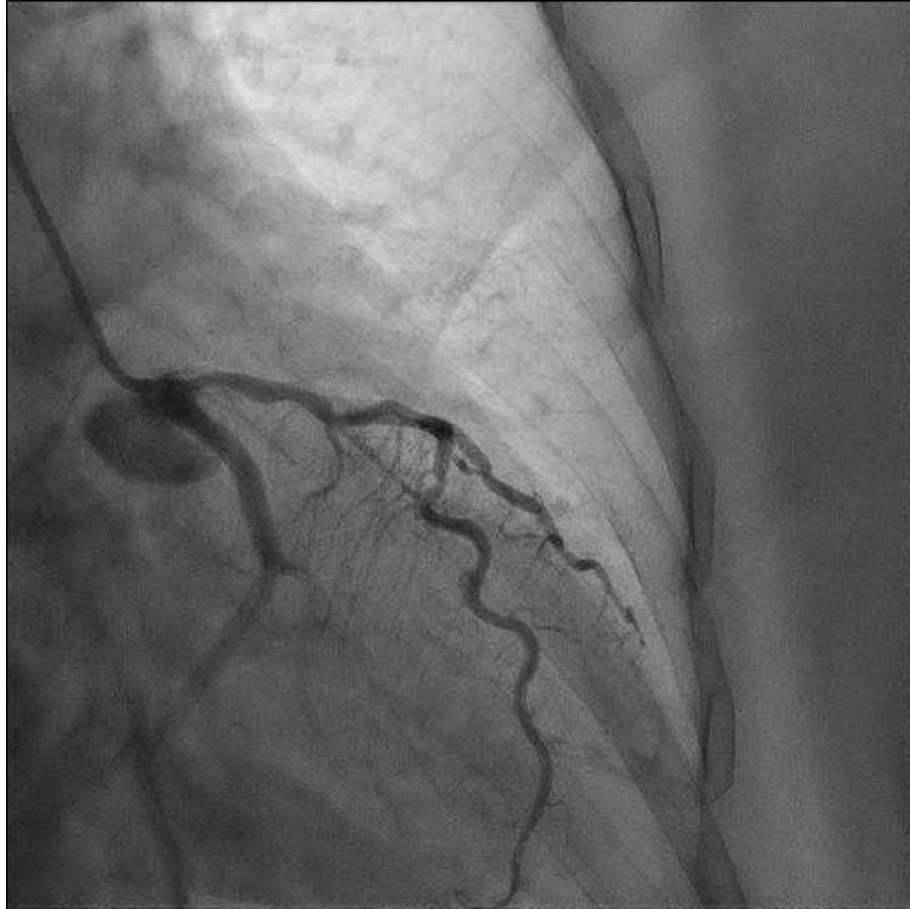
Progress

- Still having intermittent angina
- Slight improvement from before
- CCS class II
- Compliant with medications
- Repeat trans-radial approach

LAD angiogram



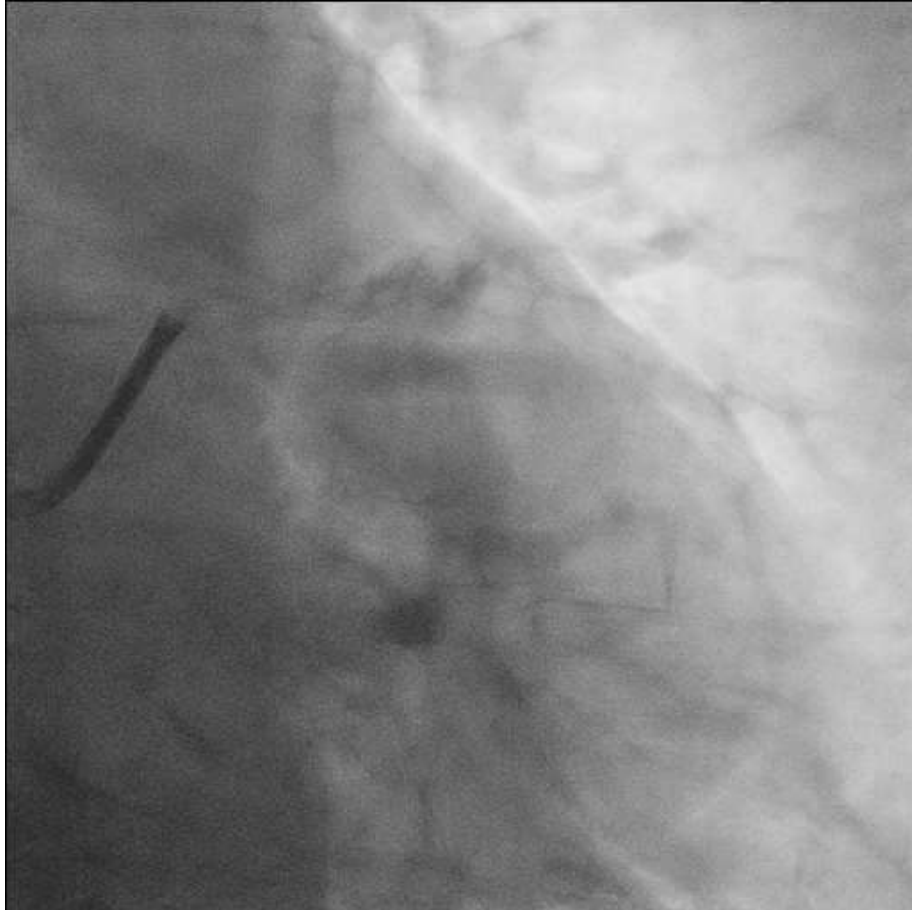
? Separate origins of LCx



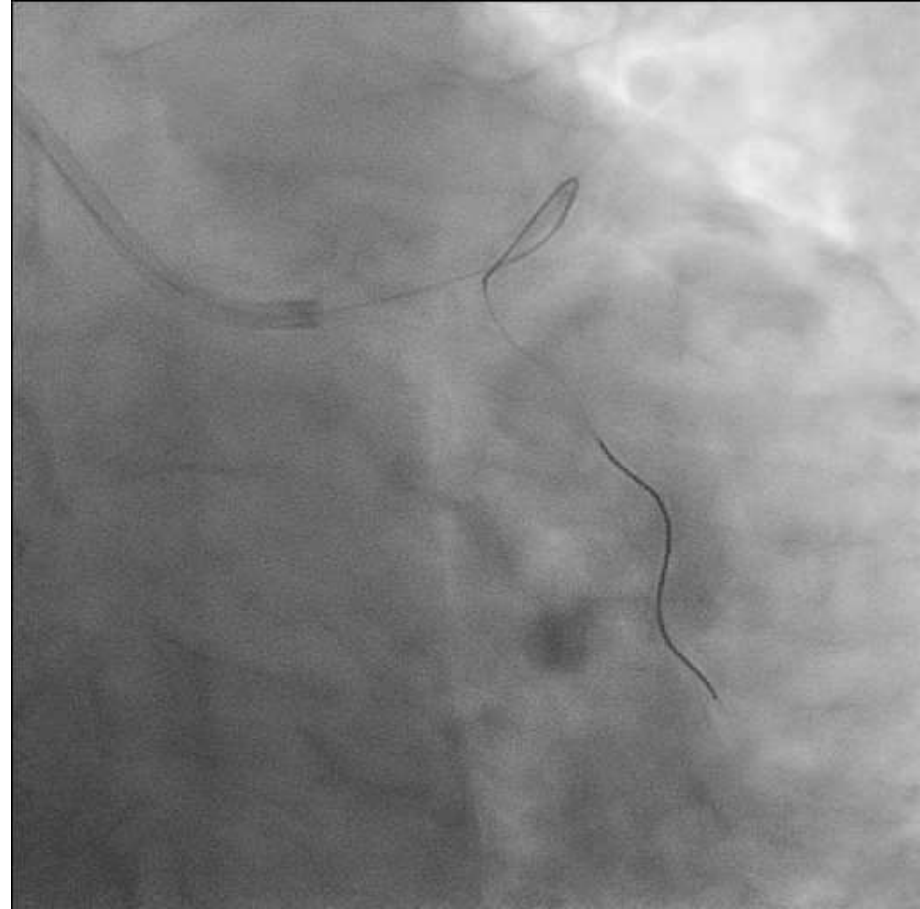
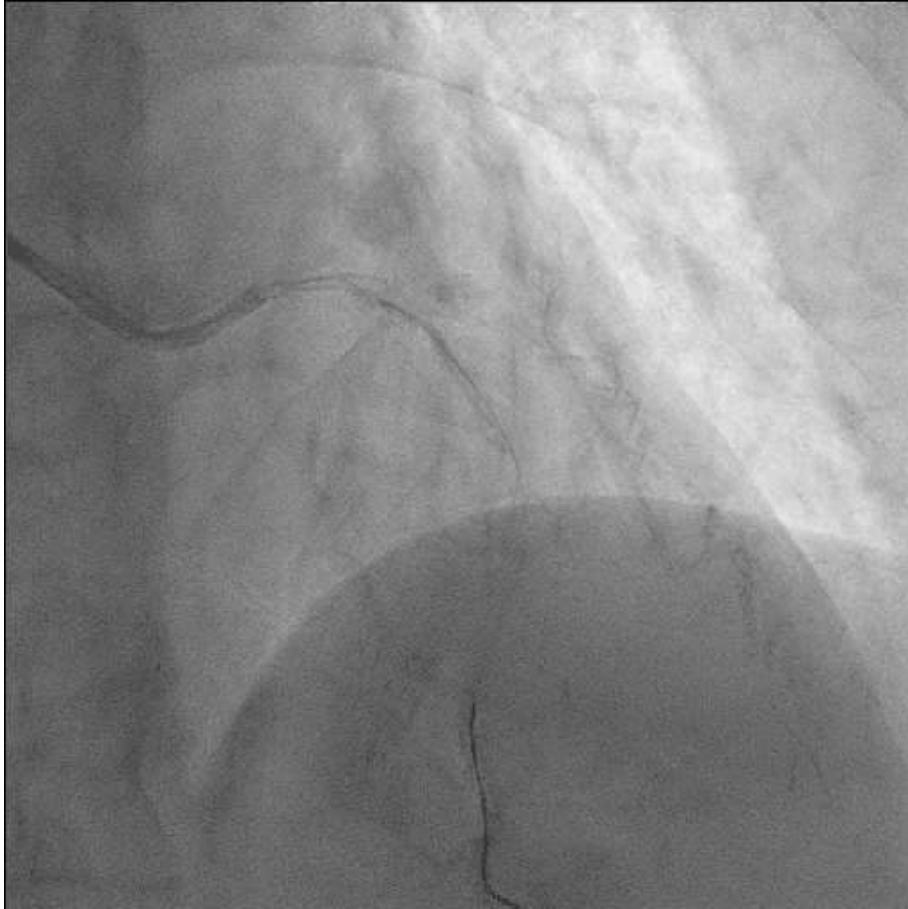
Initial strategy

- PCI mLAD only
- Perhaps short length stent to negotiate tortuosity and calcification
- IVUS proximal LAD
- Keep procedure simple

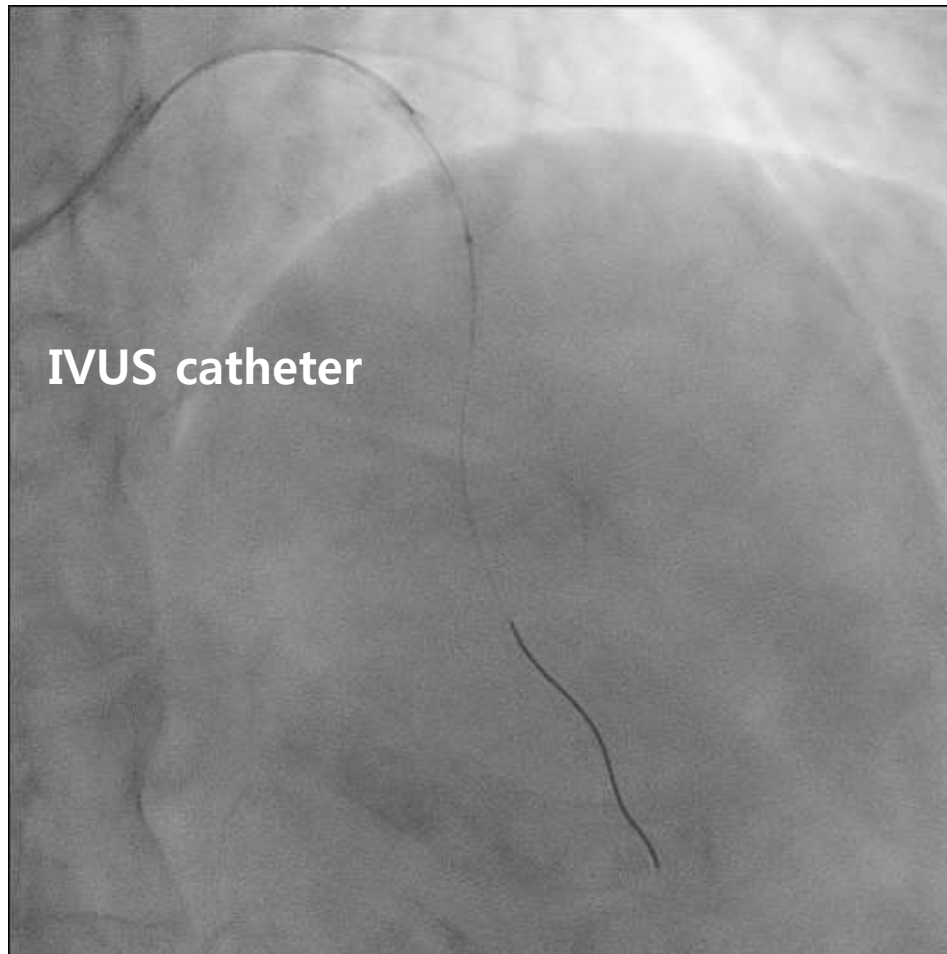
XB guide not well seated



JL guide better cannulation



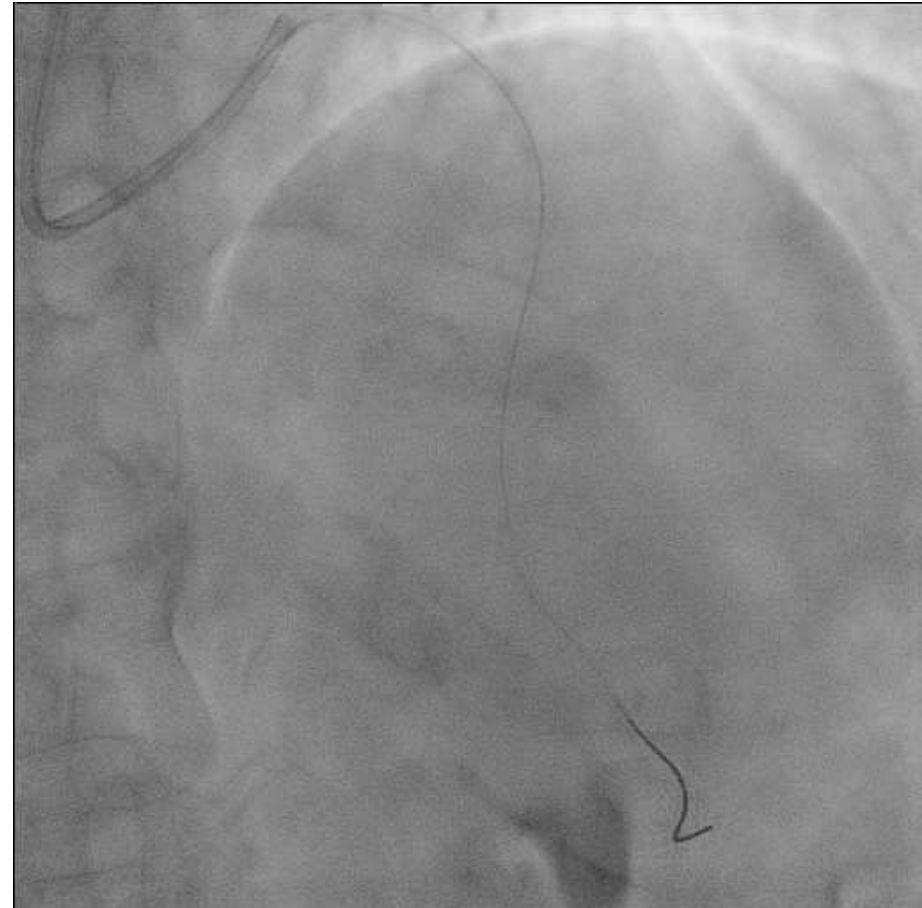
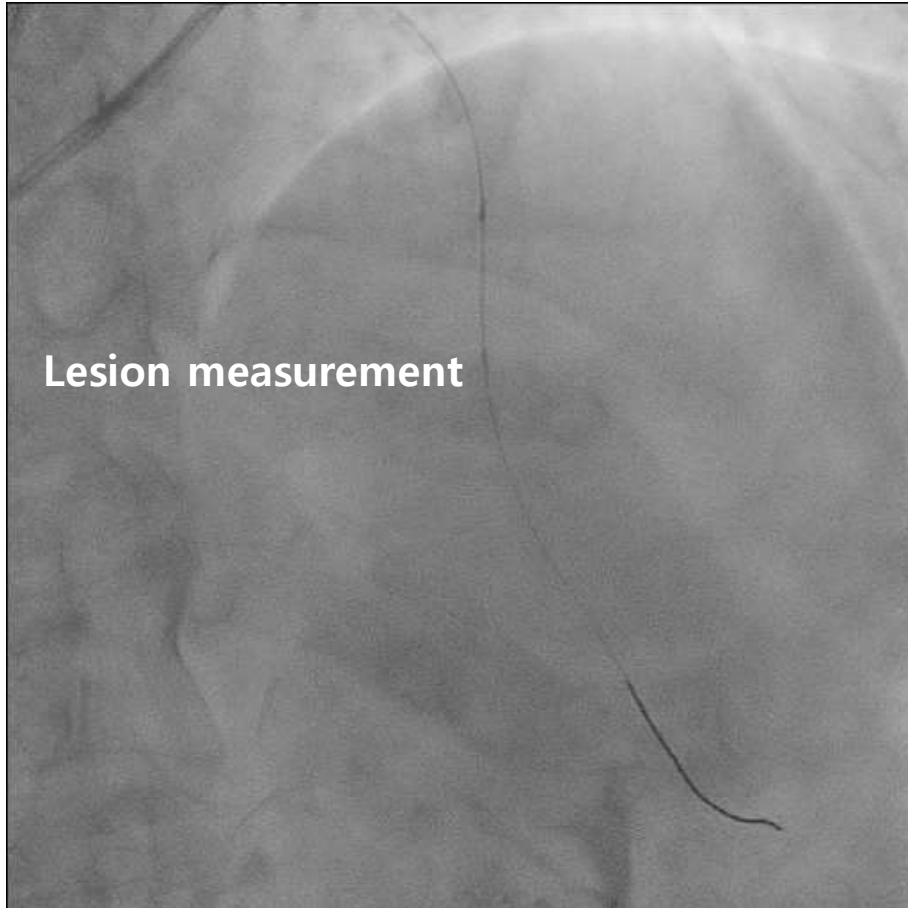
IVUS catheter cannot pass



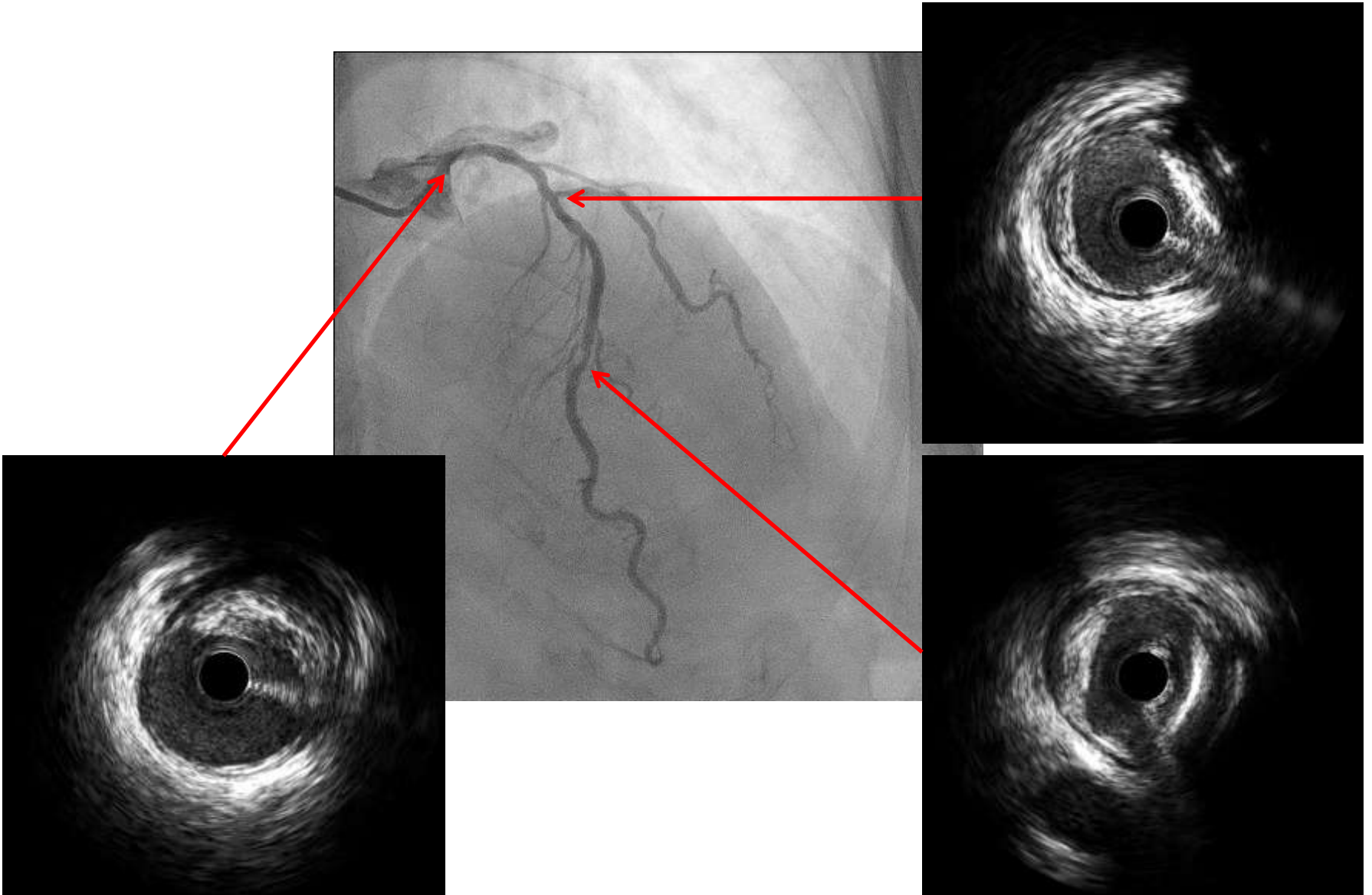
POBA mLAD



Post POBA mLAD



IVUS run post POBA

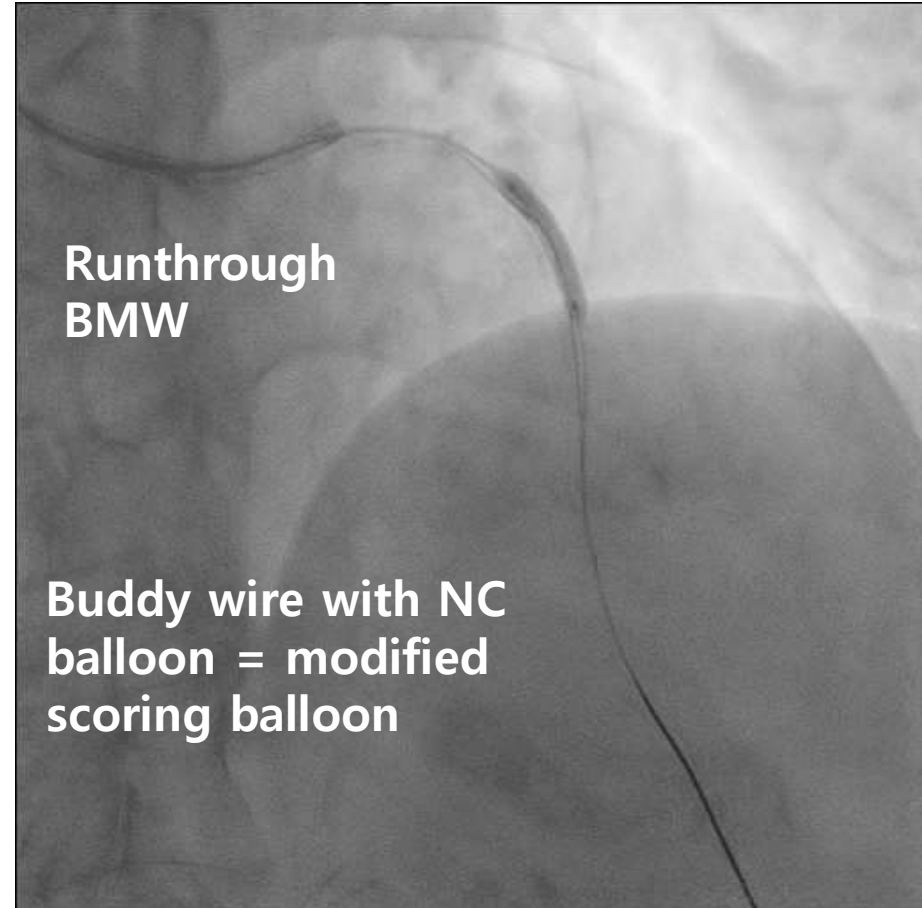
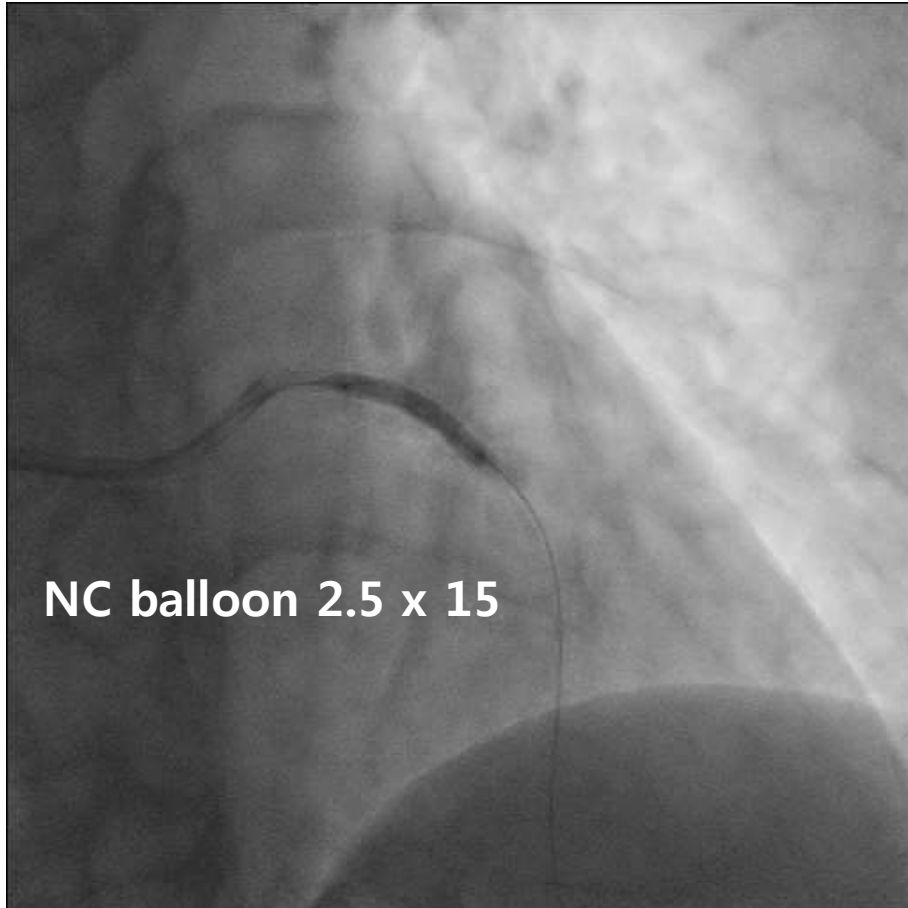




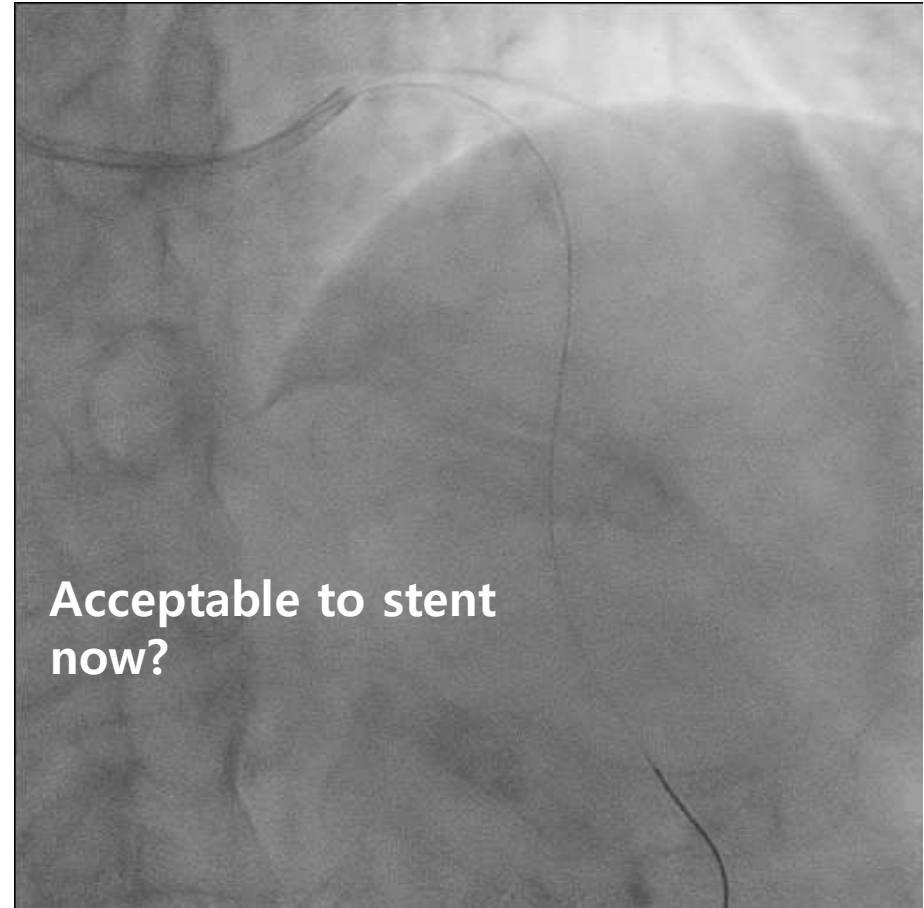
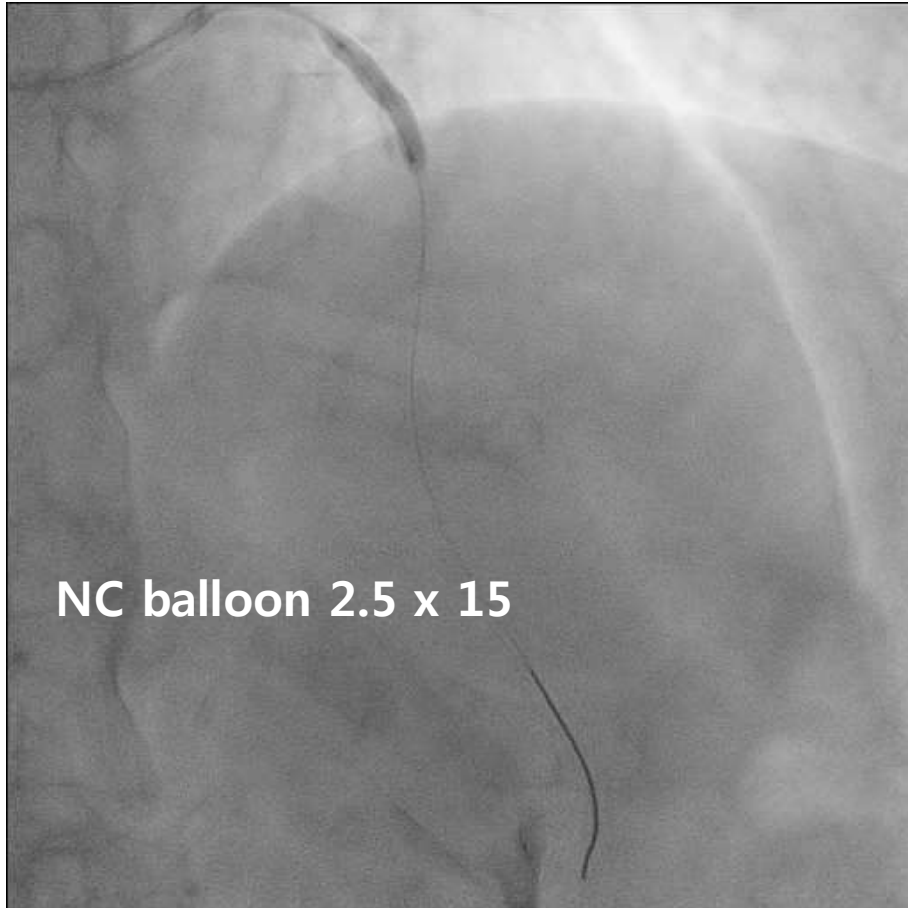
Can I have the stent now?
Get me something shorter
and sleeker...

- Unfortunately, unable to pass stent
- Already opened up DES 2.5 x 15
- Decided to perform more pre-dilatation
- 'Poor-man' scoring balloon

Aggressive pre-dilatation



POBA again



- Still unable to pass down the stent
- Despite reasonable post POBA result
- What to do next?

COMMENTS FROM INDONESIA