



**A GENTLEMAN DECIDED TO  
UNDERGO**

**CARDIAC SCREENING TEST**

**BIT@TCTAP**

**28<sup>TH</sup> APRIL 2015**

**S.KOREA, SEOUL**

**DR. KAISAR NASRULLAH KHAN  
CONSULTANT CARDIOLOGIST  
UNITED HOSPITAL LTD**

# Potential conflicts of interest

**Speaker's name: Kaisar Nasrullah Khan**

**I have the following potential conflicts of interest to report:**

Research contracts

Consulting

Employment in industry

Stockholder of a healthcare company

Owner of a healthcare company

Other(s)

√

**I do not have any potential conflict of interest**

# History

Mr. ZS, a 47 years old gentleman had been suffering from central chest pain on exertion for 7 days.

Risk factor HTN, Dyslipidaemia, family history +ive( mother and elder brother had CAD. )

So, he decided to undergo cardiac screening tests on his own.

# Investigation

ECG : Normal.

Echocardiography : Normal EF=65%

ETT : strongly +ive Positive stage 2

ZAKARIA SYED  
Patient ID: 213263  
23.03.2014  
11:46:35am

63 bpm  
01:05 130/85 mmHg

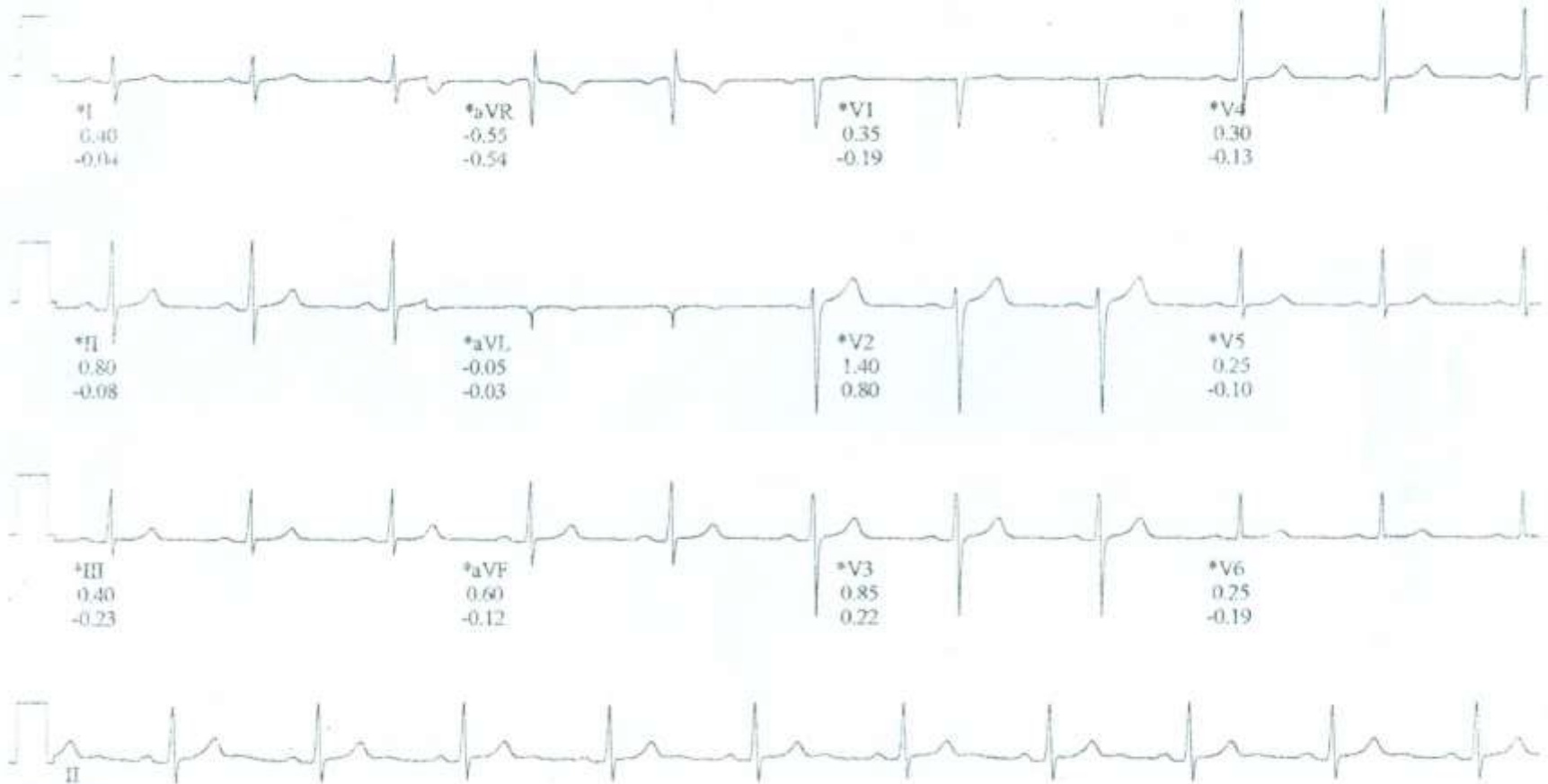
PRETEST  
STANDING  
01:09

BRUCE  
0.0 mph  
0.0 %

*Dr. Marwan Sidani*

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm/mV  
60 ms post J



Raw Data

\*Computer Synthesized Rhythms

ZAKARIA, SYED  
Patient ID: 213263  
23.03.2014  
11:59:24am

United Hospital Limited

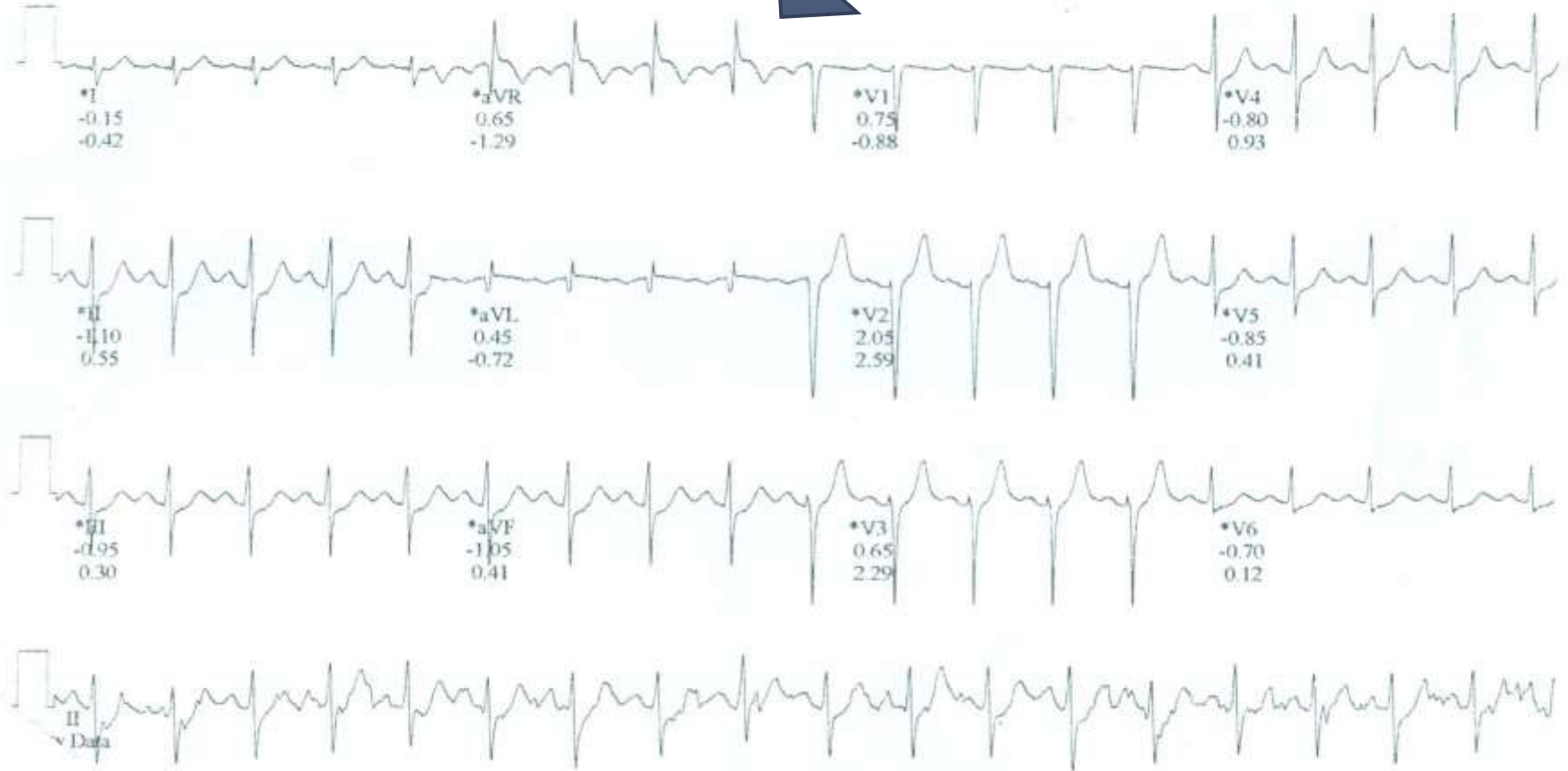
112 bpm  
02:24 140/90 mmHg

EXERCISE  
STAGE 1  
02:50

BRUCE  
1.7 mph  
10.0 %

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm/mV  
60 ms post J



\*Computer Synthesized Rhythms

25 mm/s 10 mm/mV 50Hz 0.01 - 20Hz S+ HR(V2,V3)

Start of Test: 11:45:26am

AKARIA SYED  
Patient ID: 213263  
03.2014  
01:05pm

LINKED MEDIANS

United Hospital Limited

129 bpm

EXERCISE  
STAGE 2  
04:30

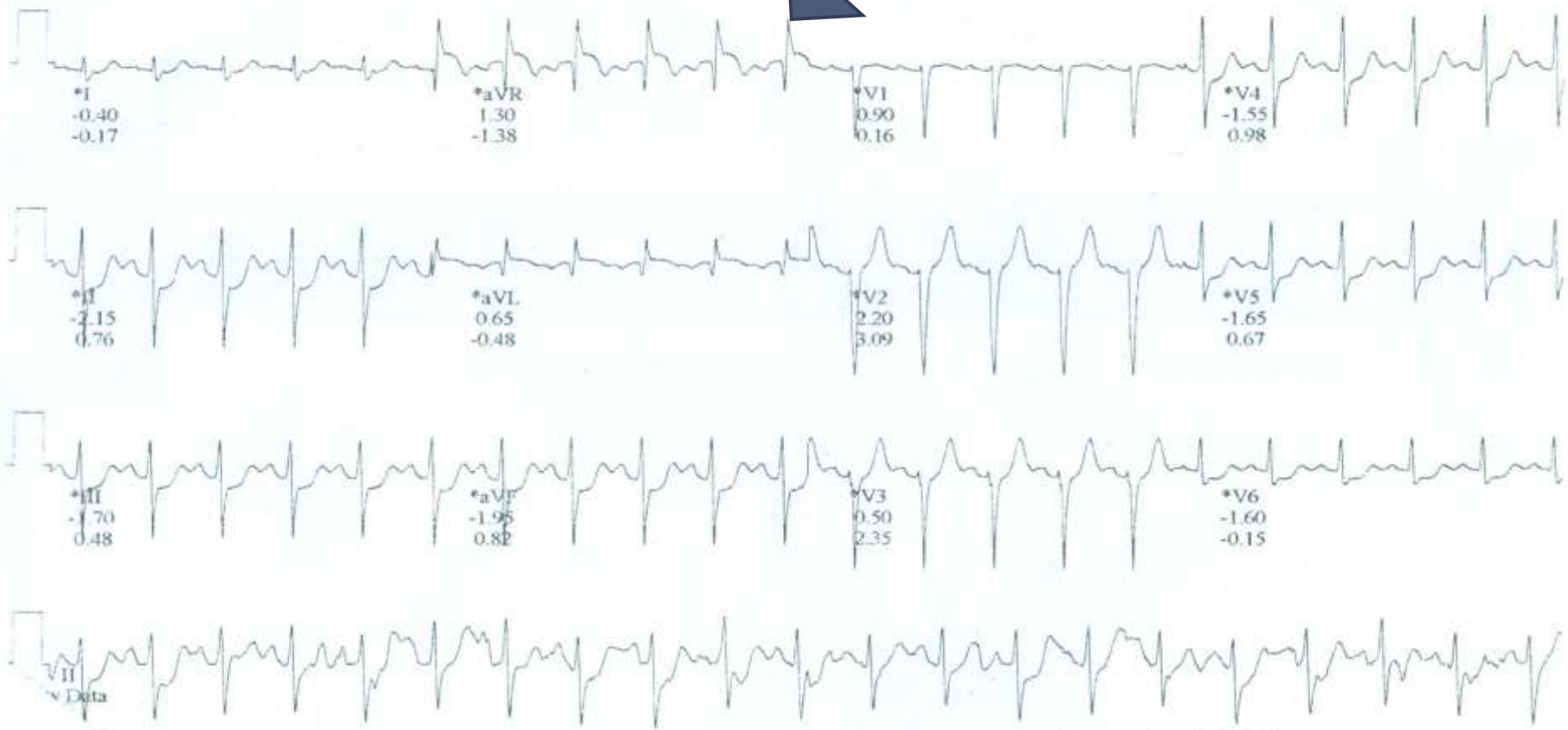
BRUCE  
2.5 mph  
12.0 %

Chest pain  
GTN spray

ST @ 10mm mV  
60 ms post J

ST↑ in aVR

Lead  
ST Level (mm)  
ST Slope (mV/s)



\*Computer Synthesized Rhythms

AKARIA SYED  
Patient ID: 213263  
1.03.2014  
2:03:19pm

LINKED MEDIANS

United Hospital Limited

68 bpm  
01:05 140/90 mmHg

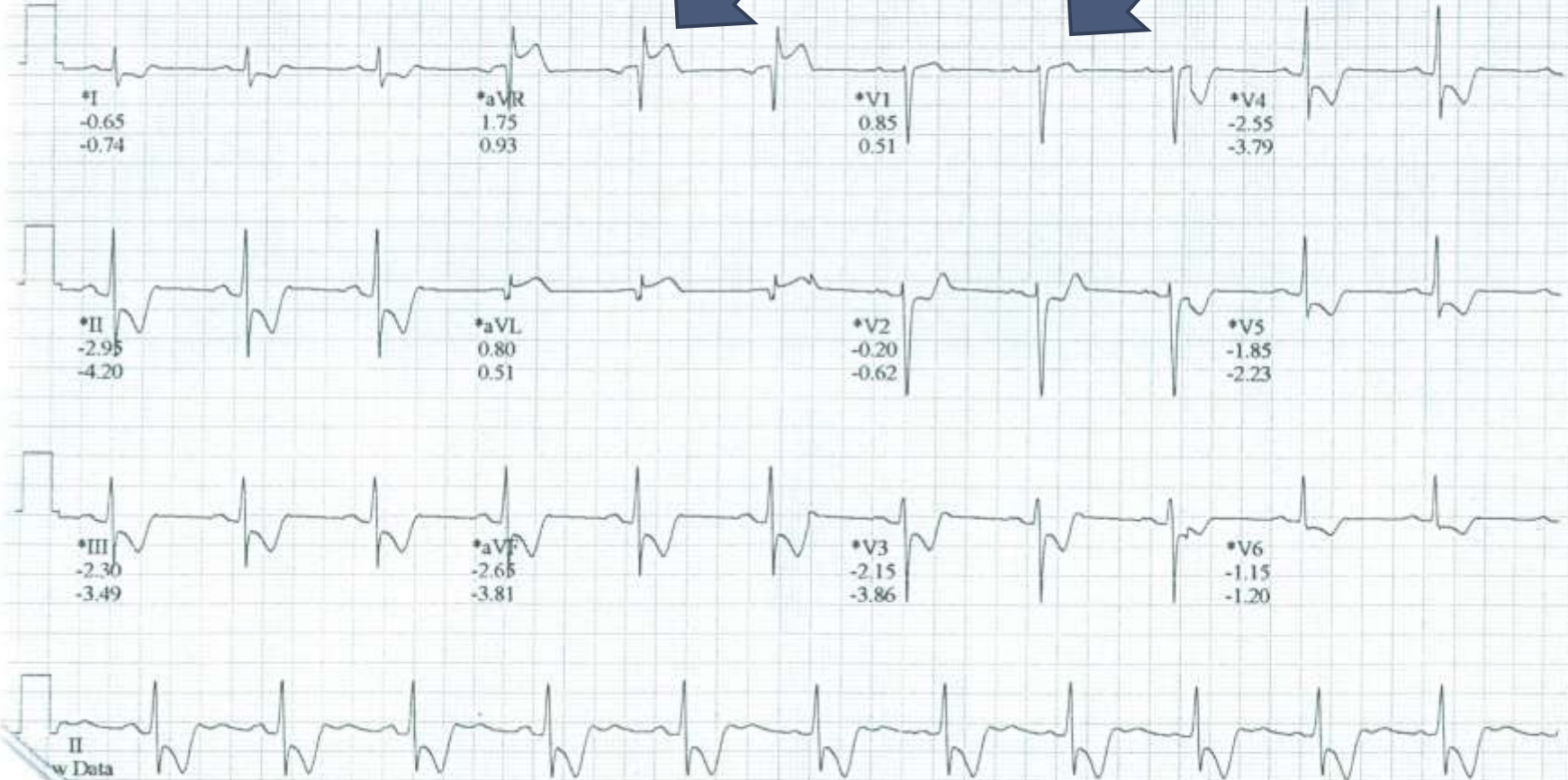
RECOVERY  
Recovery1  
02:00

BRUCE  
0.0 mph  
0.0 %

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm/mV  
60 ms post J

ST↑ in aVR & V1



\*Computer Synthesized Rhythms



AKARIA SYED  
Patient ID: 213263  
3.03.2014  
2:05:09pm

LINKED MEDIANS

United Hospital Limited

88 bpm  
01:04 130/85 mmHg

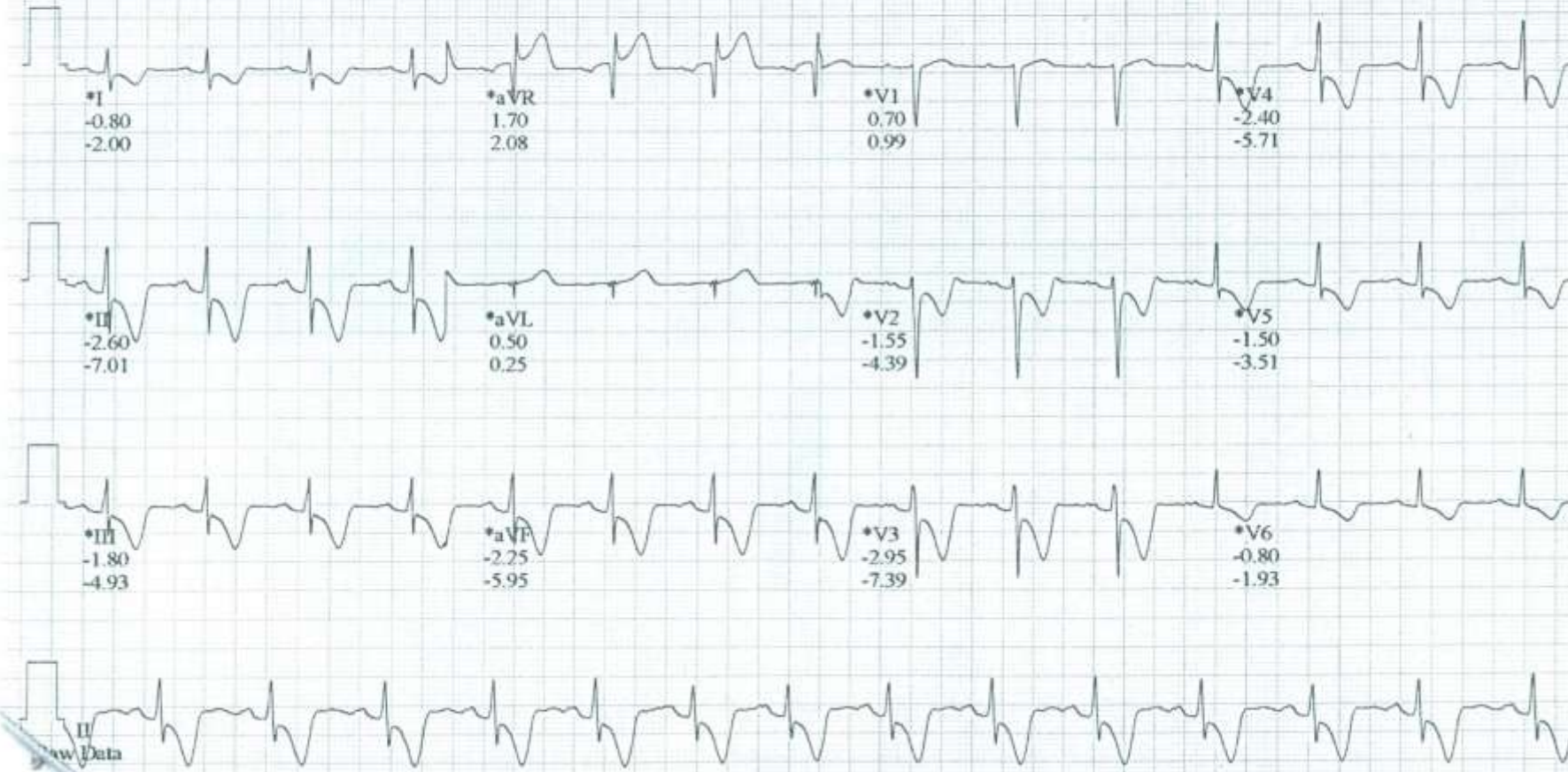
RECOVERY  
Recovery2  
03:50

BRUCE  
0.0 mph  
0.0%

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm  
60 ms pos

ST↑ in aVR & gross  
ST↓ in all other leads



\*Computer Synthesized Rhythms

AKARIA SYED  
atient ID: 213263  
3.03.2014  
2:07:09pm

LINKED MEDIANS

United Hospital Limited

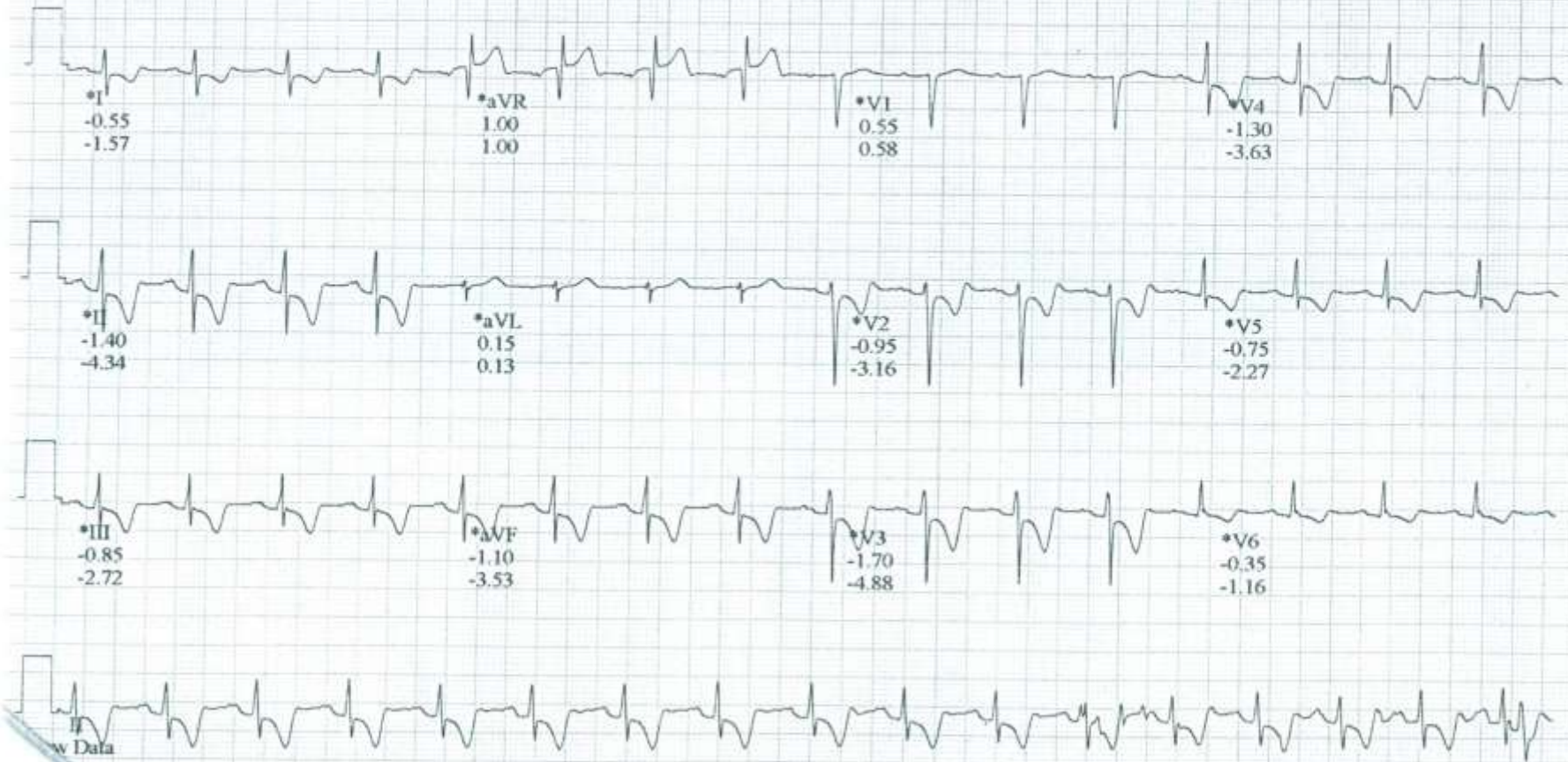
97 bpm  
01:08 120/80 mmHg

RECOVERY  
Recovery3  
05:50

BRUCE  
0.0 mph  
0.0%

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm/mV  
60 ms post J



\*Computer Synthesized Rhythms

25 mm/s 10 mm/mV 50Hz 0.01-20Hz S+ HR(V2,V3)

Start of Test: 11:45:26am

ZAKARIA SYED  
Patient ID: 213263  
23.03.2014  
12:00:09pm

LINKED MEDIANS

United Hospital Limited

100 bpm  
01:04 120/80 mmHg

RECOVERY  
Recovery-I  
07:50

BRUCE  
0.0 mph  
0.0 %

Lead  
ST Level (mm)  
ST Slope (mV/s)

ST @ 10mm mV  
60 ms post J



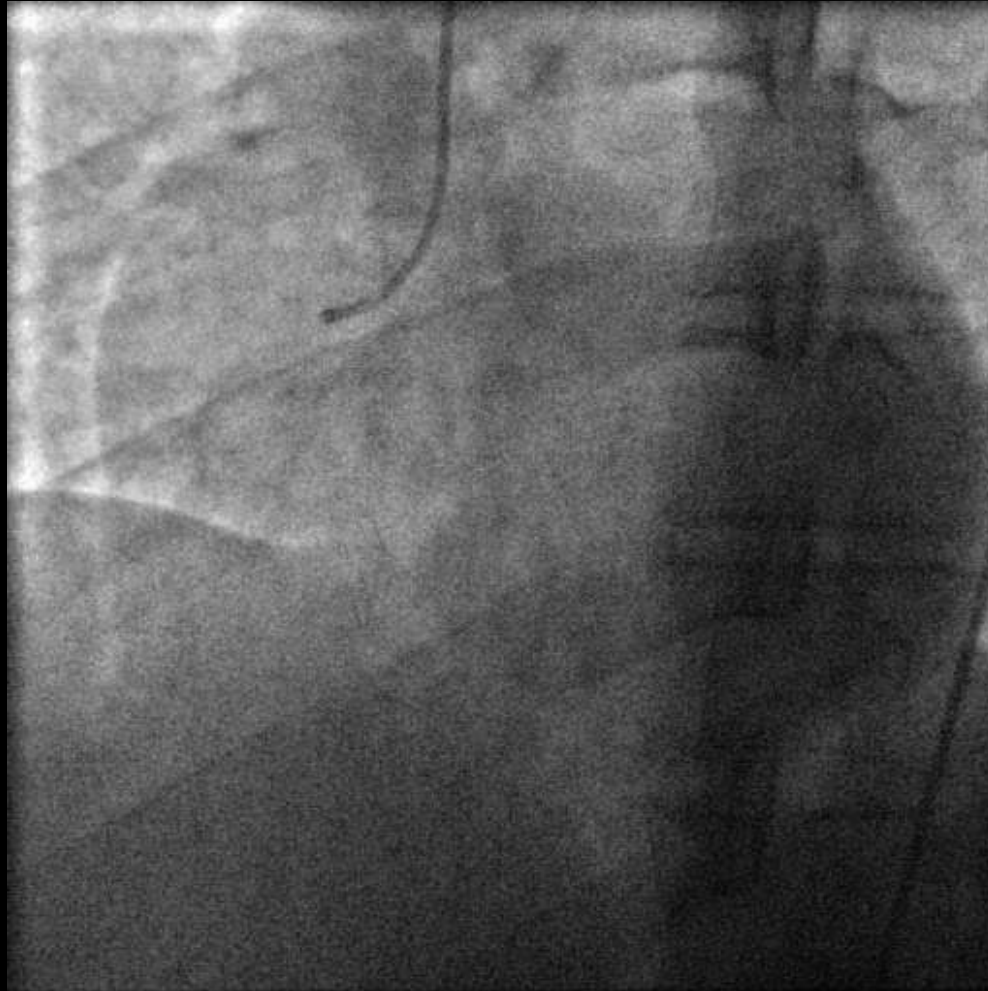
# ECG prediction of L.main stenosis

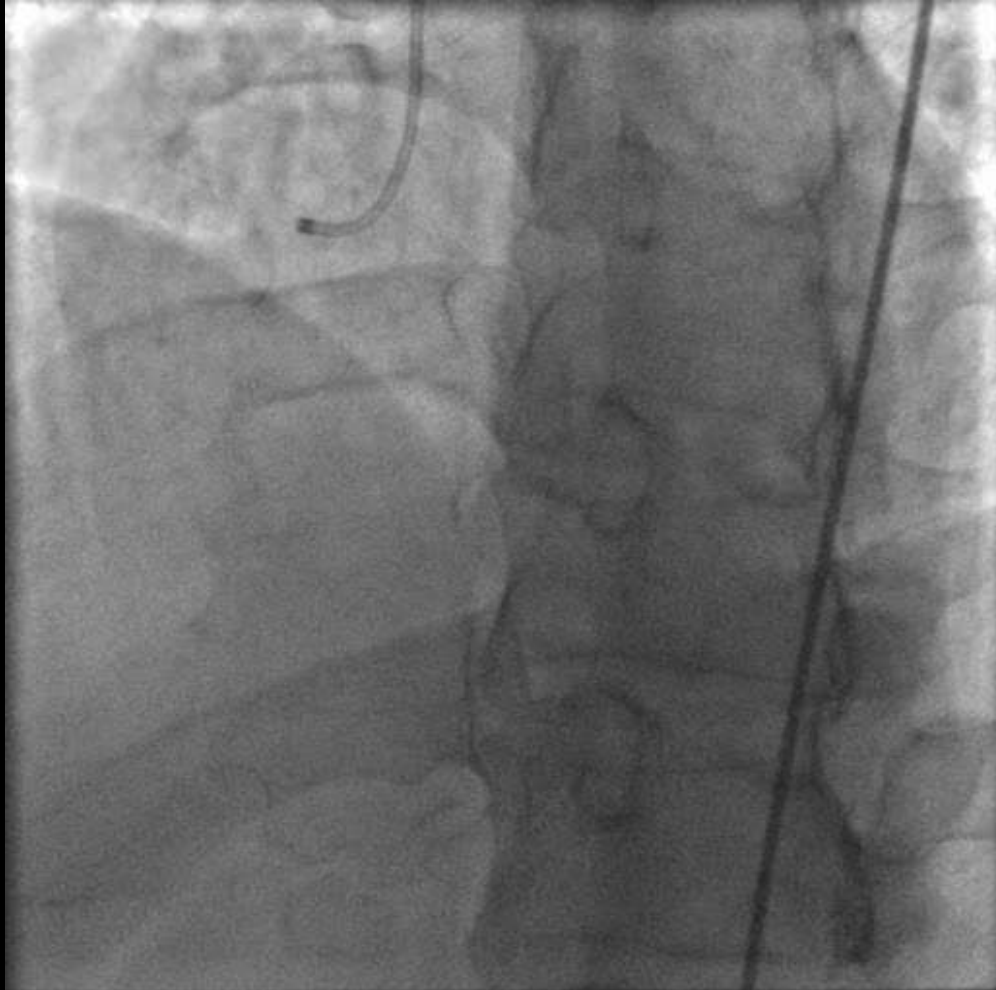
an aVR ST-segment elevation can predict left main stenosis in patients with ACS, and its early recognition can improve clinical outcomes in these patients.

So we took him to cathlab for urgent CAG

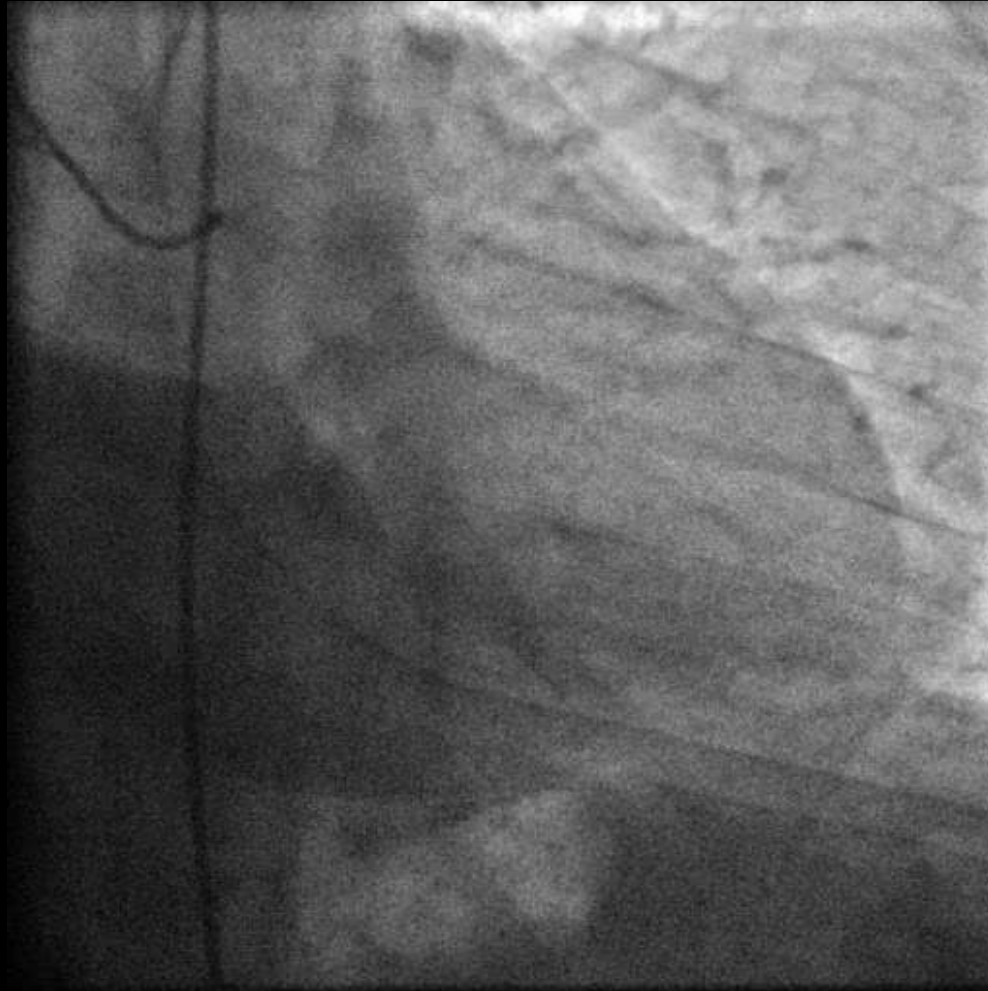
CAG showed-

RCA-30%prox,80%mid 50% dist.

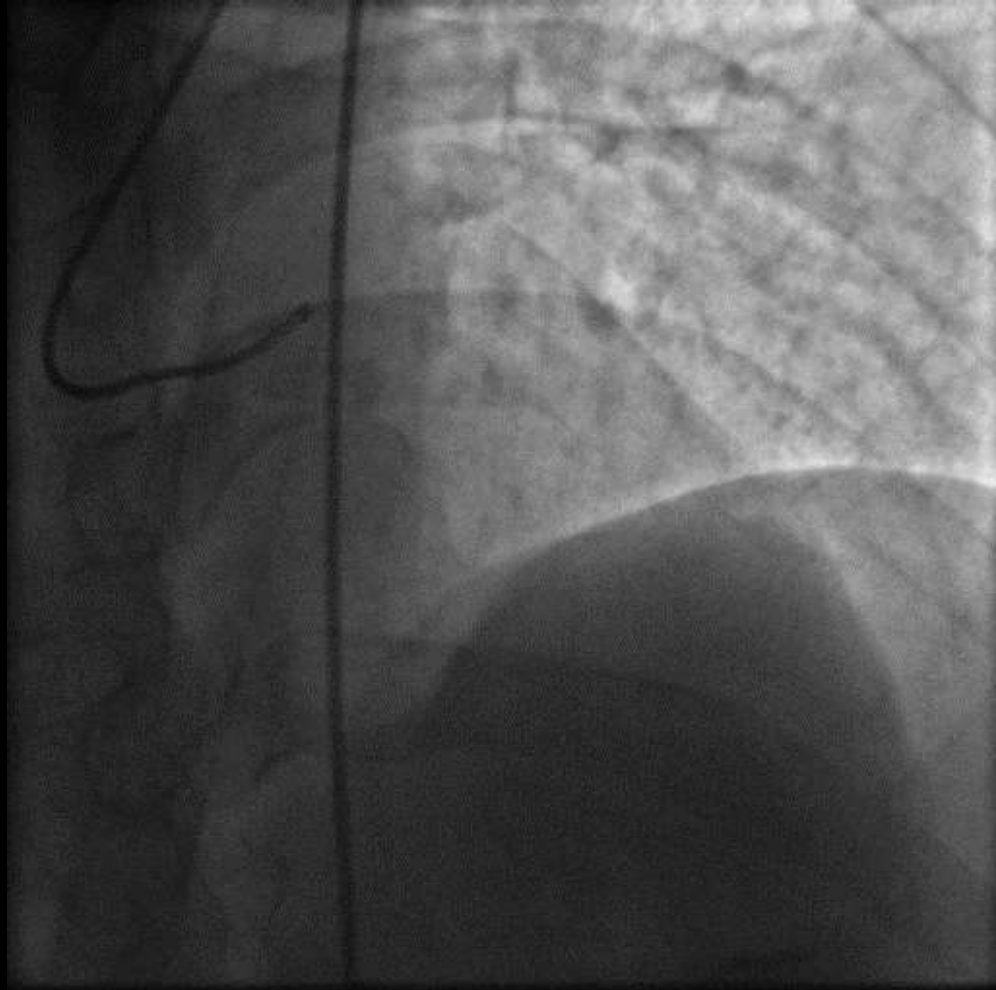




LM-98%dist LAD-90%ost. LCX-  
90%ost.,95% dist. OM-30% prox









# Typical Mercedes Benz sign



So, in summary

left main disease with TVD

Recommended for urgent CABG

While I was talking to patients relative

The patient started to have chest pain

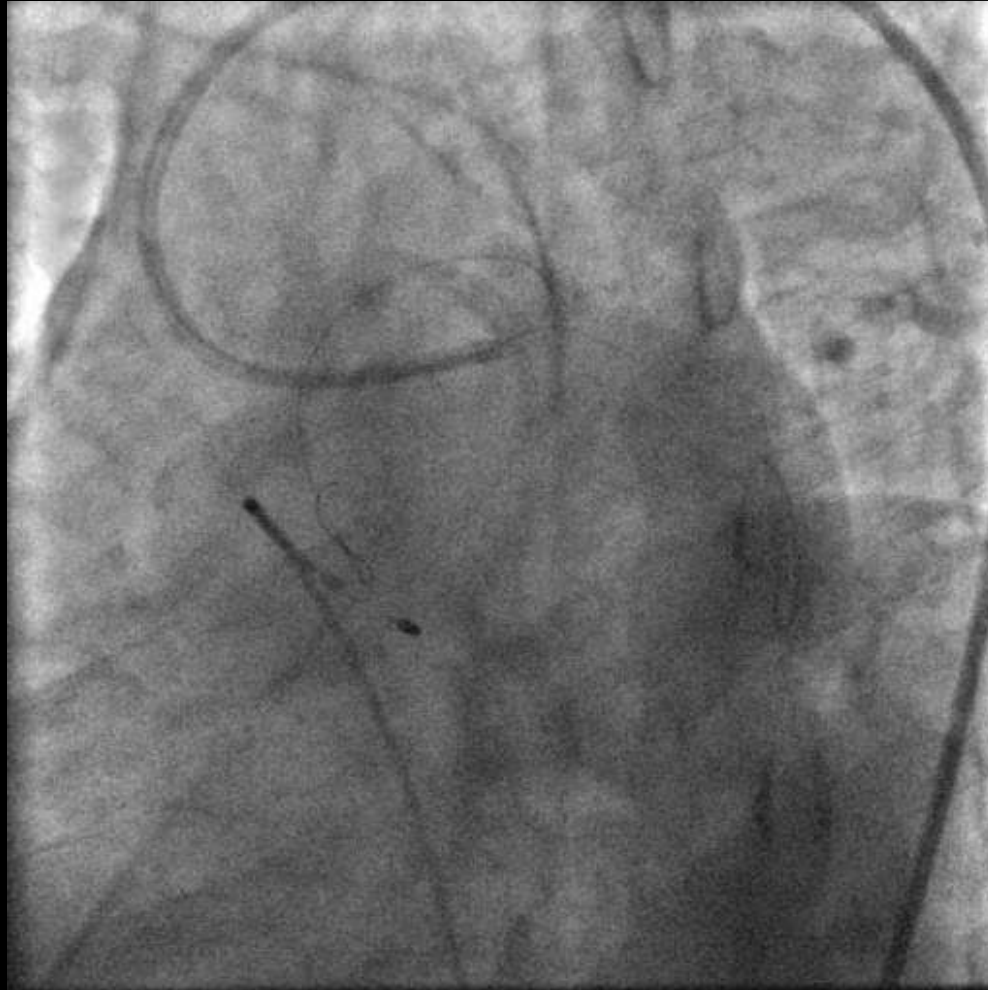
ECG showed again ST elevation in lead AVL & V<sub>1</sub> with gross ST depression in all other lead with bradycardia & hypotension

I put a TPM & started inotropes

I called our surgeon ,but he was busy with another complicated case in OT

So I did not have any choice but go for urgent PCI

Put TPM & two wires through LAD & LCX



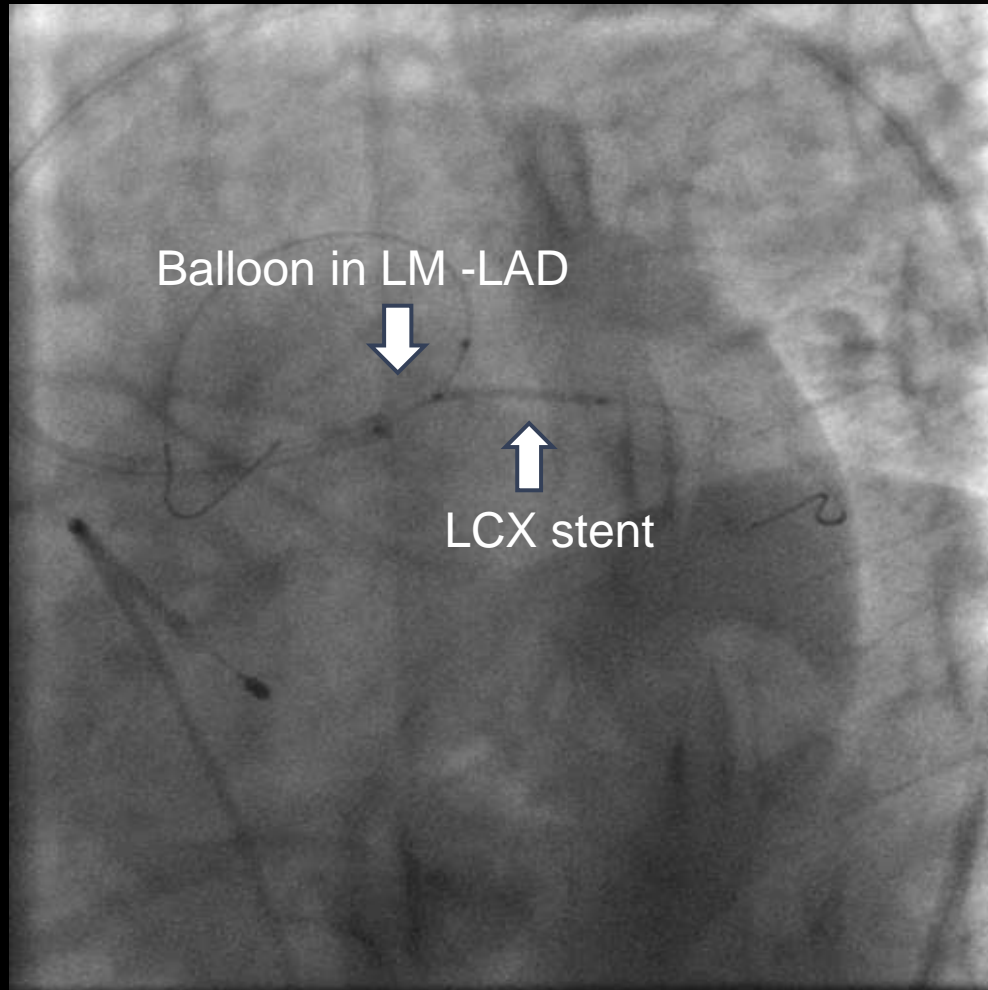
Dilated both lesion sequentially 2.5x12 balloon



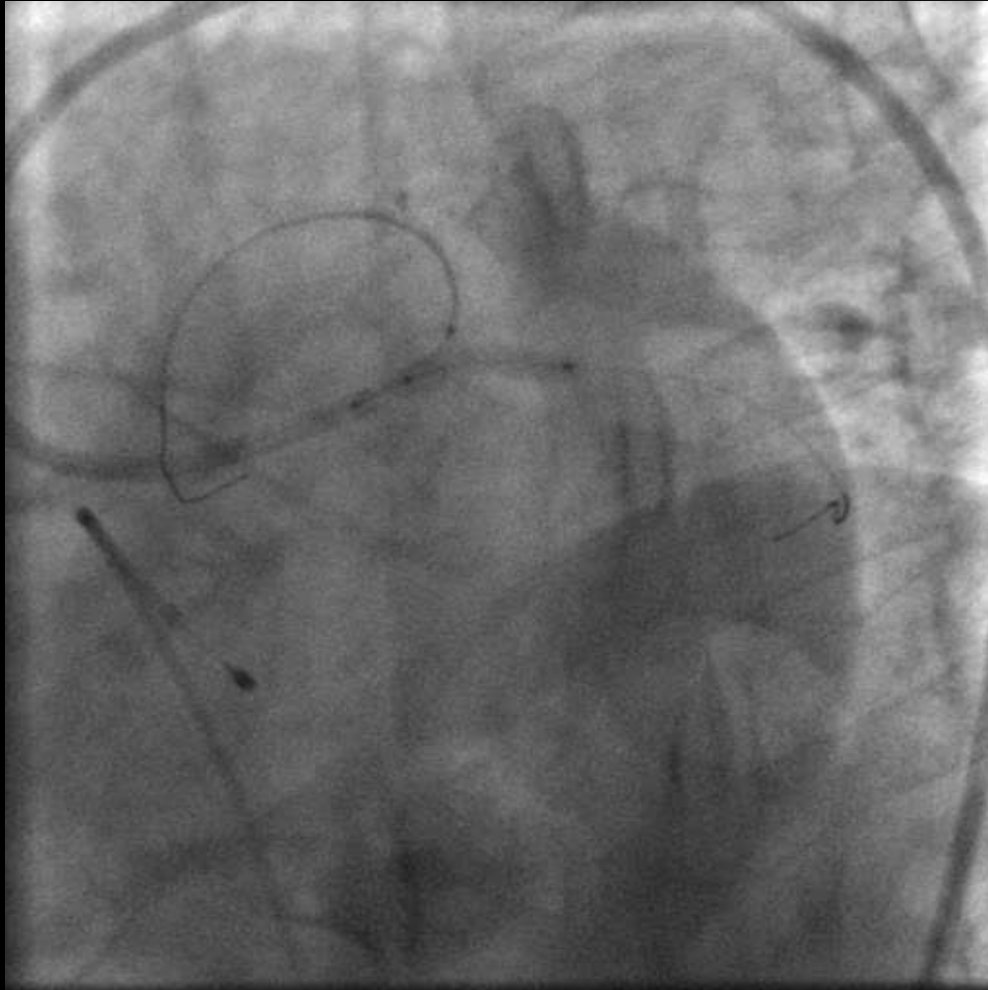




Planned for DK crush technique positioned  
LCX stent 3x15 R. Integrity, keeping 3x15  
balloon in LM to LAD



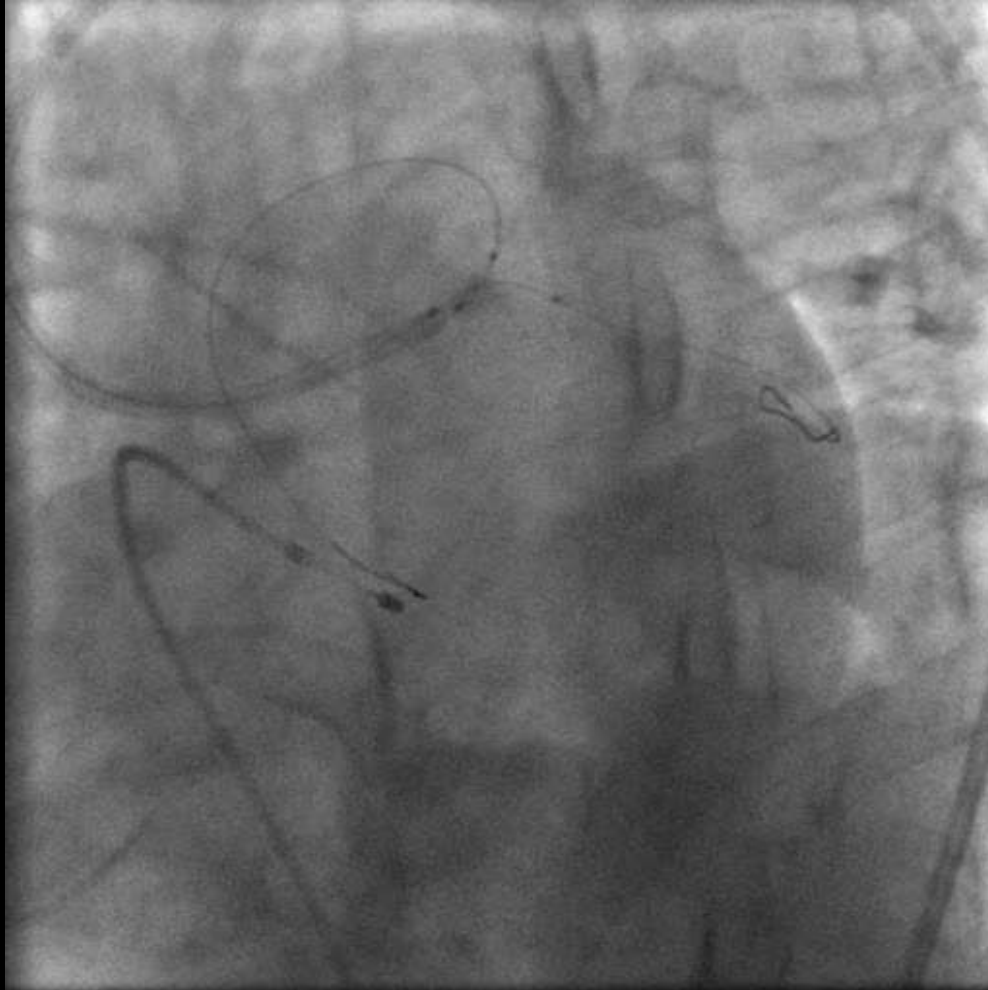
# Deployed LCX stent



1)1<sup>st</sup> crush- Crushed the LCX stent with  
LM 3x15 balloon

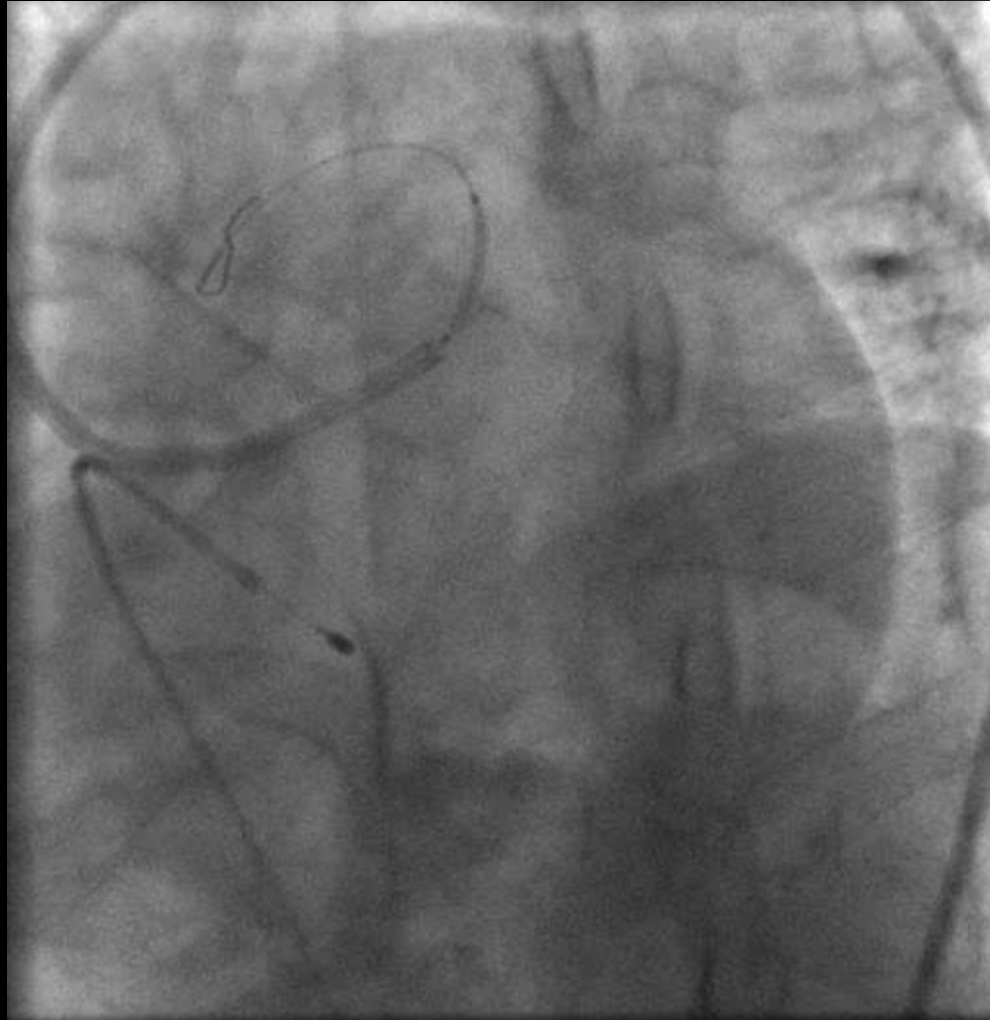


2) 1<sup>st</sup> kiss- with 3x15(LCX) & 3.5x15(LM-LAD)  
balloon after exchanging wires

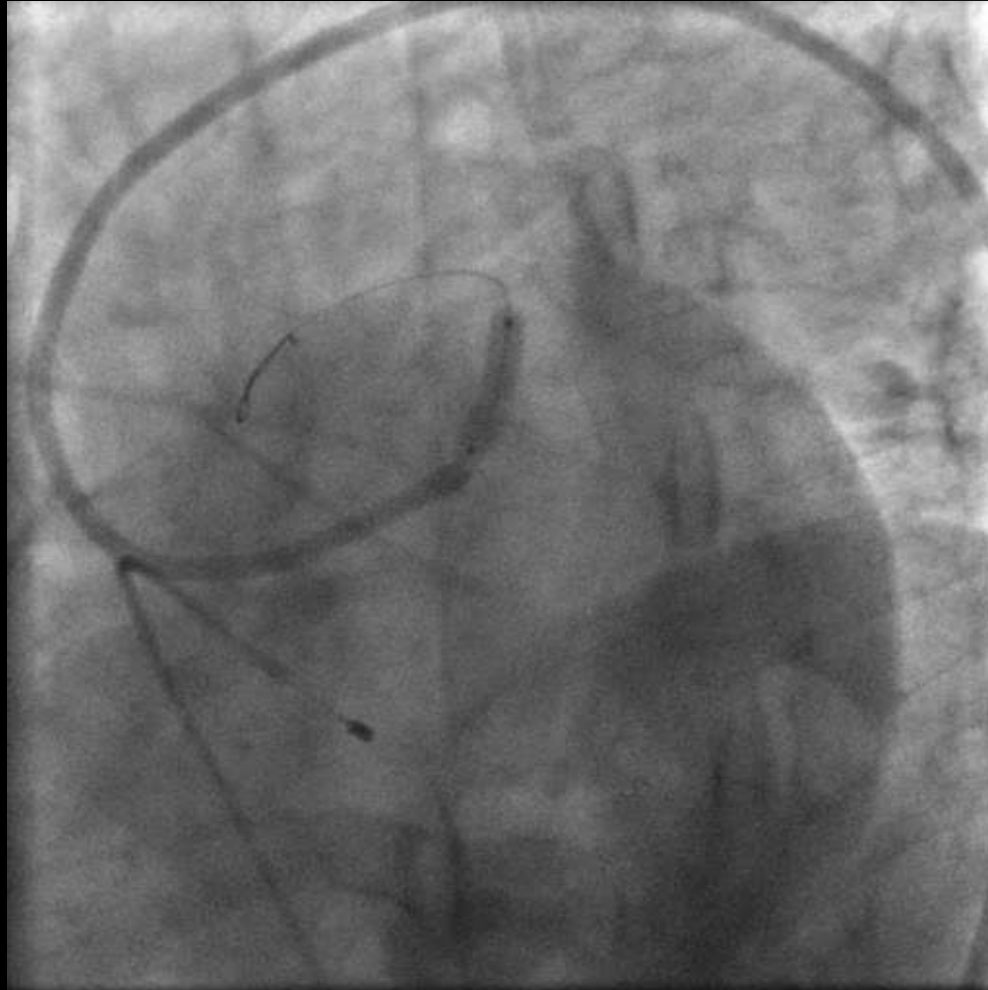


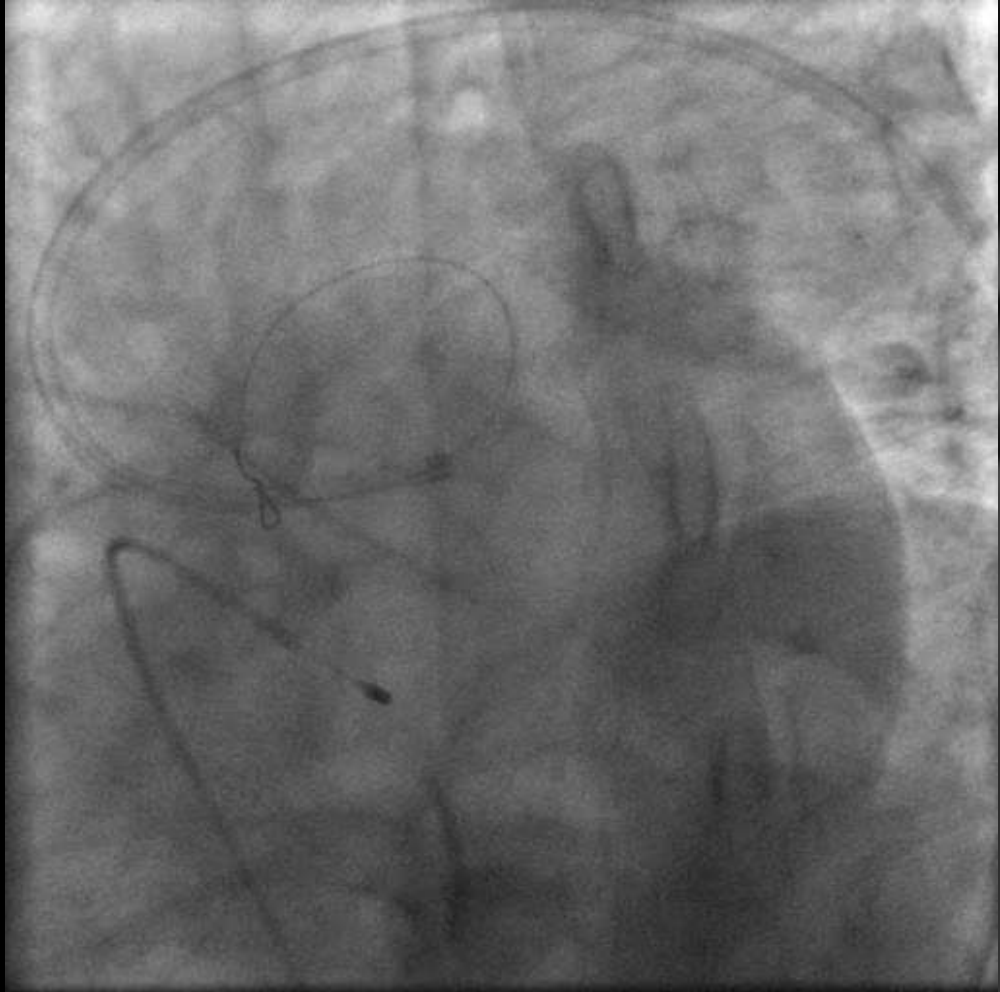


Positioned LM-LAD 3.5x18 R.Intigrity stent  
across LCX after pulling out LCX wire



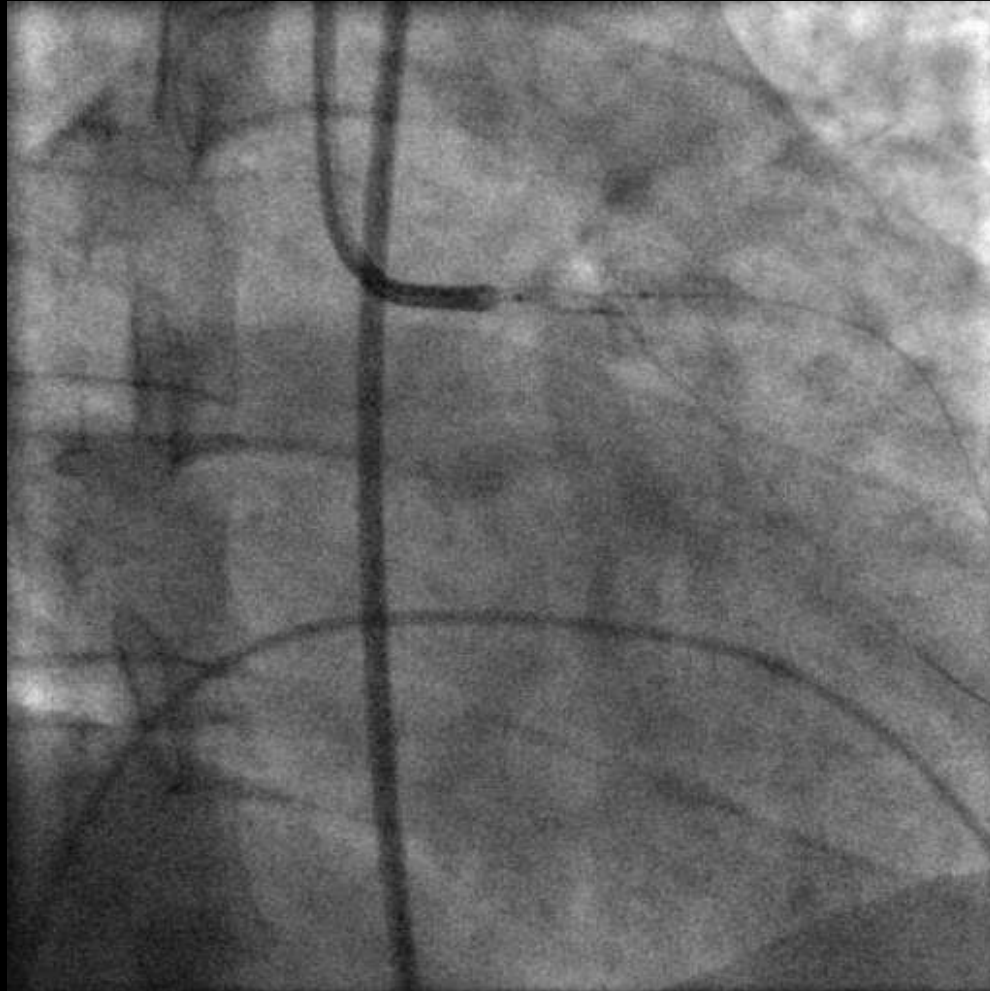
3) 2<sup>nd</sup> crush-crushed the LCX stent by  
LM-LAD stent







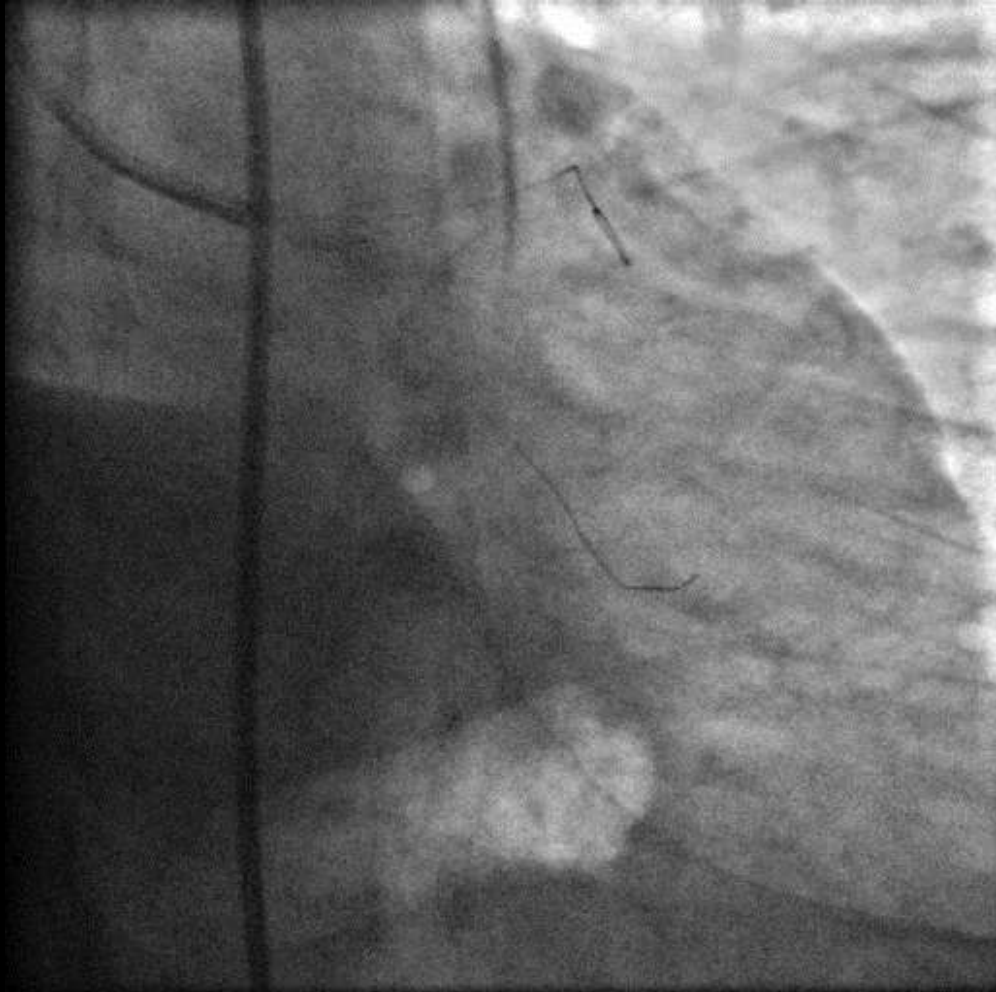
Post dilated LM stent by 4x15 balloon

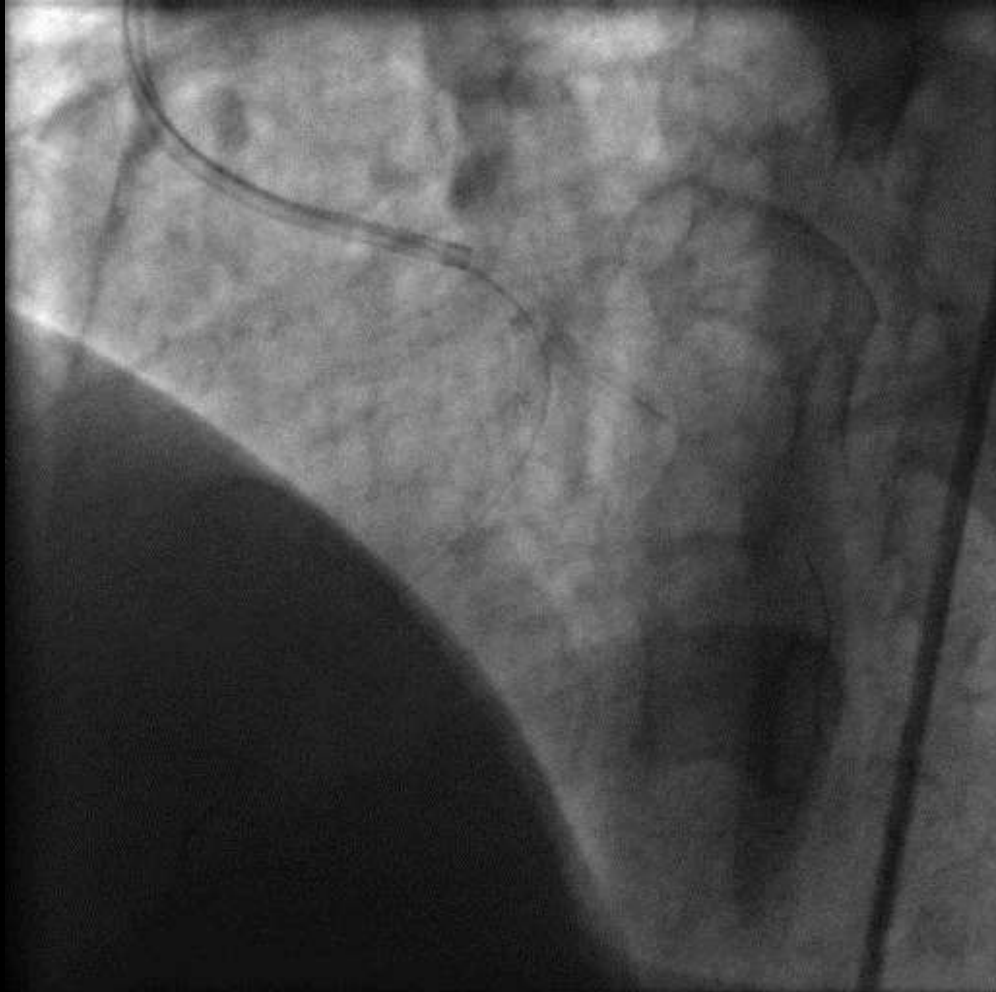


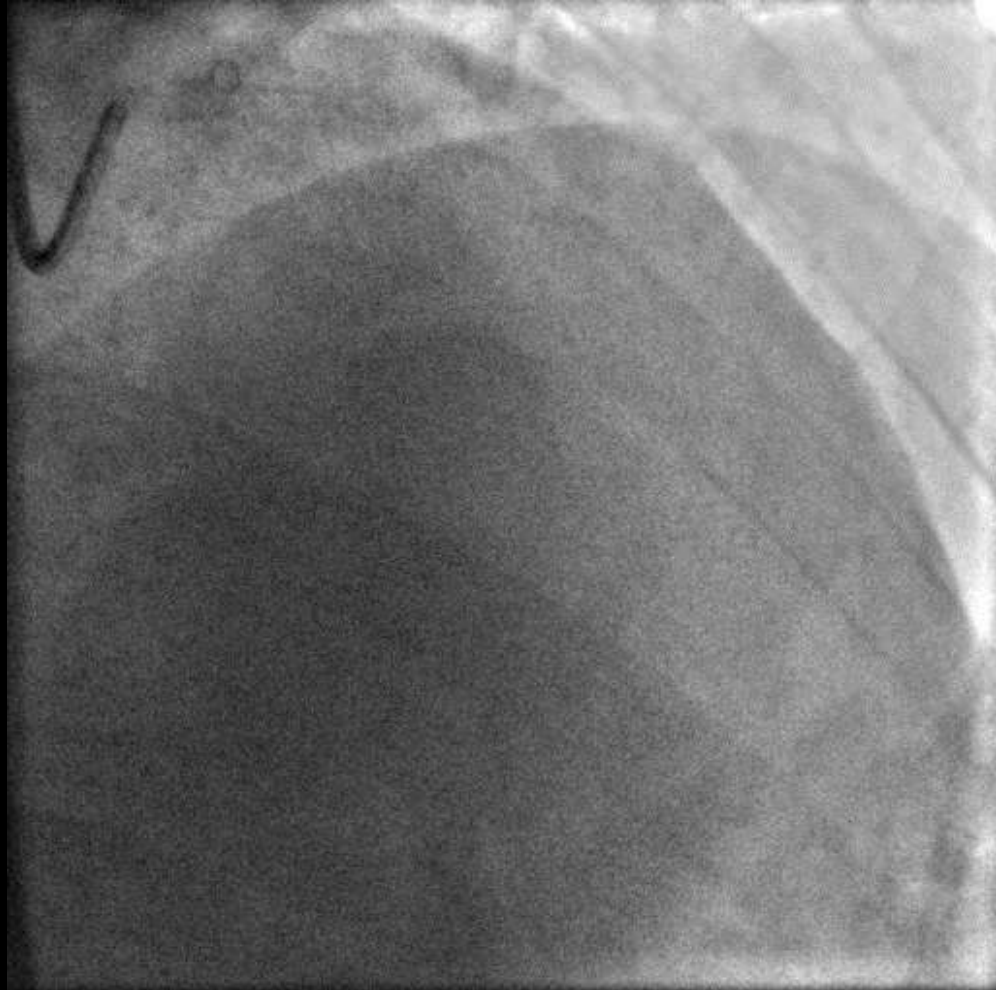
4) 2<sup>nd</sup> kiss-by 3x15(LCX)&3.5x15(LM-LAD)  
balloon  
after exchanging wires



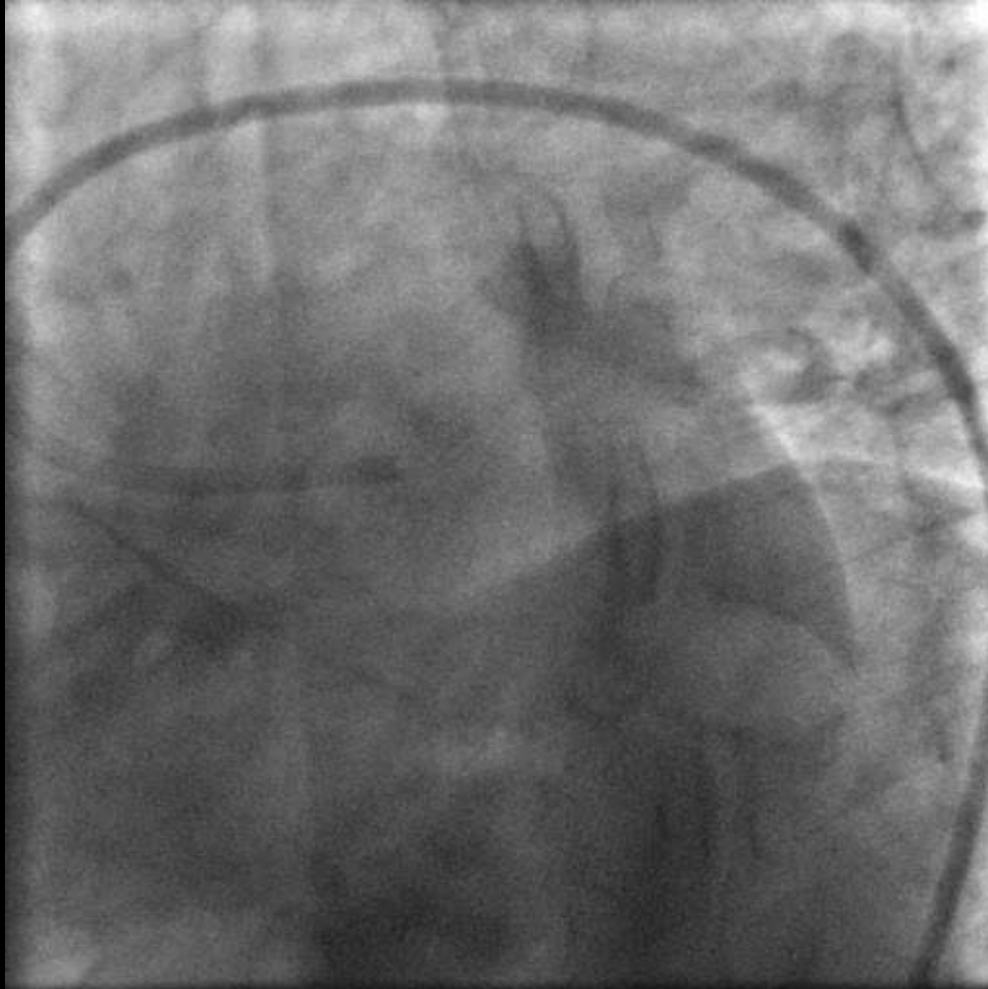








# Final picture



# Take home message

- 1) Lead AVR ST segment elevation with less ST segment elevation in lead  $V_1$  is an important predictor of acute LMCA obstruction
- 2) 1) In 2 stent technique for bifurcation lesion, DK crush technique has the potential of increasing FKBI, good coverage of ostium & apposition of stent strut.
- 3) DK crush stenting was associated with significant reduction of ISR, TLR and TVR but no significant difference in MACE between DK vs. Provisional stenting (DK crush 2 study)
- 4) Compared to the DK crush technique, Classical crush & Culotte stenting is associated with significantly increased TLR, TVR, MACEs in patients with UPLMCA bifurcation lesions. (DK crush 1 & 3 study)
- 5) In case of emergency, you might not be able to take the best option but you need to tackle it with whatever resources you have



SINGLE KISS



DOUBLE KISS



**Always try to kiss double**

**It improves outcome**

