

# Symbol of speed, agility and protection



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# Clinical background

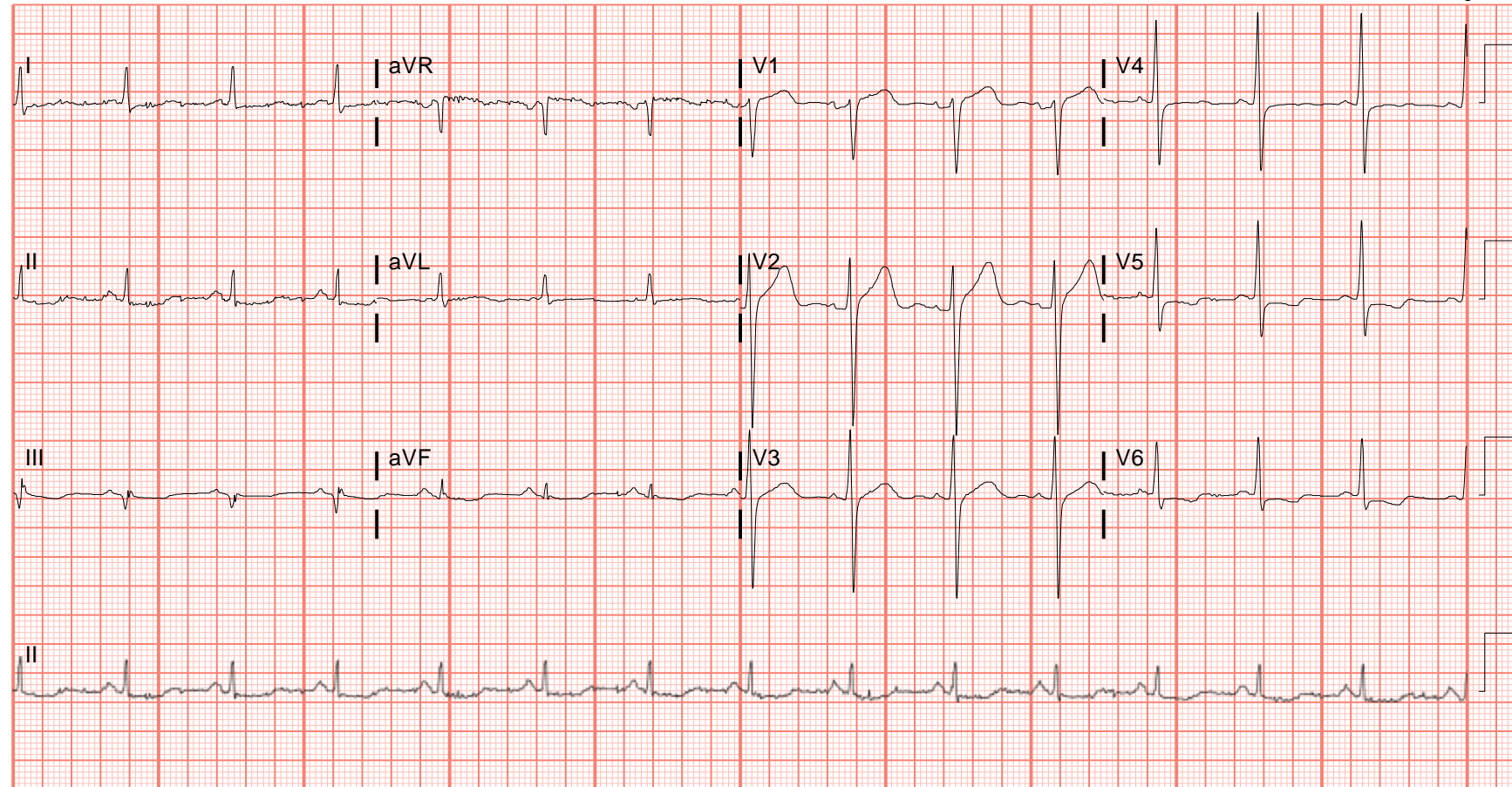
- A 49 years gentleman
- Exertional angina for the last 12month
- Dyslipidaemia and obstructive sleep apnoea on CPAP
- Chronic smoker.
- Clinical Examination Ht.:174.5cm, Wt.: 94.5, BMI: 31
- ECG: SR. LVH

Rate 85 Sinus rhythm  
PR 130 Nonspecific repol abnormality, lateral leads  
QRSd 94 Borderline ST elevation, anterior leads  
QT 370  
QTc 440  
--Axis--  
P 63  
QRS 13  
T -68

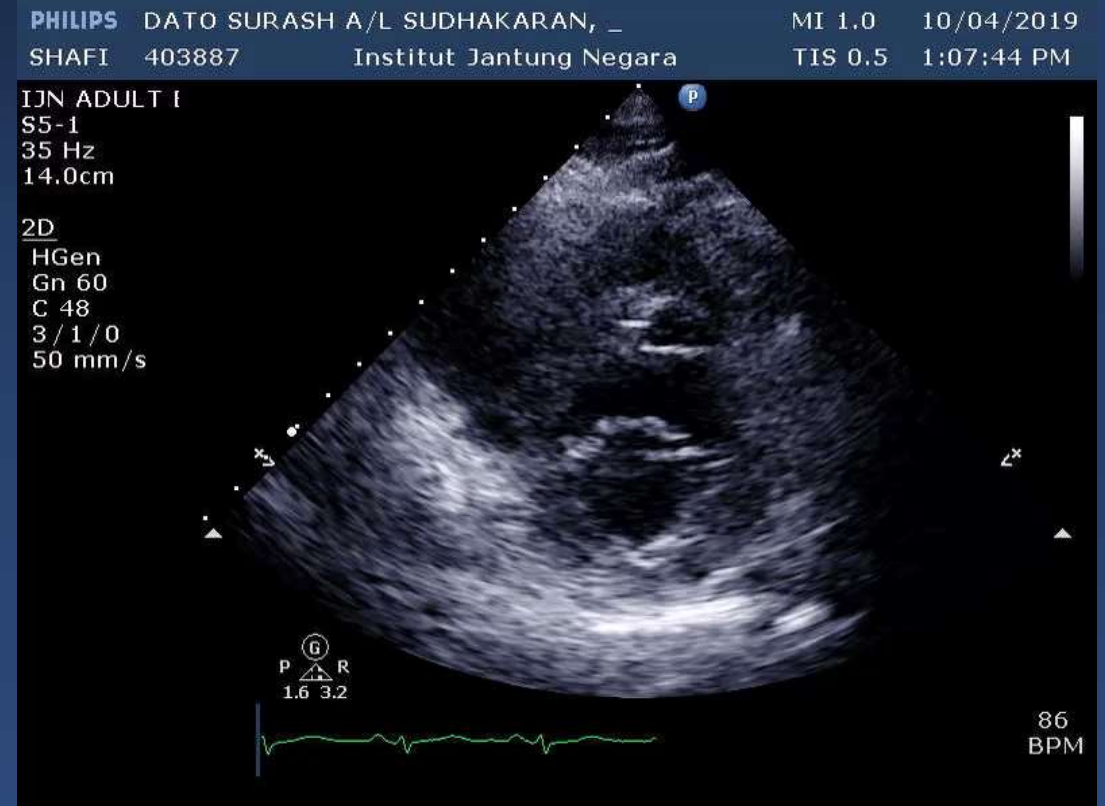
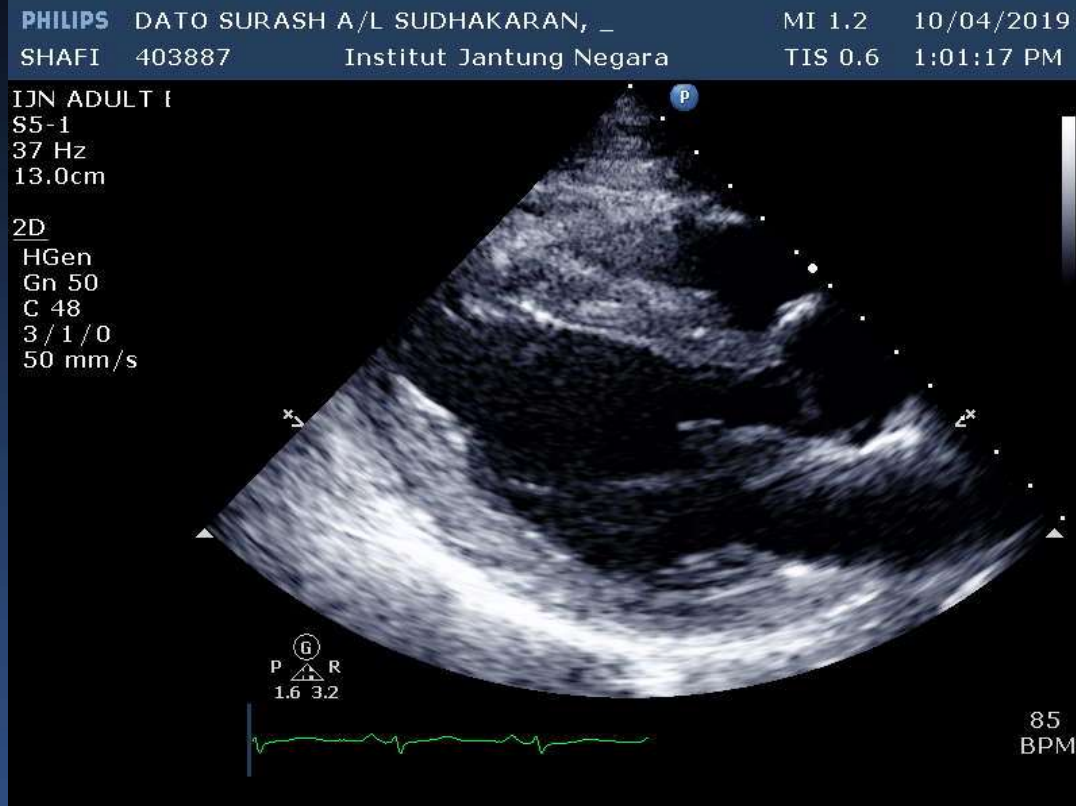
Req Provider:

- Abnormal ECG -

Unconfirmed Diagnosis



# Echo

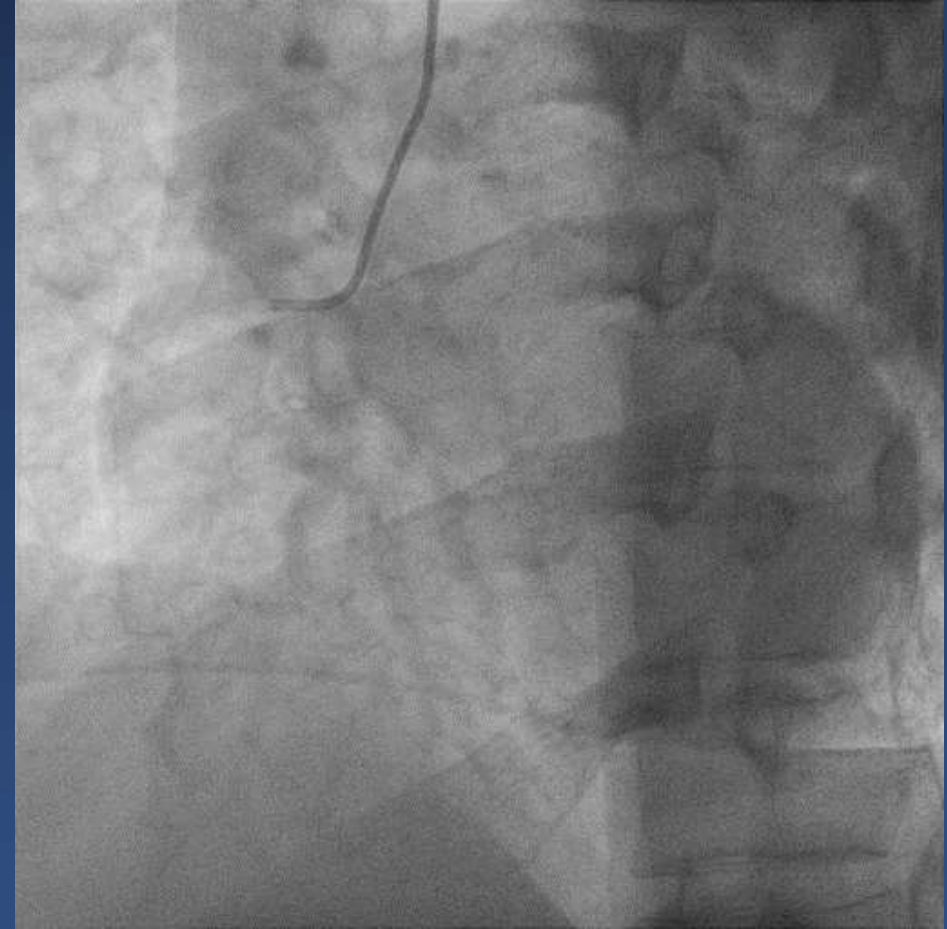
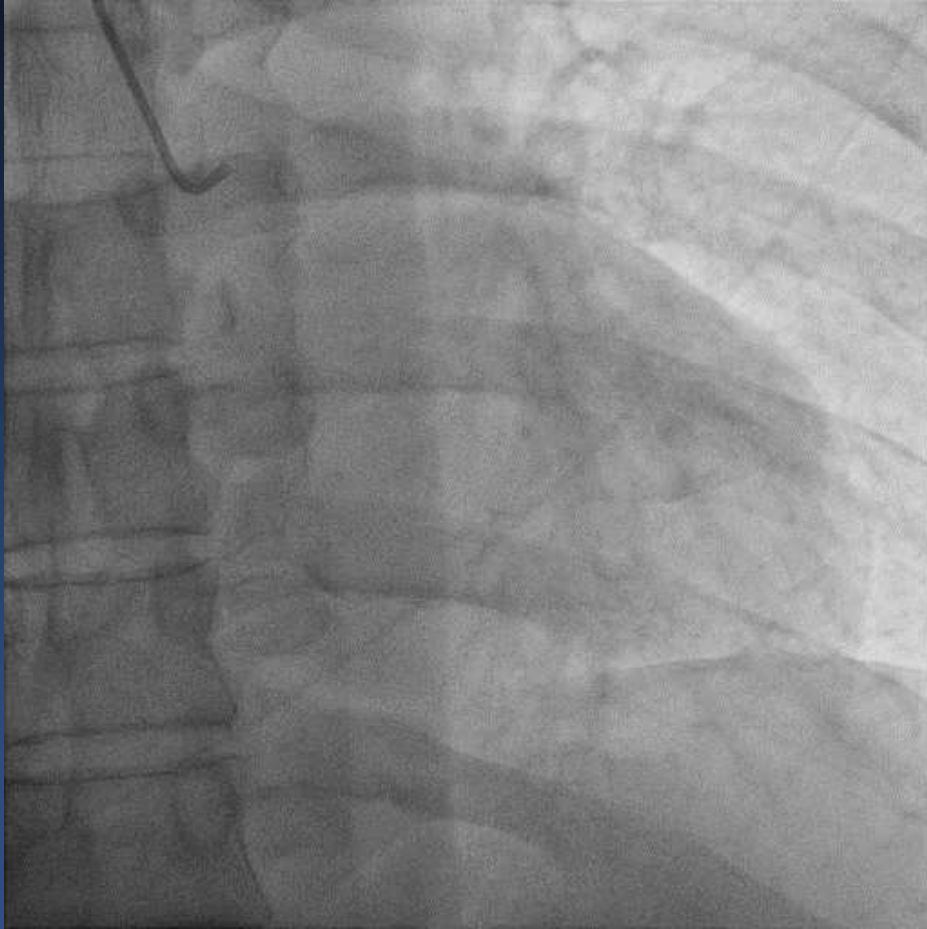


Echo: EF 55%, LVH, multiple areas of RWMA  
Stress test : Positive at stage II

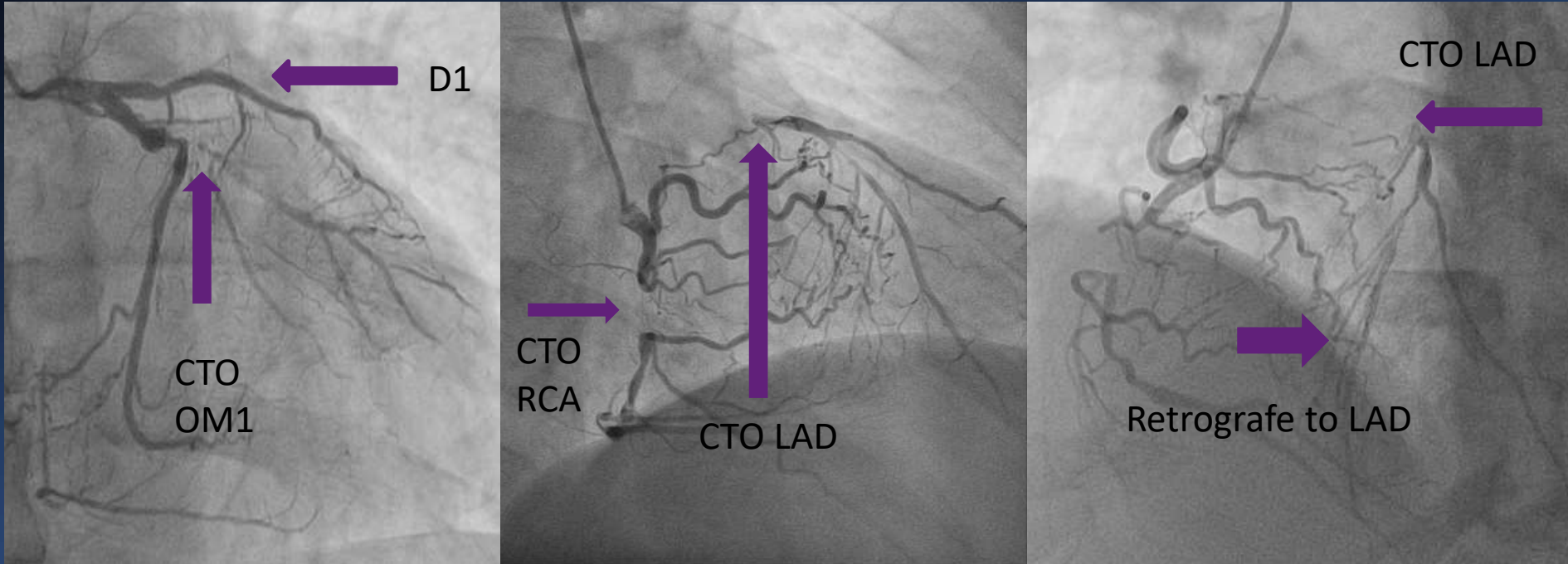
# Angiogram:

- LMS: Normal
- LAD: Proximal segment CTO after D1 bifurcation.
- LCX: Mild irregularity.
- OM1: Short CTO at ostium
- RAC: Dominant, mid segment CTO.

# Angiogram



# Coronary Angiogram finding



# Syntax Score

- Syntax Score I (total score for all lesion): 40.4

## PCI

- Syntax Score II: 30.3
- PCI 4 years mortality: 7.0%

## CABG

- Syntax Score II: 24.0
- CABG 4 year mortality: 4.2%

Treatment recommendation: CABG or PCI.

Discussed and explained to patient, he opted PCI



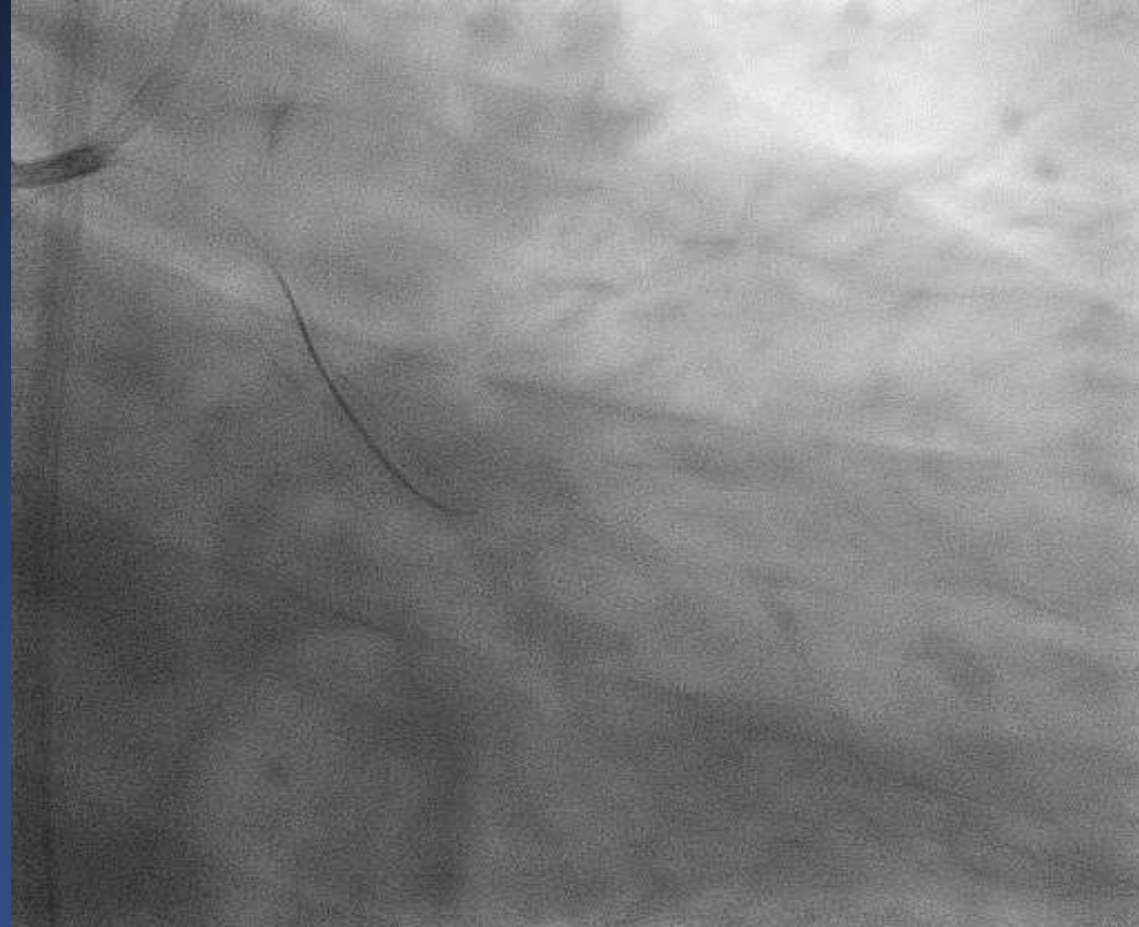
# PCI short CTO OM1

## PCI LCX/OM1

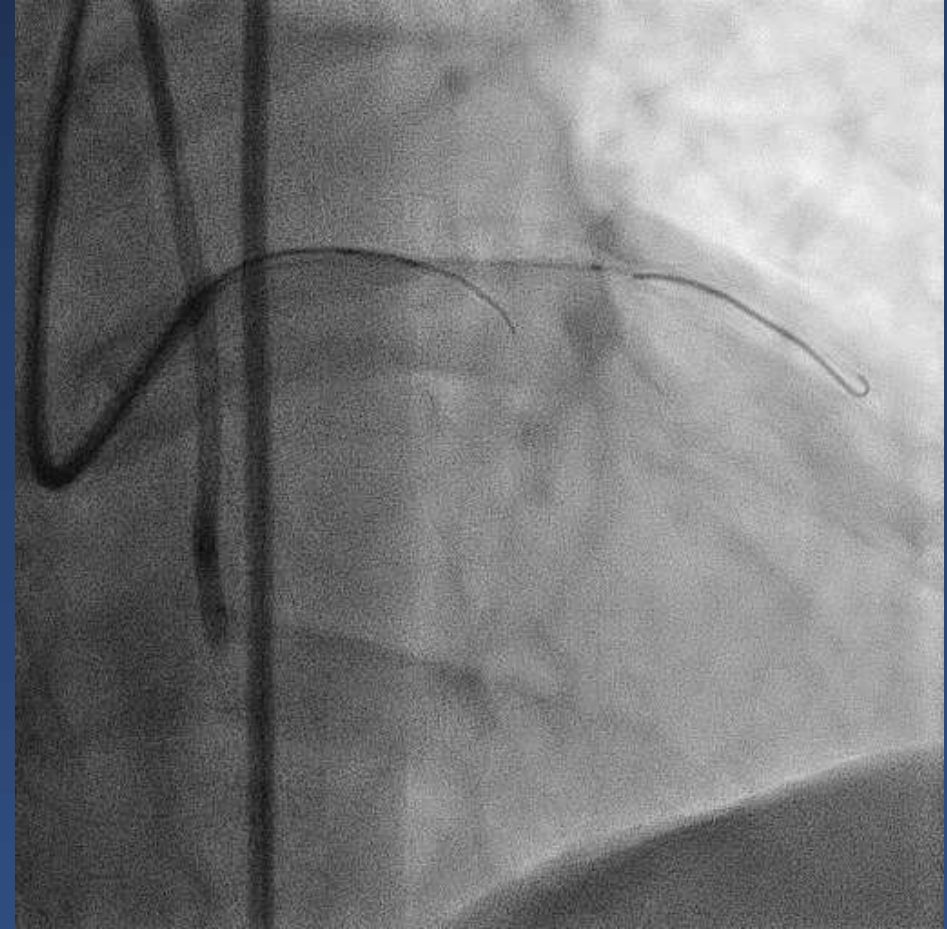
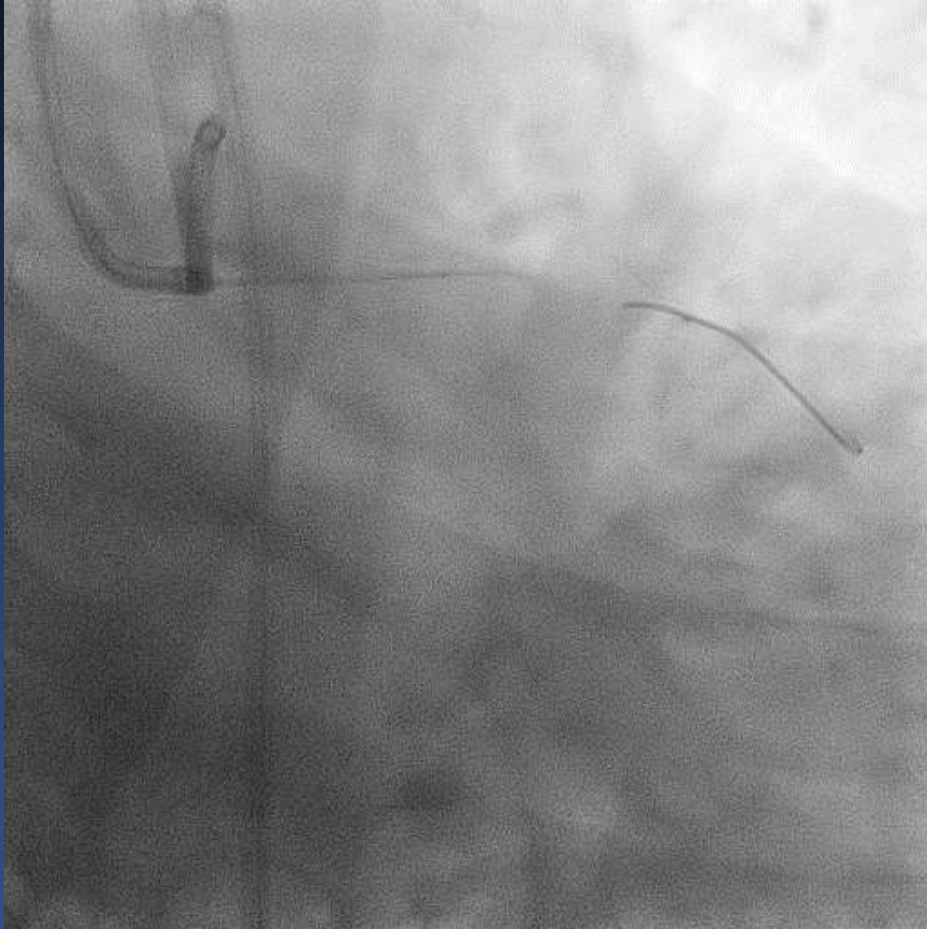
- EBU 3.5 7F, CATHETER
- 2 wires
- Conquest pro 200 in corsair microcatheter
- Cross lesion
- Predilated with 2.5/20mm
- Stent with synergy 2.5×48
- Post dilated with NC 2.5/15 distally & 3.0/8 proximally



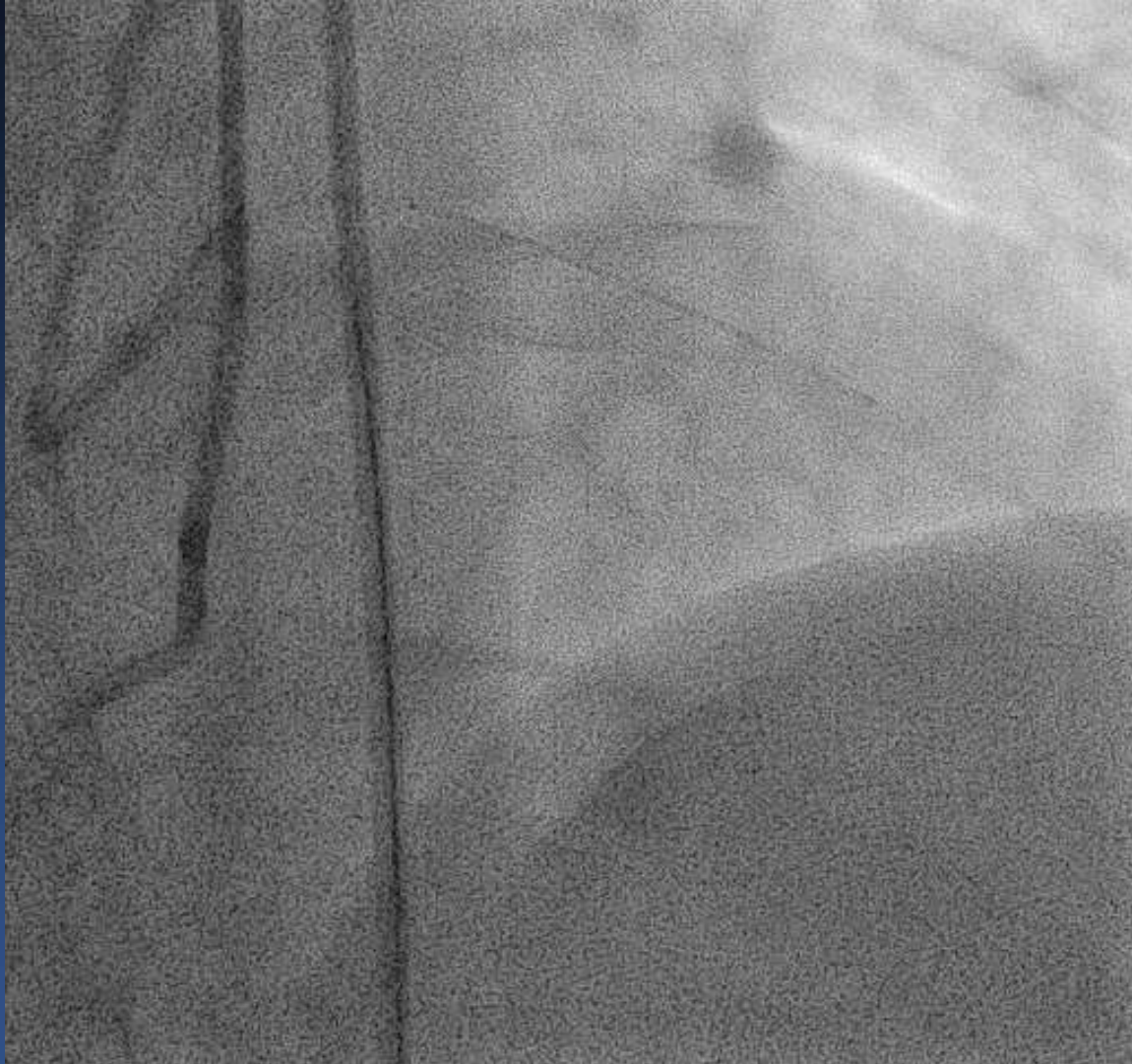
# Final Result PCI OM1



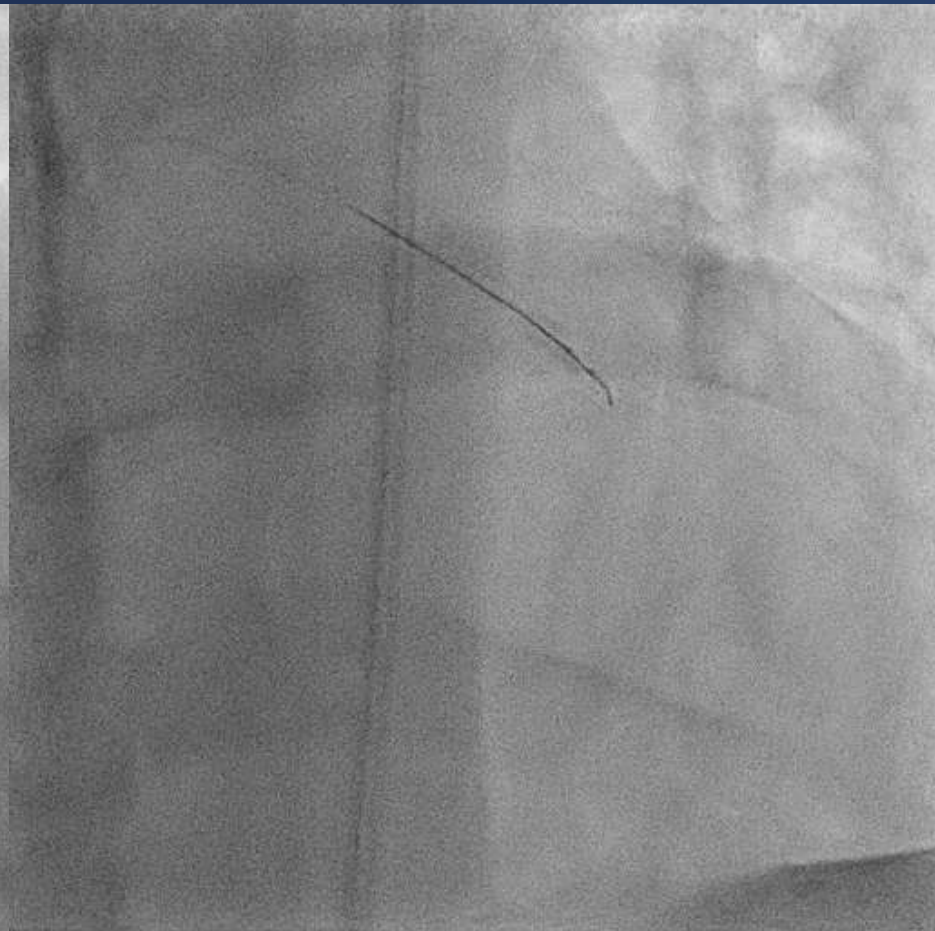
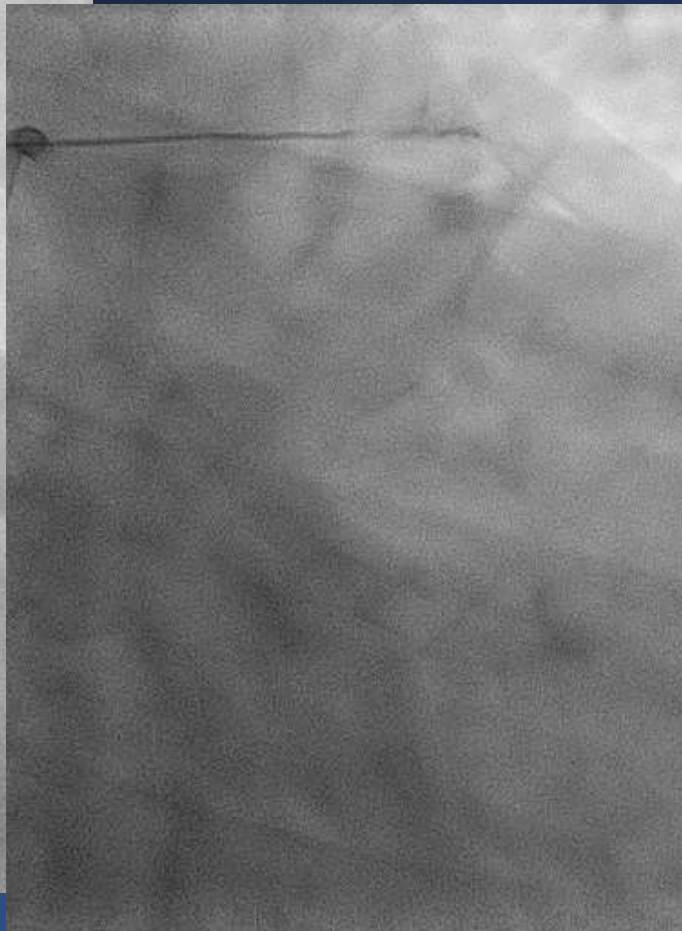
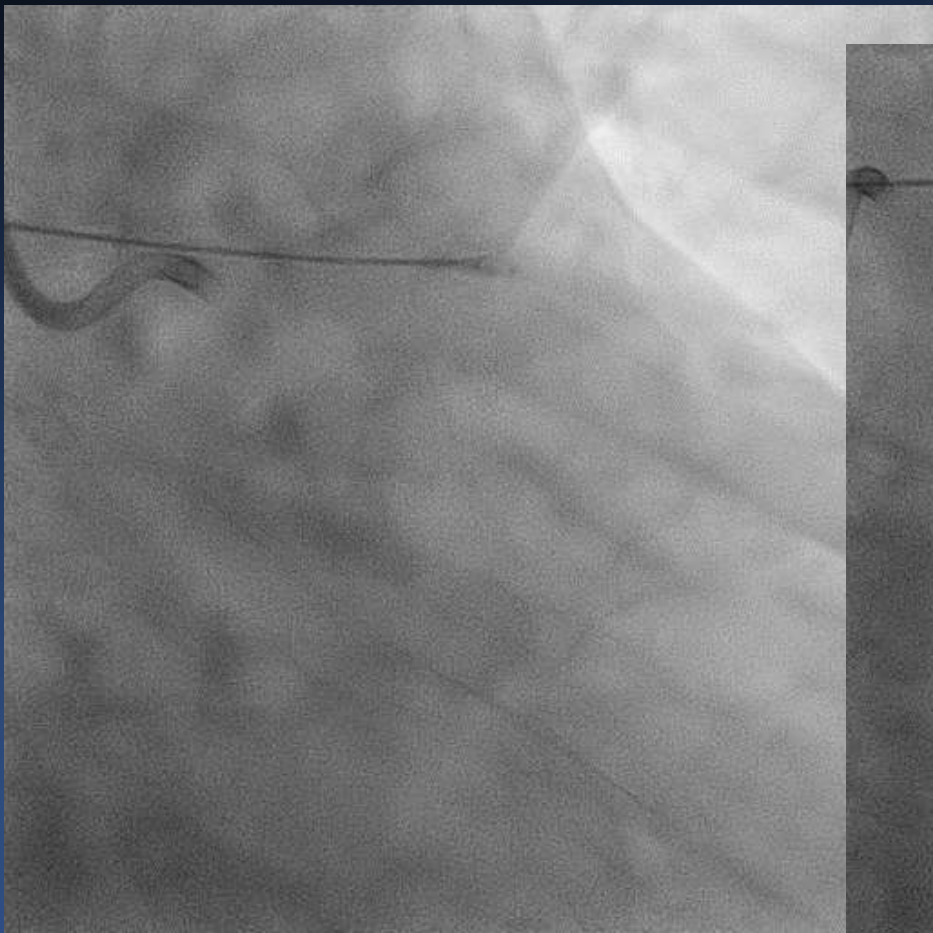
# IVUS guided PCI LAD

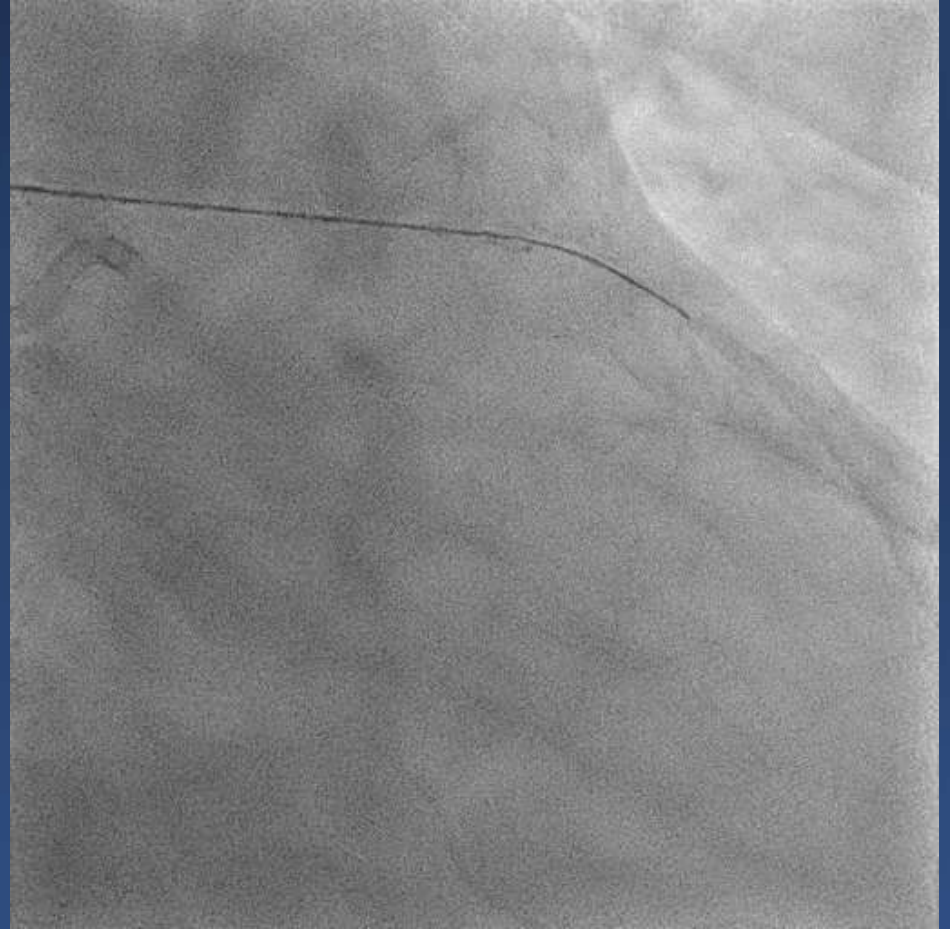
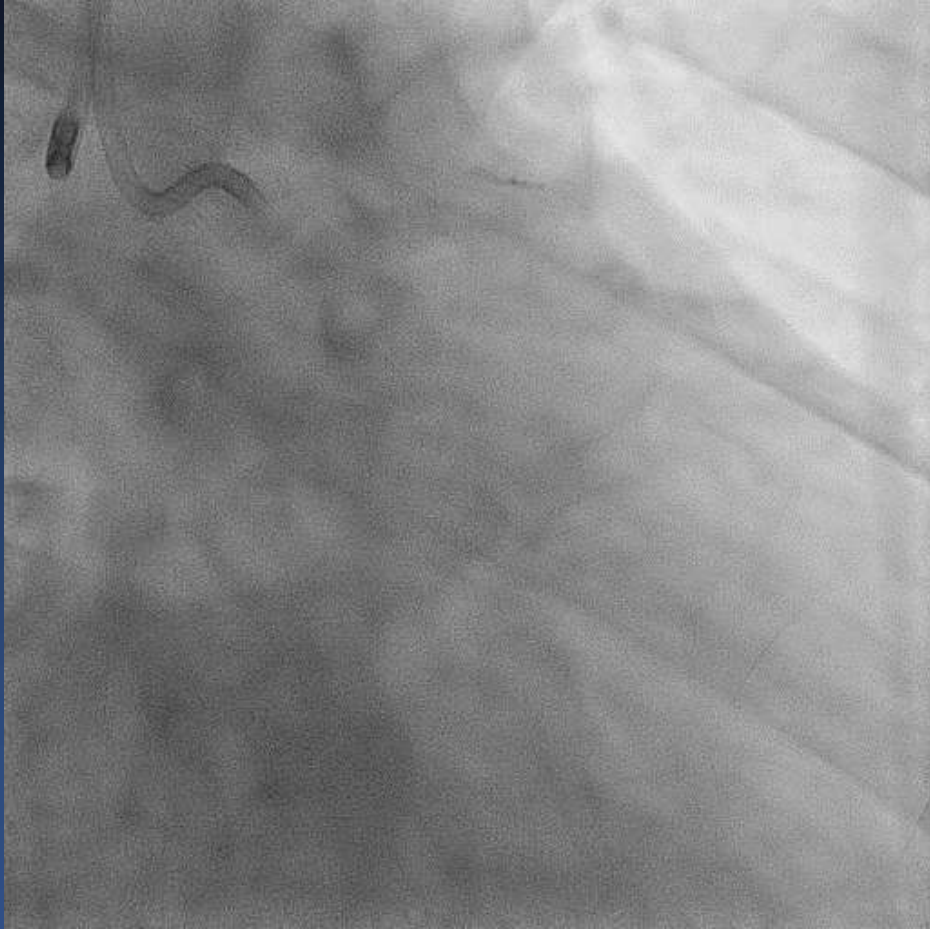


# Cross boss

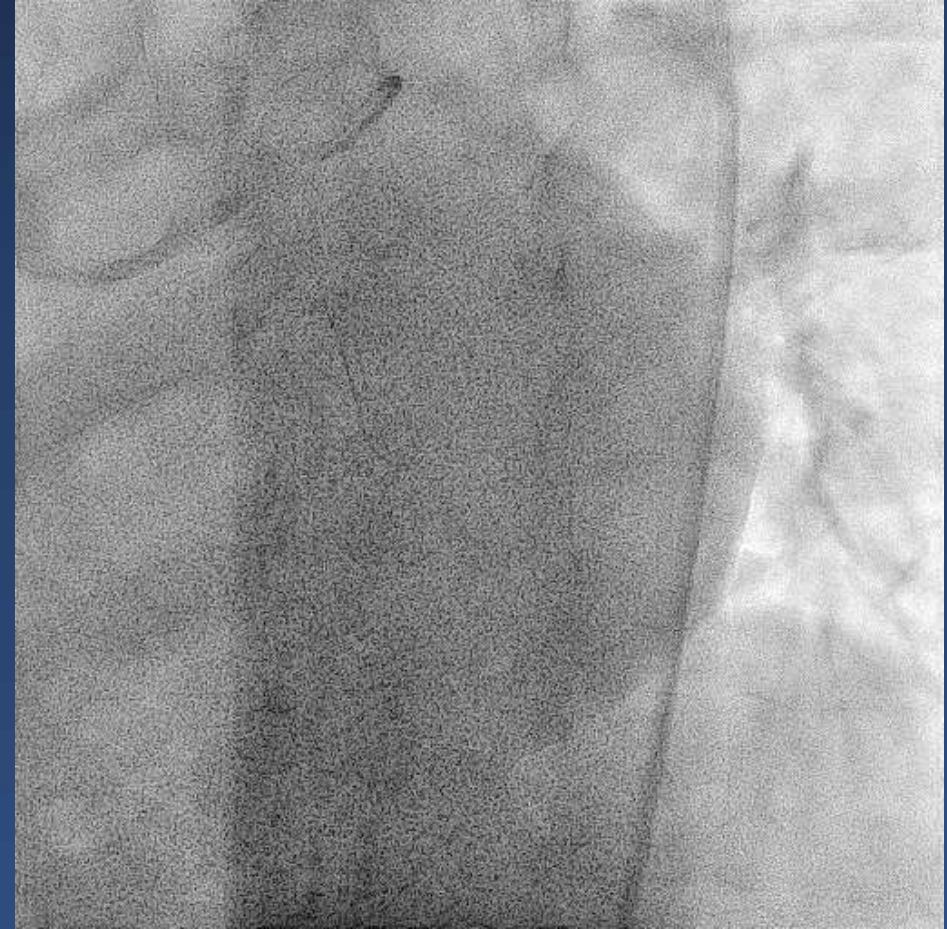
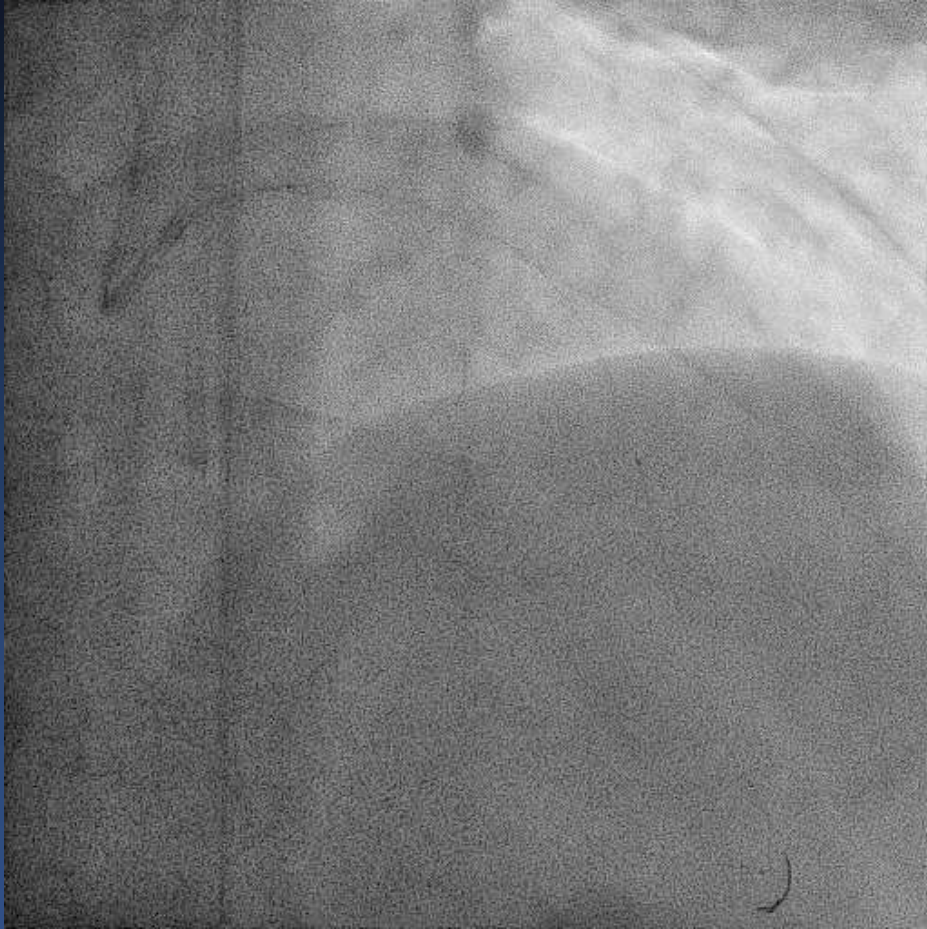


# Stingrey balloon





# IVUS & sten LAD



Placing stent at LAD ostium  
Synergy 3.0×48 & 3.5x48

# PCI CTO LAD



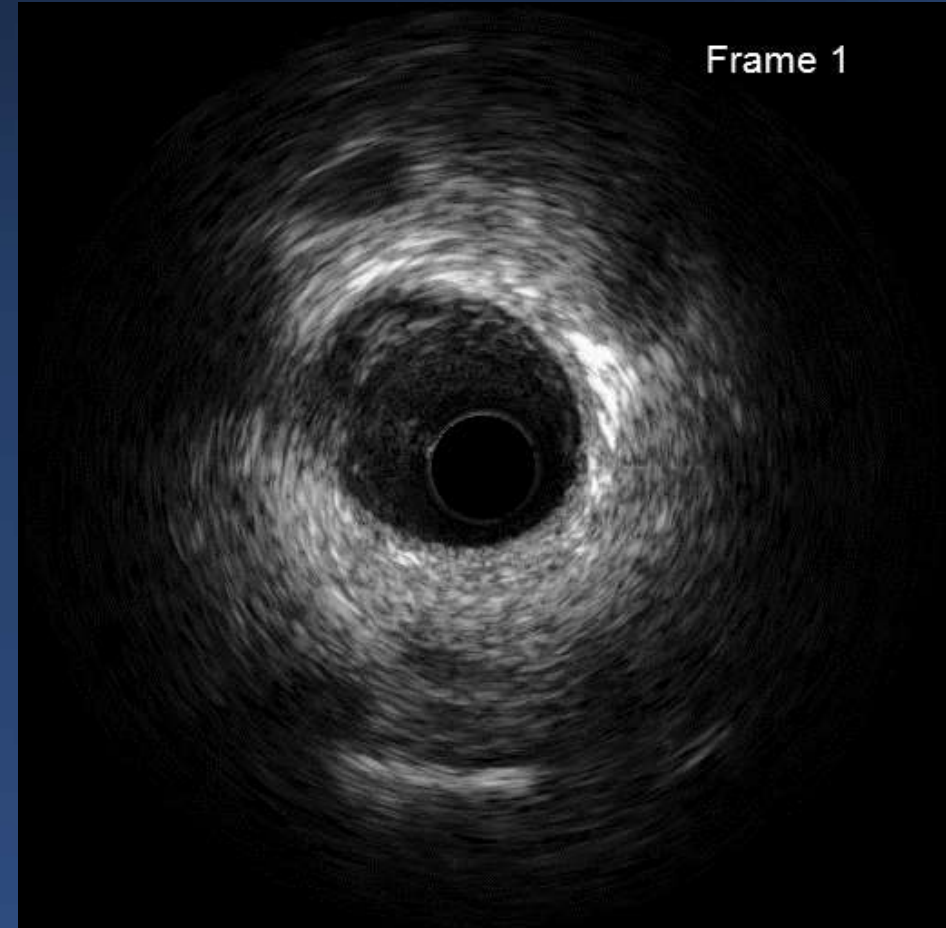
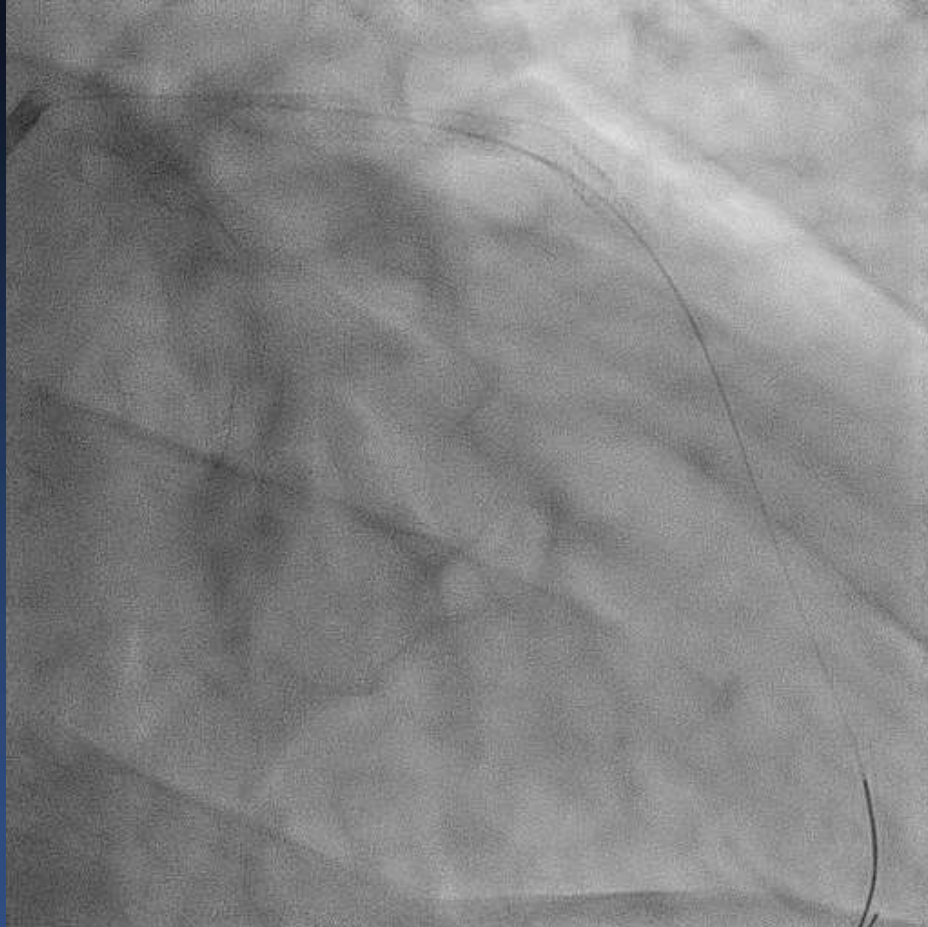
Change wire to sion blue  
wire.  
Predilated with 2.5/15



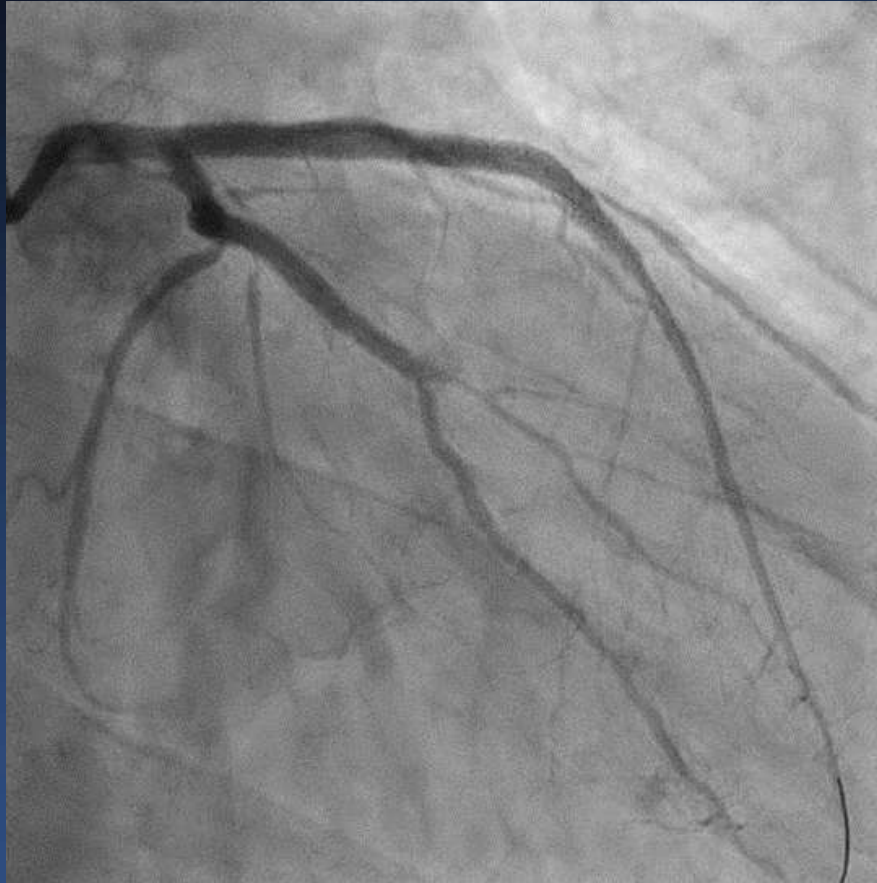
Placing stent at LAD ostium  
Synergy 3.0×48 & 3.5x48



# Final result



# IVUS LAD post stent



Good Final result



IVUS post PCI, stent well opposed

# Discussion Points

- CTO angioplasty is recommended for ischemic symptoms relief.
- Outcomes of CTO PCI has improved with the advancements in equipment and techniques.
- IVUS is useful identify lesion detail & vessel size and post- PCI is required to evaluate stent setting and ensure optimum stent expansion.

# Conclusion/Take-home Message

- The use of advanced equipment will shortens procedure time, and lowers radiation and contrast dose, as well as it reduces complications and makes complex procedure easy & simple.
- If the initially selected crossing strategy fails, efficient change to an alternative crossing technique increases the likelihood of eventual PCI success.