

# **FFR and IVUS in multivessel PCI Involving Left Main**



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# **Clinical details**

**55yr old gentleman.**

**Recent diagnosis of N-STEMI.**

**TMT +ve for reversible ischemia.**

**Risk factors**

**Dyslipidemia**

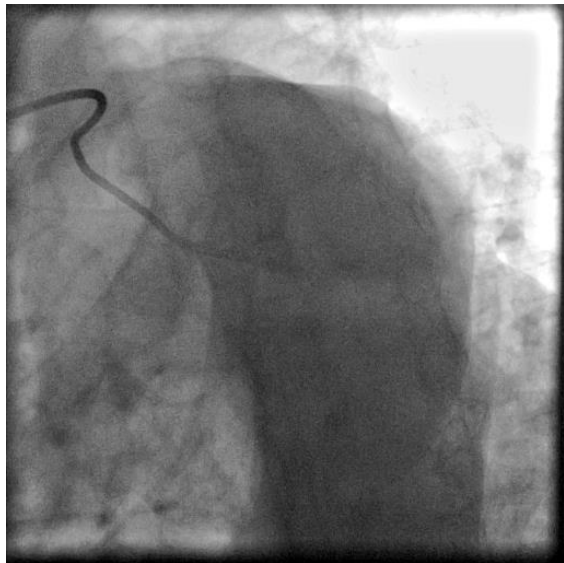
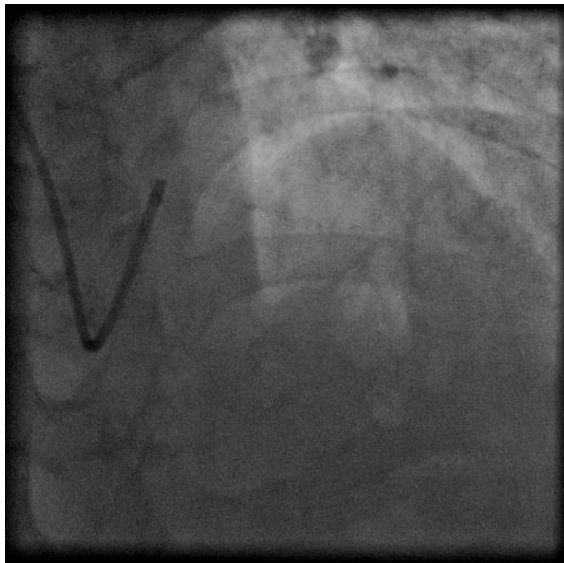
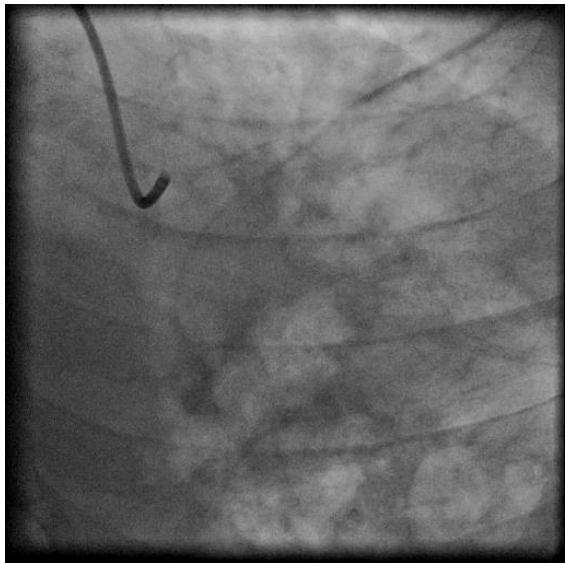
**Smoking**

**CAG**

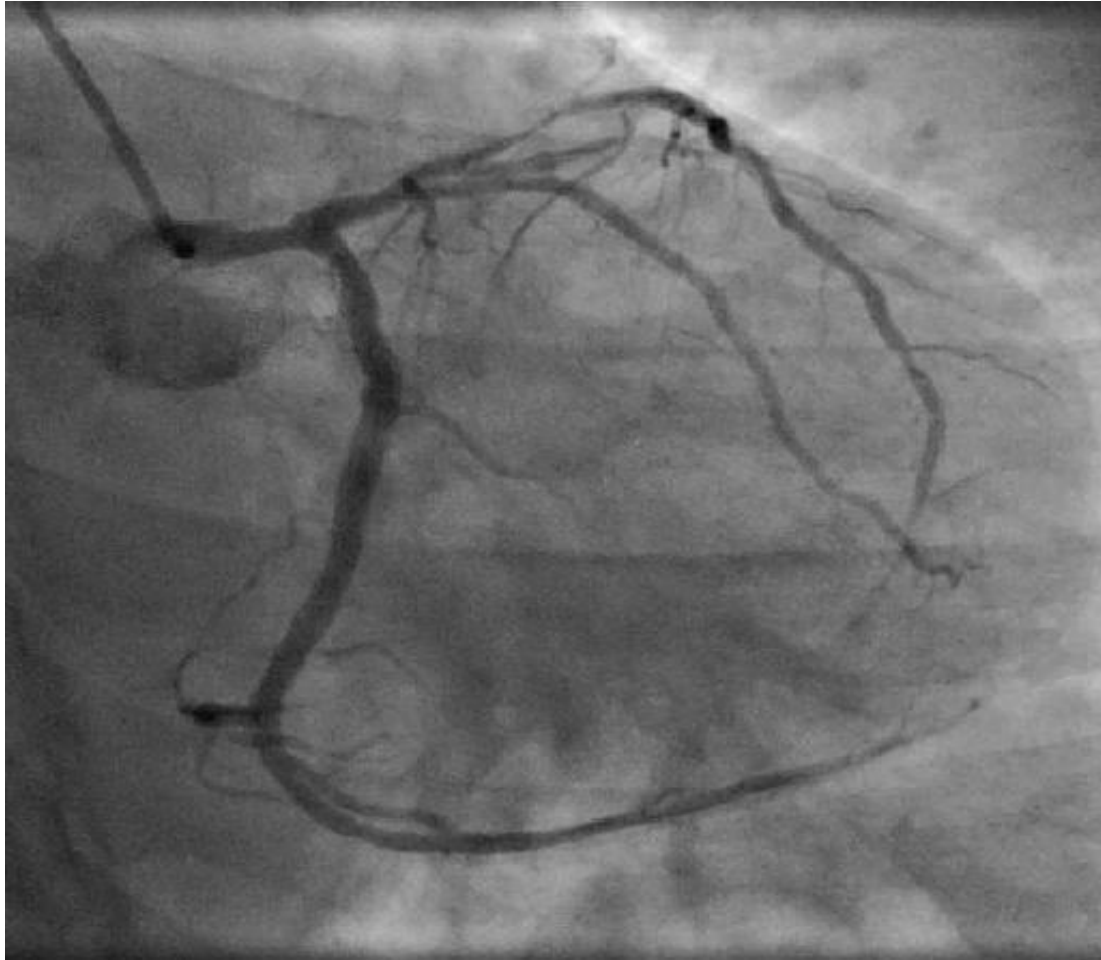
**LM 40% to 50% stenosis**

**LAD proximal 90% long lesion**

**LCx Dominant**



# Left Main with LAD Disease

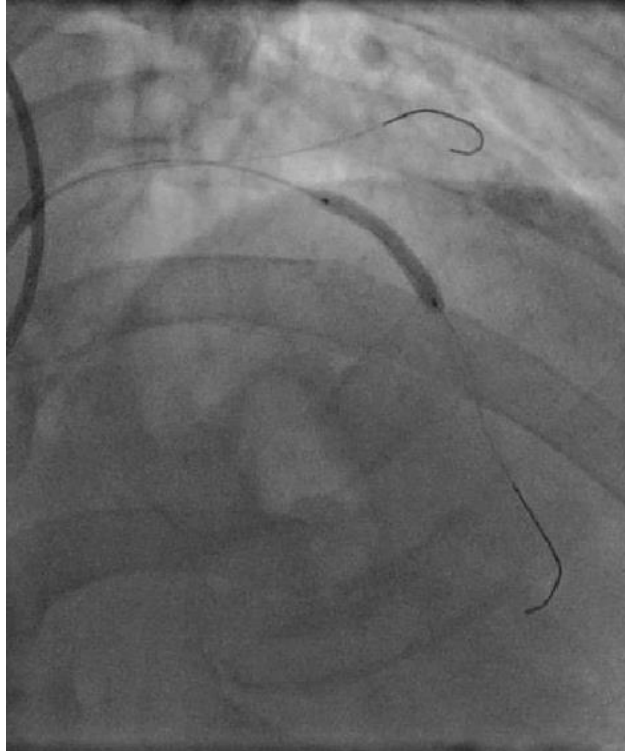


**Treat LM and LAD**

**Place Pressure wire in  
LCx and measure LM FFR**

**Stent LAD and  
measure LM FFR**

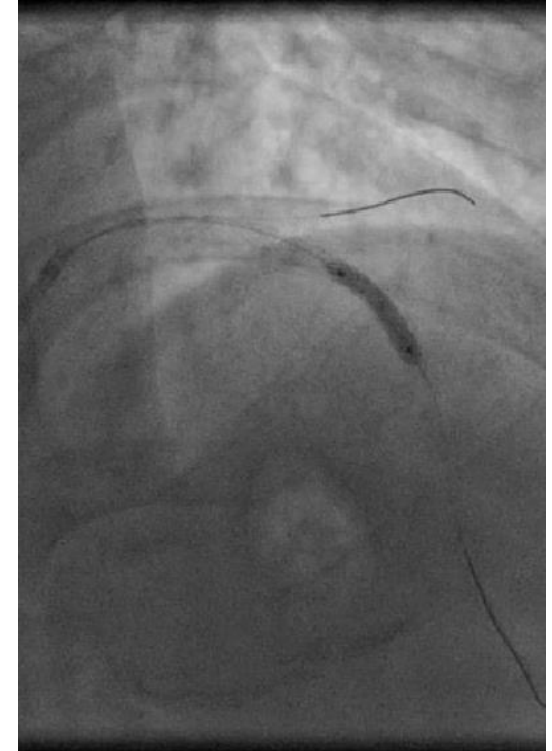
**Mid LAD Stenting  
3x20 SYNERGY**



**Ostio-proximal LAD Stenting  
3.5x28 SYNERGY**



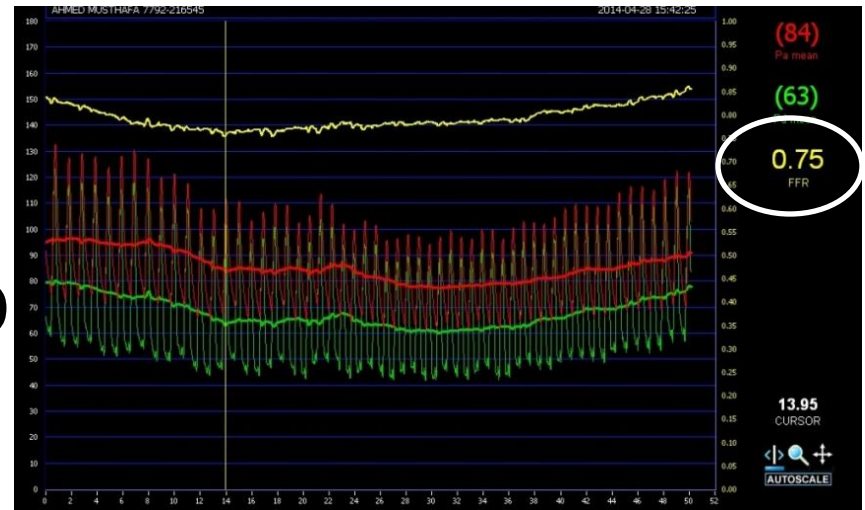
**Post dilatation  
3.5x15 Voyager NC**



# Post LAD Stenting FFR



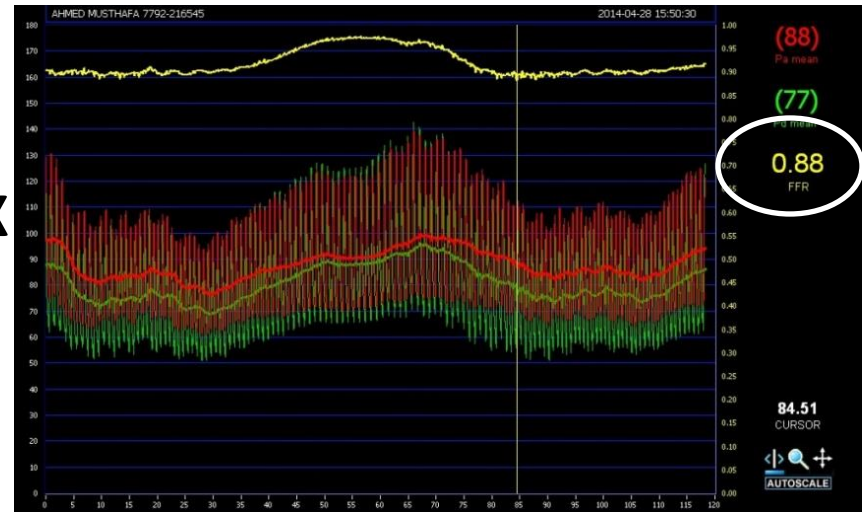
LAD



Options

- Proceed with Stenting LM
- Do an IVUS and decide

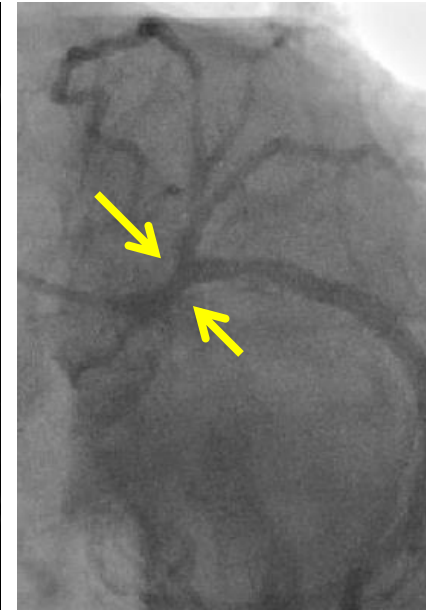
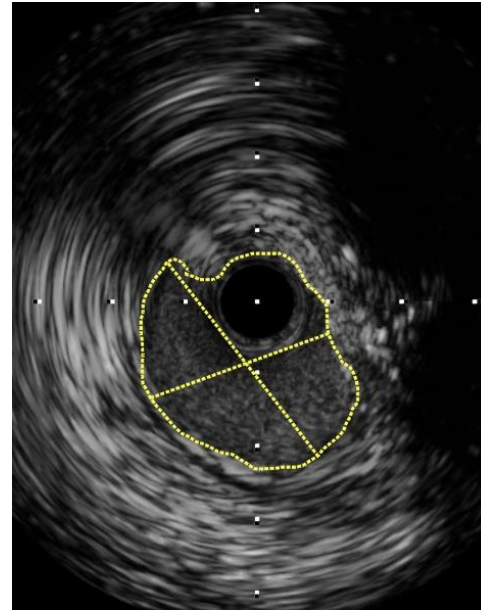
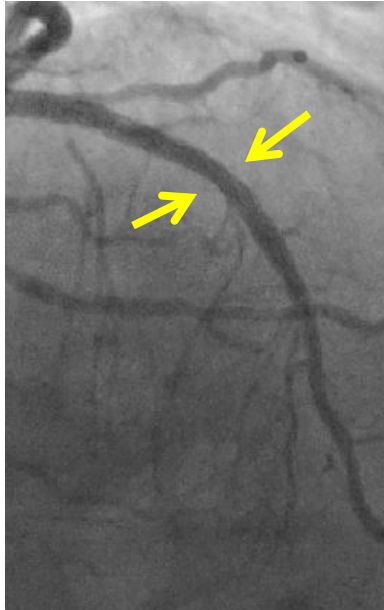
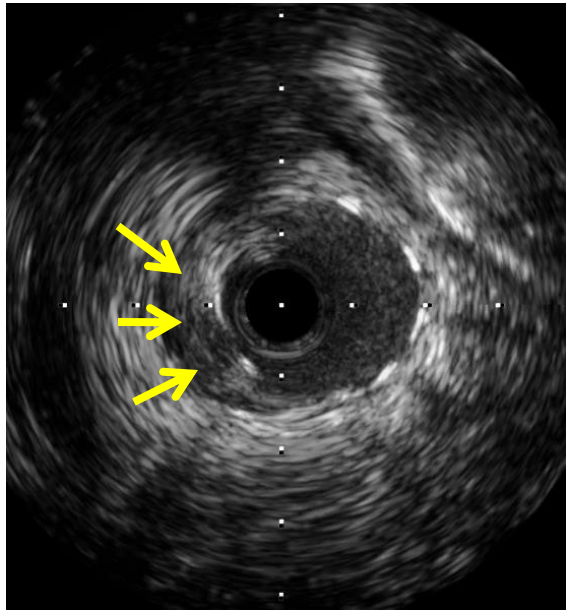
LCx



# IVUS

LAD

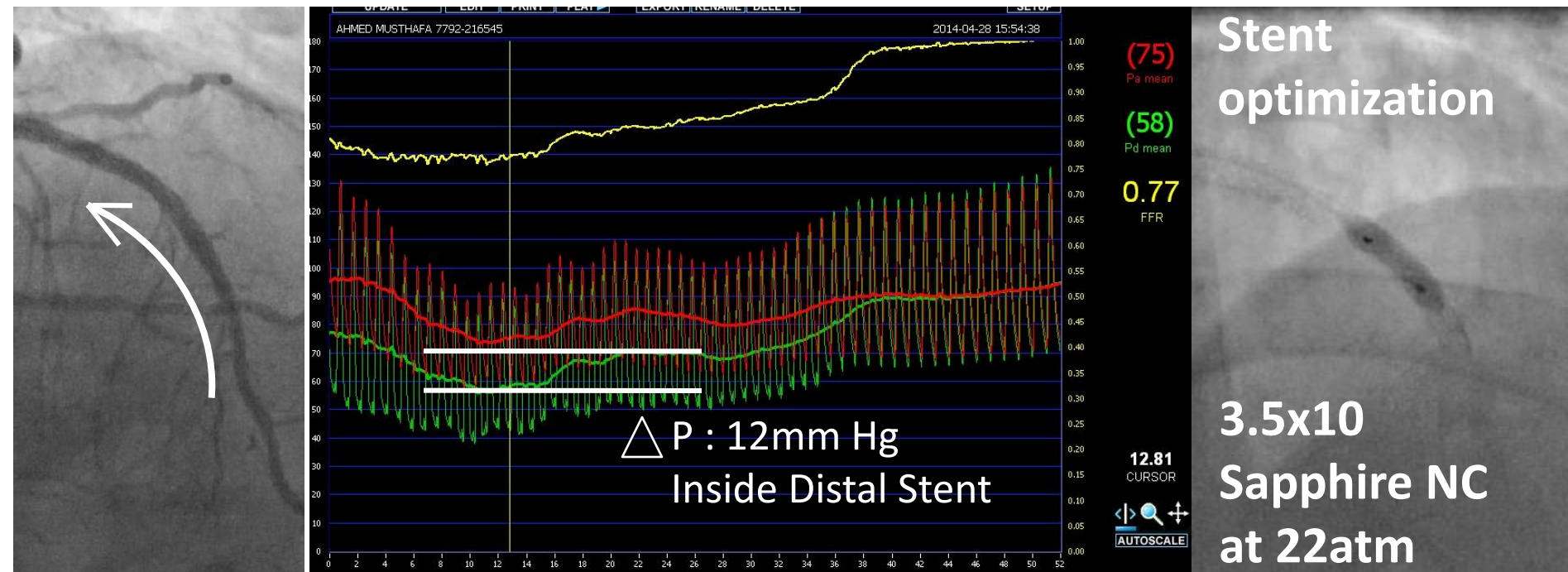
LMCA



**Stent malapposed &  
Underexpanded  
( Diameter : 2.7mm)**

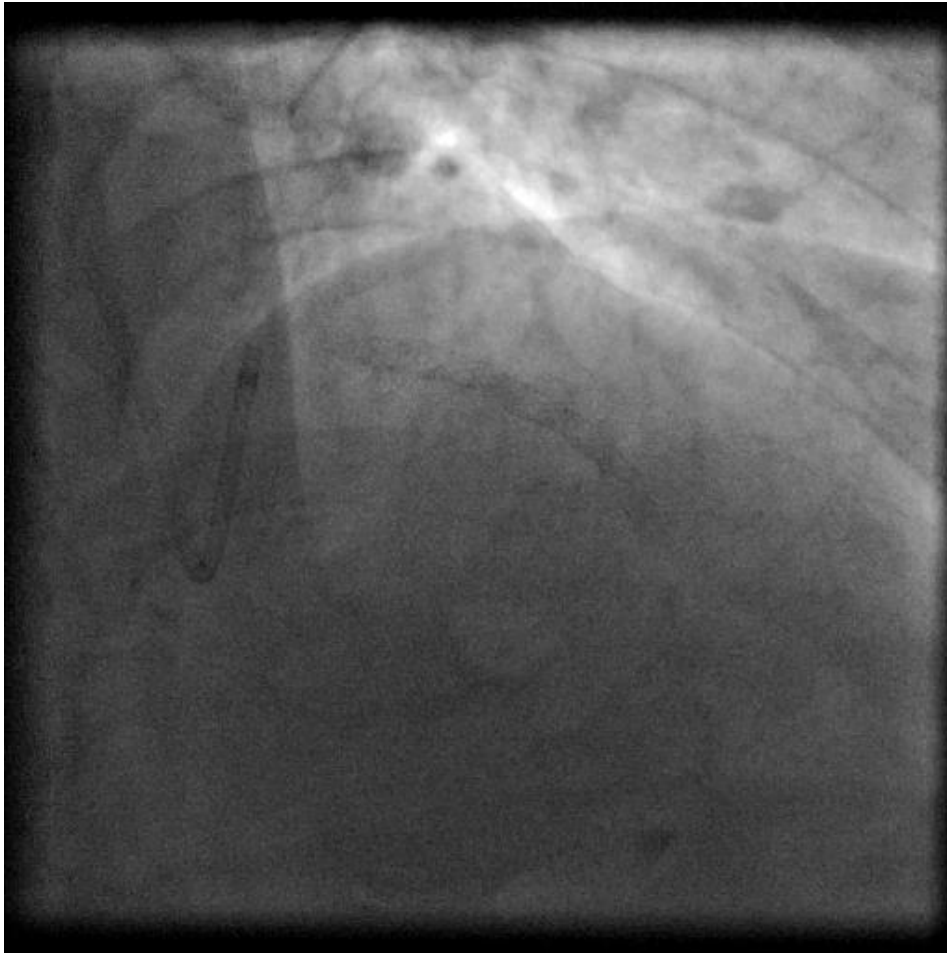
**Minimum Lumen Area : 6.52mm<sup>2</sup>**

# FFR Pullback

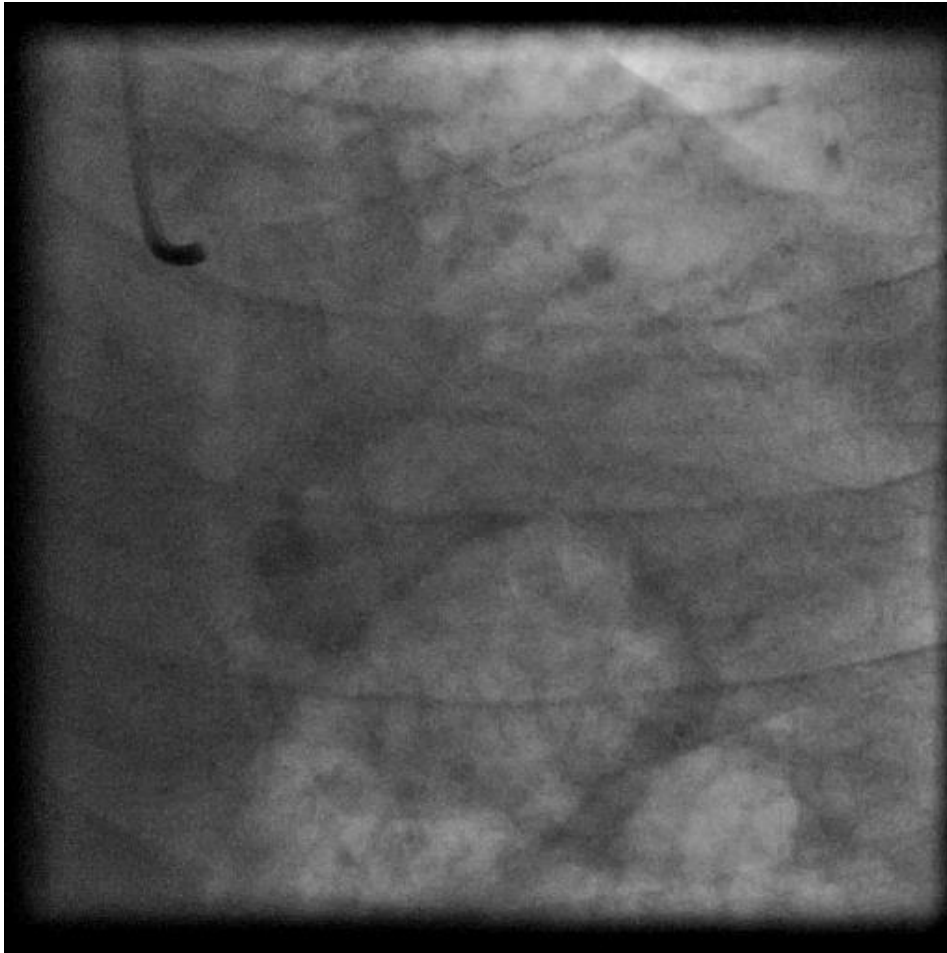




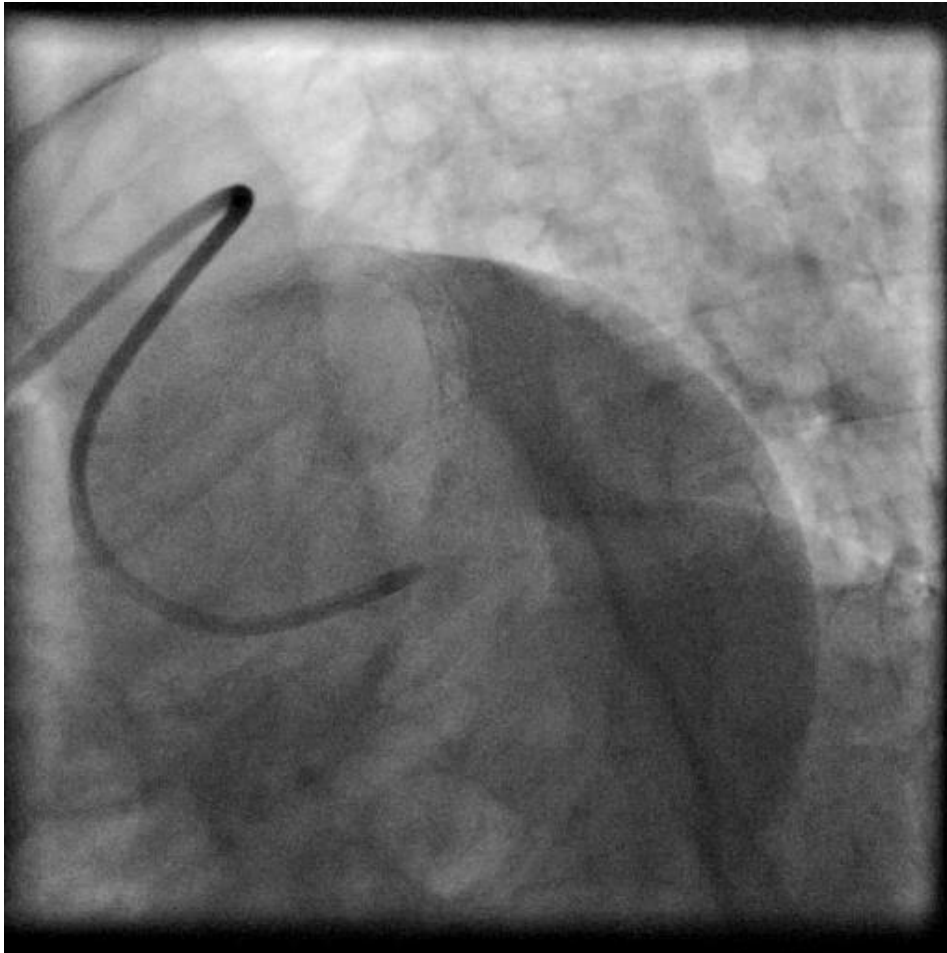
# Final



# Final



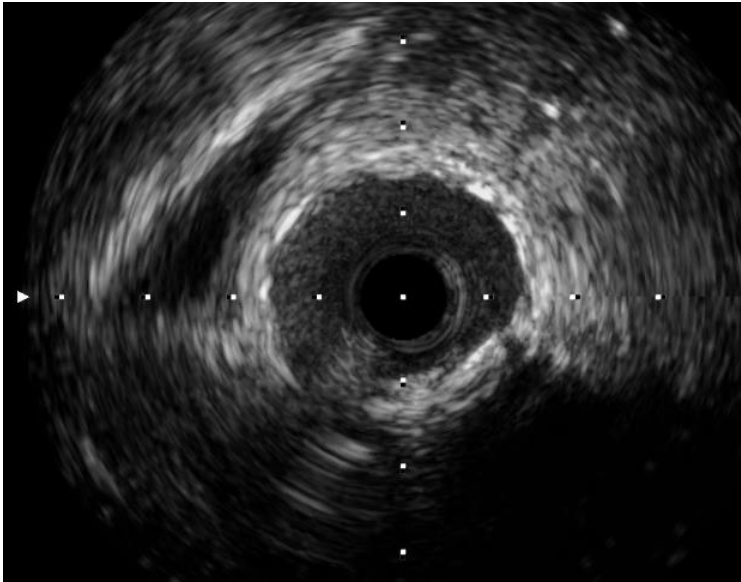
# Final



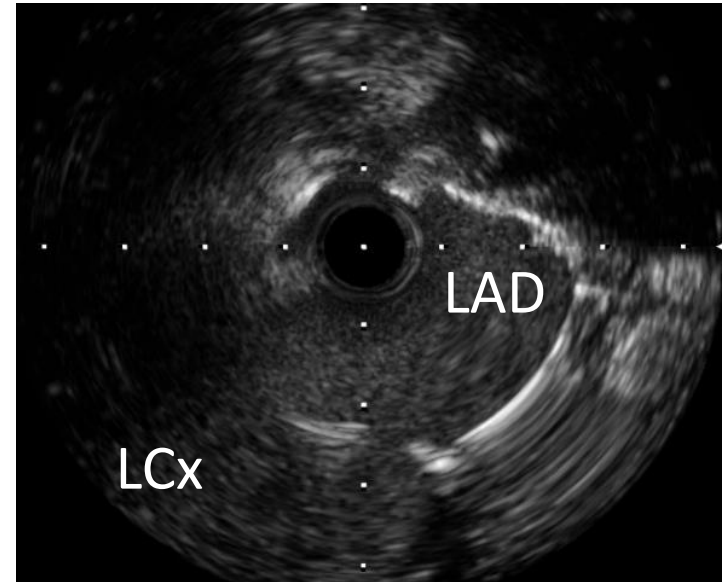
# Final



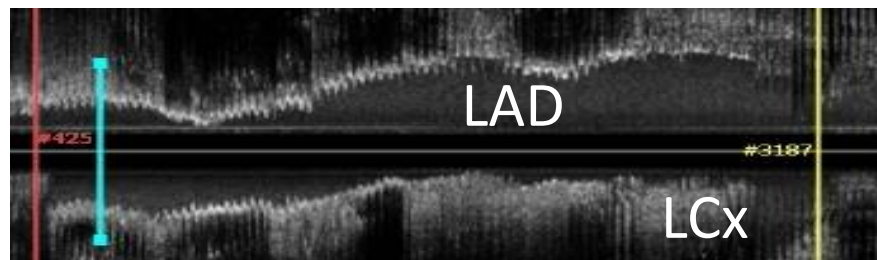
# Final IVUS



**Well apposed distal stent**



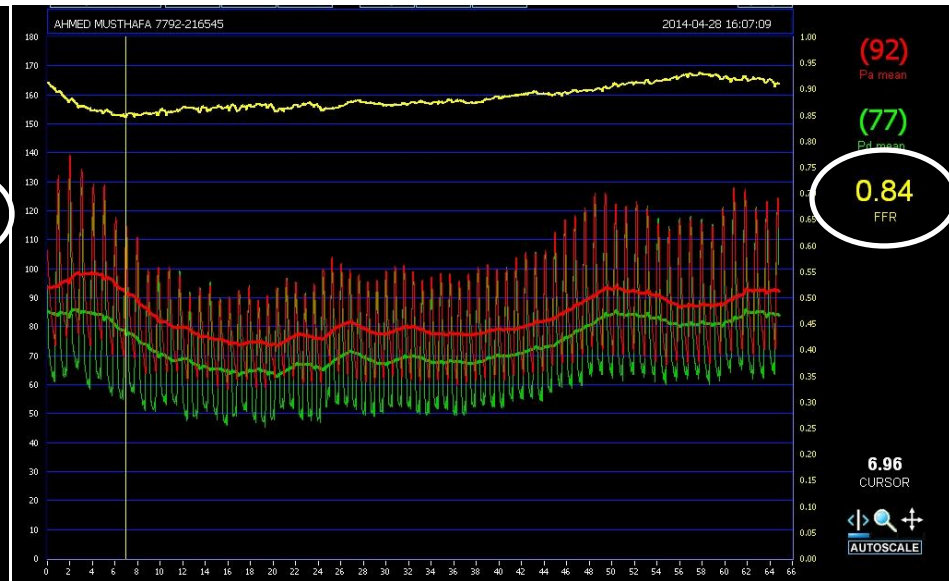
**Proximal stent edge exactly at LAD ostium**



# Final FFR



**Baseline : 0.98**



**During Hyperemia : 0.84**

# **FFR and IVUS Integration in PCI of LM and LAD Disease**

- **Points for discussion.**

**Assessment of LM lesion in presence of significant LAD stenosis.**

**FFR and IVUS integration in complex PCI.**

**Importance of FFR identified residual ischemia**