

# **BIFURCATION STENTING WITH BVS TO LAD UNDER OCT GUIDANCE USING KISSING METHOD**

**Dr.Sridhar Kasturi., M.D.,D.M.,FACC**

**Sr.Consultant Interventional Cardiologist**

**SUNSHINE HOSPITAL,Secunderabad.**

**HOD & Professor**

**Department of Cardiology**

**Chalmeda Anandarao Institute of Medical Sciences**

**Karimnagar,Andhrapradesh,India.**

**Dr.Narsaraju.,MD.,DM, Sr.Consultant Interventional Cardiologist**

**SUNSHINE HOSPITAL**

# Clinical History

- 54 Years Male known Hypertensive.
- H/O chest pain,evaluated elsewhere, diagnosed as acute AWTMI, TLT with TNK, stabilized & referred for further evaluation & management.
- IHD with Acute AWTMI
- Normal LV Function

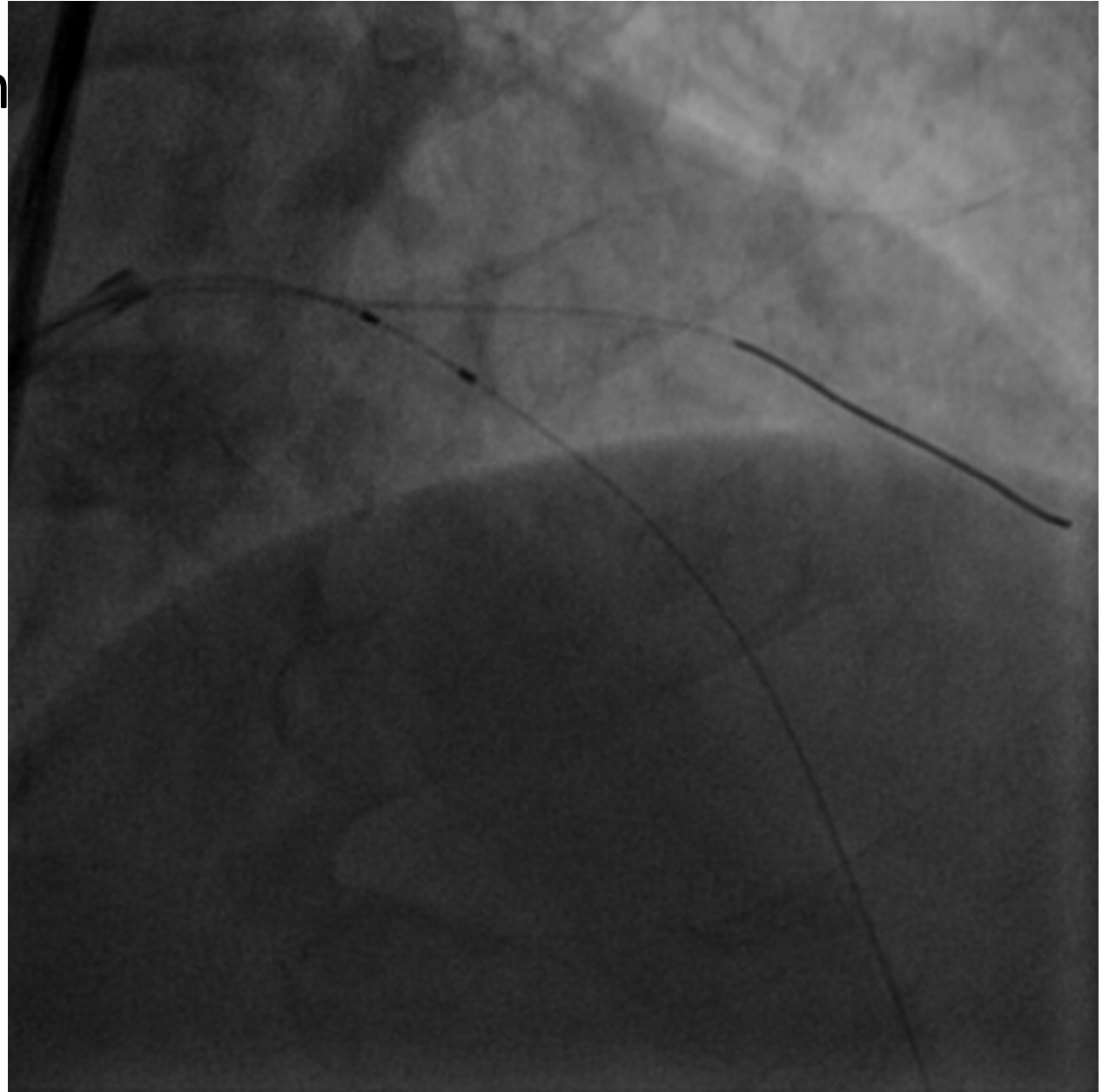
# Angiogram

- LMCA Engaged with XB 3.0 6Fr guiding catheter.
- Check angiogram revealed Mid LAD 99% lesion & D1-Proximal 70% Narrowing.
- RCA-Normal.
- TIMI Grade II Flow.
- Plan-PCI with BVS Stenting of LAD under OCT guidance.



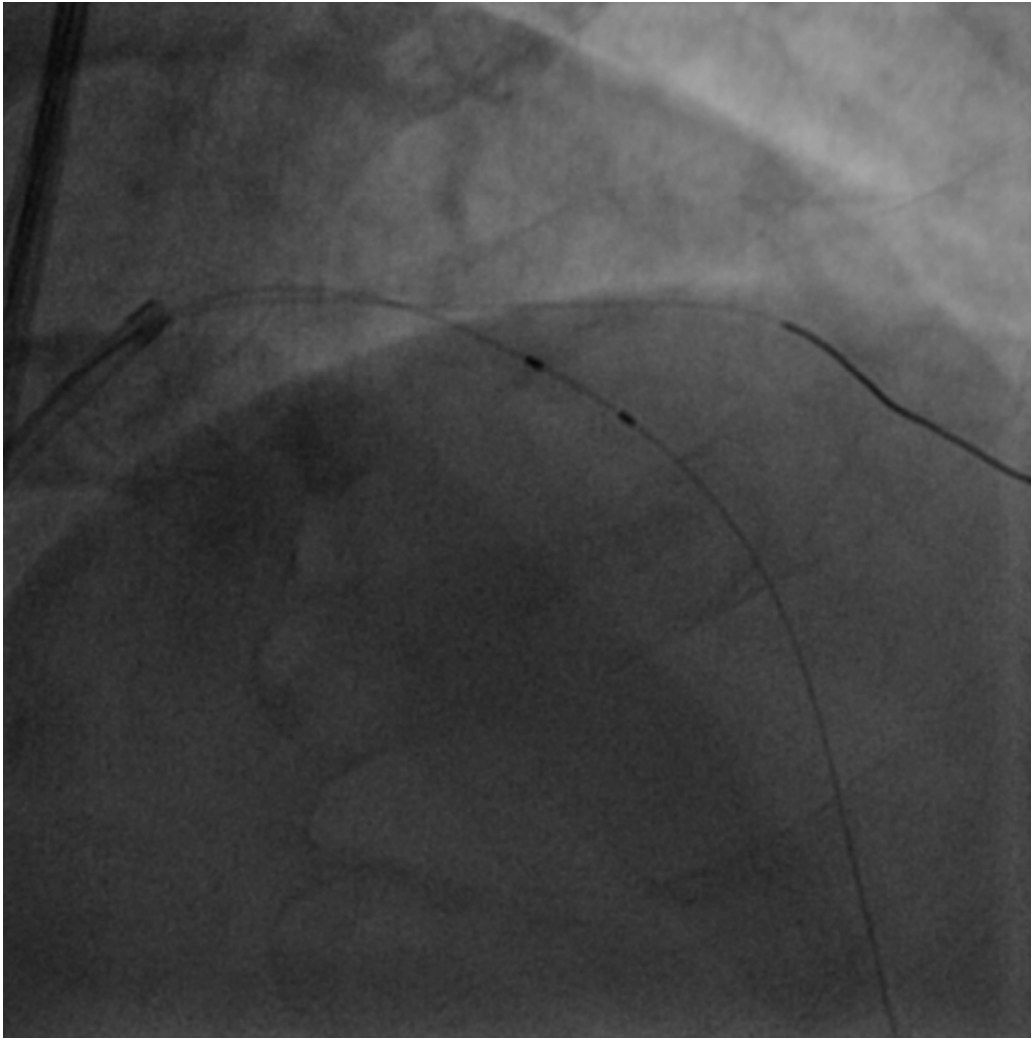
# Procedure

- LAD & D1 Crossed with two BMW wires.
- LAD lesion pre dilatation done with 2.0x09 mm Maverick Balloon

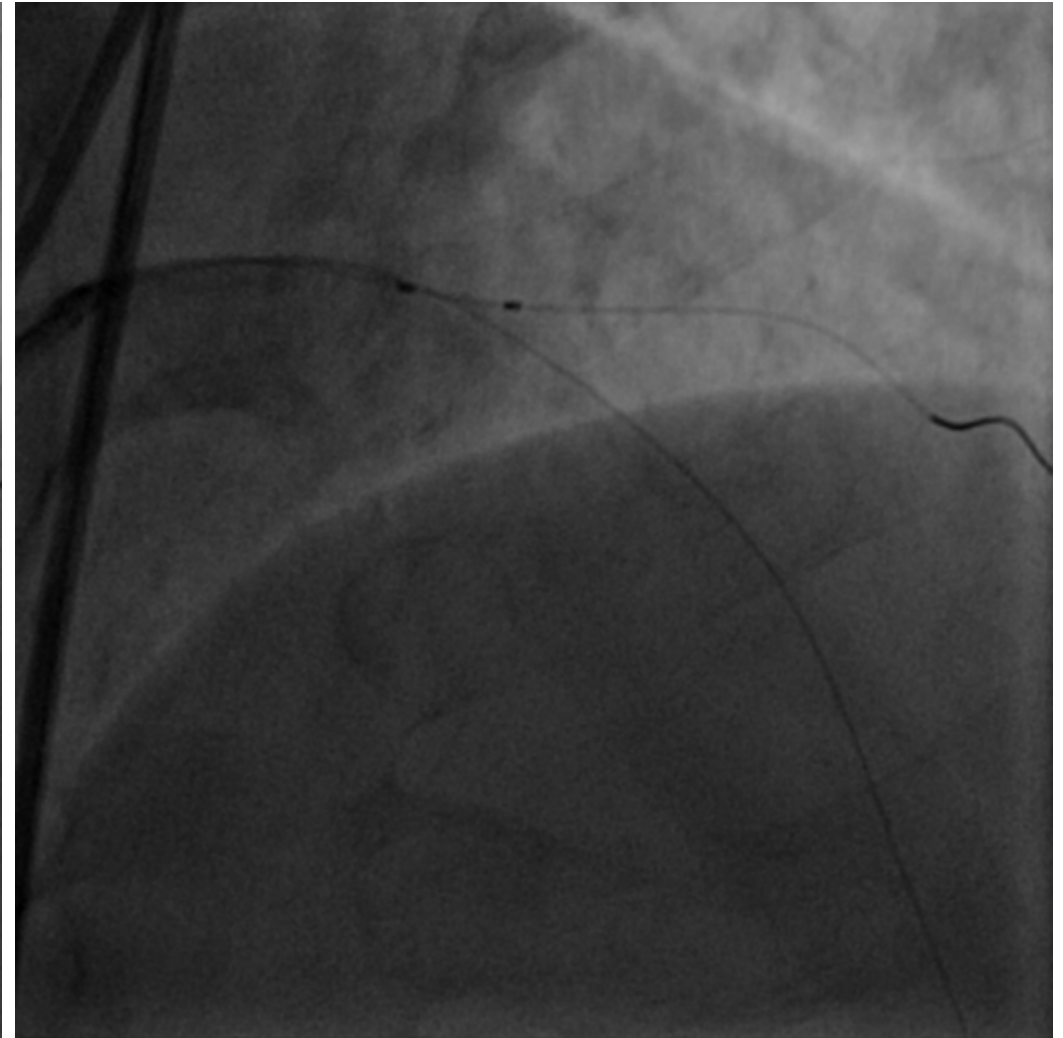


# Procedure

LAD lesion serially pre dilated with  
2.0x09 mm Maverick Balloon

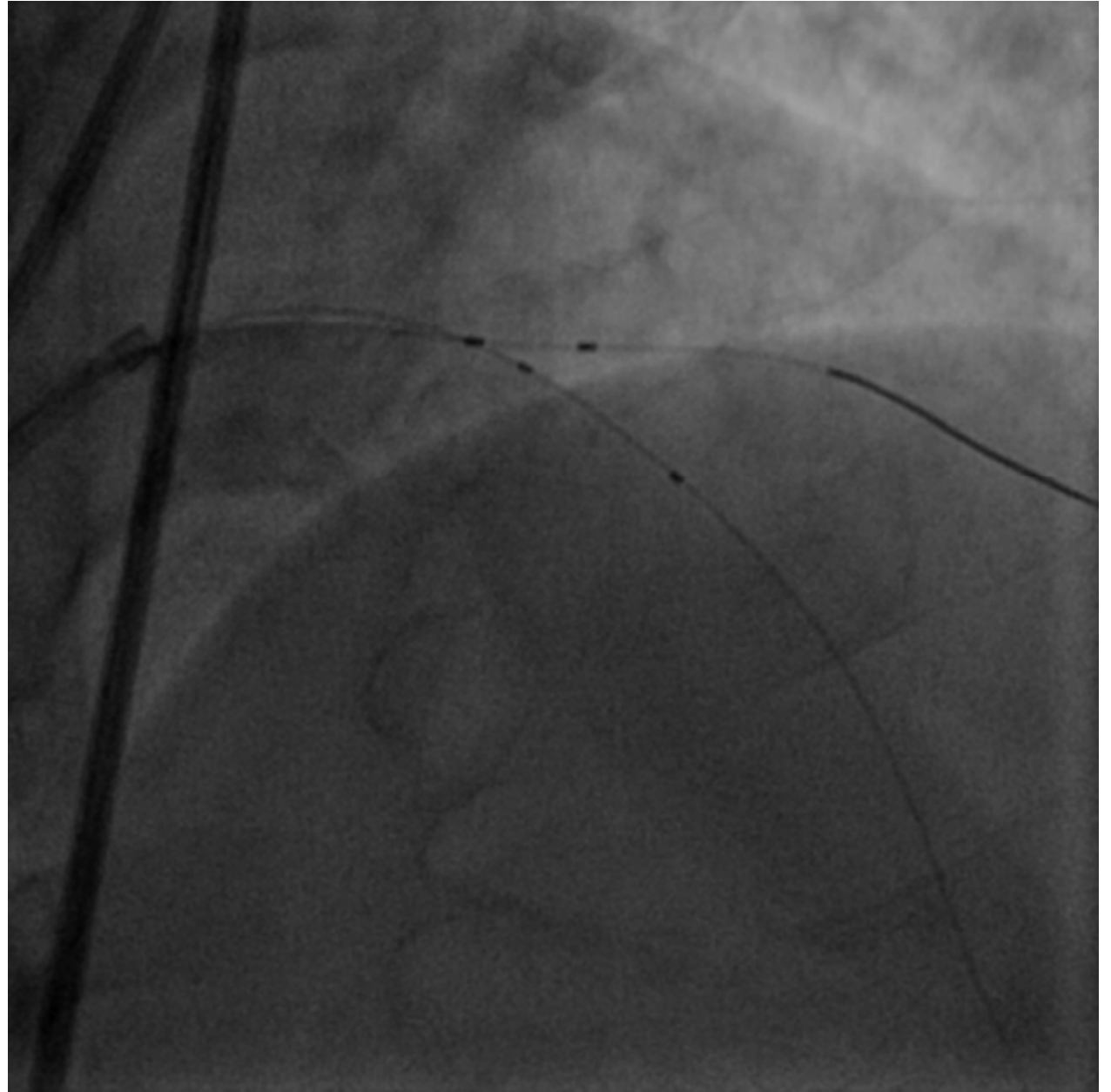


D1 dilated with 1.5x12 mm Mini  
Trek Balloon



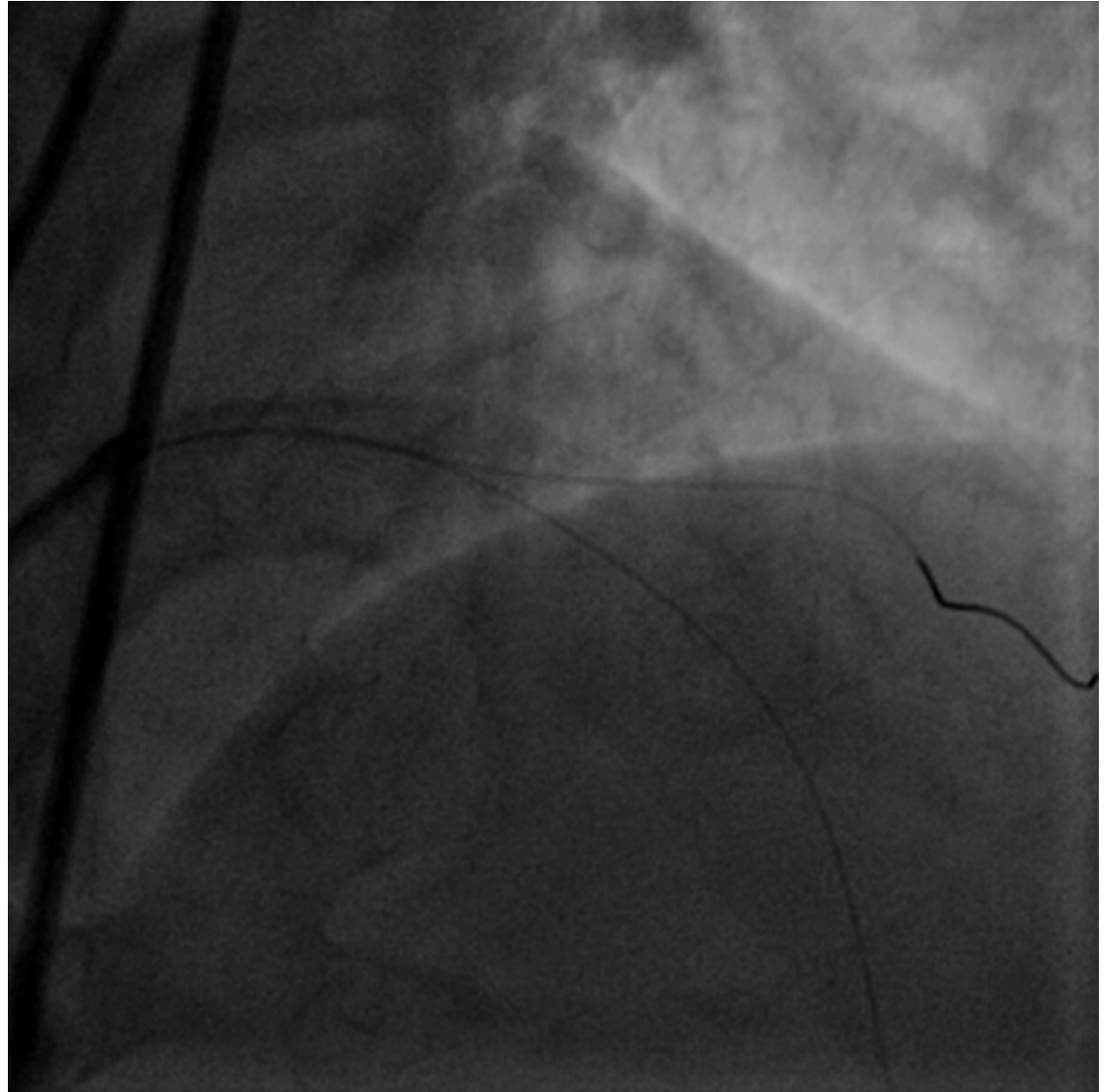
# Procedure

- LAD - D1 Kissing Balloon  
Angioplasty done with 2.5x14 mm Falcon Balloon in LAD & 2.0x09 mm Maverick Balloon in D1



# Procedure

- After Predilatation with Kissing Balloon-well dilated D1 & LAD with mild residual narrowing of LAD.



# BVS Stenting of LAD with Jailed D1-wire

- LAD stenting done with **3.5x28 mm ABSORB Stent at 16 atm for 22 sec** & re dilated at 16 atm for 30 sec.
- Post dilatation done with **3.5x12 mm Trek NC Balloon up to 16 atm.**





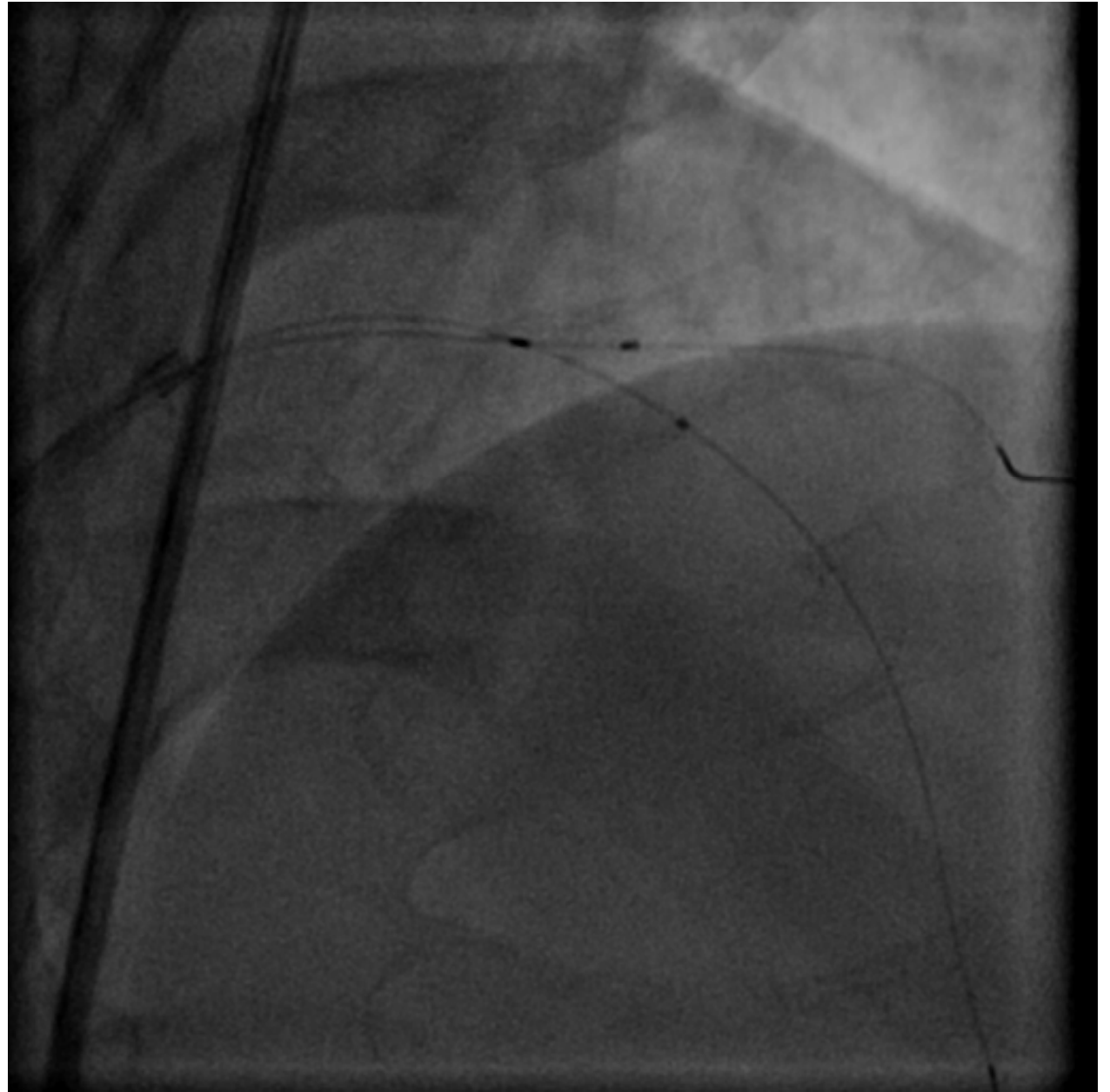
# Procedure

- Post Absorb Implantation, narrowing of D1 ostium due to plaque shift with well implanted LAD stent.



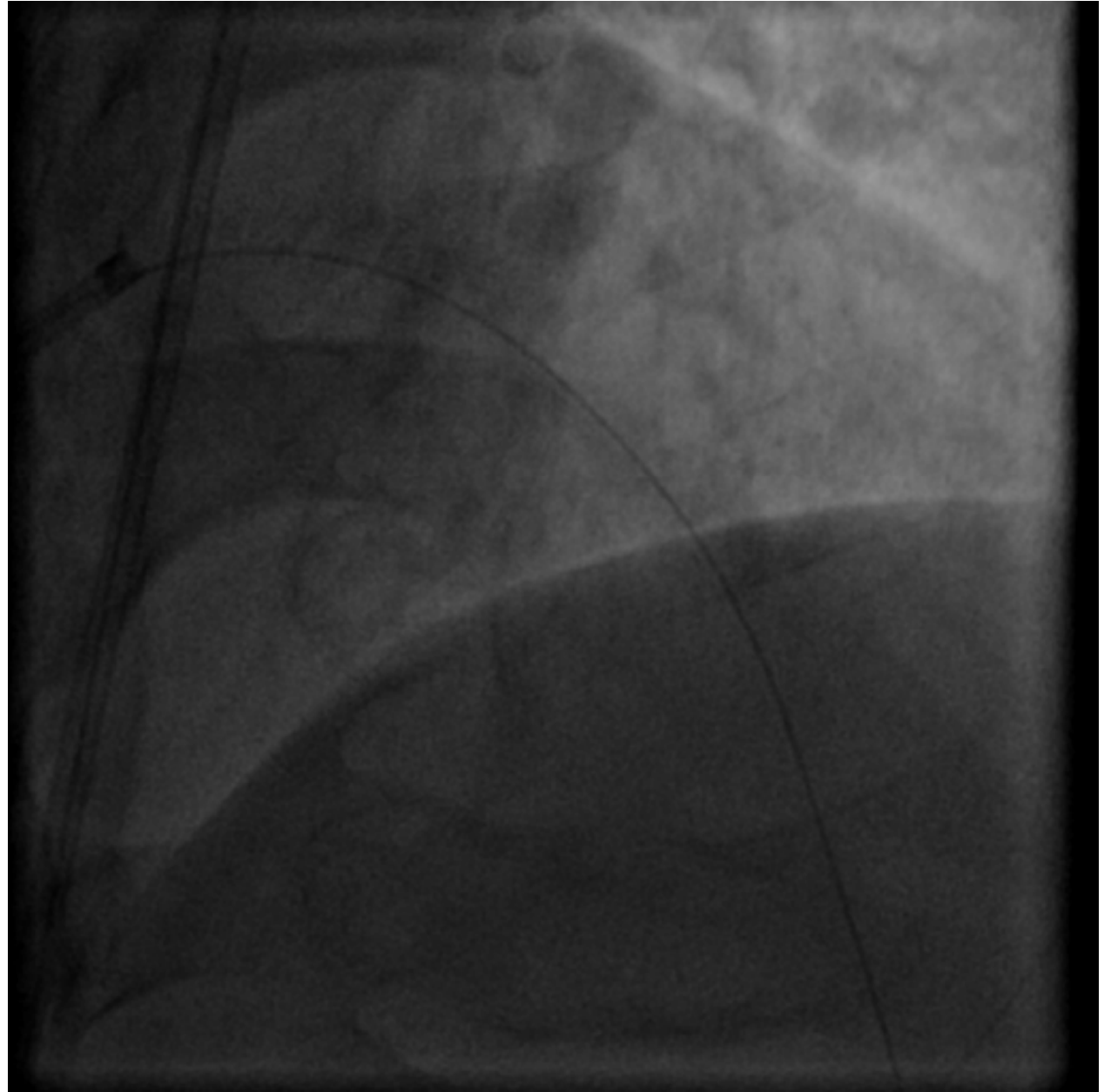
# Post BVS-SKB

- D1 re entered with another BMW wire & jailed BMW wire removed from D1.
- Then LAD-D1 Kissing Balloon Angioplasty done with LAD-3.5x12 mm Trek NC Balloon & D1-2.0x09 mm Maverick Balloon

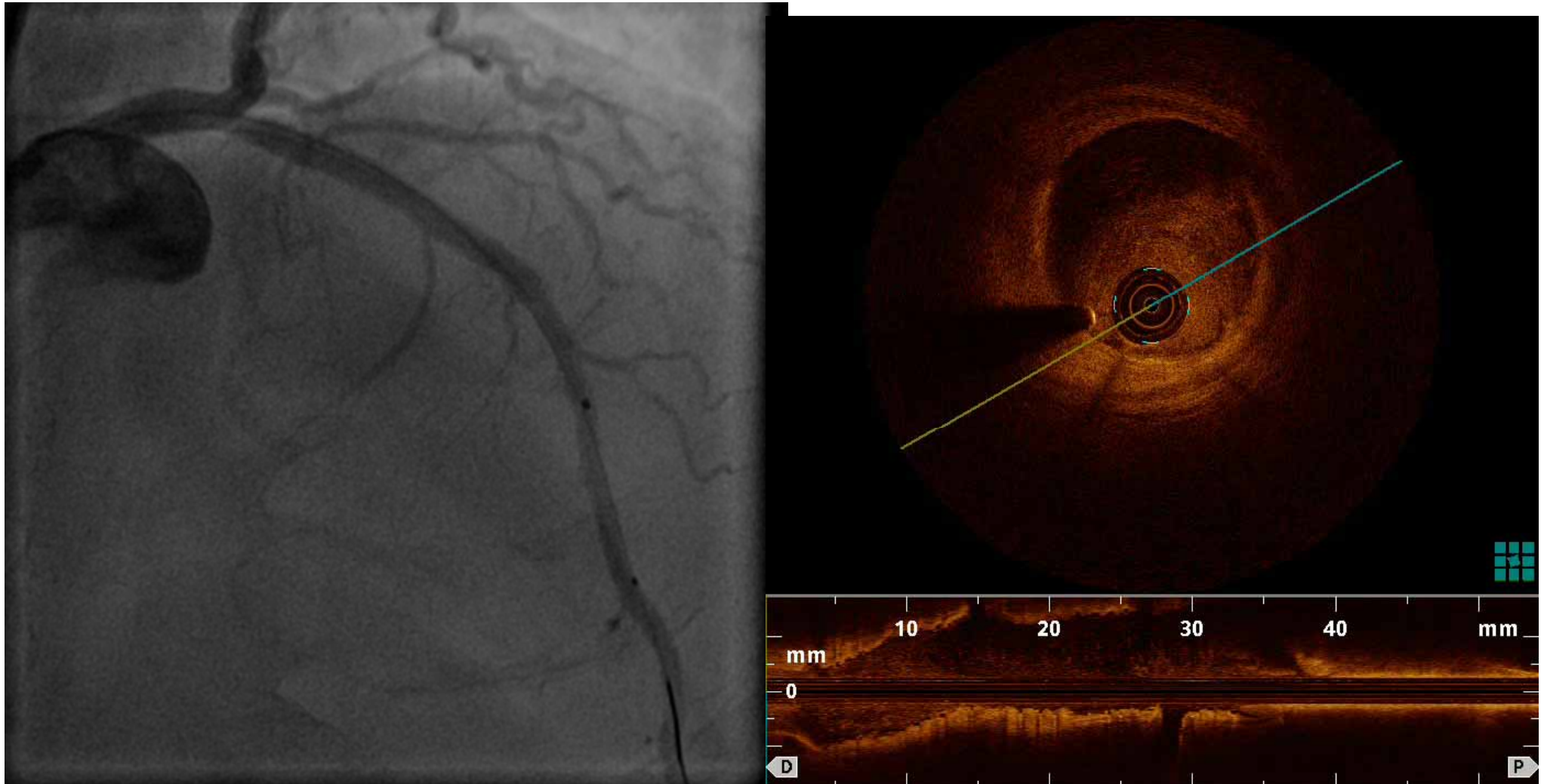


# Post Stenting Angio

- After Post Kissing Balloon good results with TIMI III Flow & No Complications



Post stenting OCT Study done shows well opposed stent struts with mild dissection at distal segment of the stent



# Post stenting OCT Study done shows well opposed stent struts with mild dissection at distal edge of the stent

1\271

Patient Name: RAM REDDY.E DR.SRIDHAR KASTURI

Patient ID: 0648

Sex: M

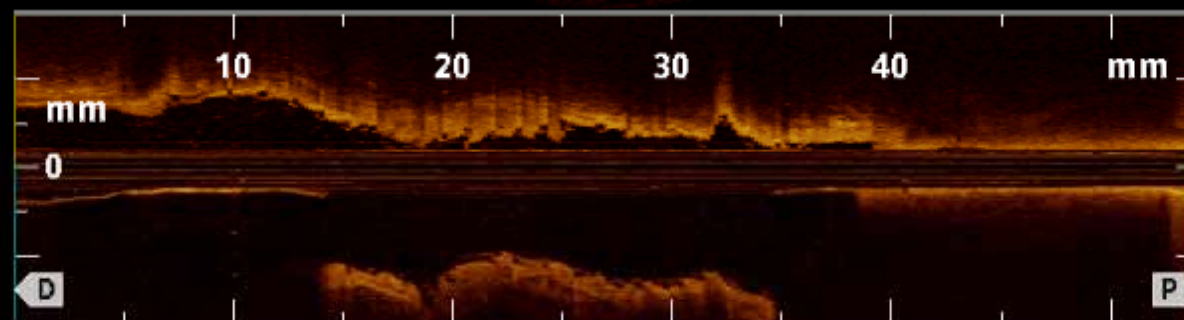
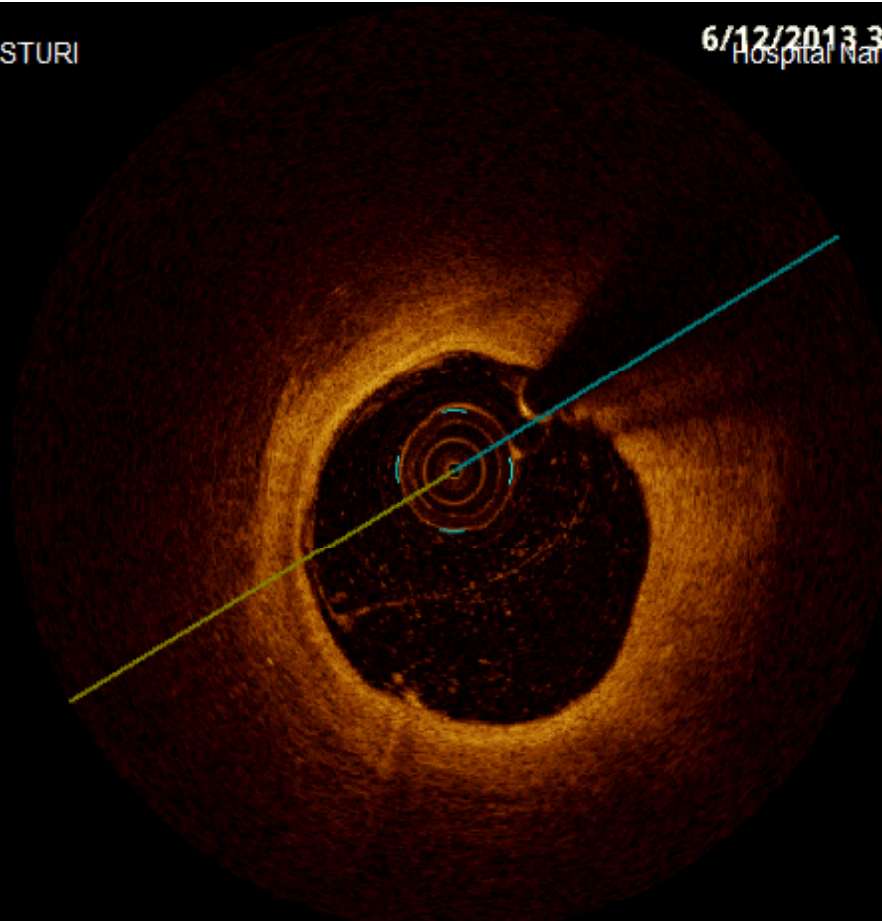
Date: 6/12/2013

6/12/2013 3:31:49 PM

Hospital Name: Sairudaya Heart Institute (Sunshine Hospital)

0001

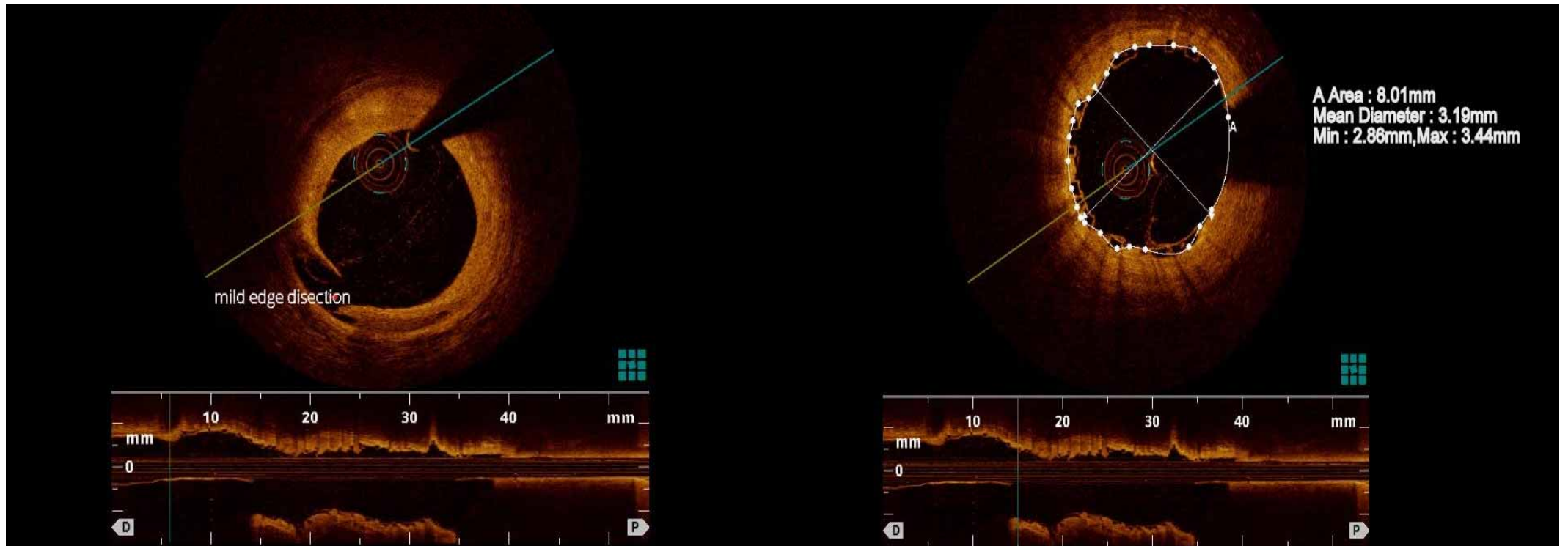
Physician Name:



Zoom: 85%  
PS:  
VOI:  
WC: 127.00  
WW: 254.00



# OCT Study



# The final OCT Image shows good result with very good apposition

This image is not for diagnostic purposes

1/1

A Area: 8.01mm<sup>2</sup>

Min Diameter: 3.19mm

Min: 2.86mm, Max: 3.44mm

6/12/2013 3:31:50 PM

Hospital Name: Sahrudaya Heart Institute (Sunshine Hospital)

0001

Physician Name:

Patient Name: RAM REDDY.E DR.SRIHARIPATI

Patient ID: 0648

Sex: M

Date: 6/12/2013



Zoom: 91%

PS:

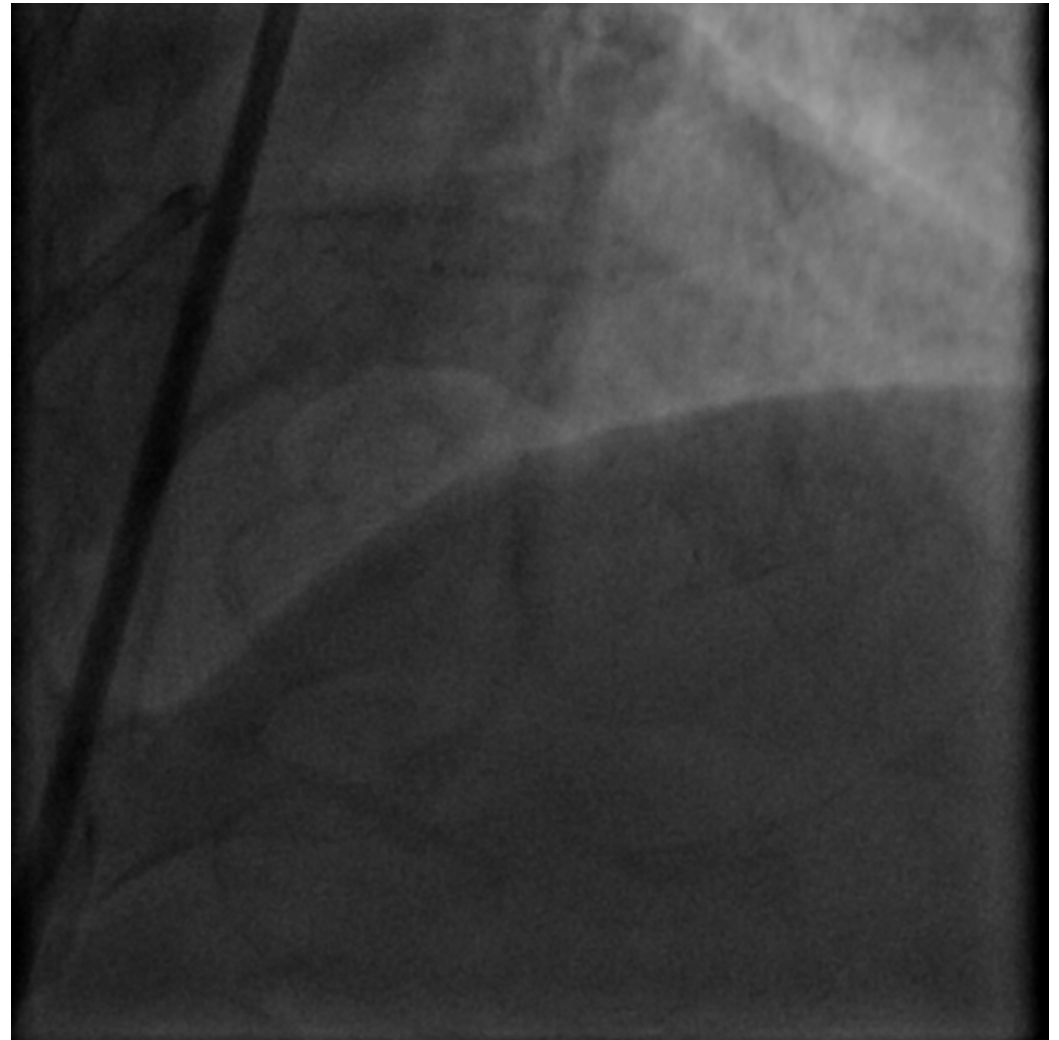
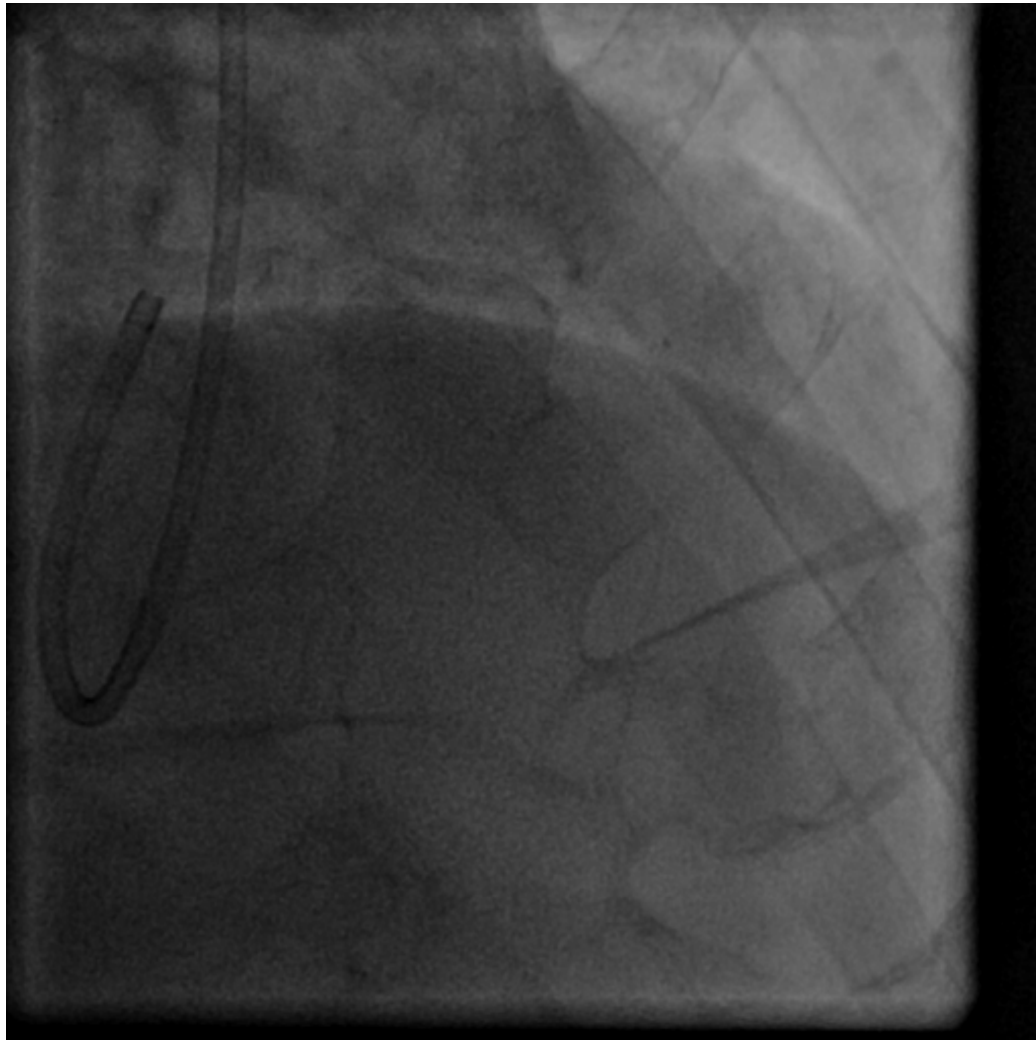
VOI:

WC: 127.00

WW: 254.00



Final Result- check angio shows good result with  
TIMI III flow



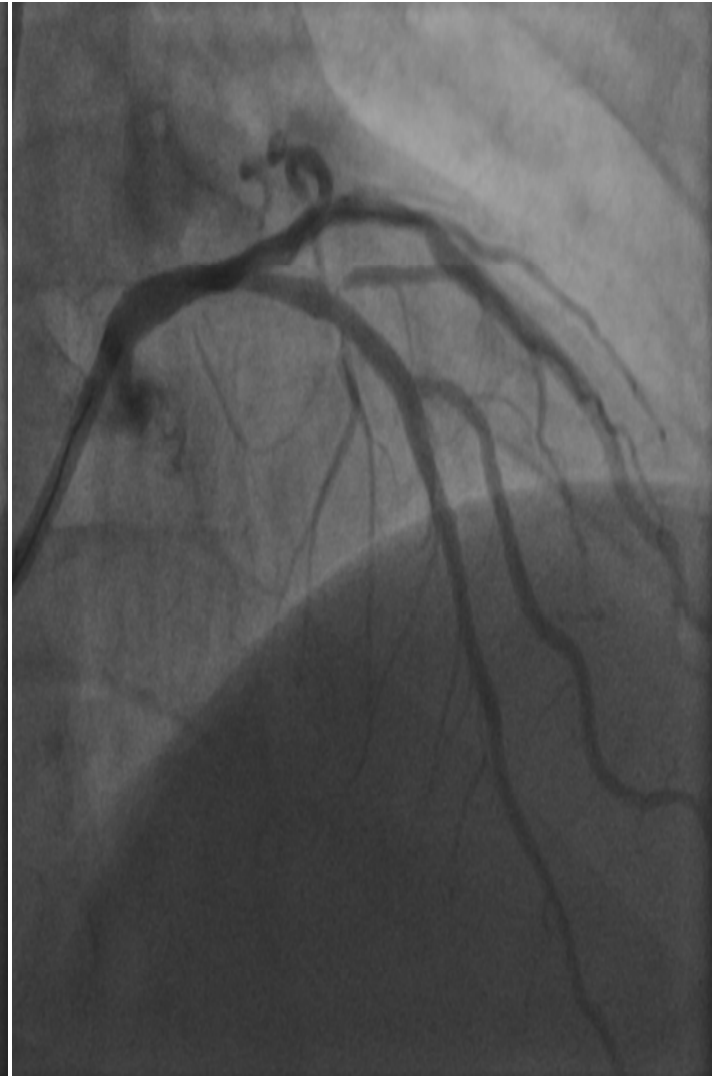
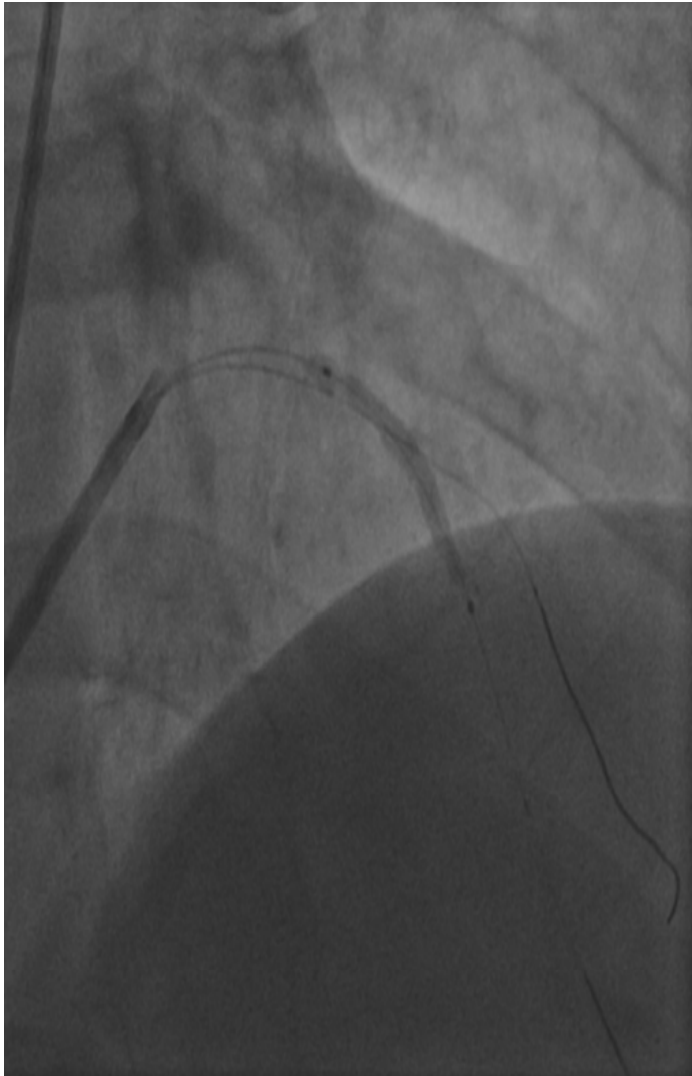


# BVS-Bifurcation Stenting of LAD

CAG-Mid LAD 95%  
lesion

Mid LAD stenting with  
3.0 x 28mm Absorb  
Stent (BVS)

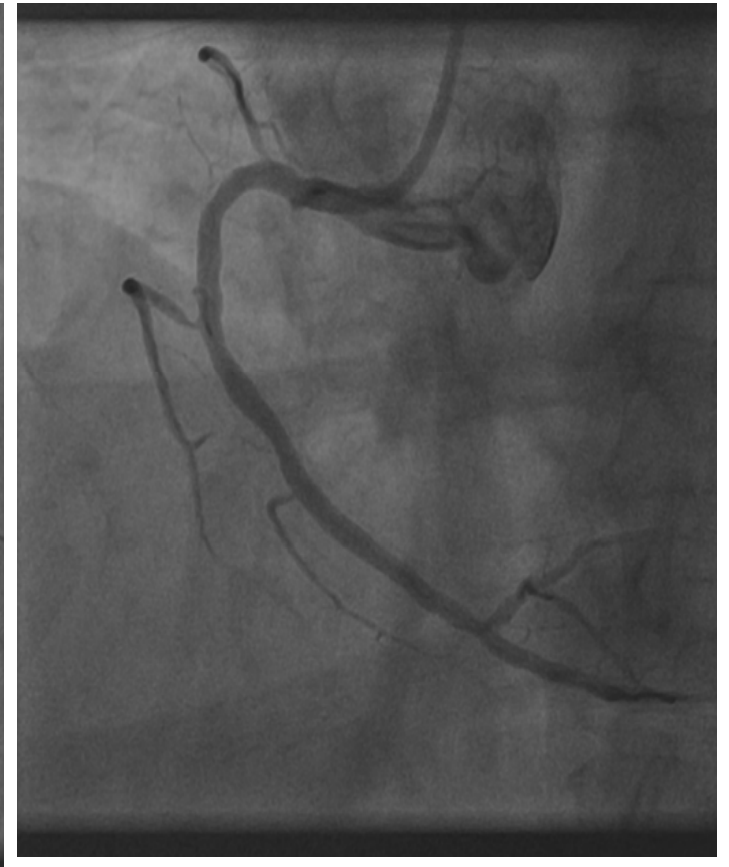
Good TIMI III Flow



# BVS-Bifurcation Stenting of distal RCA

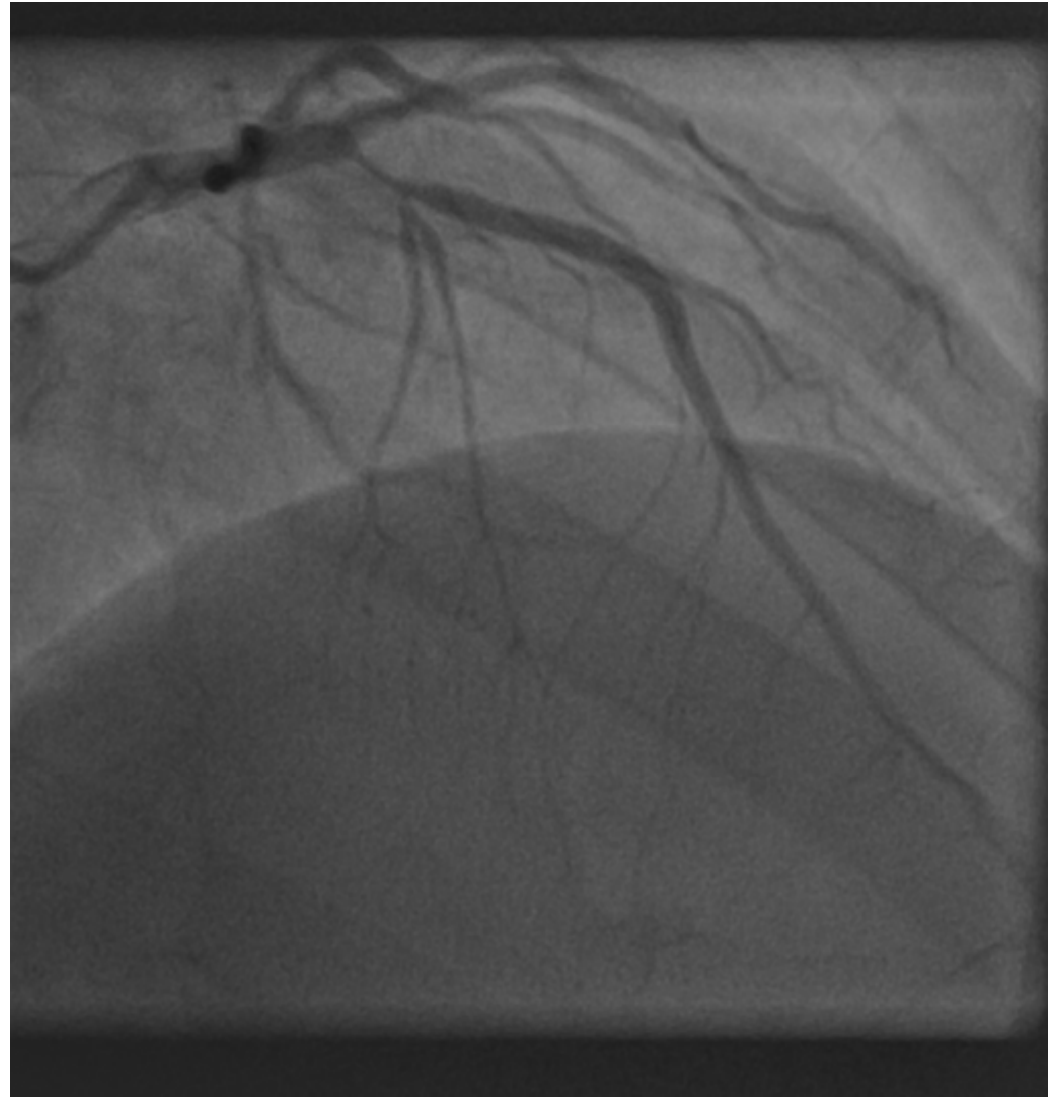
RCA total Occluded

Distal RCA Bifurcation Stenting done  
with BVS 3.0X28mm



# BVS-Bifurcation Stenting of LAD

CAG-mid LAD 90% stenosis



# BVS-Bifurcation Stenting of LAD

Kissing Balloon Technique  
Passed wires in LAD and D1

Final Result



# Bifurcation Stenting-BVS

- Choose appropriate size of BVS
- Single stent strategy is ideal.
- If two stent strategy-T-stenting or T TAP with minimal protrusion(only if main vessel is larger in size),some times V-stenting.
- Avoid crush, mini crush, culotte and SKS- stenting.
- Avoid in highly calcified, tortuous and acute bend lesions.

# Conclusion

- OCT Guided PCI will be very useful in reducing incidence of Stent Restenosis and Stent Thrombosis by sizing appropriate stent diameter and length, detecting any uncovered dissection flaps, improperly opposed stent struts and also detects stent fractures.