

21st CARDIOVASCULAR
SUMMIT

TCTAP, 2016

APRIL 26 – 29, 2016
COEX, SEOUL, KOREA

EXOTIC INTERVENTIONS – OCT
GUIDED

BRS in Complex PCI

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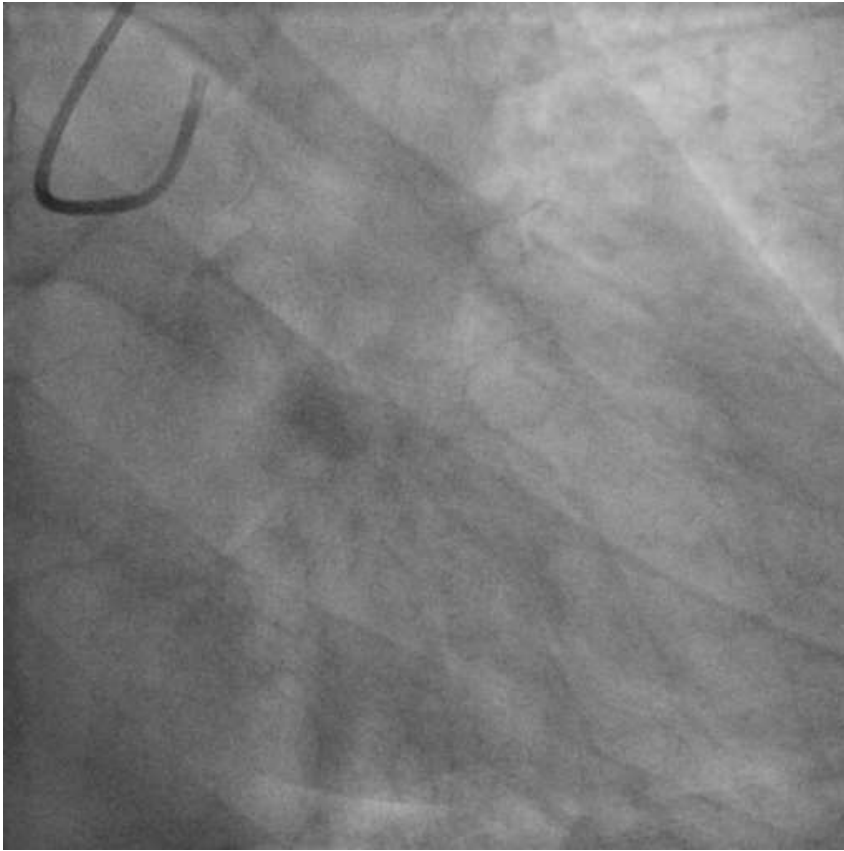
Director, Interventional Cardiology

Fortis Escorts Hospital, Jaipur

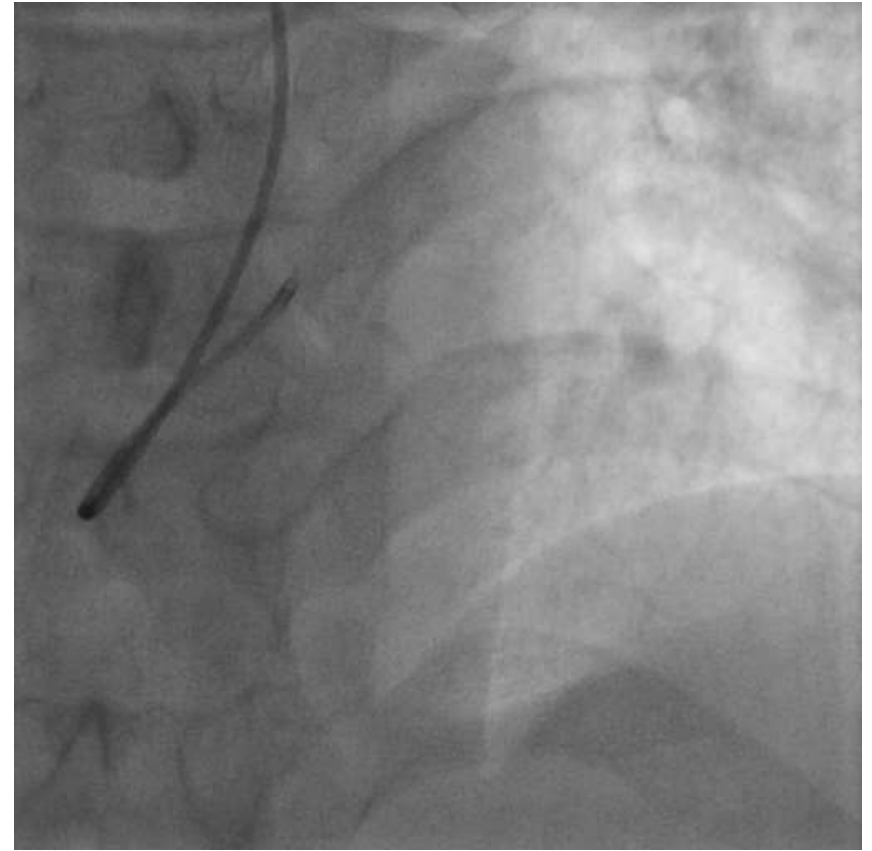
Case 1

- ❑ Mr. AK, 42 year old, presented a short time after ACS during his travel overseas. He had received medications (anti-anginals and anti-platelets as troponins were found elevated.
- ❑ No associated co-morbidities or known risk factors
- ❑ Physical examination findings: unremarkable.
- ❑ Investigations:
 - ❑ ECG: Anterior NSTEMI
 - ❑ Echo: Mild LV dysfunction with hypokinetic LAD territory.

Coronary angiography

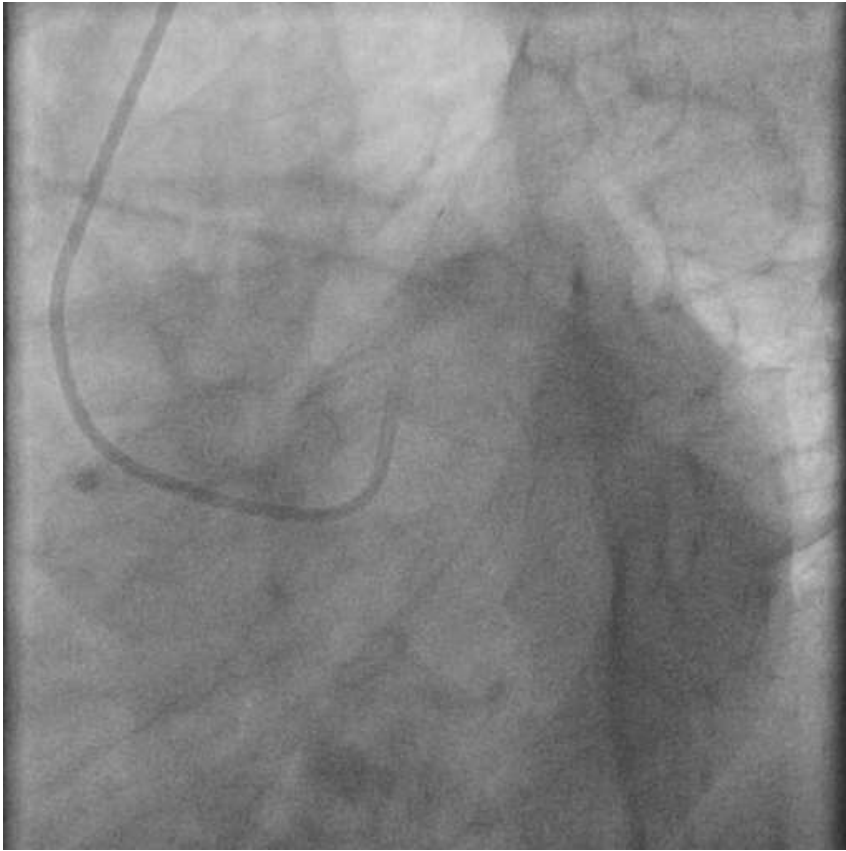


RAO Caudal



AP cranial

Coronary angiography (contd.)



LAO Caudal

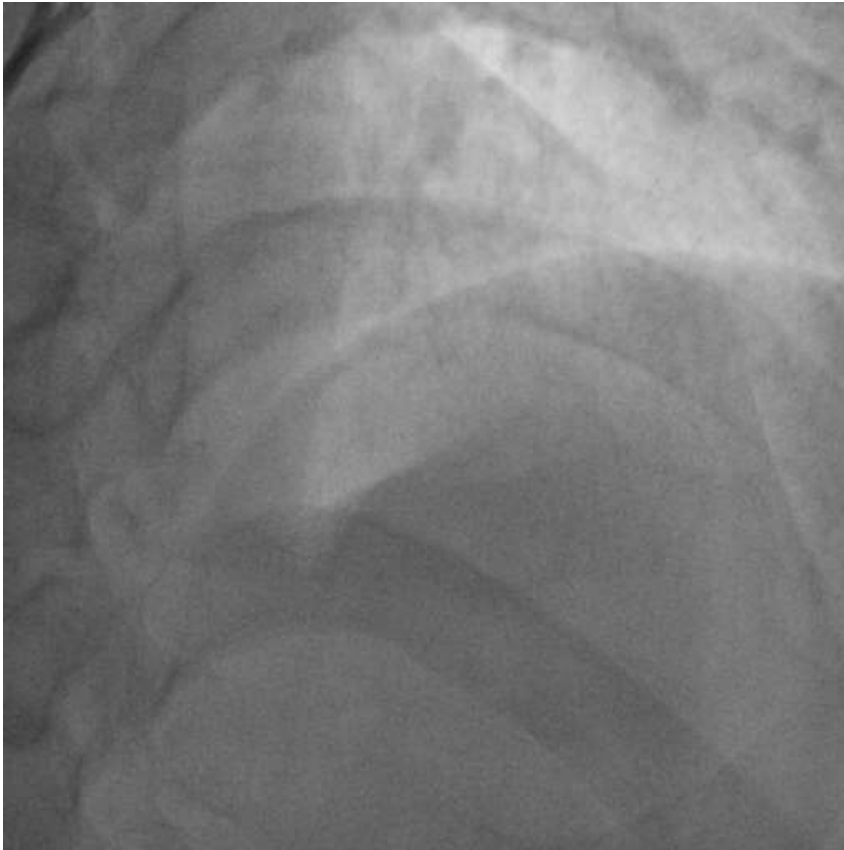


LAO

PCI strategy

- ❑ Wire LAD, prep the vessel well using NC balloon
- ❑ Plan for scaffolding with BRS – may be two scaffolds need to cover the long diseased segment

PTCA

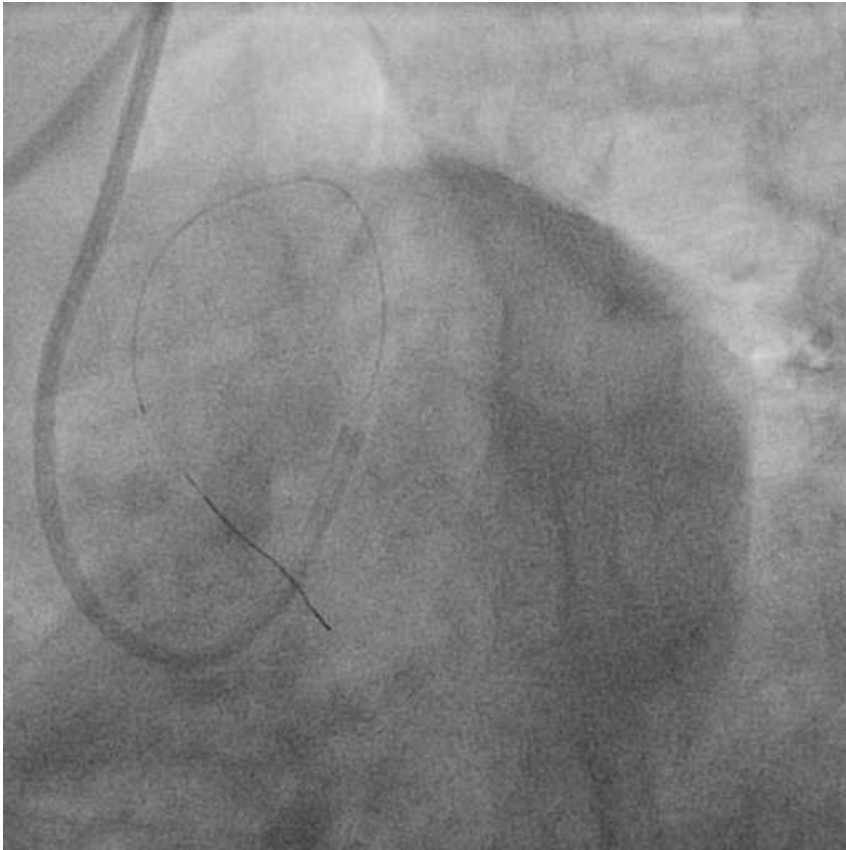


7 Fr XB 3.5 guide

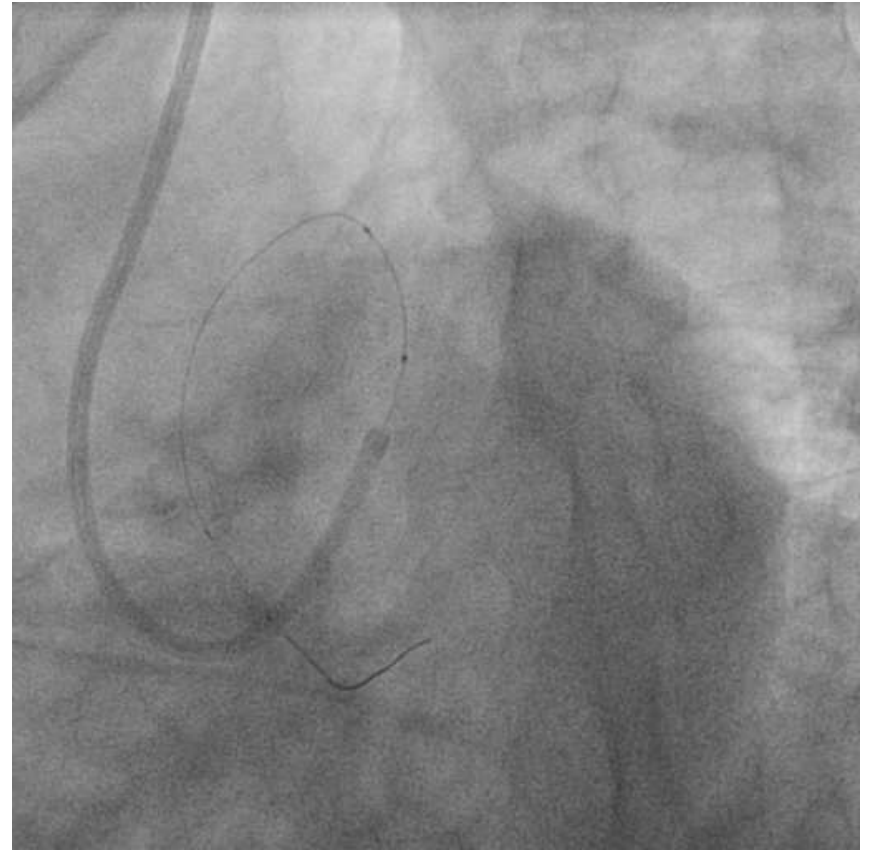


LAD wired with BMW and dilated with
2.0 x 12 and 3.0 x 12 NC balloon

PTCA (contd.)

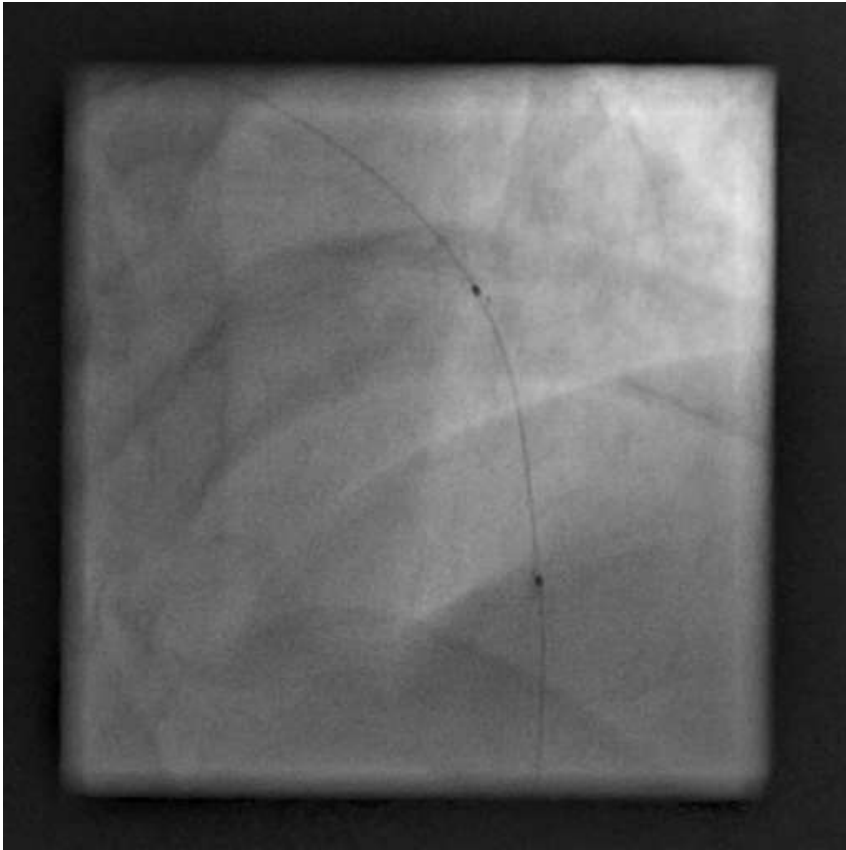


LAO Caudal

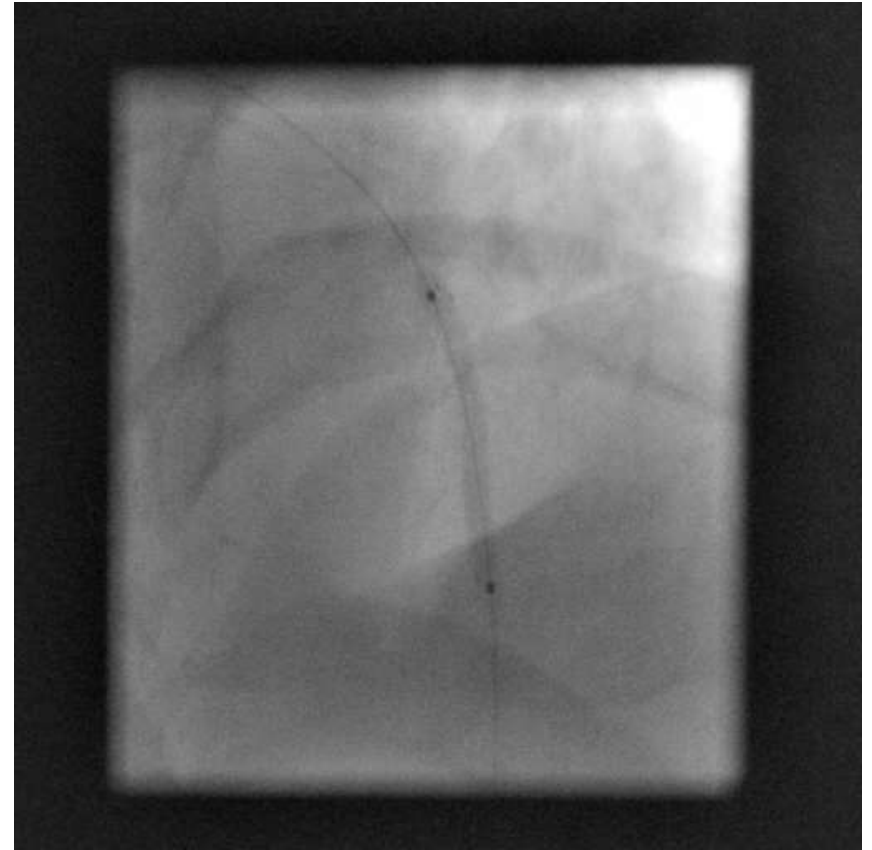


3.5 x 28 Absorb positioned from ostia,
deployed at 6 atm; Post dilatated with
3.5 x 12 NC at 14-24 atm

PTCA (contd.)



Absorb 3 x 28

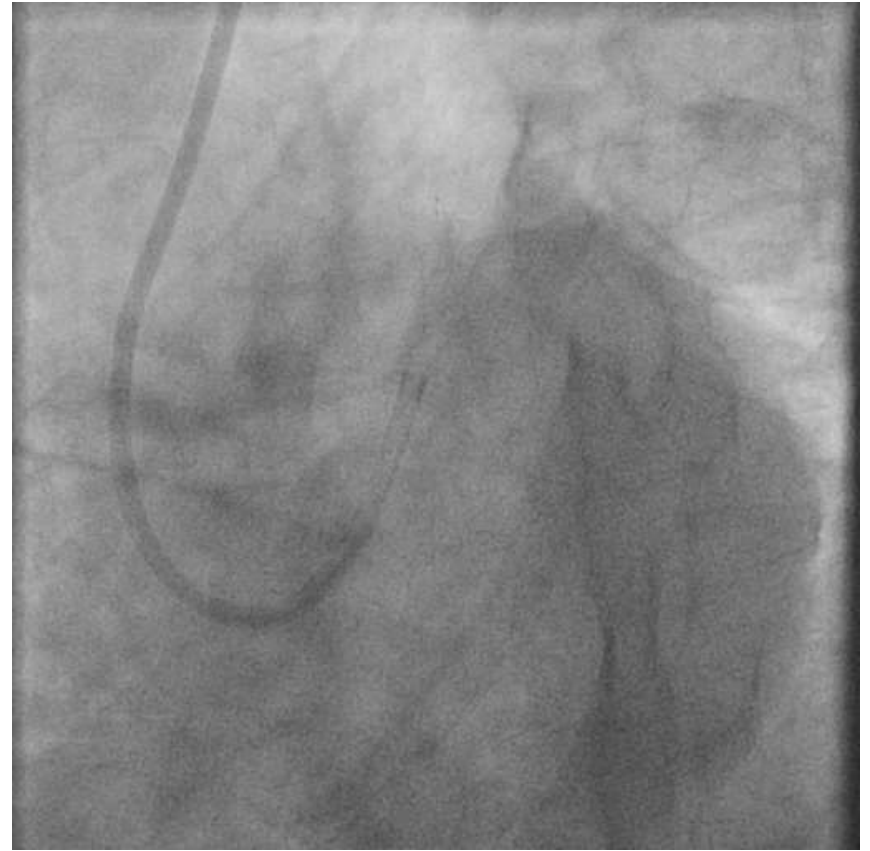


Deployed at 6 atm and post dilated
with 3x12 NC at 14-26 atm, proximally
3.6 x 12 at 14 atm

PTCA (contd.): Final Images

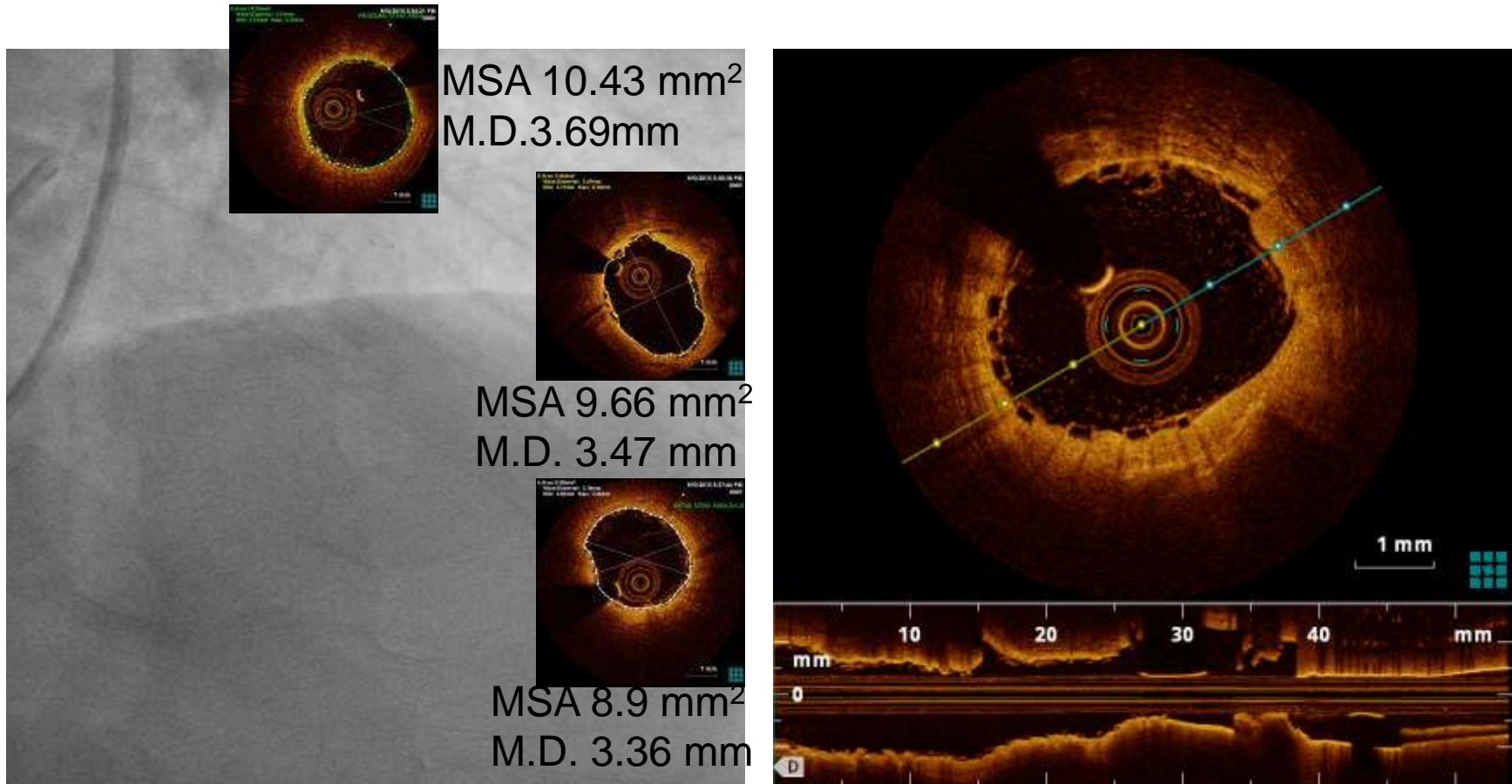


RAO Cranial



LAO caudal

OCT imaging



LAD	Distal	Mid	Proximal
MSA (mm ²)	8.9	3.47	10.43
Mean dia (mm)	3.36	3.47	3.69

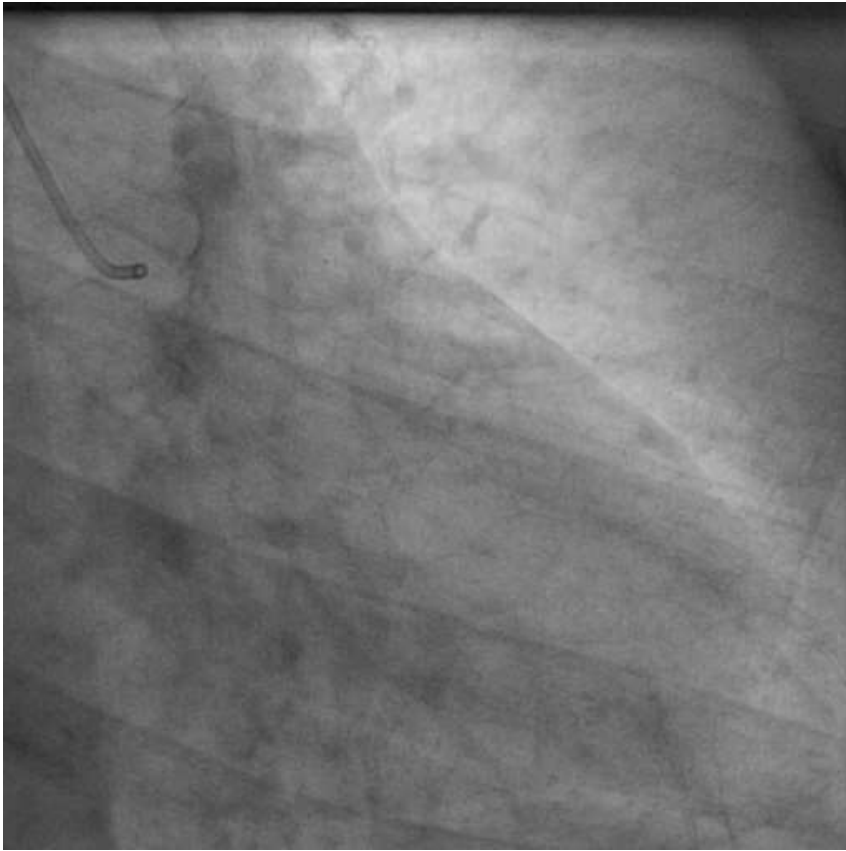
Key features of the case

- ❑ Long disease segment covered by two scaffolds
 - ❑ Ostial positioning with bifurcation angle 90°
 - ❑ Minimal overlap (side-to-side deployment)
- ❑ OCT guidance shows optimal deployment

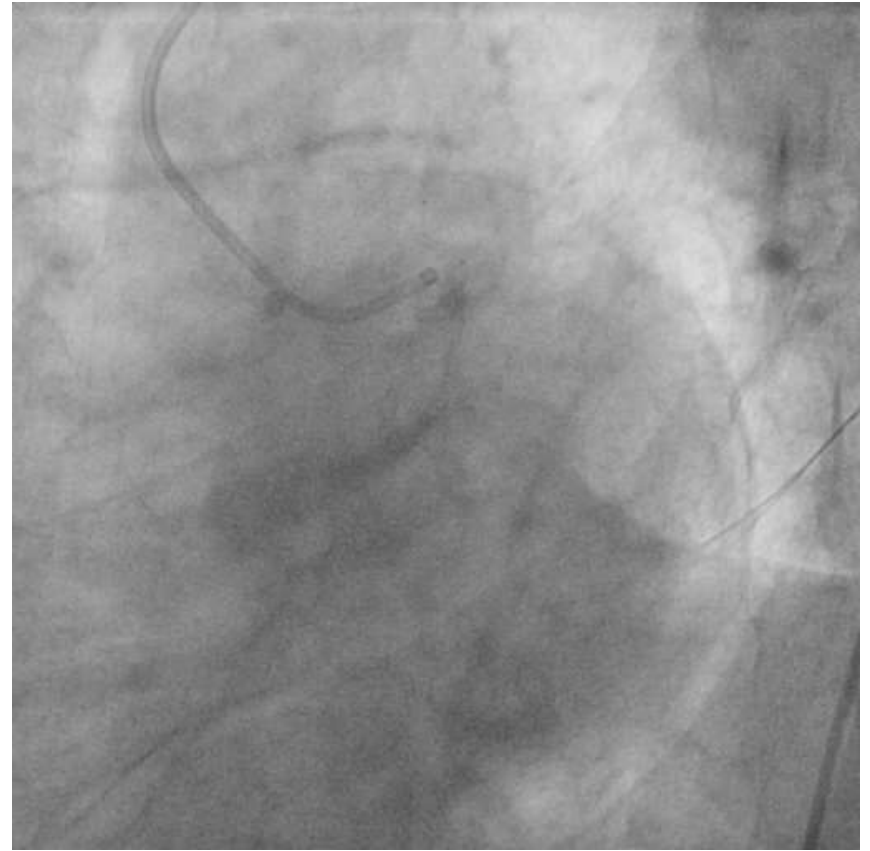
Case 2

- ❑ Mr. PK, 47 year old, presented ACS – unstable angina.
- ❑ He had earlier PTCA with BVS to ostio-proximal LAD about 13 months prior.
- ❑ Associated co-morbidities:
 - ❑ Diabetes – 5 years but good glycemic control on OHA
 - ❑ Hypertension – well controlled of medication
- ❑ Physical examination findings: unremarkable.
- ❑ Investigations:
 - ❑ ECG: Normal sinus rhythm (no ST-T changes)
 - ❑ Echo: Normal LV function with no RWMA.

Coronary angiography



RAO Caudal

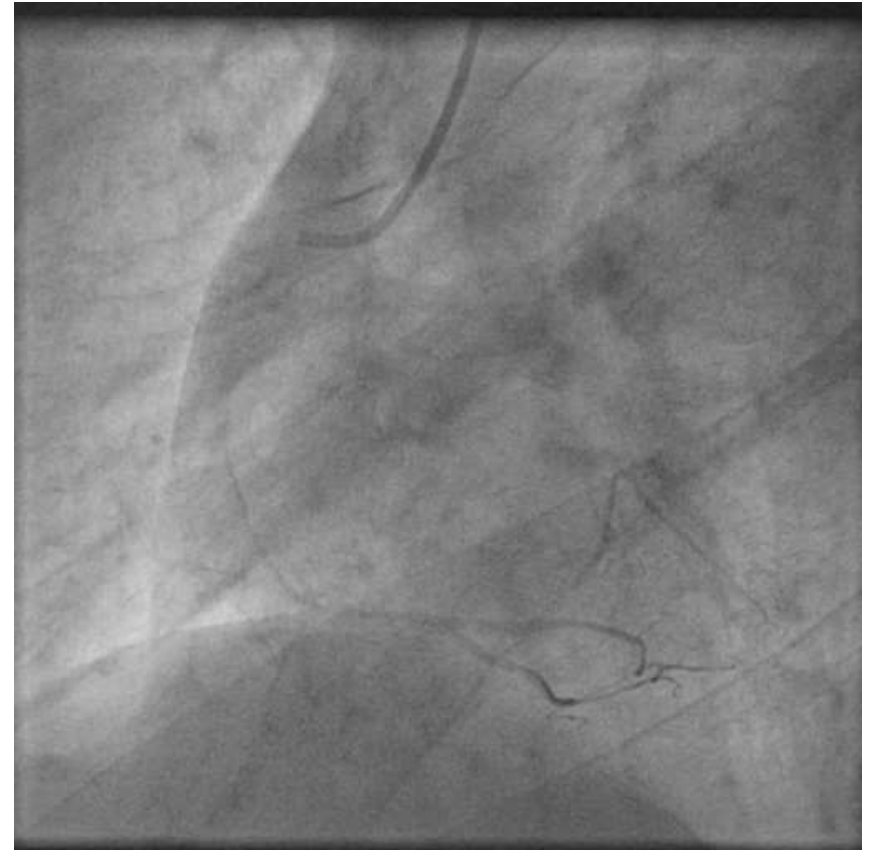


LAO caudal

Coronary angiography (contd.)

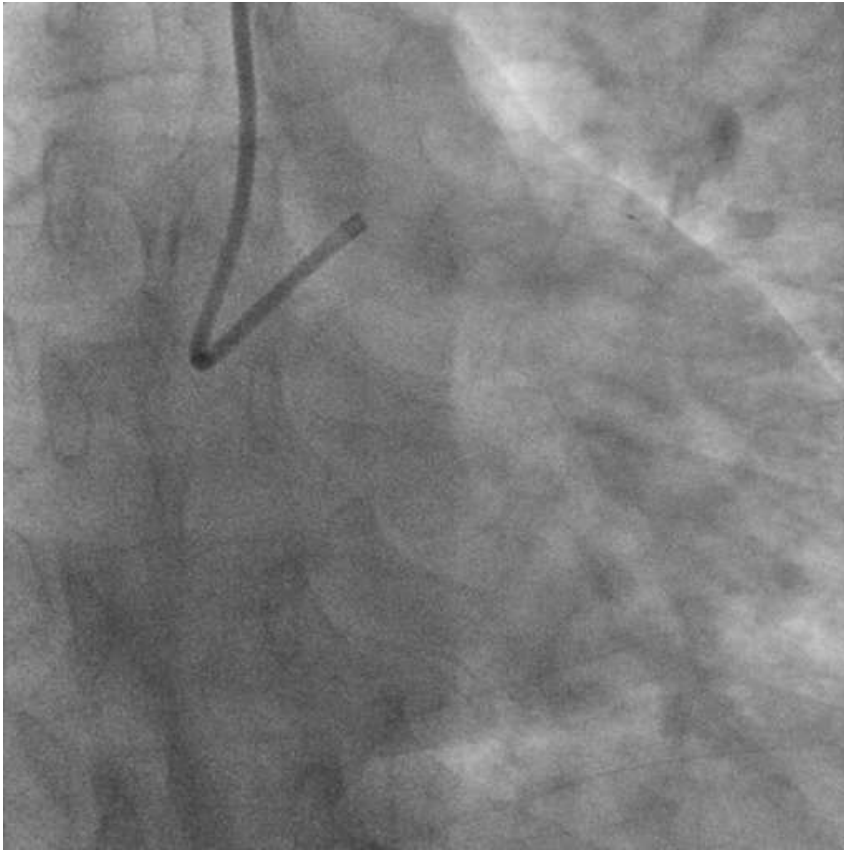


AP cranial

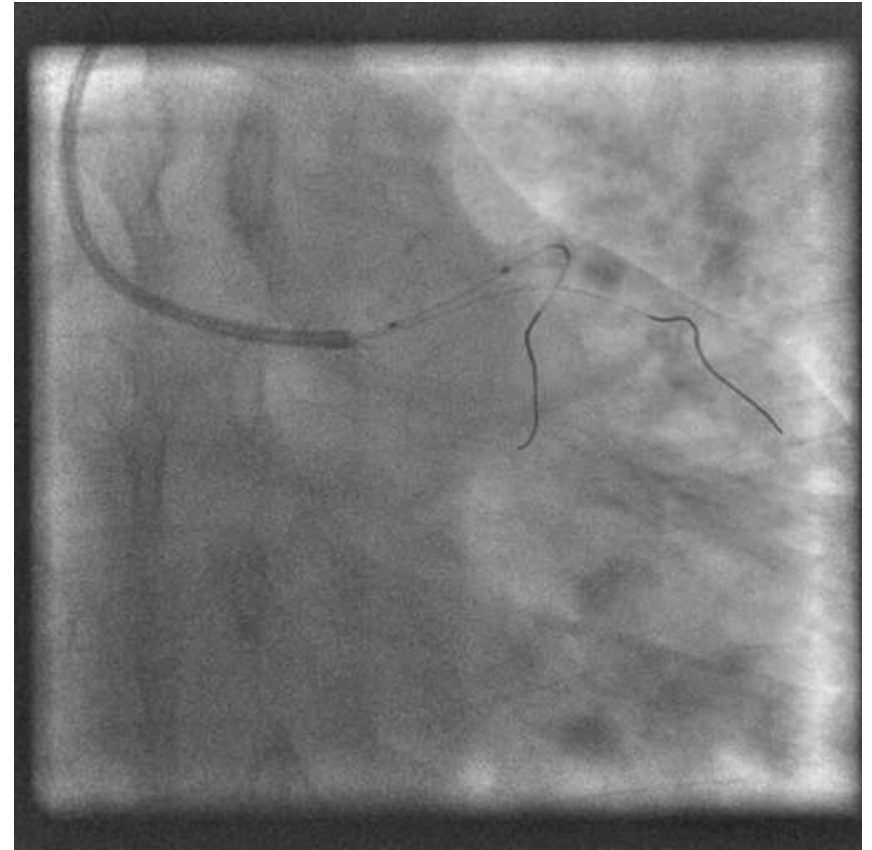


LAO

Did I go wrong some where? Lets review previous PCI images

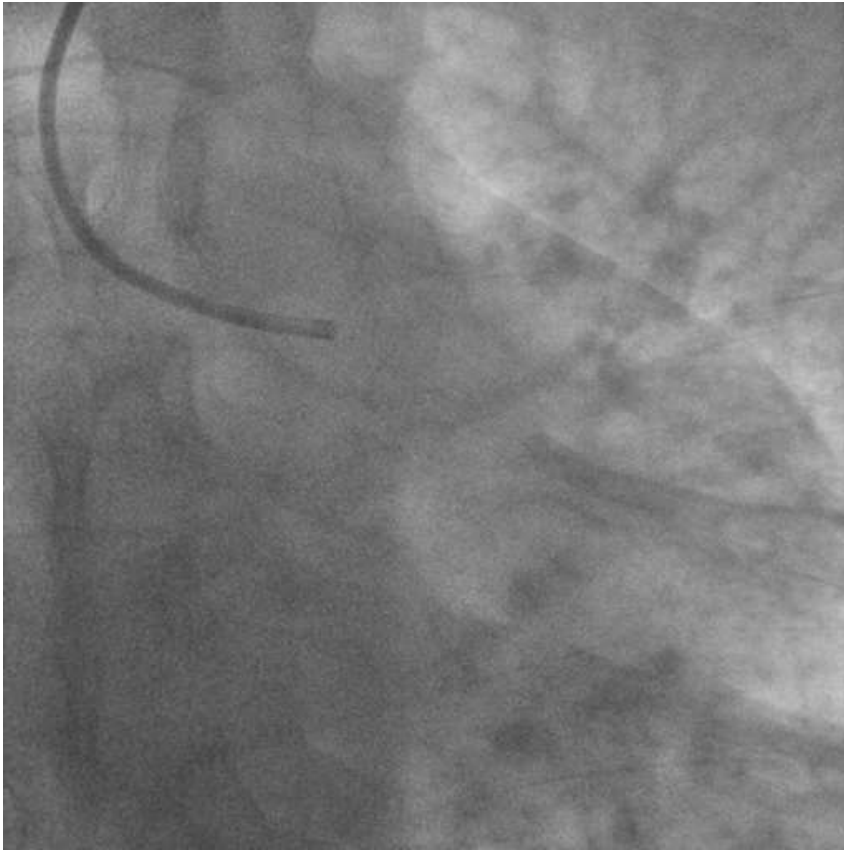


RAO Caudal

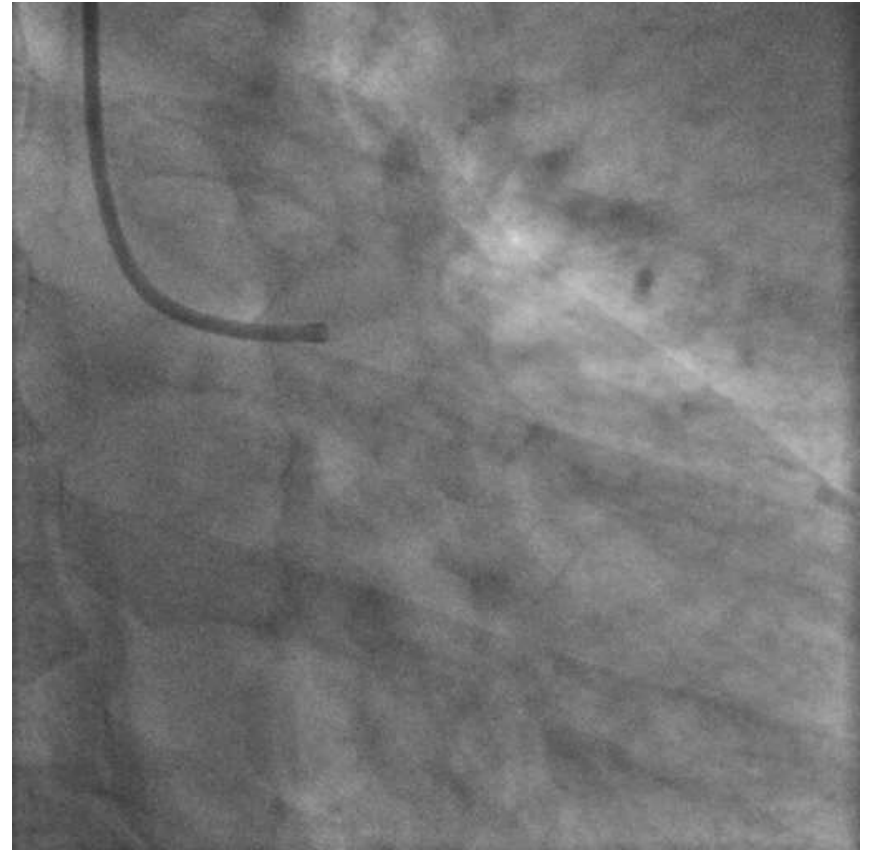


6 Fr XB 3, BMW in LAD and Sion in D1
3 x 12 NC balloon and 3.5 x 18
Absorb, post dilated with 3.75 x 10

Review of Final images of previous PCI

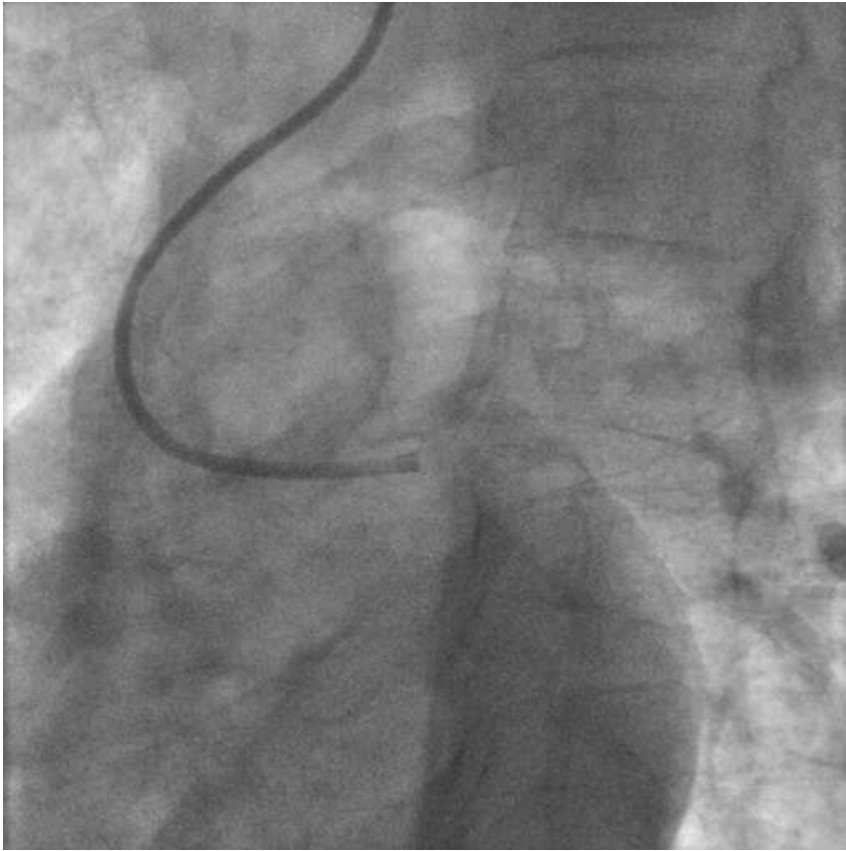


RAO Caudal

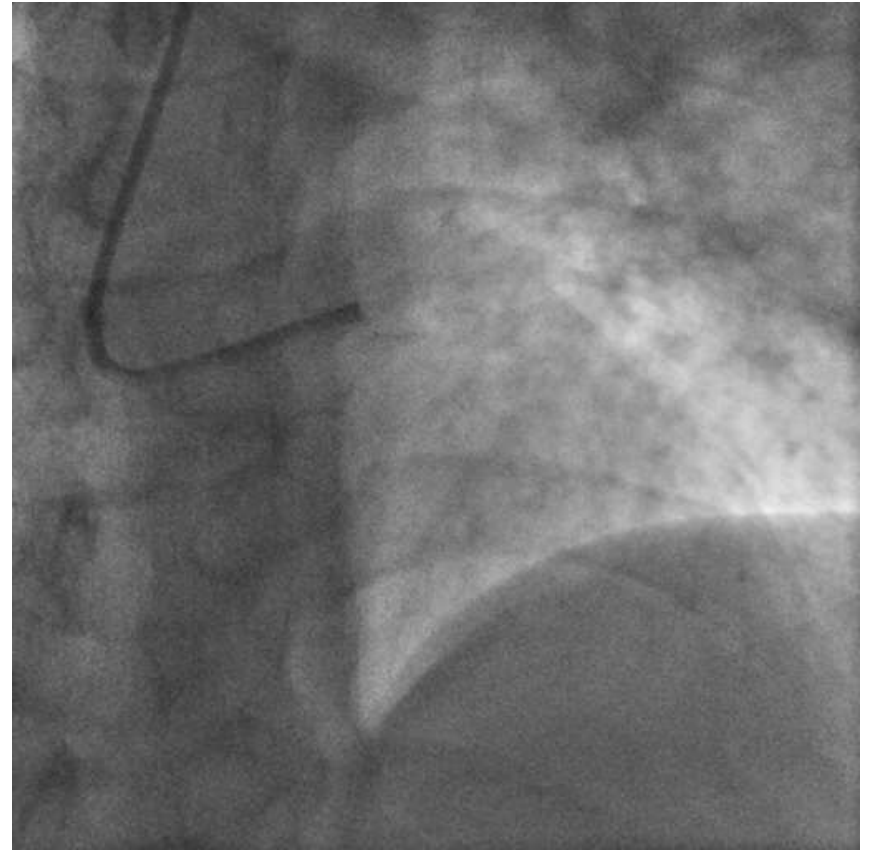


AP caudal

Review of Final images of previous PCI



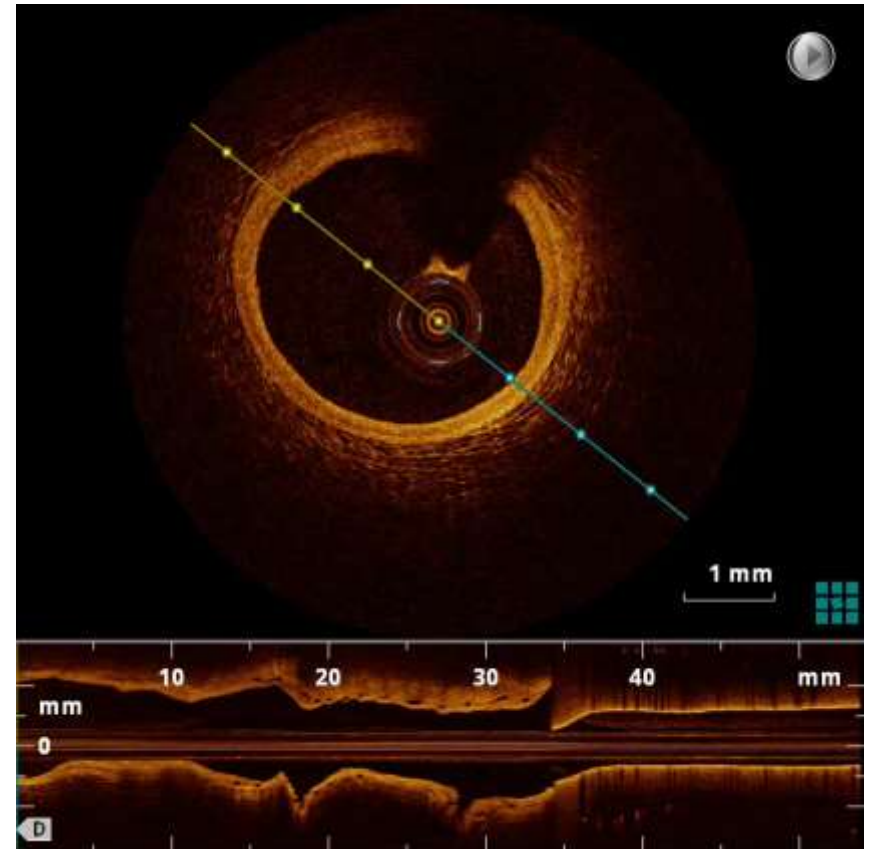
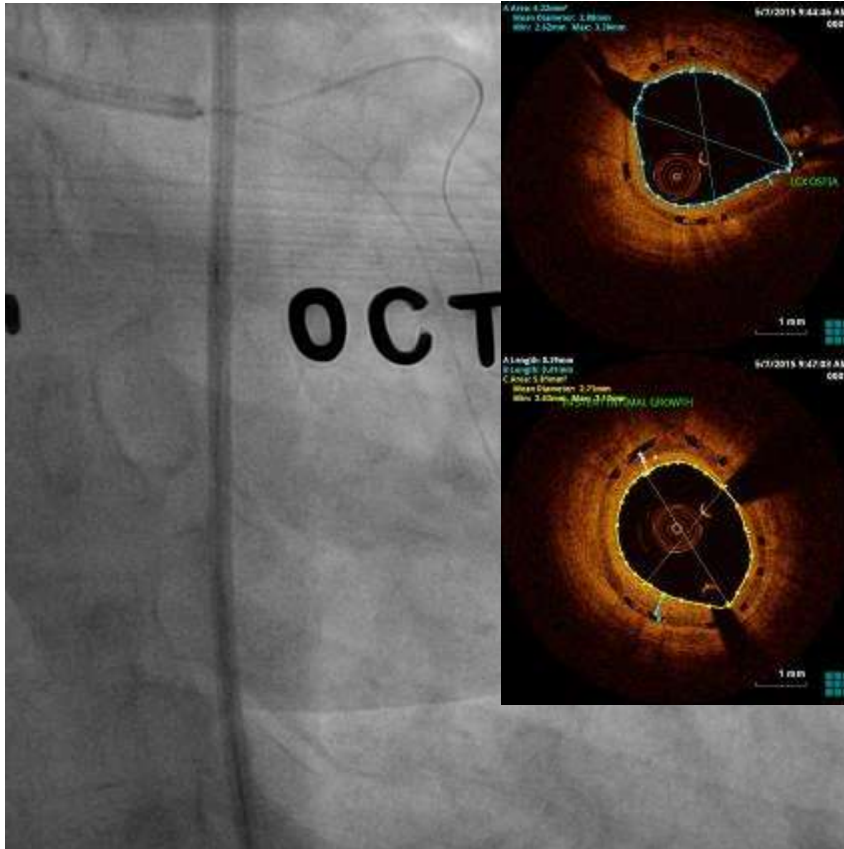
LAO Caudal



AP cranial

Let me check out with OCT

OCT



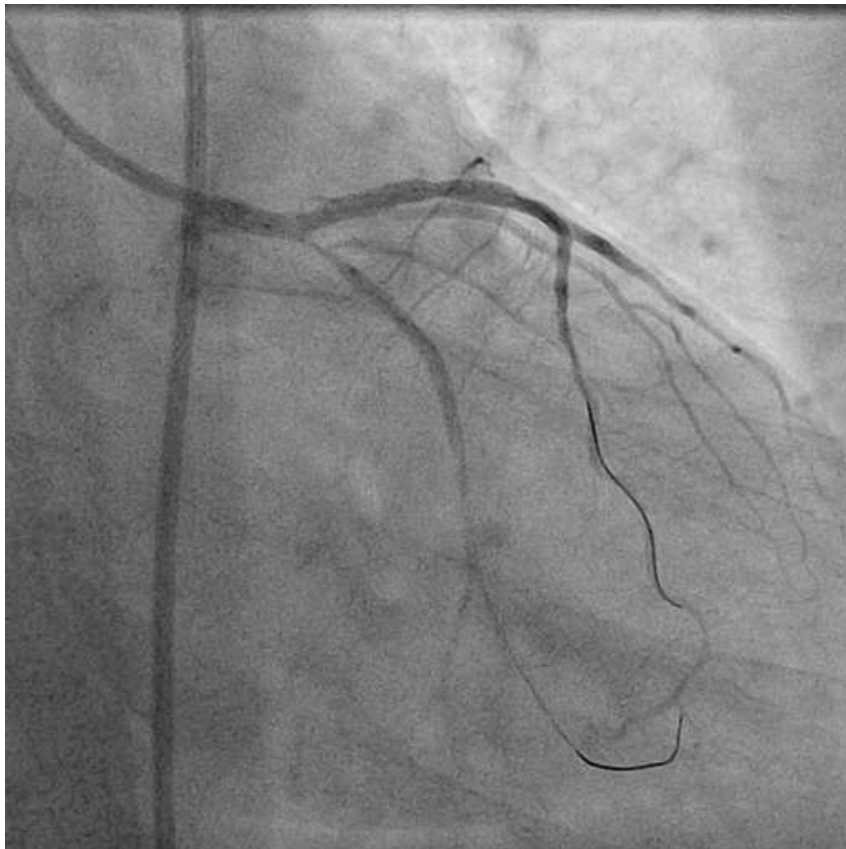
LAD	Distal	Mid	Proximal
MSA (mm ²)	6.75	5.02	7.7
Mean dia (mm)	2.93	2.52	3.14

PCI strategy

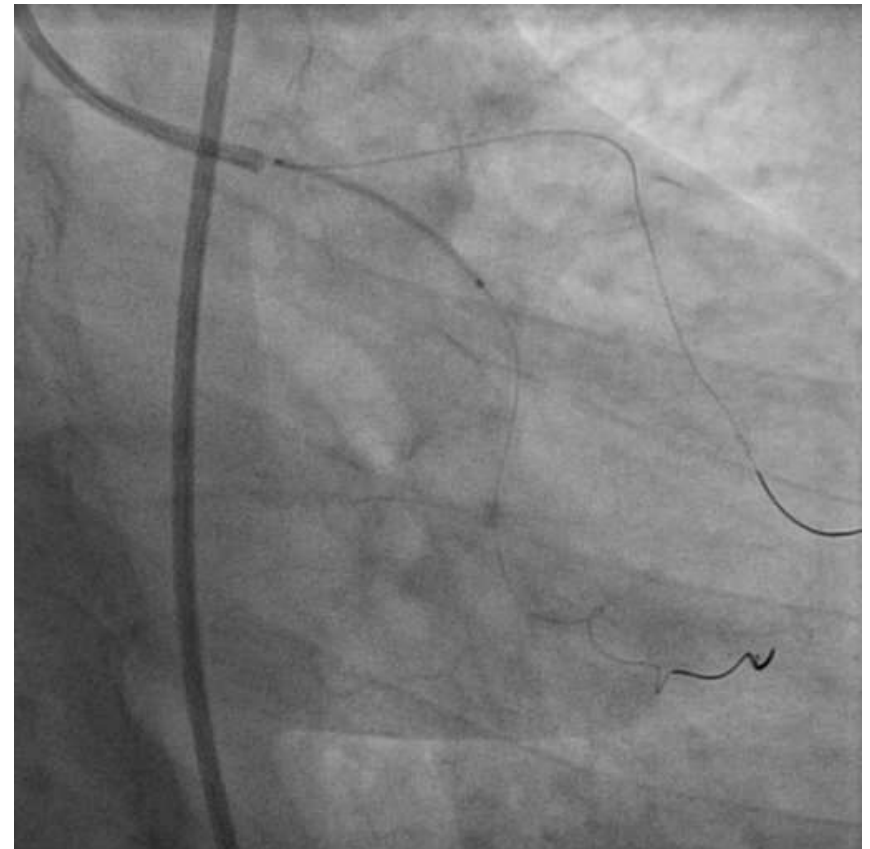
Provisional single stent strategy

- ❑ Wire both LAD and LCX, prep the Ostial LCX well using NC balloon
- ❑ Plan for Cross-over stenting with POT and if needed Kissing balloon dilation

PTCA

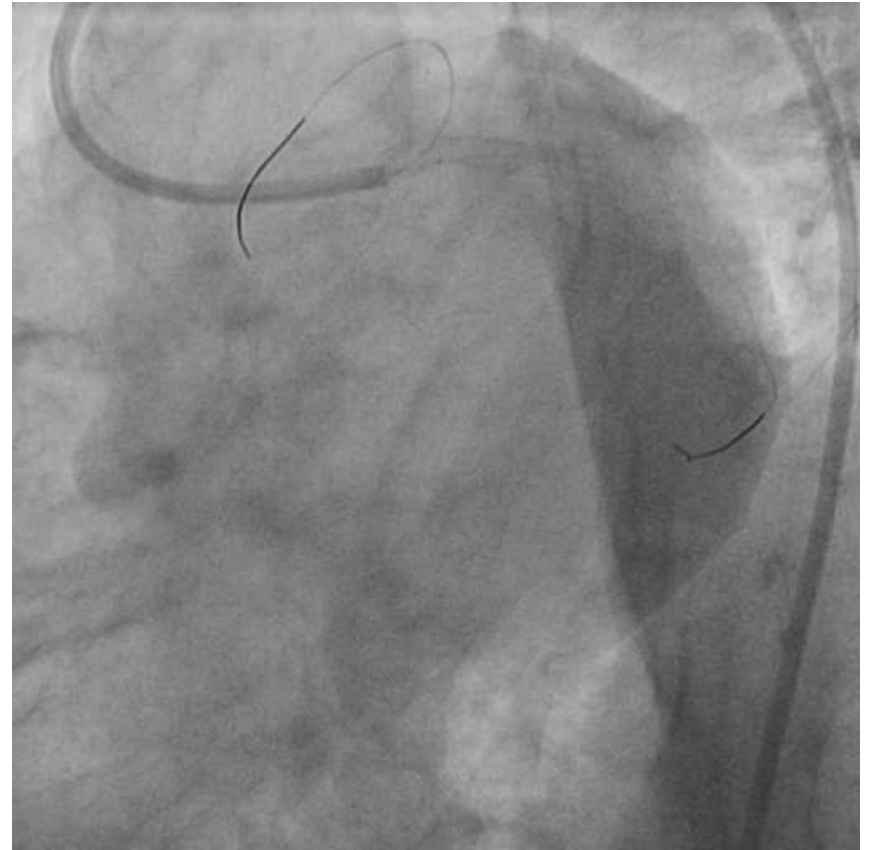
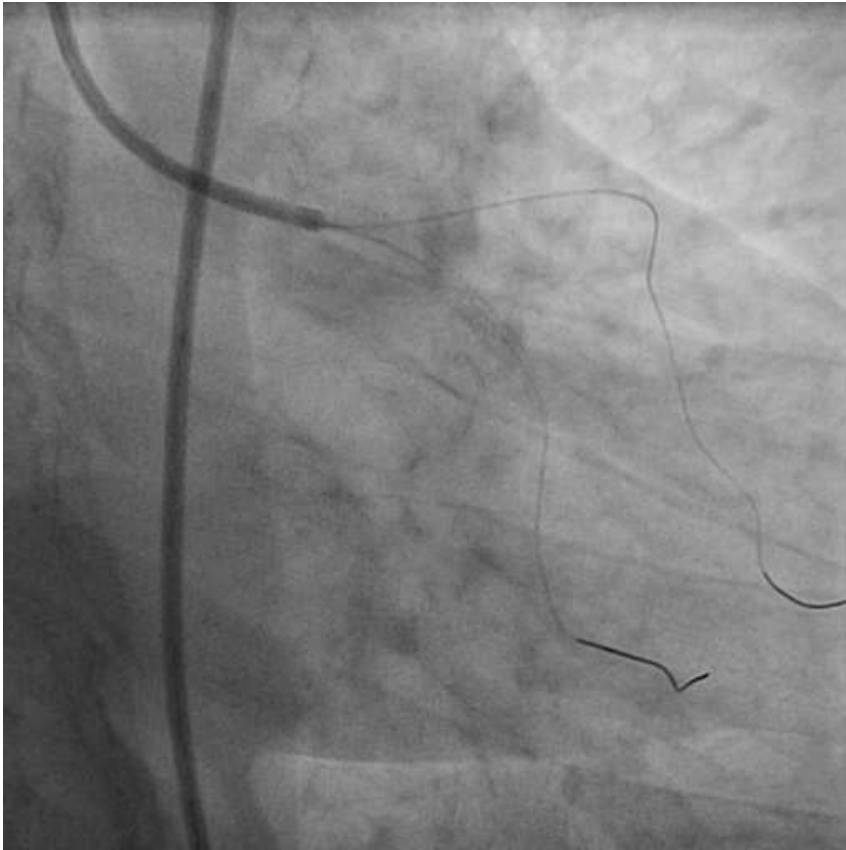


7 Fr XB 3.5 guide with BMW in LCx
and Sion wire in LAD, 2.25 x 12 and
3.5 x 12 NC balloon



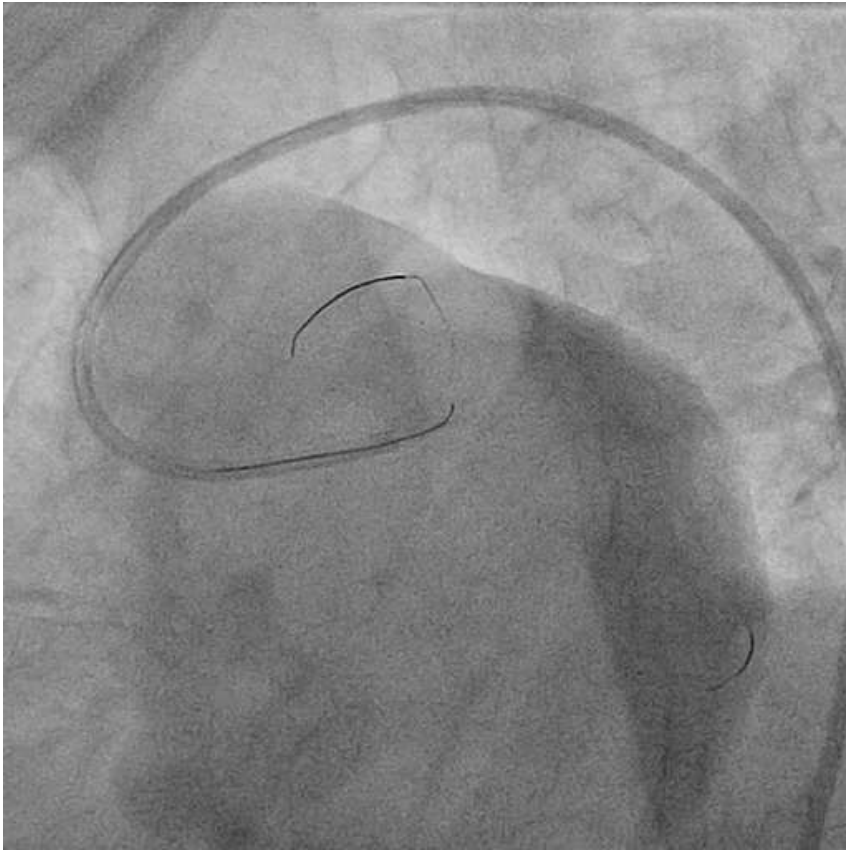
3.5 x 28 Xience V stent in LMCA- LCx
deployed at 10 atm

PTCA (contd.)

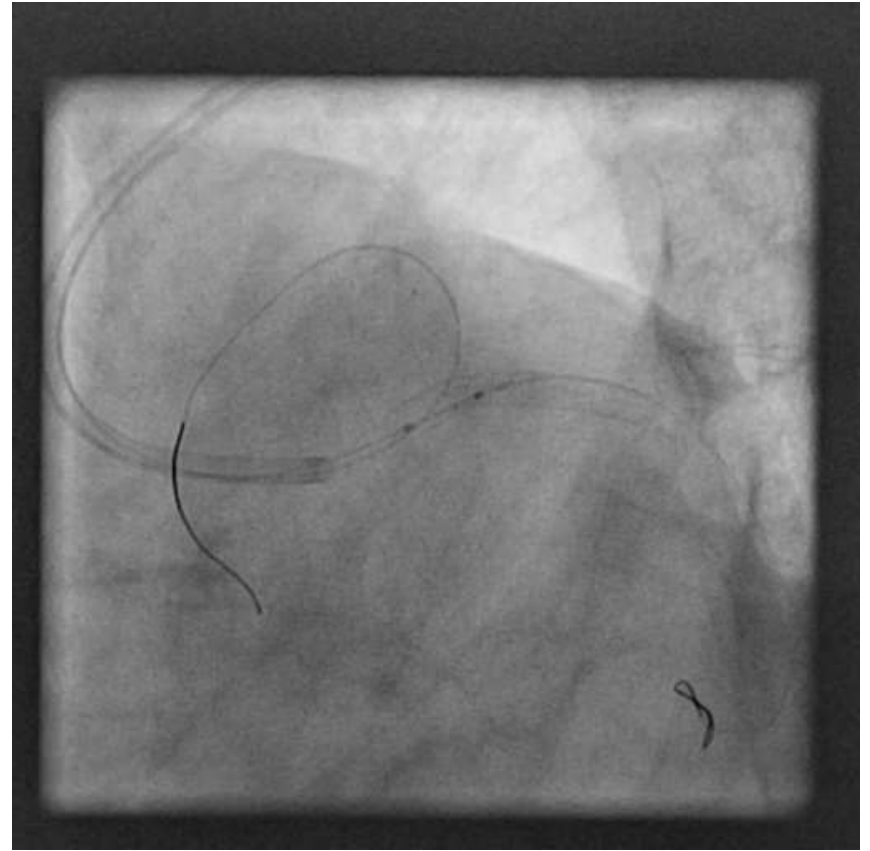


Post-stent deployment

PTCA (contd.)

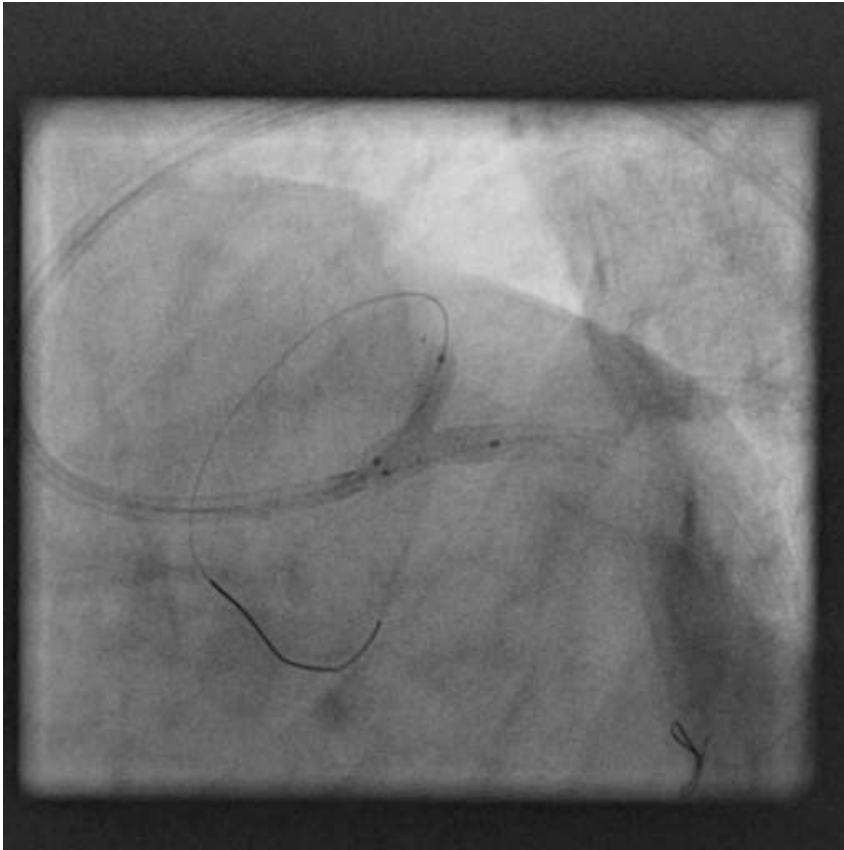


Crossing struts close to carina

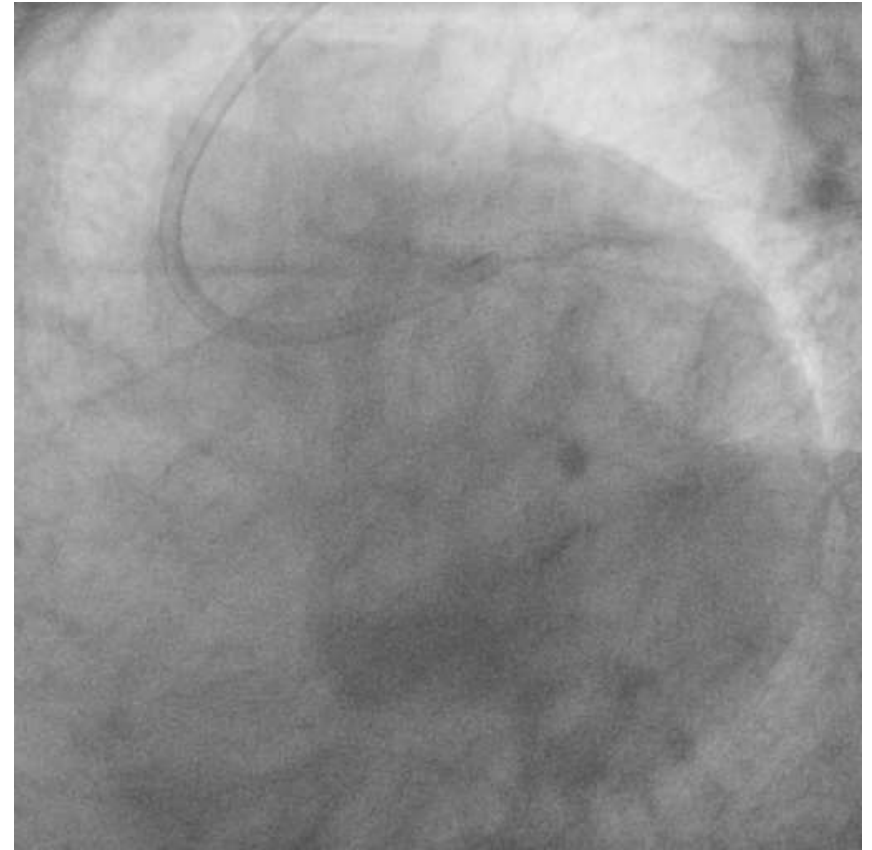


POT with 4 x 8 NC balloon at 20 atm

PTCA (contd.)

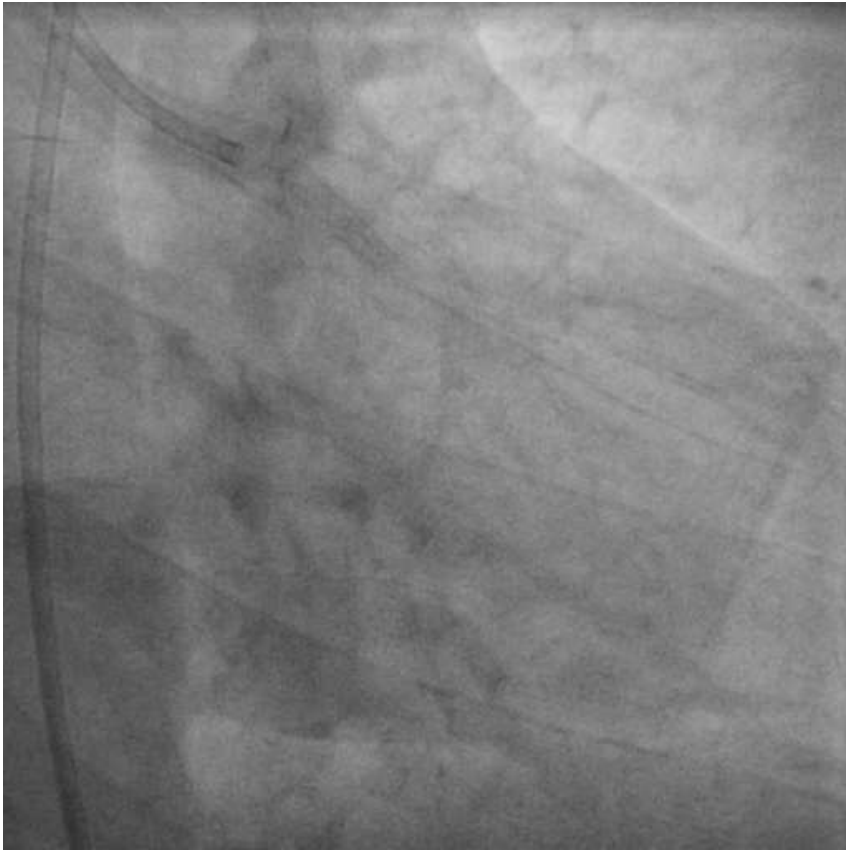


Kissing balloon with 3.5 x 15 in LMCA-LAD and 3.5 x 12 in LMCA-LCX

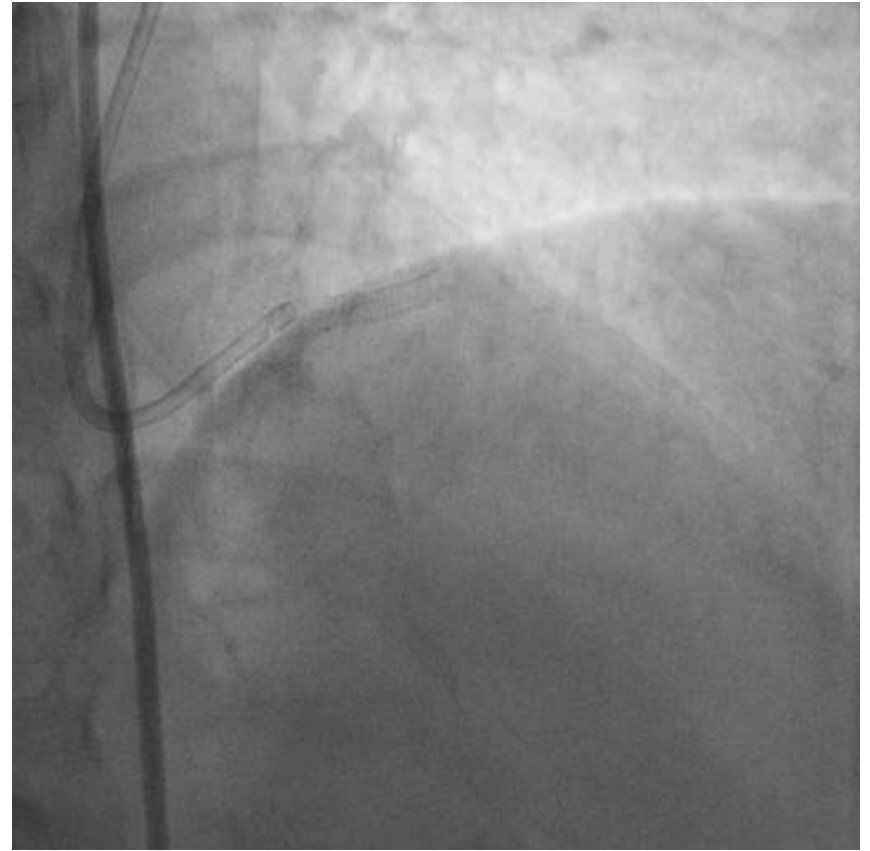


Final images - post kissing balloon dilation and POT

PTCA: Final images

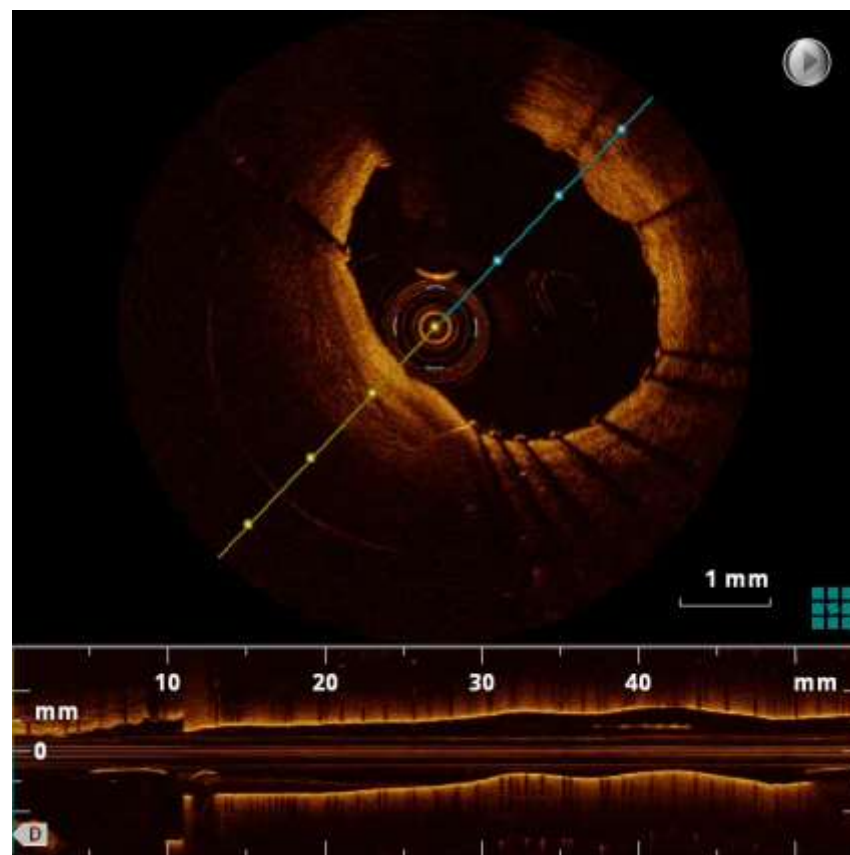
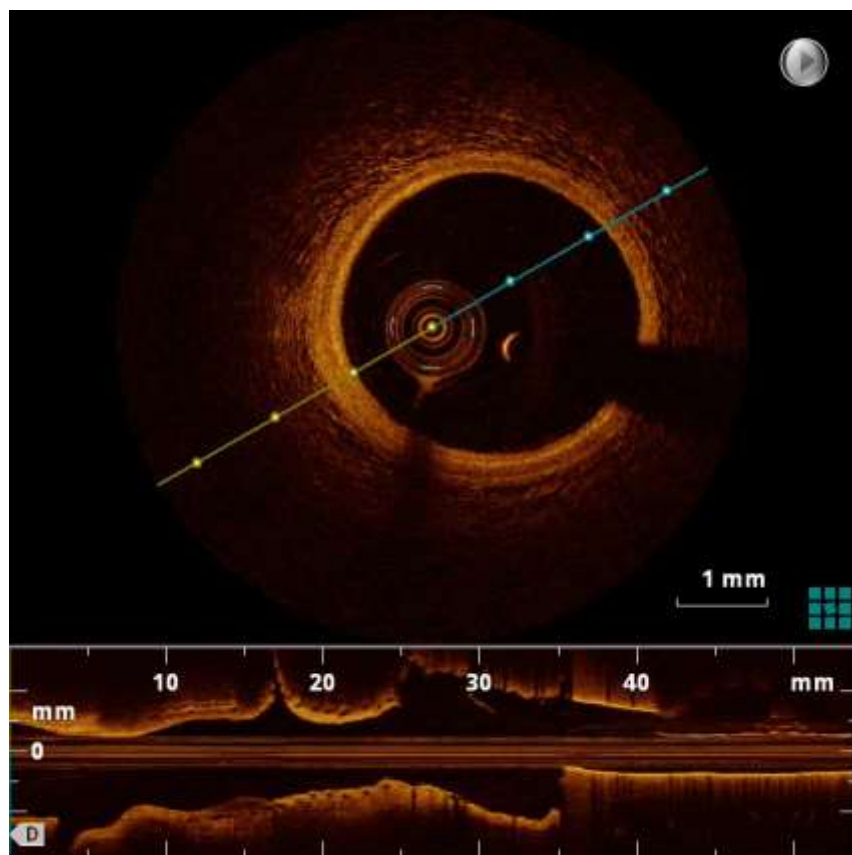


RAO Caudal



AP cranial

OCT images



	LMCA	Ostial LCX	Distal LCx	Prox LAD	Mid LAD
MSA (mm ²)	13.32	9.34	8.68	7.1	6.3
Mean dia (mm)	4.32	3.45	3.32	2.98	2.82

Key features of the case

- ❑ Ostial positioning of scaffold in some given situations can be challenging.
- ❑ In long term implications of scaffold protruding into left main, not known.
- ❑ In this case crossover Left main- LCX provisional single stent strategy with POT and kissing balloon, using DES was mainly due to limitation of sizes with BVS.
- ❑ 11 months clinical follow-up has been uneventful with stress imaging being negative for inducible ischemia after 6 months

Thank you!!!