19th CARDIOVASCULAR SUMMIT
TCTAP 2014
BIT
Enhancing education on cardiovascular Intervention
Bangla Interventional Therapeutics

IVUS guided critical left main stem angioplasty

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NH – RTIICS
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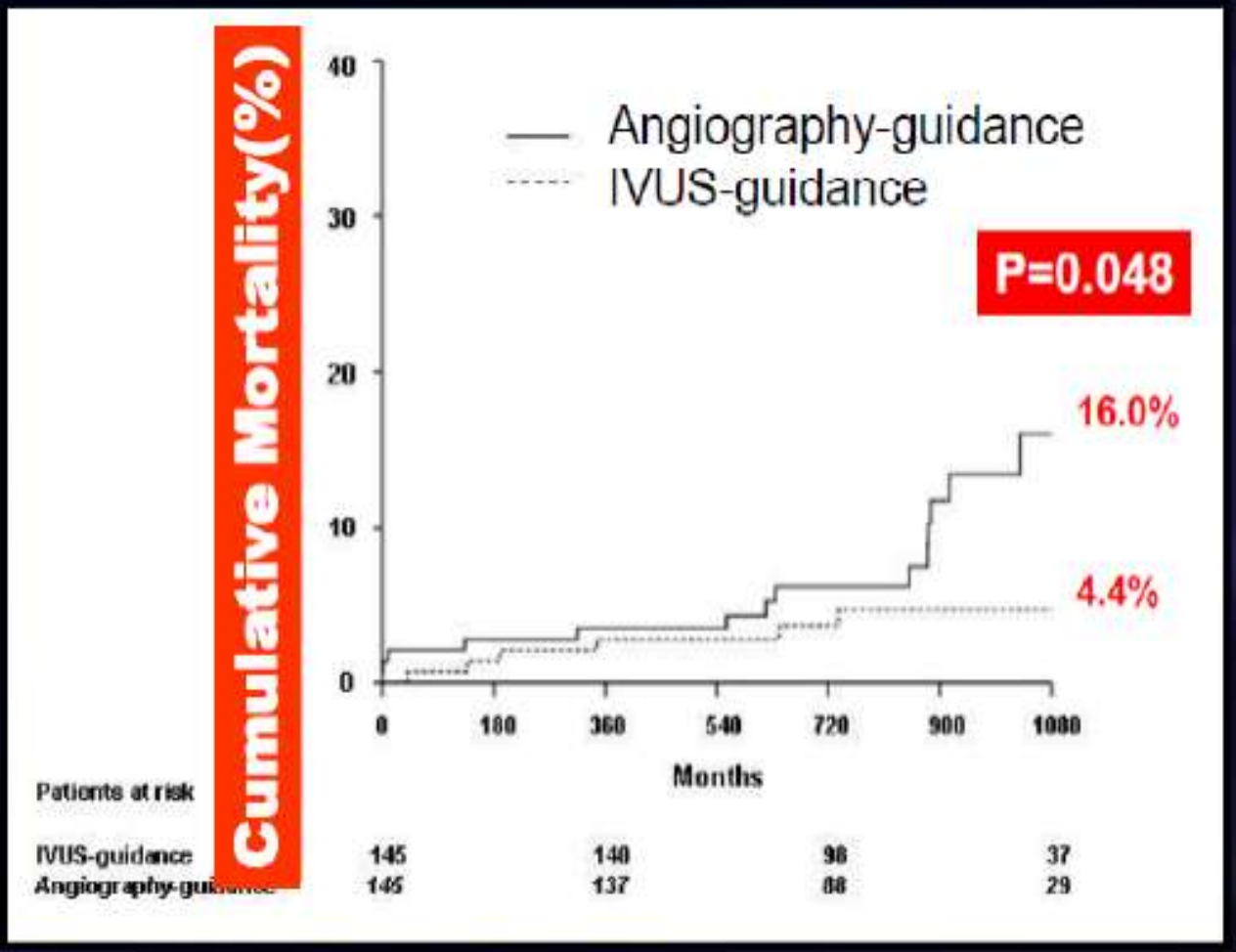
IVUS guidance may have even better survival in LM PCI

IVUS-guided stenting reduced long-term mortality rate compared with conventional angiography-guided stenting

The differential survival rate start to separate and progressively diverged after 1 year.

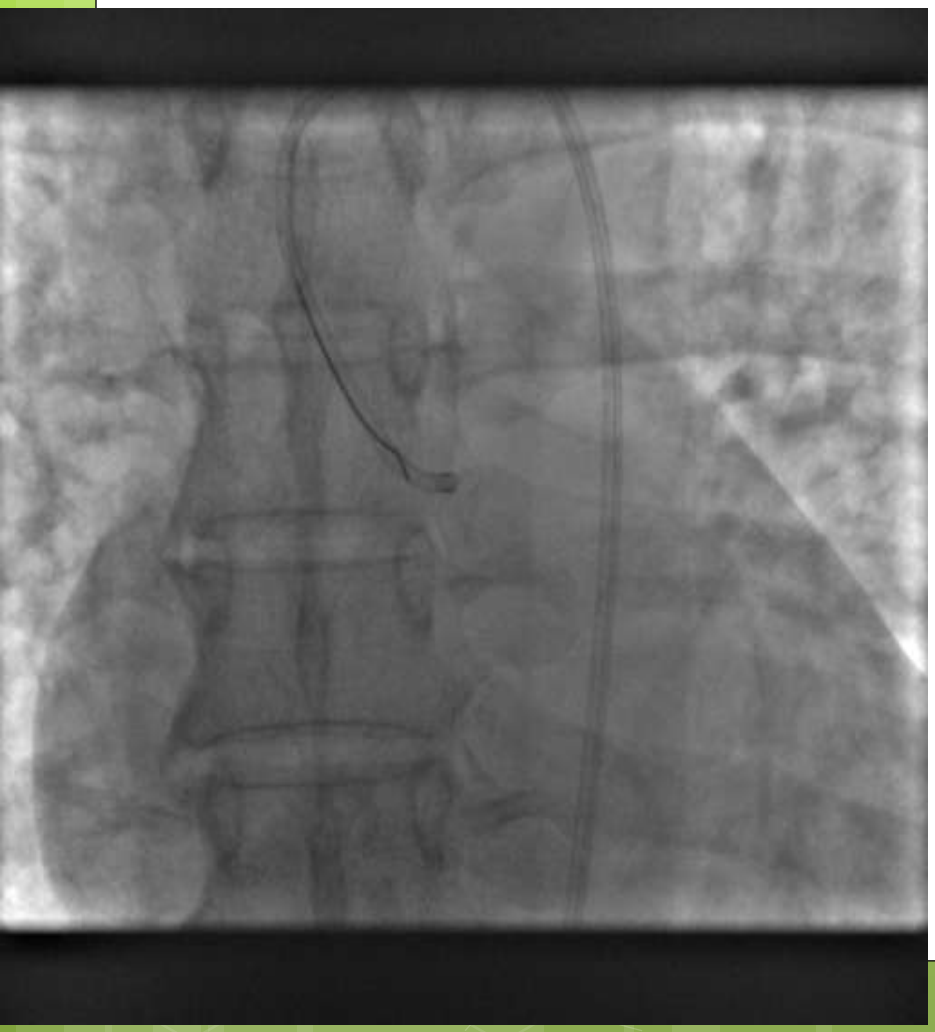


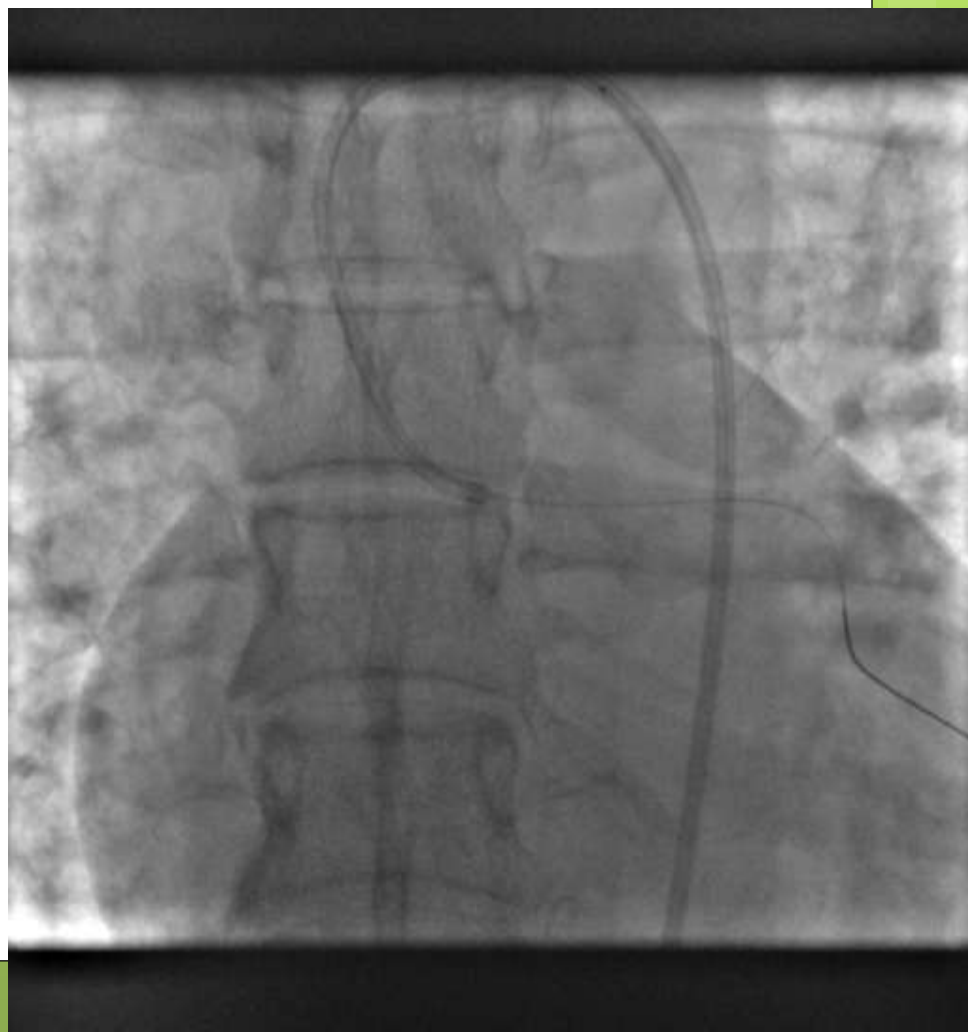
•Park SJ et al, Circ Cardiovasc Intervent. 2009;2:167-177

Case History

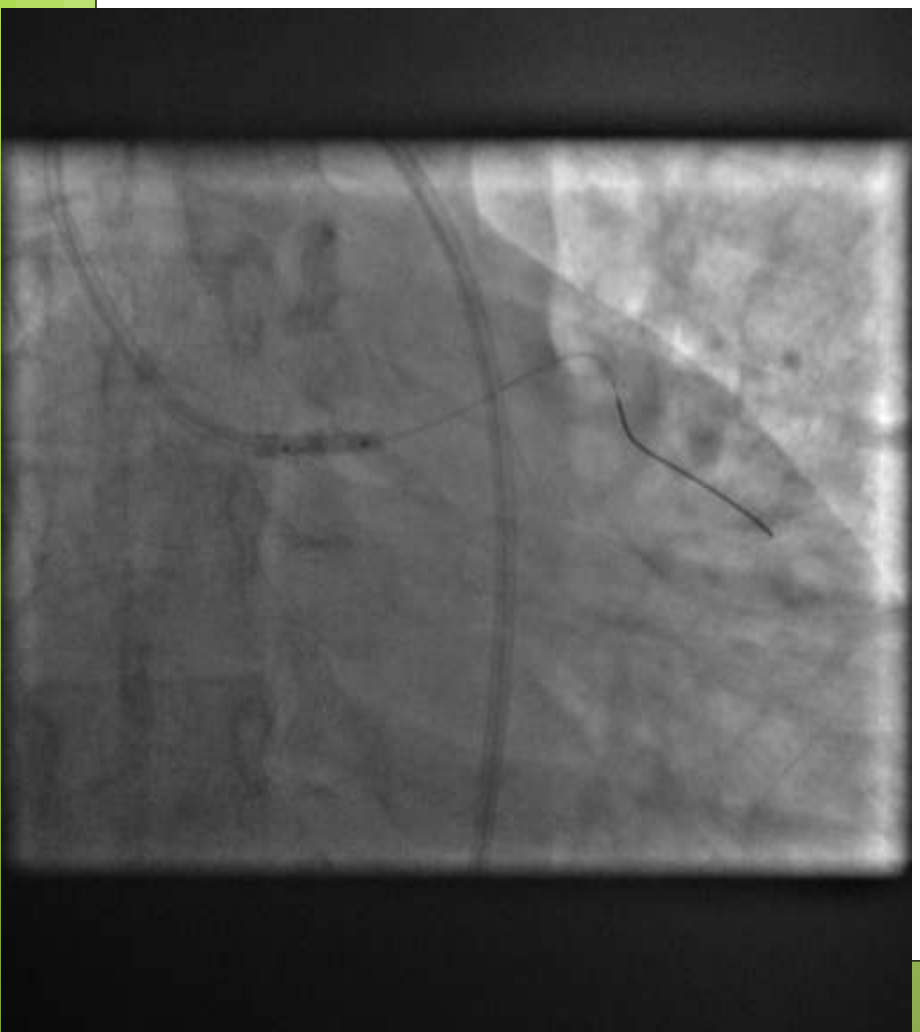
- K S,
- F, 54 years
- Hypertensive, DM.
- Presented with UA
- Echo :No RWMA
- EF – 60%

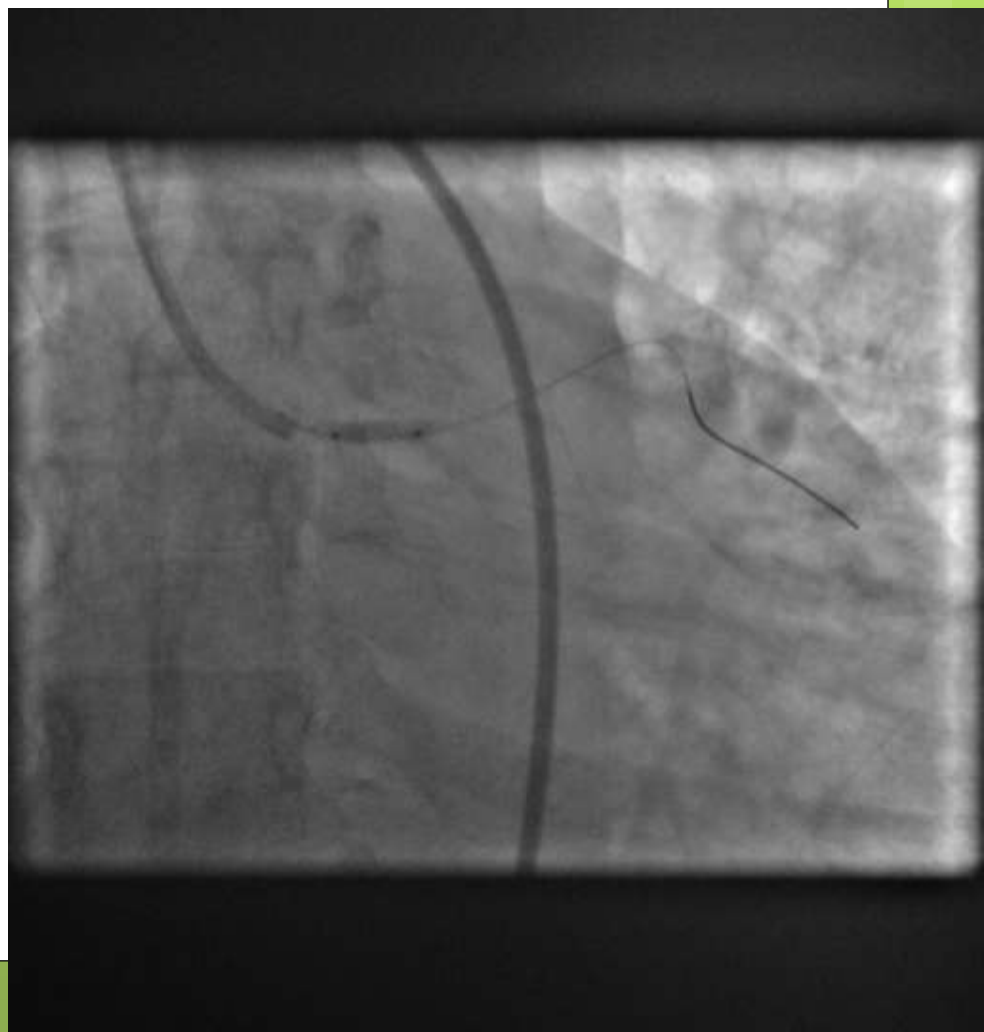
Angiography



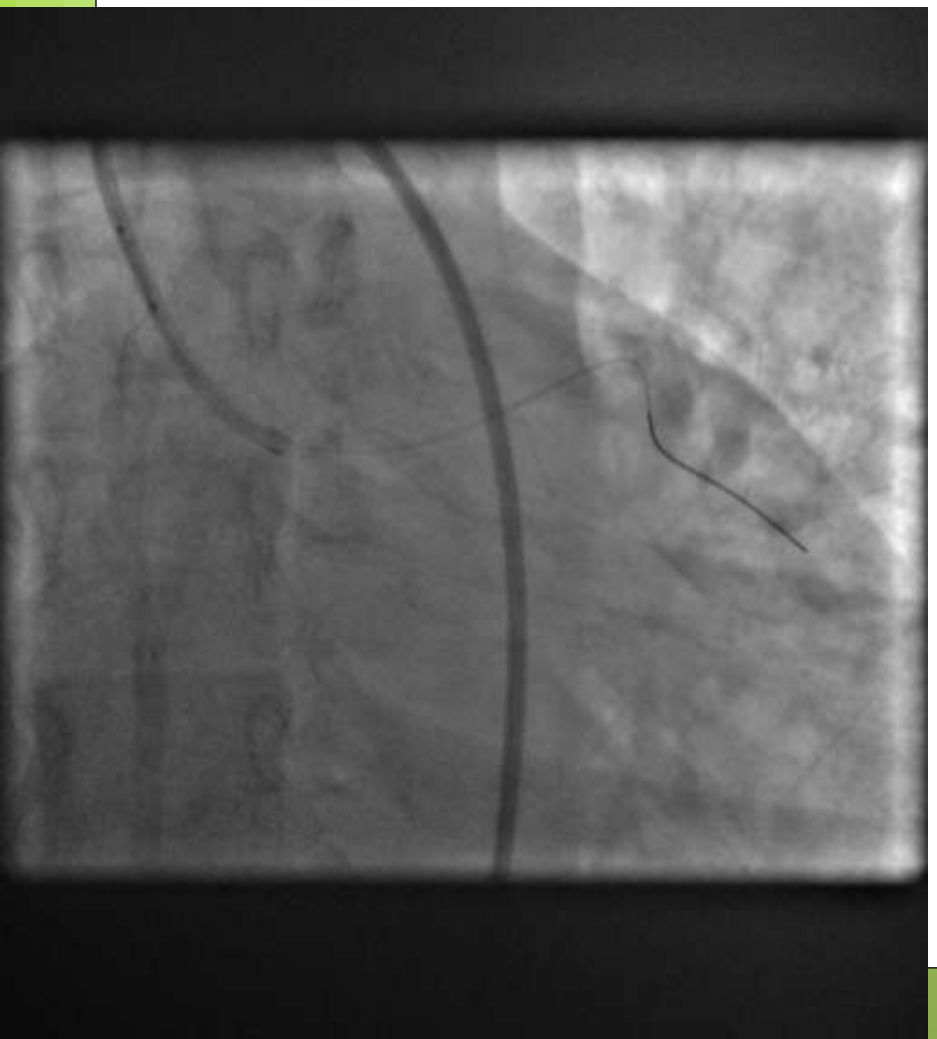


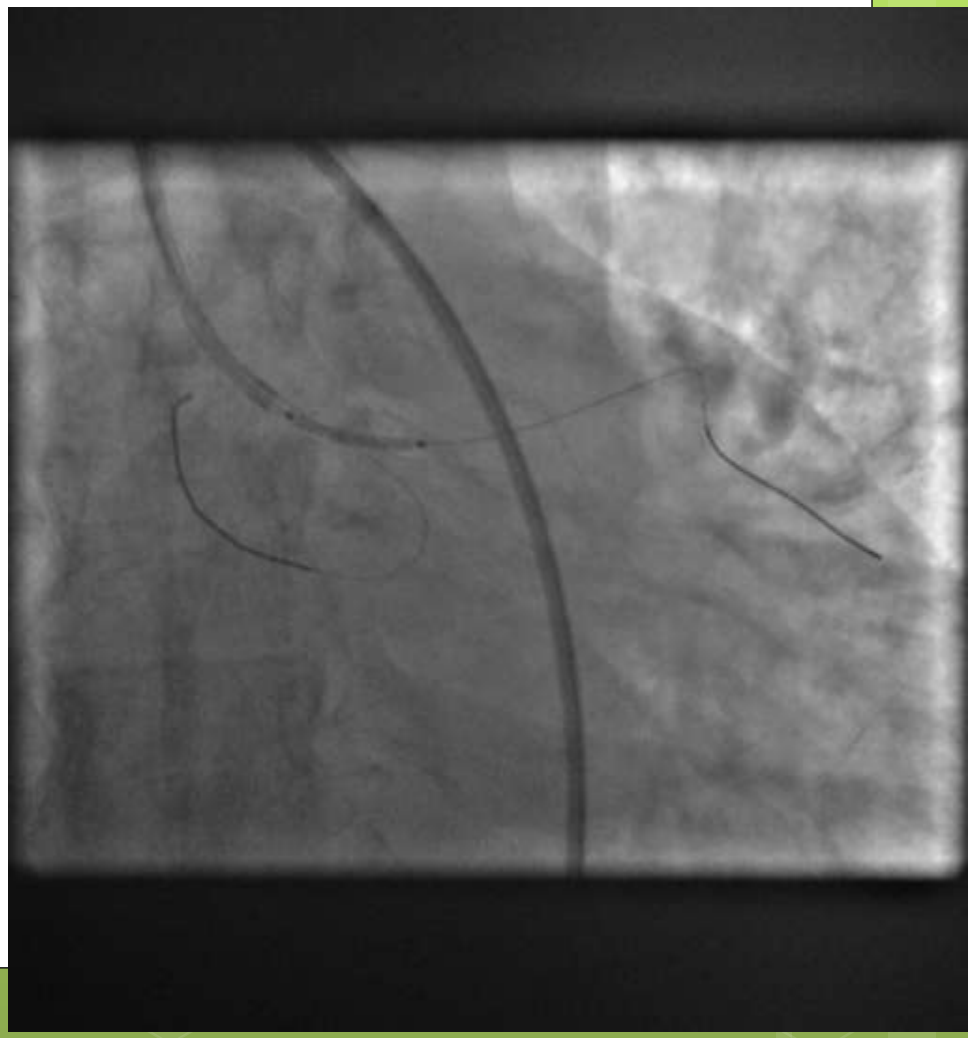
Pre dilatation with sprinter 2.00X10mm



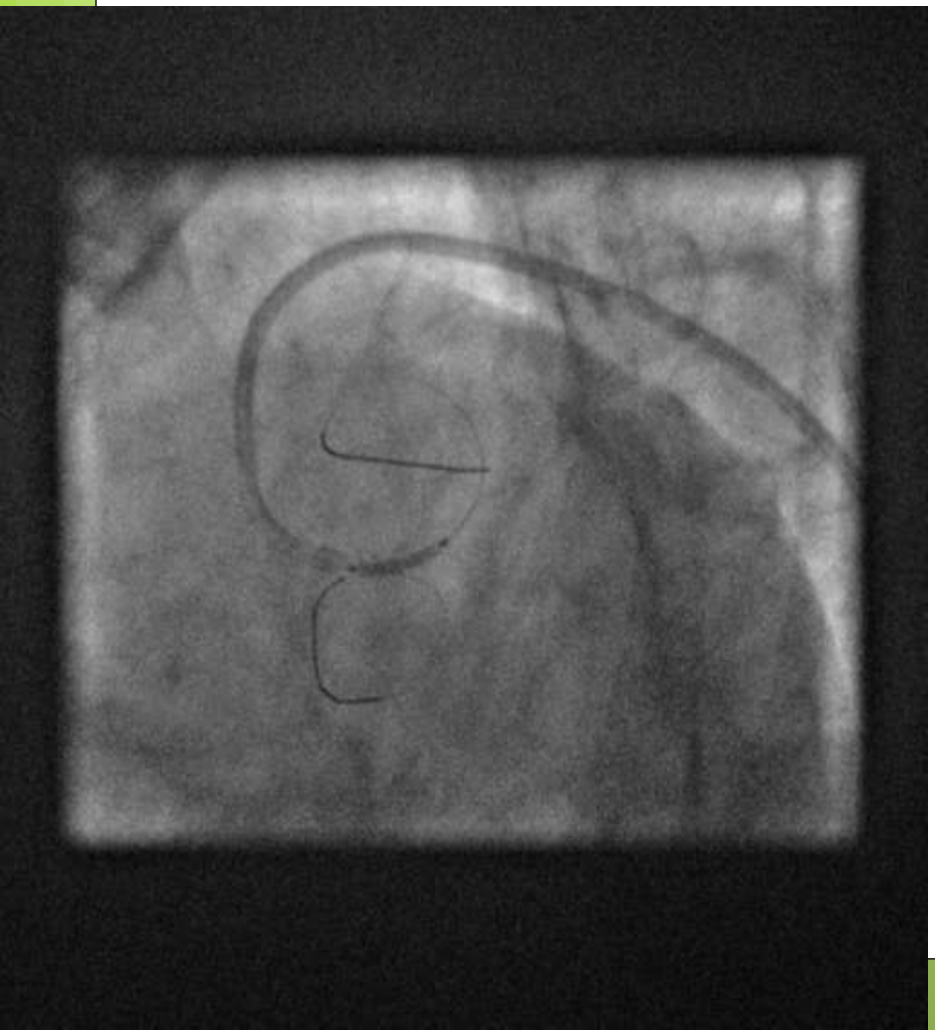


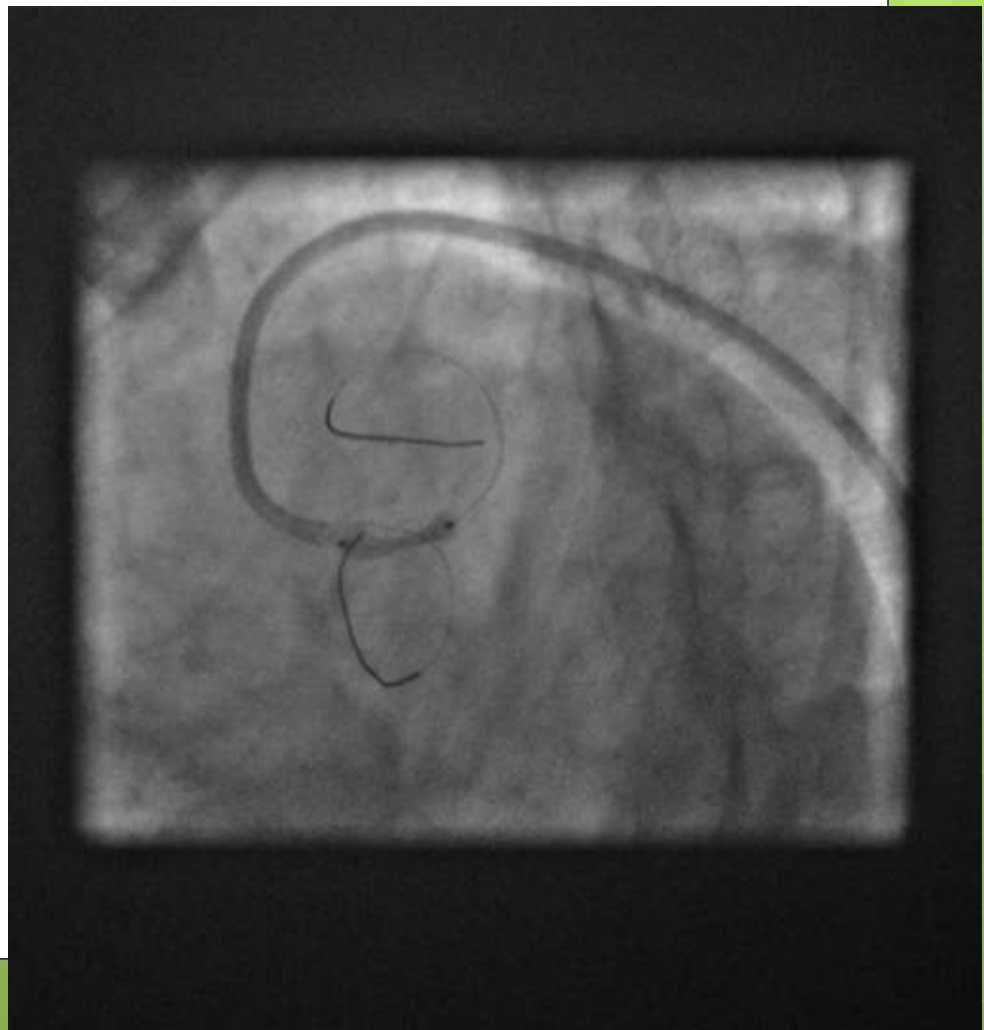
DES 4.00X15mm



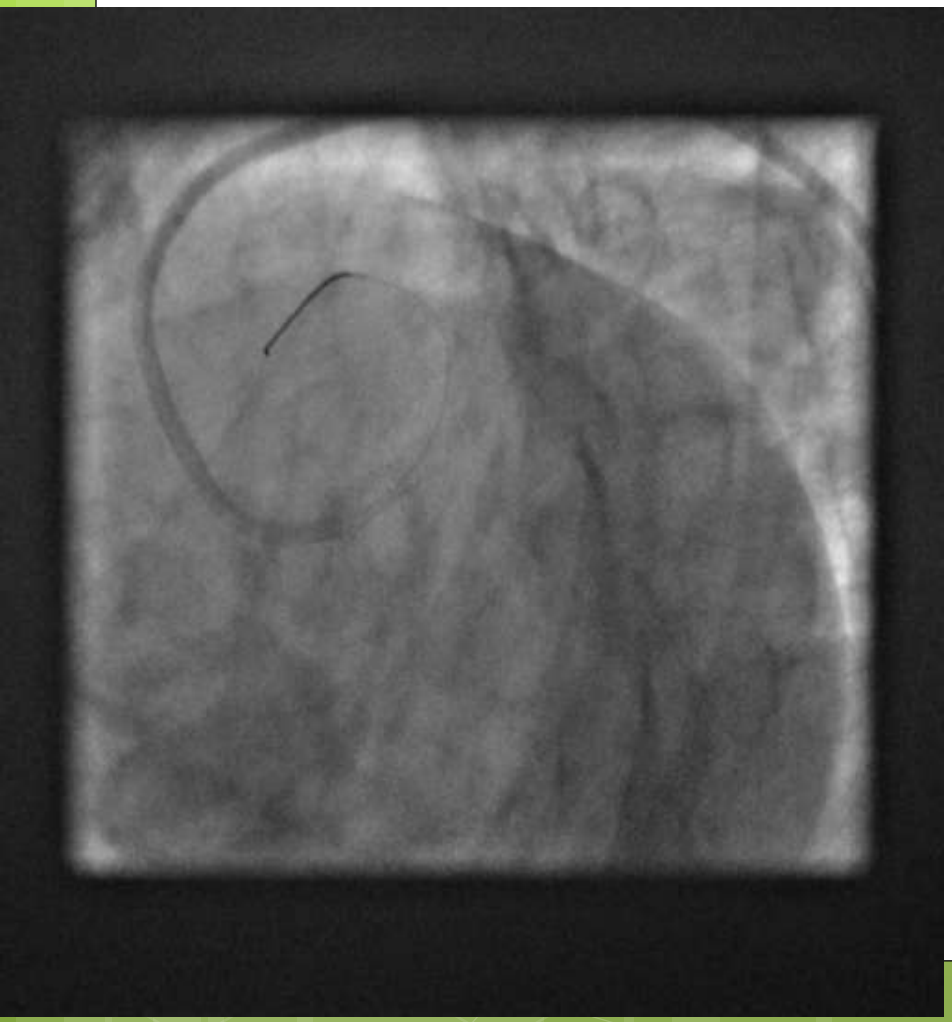


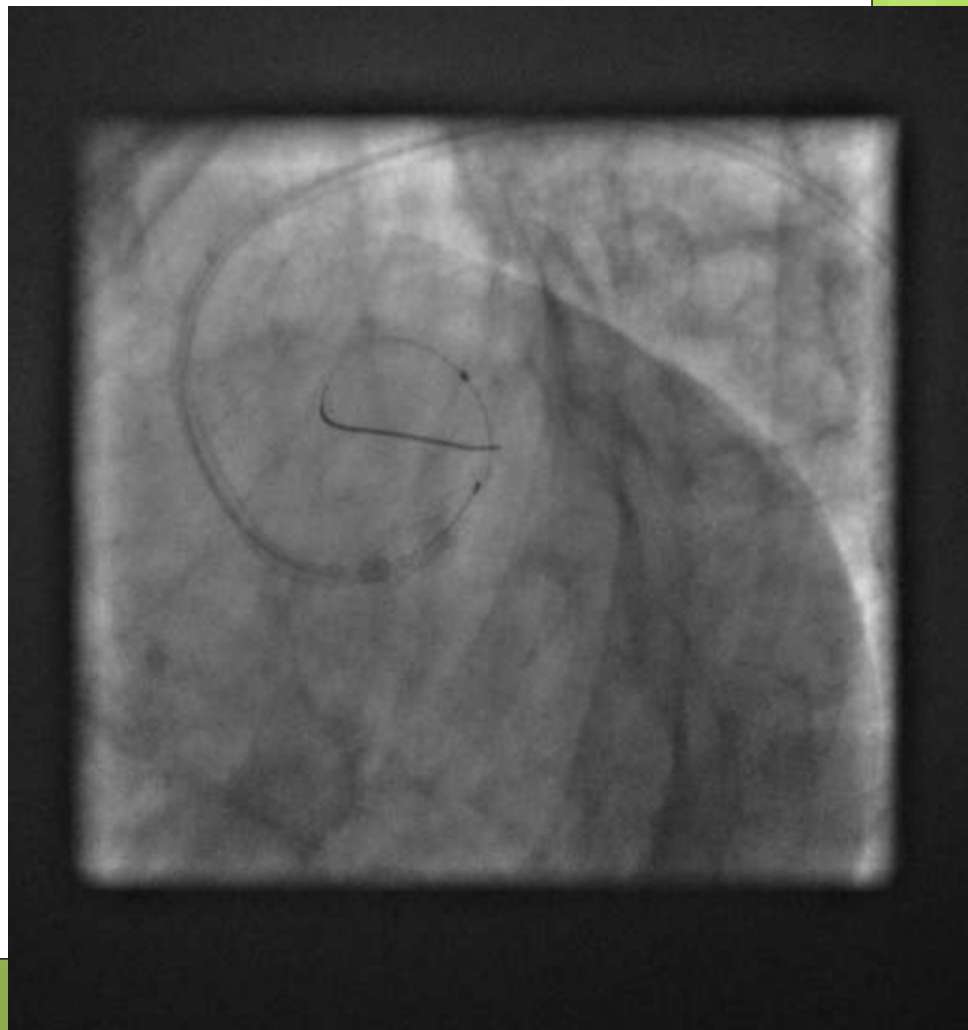
Stent positioning & deployment



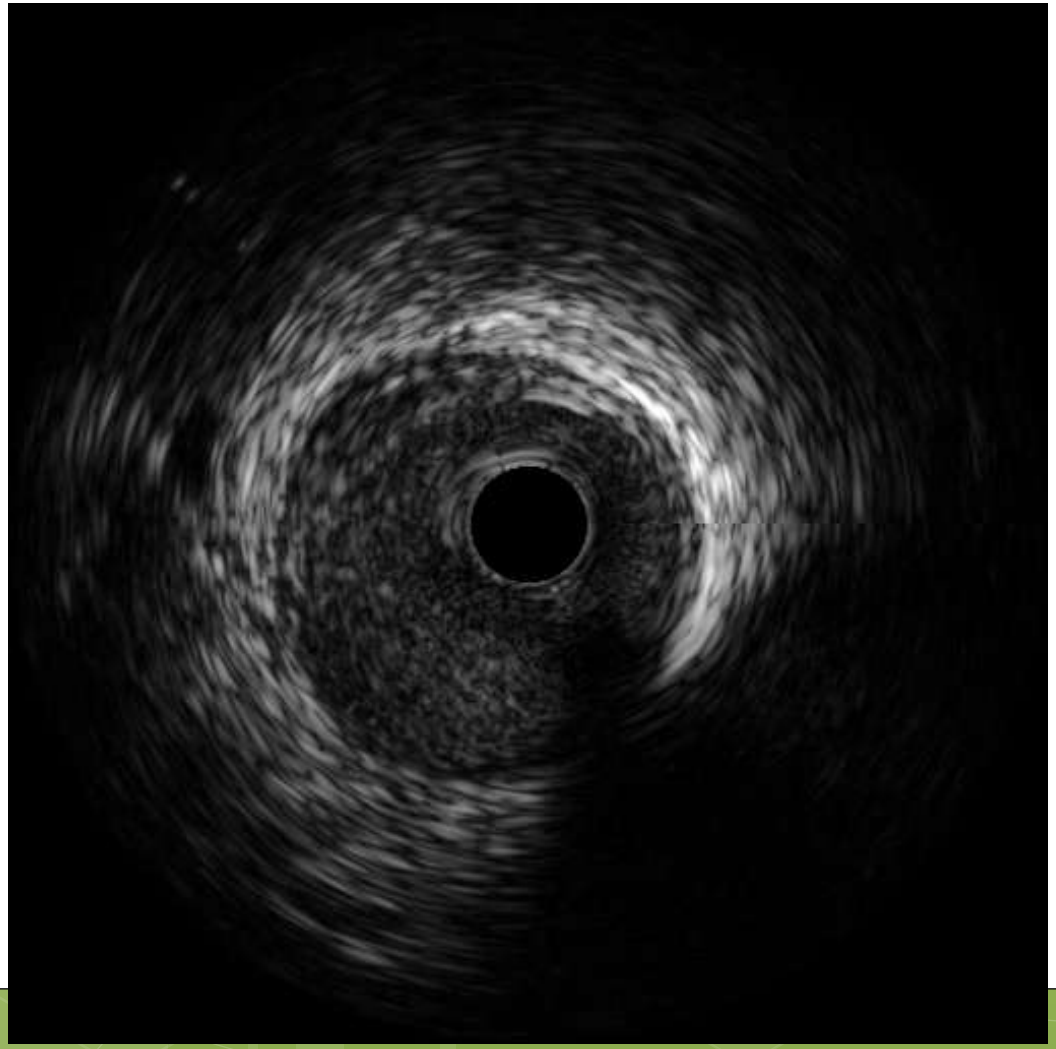


IVUS from LAD to LMCA





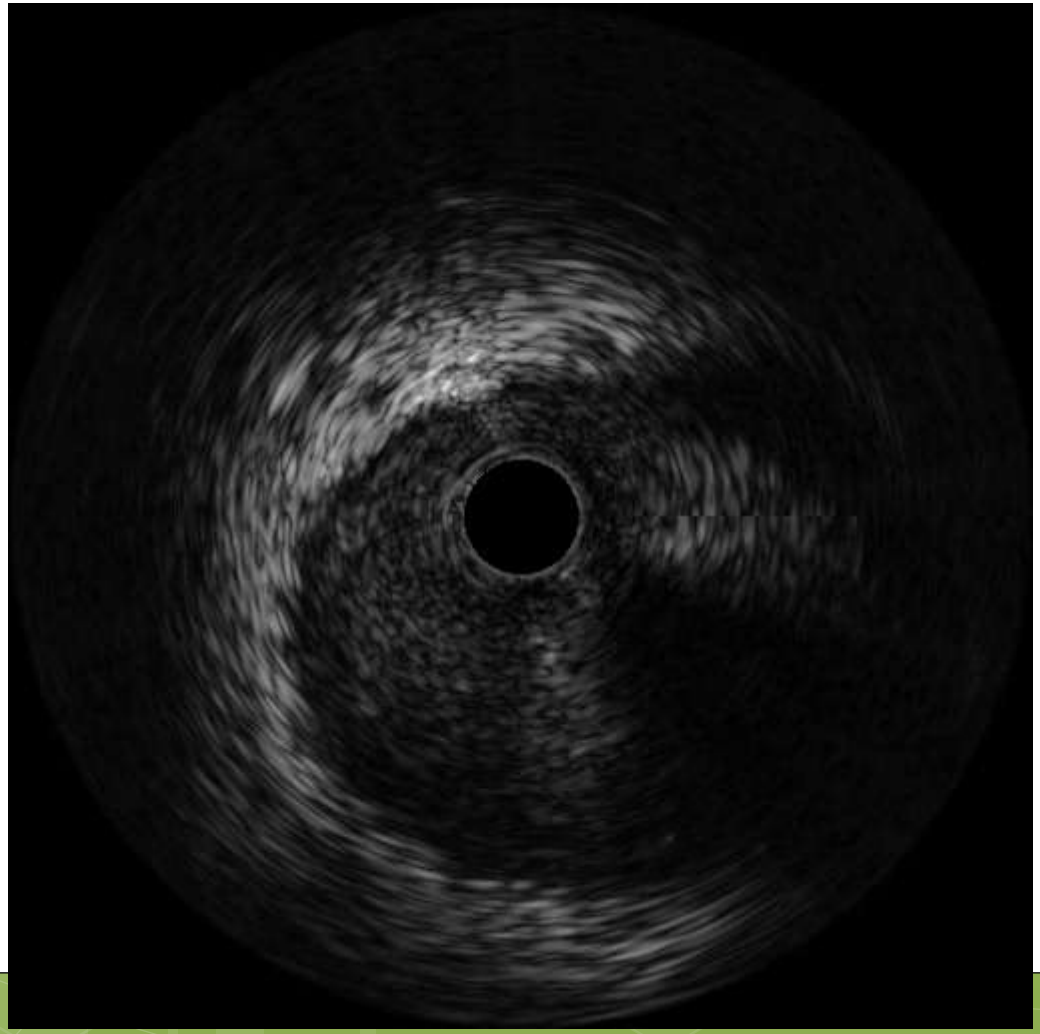
IVUS RUN

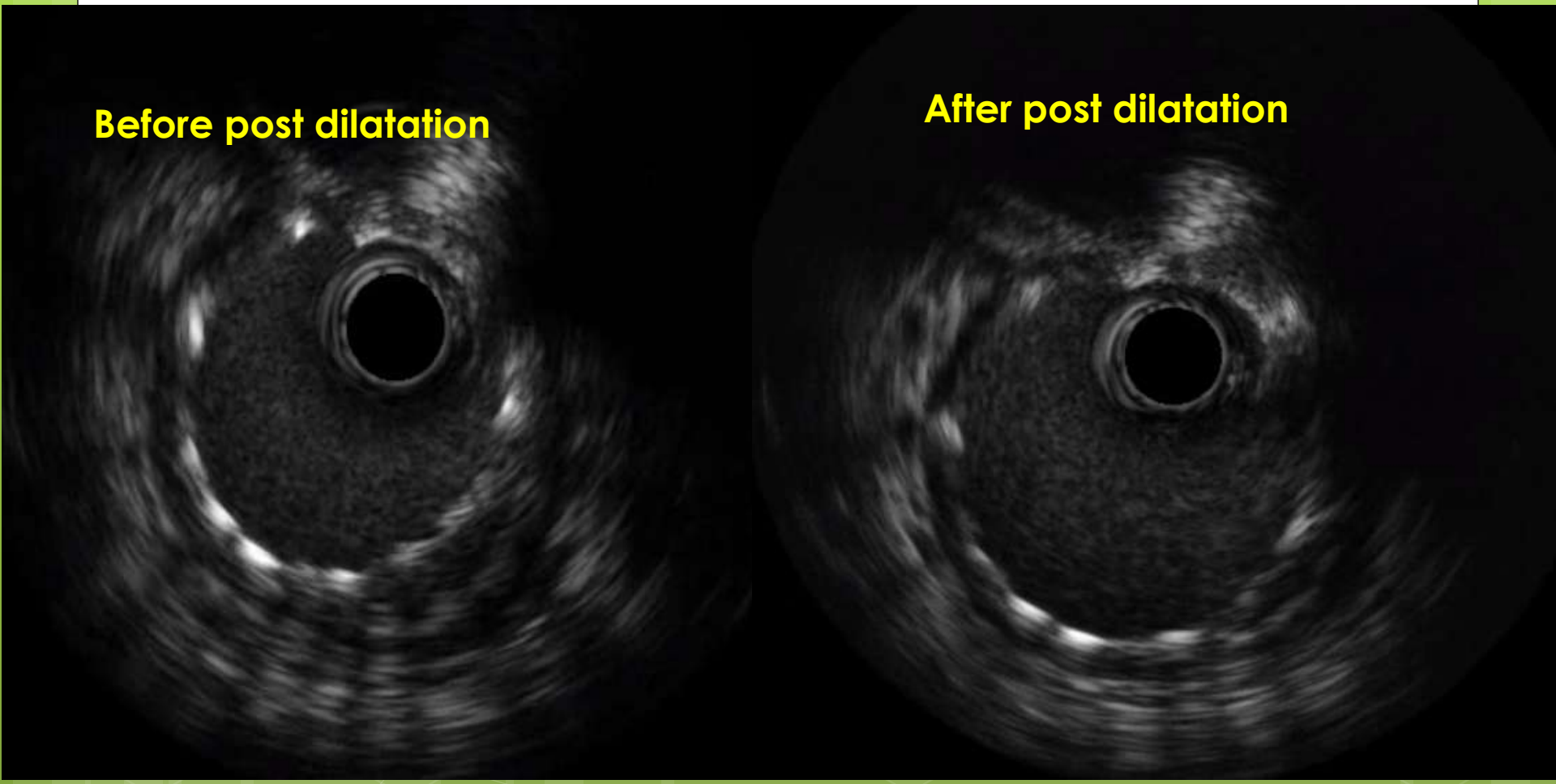


Post dilatation with NC sprinter

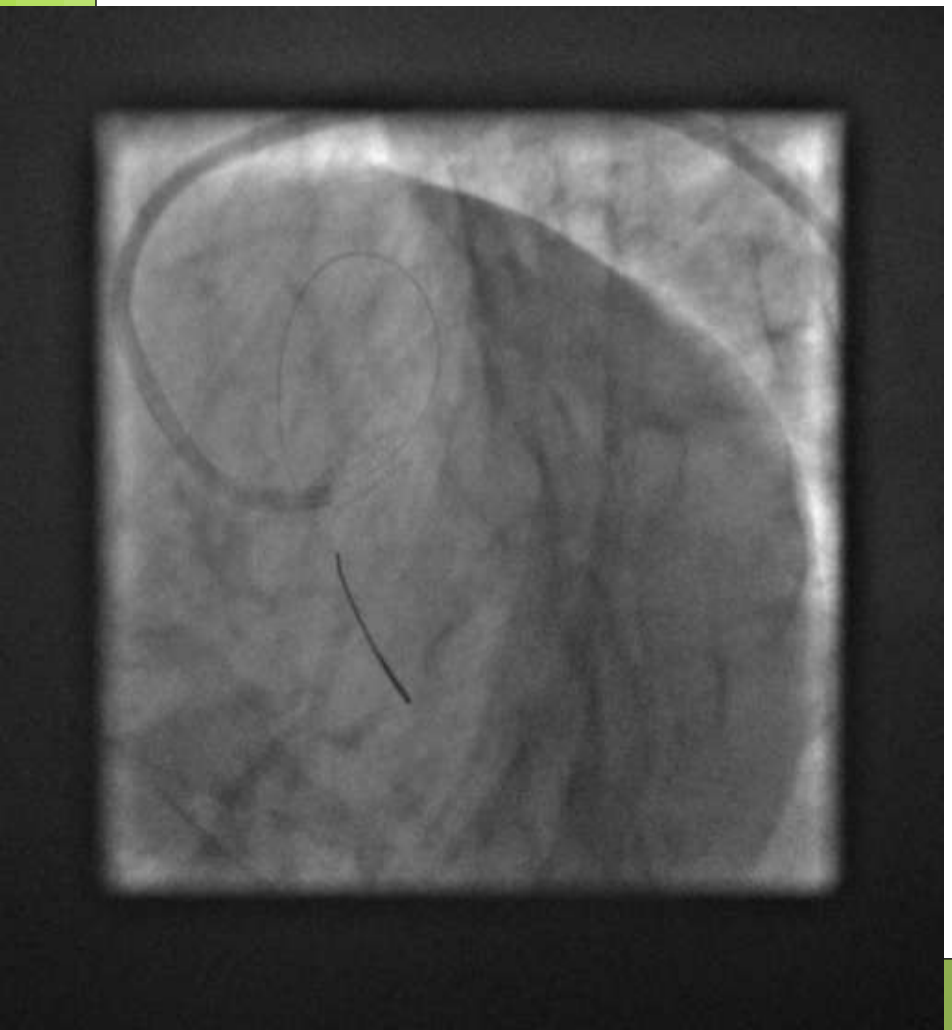
Final IVUS run

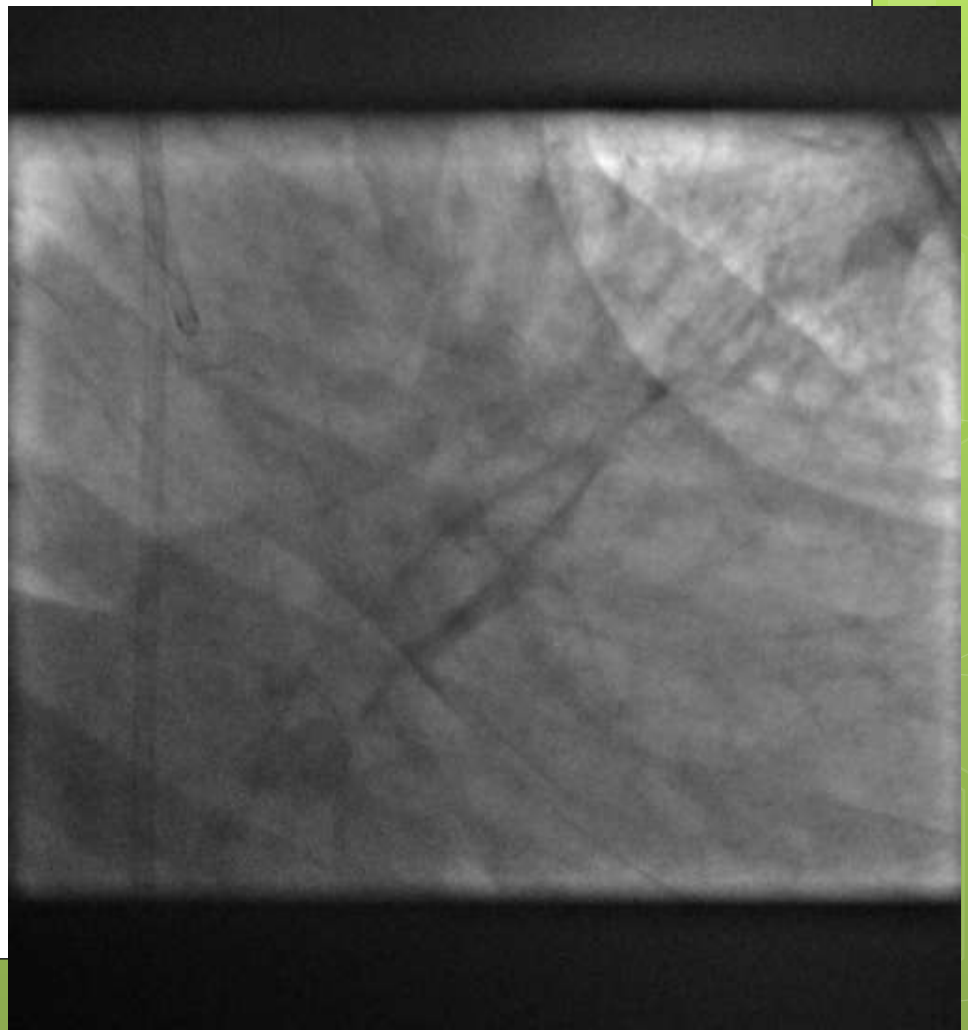
IVUS run




Before post dilatation
After post dilatation

Final result



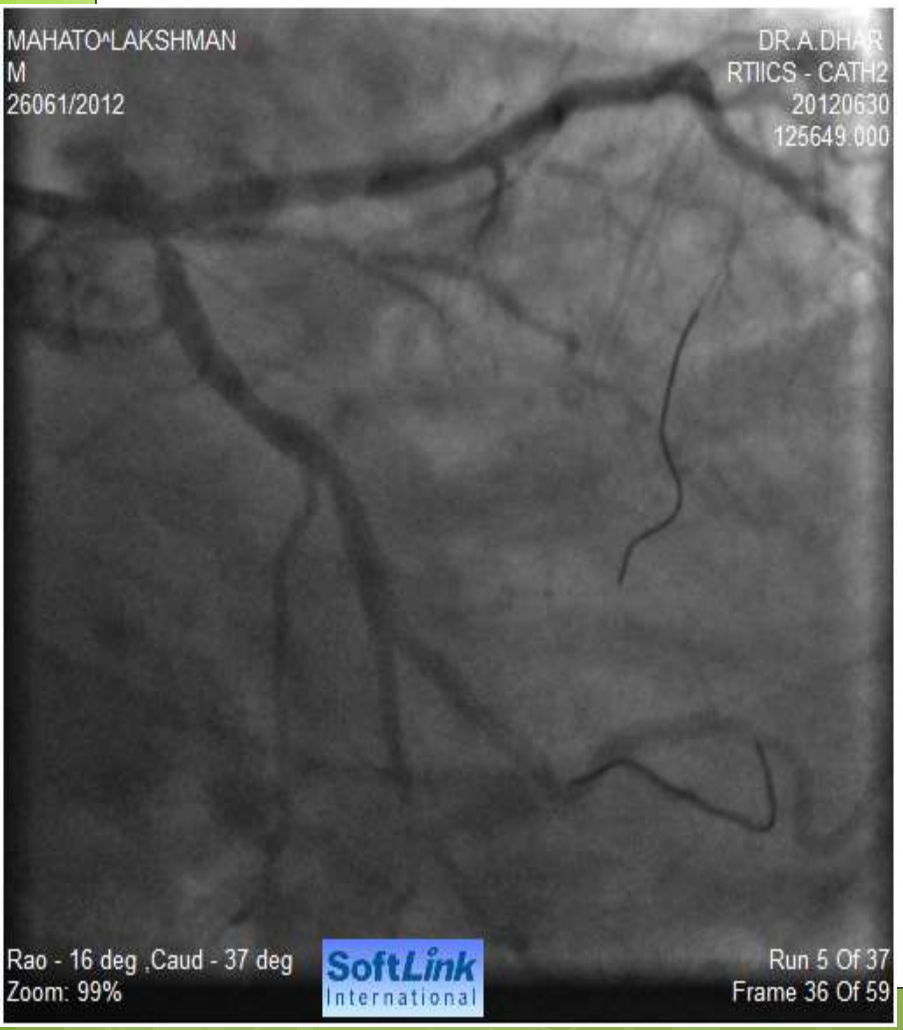


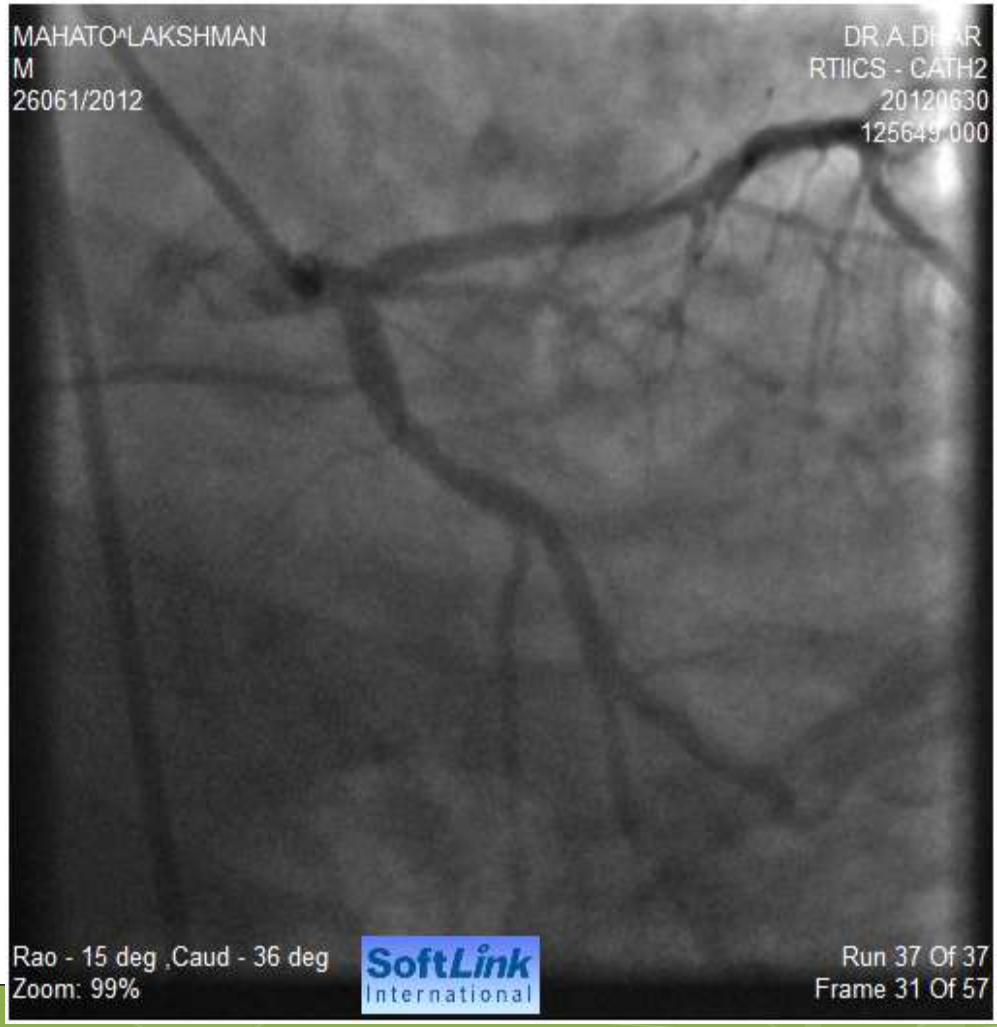
CASE HISTORY

- Mr. Mahato, M 54,
- Hypertensive, Diabetic, Smoker
- Presented with effort angina
- PTCA to LCx with DES in 9 months ago..

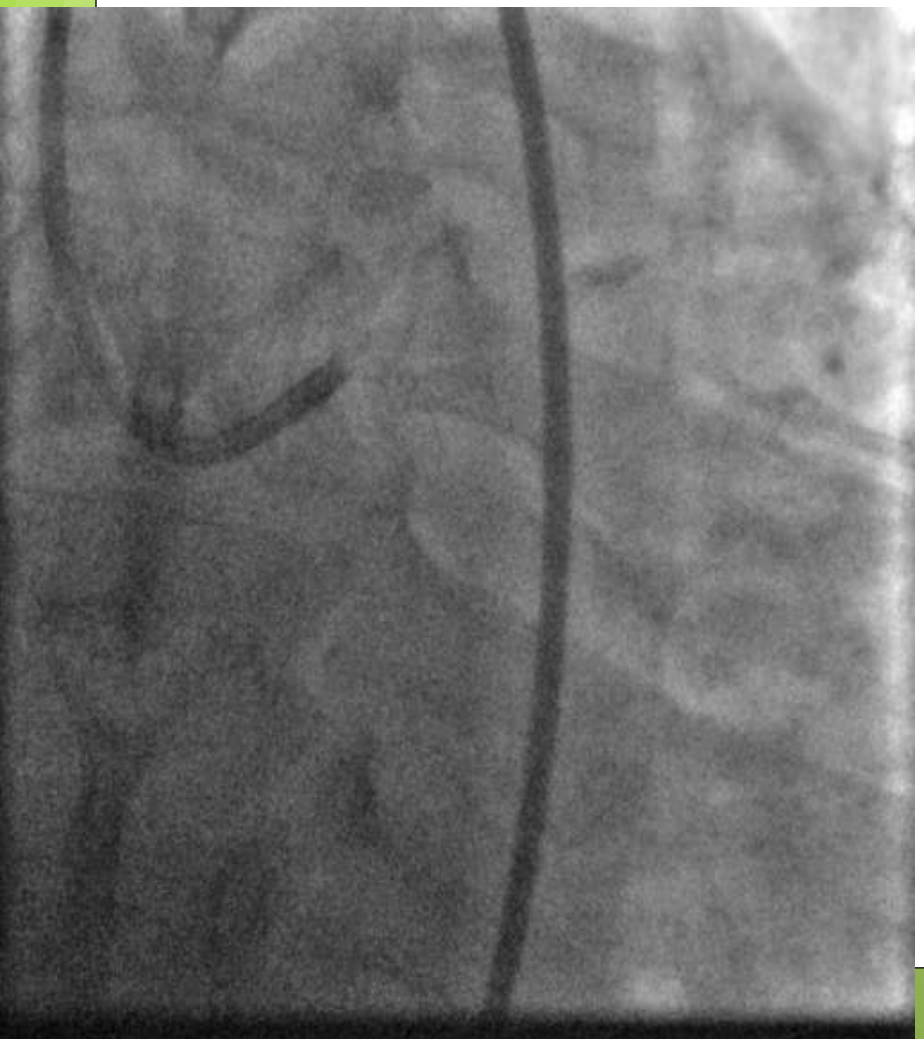
- ECHO : No RWMA, LVEF : 60%

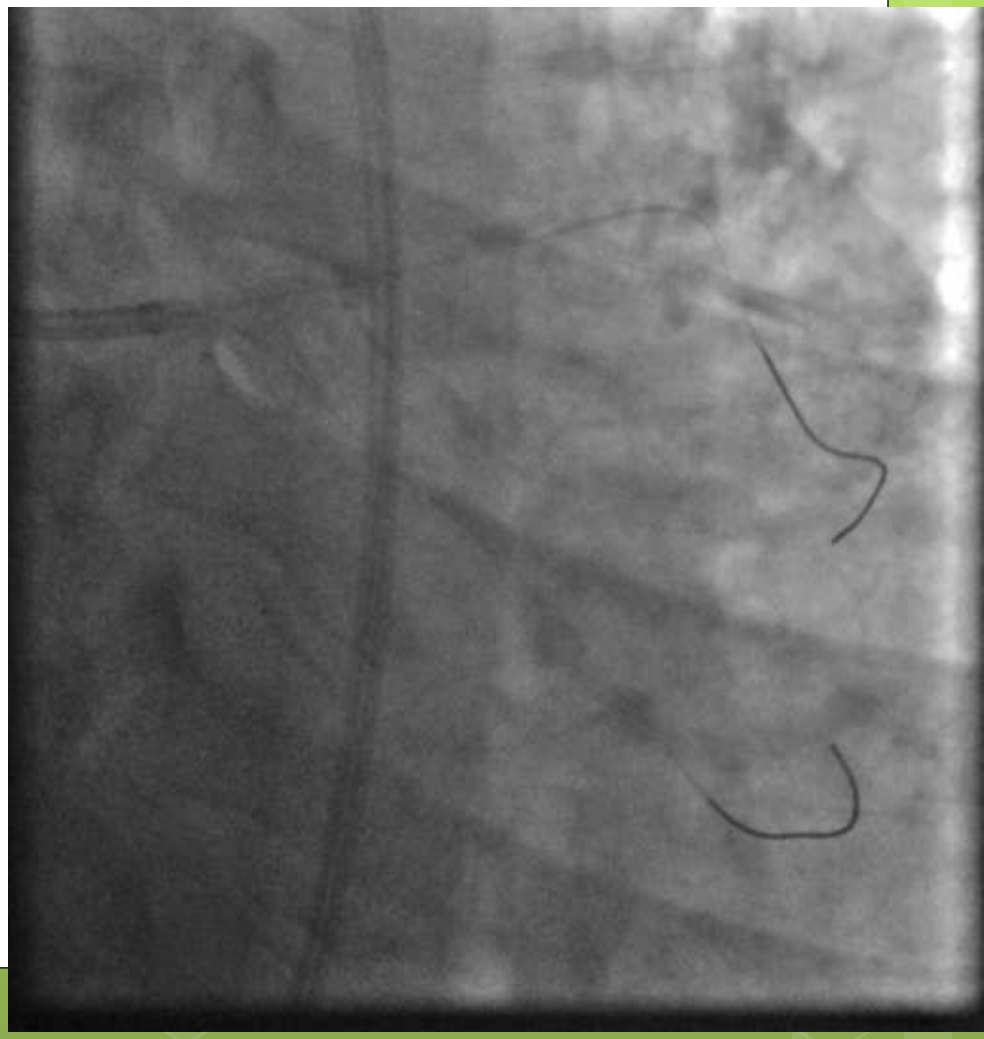
9 months back LCx stenting with DES



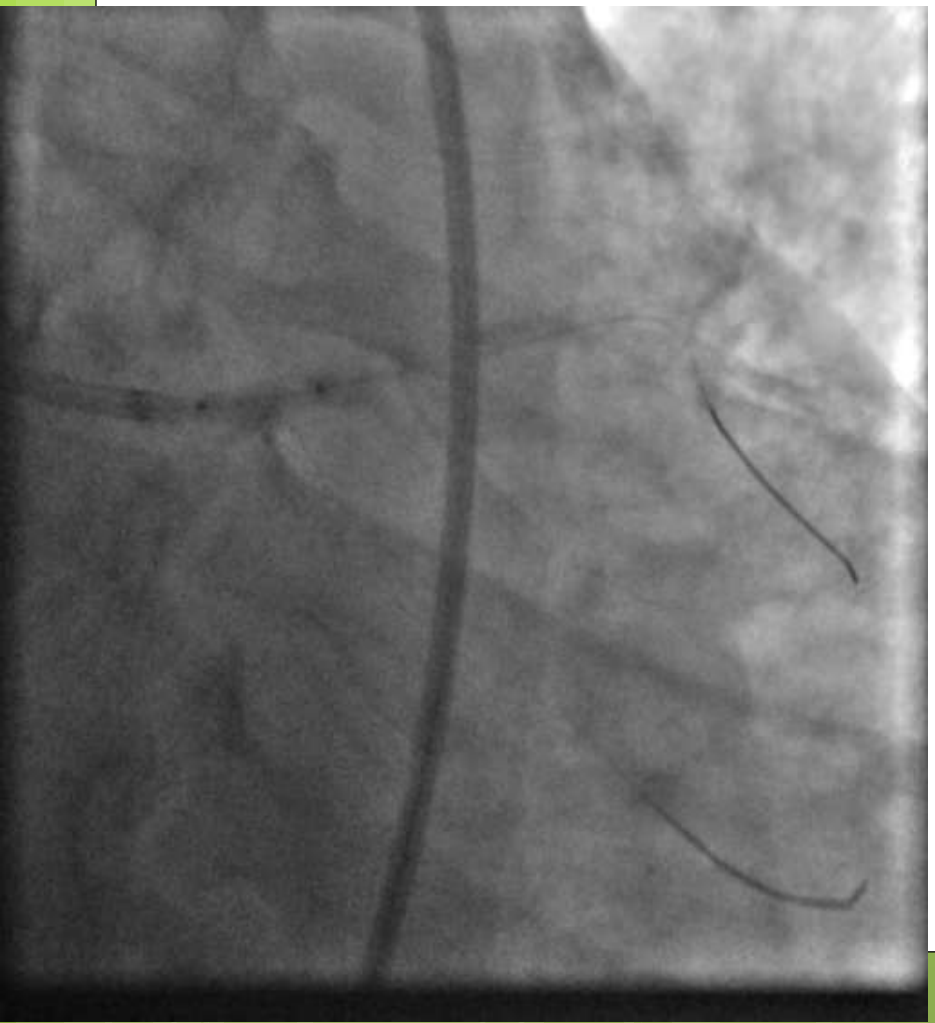


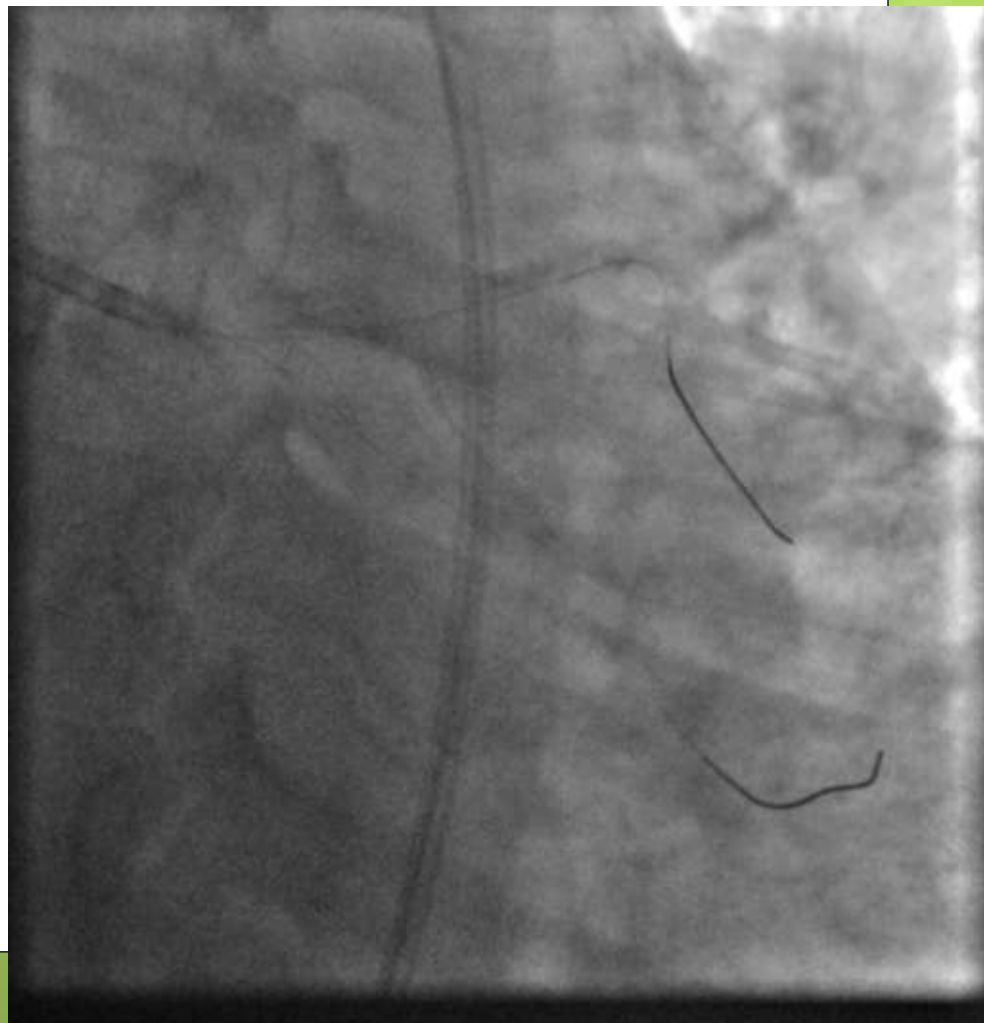
Current angiography



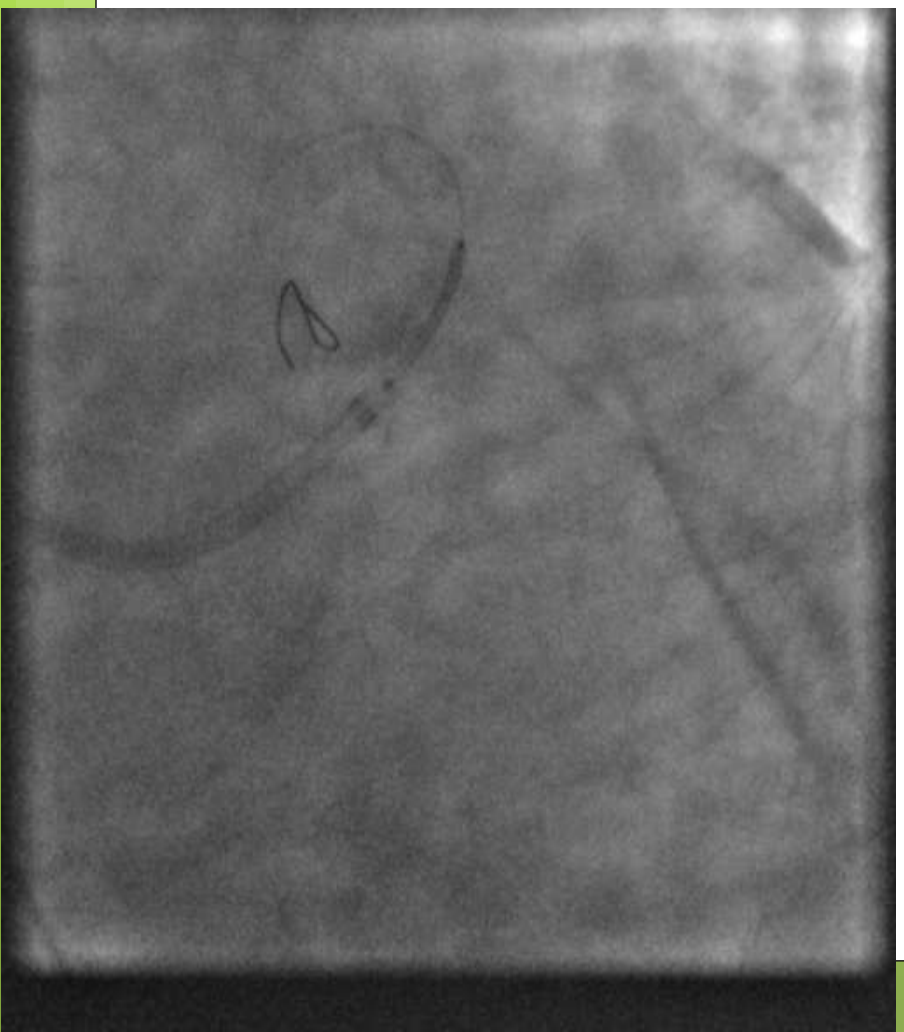


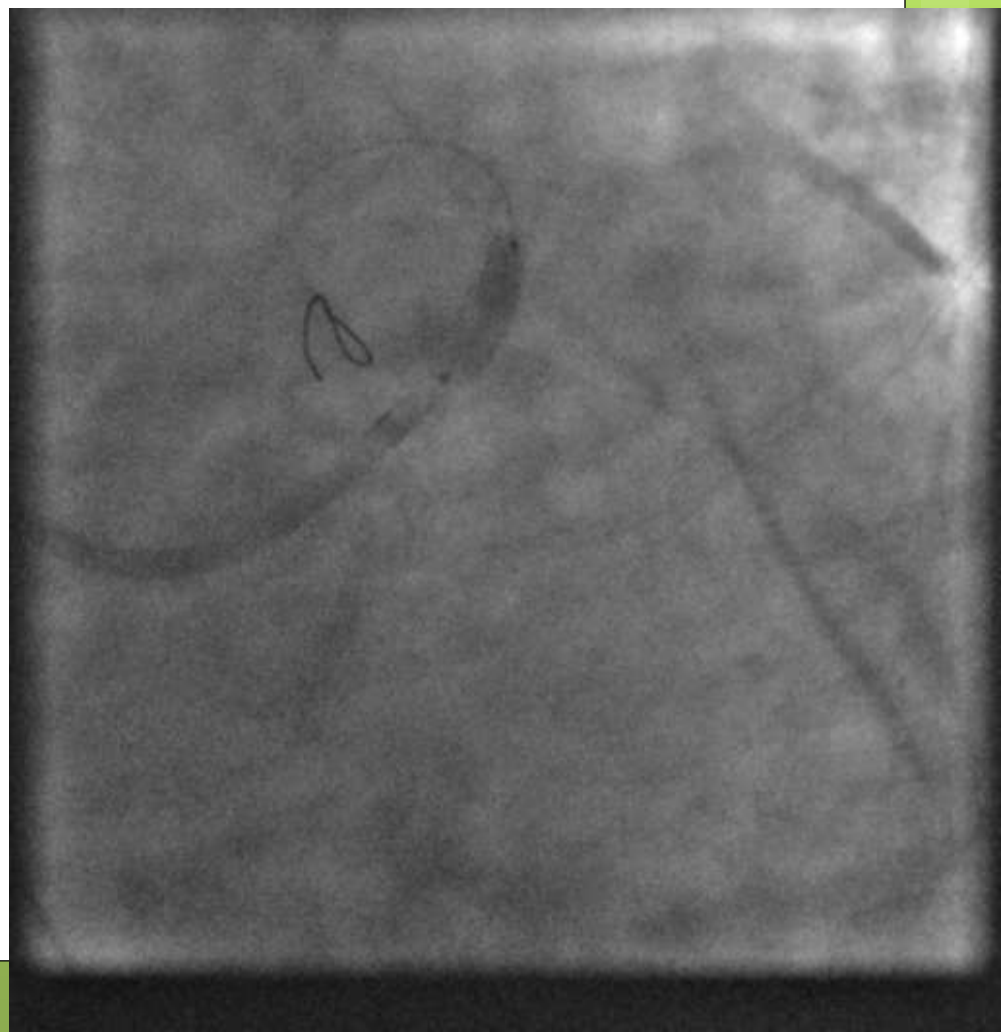
Pre dilatation with 2.50X10mm sprinter



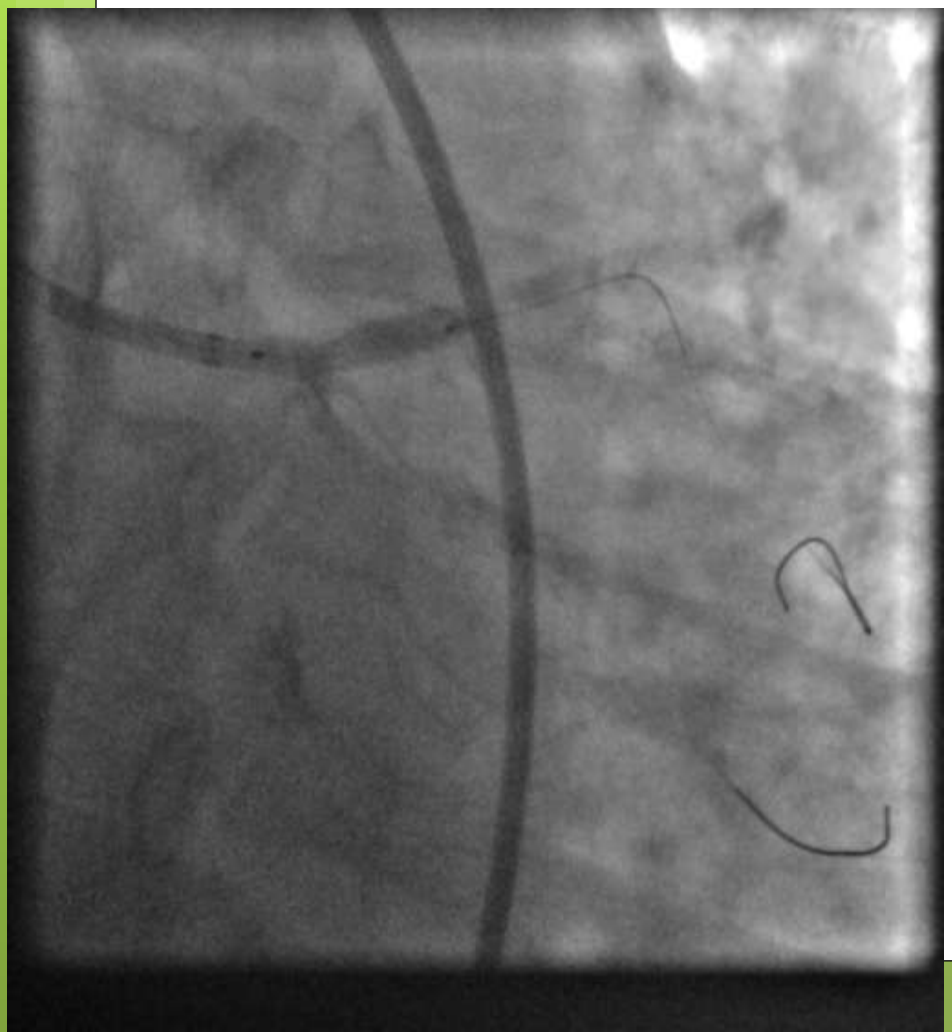


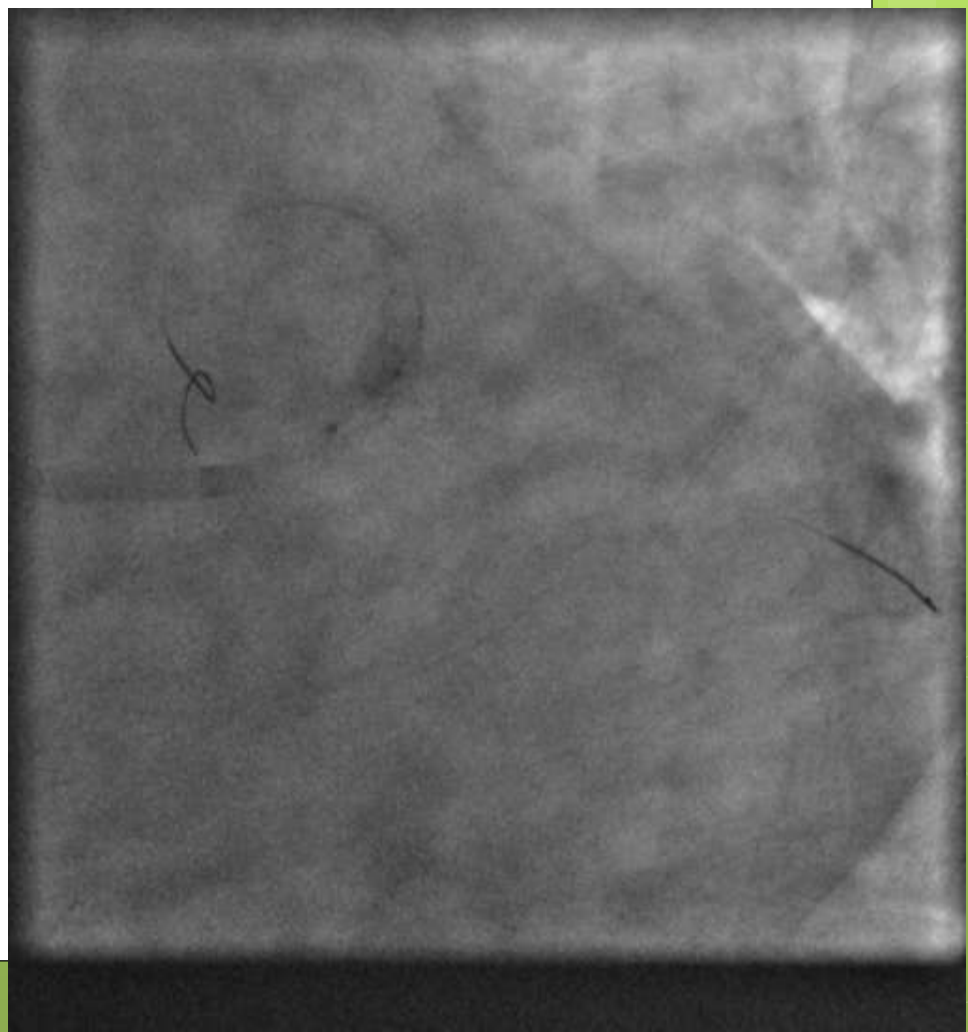
DES 3.50X15mm



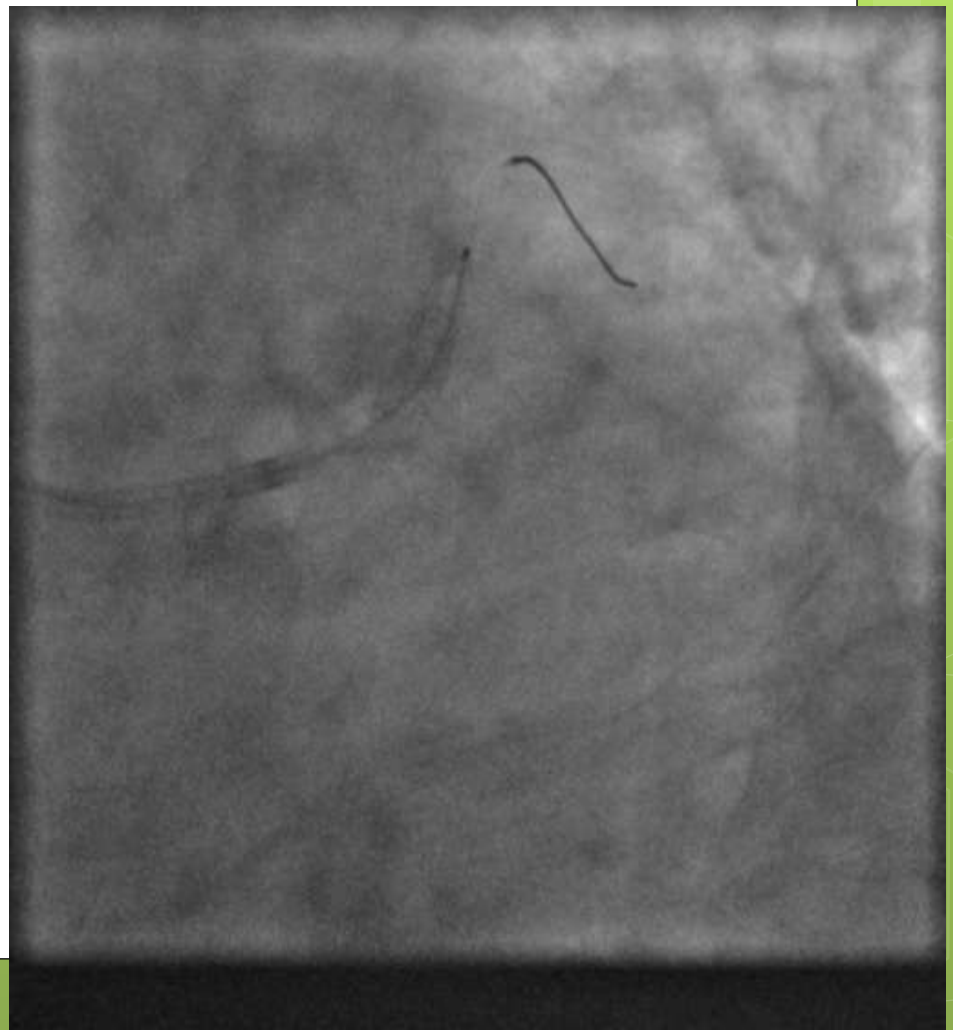


Post Dilatation with NC 4.00X9mm

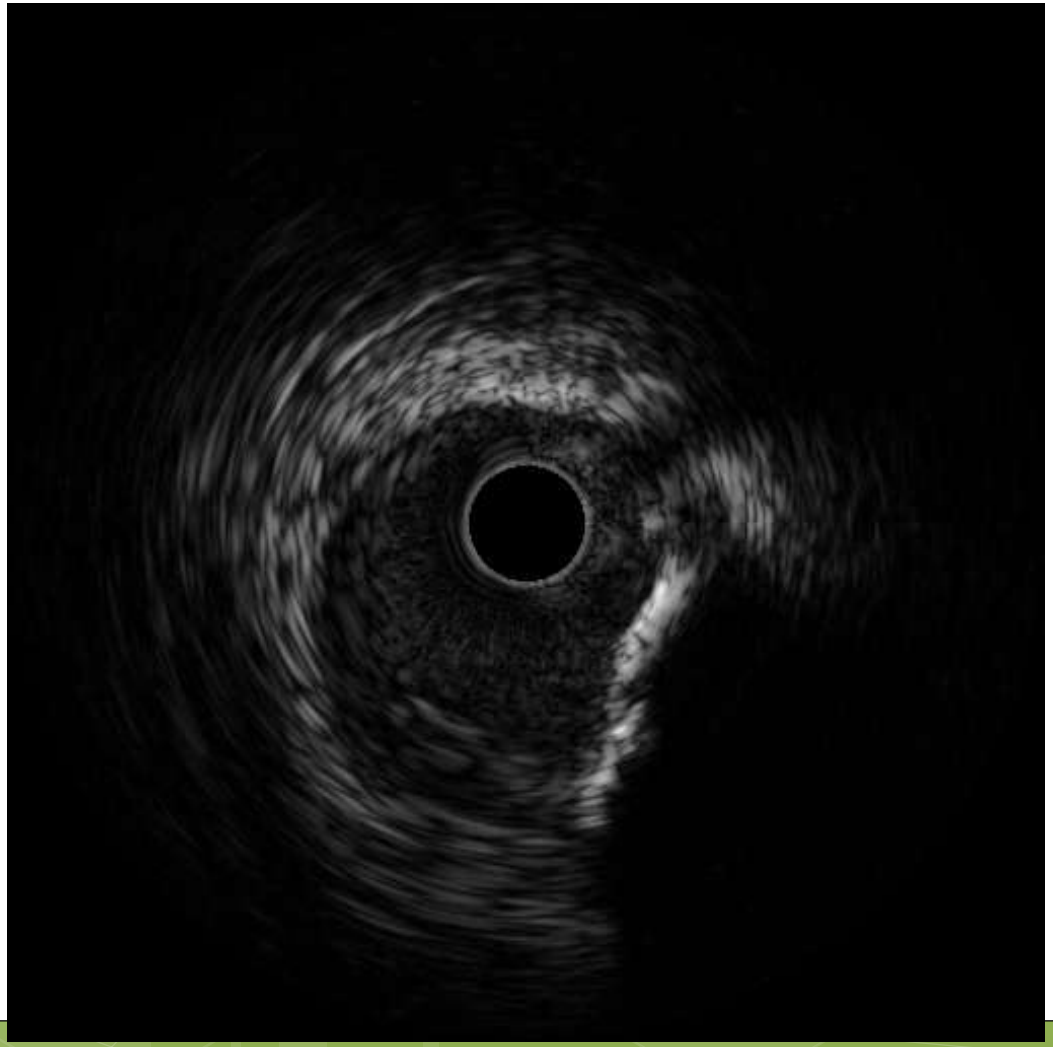




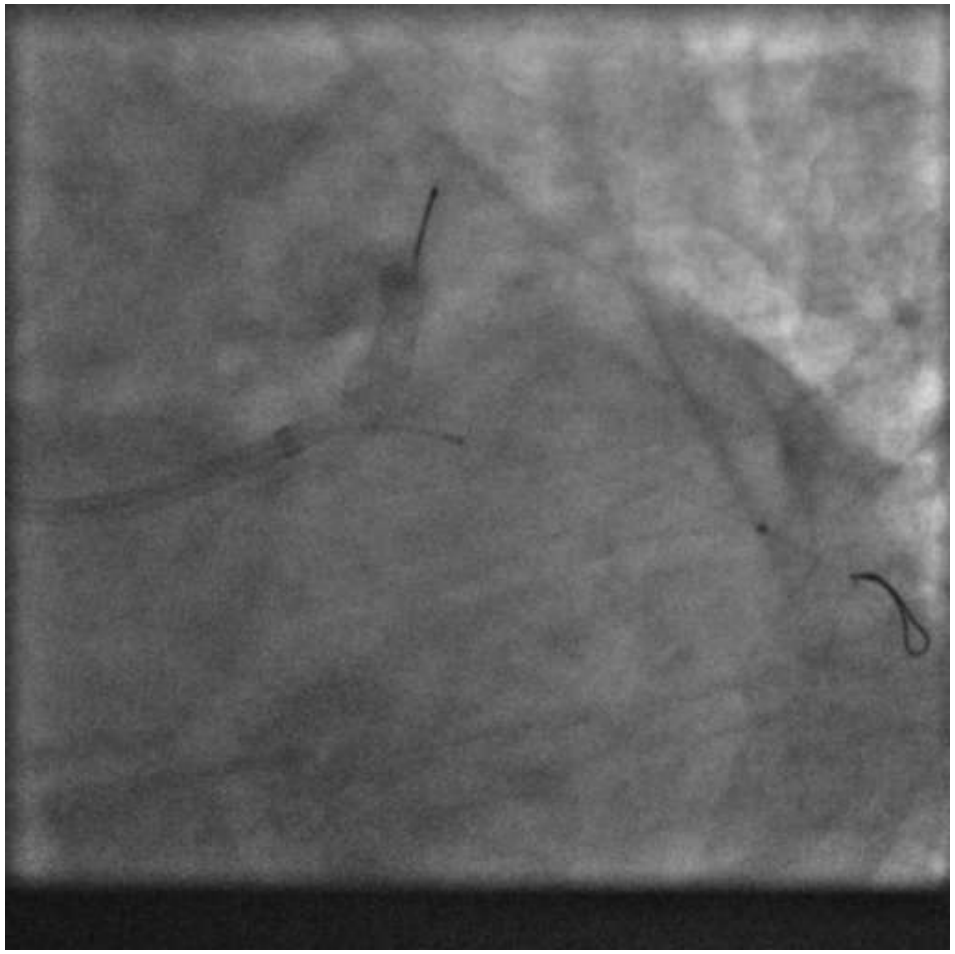
IVUS pull back study from LAD to LMCA



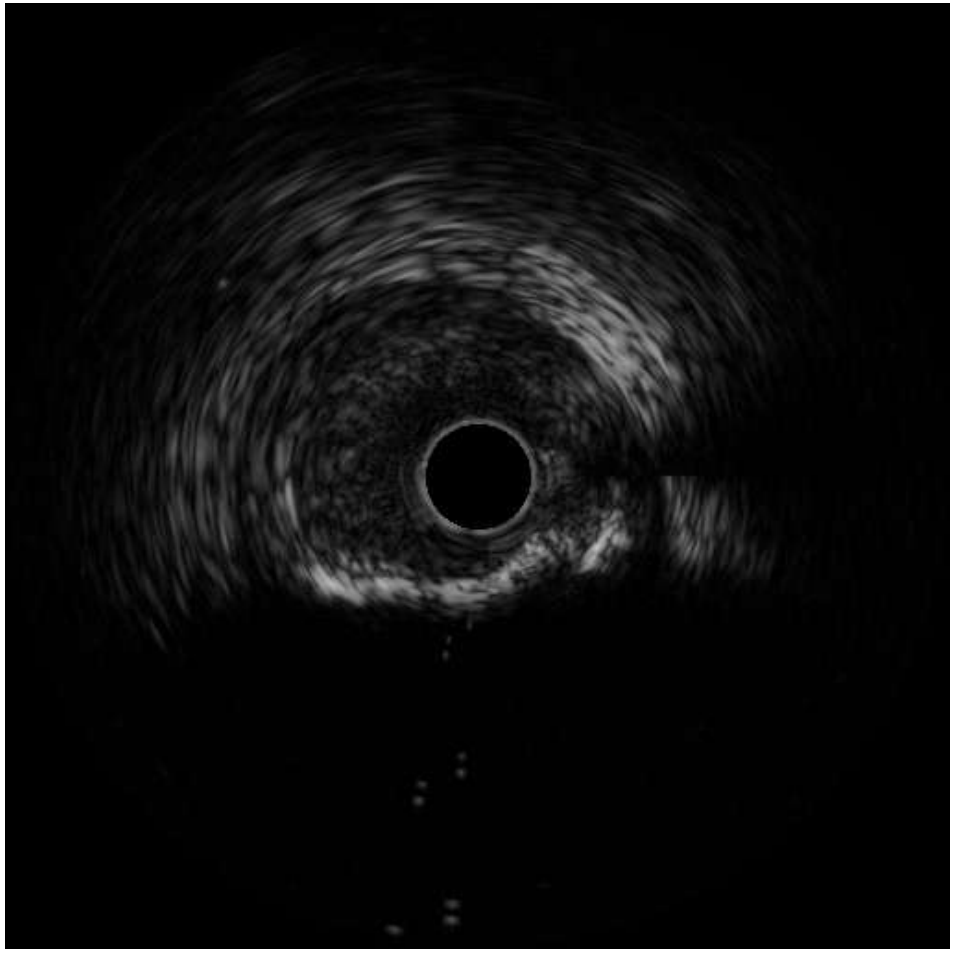
IVUS run



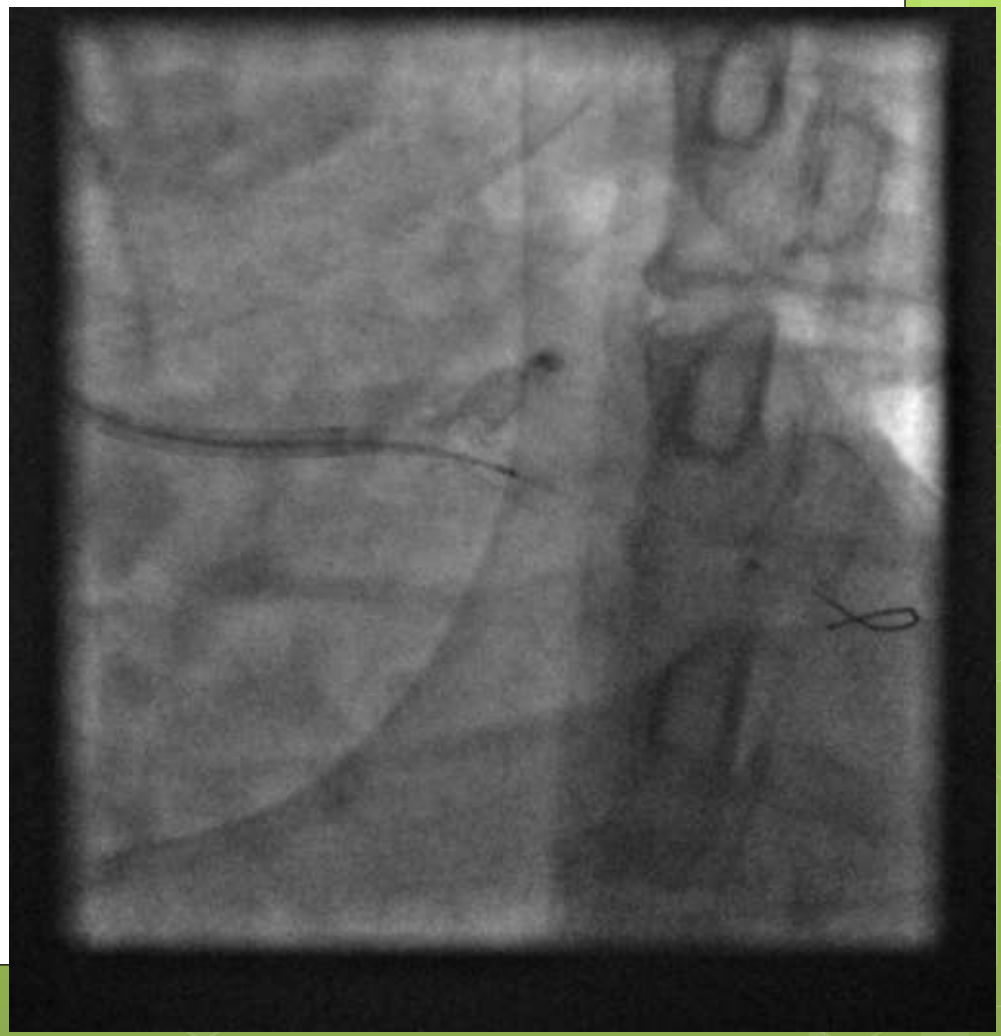
IVUS pull back study from LCx to LMCA



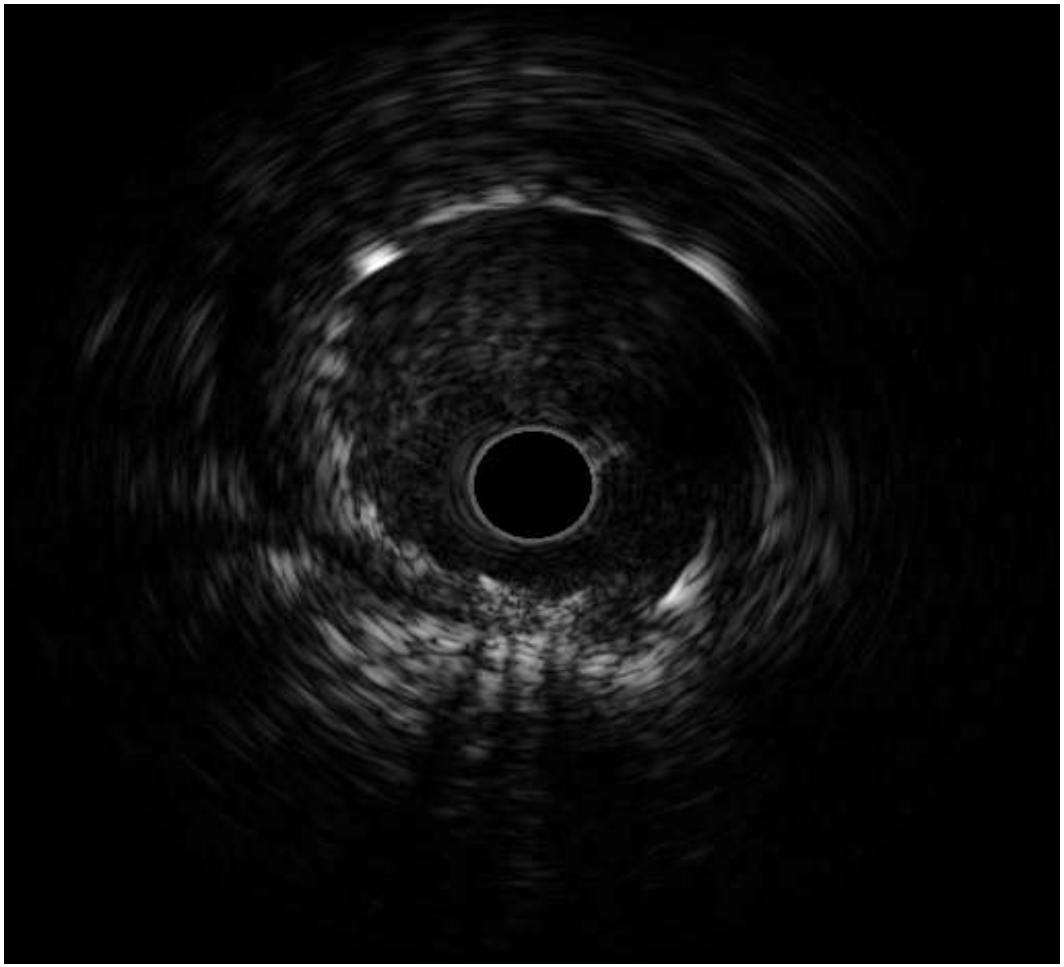
IVUS run



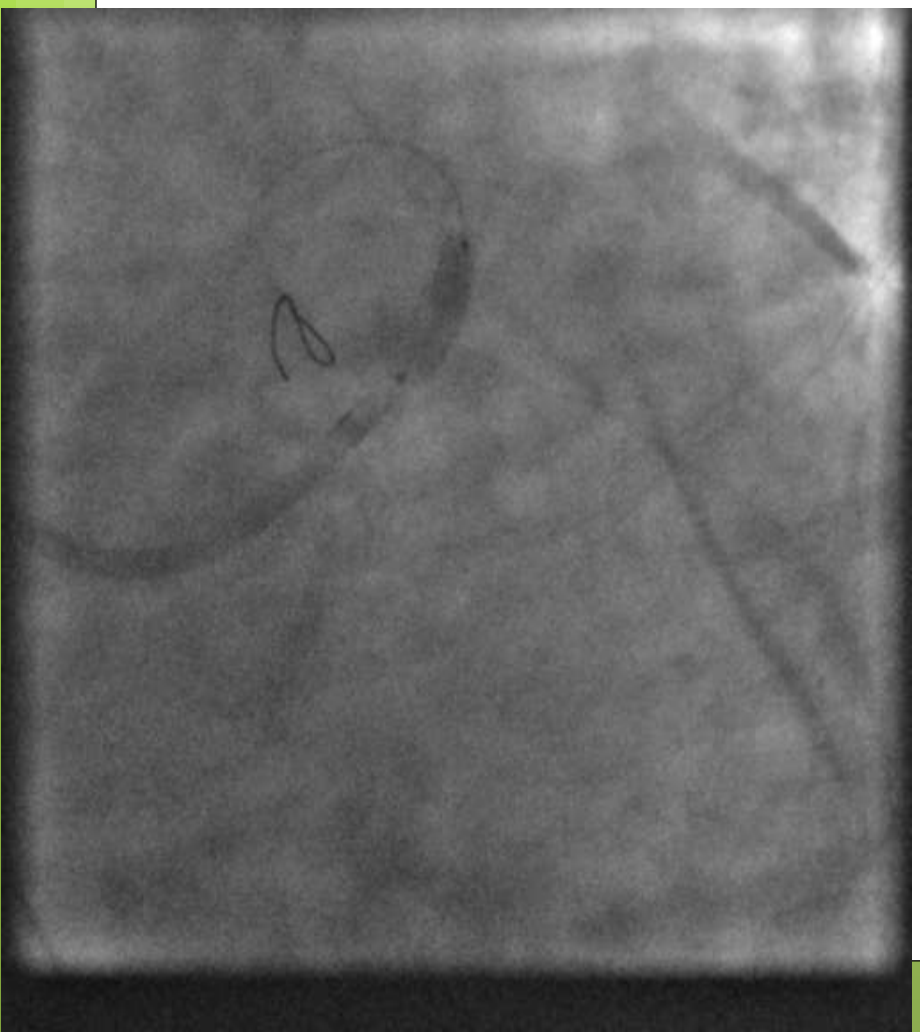
Ballooning in LCx and IVUS from LCx to LMCA

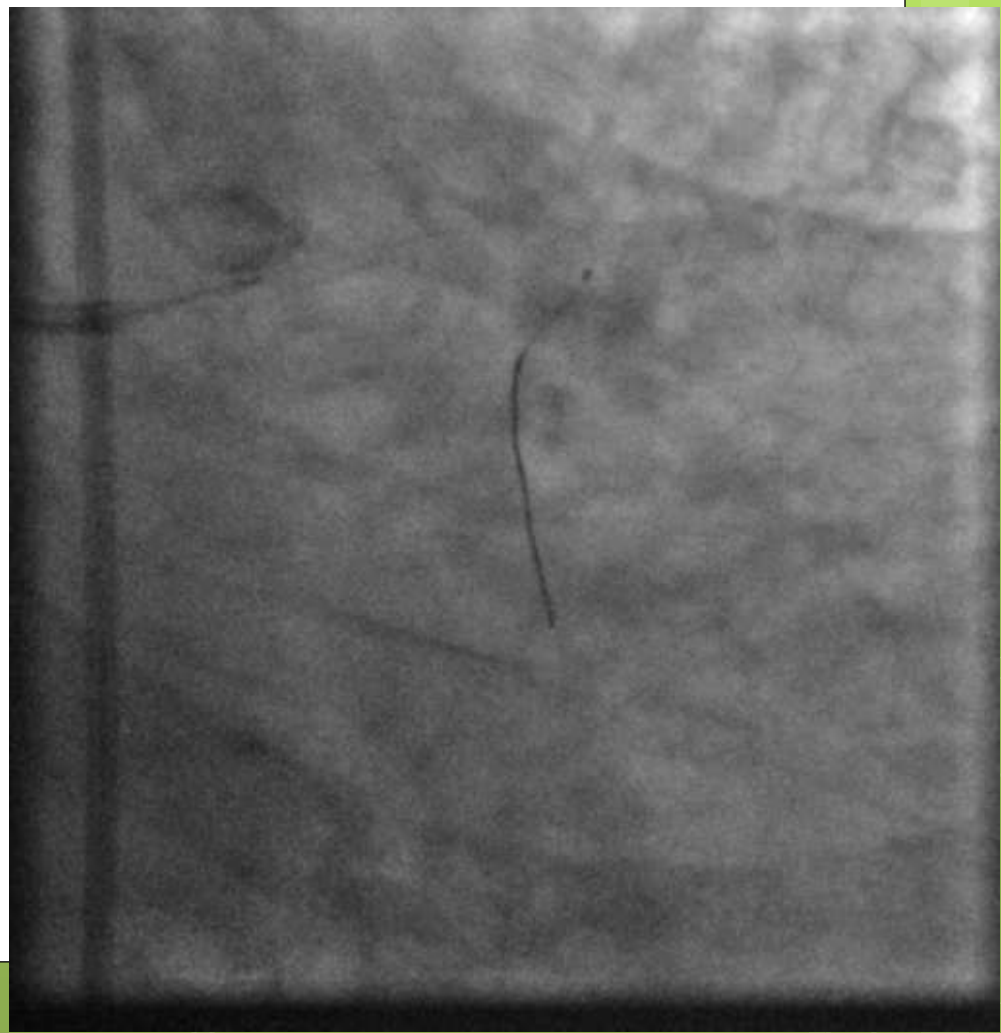


IVUS run

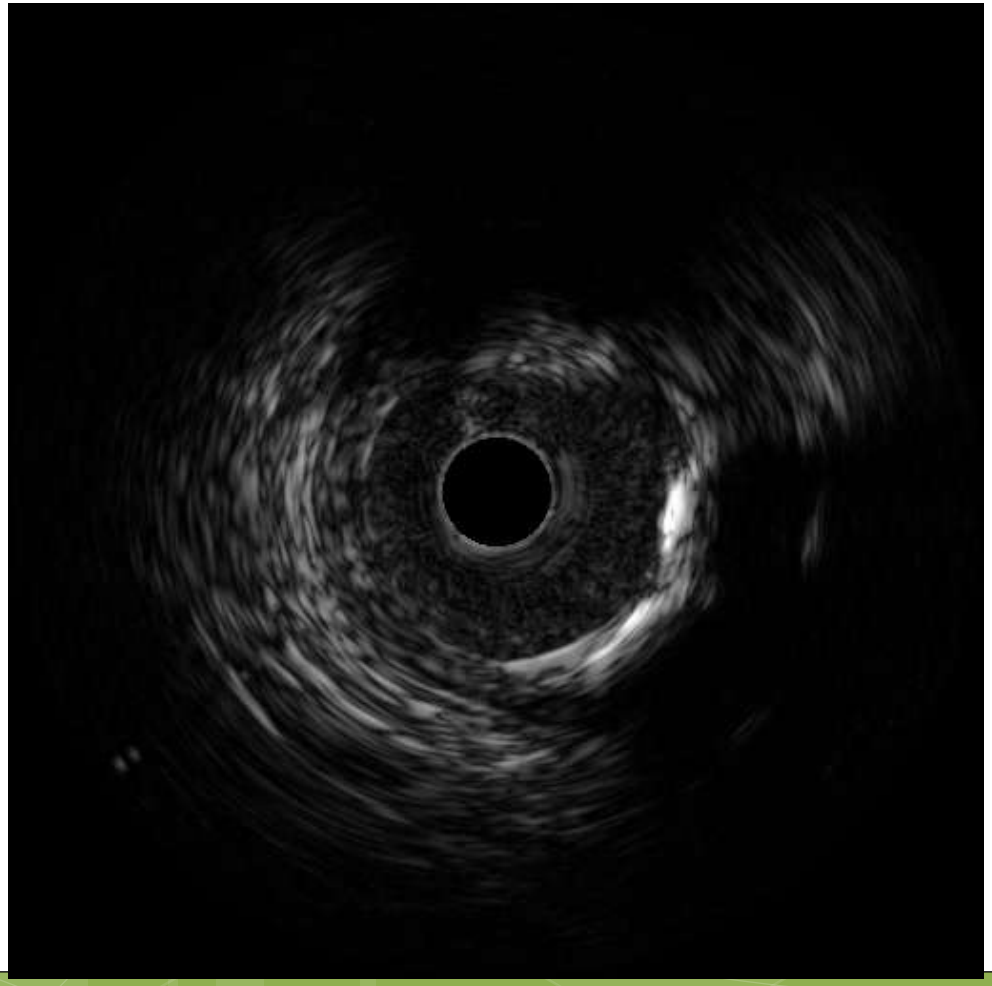


Final post dilatation of LM Stent & IVUS from LAD to LMCA

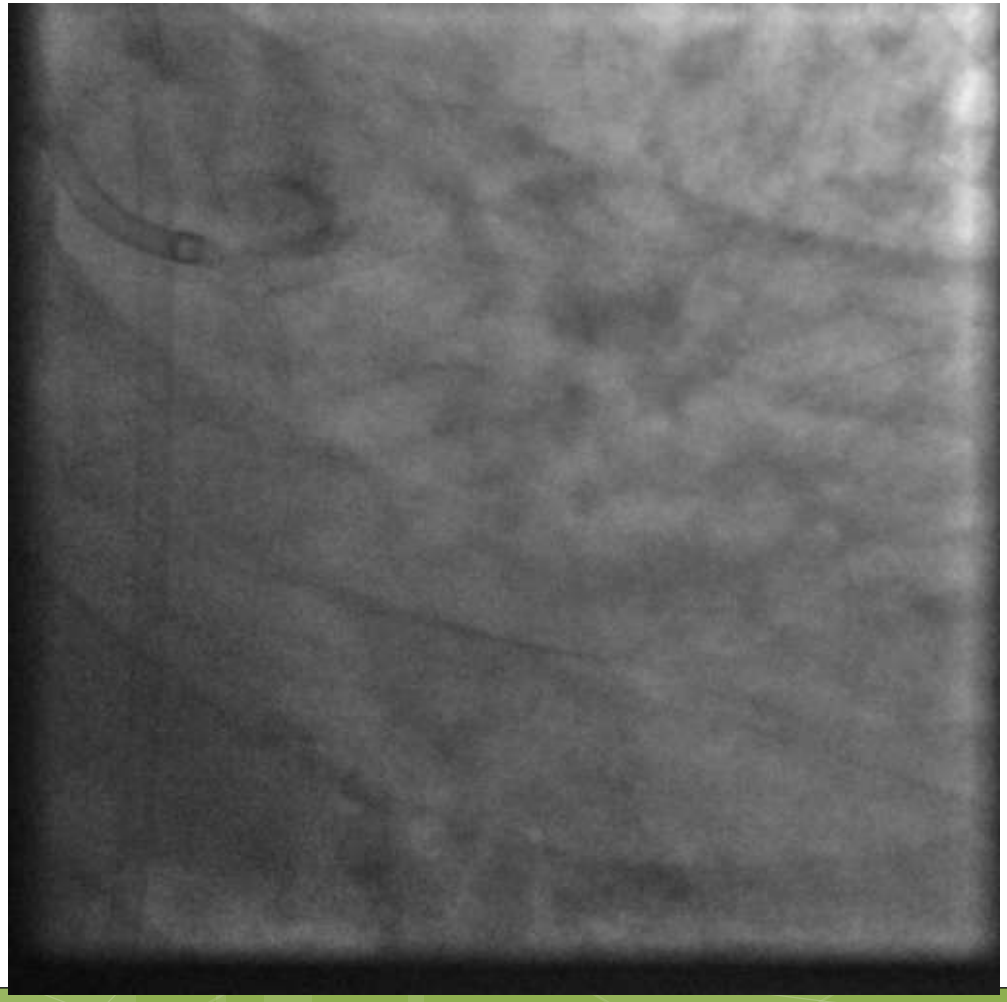


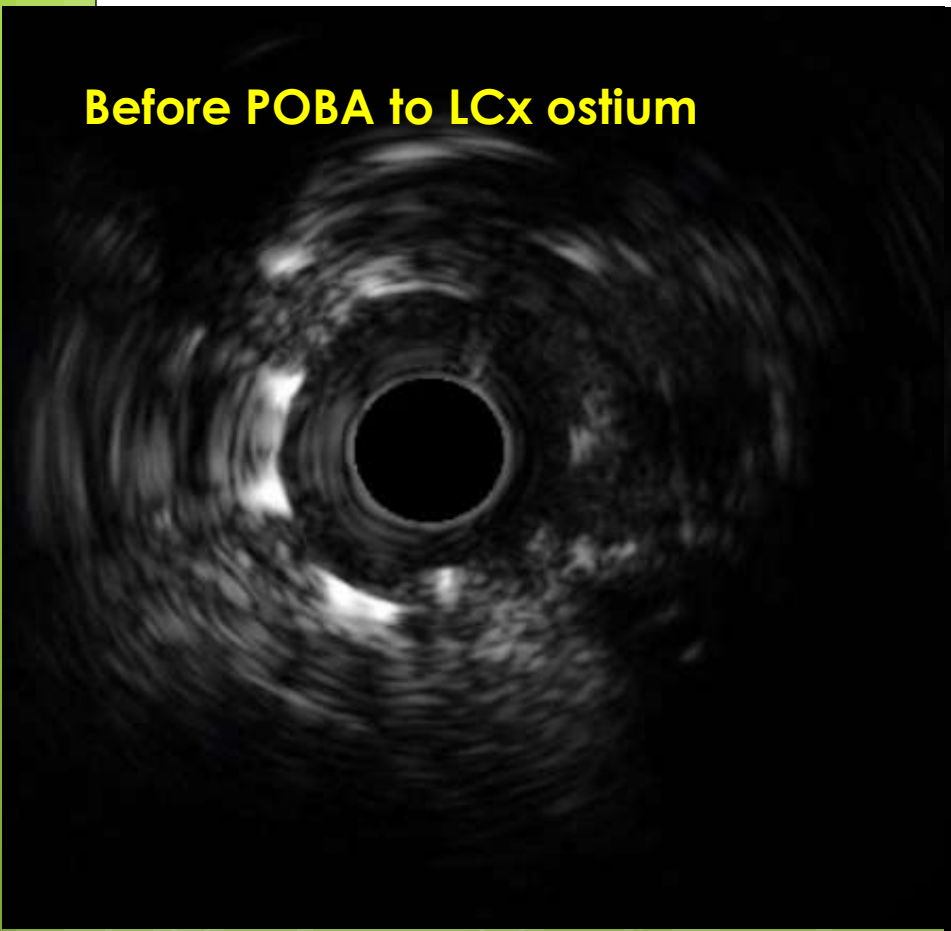


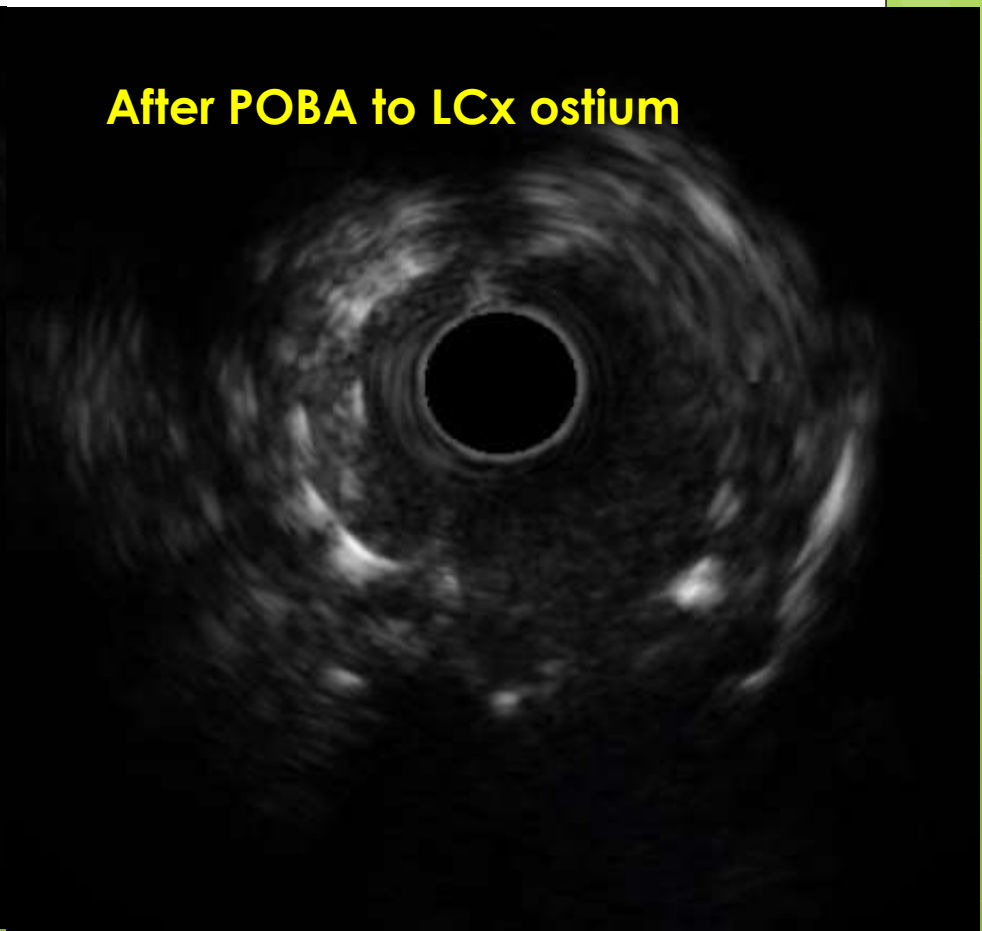
IVUS run



Final Result




Before POBA to LCx ostium


After POBA to LCx ostium

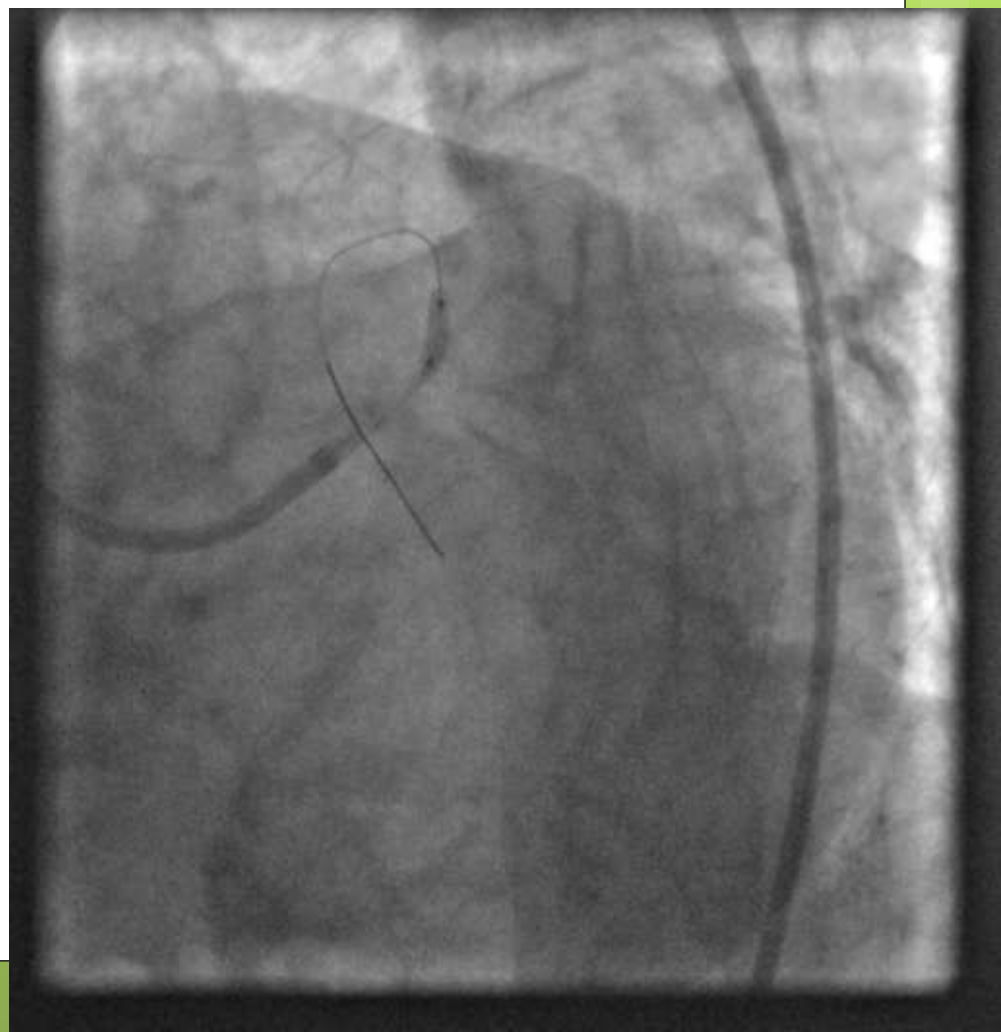
Case history

- Mr. Ghosh, 62 M,
- Non diabetic, normotensive, dyslipidimic, Ex-smoker
- Presented with chest pain

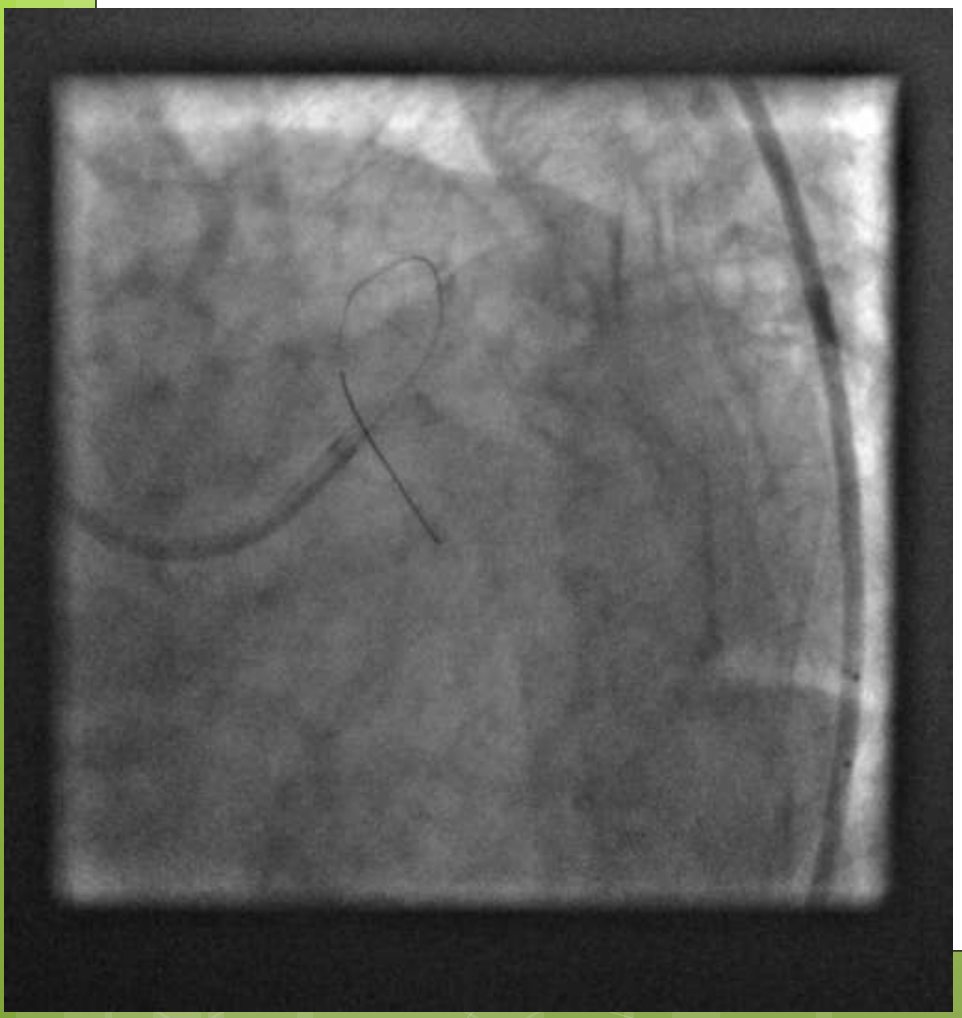
- ECHO : No RWMA, LVEF : 65%

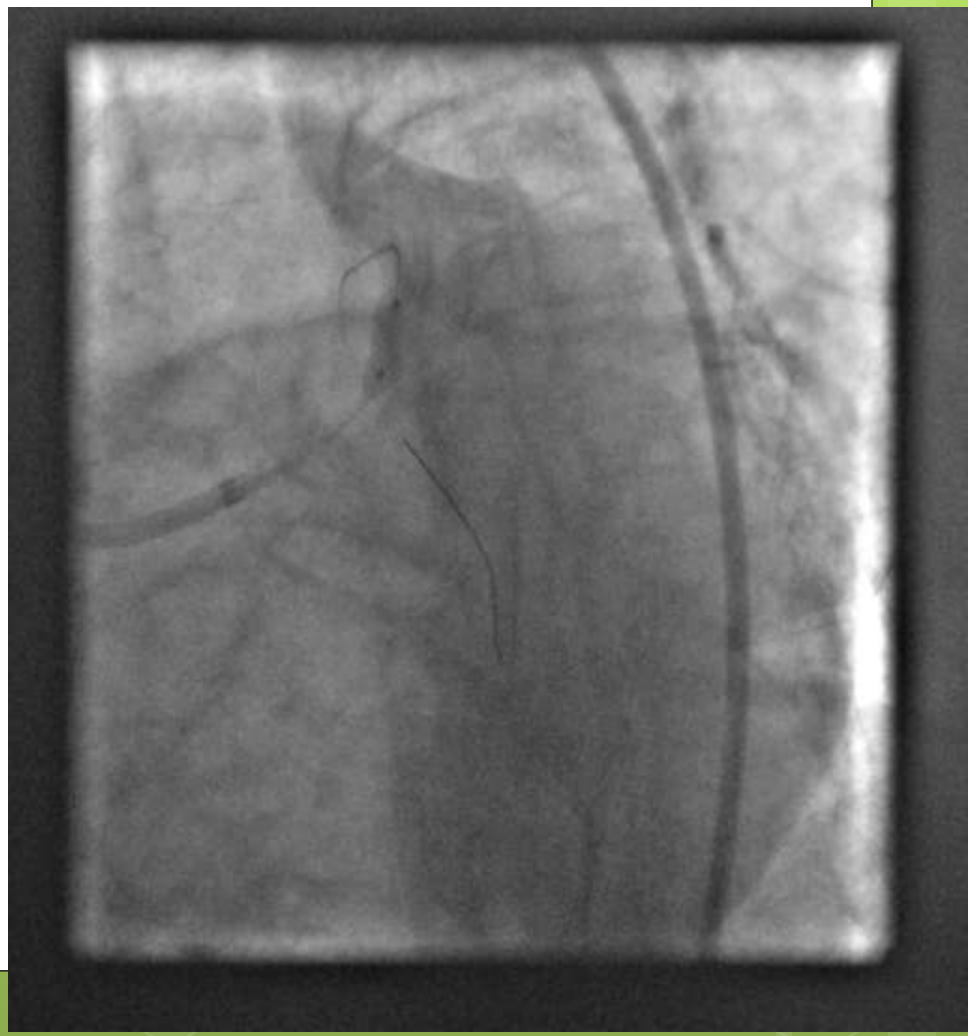
Stabilizer super soft wire

Pre dilatation with sprinter 2.00X12mm

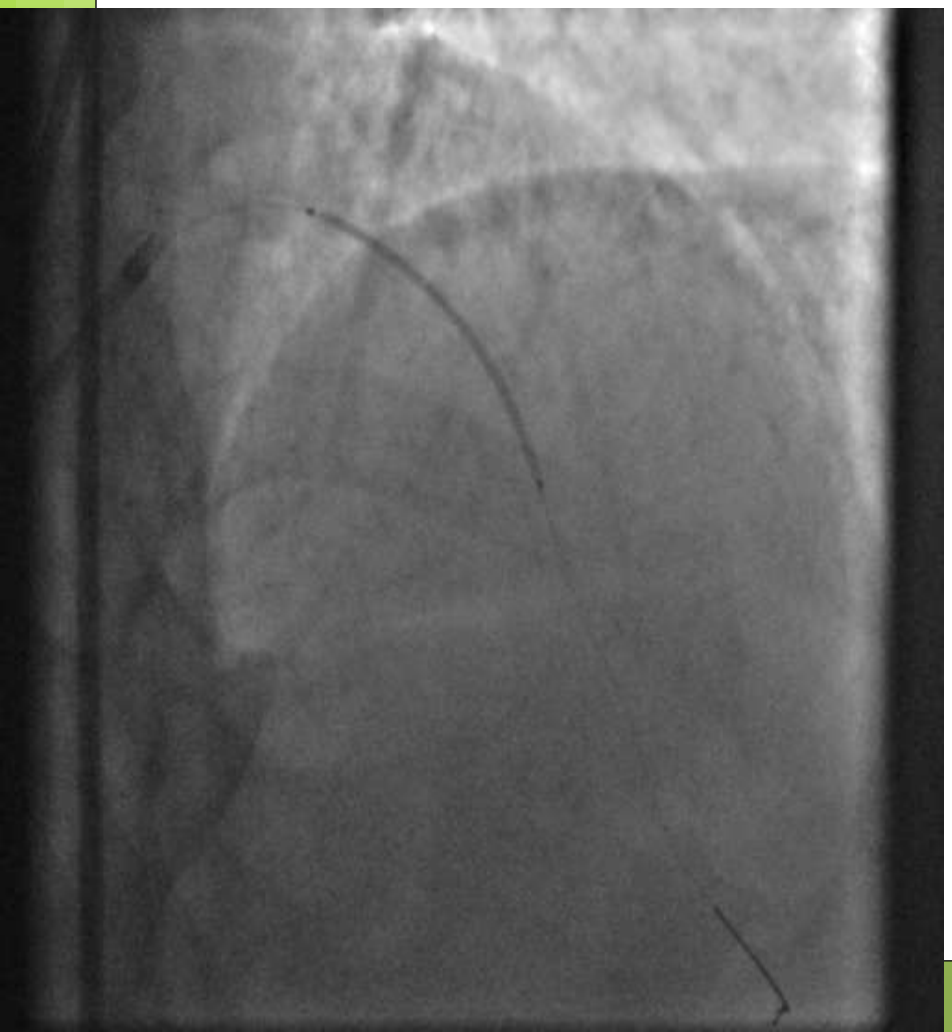


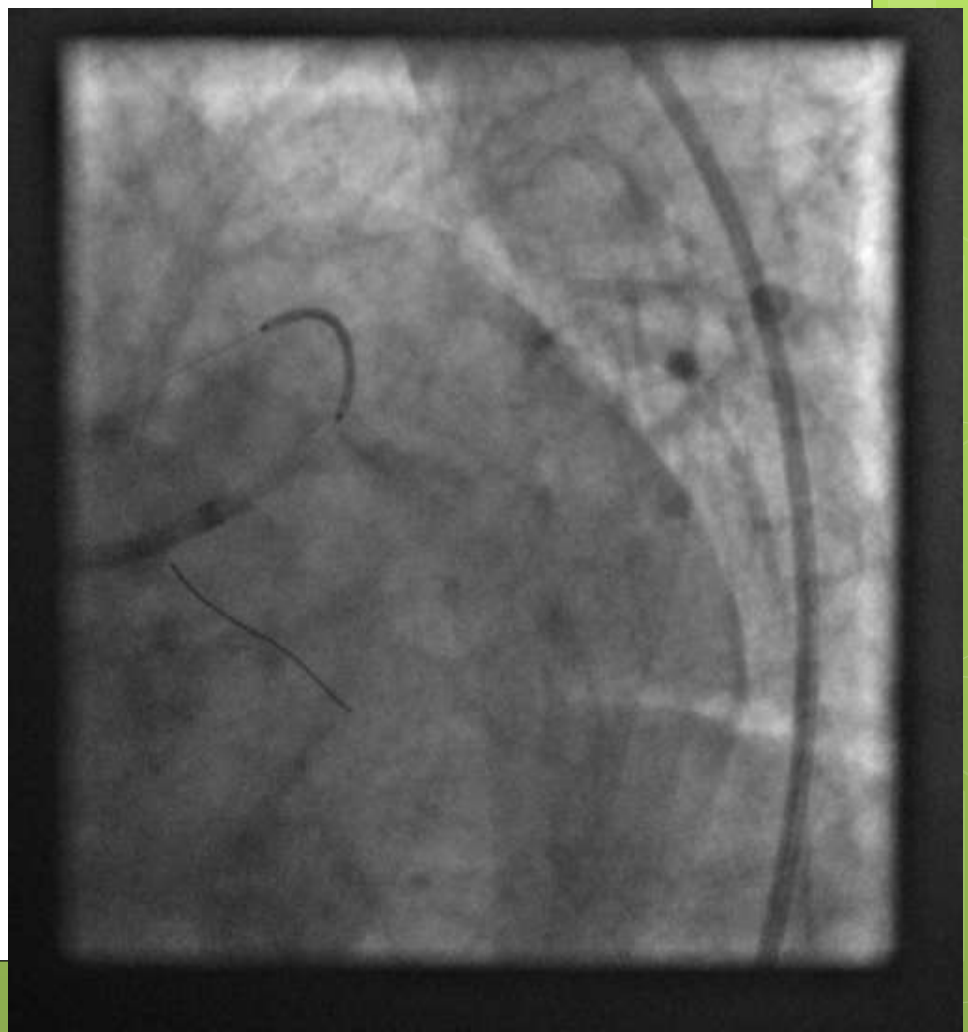
IVUS run



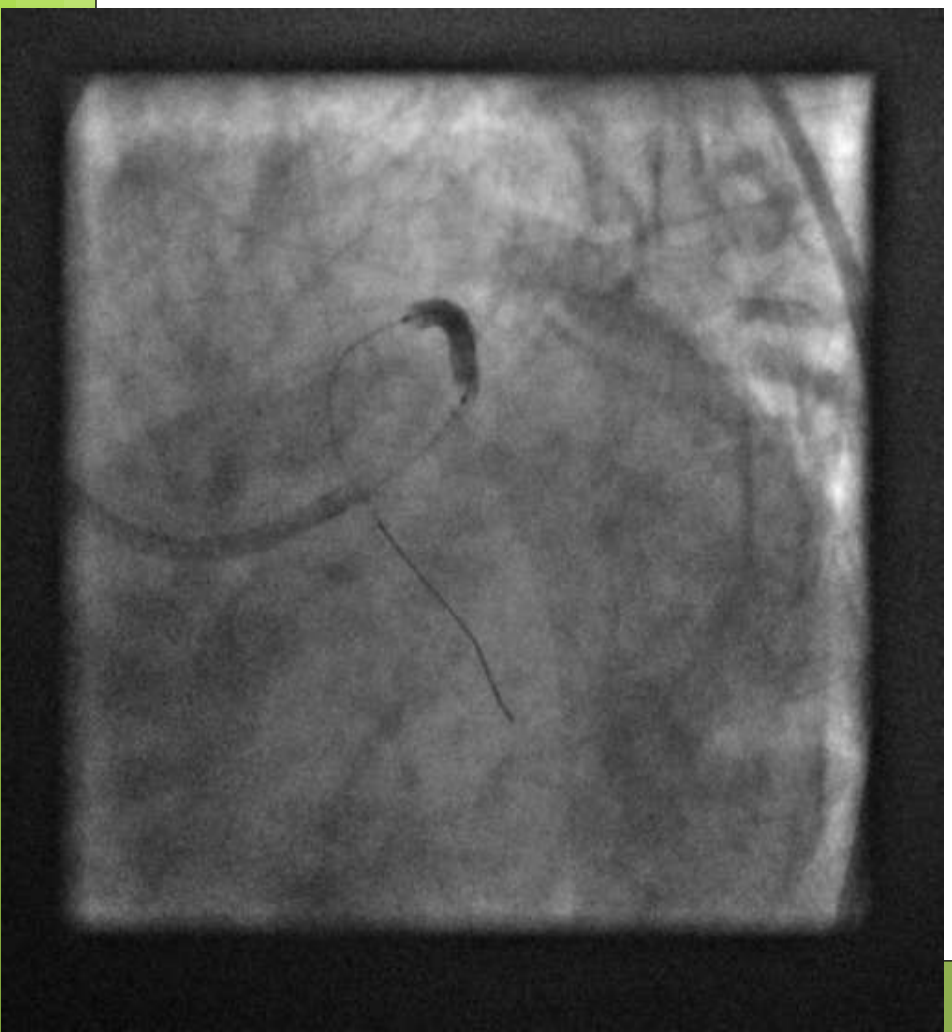


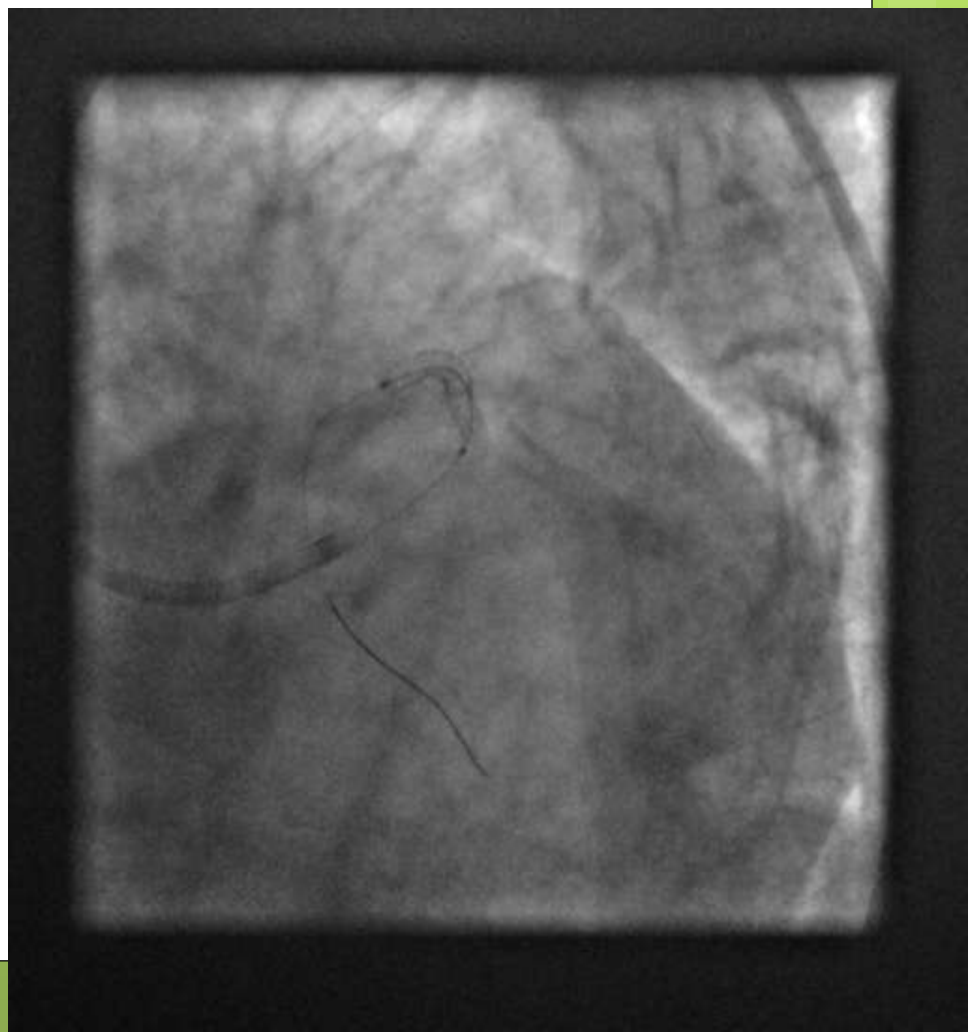
DES 3.50X24mm



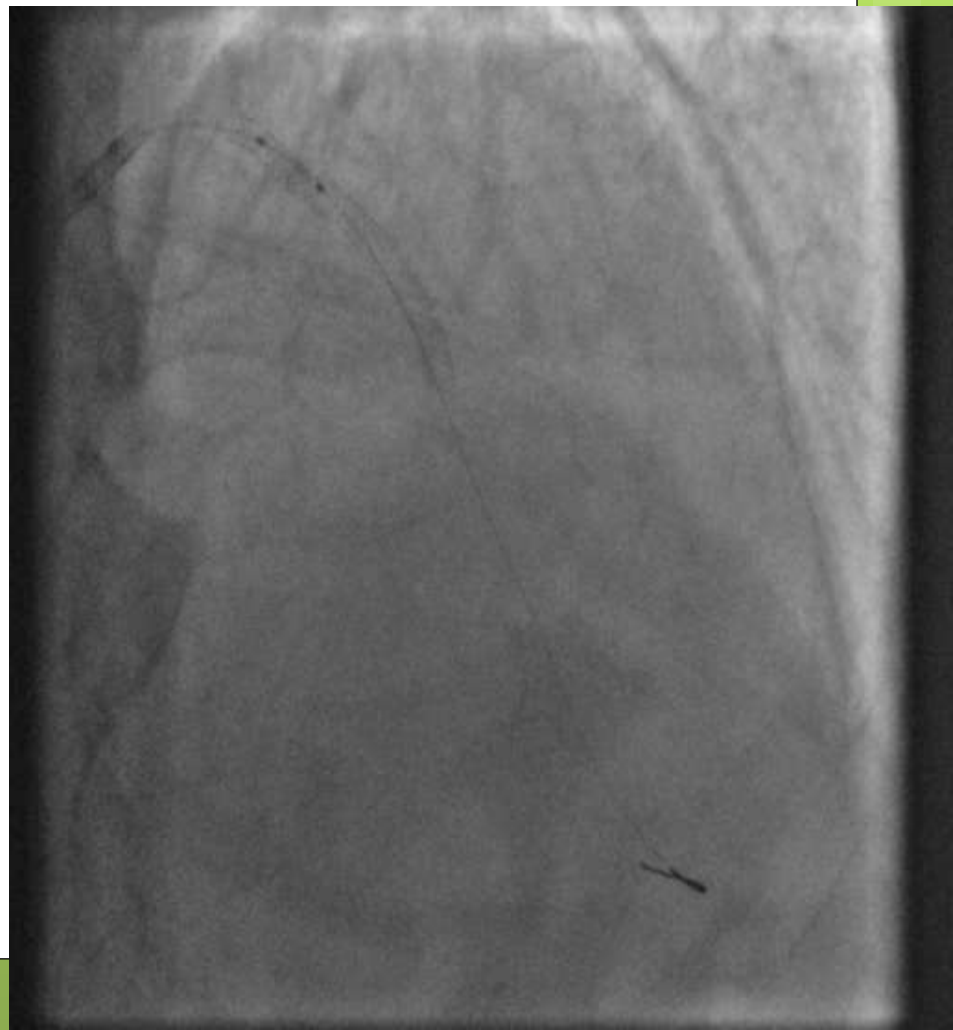


Stent deployment

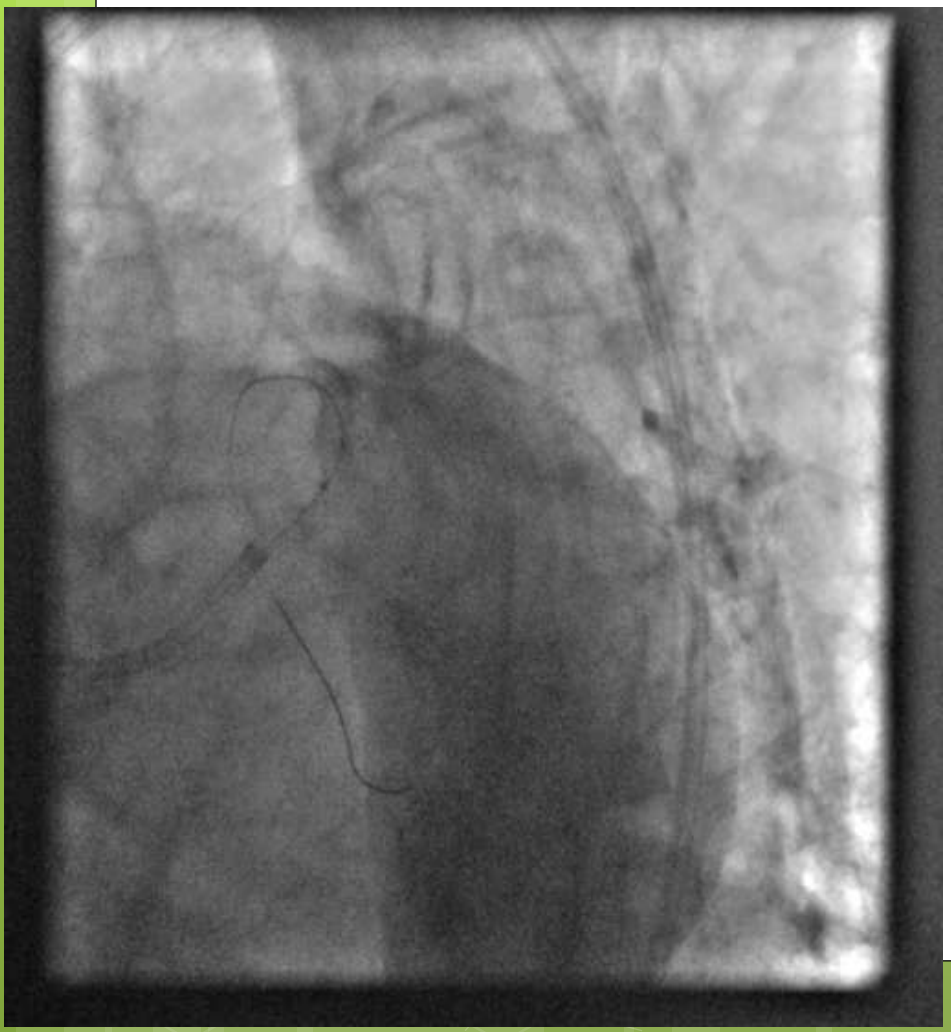


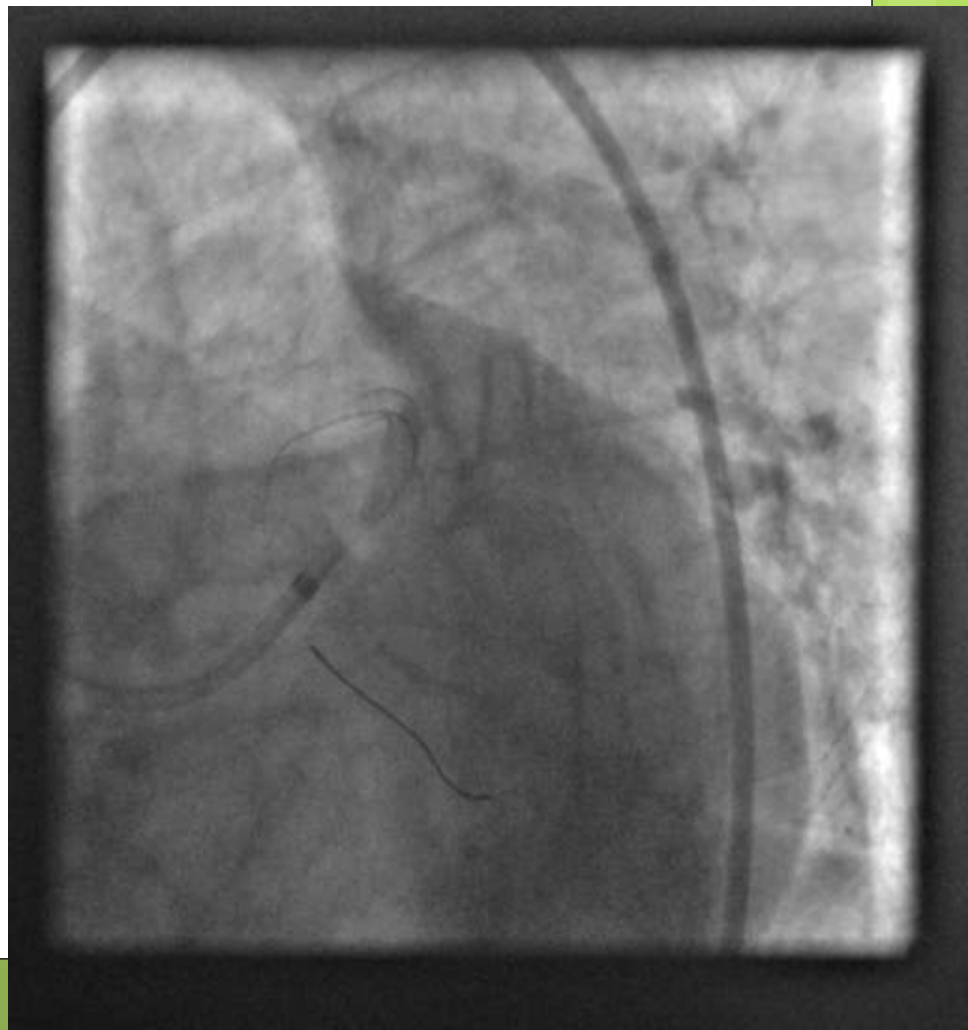


Post dilatation with NC 3.5X9mm

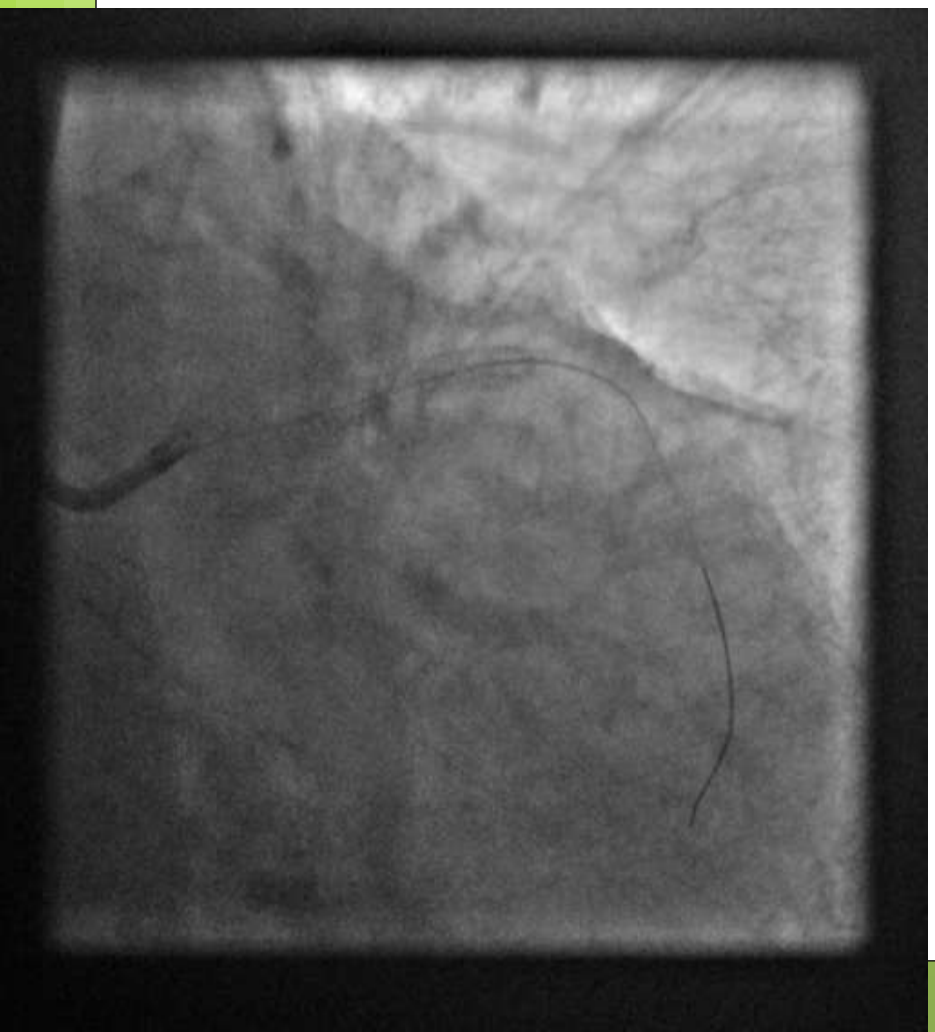


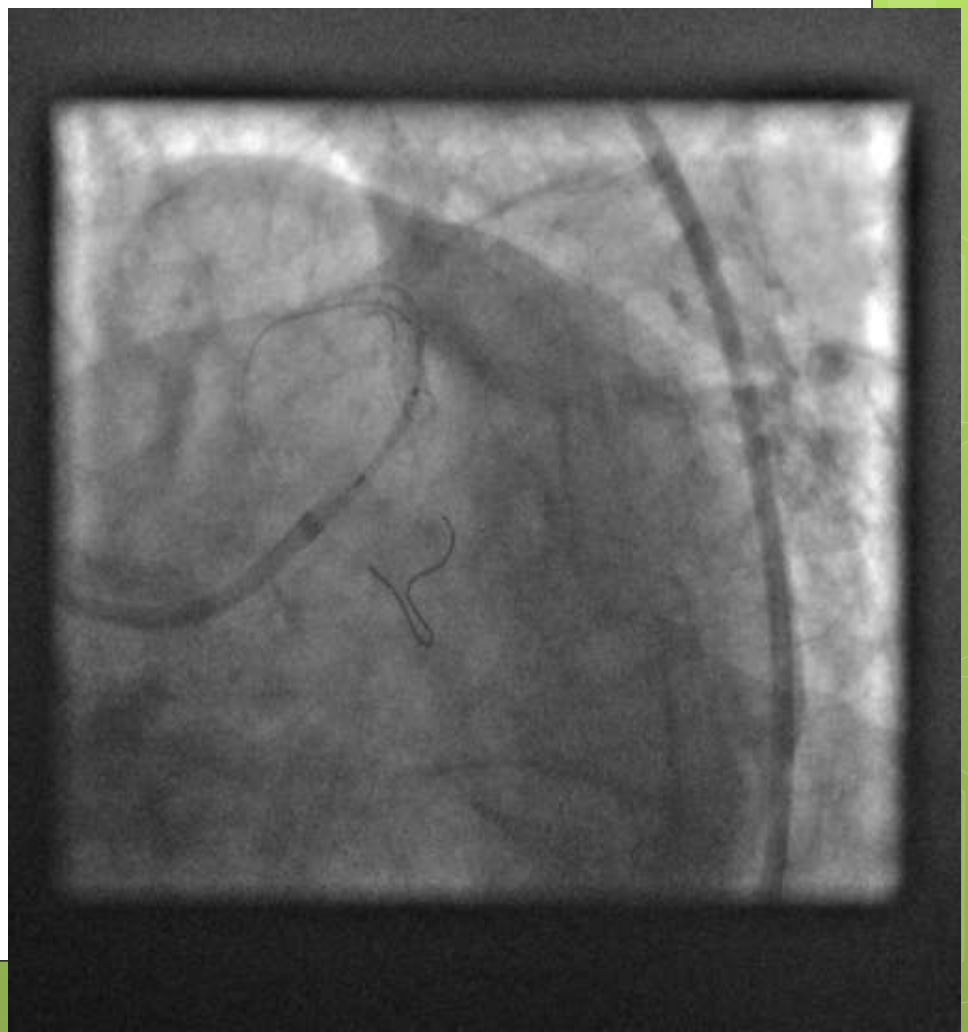
Dissection at Proximal part of stent

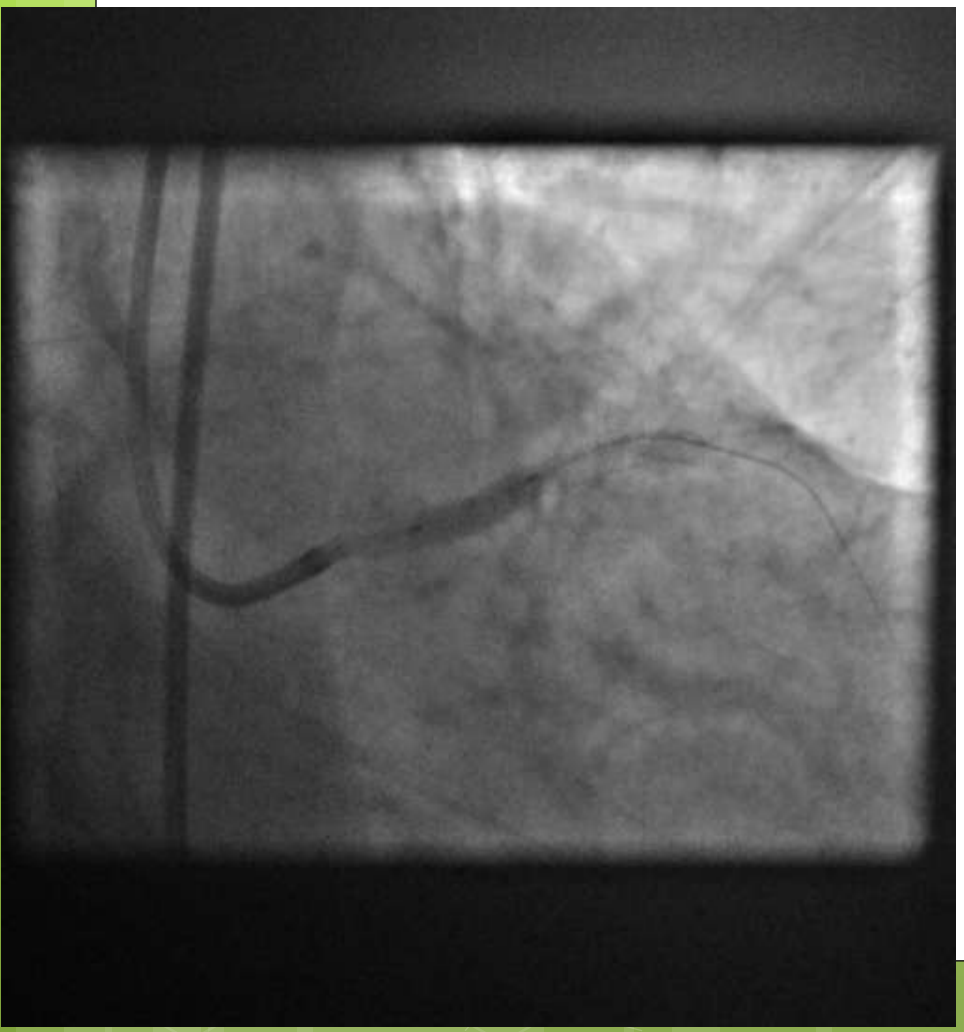


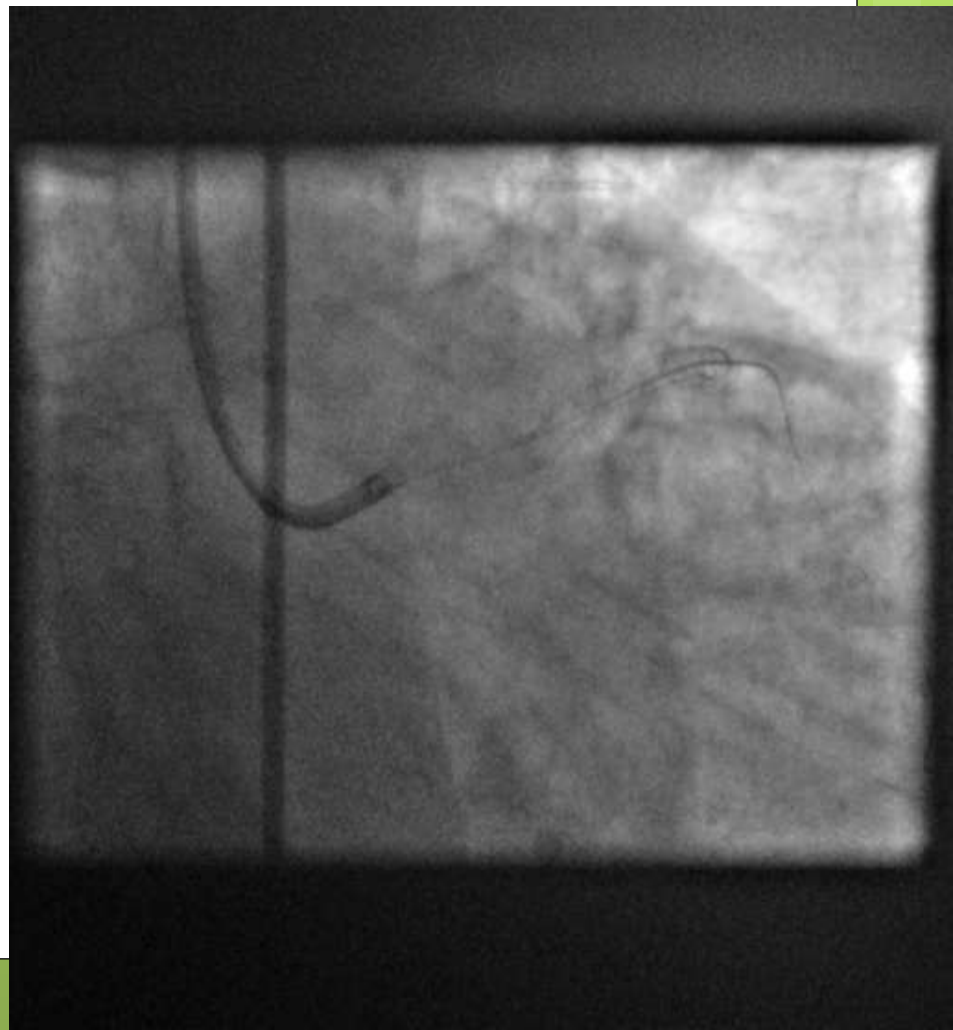


DES 4.00X12mm

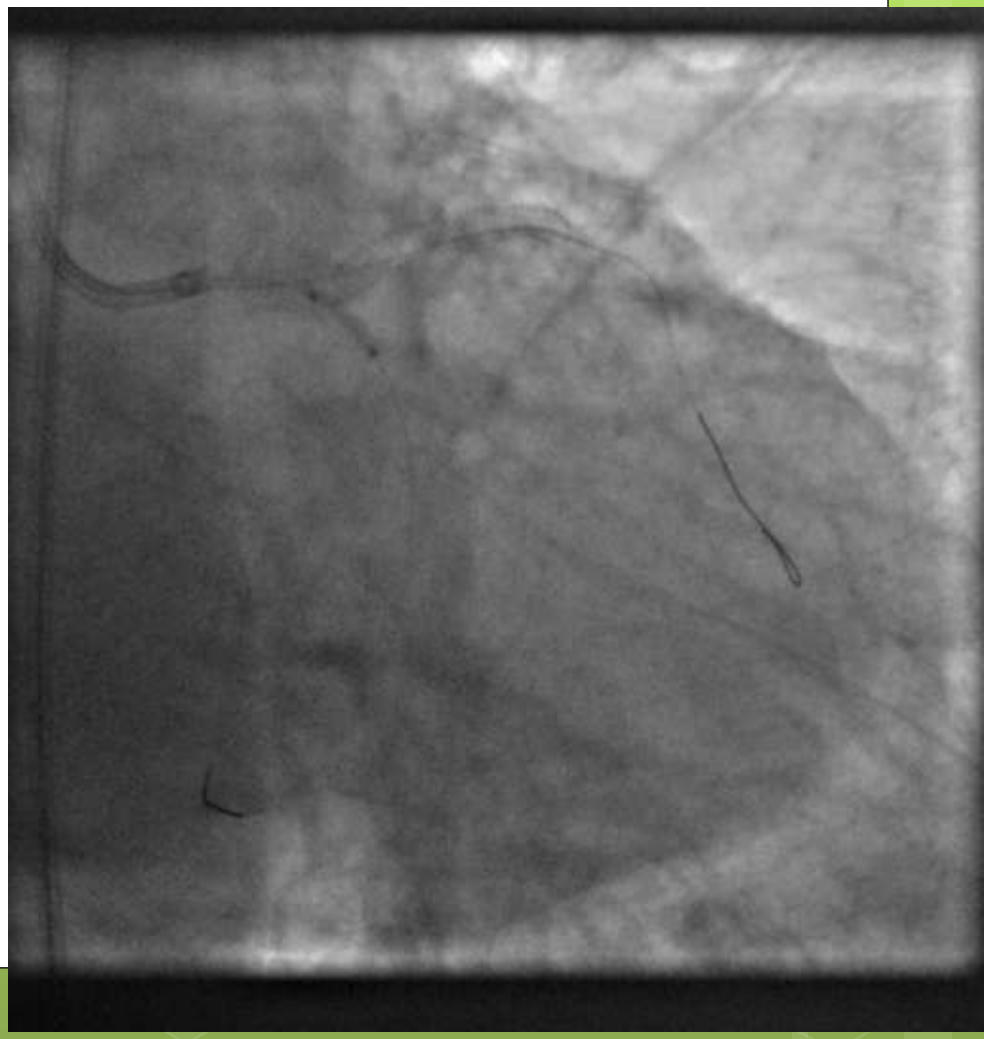




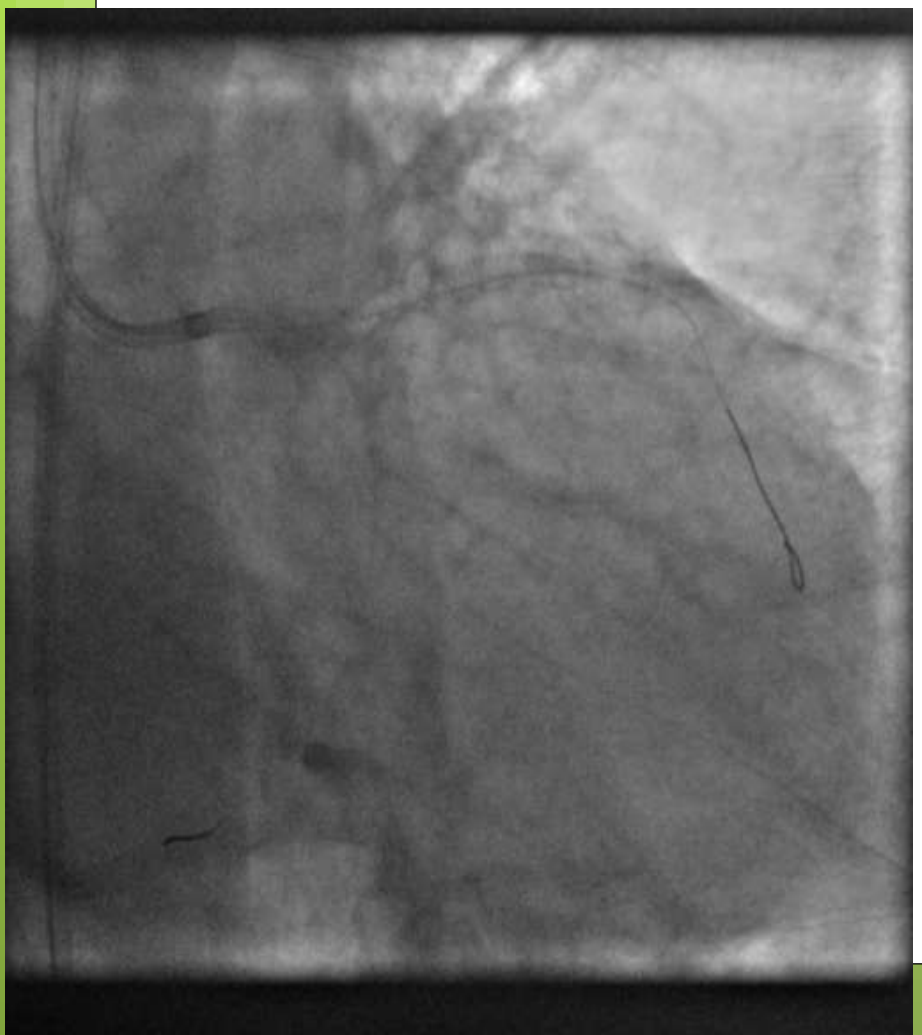


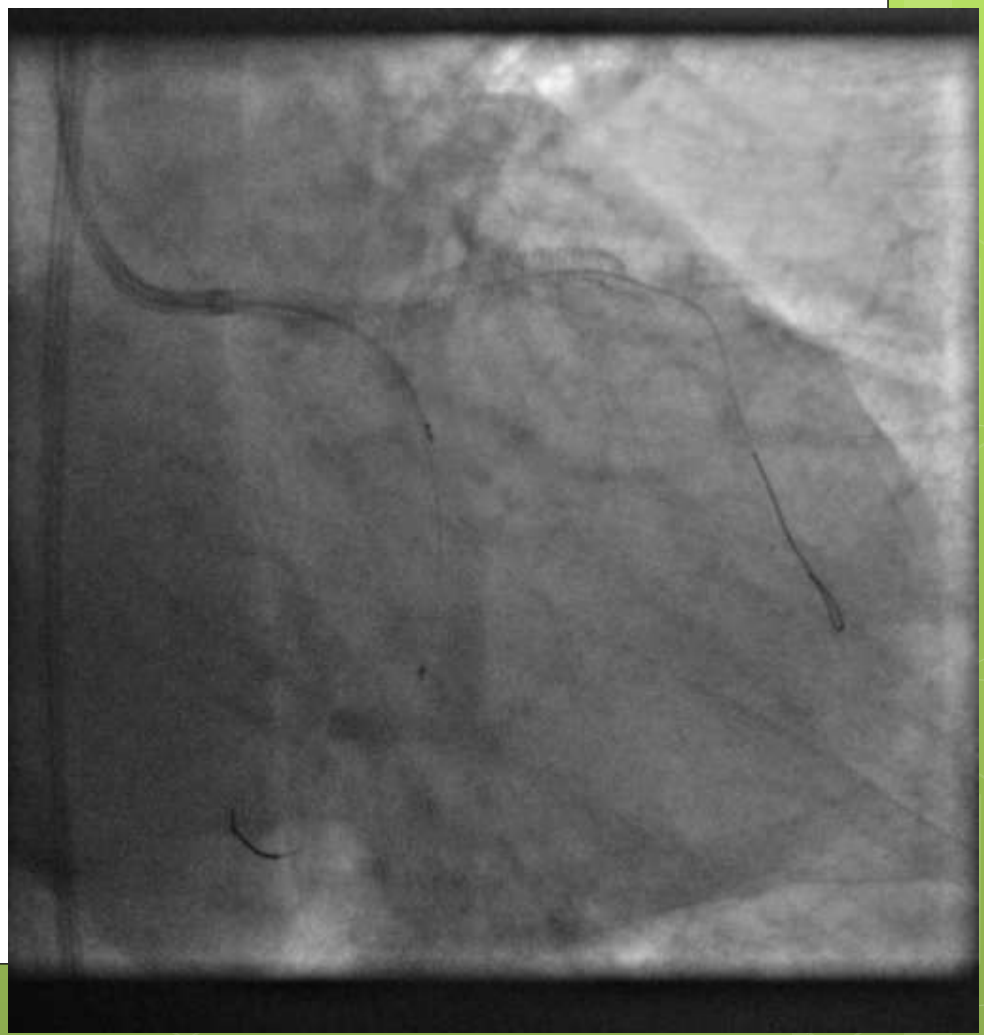


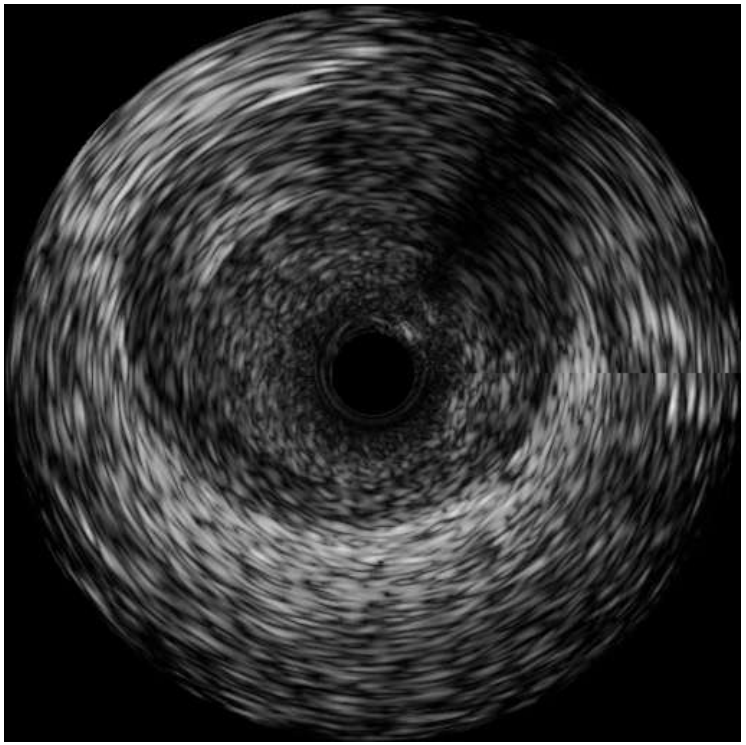
POBA to LCx ostium with 2/10 balloon



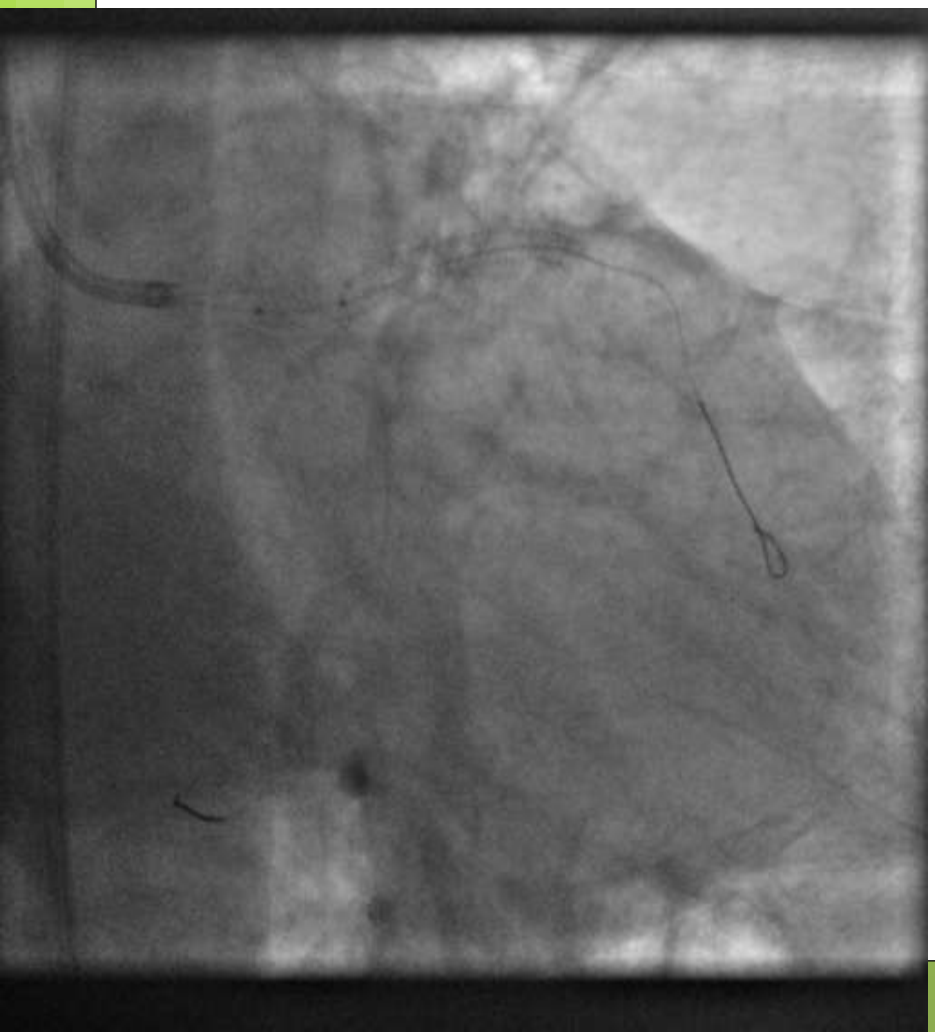
IVUS from LCx to LMCA

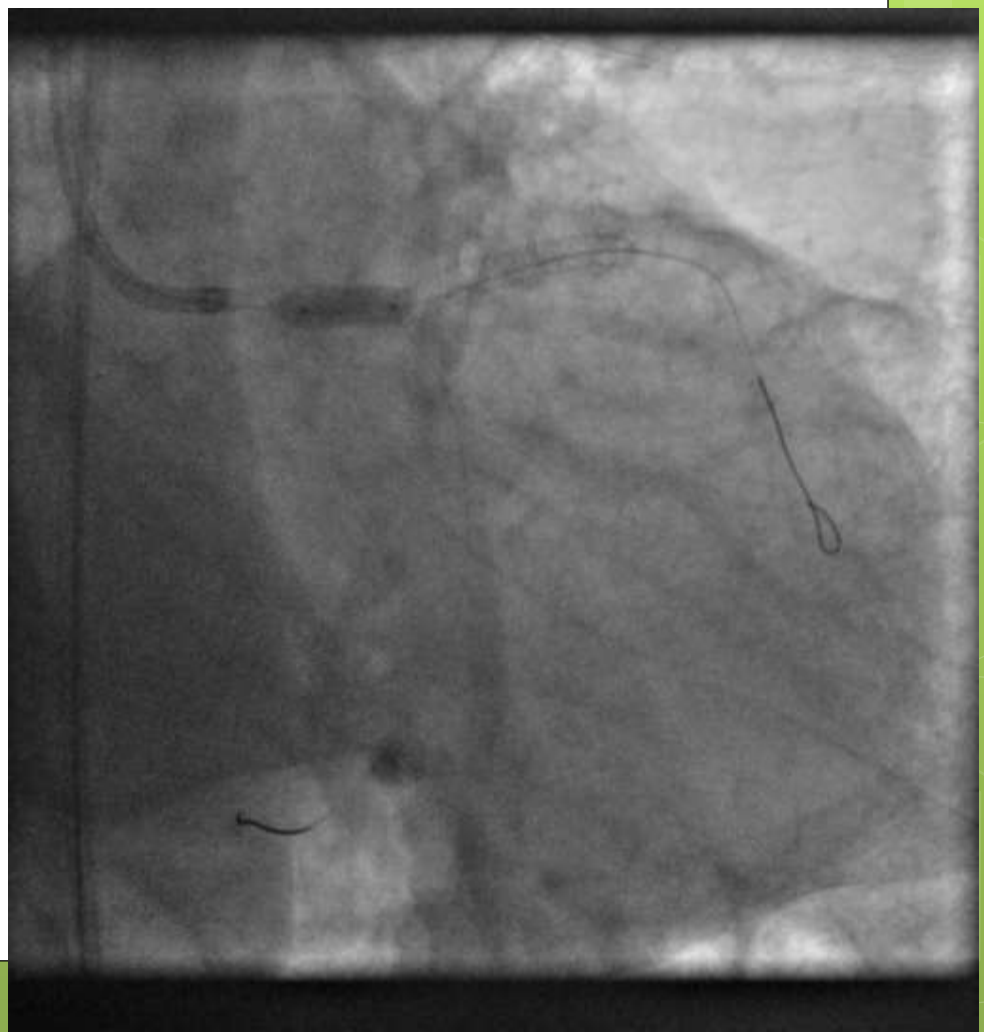




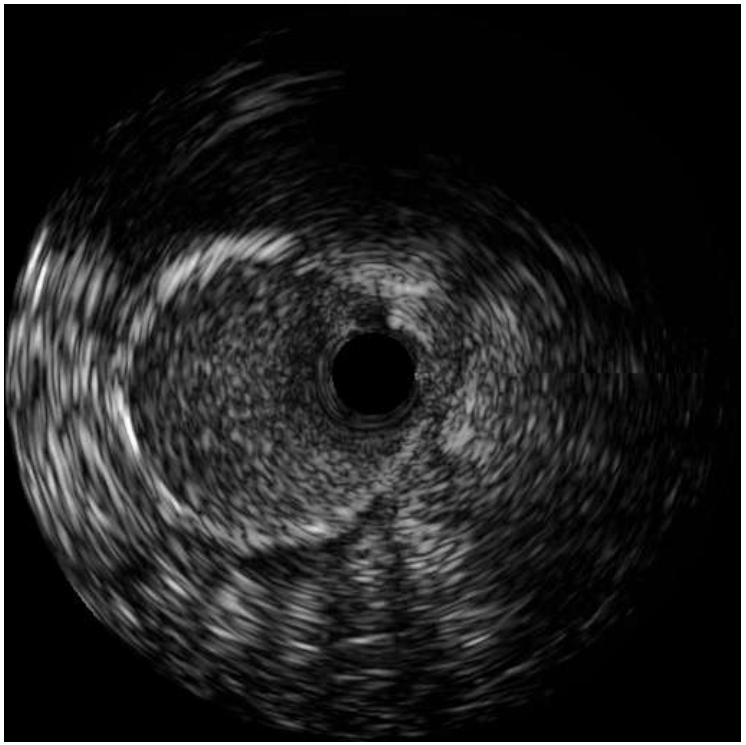


Final post dilatation with4.5/9 of LM stent

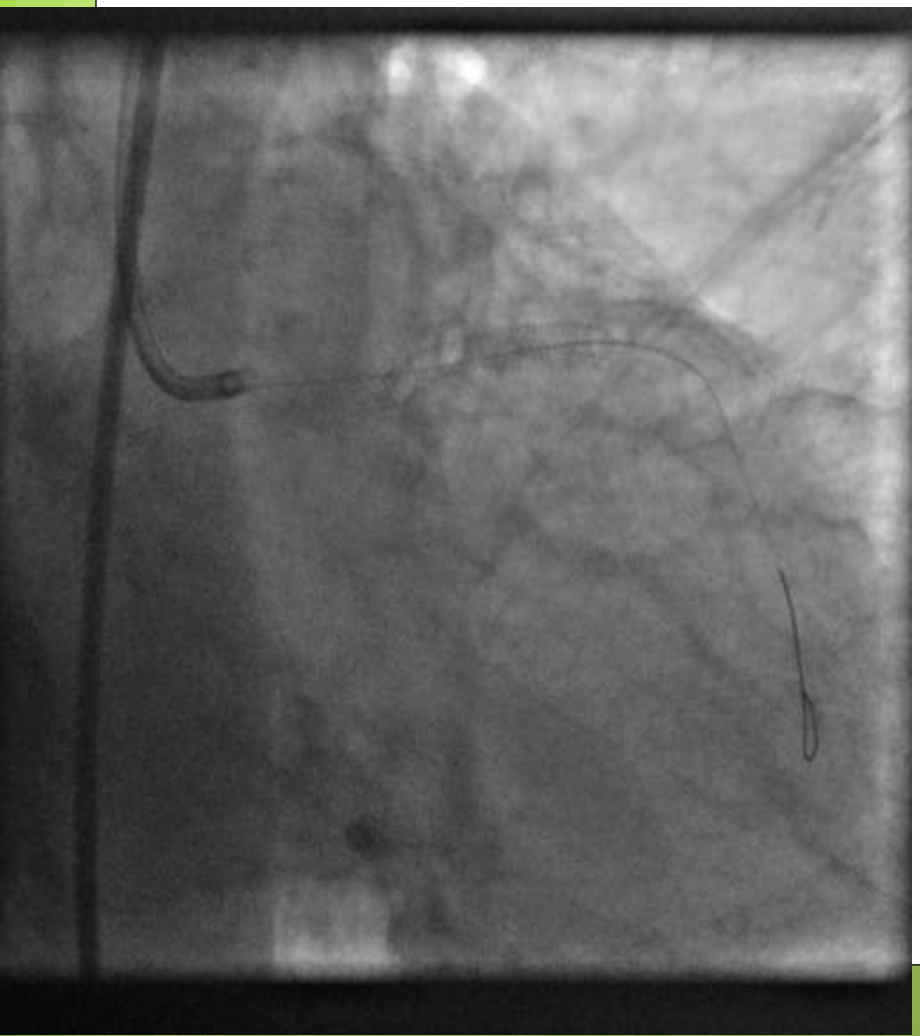


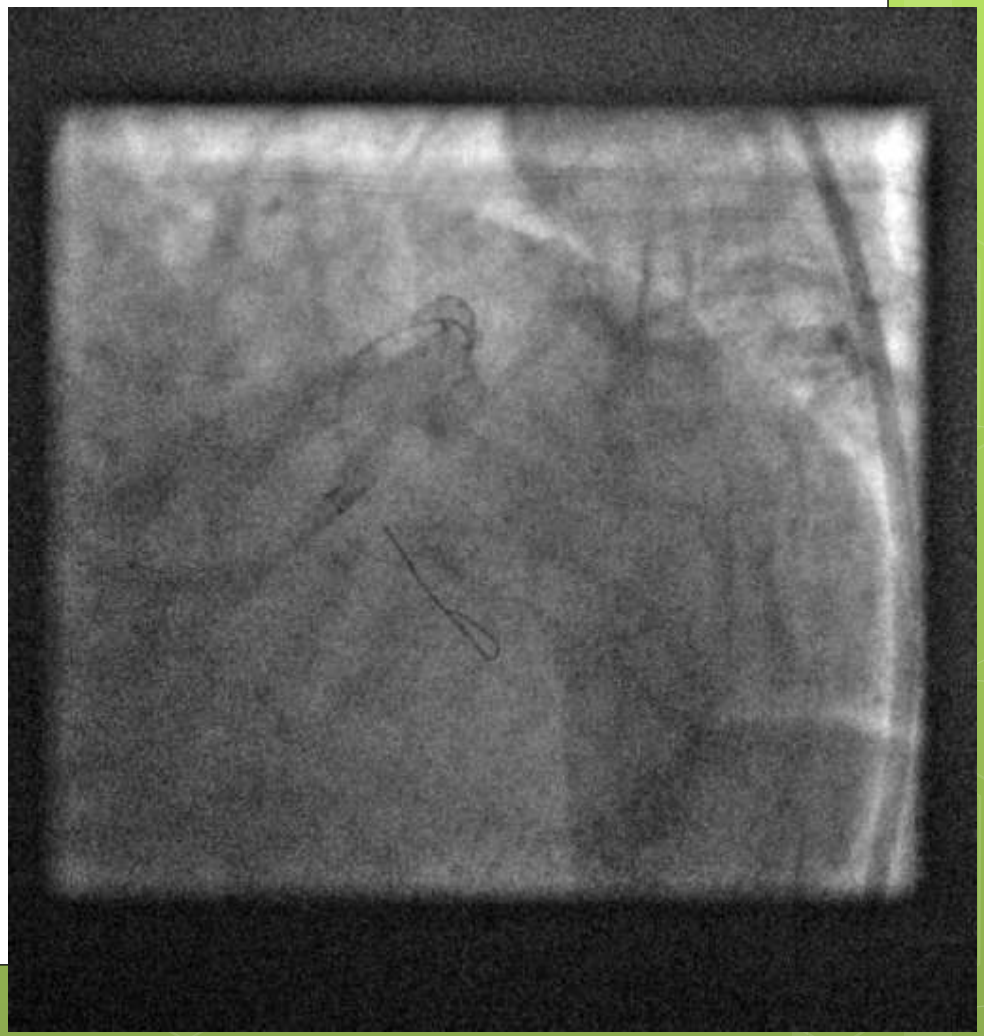


IVUS run



Final result



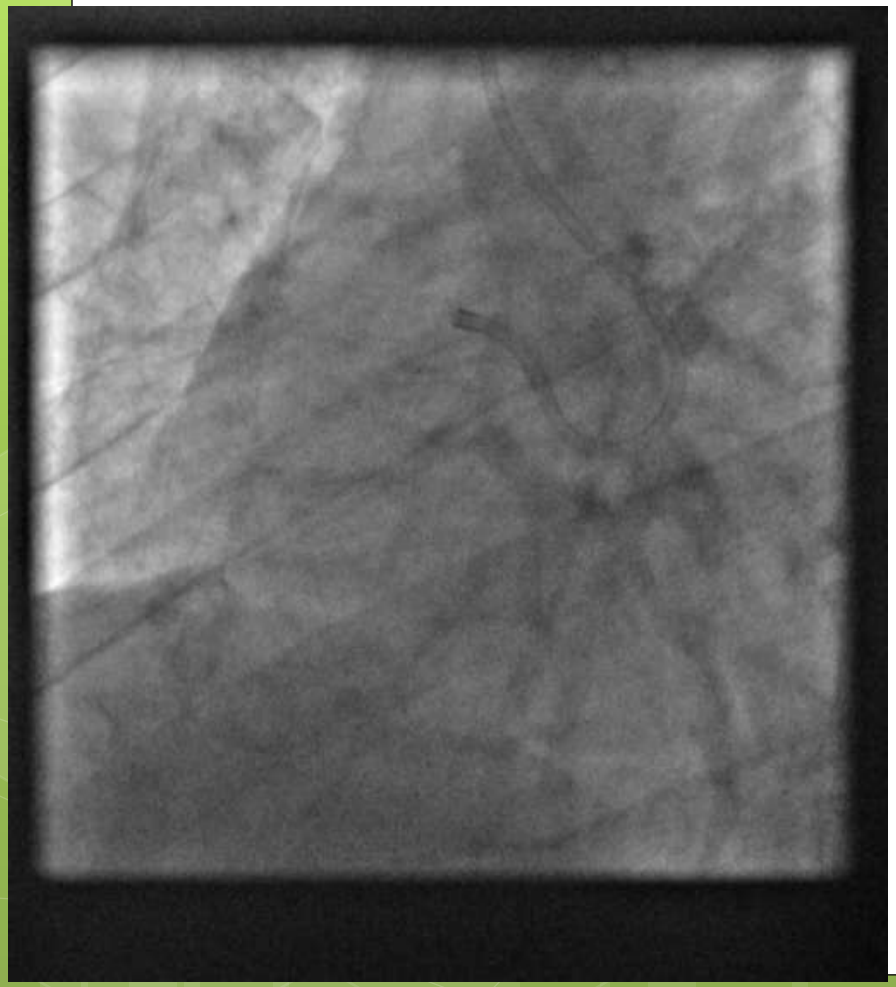


Case History

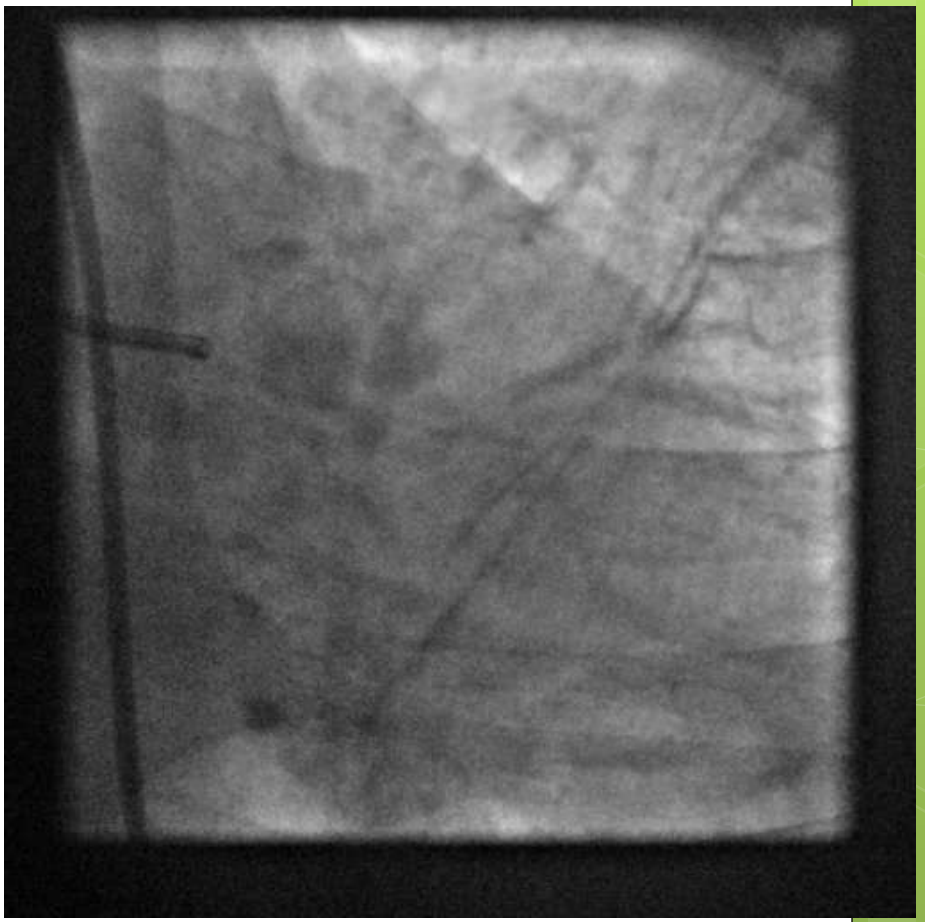
- BD, M 56
- Smoker, Diabetic, dyslipidemic
- Presented with chest pain and shortness of breath

- ECHO : LVEF : 47%. Grade I diastolic dysfunction

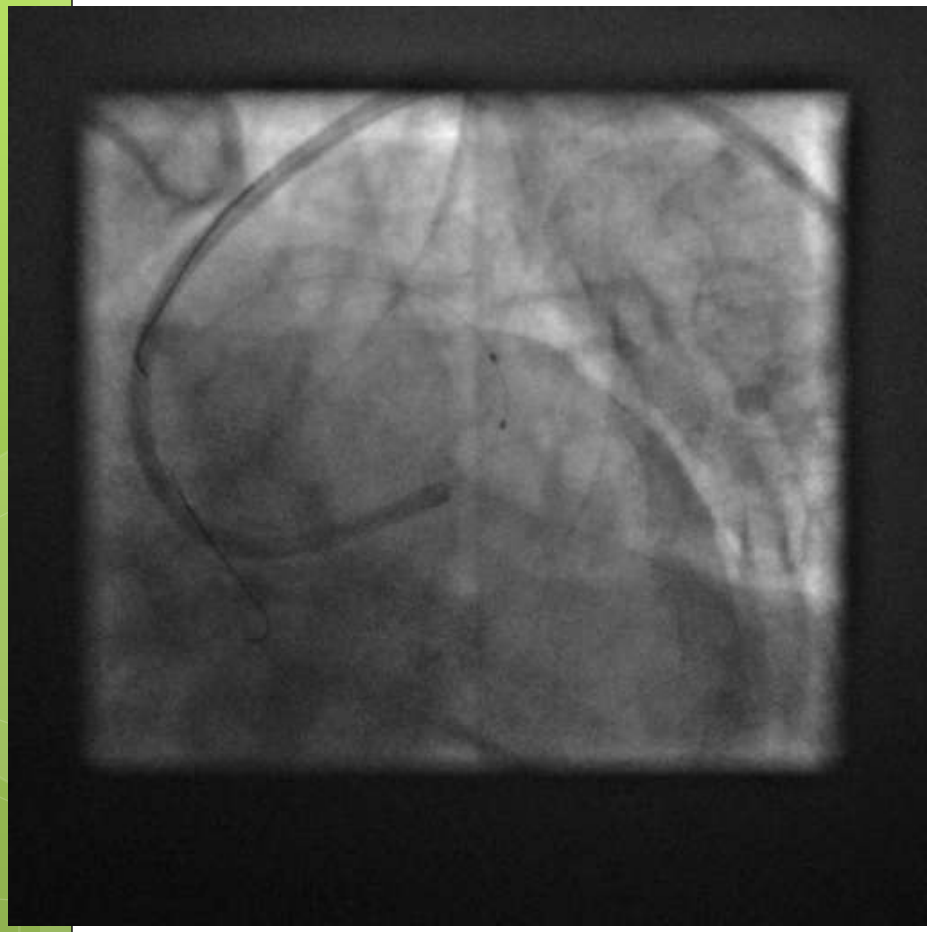
RCA CTO

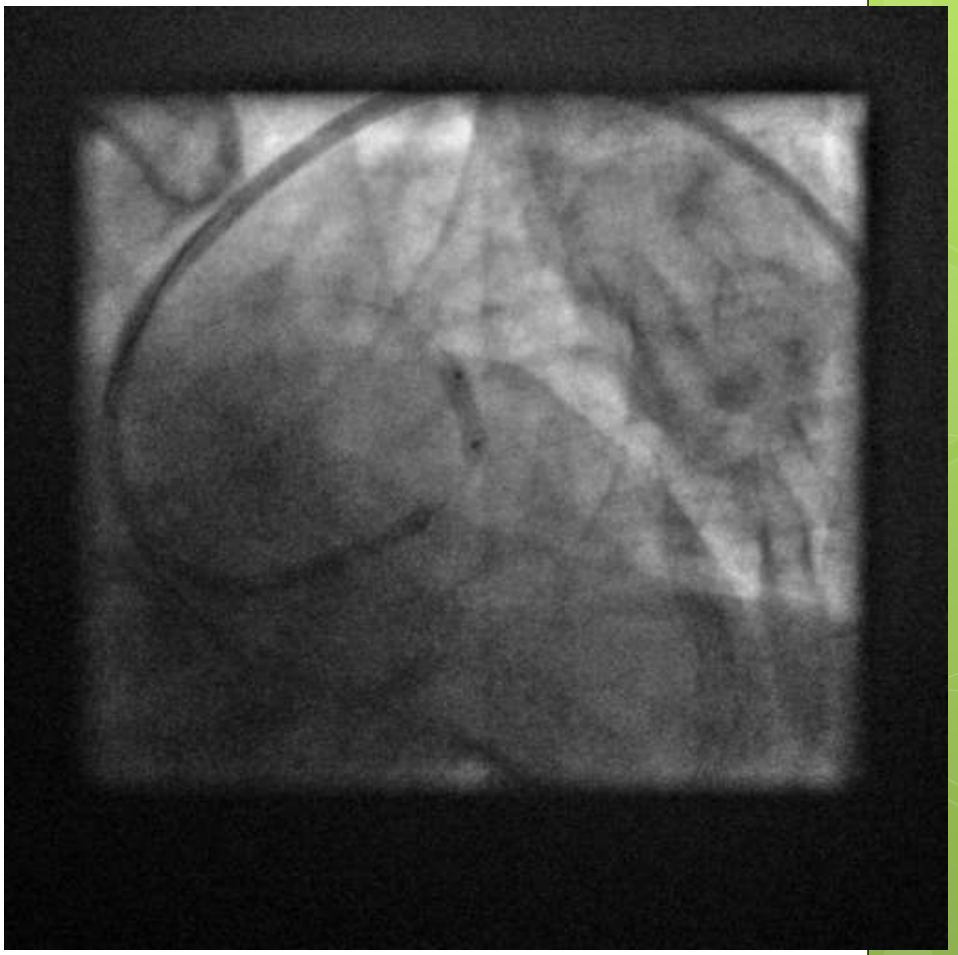


RCA stented. Angio of left system

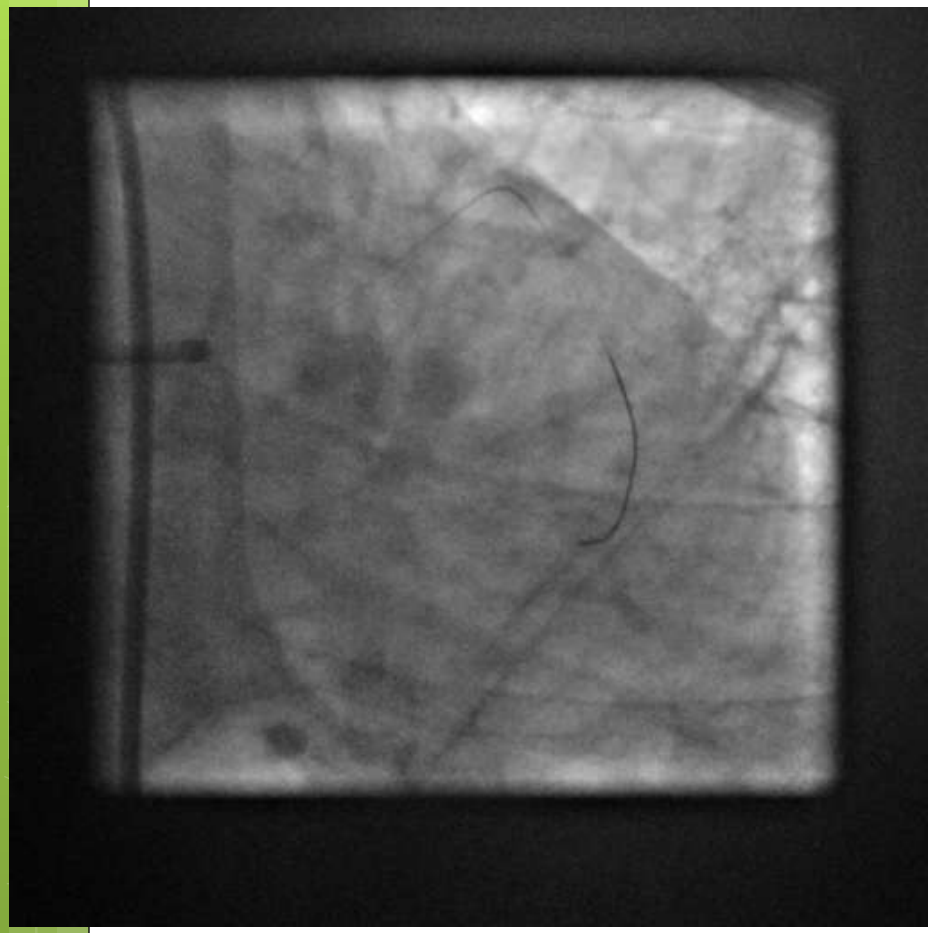


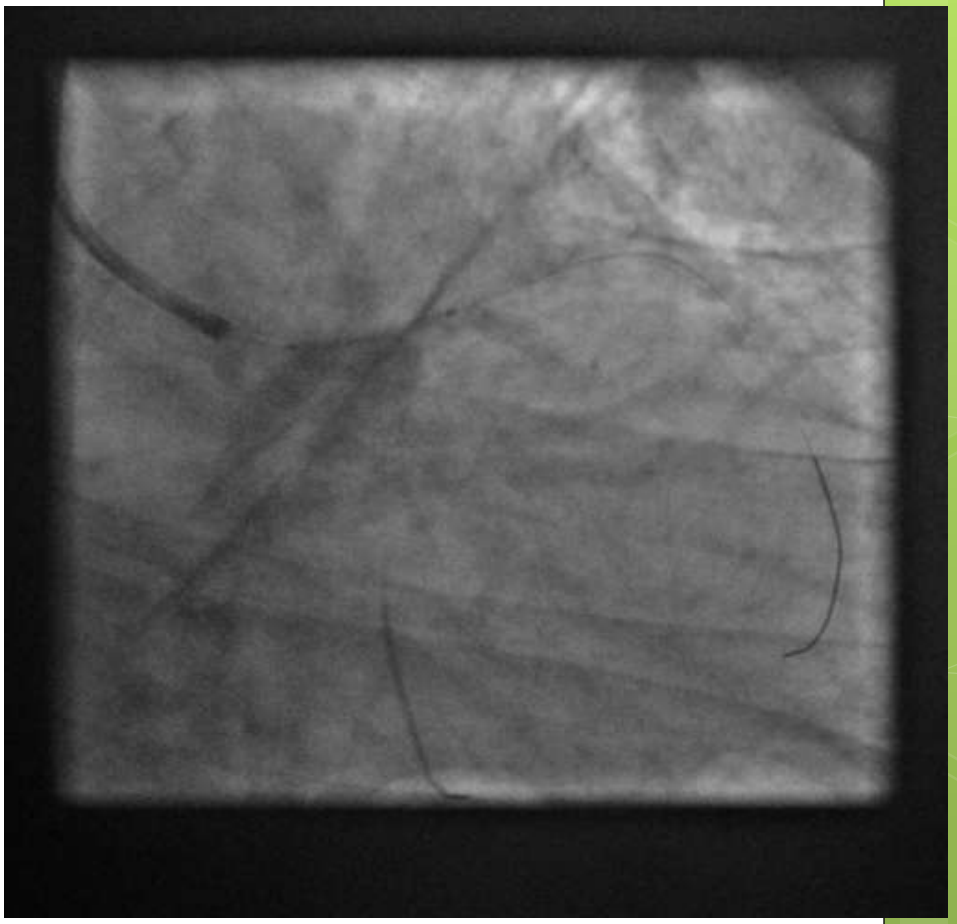
Pre dilatation with Trek 2.5X10mm

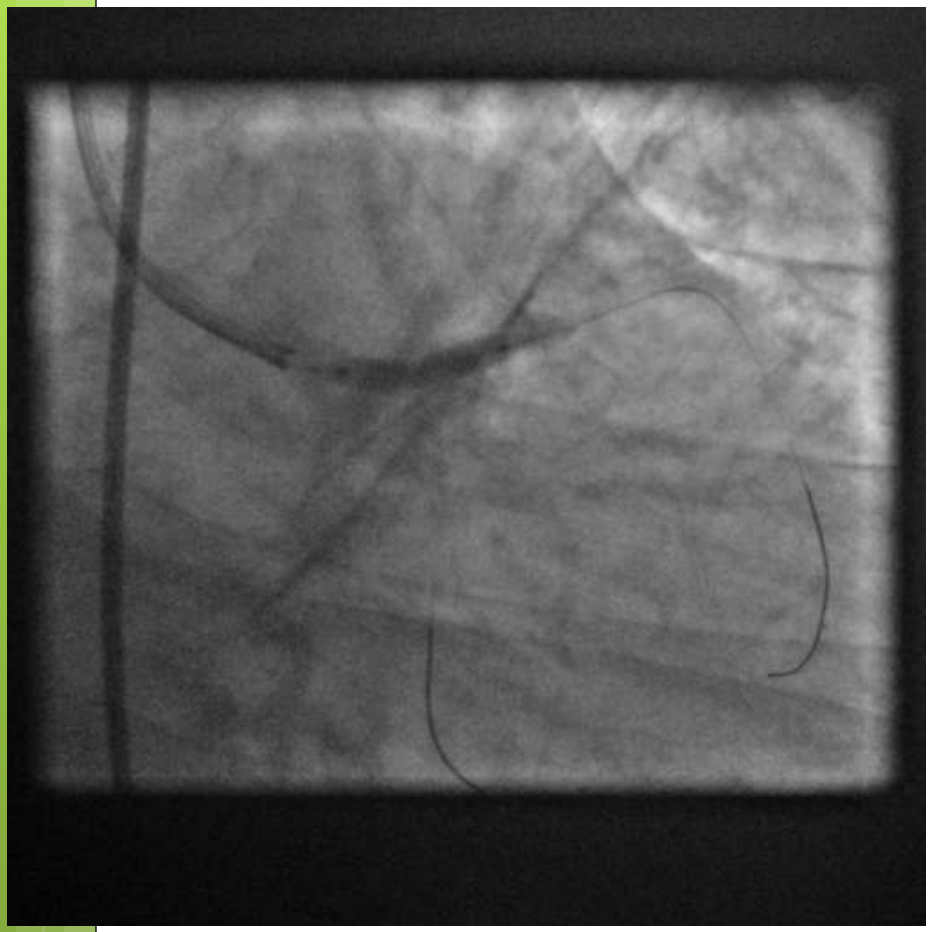


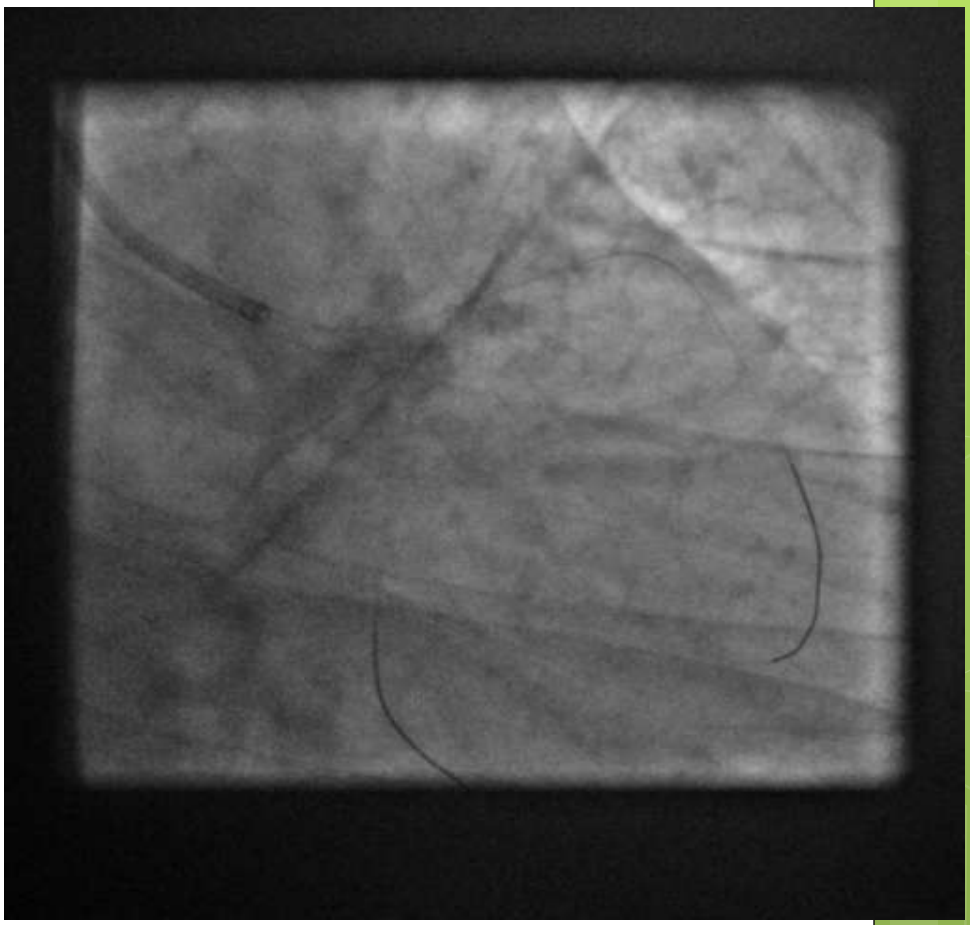


DES 4.00X22mm

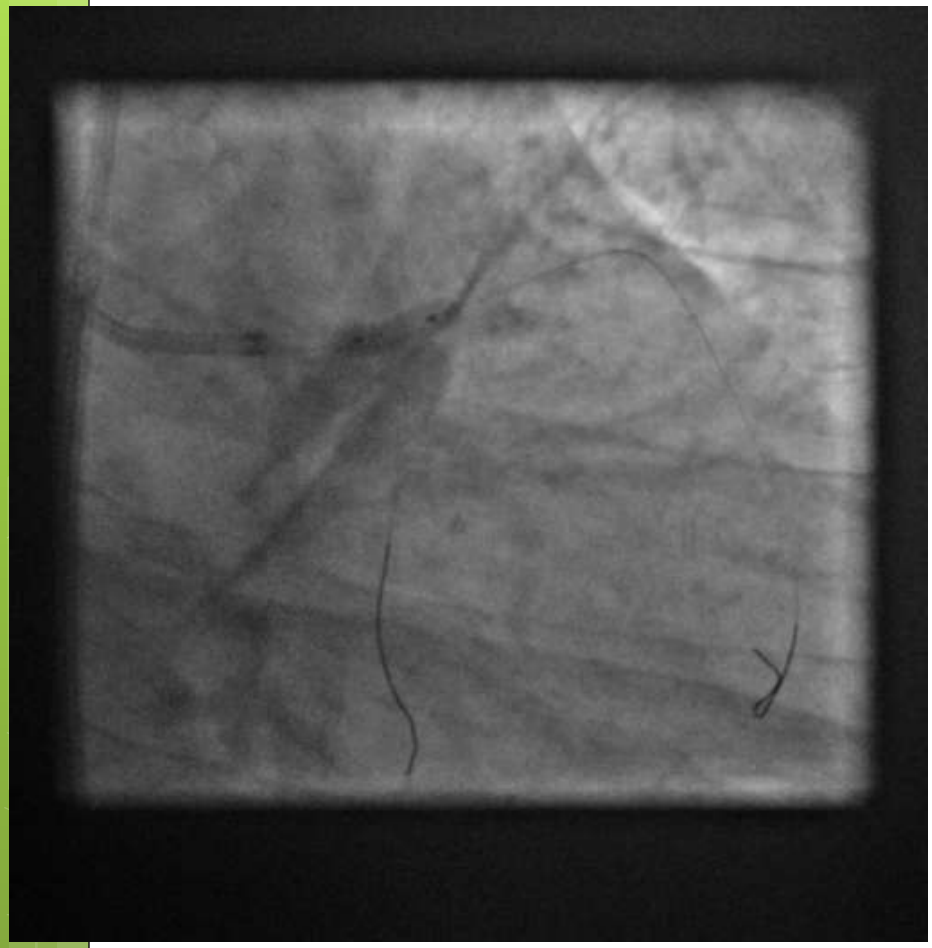


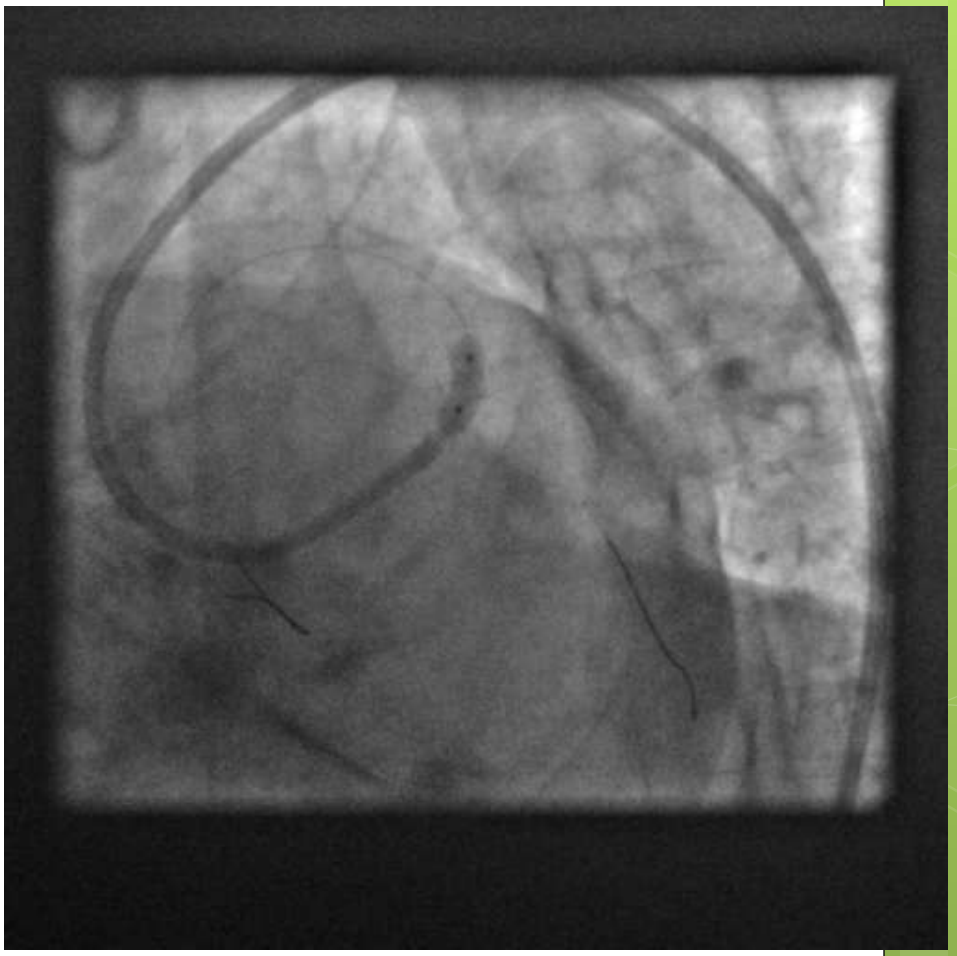




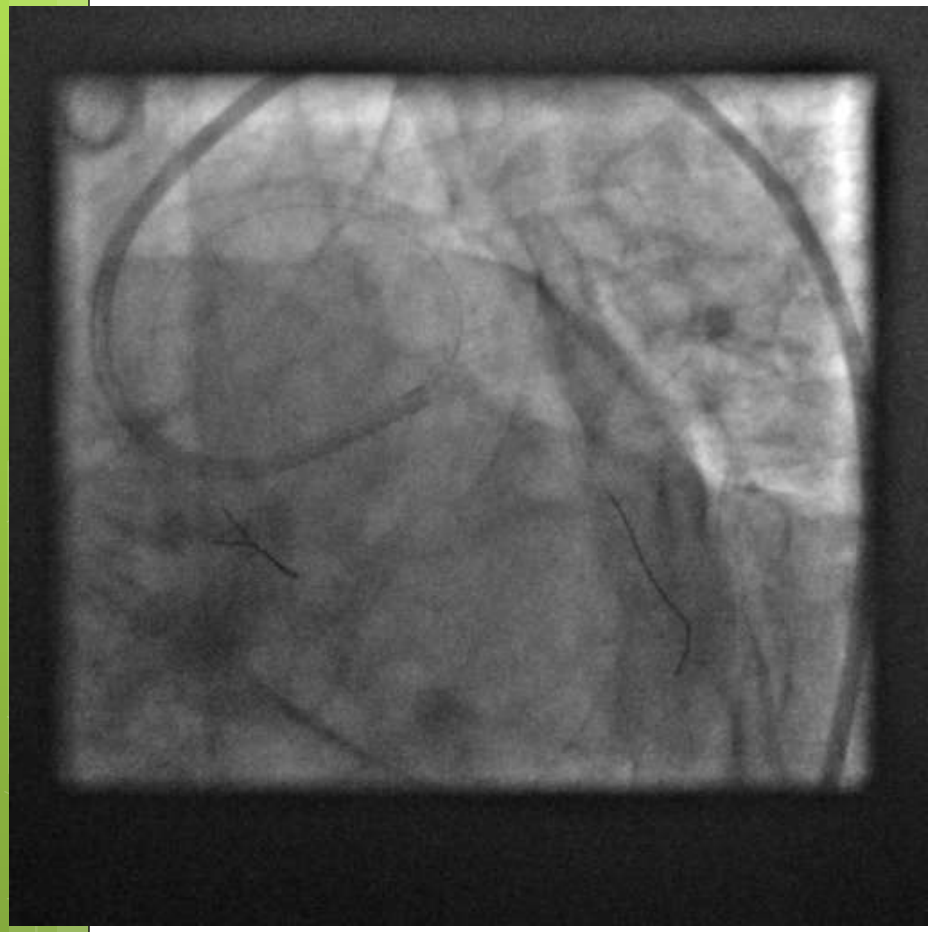


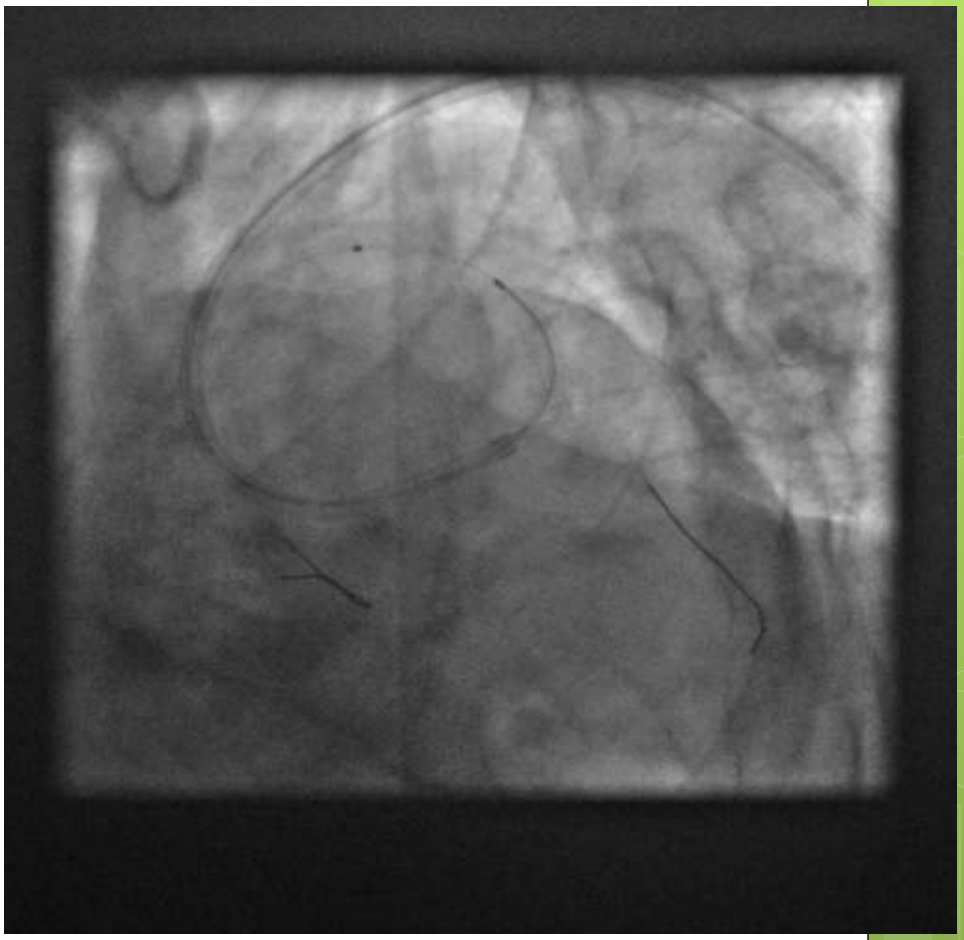
Post dilatation with 4.5X8 NC balloon

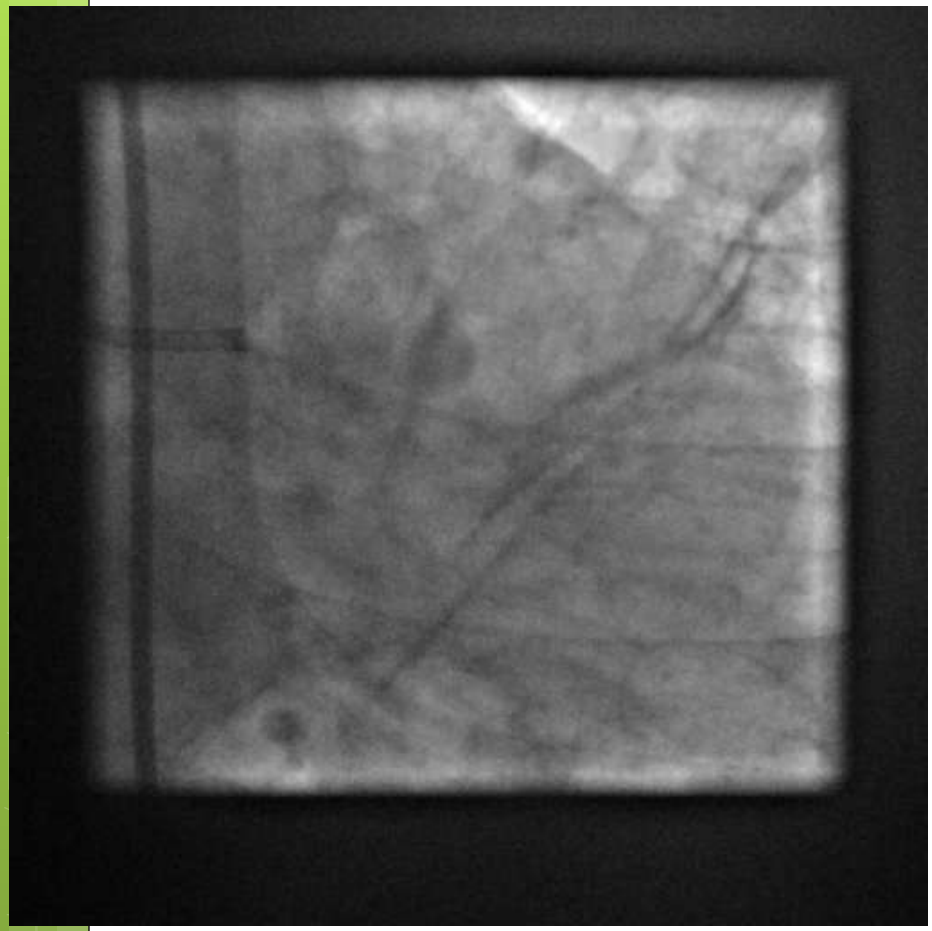


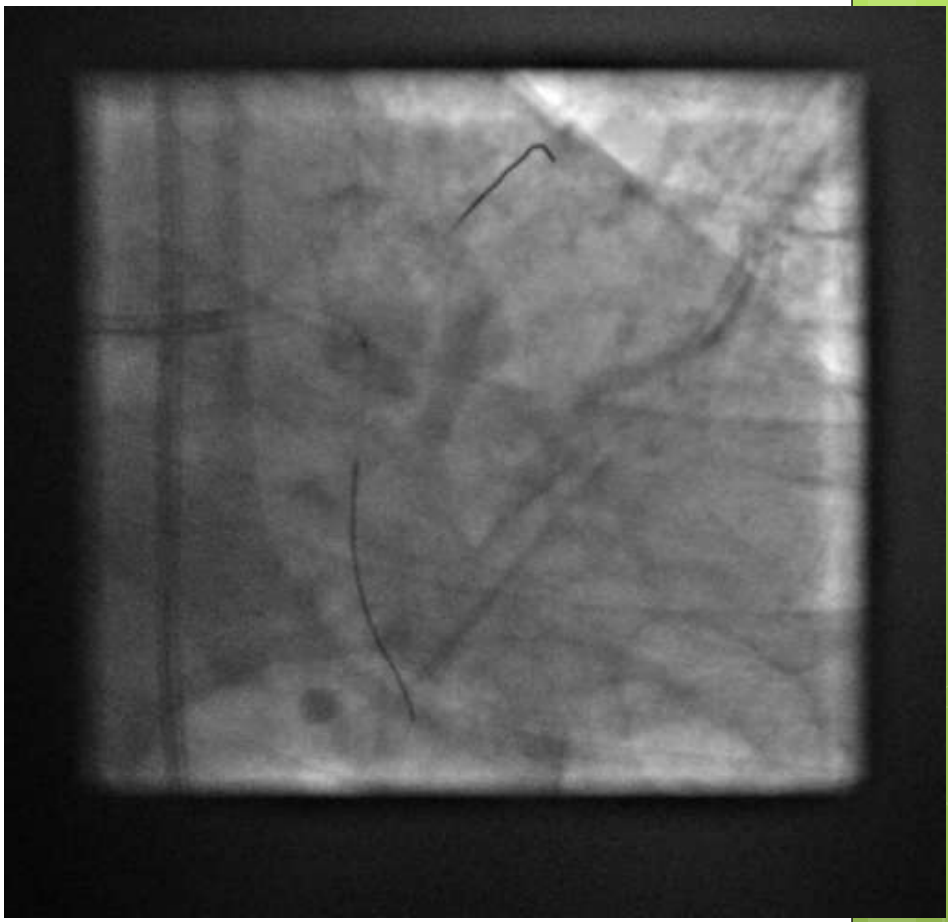


IVUS from LAD to LMCA

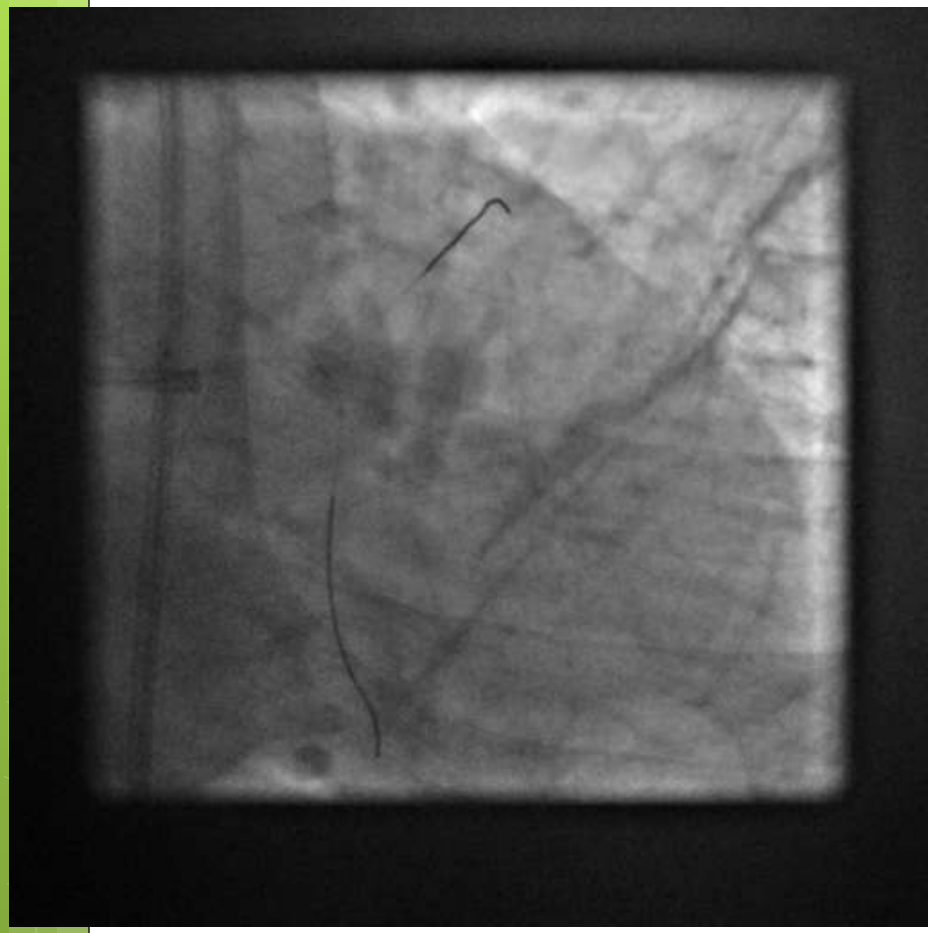


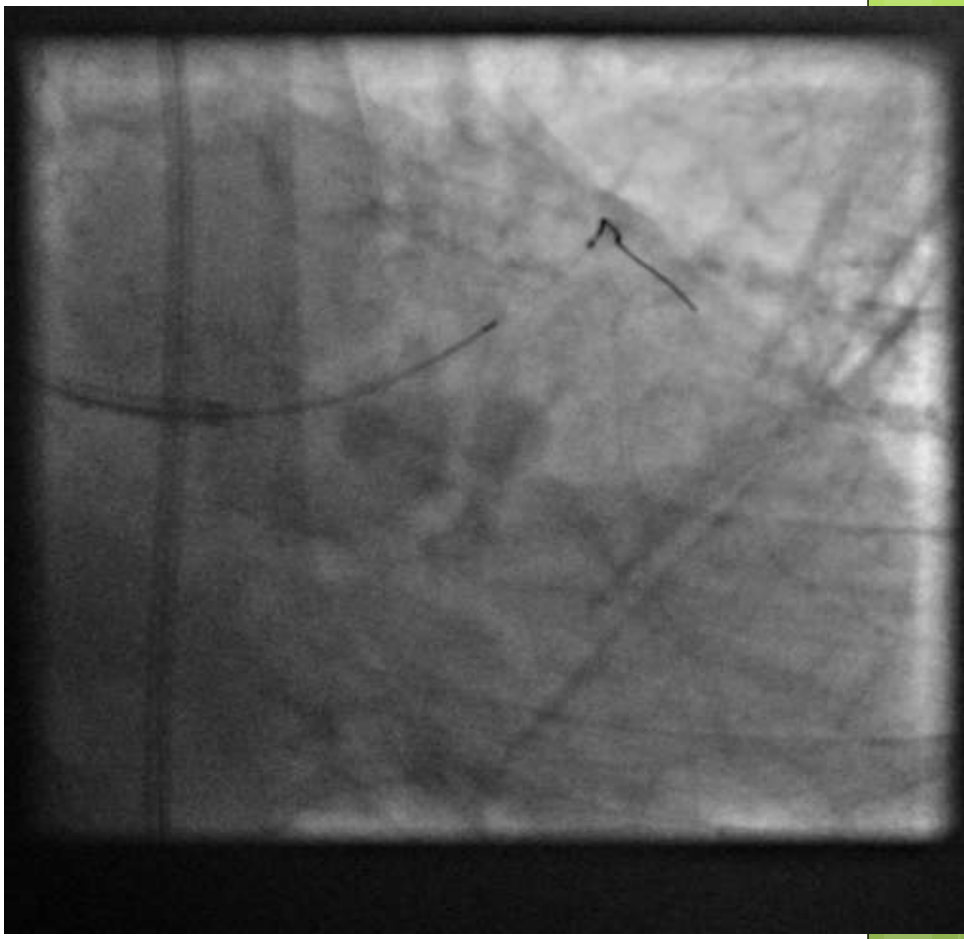




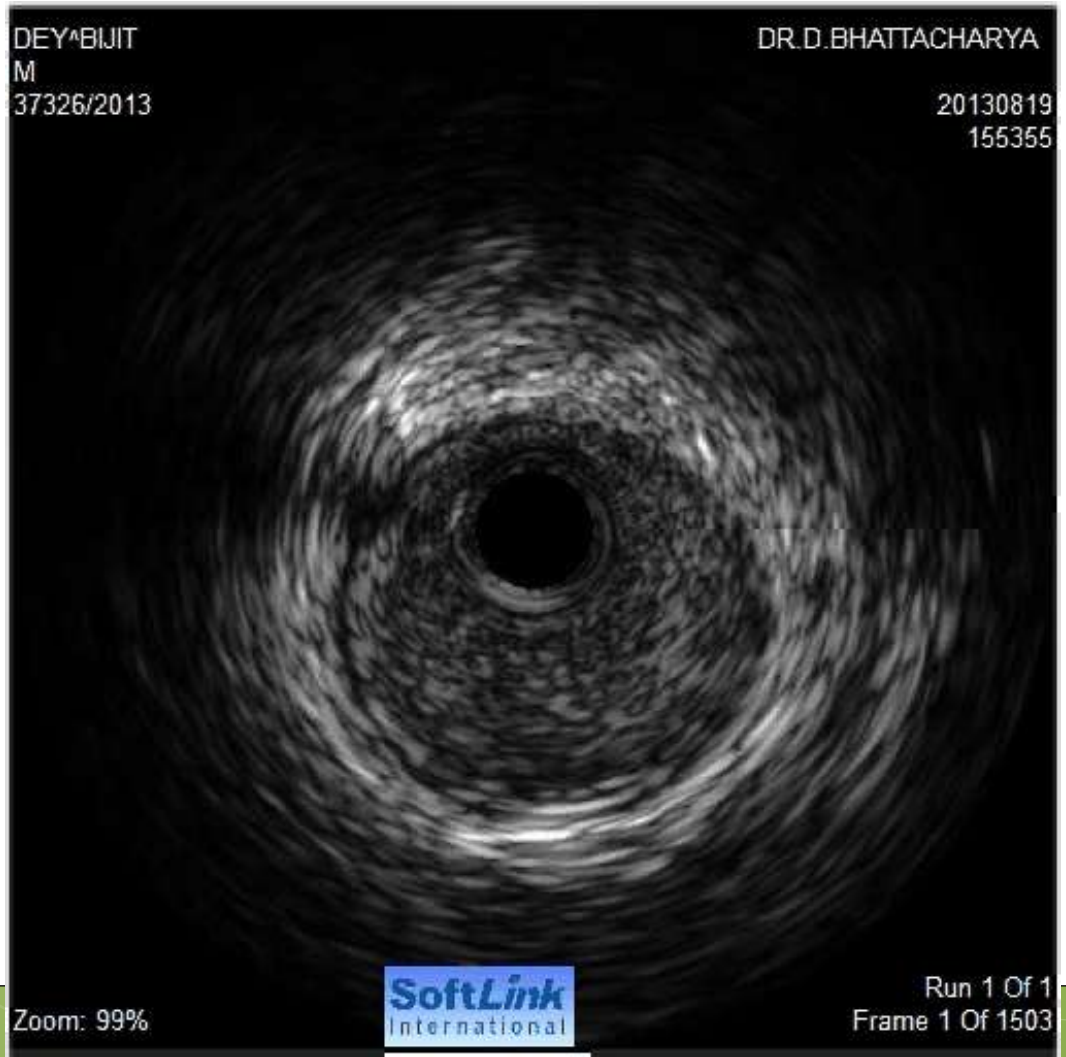


Balloon dilatation of LCx ostium





IVUS run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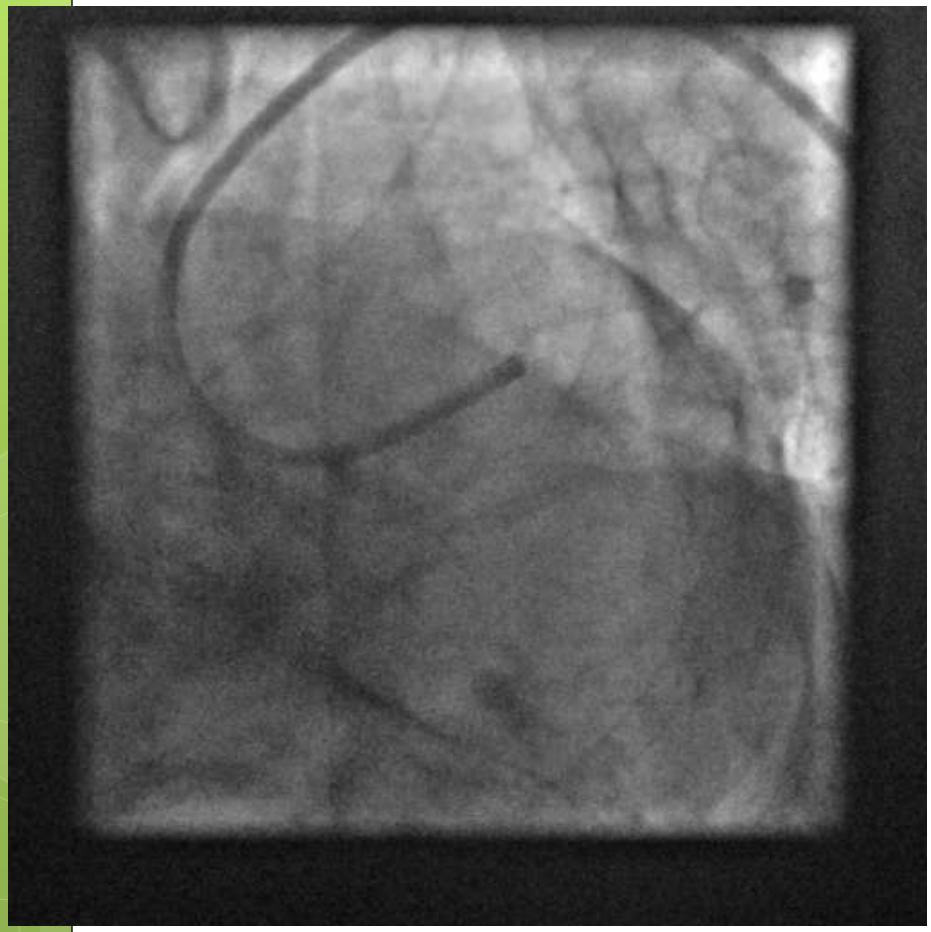
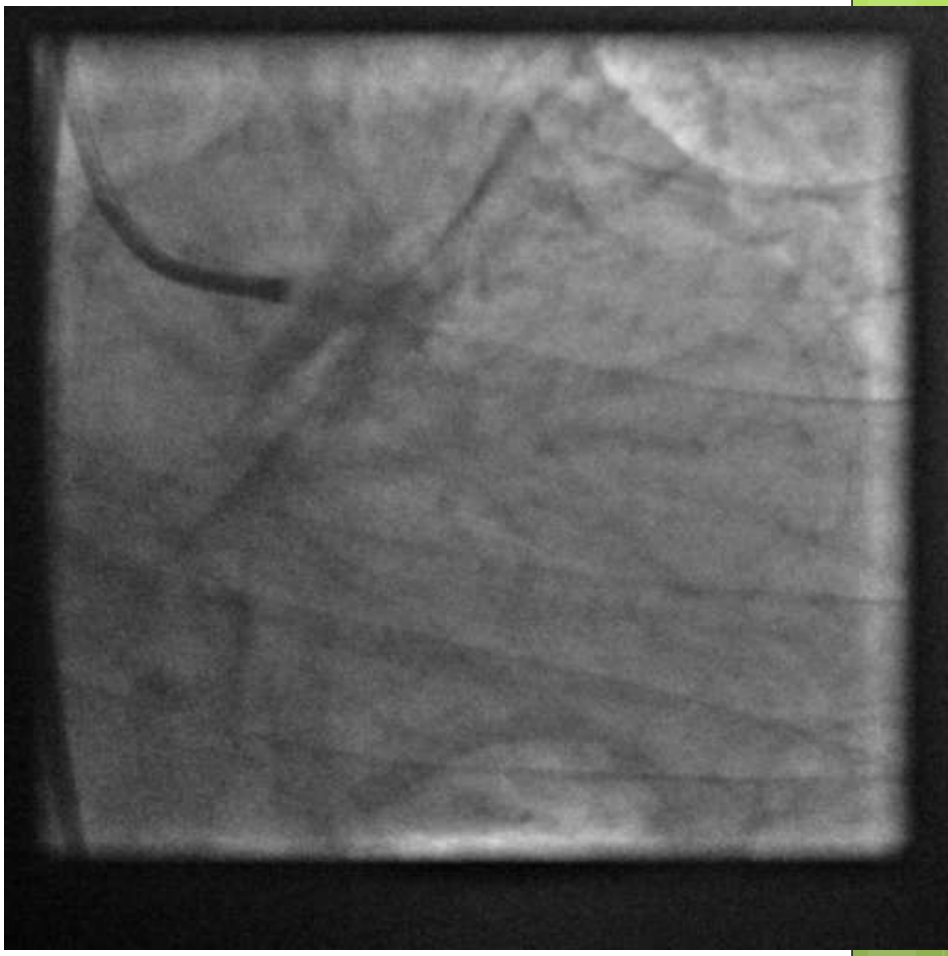
SoftLink
International
Run 1 Of 1
Frame 1 Of 1503

Final Result





What I have learnt by using IVUS in LMCA PCI

- We tend to undersize LMCA angiographically
- The diameter of LMCA is always 4mm or above in Indian patients
- Malappostion after LMCA stenting at nominal pressure is common
- True ostial LAD stenosis invariably encroaches into the distal LMCA
- If there is a sharp angle between the LAD & LMCA & there is mild disease in distal LMCA, it is safer to stent from the LAD into the LMCA across the LCx artery


Thank you