

# **The Law of Unintended Consequences**

**Chandan Bhavnani**  
**Hospital Serdang**

Credits to: Dr. Benjamin Lim, Dr. Ali SK Kader, Dr. Faizal Khan

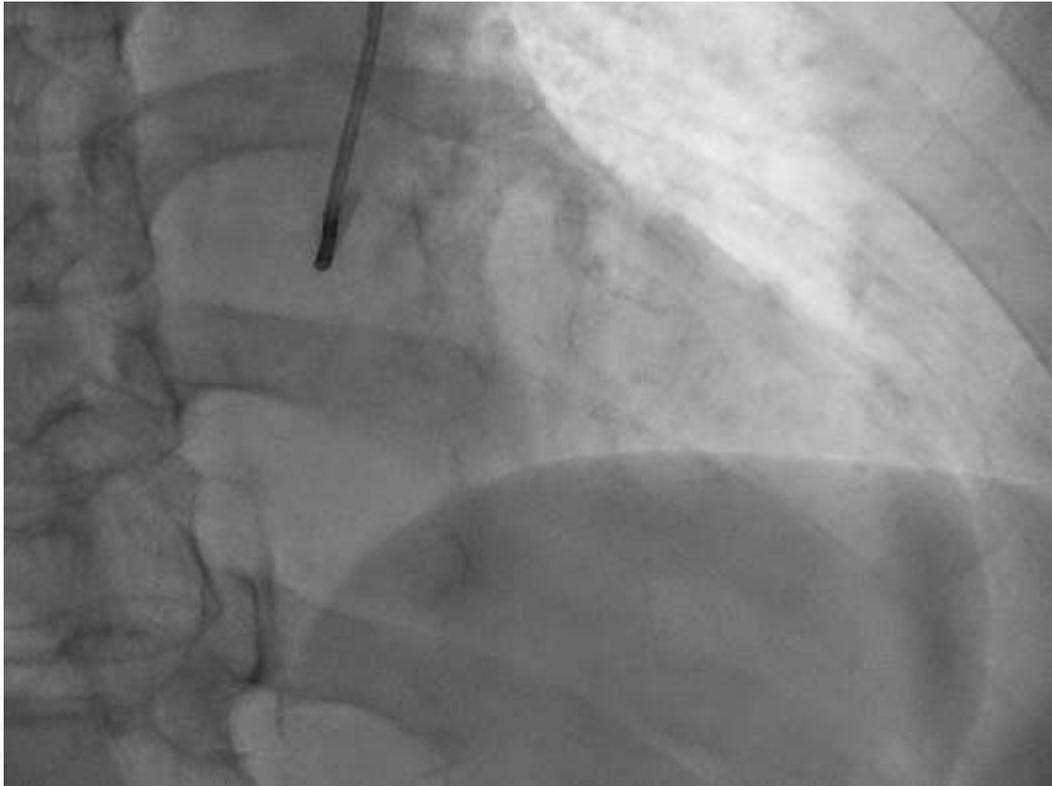
# Disclosure

- I have no potential conflicts of interest

- Unintended consequences that occur:
  - To solve the original problem, but there is an unanticipated consequence.
- In the following case discussion:
  - Solving 1 problem resulted in another problem.

# Case Summary

- 58 M
- HPT, IHD
- Admitted May 2022:
  - HPT Crisis
  - Unstable Angina
  - Left MCA Infarct
    - MRS 2 post stroke
- ECHO: EF 50%, No RWMA, Normal valve morphology
- Elective admission for COROS
  - 10 Mar 2023



LM: Minor disease  
LCX: moderate pLCX disease



LM: Minor disease

LAD: diffuse calcific stenosis. Severe prox LAD, mod mLAD dx

LCX: moderate pLCX disease

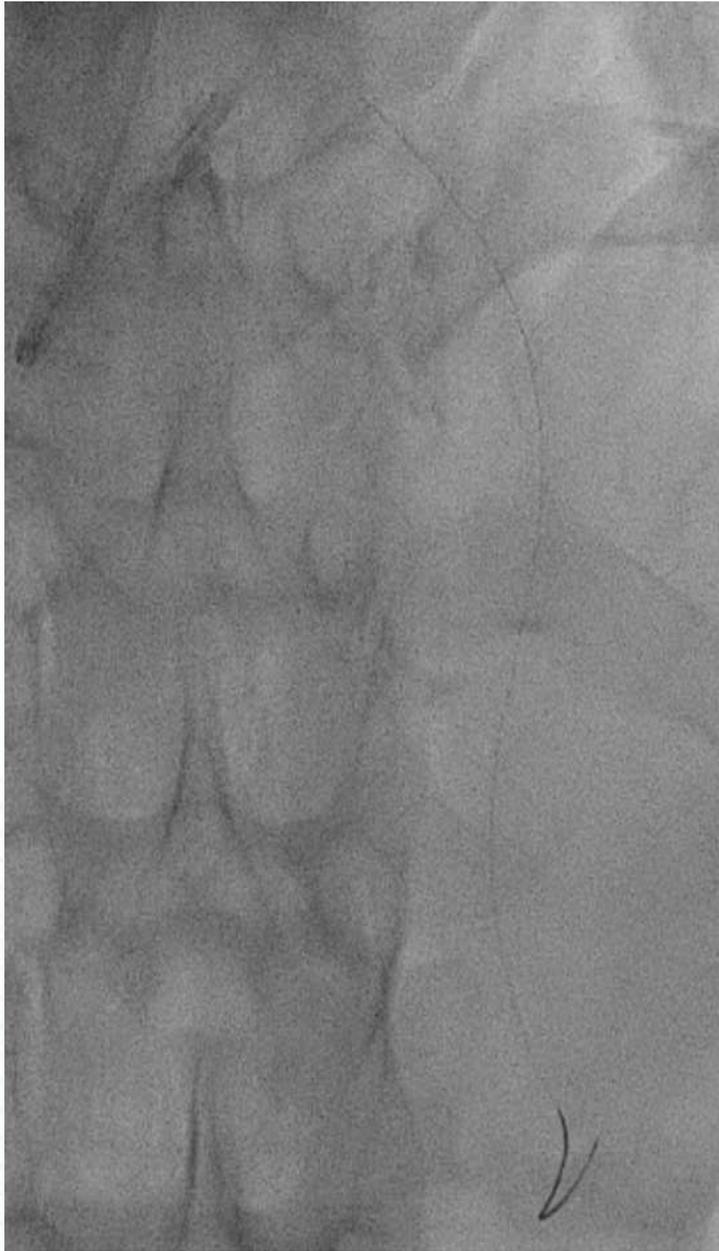


RCA: mild-mod mRCA plaque disease

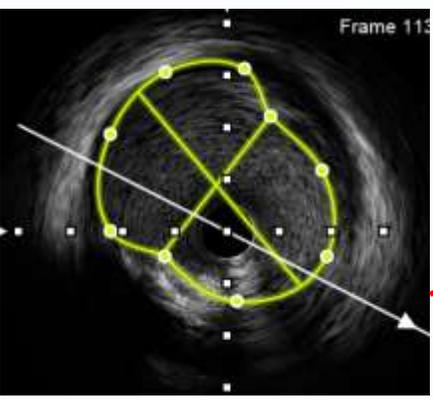
# Strategy

- PCI LAD (ostial – distal)
- Calcific disease – possible need for calcium modification
- Unsure if ostial plaque extending into LMS
- Decided for IVUS guided

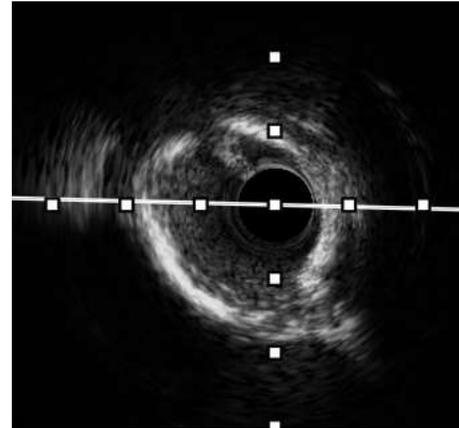
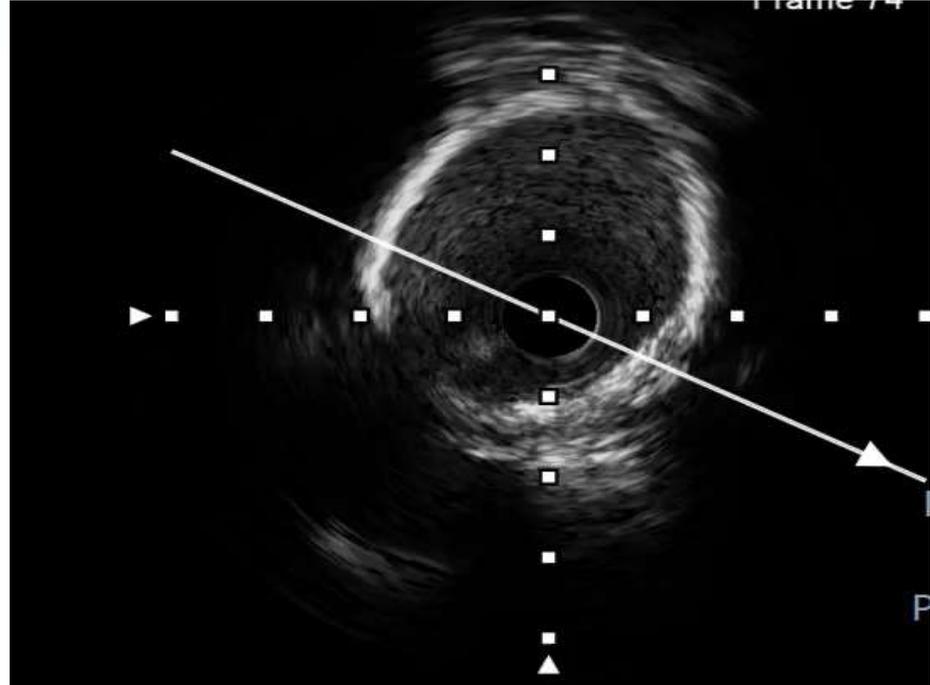
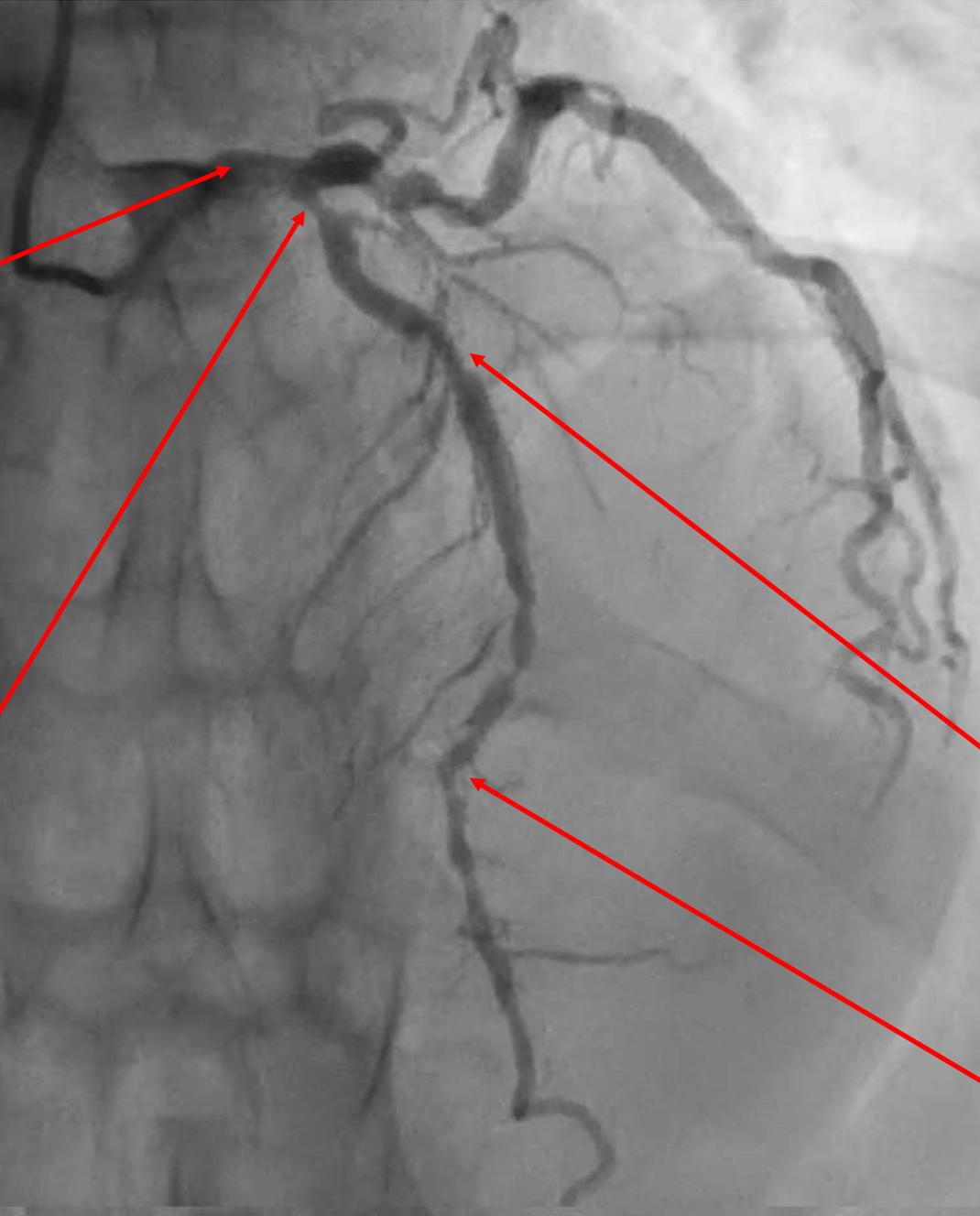




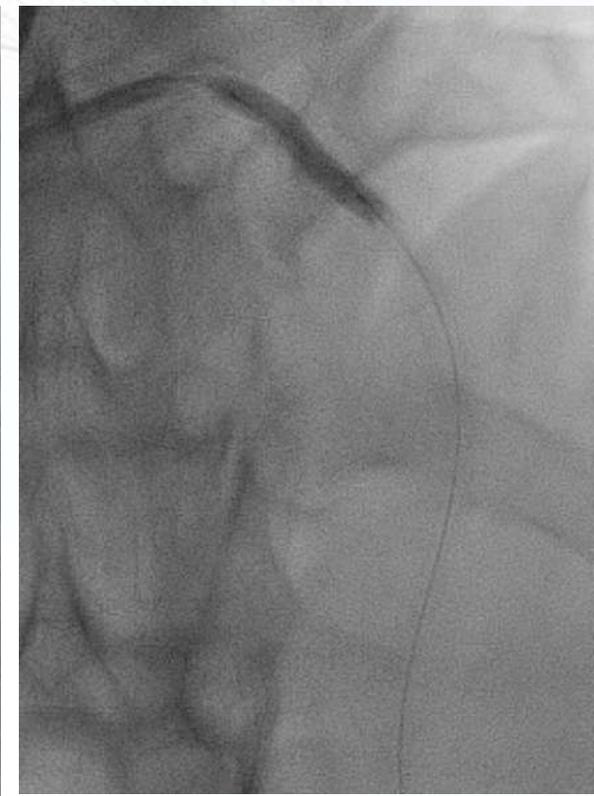
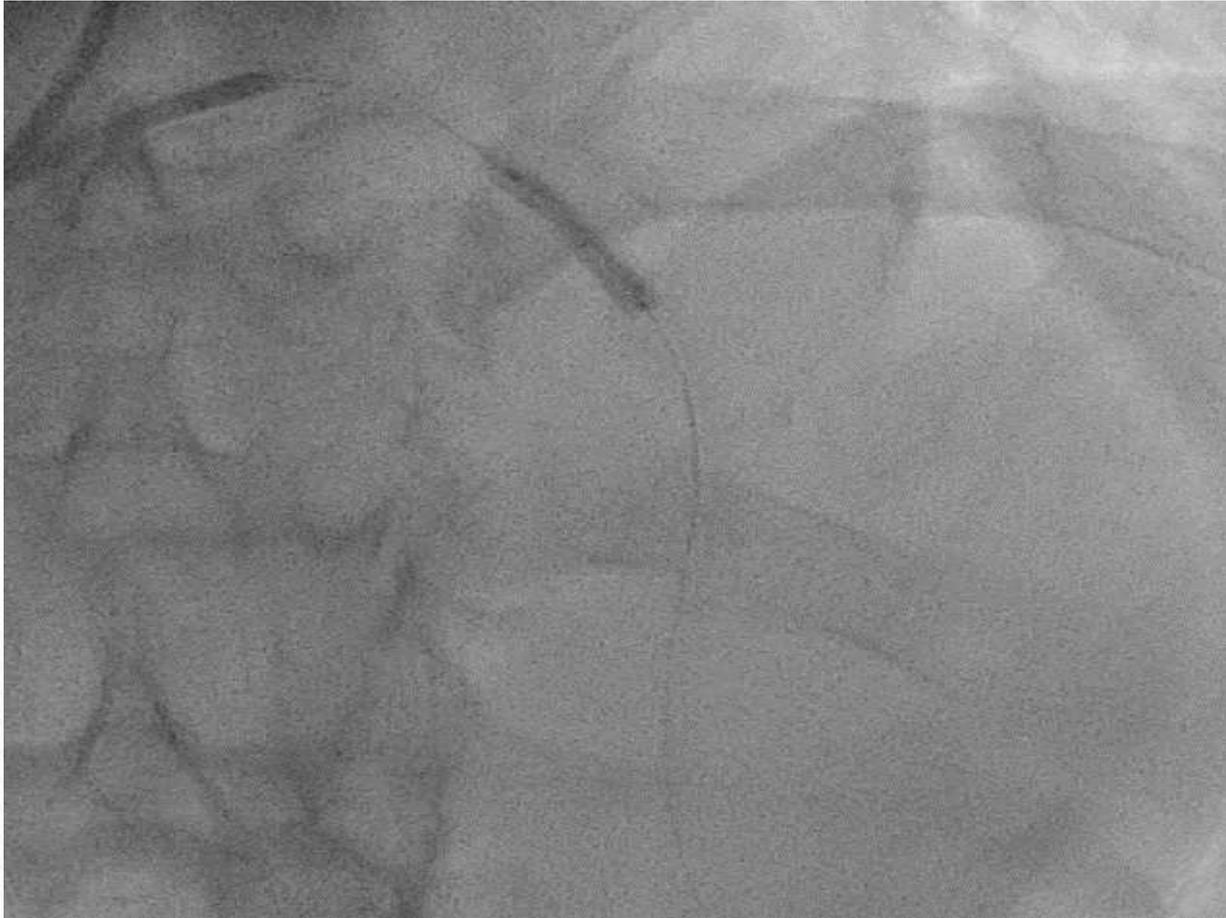
EBU 3.0 6F  
Sion Blue to dLAD  
IVUS



LMS:  
14.94mm



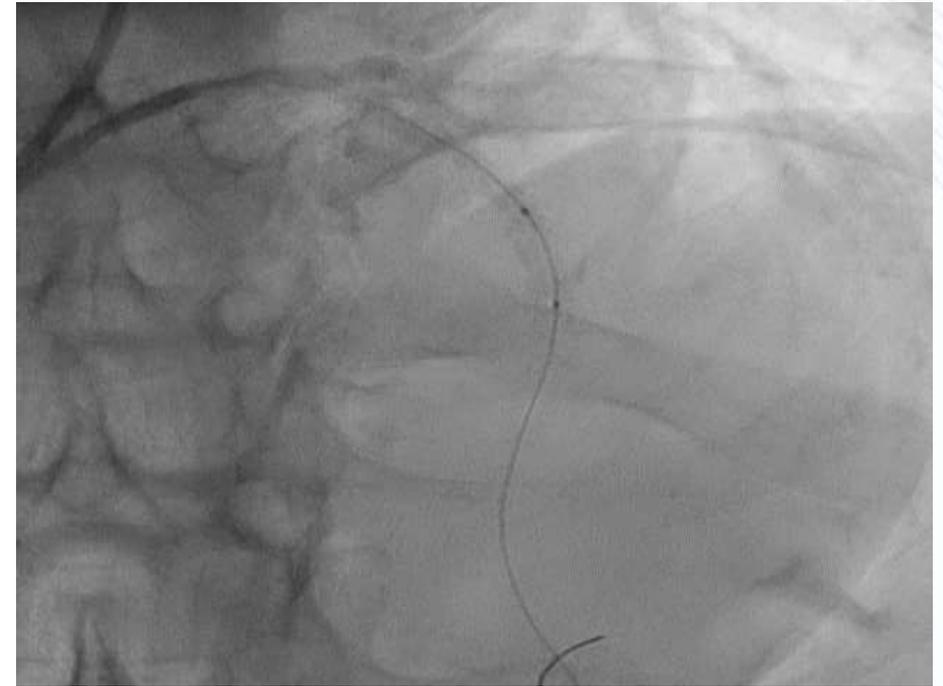
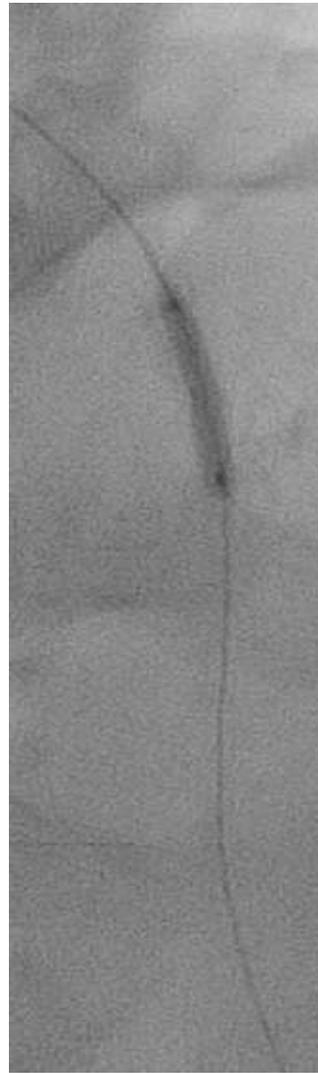
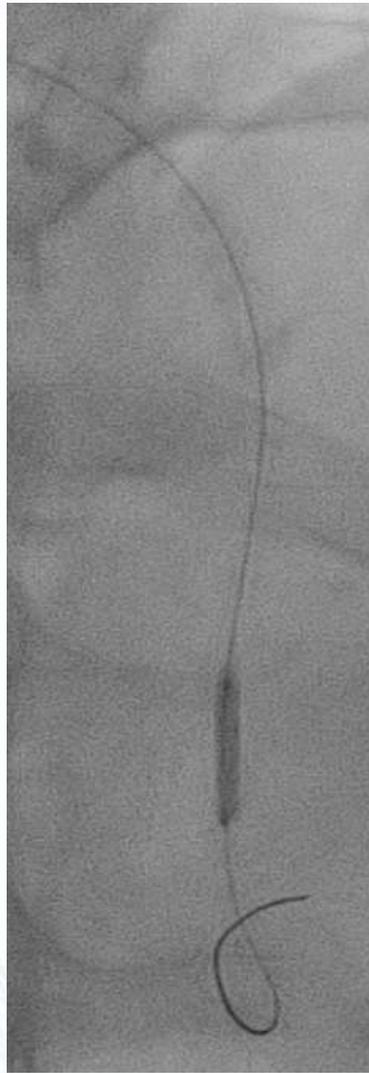
Distal vessel: 2.5mm. Calcified vessel. Acceptable MLA.



3.0X15 Cutting Balloon

3.25mm NC Balloon to high pressures

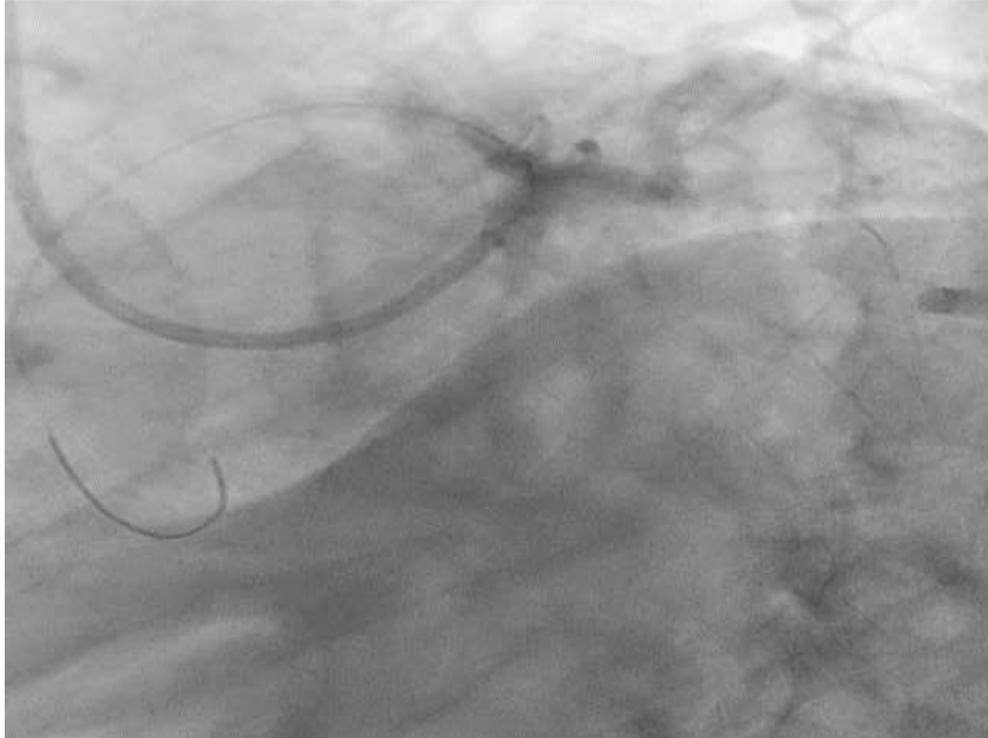




2.5x15 NCB to mid and dLAD. Acceptable results. Decided for DCB strategy to mid – distal LAD



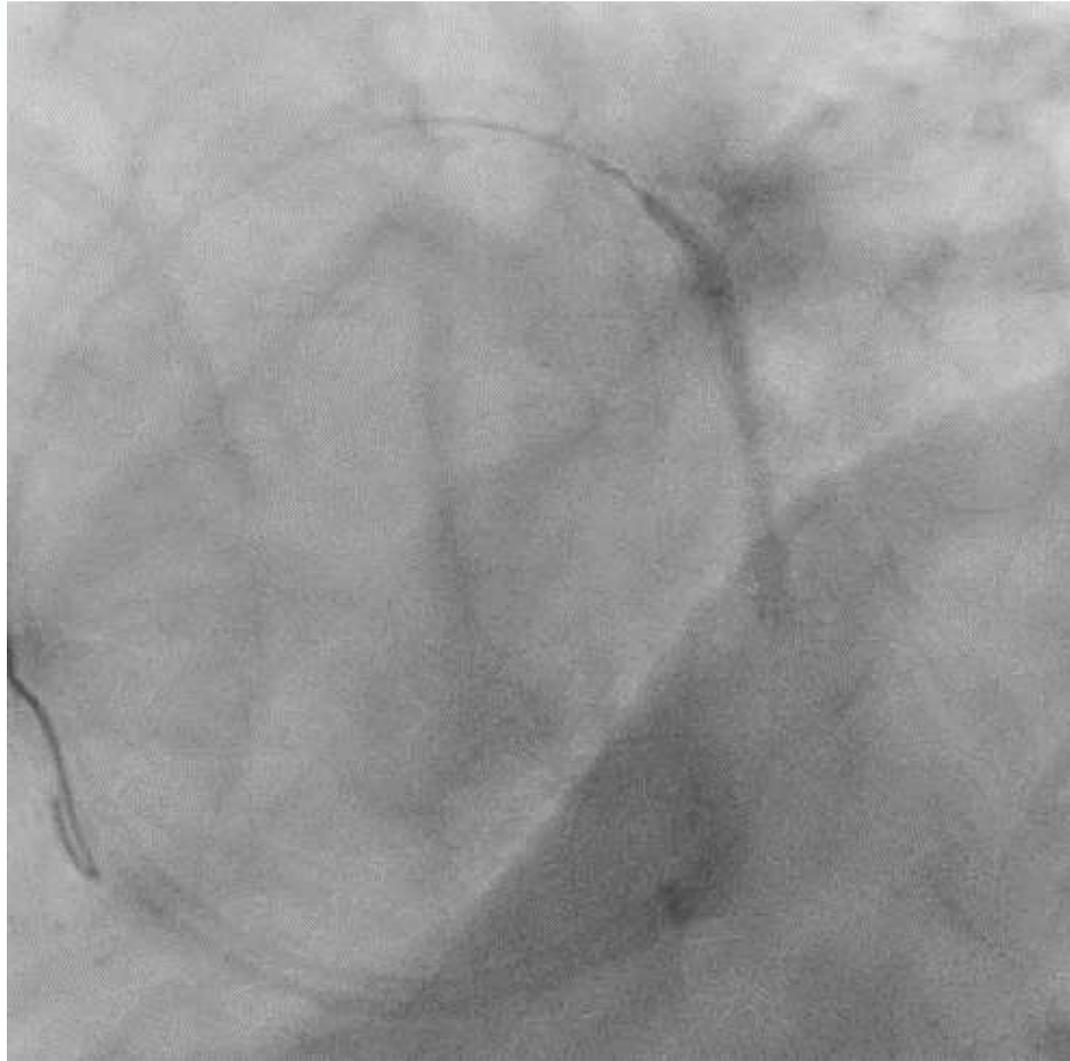
2.5X40MM  
DCB m-dLAD



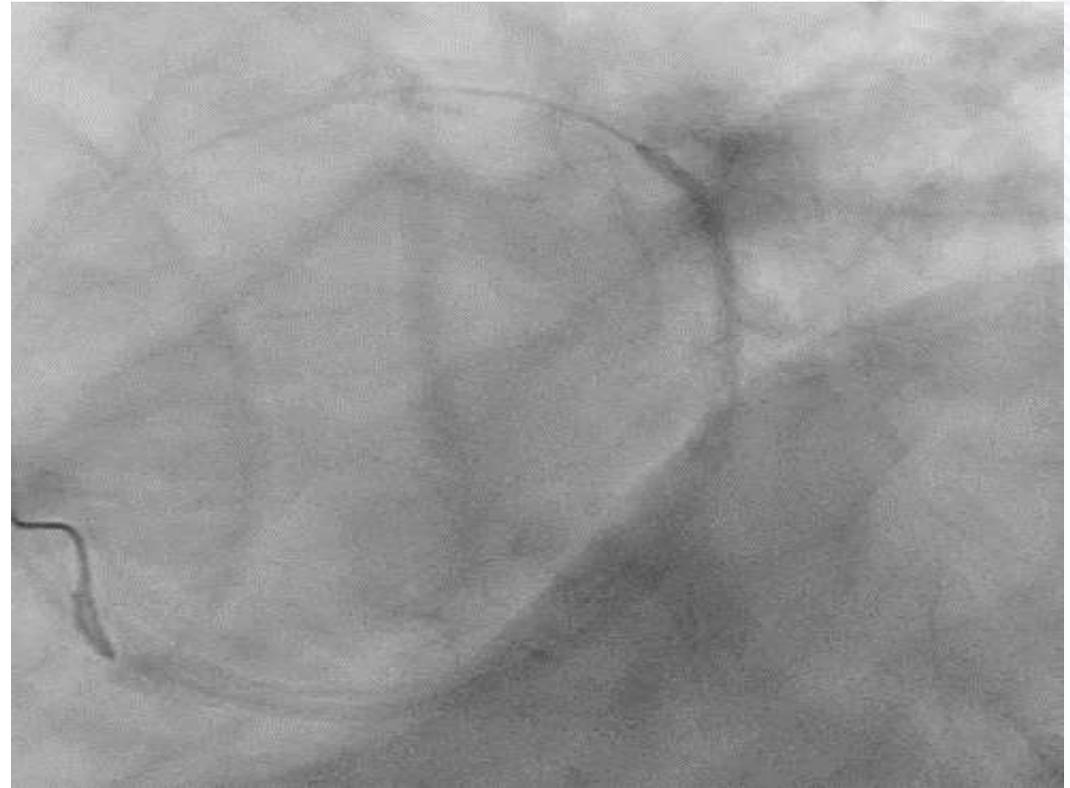
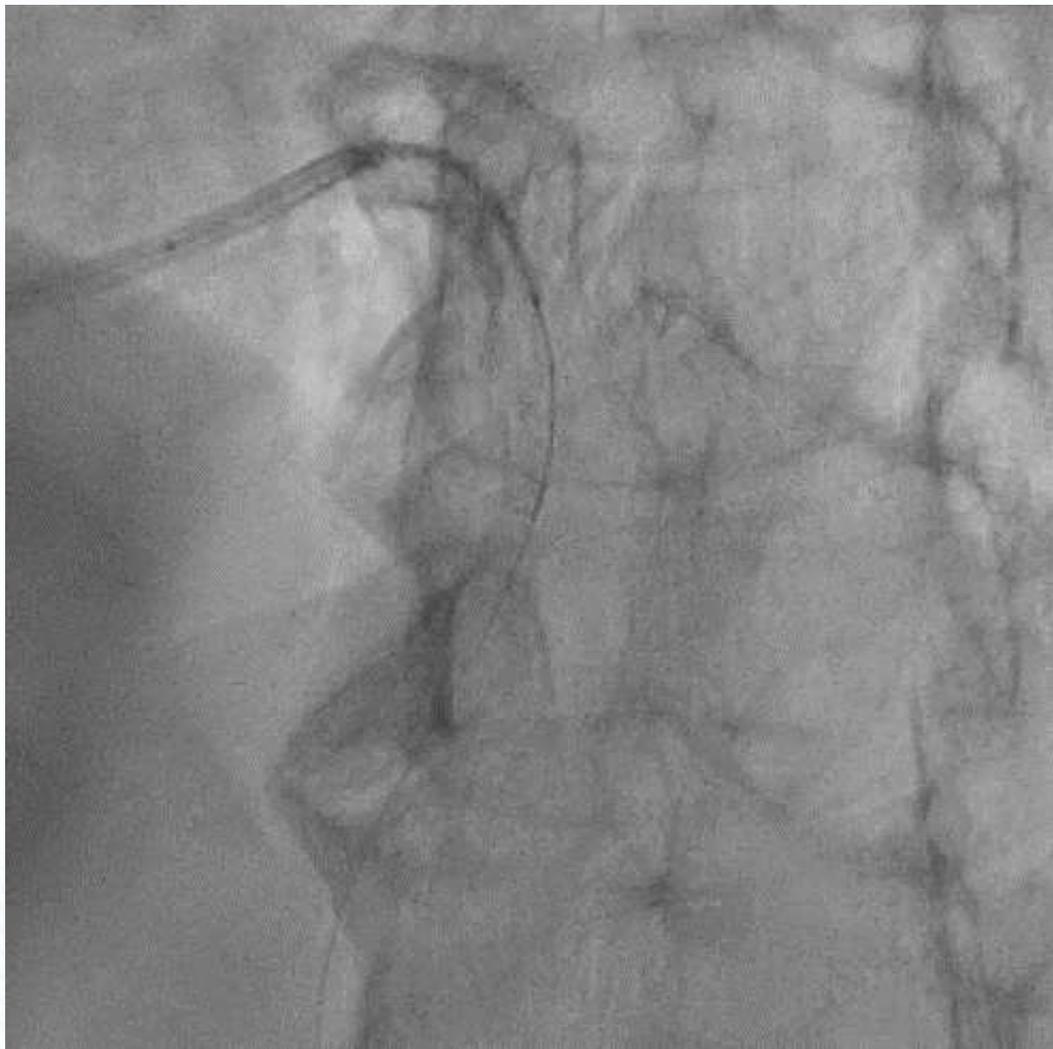
Acceptable  
results in mid  
LAD

Acceptable  
preparation of  
ostial and pLAD

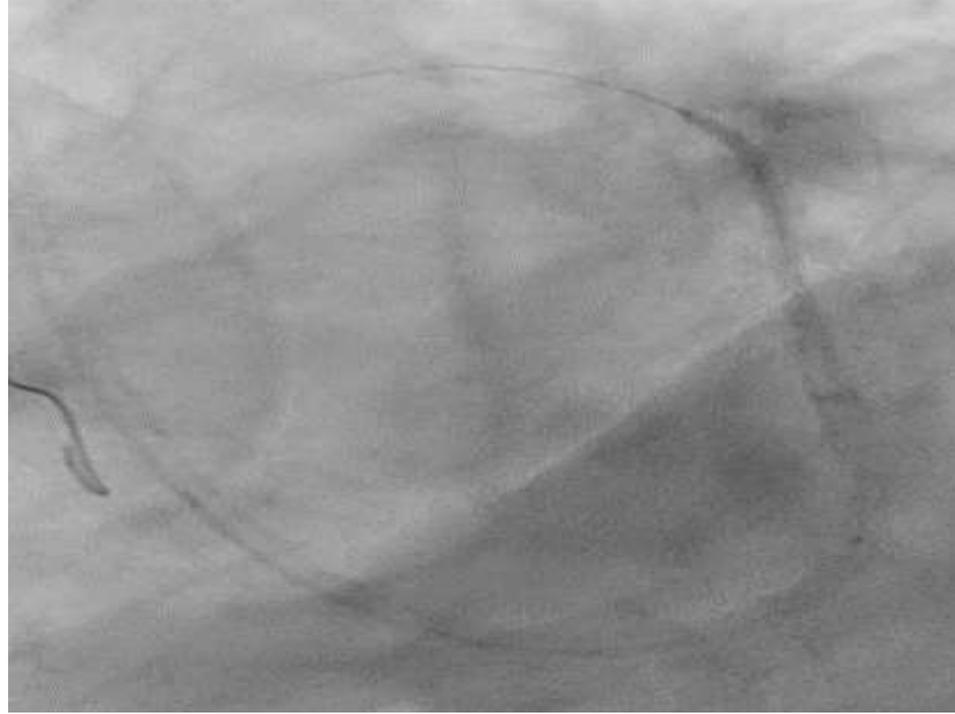
Plan for  
3.5x48mm DES  
from ostial – mid  
LAD



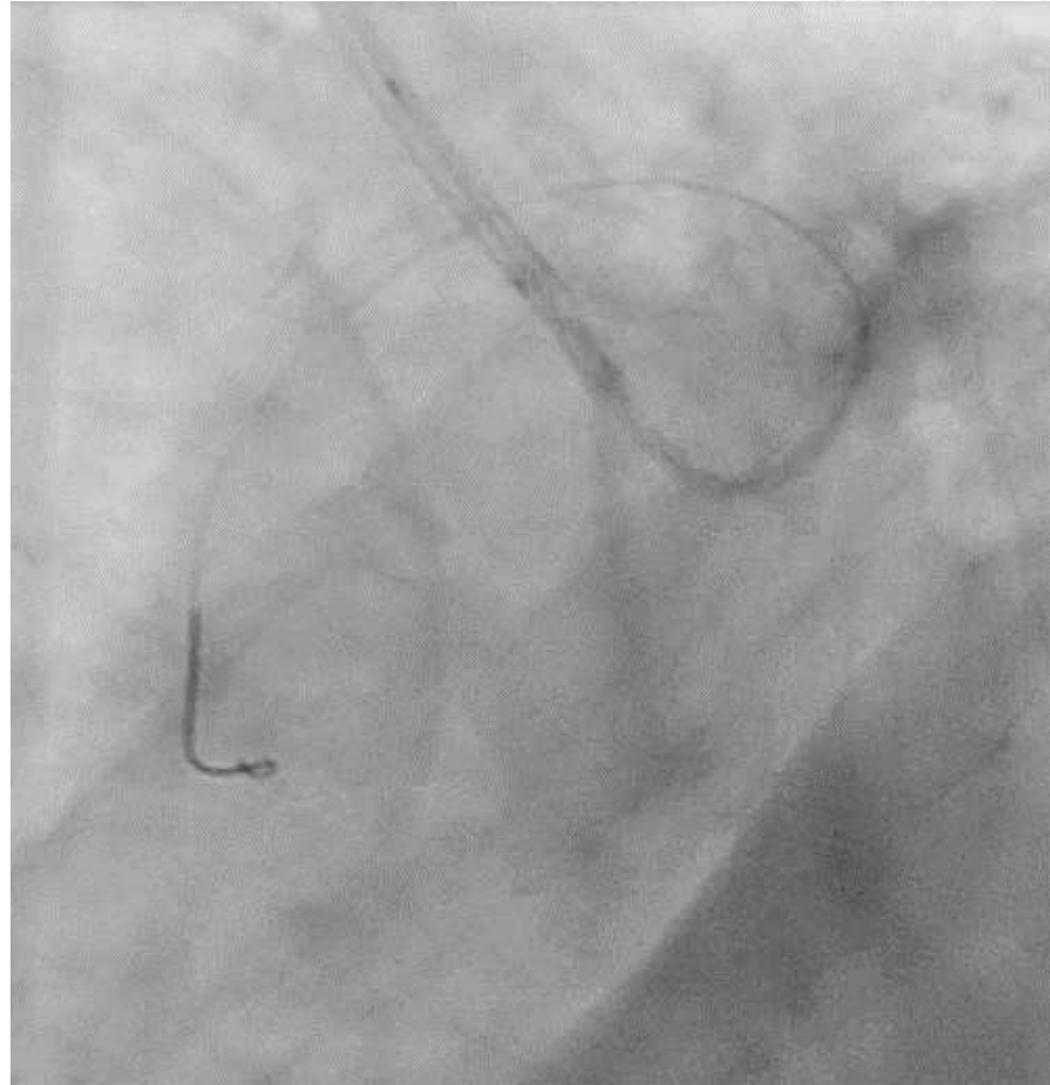
On stent delivery, it gets stuck in the ostial LAD and the prox stent edge starts to crumple



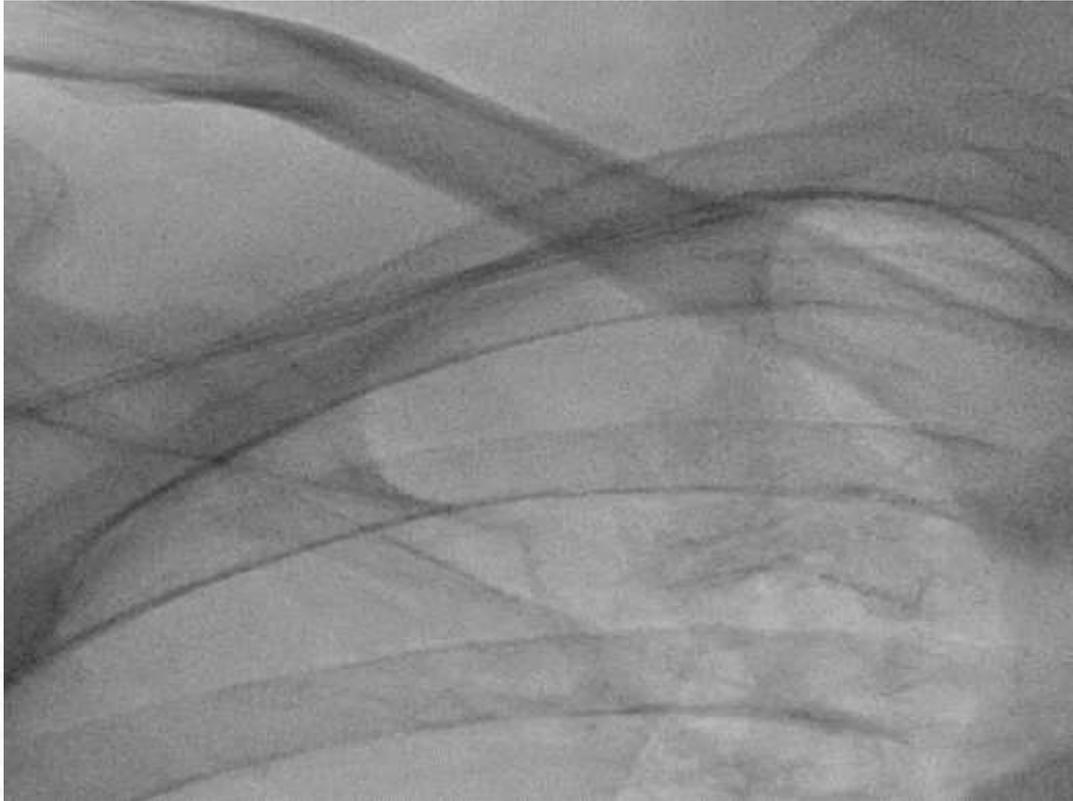
**On attempting to retrieve the stent, it dislodges, and the balloon pulls into the guiding catheter.**



On guide manipulation, the stent seems to get more deformed in its proximal end.



Slowly retracted the whole system 'en bloc'

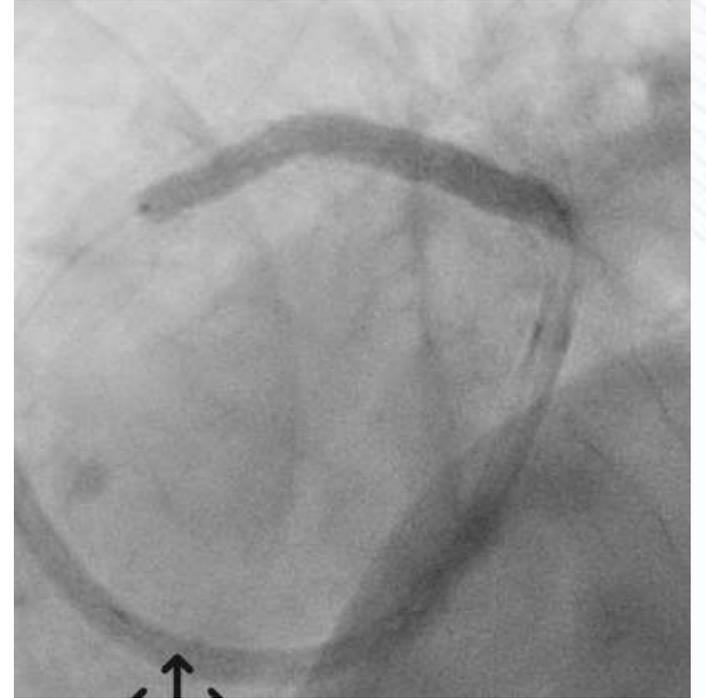
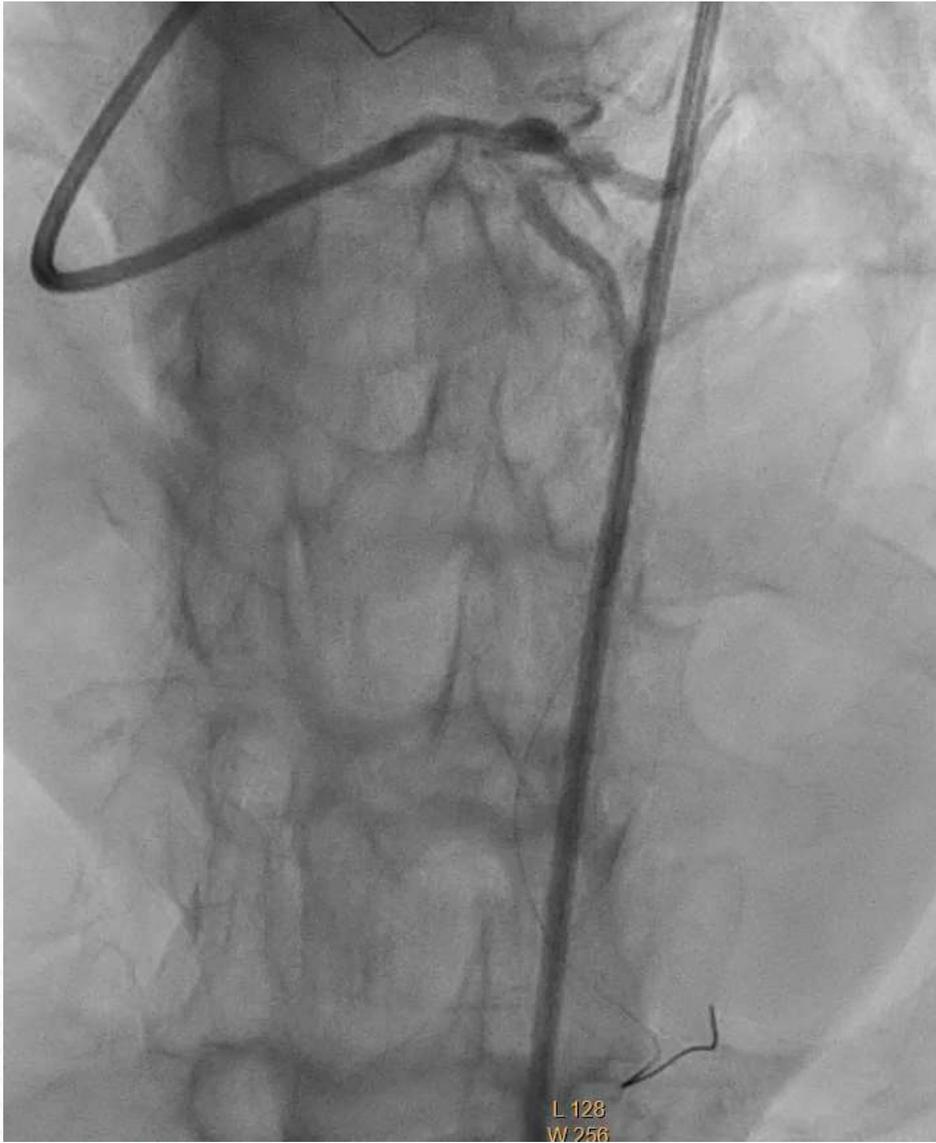


Retracted system into aortic arch  
-> subclavian artery -> Brachial  
Artery



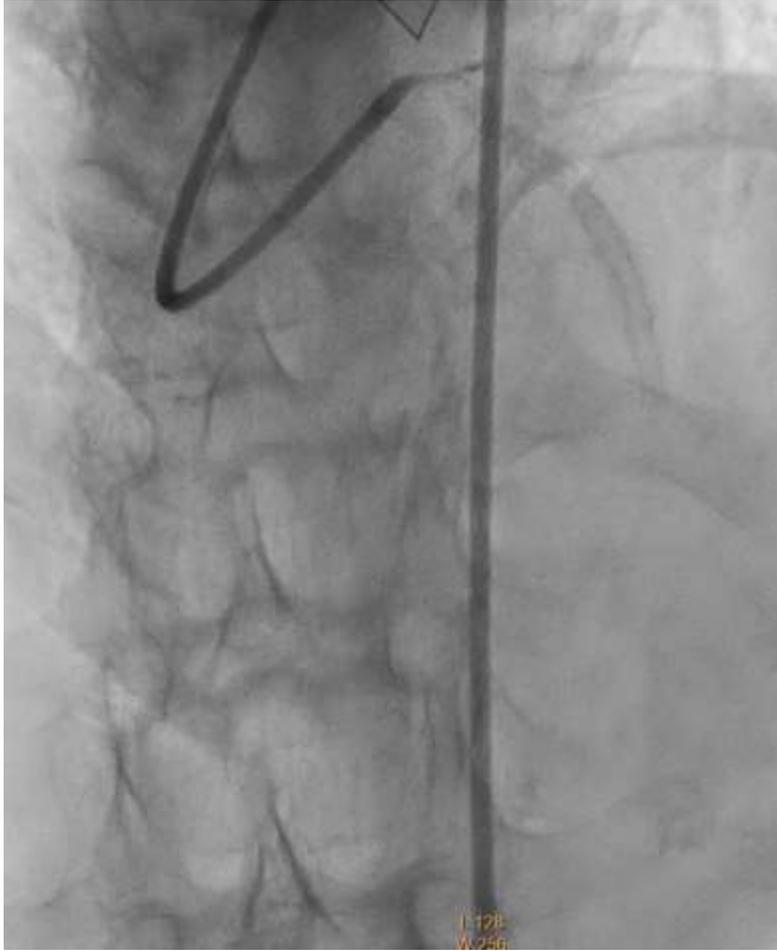
UNABLE TO REMOVE SYSTEM THROUGH THE RADIAL SHEATH!

- Right Femoral Artery puncture 8Fr
- EBU 3.5 7Fr to LCA
- Still need to finish PCI to LAD!
- Left the 6Fr guide with stent / wire in the aorta

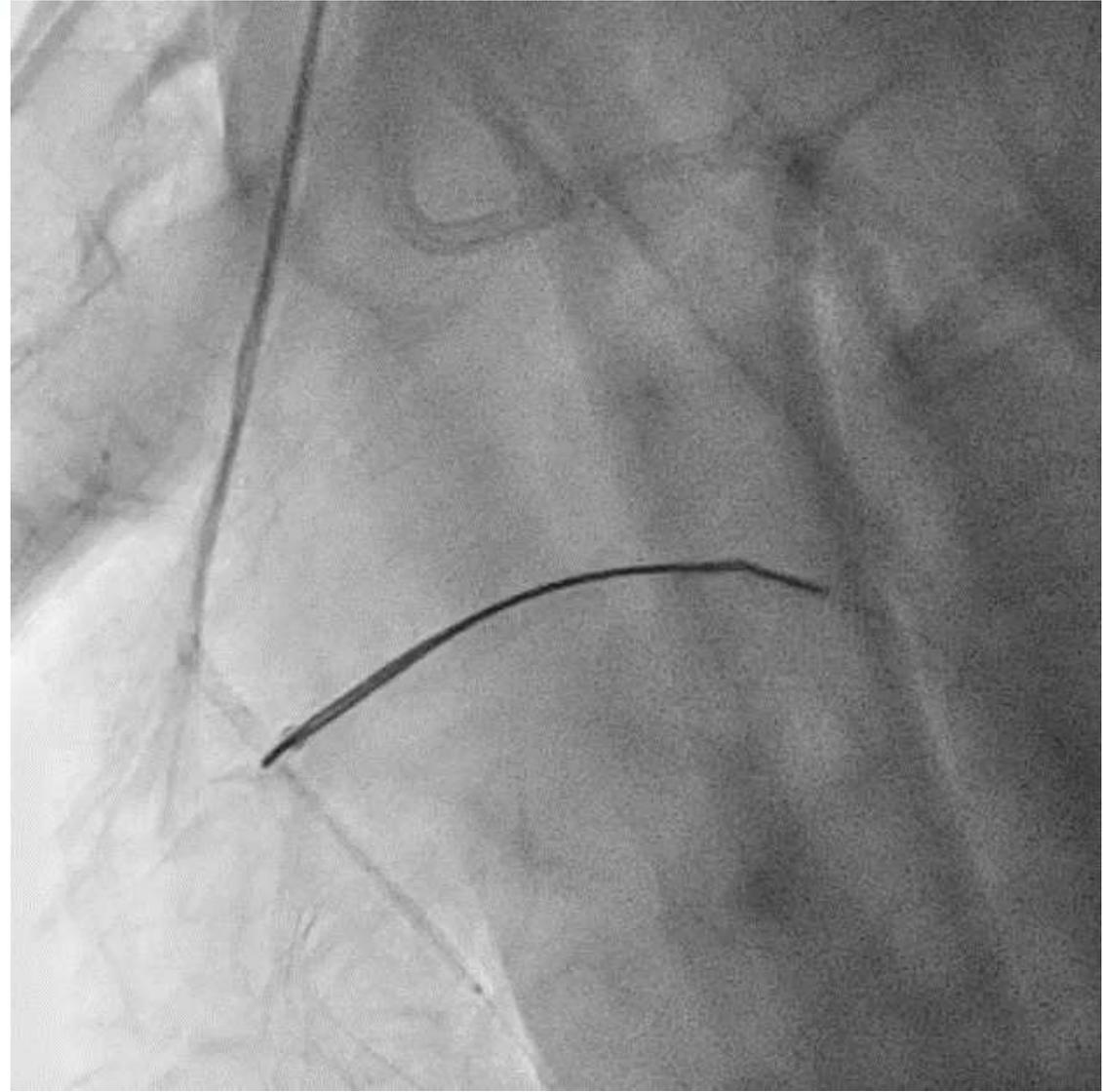
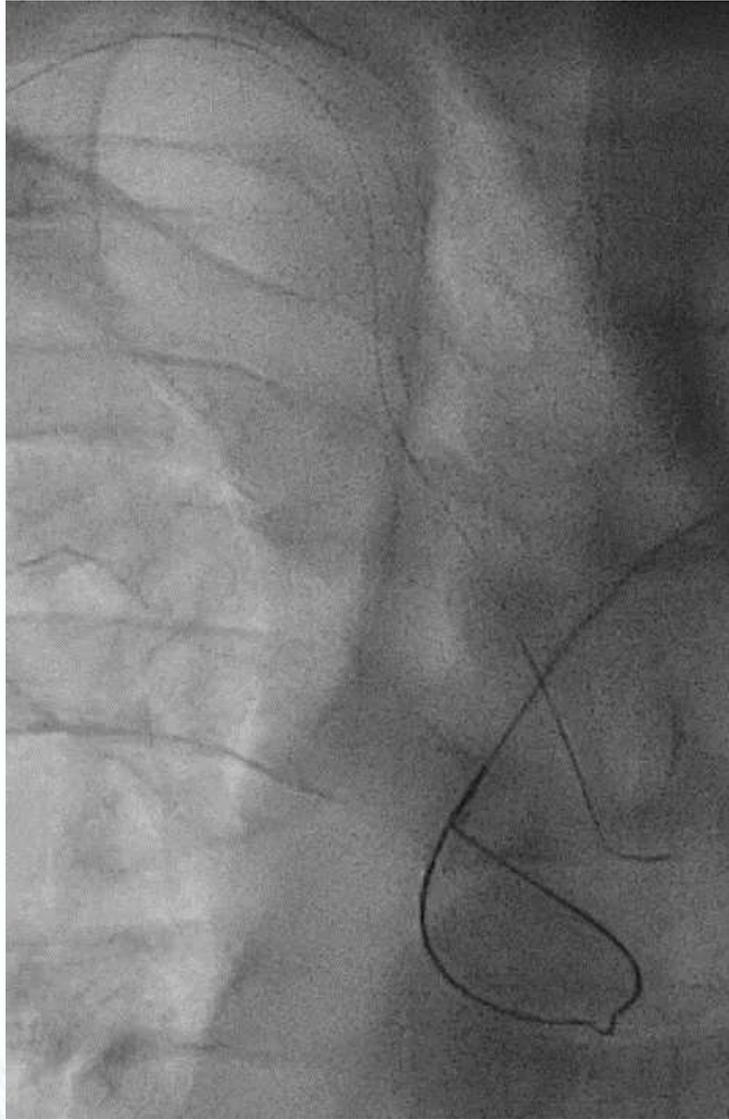


Stent delivery aided by Guide extension catheter.

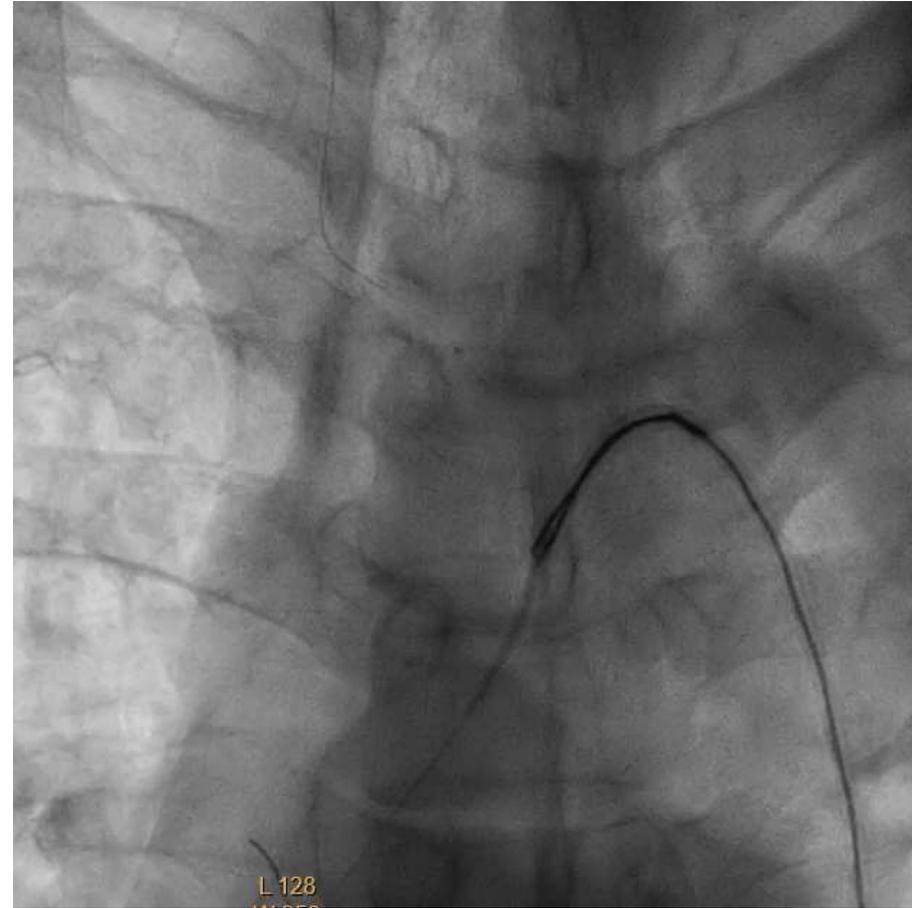
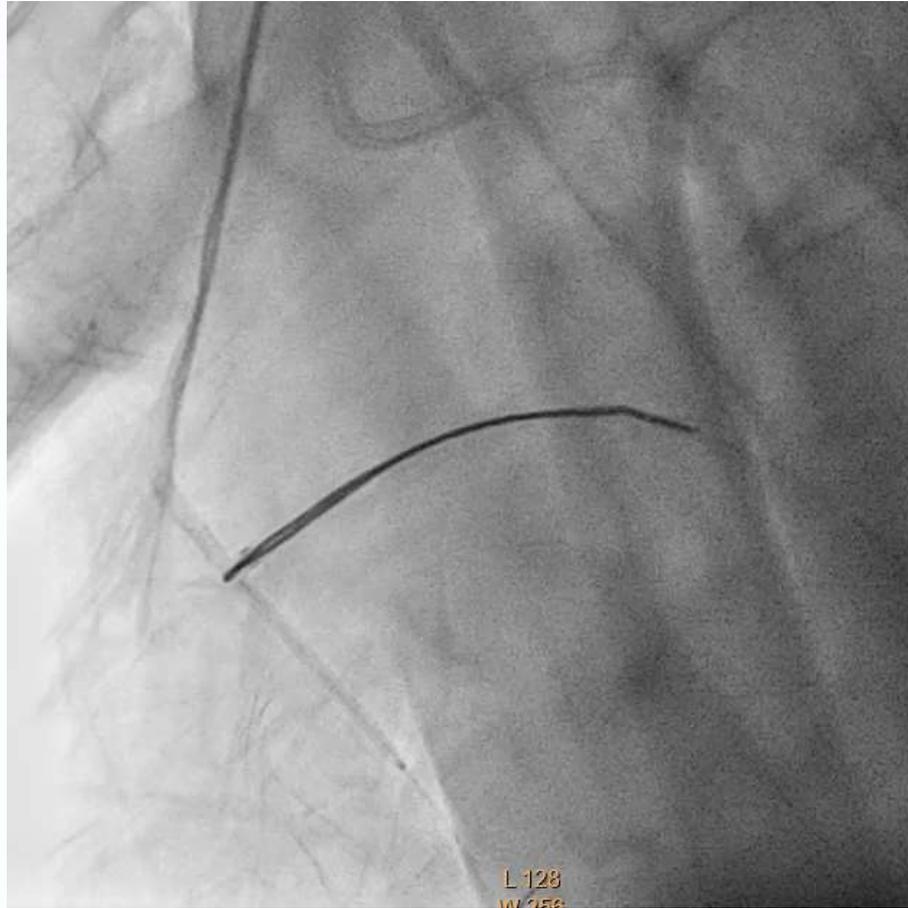
3.0x48mm DES. Post dilated to 3.0 in mLAD and 3.75 in prox LAD.



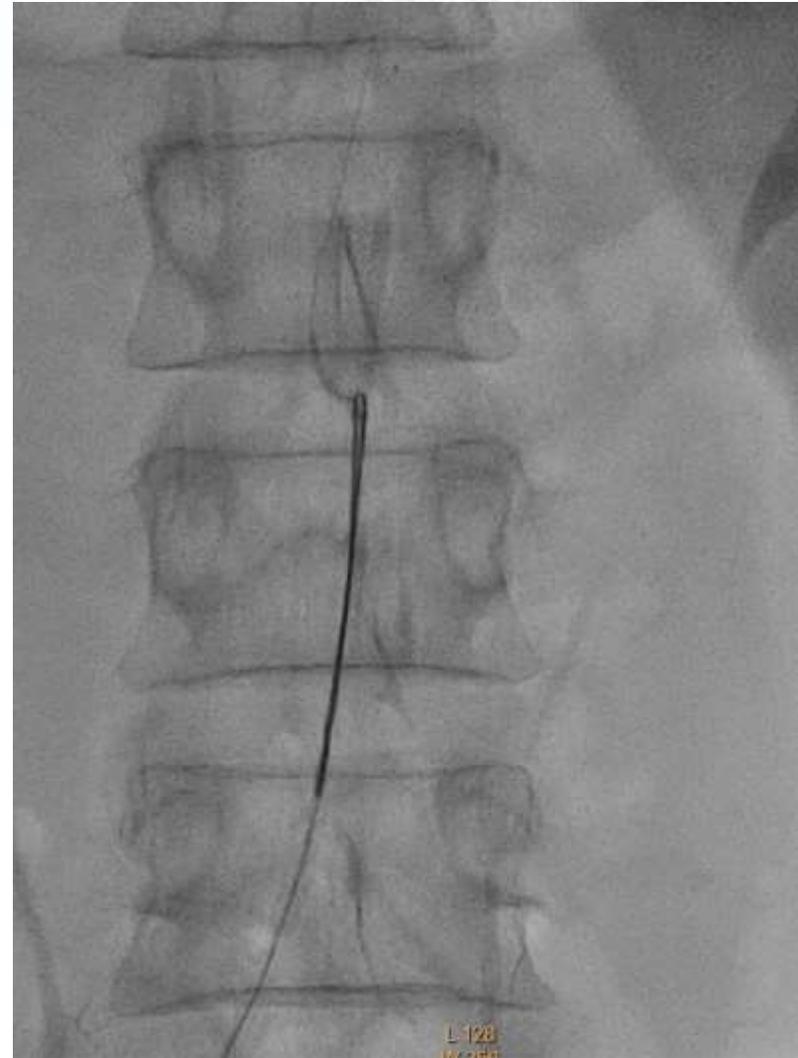
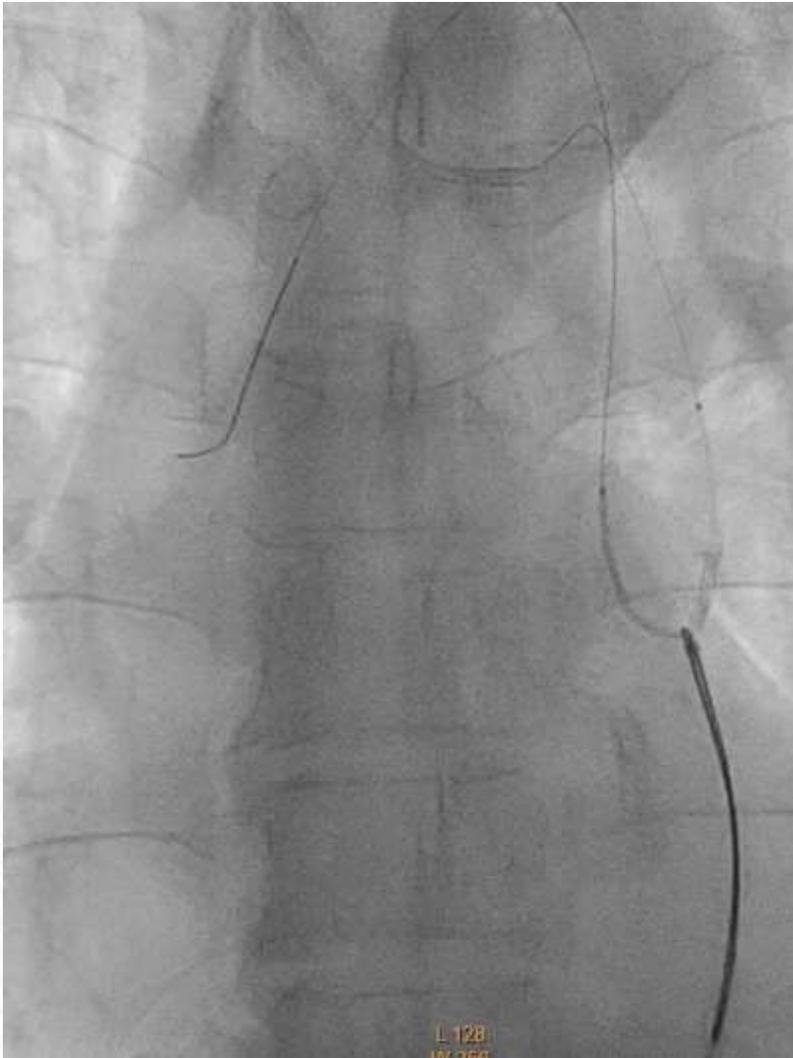
Acceptable final angiographic results.

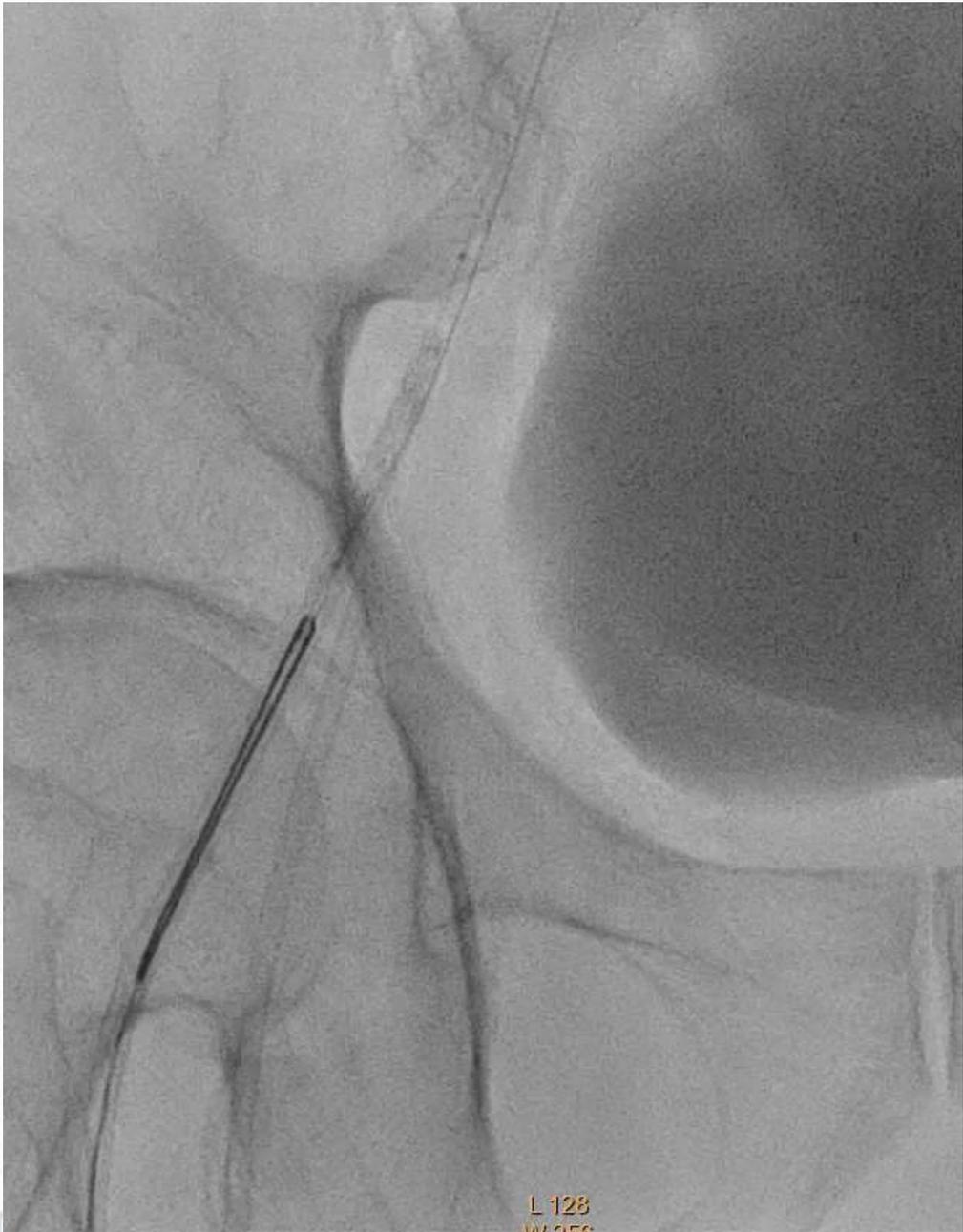


Amplatz Gooseneck snare to catch the stent / wire (JR4)



“Tug” to ensure the snare has got the stent captured.







EBU guide removed through  
the radial sheath

# THE END?

Not so fast.....

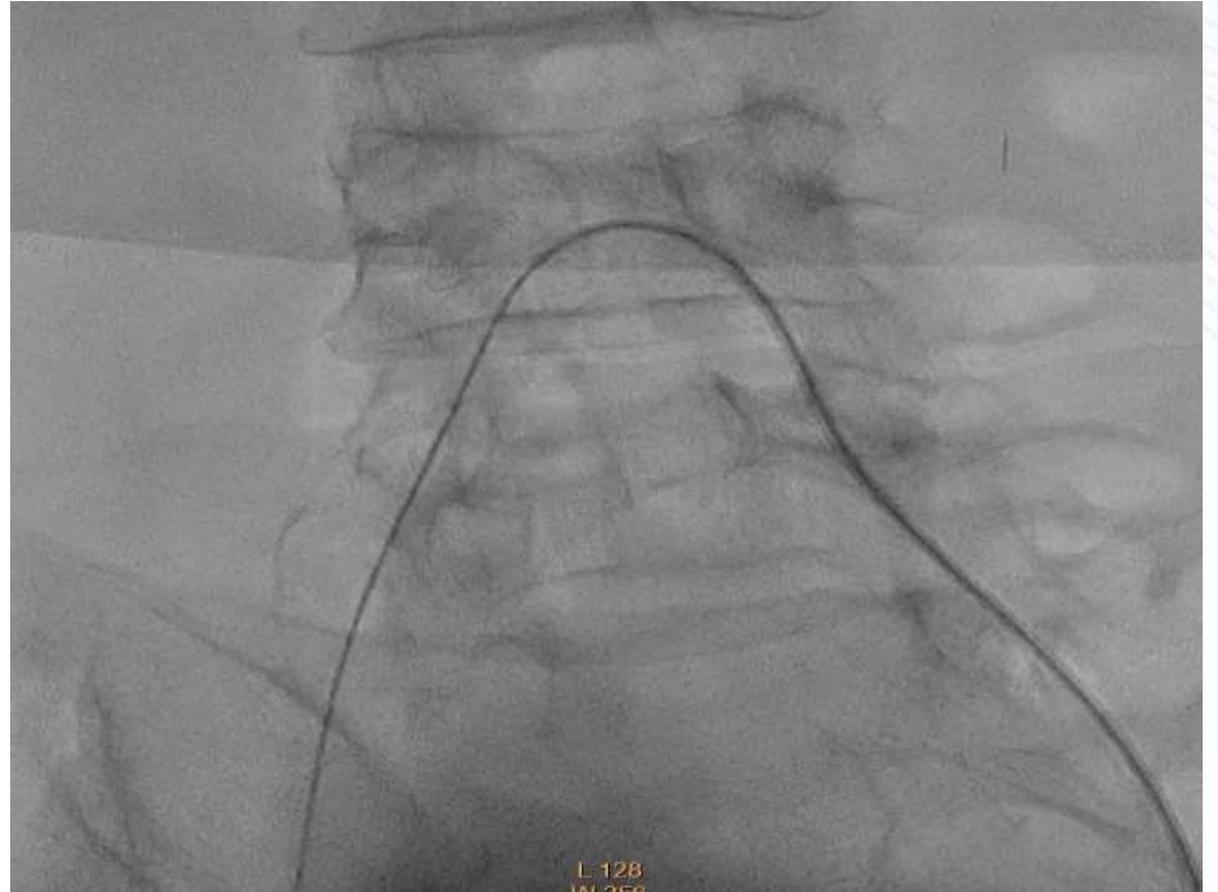
- 25 mins later....
- Persistent oozing at the femoral puncture site (despite 15 mins of manual compression)
- Bp dropped to 80 / 50 (Starting pressure of 150 systolic)

Left femoral puncture

JR 4.0 to infra renal  
aorta

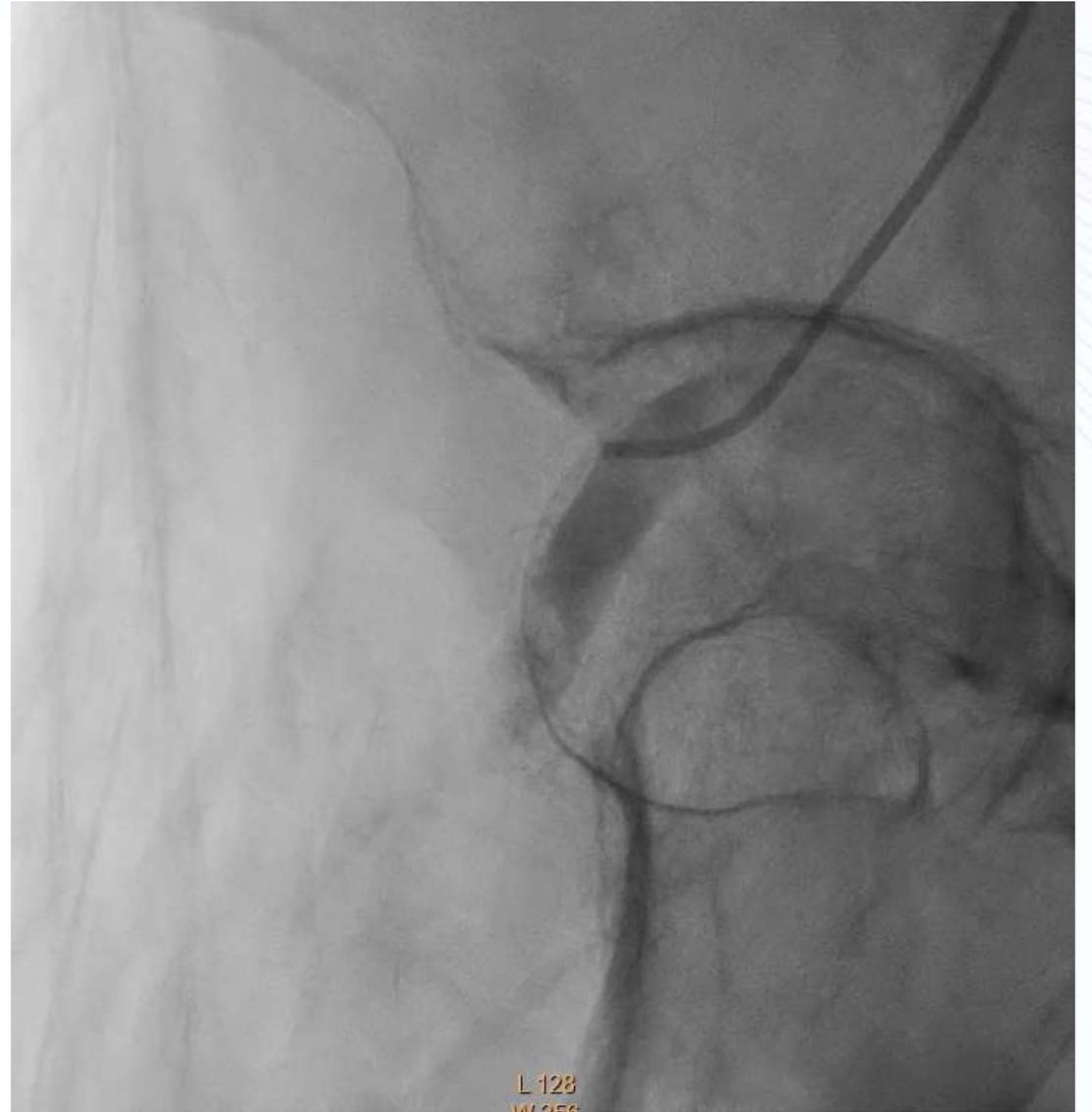
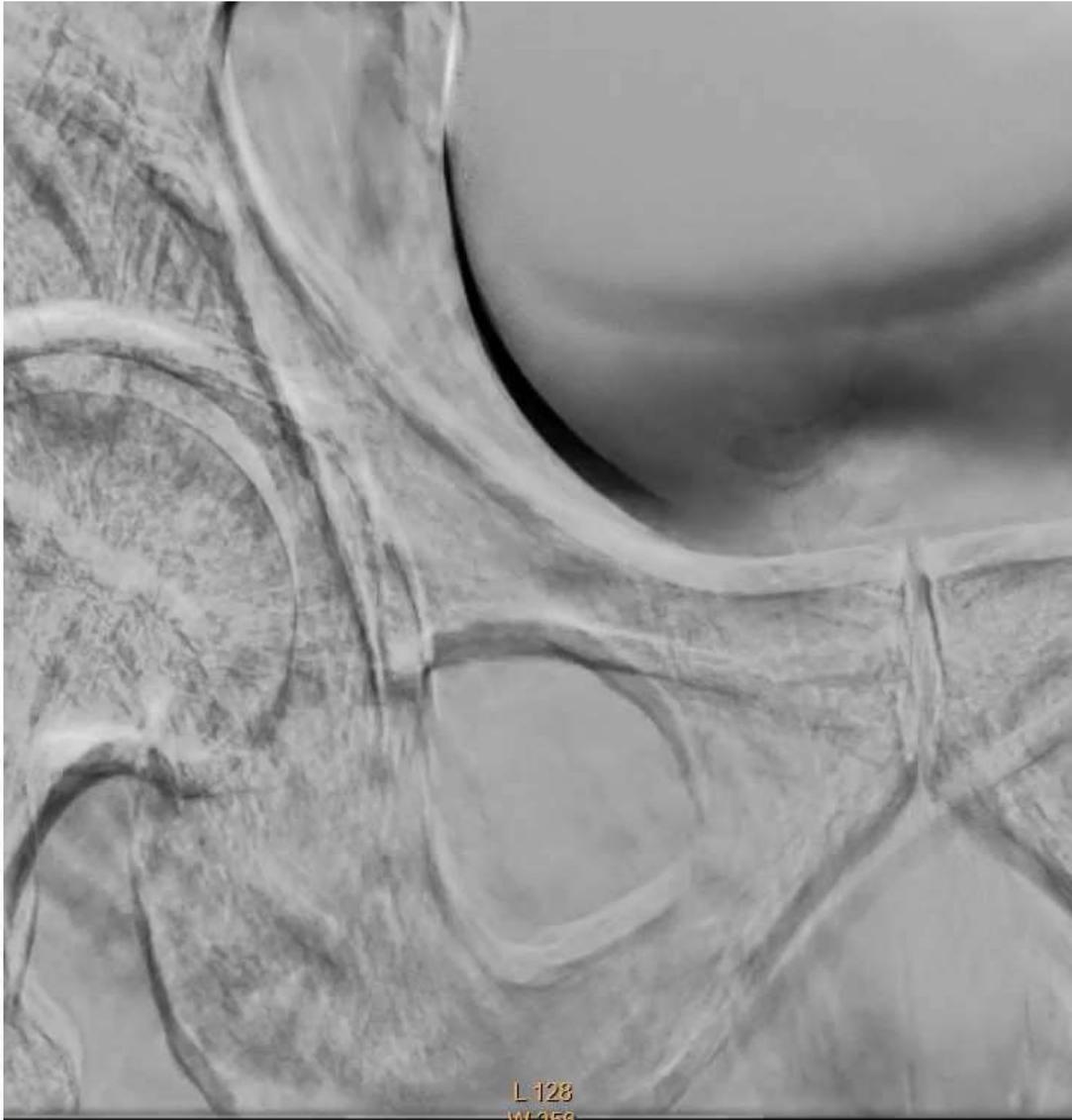
Terumo wire to RFA

Ansel flexor crossover  
sheath to the Right  
common iliac artery

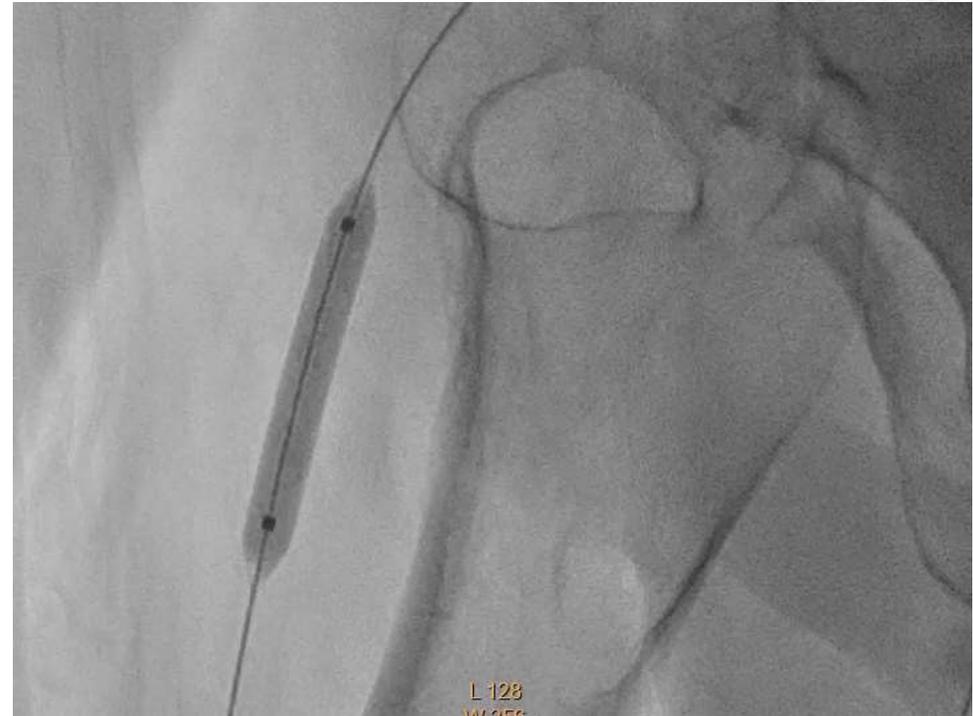
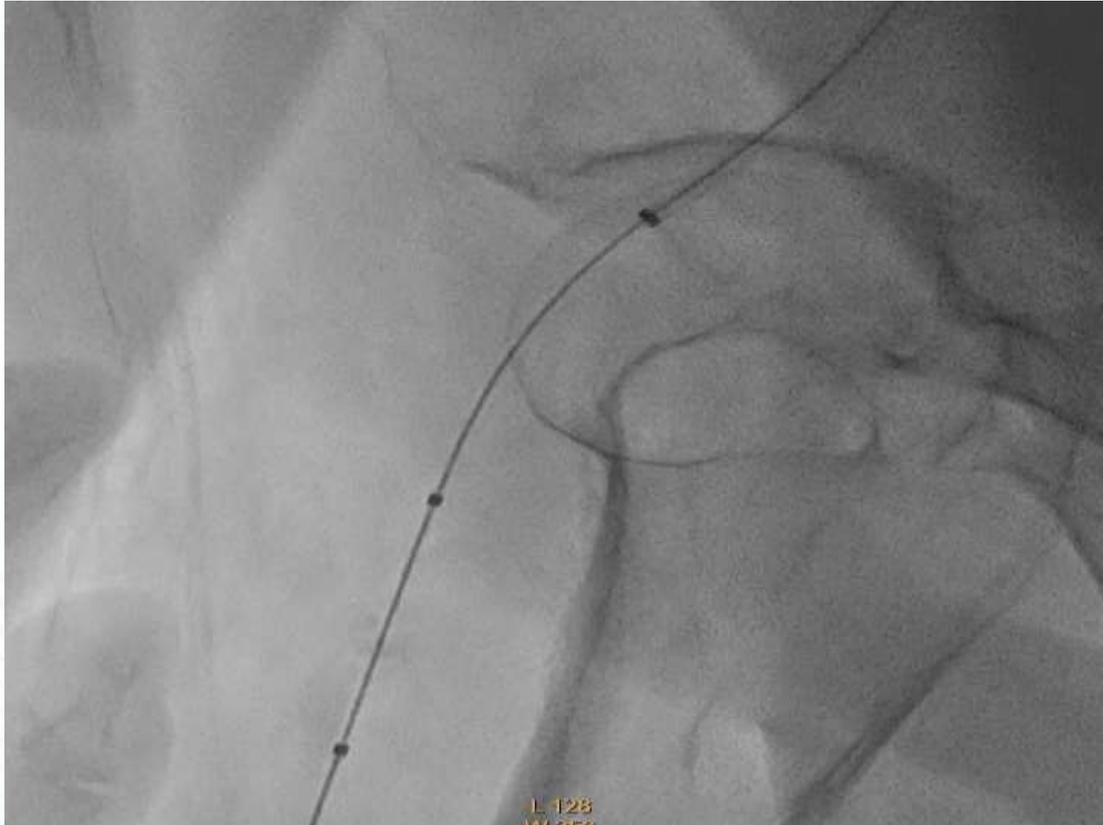




Possible contrast extravasation at the puncture site



Active Bleeder from puncture site at CFA / SFA Junction



Admiral Xtreme PTA  
Balloon  
6.0 x 40mm balloon  
inflated  
6ATM for 14 minutes



Angiogram – no more extravasation of contrast.

- LFA closed with 6F angioseal
- Post Op Hb – drop by 3 grams
- Transfused 2 pints of blood as he needed inotropes for support
- Observed in CCU for 48 hours
- Discharged on D4

