
A complex STEMI case

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TCTAP 2018

 National
Healthcare
Group

 Tan Tock Seng
HOSPITAL

Case

- 69 year-old man, former smoker
- Severe pain between shoulder blades after argument with wife
- On arrival SBP 140 mm Hg, pulses equal, CXR no mediastinal widening
- EKG showed this

Rate 92 . Age not entered, assumed to be 50 years old for purpose of ECG interpretation
 RR 652 . Sinus rhythm.....normal P axis, V-rate 50- 99
 PR 154 . Probable left atrial enlargement.....P >50mS, <-0.10mV V1
 QRSD 89 . Inferior infarct, old.....Q >35mS, II III aVF
 QT 344 . Repol abnrm suggests ischemia, diffuse leads.....ST-T neg, ant/lat/inf
 QTcB 426
 QTcF 397

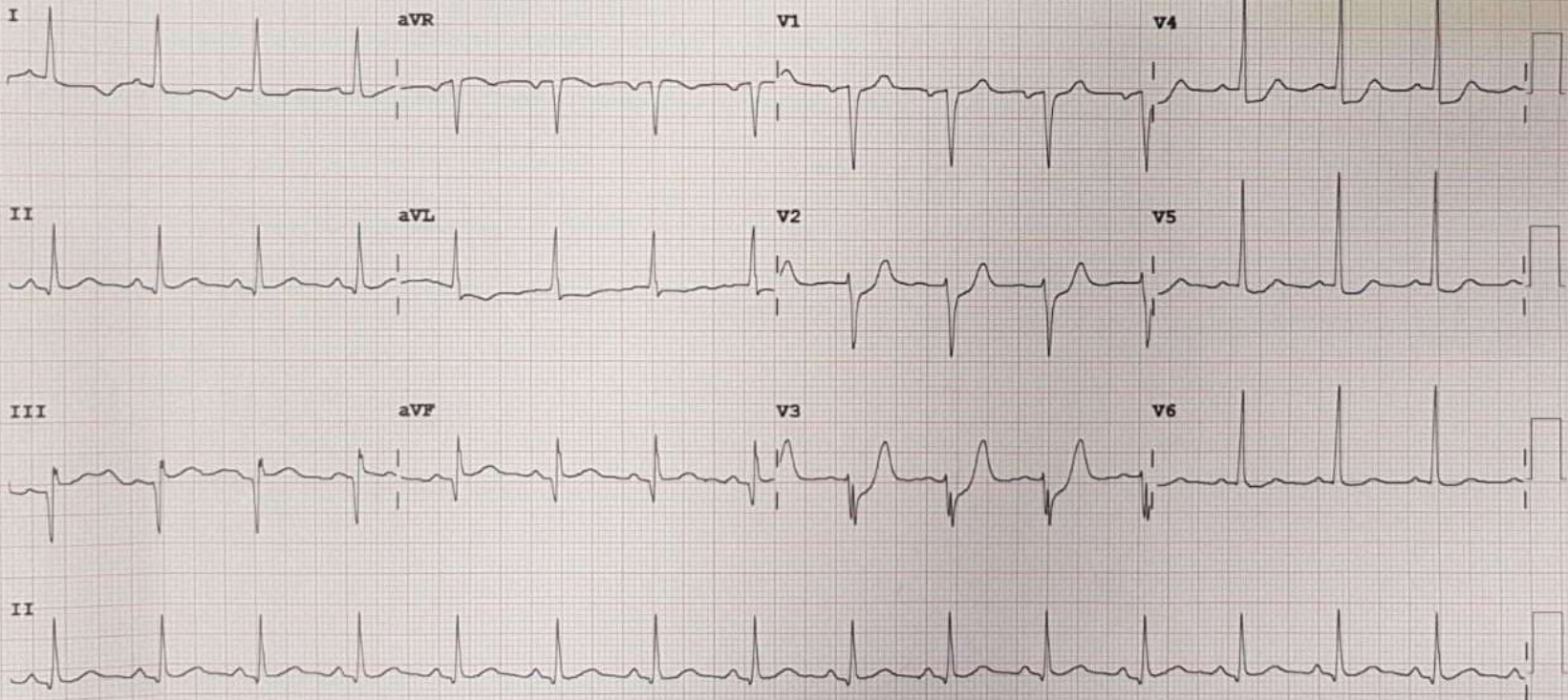
35 (21)

--AXIS--

P 57
 QRS 14
 T 99

- ABNORMAL ECG -

Unconfirmed Diagnosis

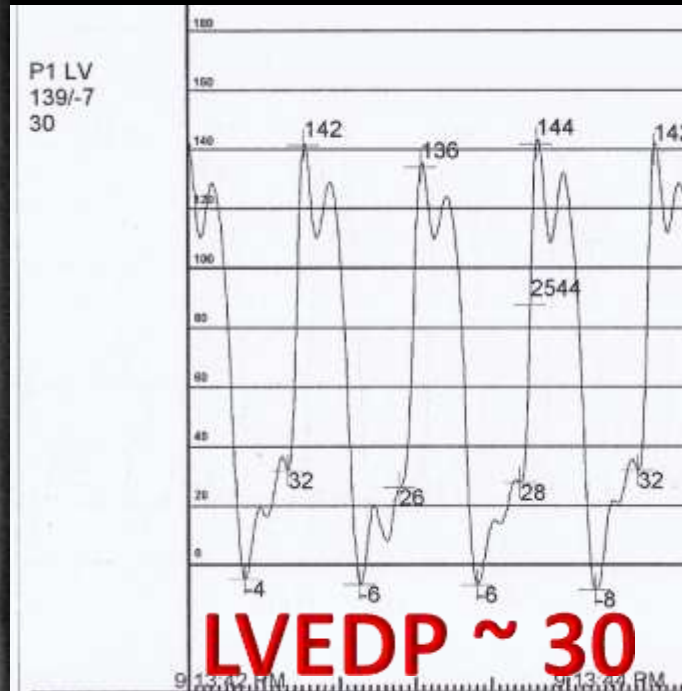
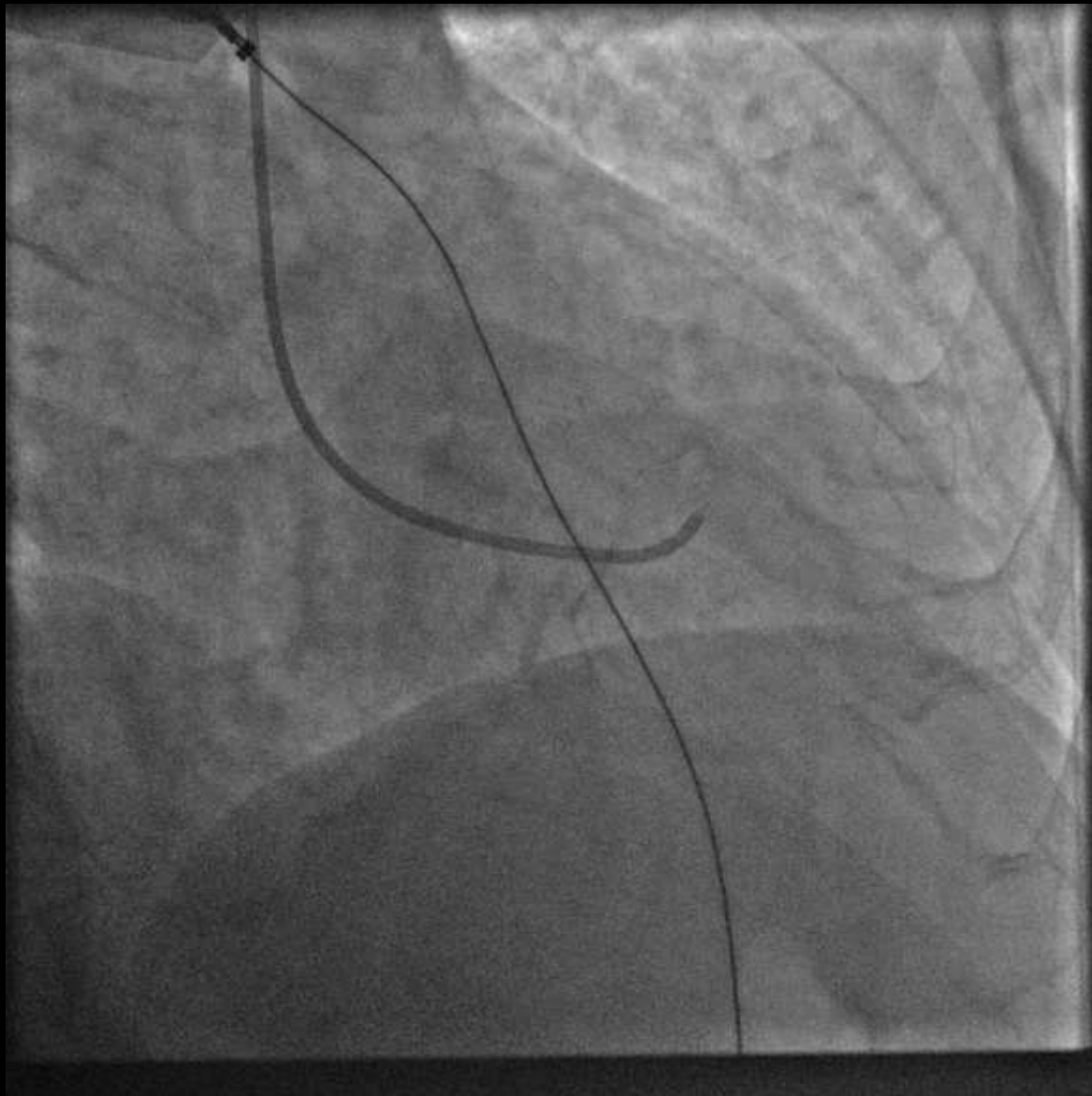


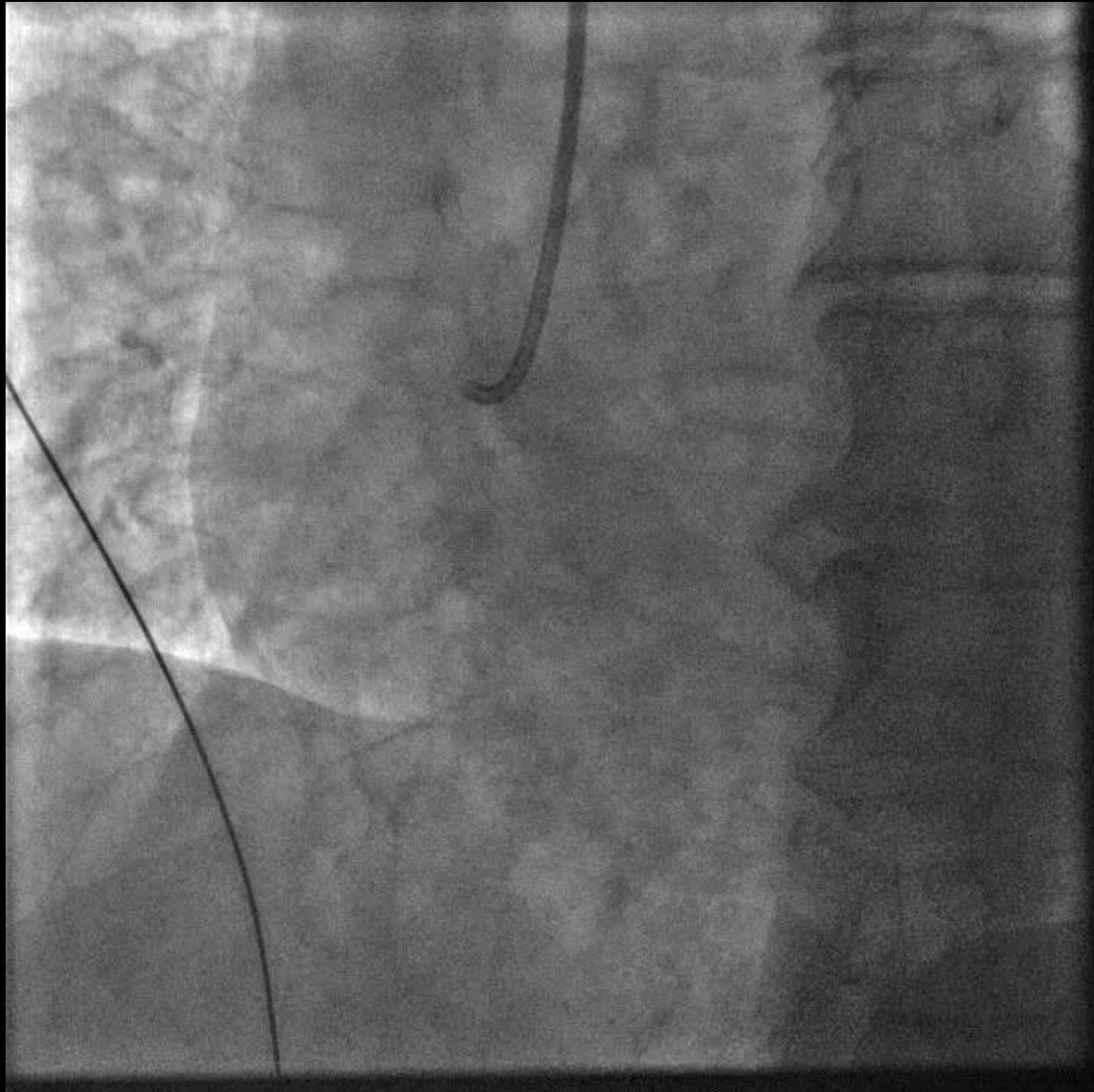
Device: TTSHECGCA> Speed: 25 mm/sec Limb: 10 mm/mV Chest: 10.0 mm/mV

F 50~ 0.15-100 Hz

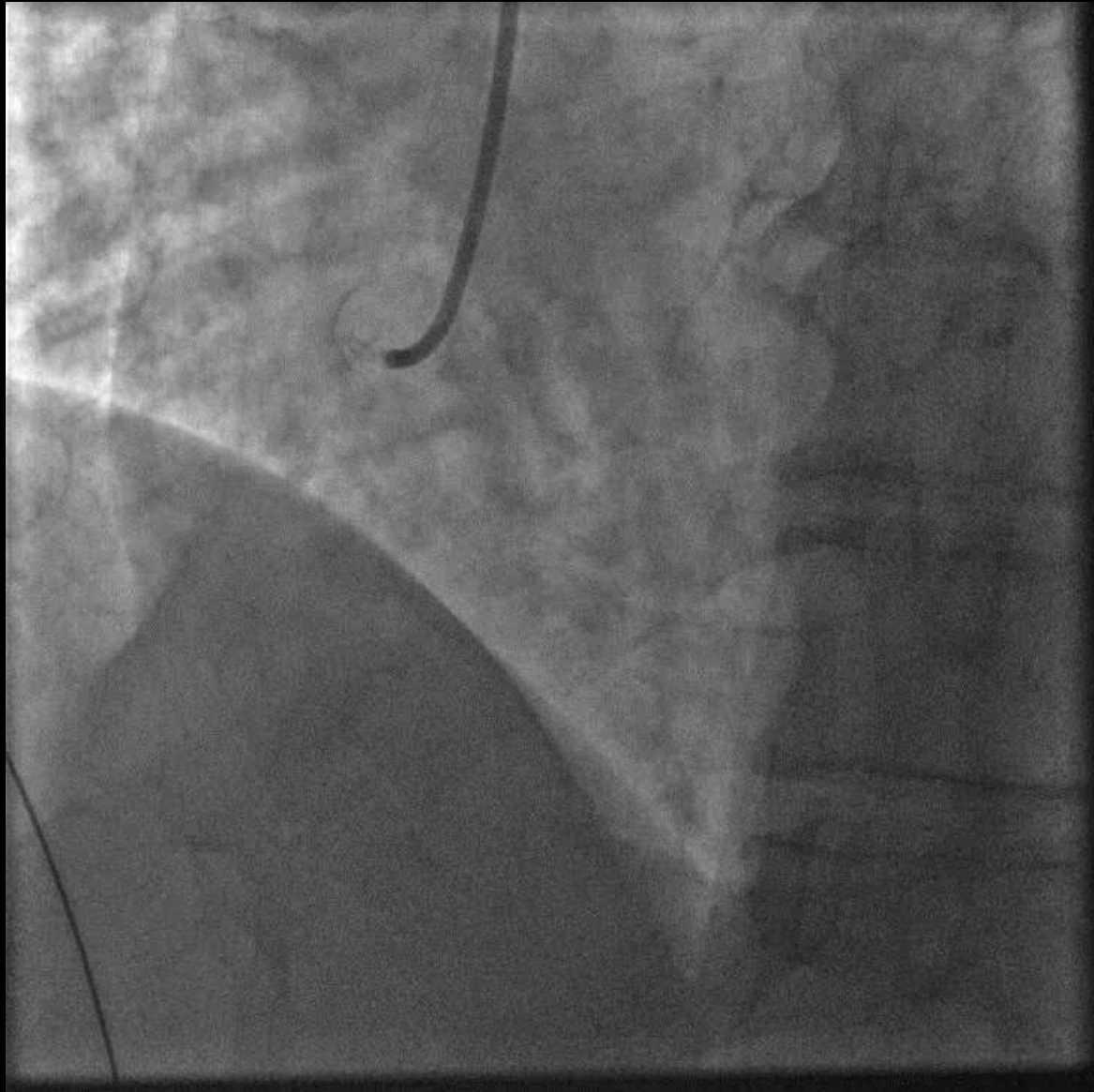
PH100B b L

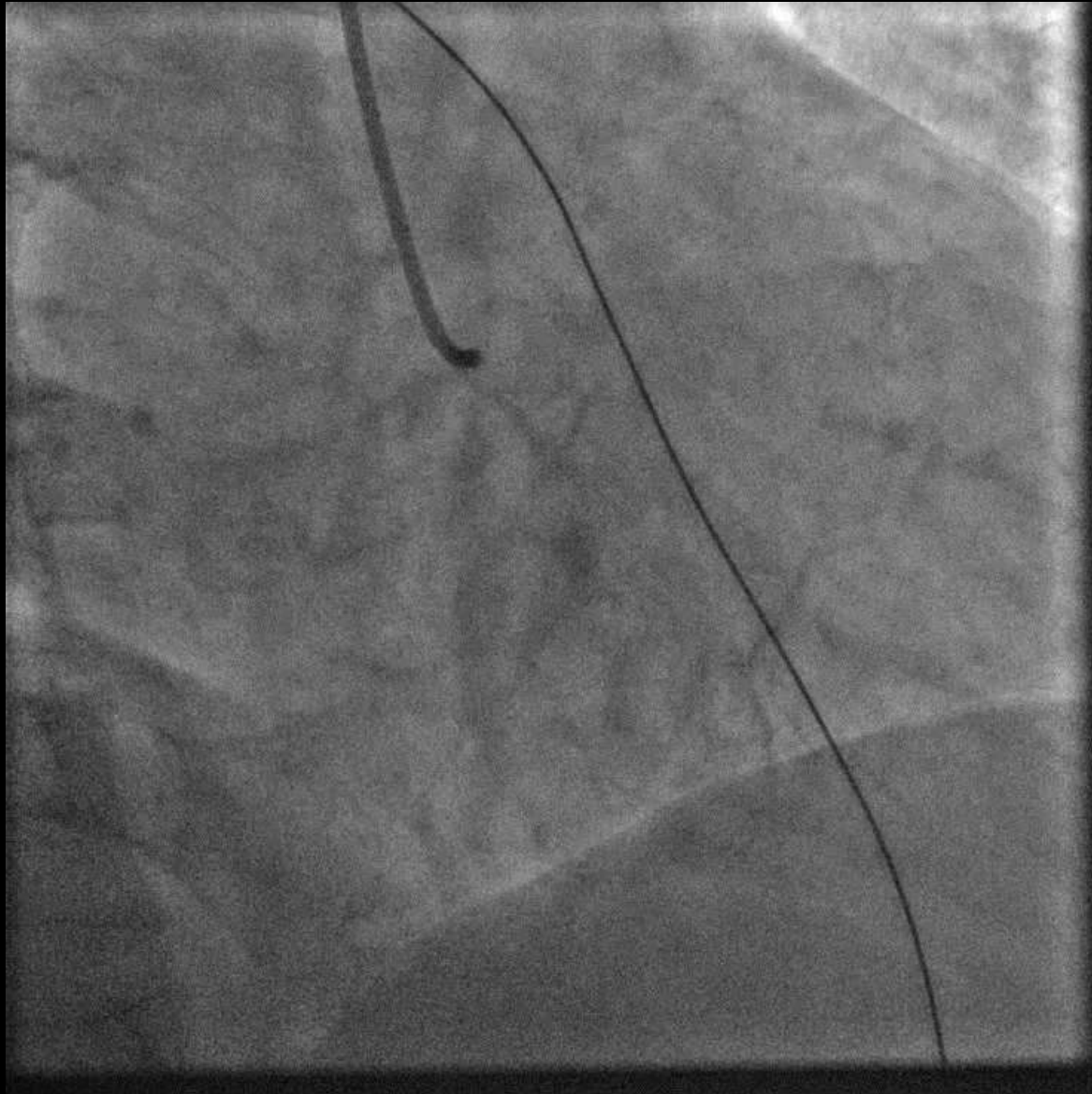
P?

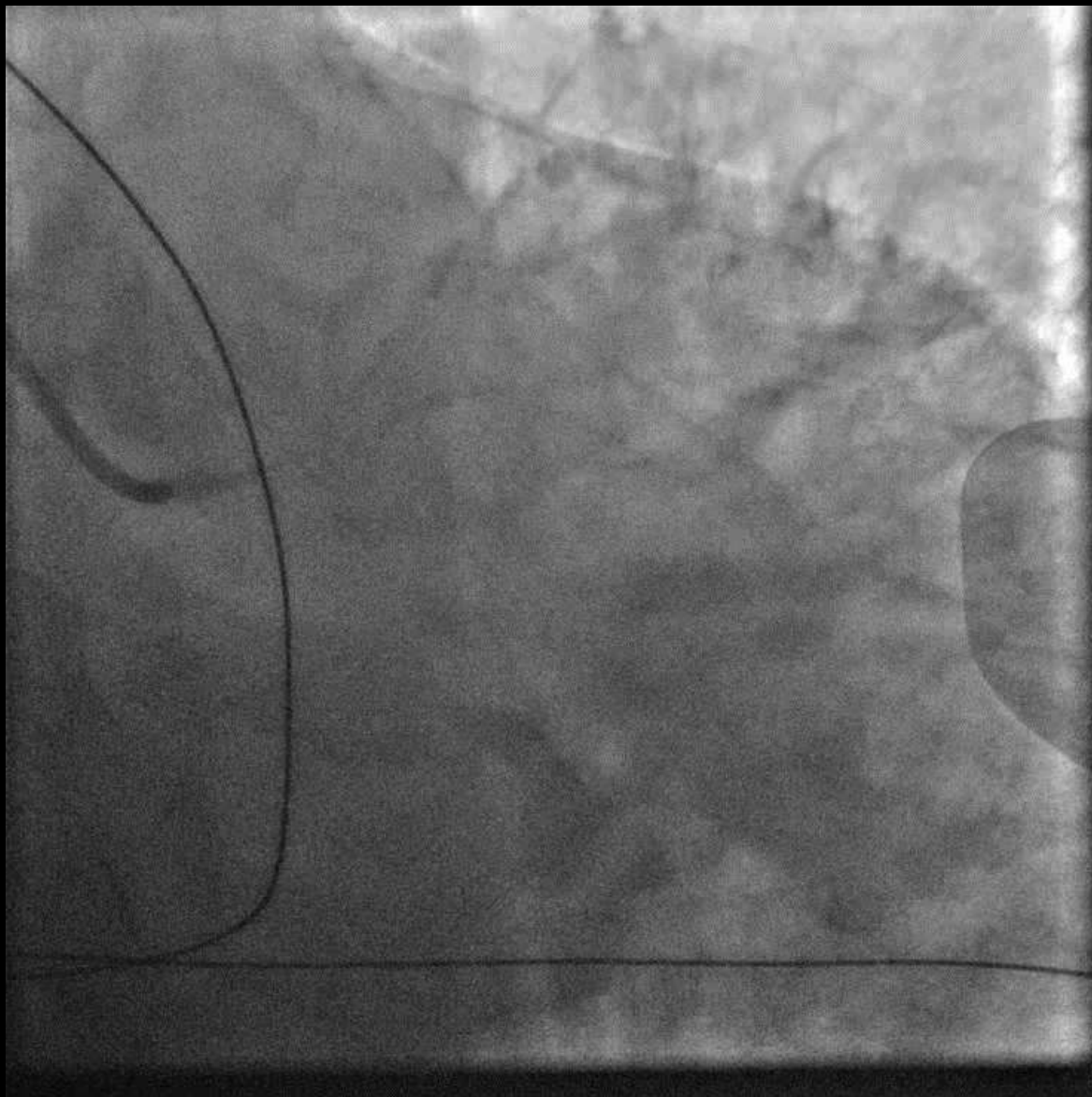




- RCA subtotally occluded, with impaired flow
- Acute or chronic?







- LCx subtotally occluded with impaired flow



- LAD severely diseased but TIMI 3 flow.

Hmmmm

Still having 8/10 pain

What do I fix ?

**NOW
WHAT**

Hmmmm

Still having 8/10 pain
What do I fix ?

Options

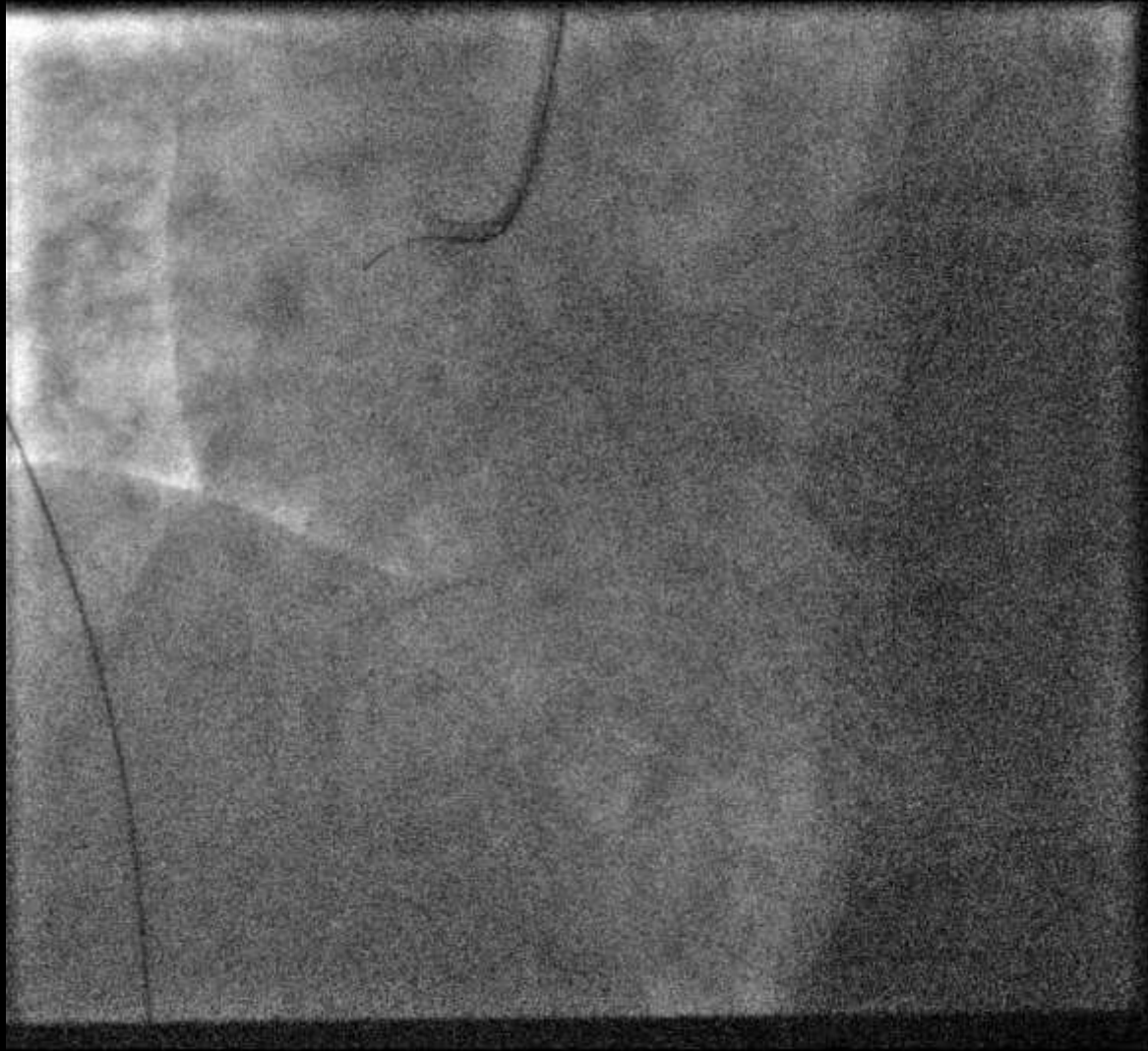
- A. Fix the RCA
- B. Fix the LCx
- C. Fix the LAD
- D. Fix 'em all
- E. Send for CABG ?

**NOW
WHAT**

My thoughts

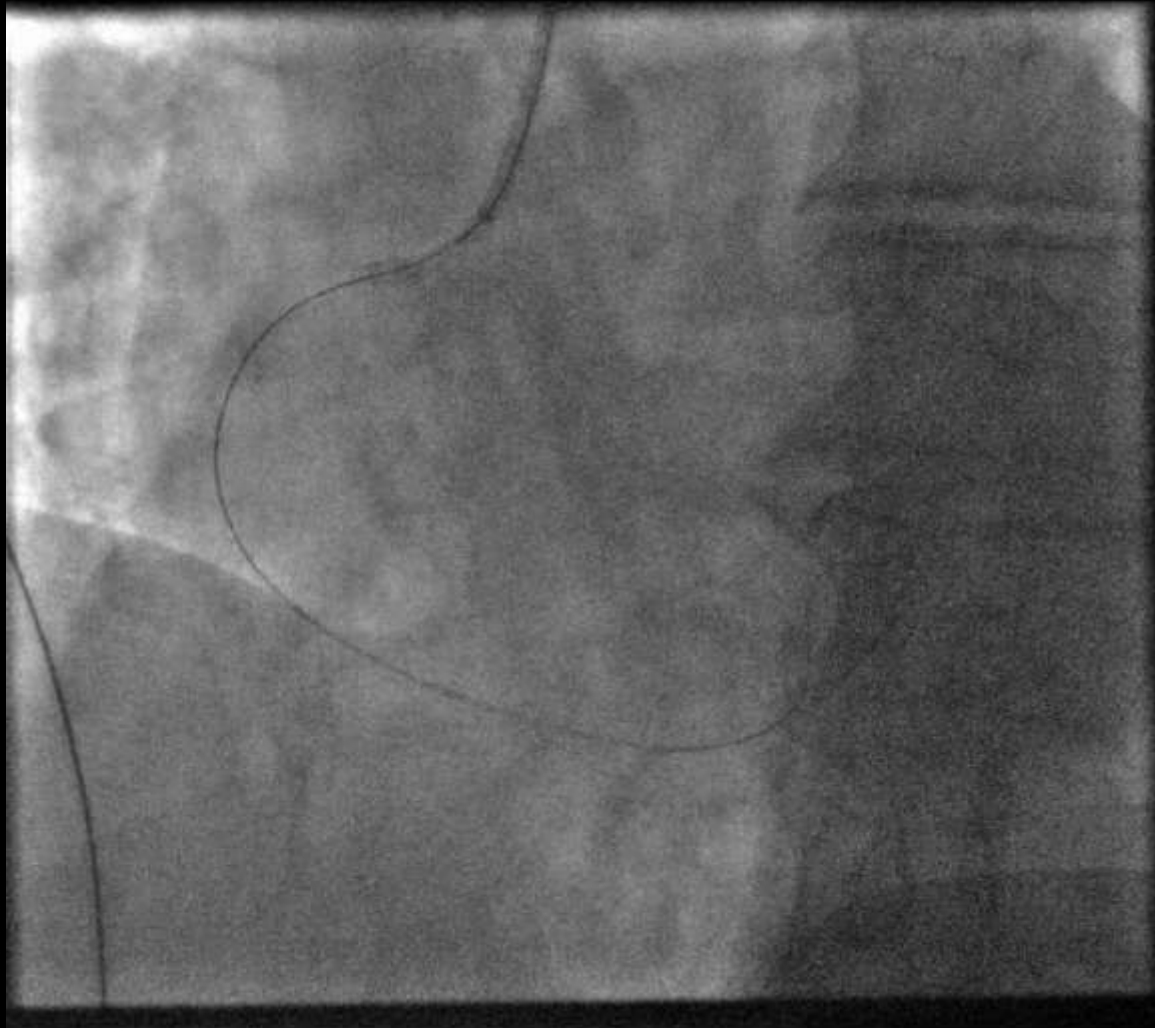
- He's having 8/10 pain
- LAD has TIMI 3 flow so less likely culprit
- Fix RCA then reassess



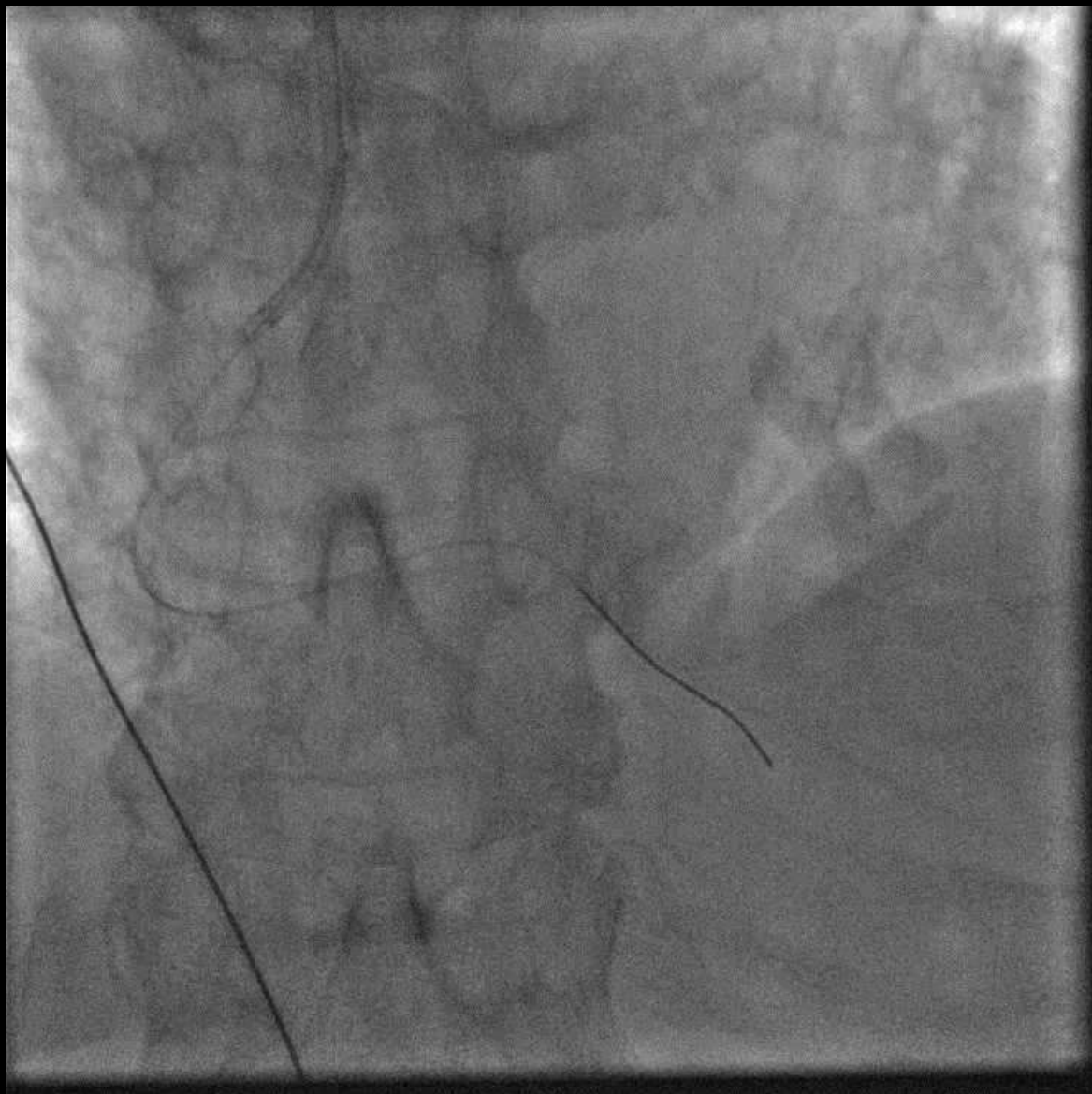


- Transradial approach
- RCA wired with Fielder XT-A wire





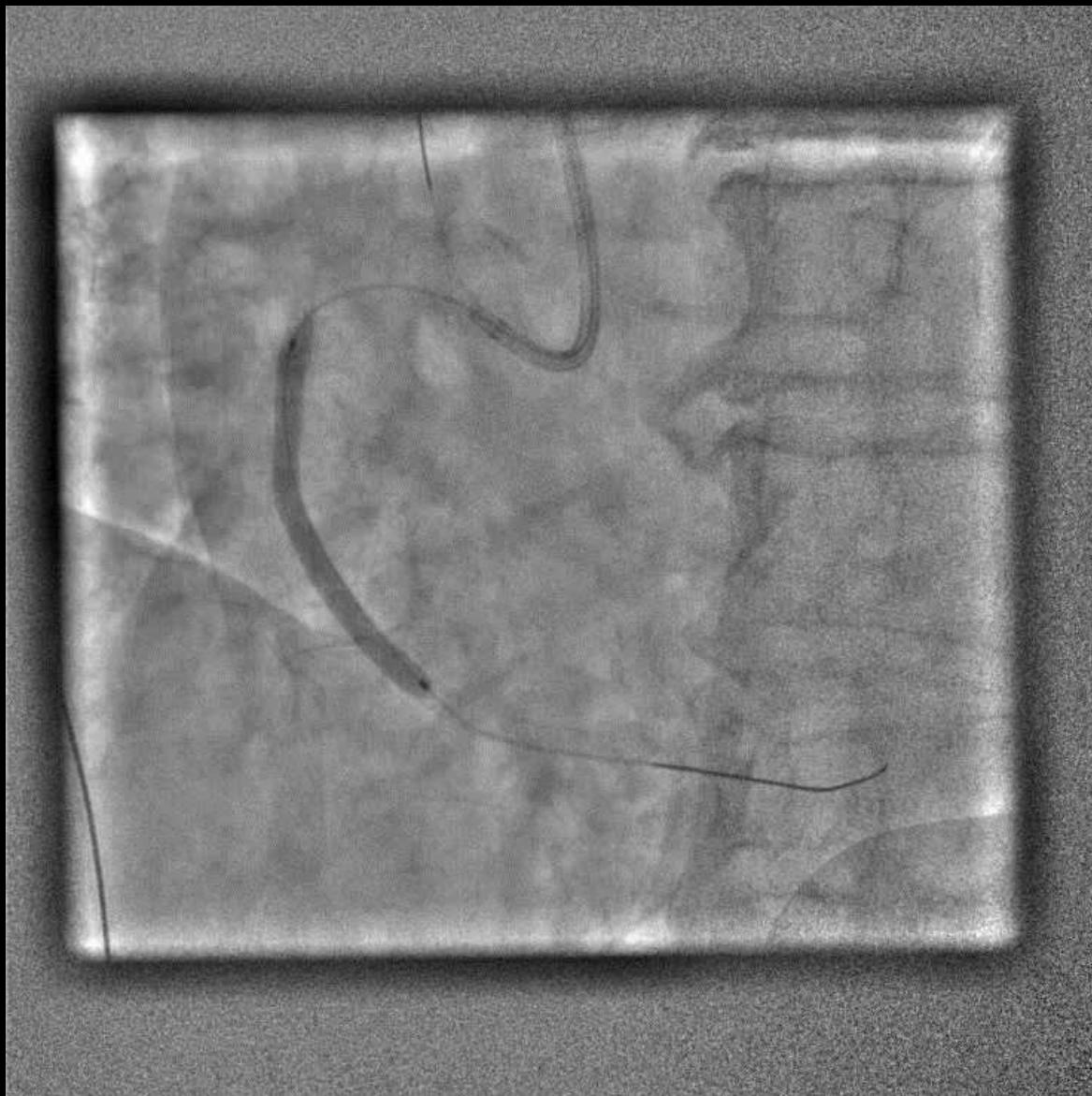
- Sapphire 1.0 x 10 mm compliant balloon crossed with a bit of difficulty



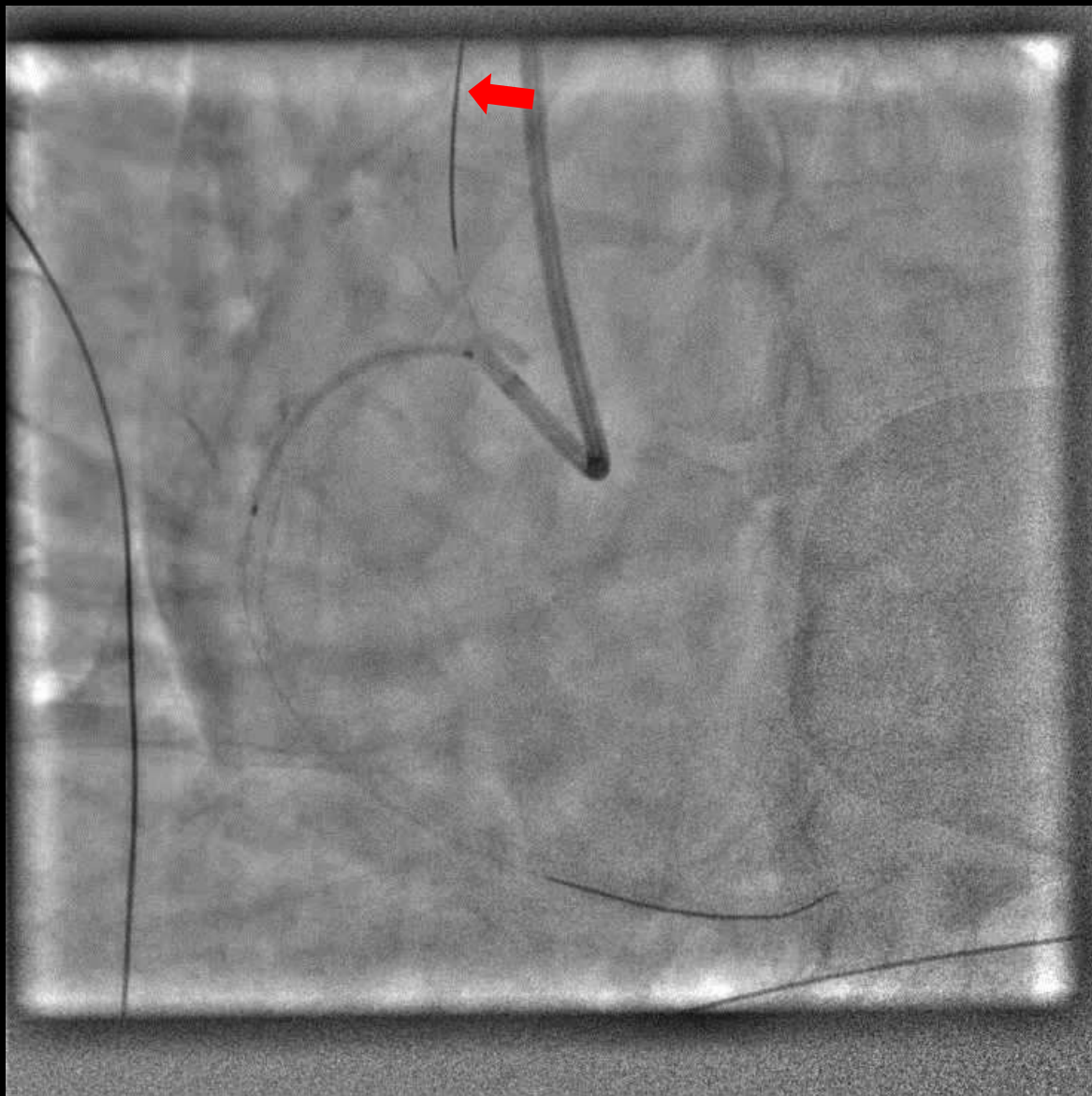
- After swapping wires, dilatation with 1.0 then 2.0 mm balloons



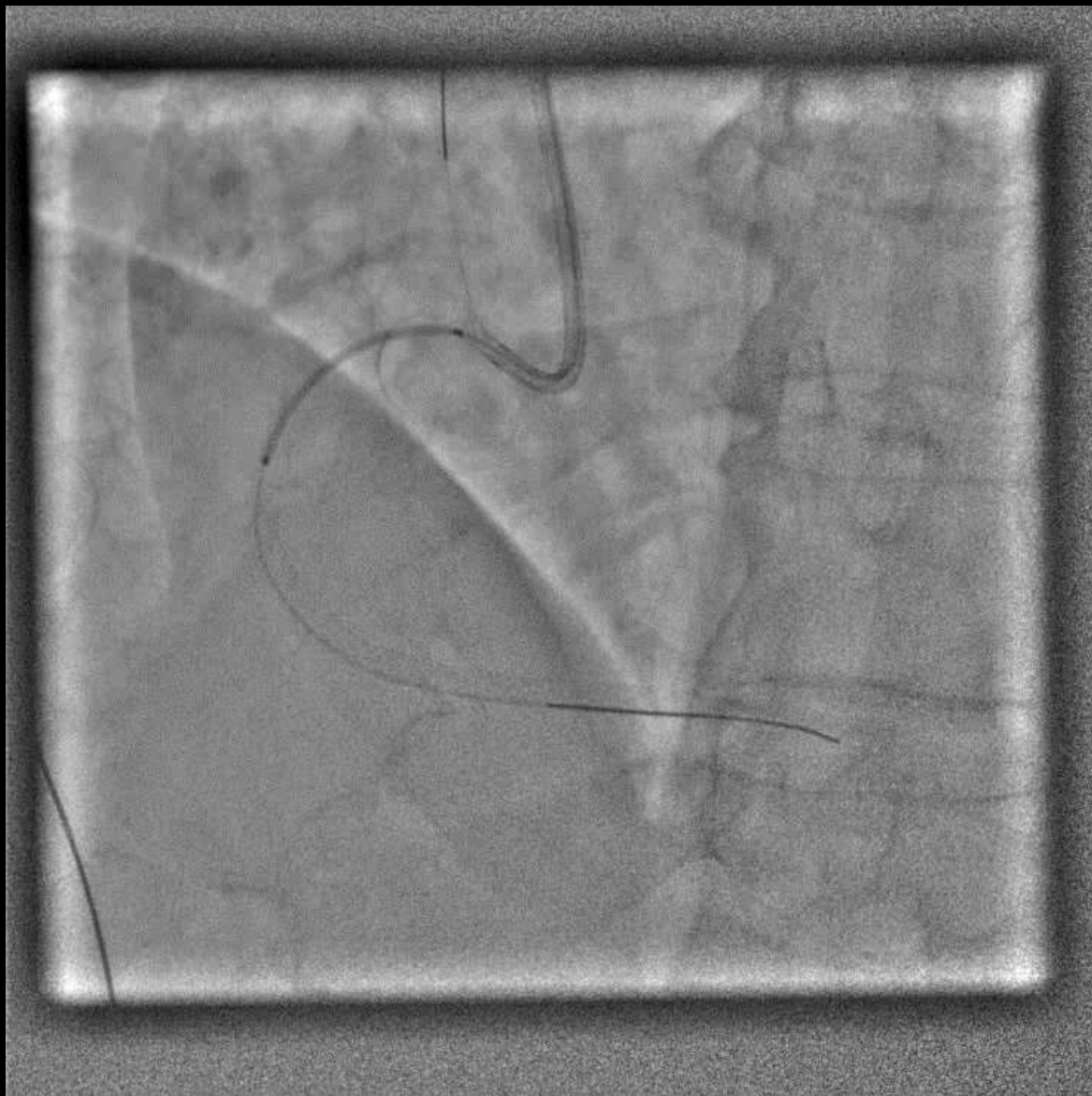
- Orsiro 2.5 x 40 mm drug-eluting stent



- Orsiro 3.0 x 40 mm drug-eluting stent

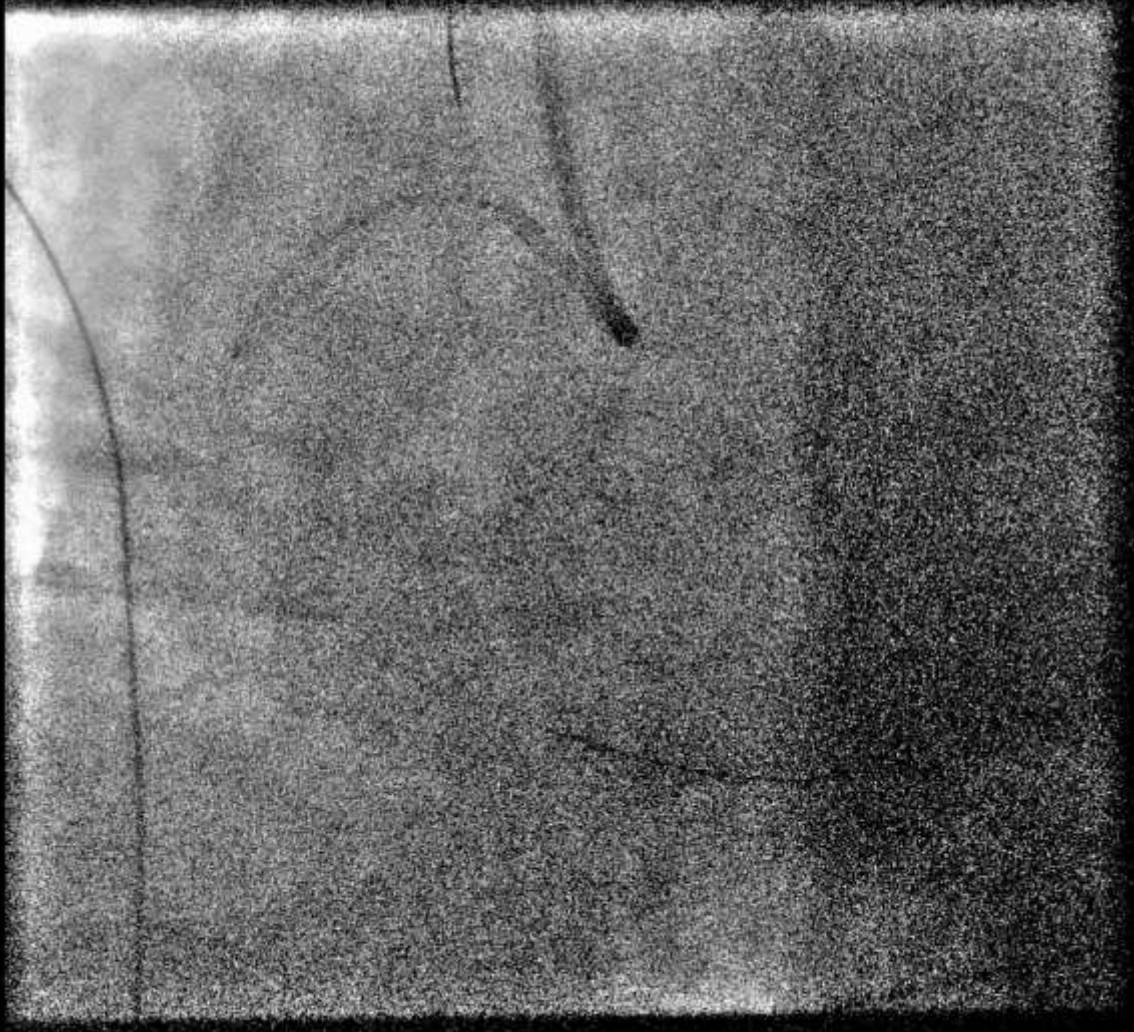


- Anchor wire in aorta to enable ostial RCA stenting accurately
- Orsiro 3.5 x 26 mm stent
- Ostial RCA stent positioning in spider view

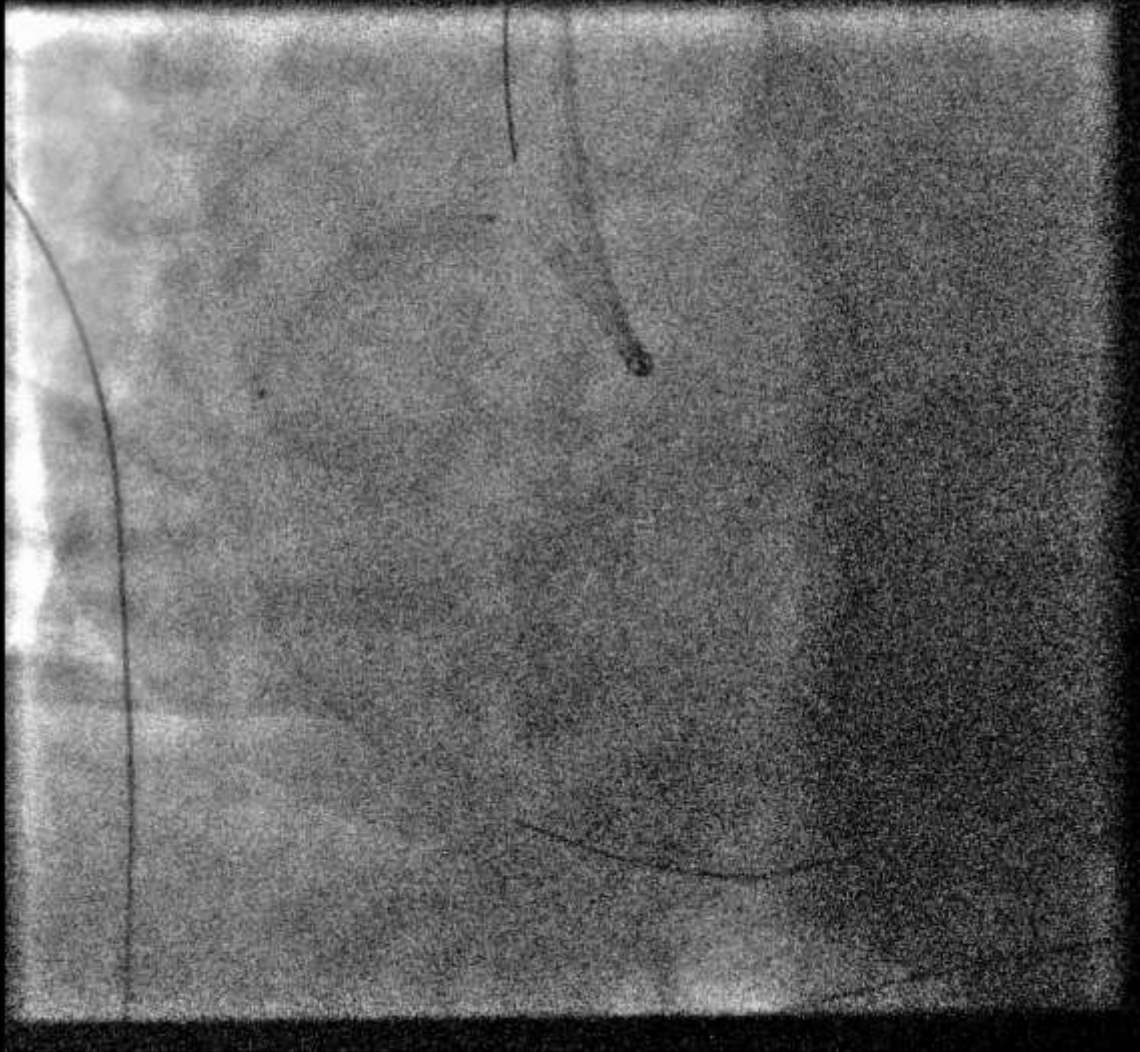


- Orsiro 3.5 x 26 mm stent
- Placing ostial RCA stent in LAO cranial view

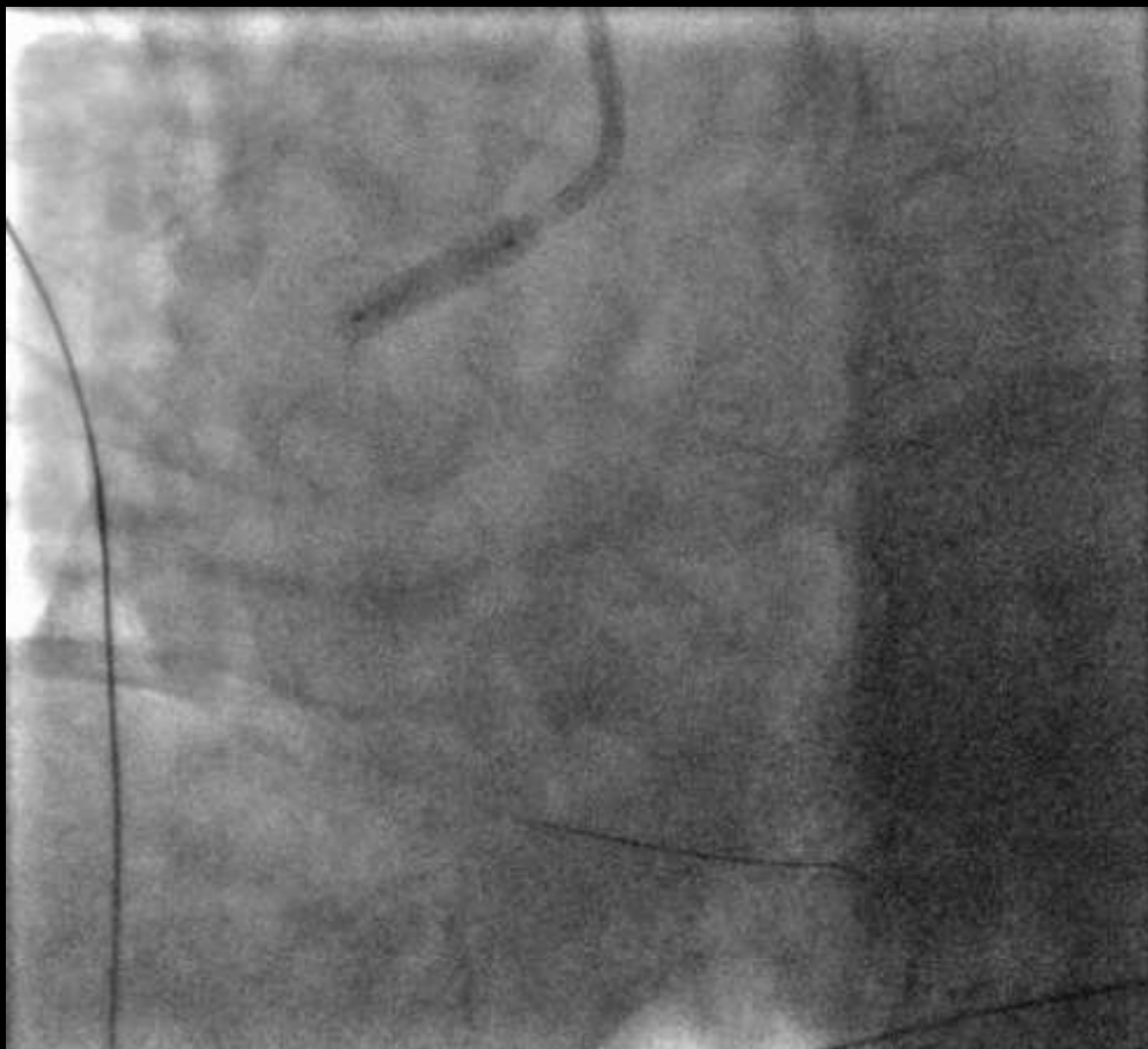




- Stent inflation



- Anchor wire allows the stent balloon to be pulled back easily without guide getting sucked in



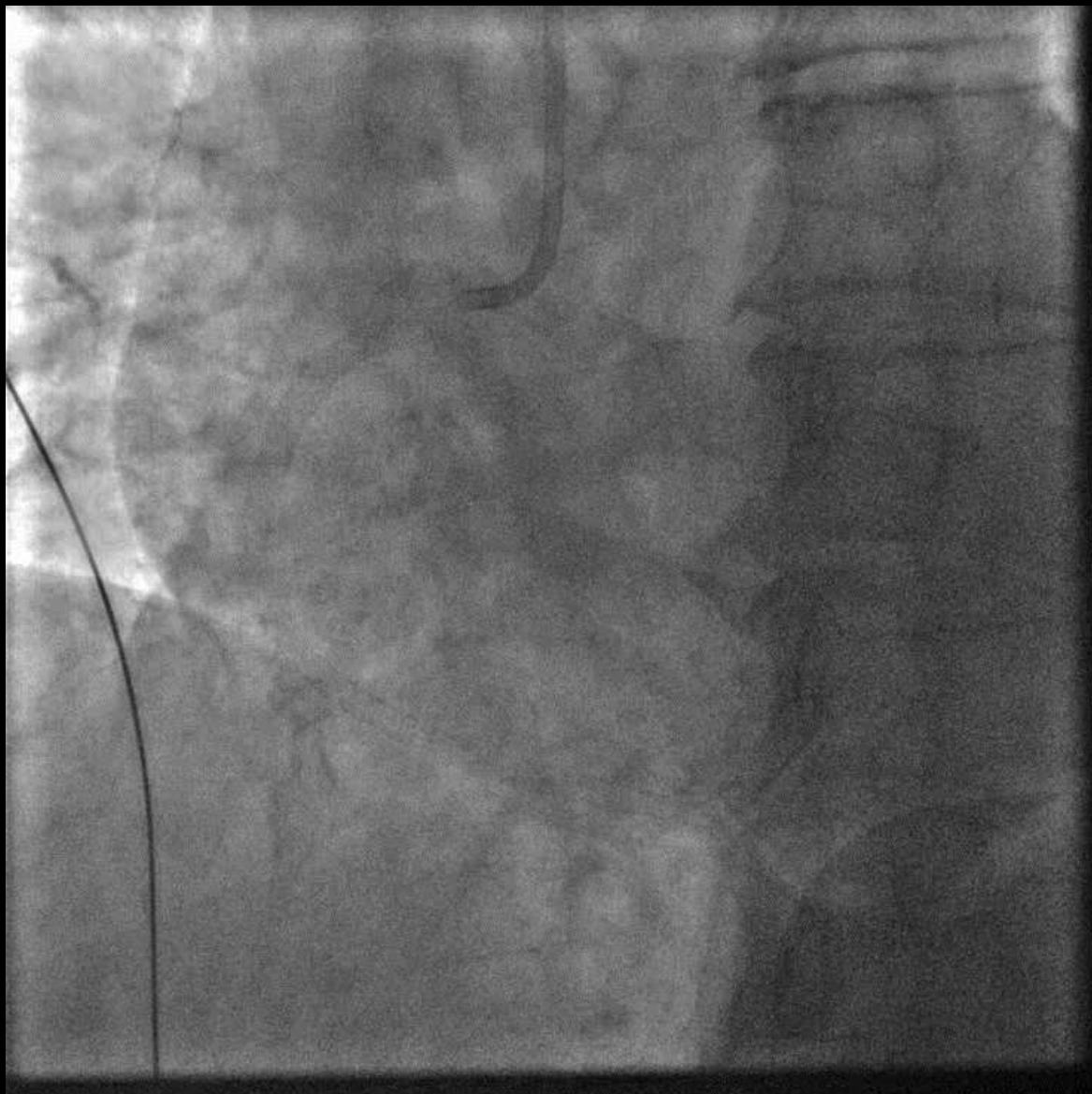
- Post dilated the stent with 3.0, 3.5 non-compliant balloons
- Ostial RCA flared with 4.0 mm non-compliant balloon



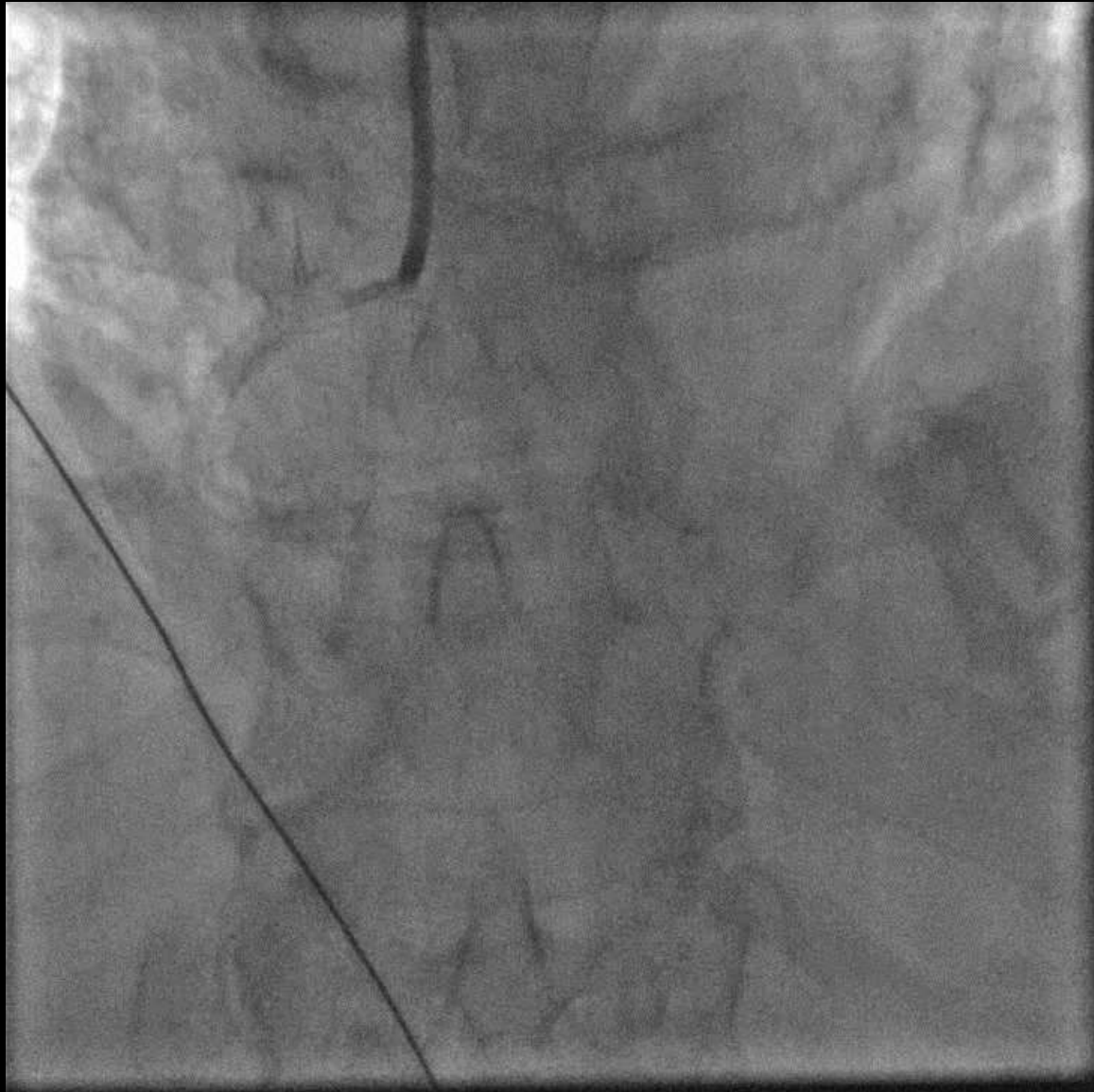
- Then patient coughed and everything came out !!

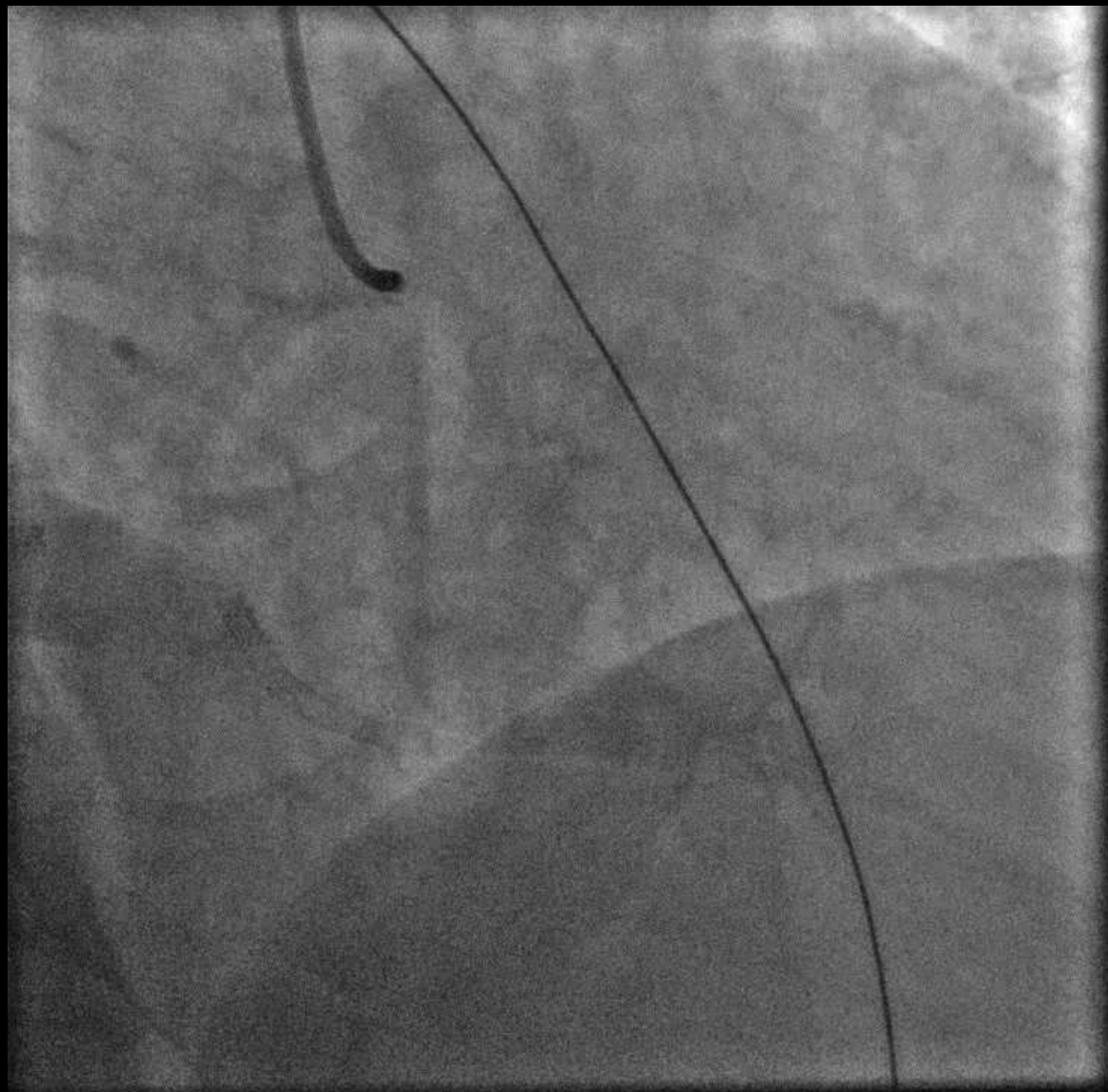


- Re-engagement of RCA with ostial stent quite easy



- Final





Did we do the right thing ?

- Subjectively, patient chest pain free
- Objectively

Rate 92 . Age not entered, assumed to be 50 years old for purpose of ECG interpretation
 RR 652 . Sinus rhythm.....normal P axis, V-
 PR 154 . Probable left atrial enlargement.....P >50ms,
 QRSD 89 . Inferior infarct, old.....Q >35ms
 QT 344 . Repol abnrm suggests ischemia, diffuse leads.....ST-T neg,
 QTcB 426
 QTcF 397

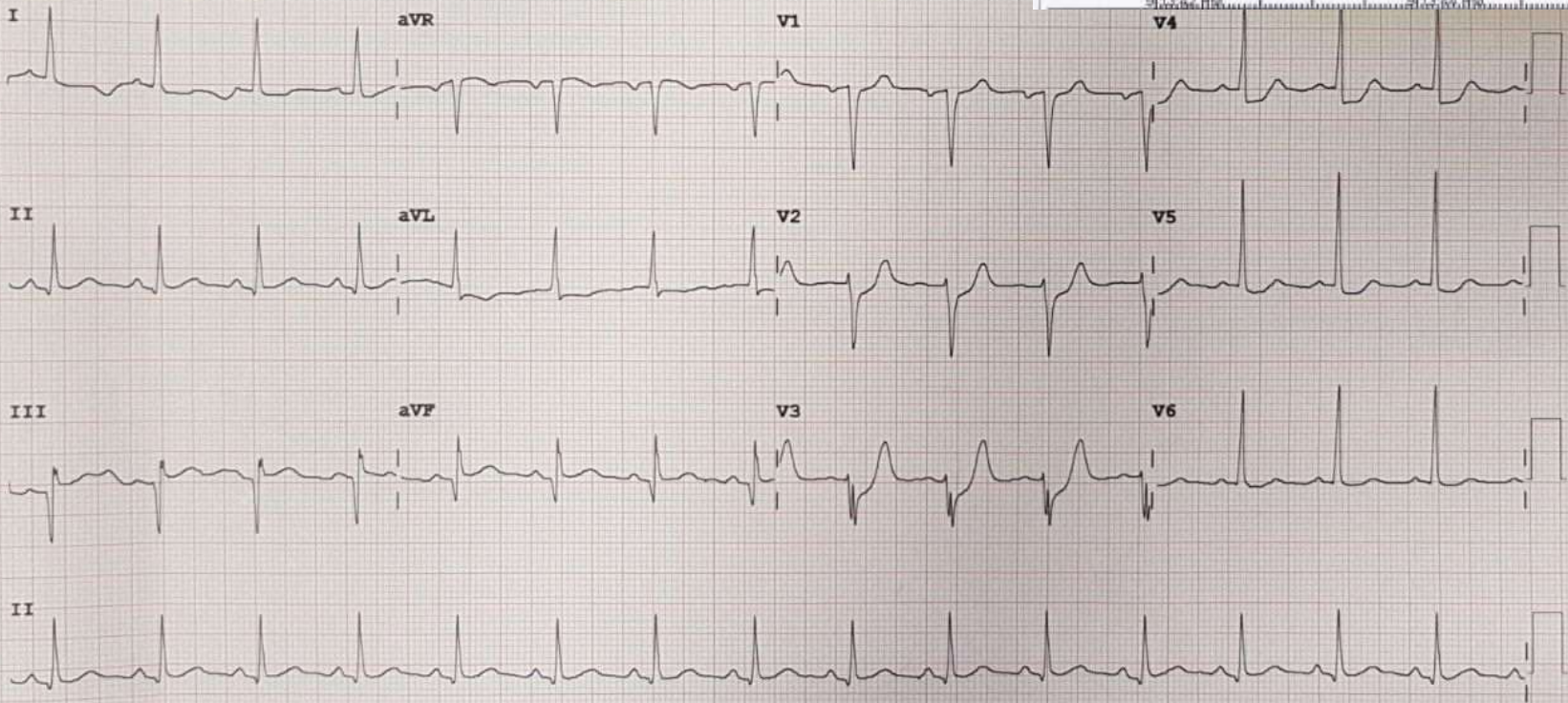
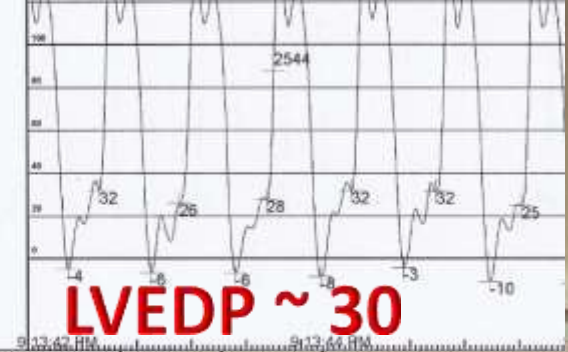
--AXIS--

P 57
 QRS 14
 T 99

- ABNORMAL ECG -

12 Lead; Standard Placement

Unconfirmed Diag



Device: TTSHECGCA> Speed: 25 mm/sec Limb: 10 mm/mV Chest: 10.0 mm/mV F 50~ 0.15-100 Hz PH100B b L P?

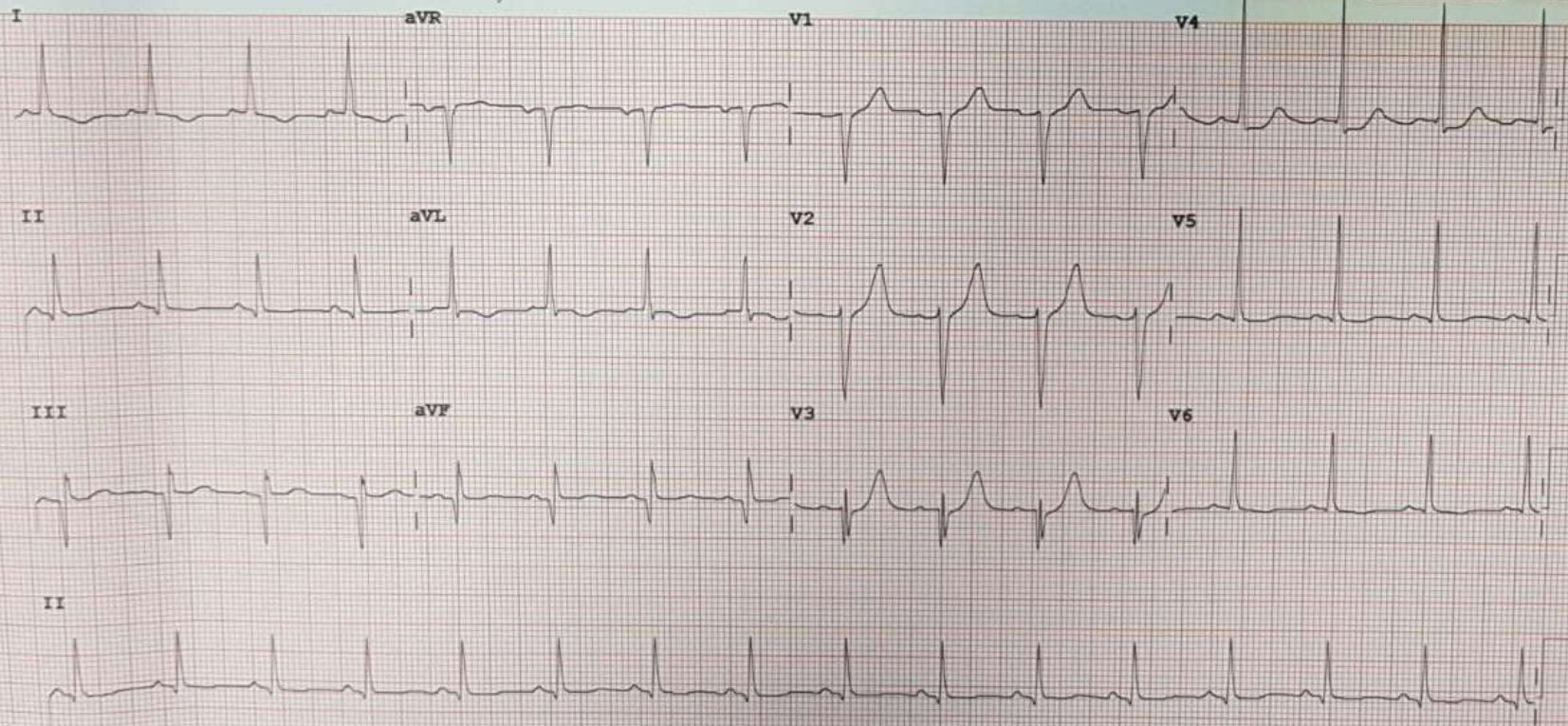
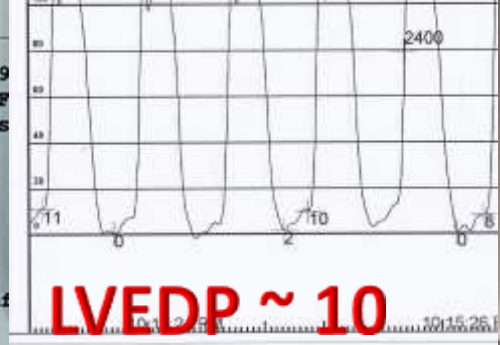
EKG and LVEDP (before)

Rate 93 . Age not entered, assumed to be 50 years old for purpose of ECG interpretation
 PR 148 . Sinus rhythm.....normal P axis, V-rate 50- 99
 QRSD 91 . Inferior infarct, old.....Q >35ms, II III aVF
 QT 372 . Lateral leads are also involved.....lat Q or ST-T abnormalities
 QTc 463

--AXIS--
 P 47
 QRS 7
 T 149

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 Senior Registrar
 Department of Cardiology
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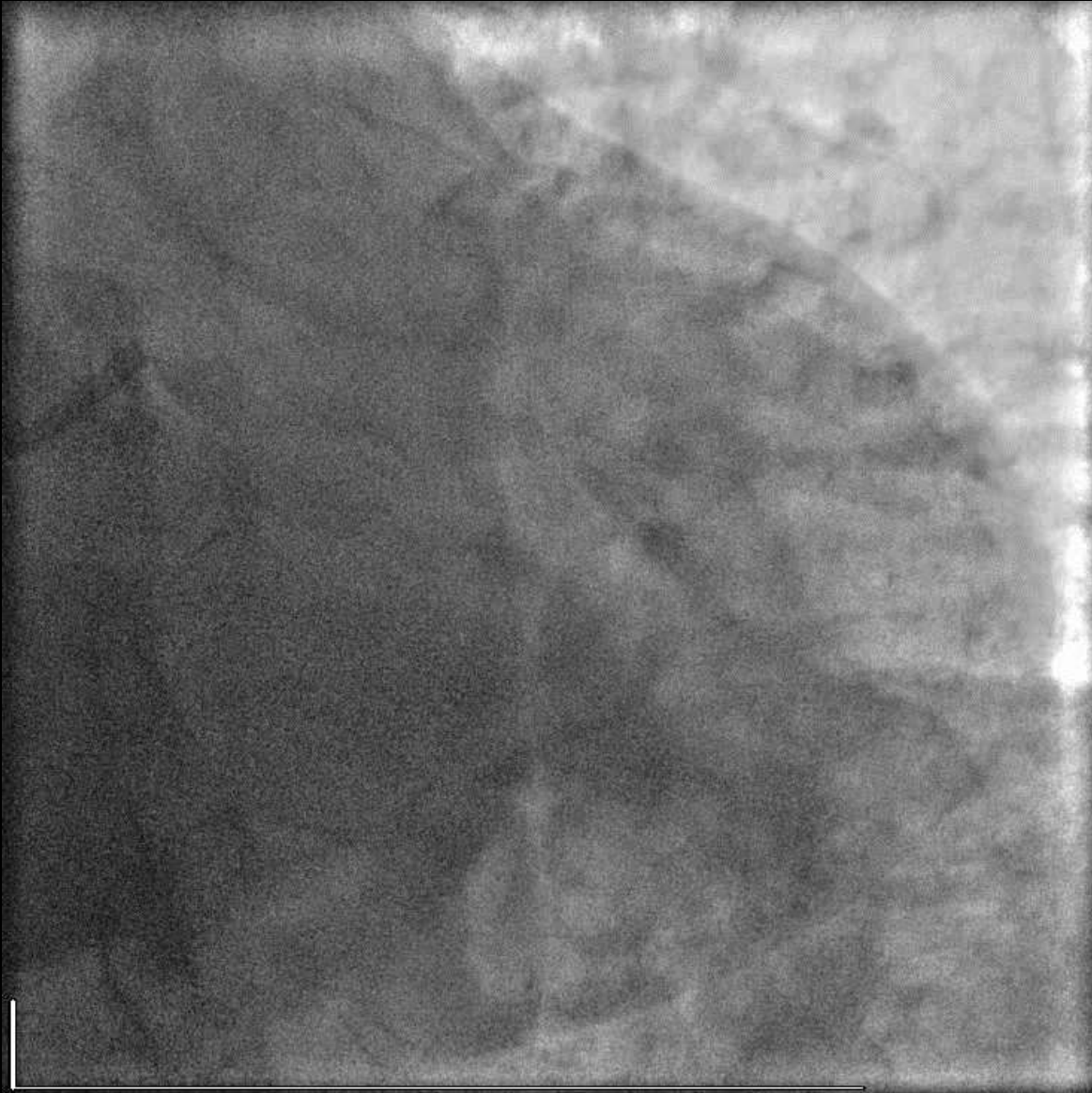
- ABNORMAL ECG -



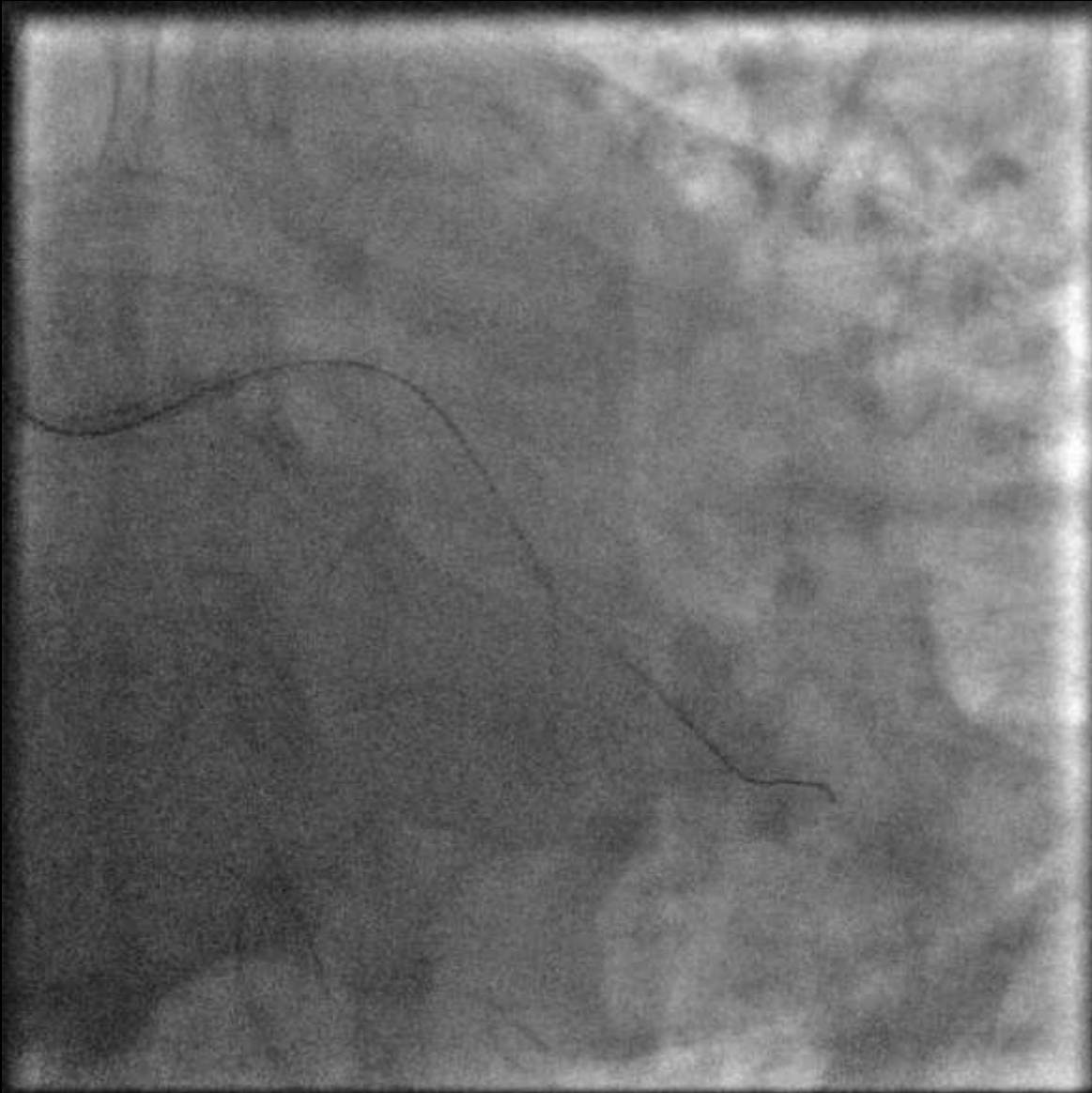
Dev: Speed: 25 mm/sec Limb: 10 mm/mV Chest: 10.0 mm/mV F 50~ 0.15-100 Hz PH100B CL P?

EKG and LVEDP (after)

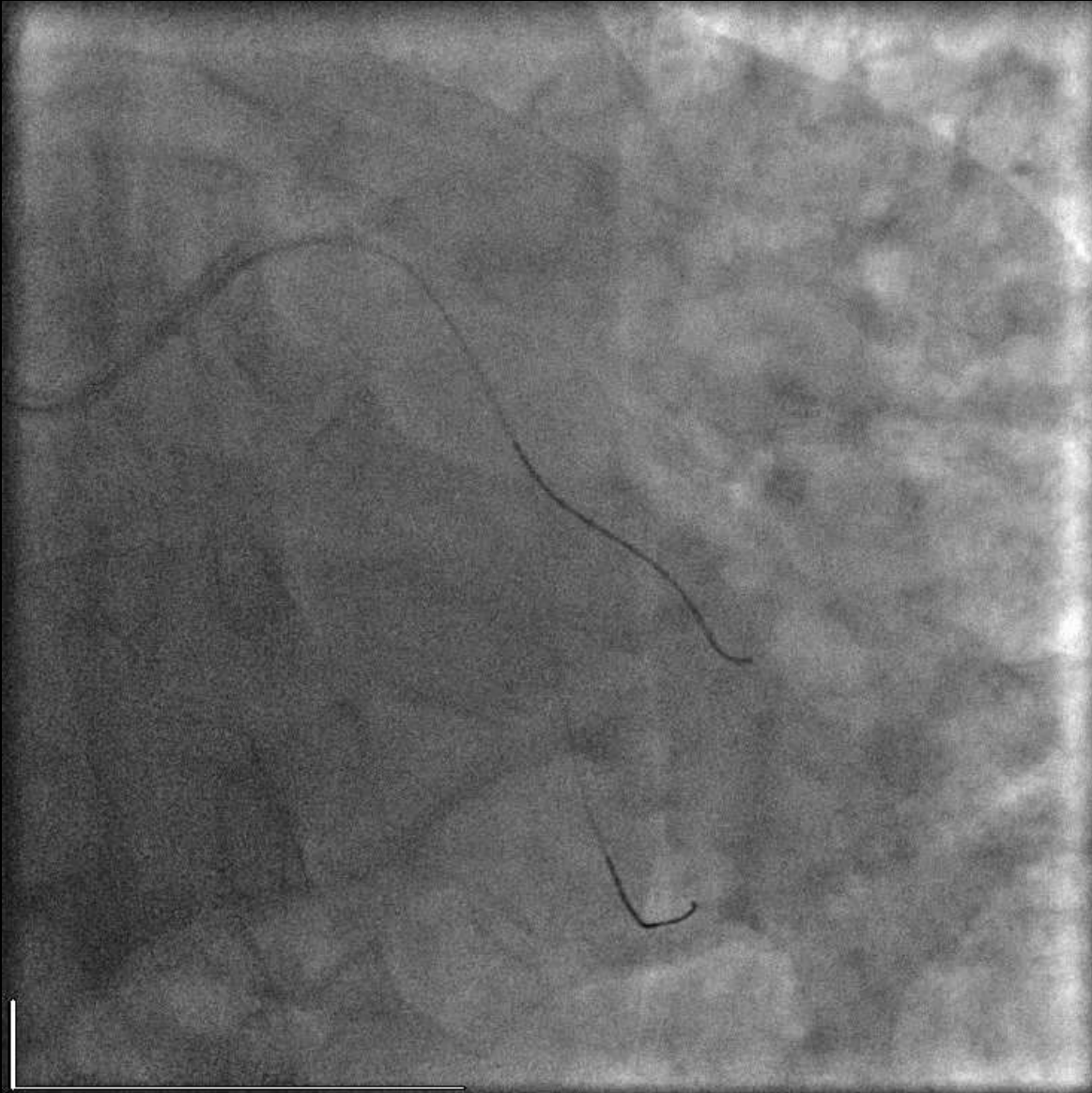
2 days later



- XB 3.0 guider



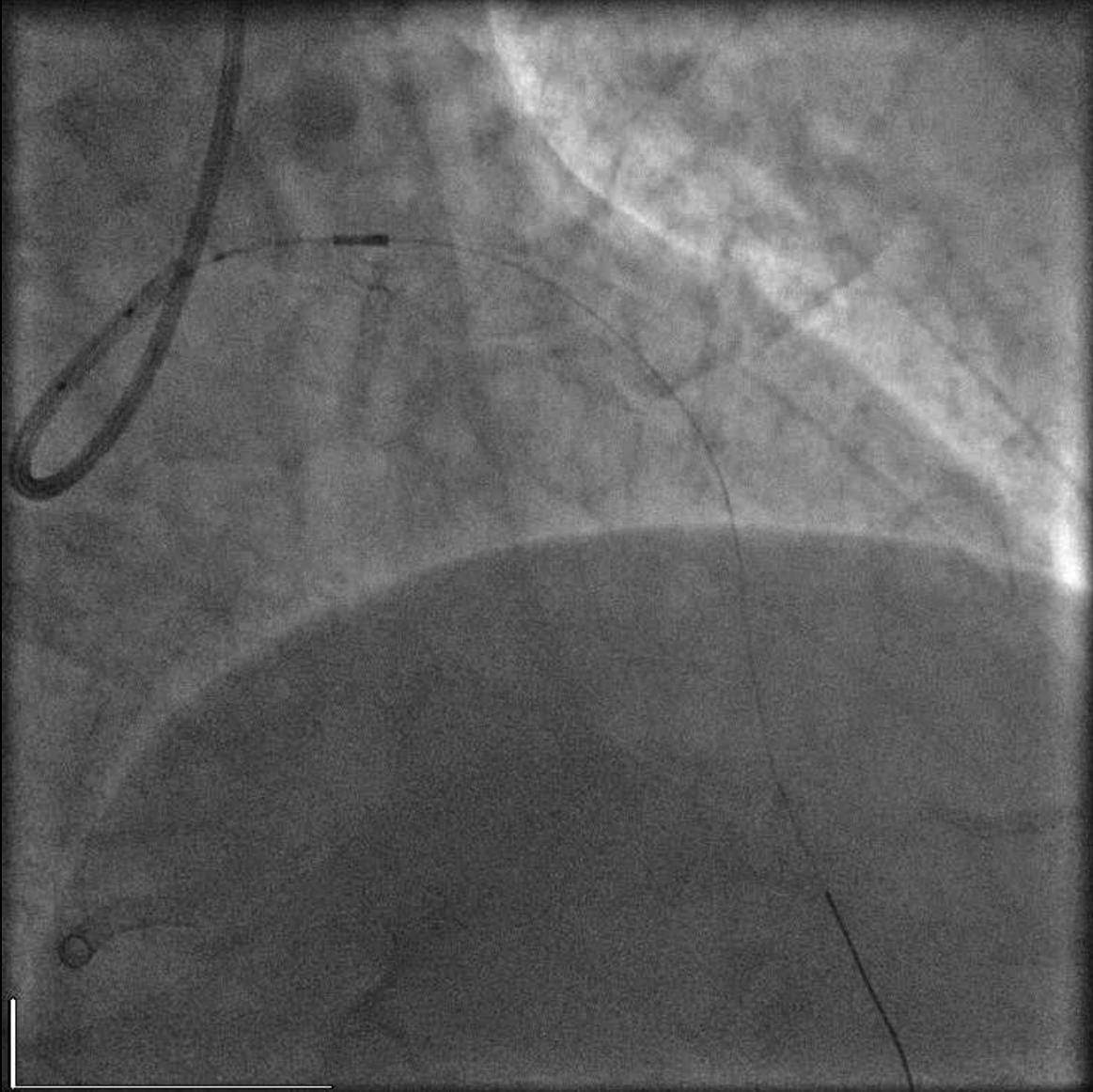
- LCx was quite difficult to wire
- Had to use a Gaia First wire to cross



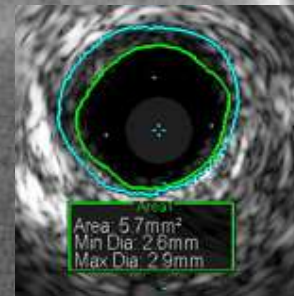
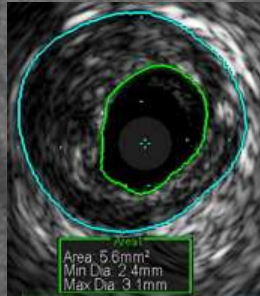
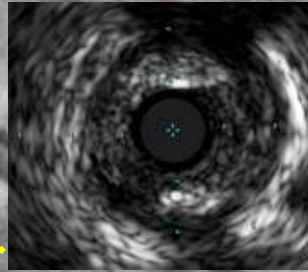
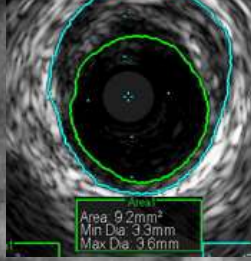
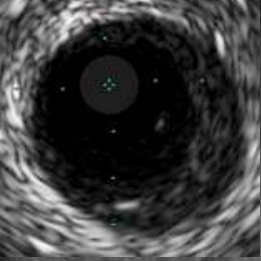
- After a bunch of dilatations and swapping the Gaia First wire



- Stented with Orsiro 2.25 x 40 mm stent, postdilated proximally with 3.0 mm balloon.

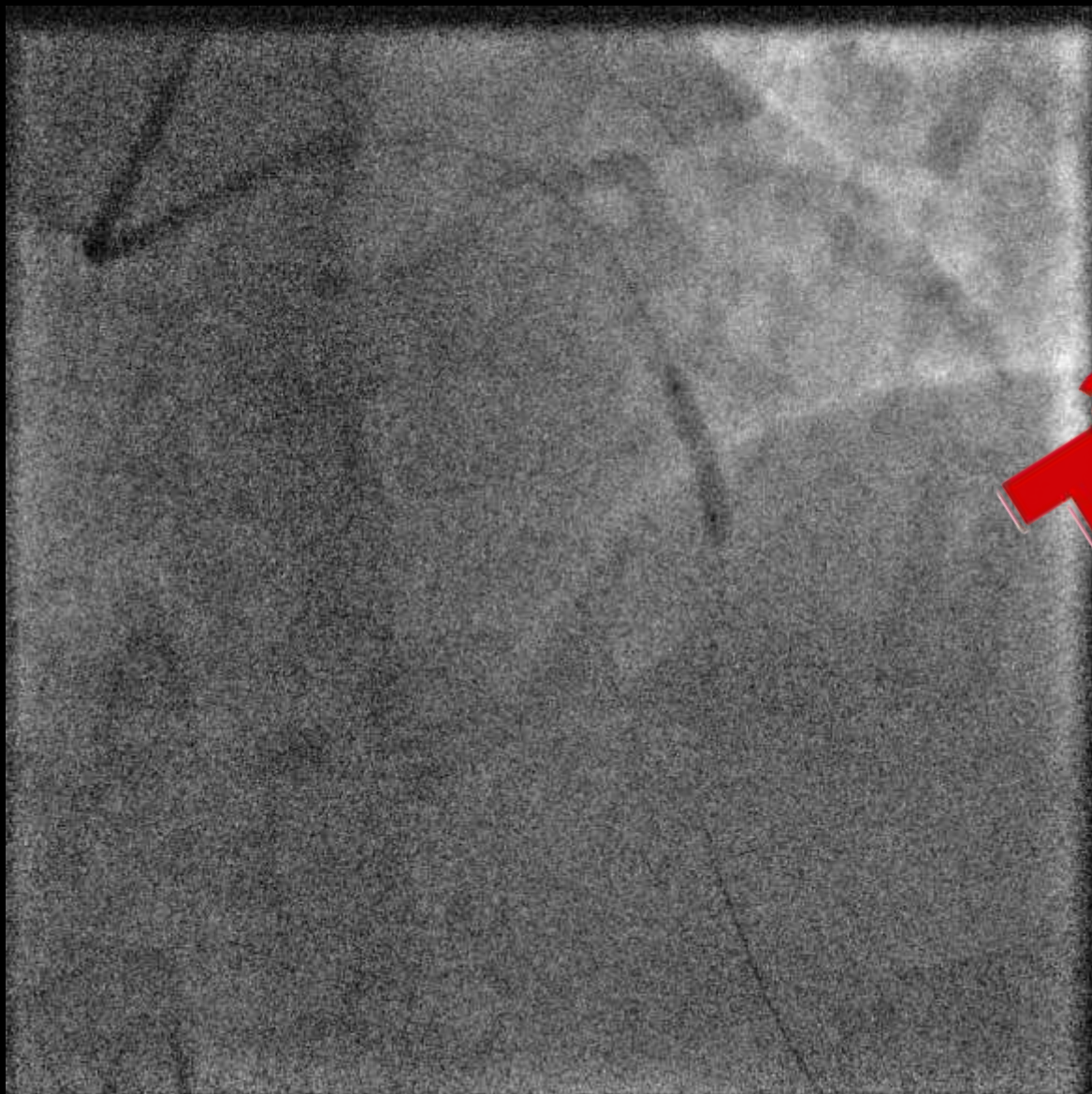


- LAD IVUS



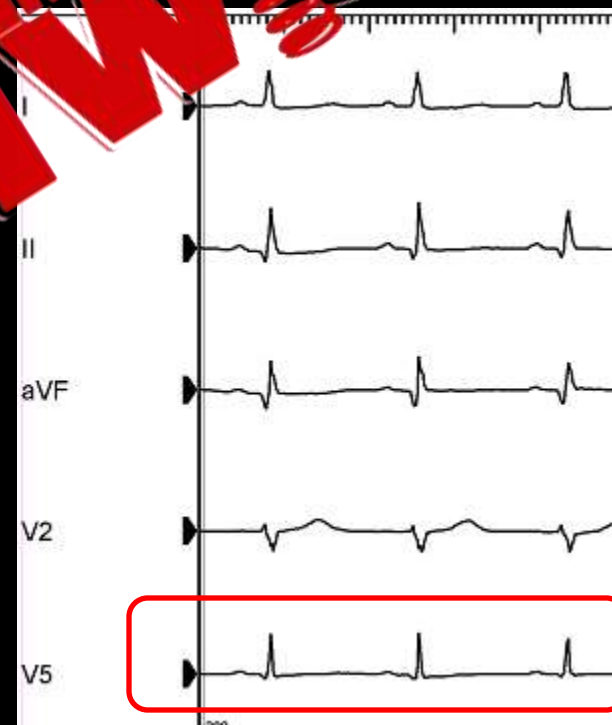
a new  twist

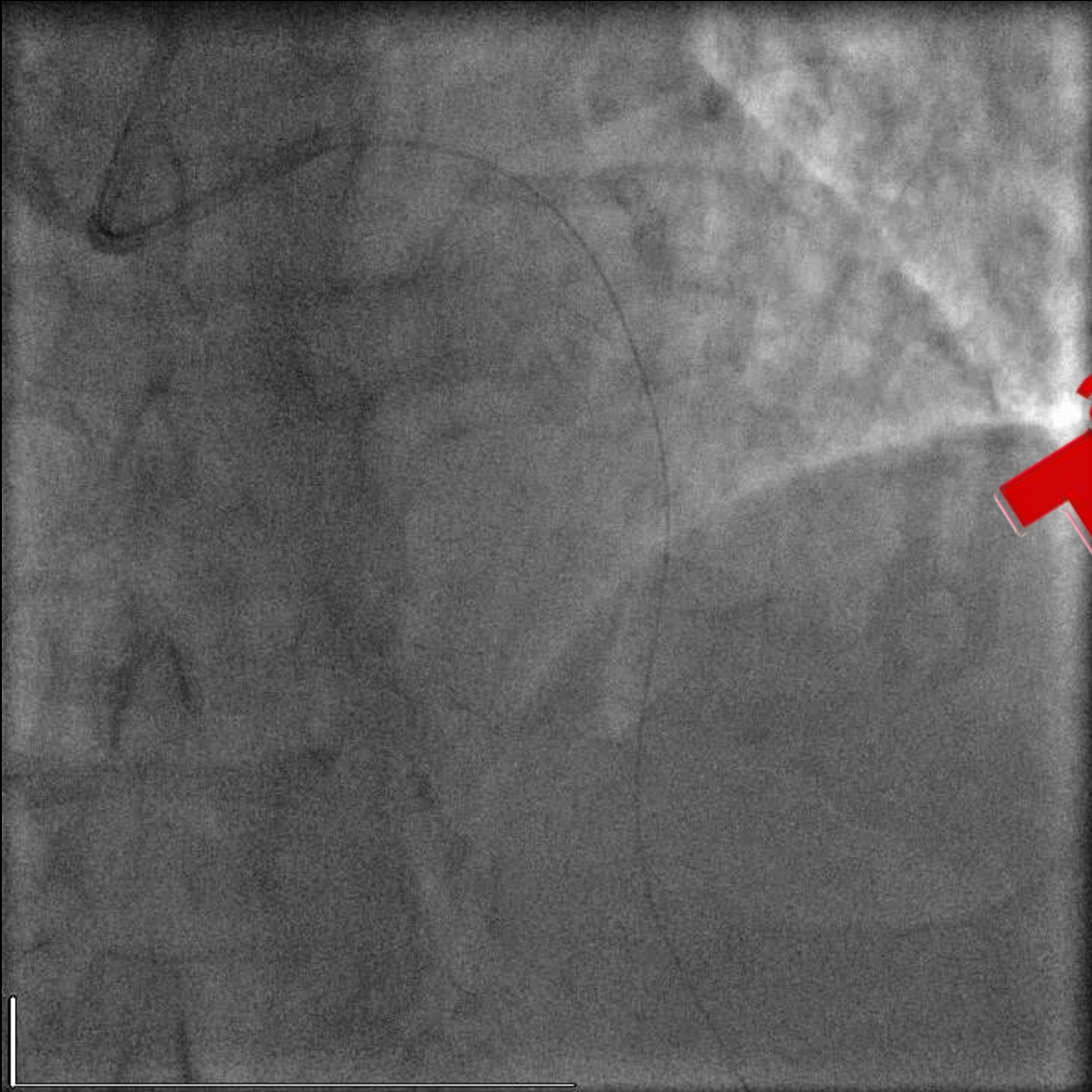
TWIST



- LAD dilated with a 3.0 balloon

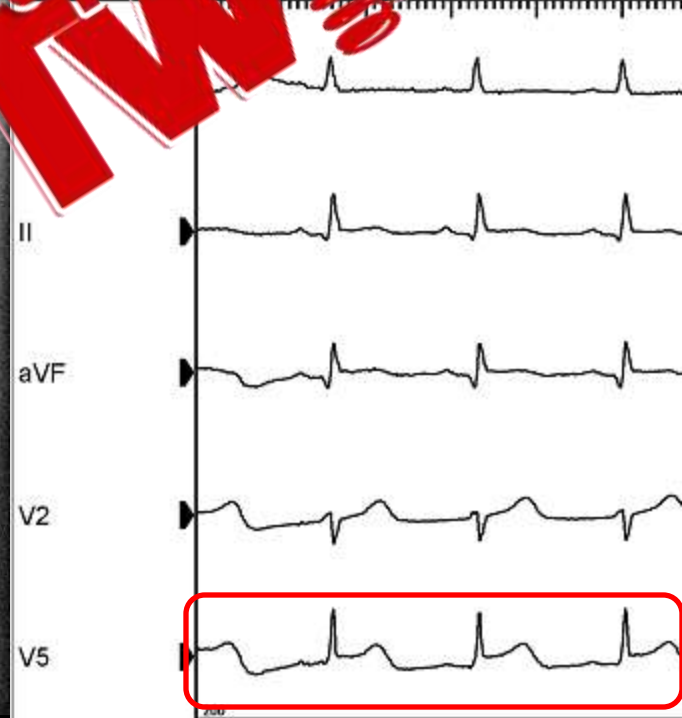
a new twist
TWIST





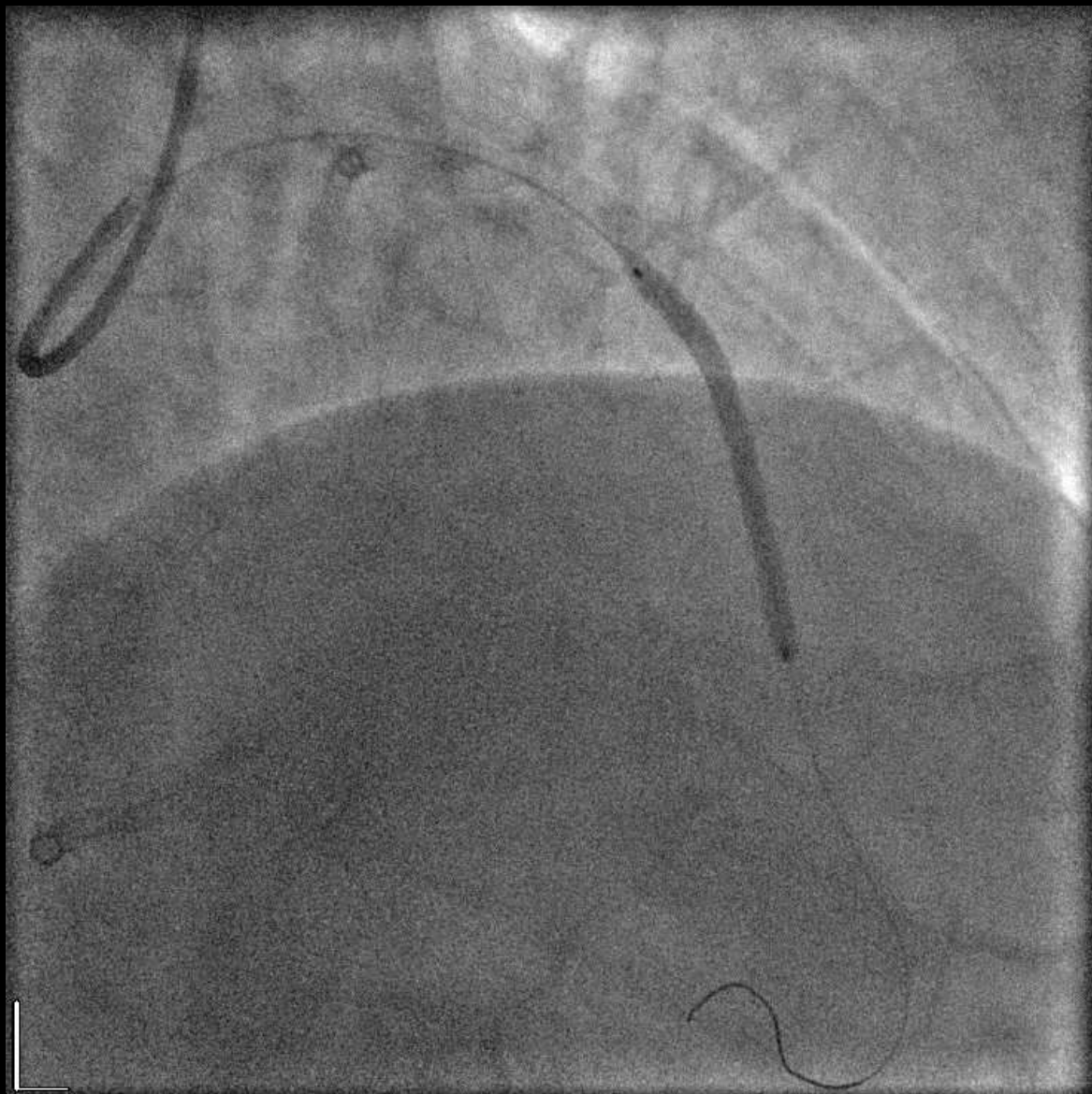
- LAD slow flow

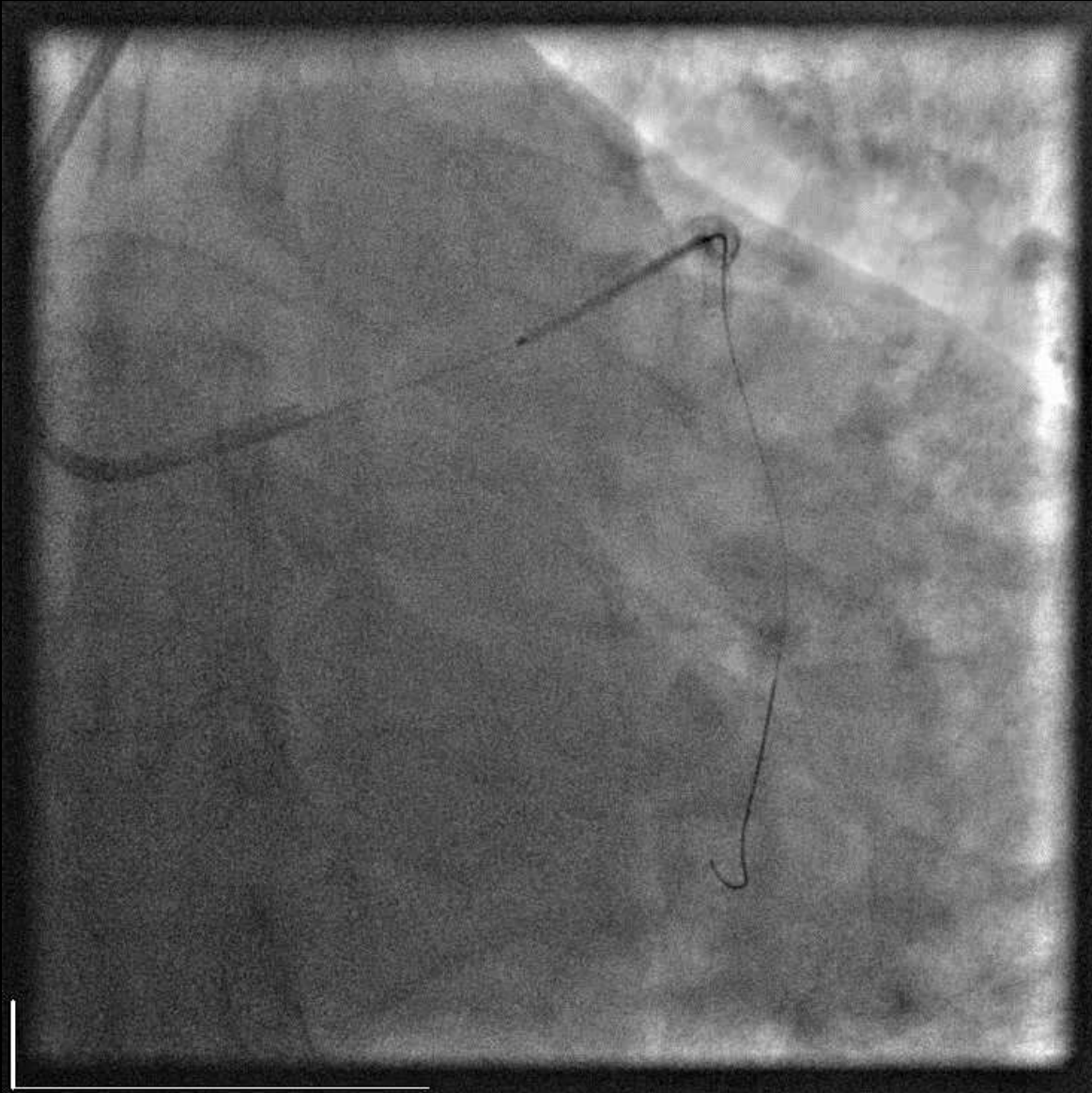
a new **TWINS**™





- Orsiro 2.75 x 40 mm stent

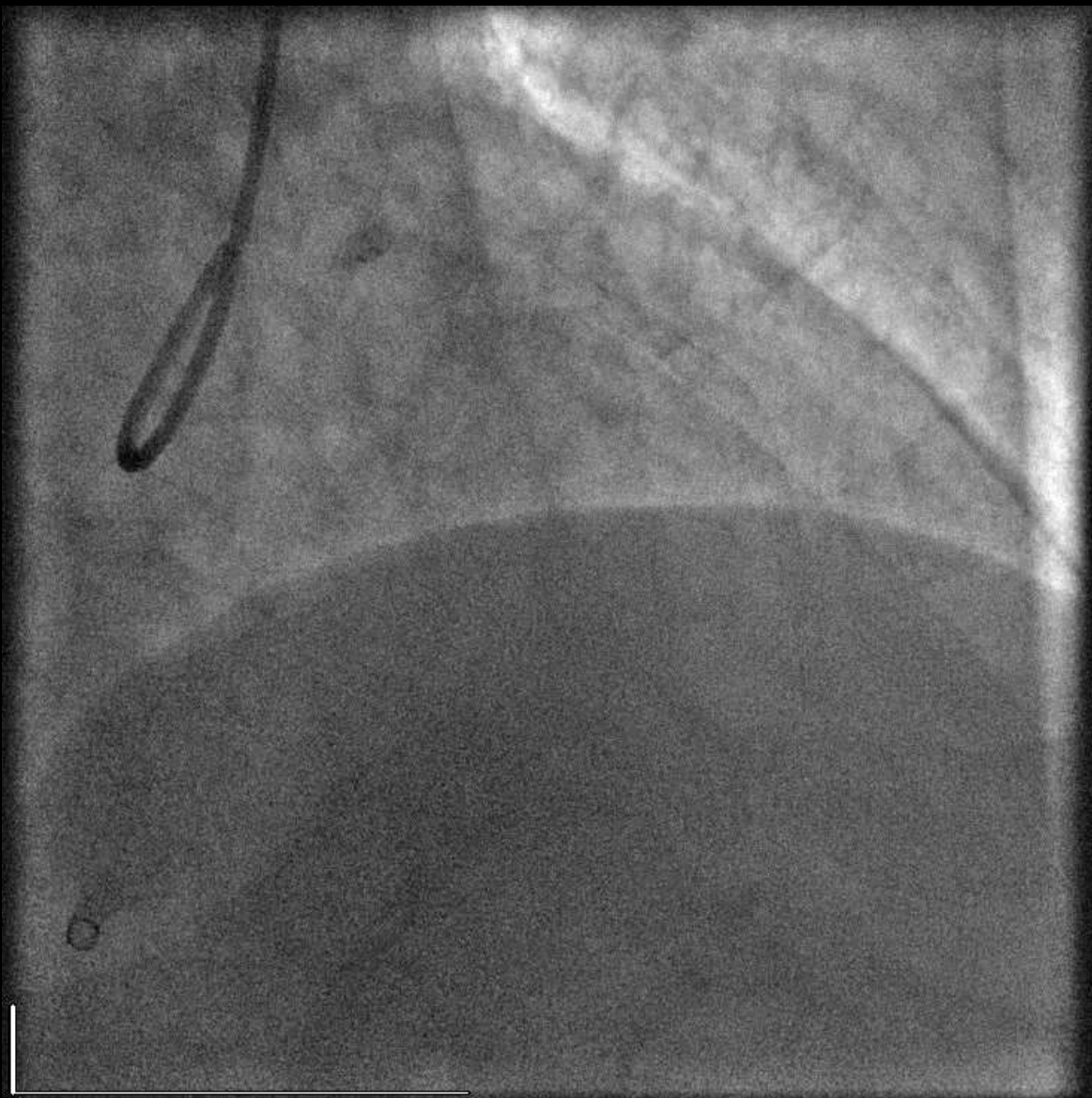




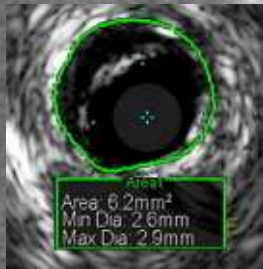
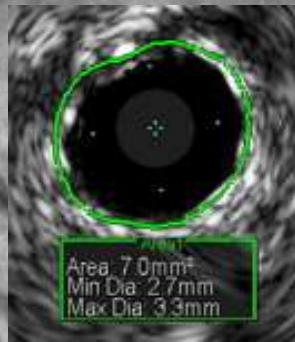
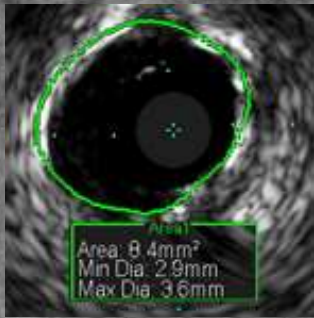
- Orsiro 3.5 x 35 mm stent



- Final after post dilatation with 3.0 and 3.5 mm non-compliant balloons







Moral of the story

- STEMI cases can be tough when there's multivessel disease
 - Identifying culprit lesion can be challenging at times
 - Timing of non-culprit intervention can be challenging
- Sometimes you have to just think it through
- Orsiro is a very trackable stent particularly in complex lesions
- Long length availability (40 mm) and thin struts advantageous
- Good outcomes data is very reassuring



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