

What we can do to identify distal true lumen in CTO intervention

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Brief history

- 67/M
- C/C dyspnea
- dyspnea with chest discomfort for 1 day,
- NYHA class III, transferred from LMC after endotracheal intubation
- Diabetes
- Smoker
- BP 96/71mmHg, HR 125 beats/min

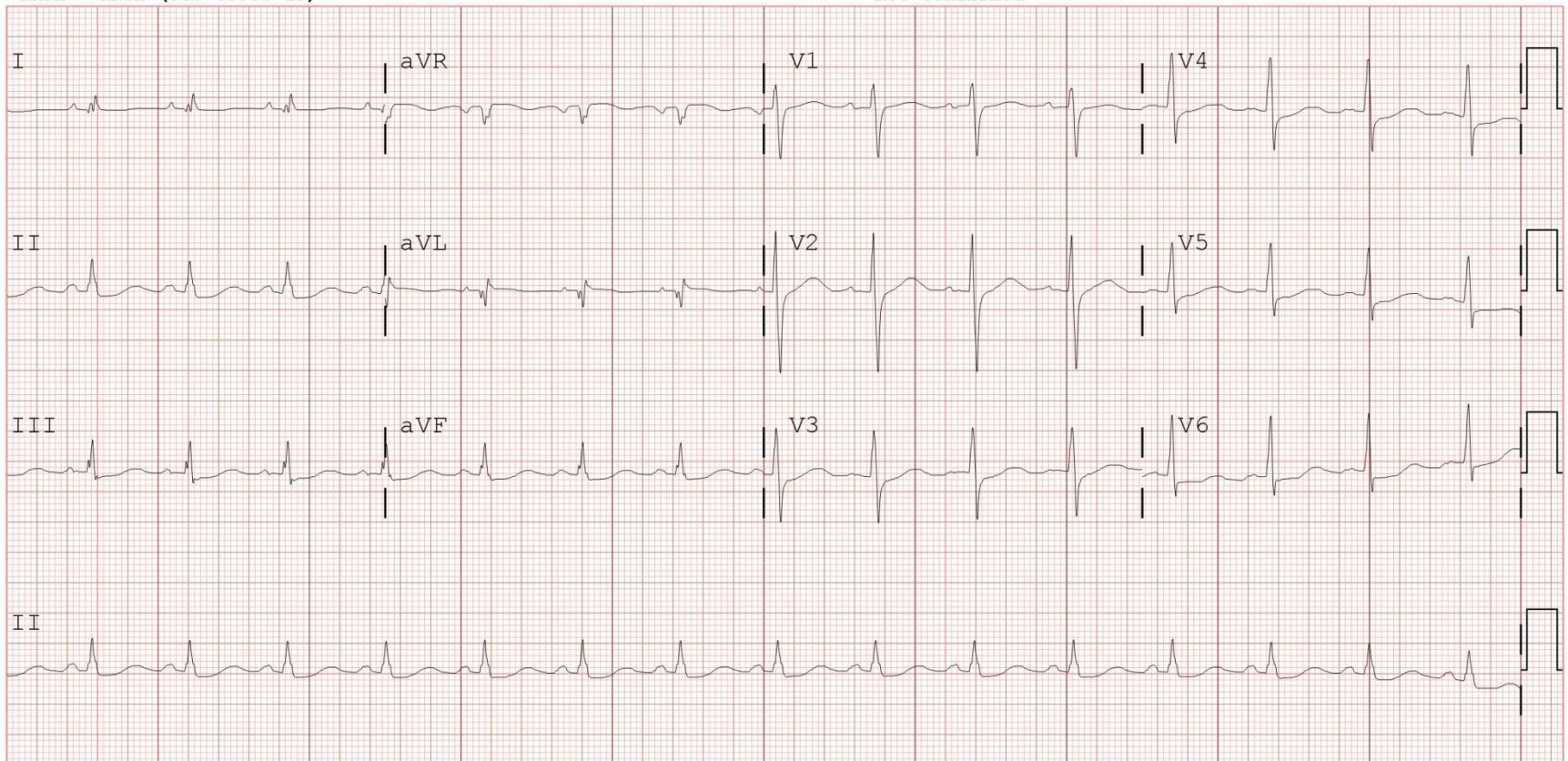
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ECG

KNUH - KNUH (500-50000-10)

Not confirmed



Device: 031-ER

Speed: 25 mm/sec

Limb: 10 mm/mV

Chest: 10 mm/mV

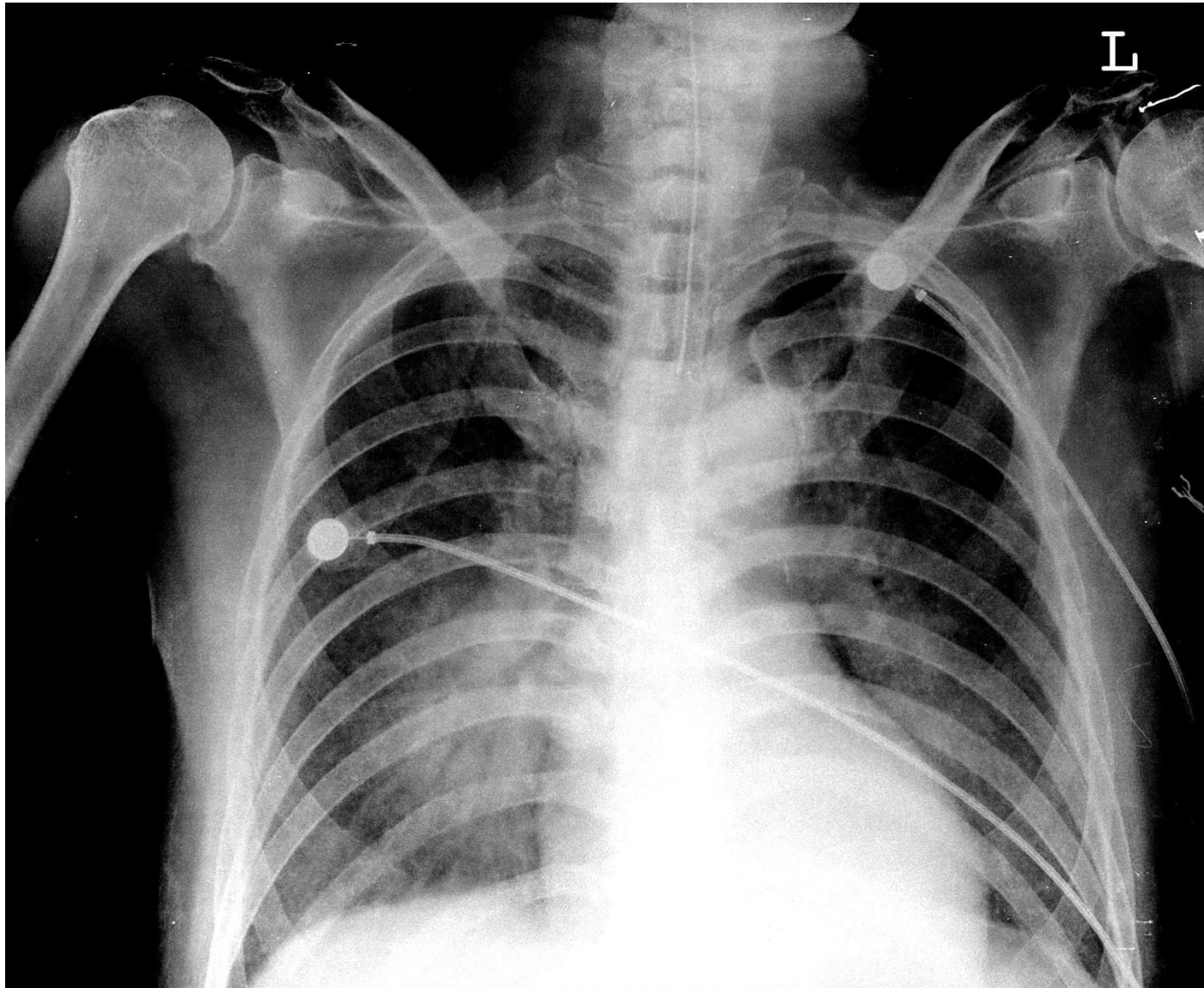
F 60~ 0.5-150 Hz W

PH080A

P?



Initial chest x-ray

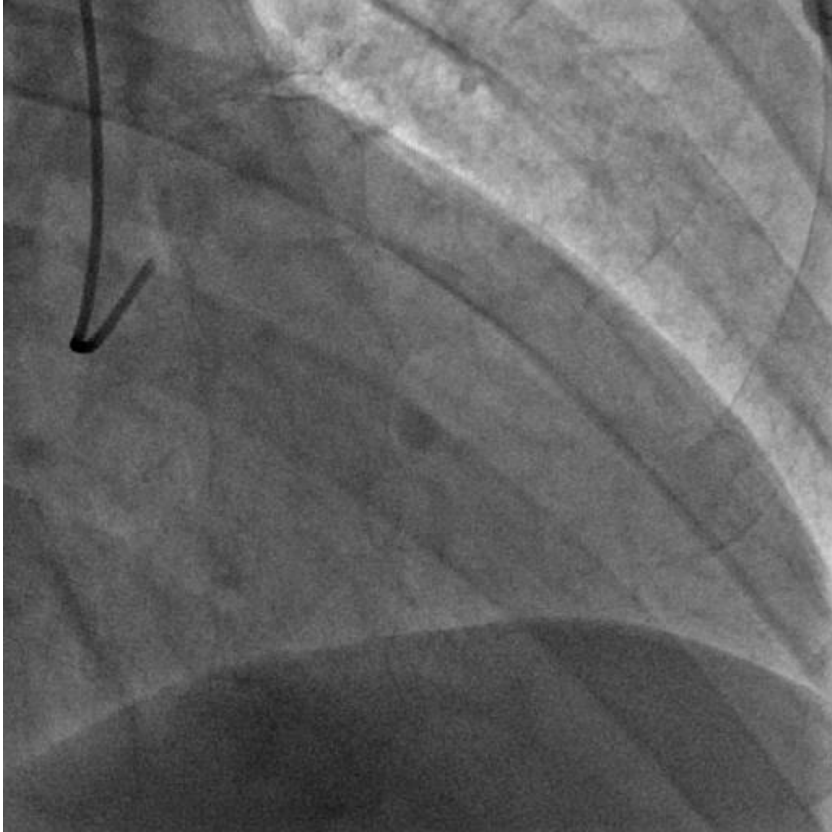


Laboratory & echocardiography

- Lab
 - Troponin I 10.6ng/ml
 - Hemoglobin 12.5 g/dl
 - BUN/creatinine 30.1/1.27 mg/dl
 - NT proBNP 5135 pg/ml
- Echocardiography
 - LVEF 30%
 - Regional wall motion abnormality in inferior, posterior and lateral wall
- Dx
 - NSTEMI, Killip III



Coronary angiography



Coronary angiography

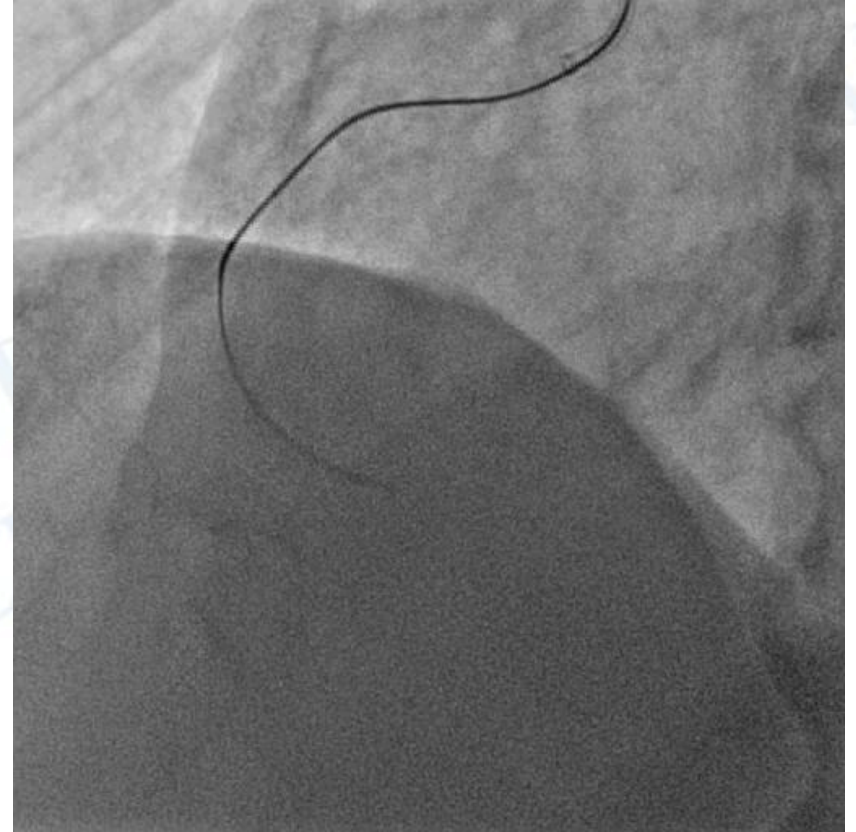
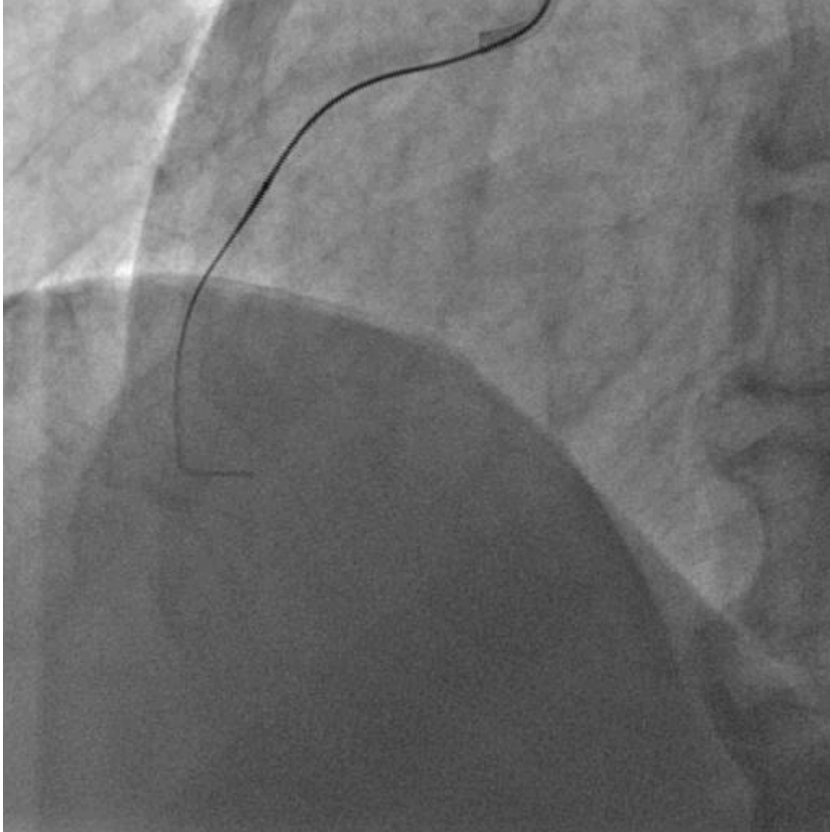


RCA CTO from mid

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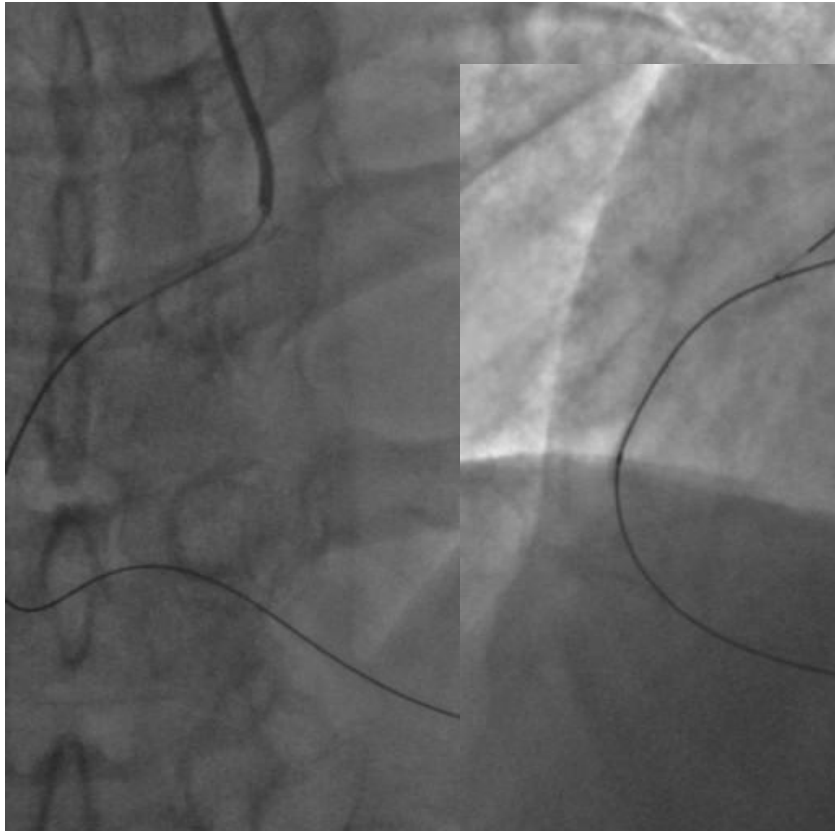


PCI RCA

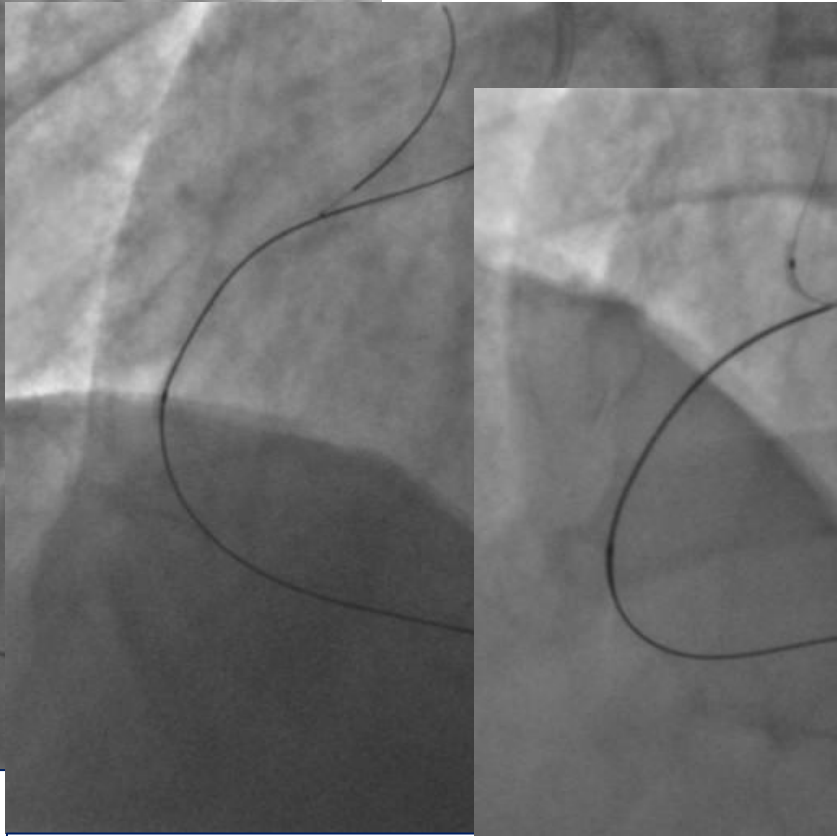


Rt radial approach
Guiding catheter : JR4 SH
Guide wire : XT-R
Corsair





Wire passed
Difficult for corsair to 1.0 x 10mm balloon



Anchor at conus branch

INTERNATIONAL
METAL



Still can not see the distal lumen

False lumen ?

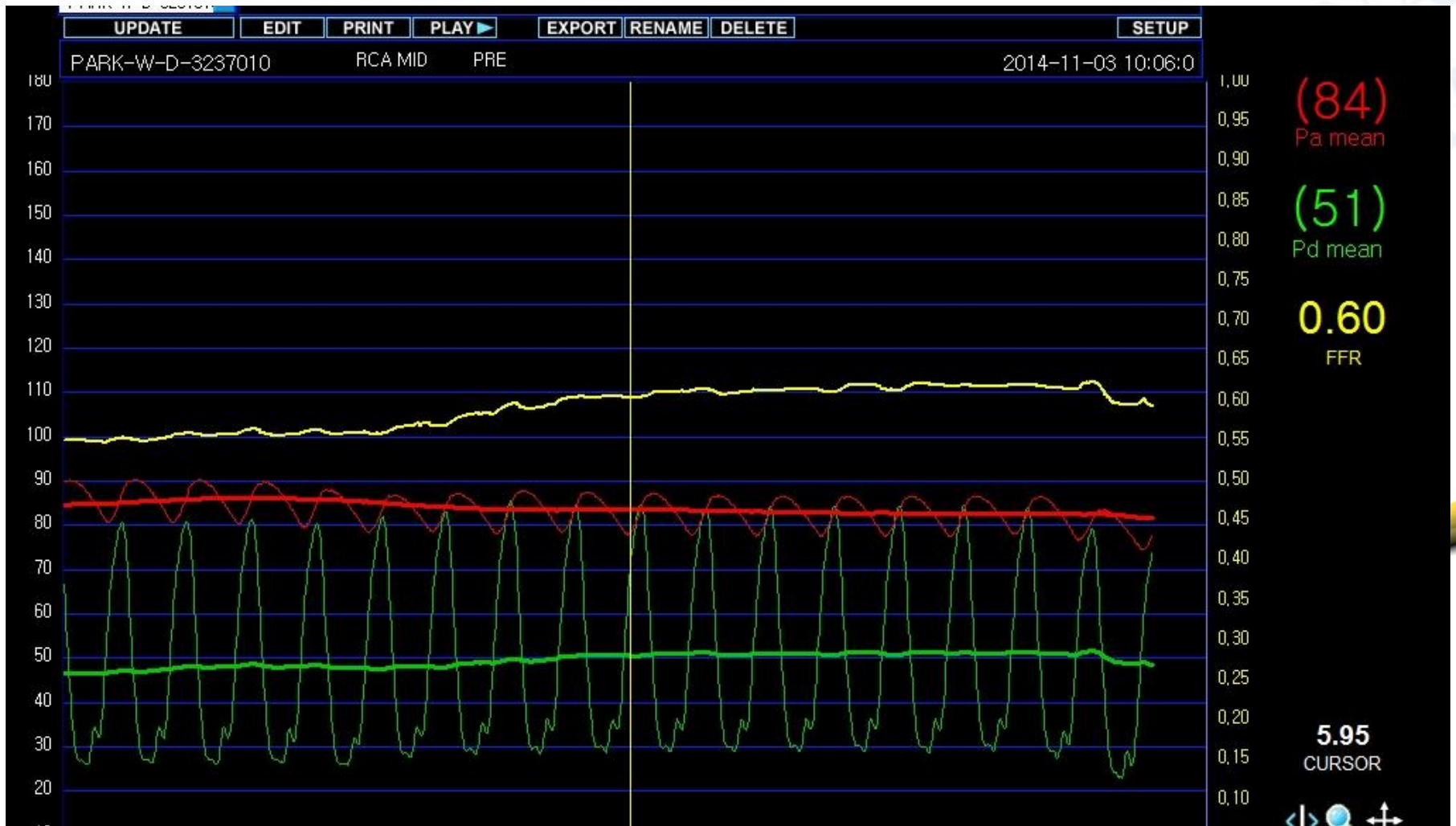
Pericardial space?

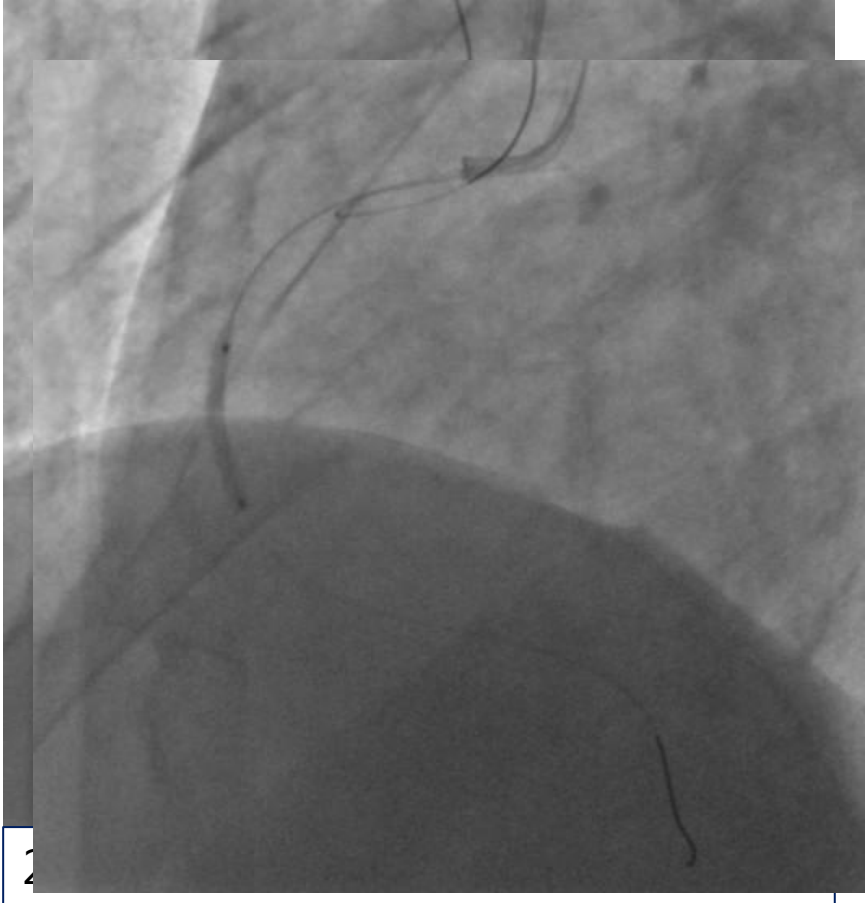


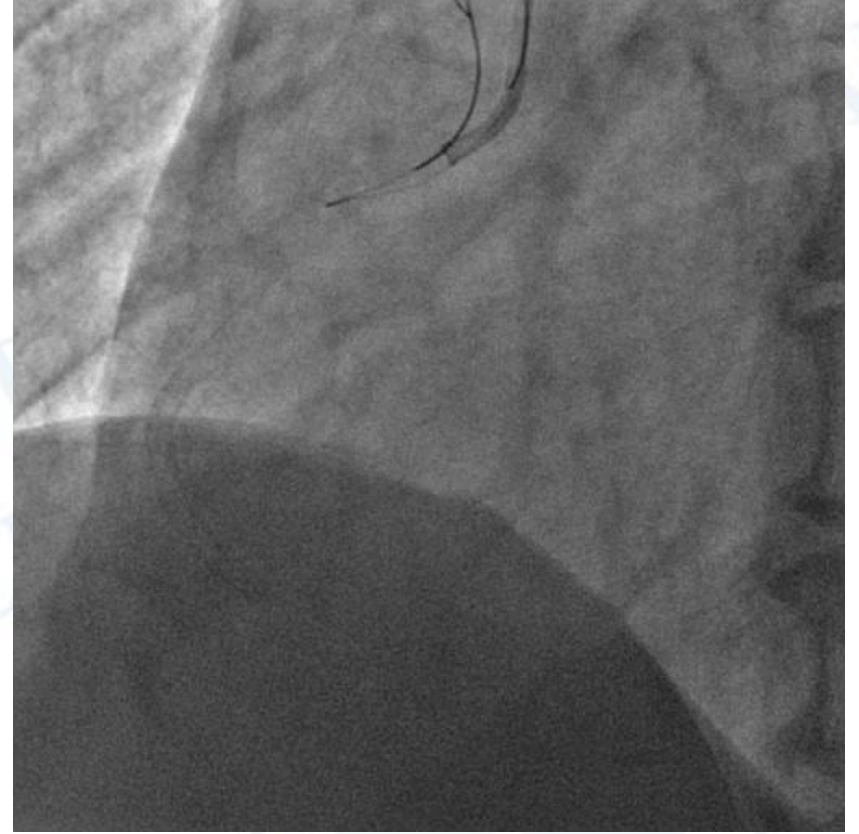
True lumen identification

- Bilateral injection
 - Standard method
 - Require another approach site
- Tip injection
 - Risk of false lumen injection
- CT scan
 - Multimodality imaging cath lab
 - Time consuming in 3D reconstruction









Case summary

- A few kind of methods are available to identify true lumen in CTO intervention
- Choose proper method depending on the situation
- Pressure measurement in distal lumen may give us a clue about the true lumen in CTO intervention

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THANK YOU FOR YOUR ATTENTION!

