

3<sup>rd</sup>  
IMAGING & PHYSIOLOGY  
Summit 2009

# IVUS-Guided CTO intervention via TRI Escape from 'False lumen'

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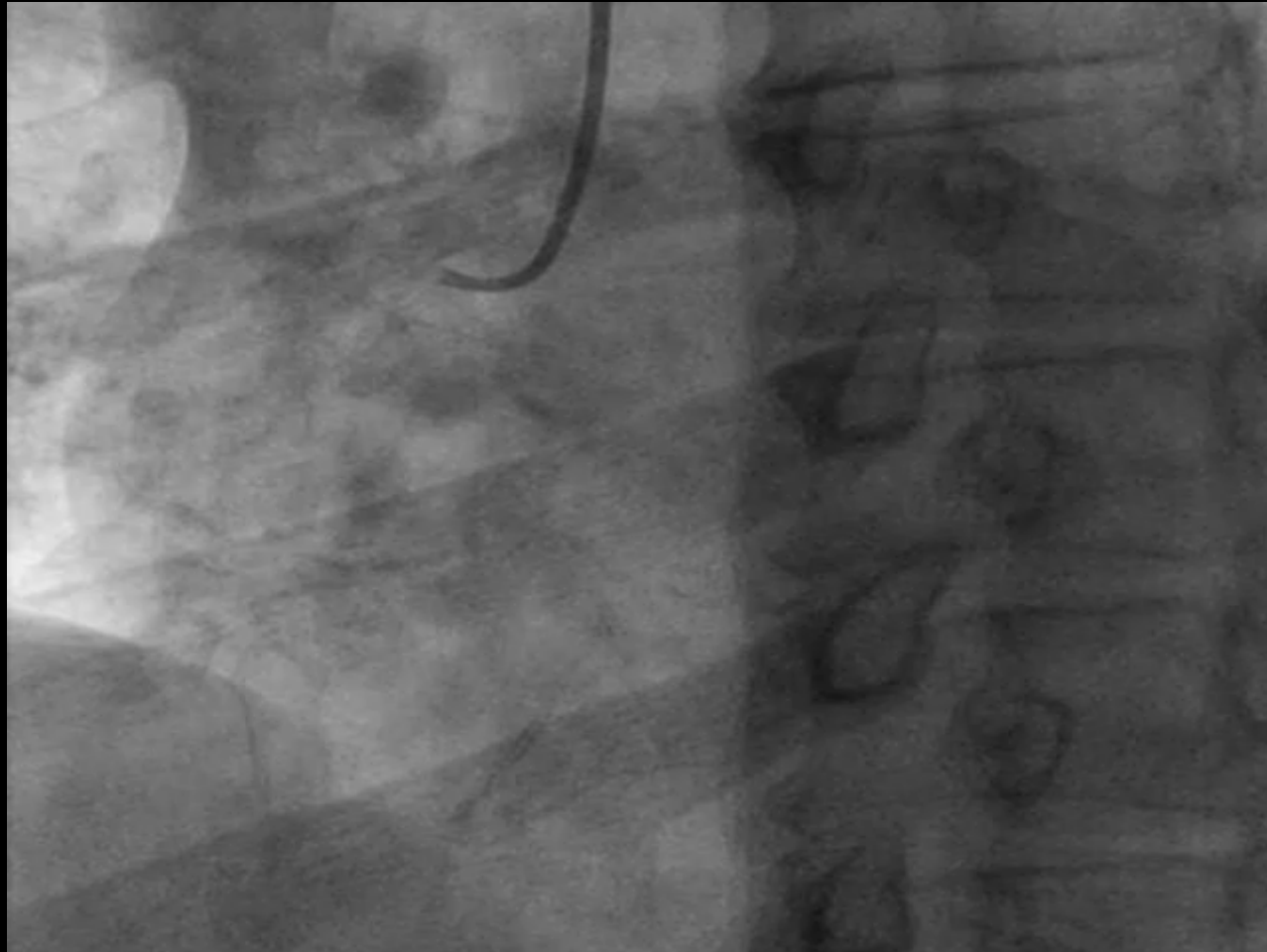
# Introduction

- ◆ 55yr male with accelerating Chest pain (CCS III)
- ◆ Risk factor : Hypertension, Smoking
- ◆ ECG : sinus rhythm, LVH with strain
- ◆ Echo : EF 50%, basal inf. Wall hypokinesia
- ◆ Unstable angina

# Left coronary angiogram



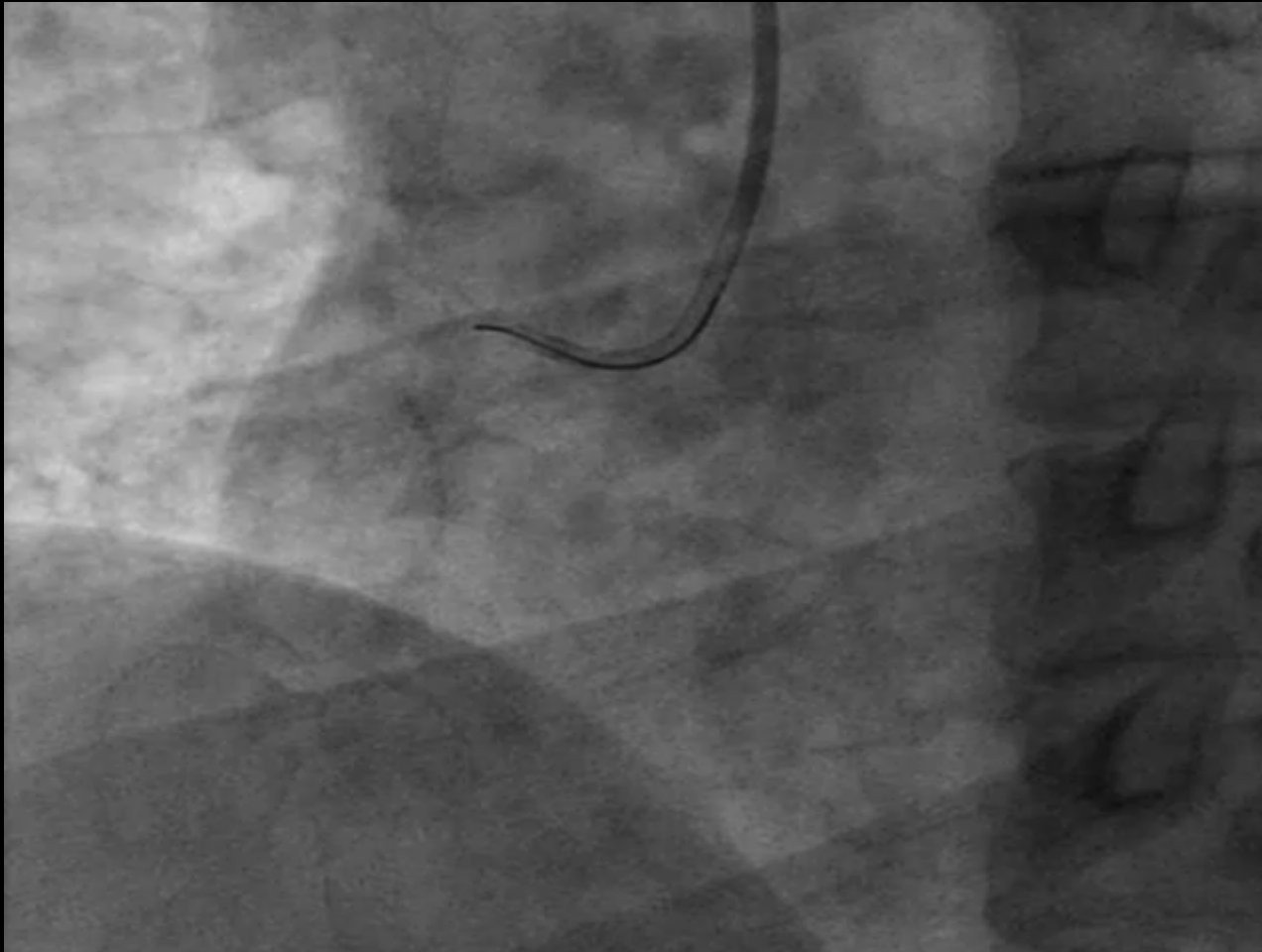
# Right coronary angiogram



# Strategy

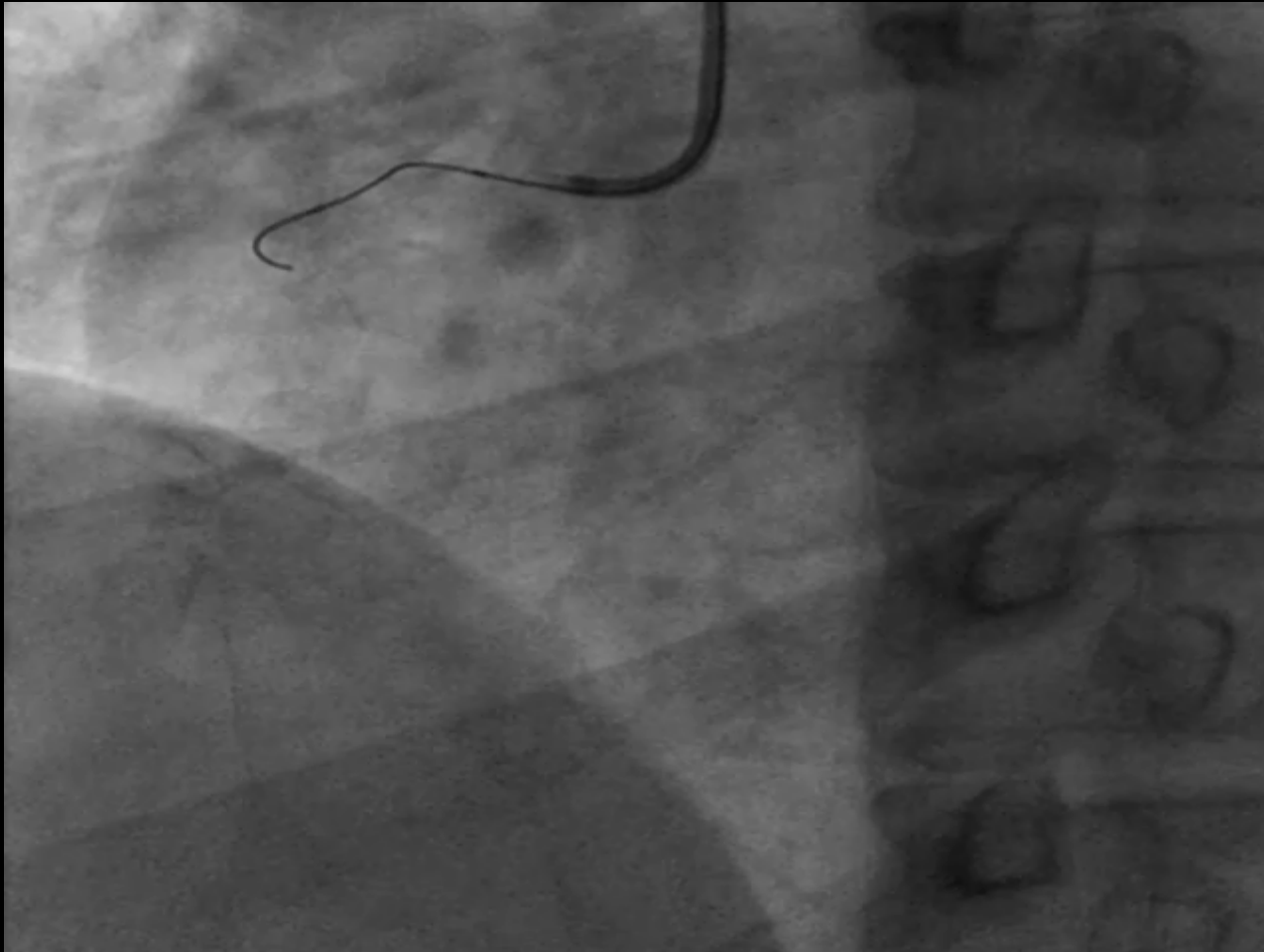
- ◆ OTW balloon + CTO-dedicated wire
- ◆ Parallel or seesaw wire technique whenever indicated
- ◆ IVUS-guided whenever indicated

# PCI at RCA

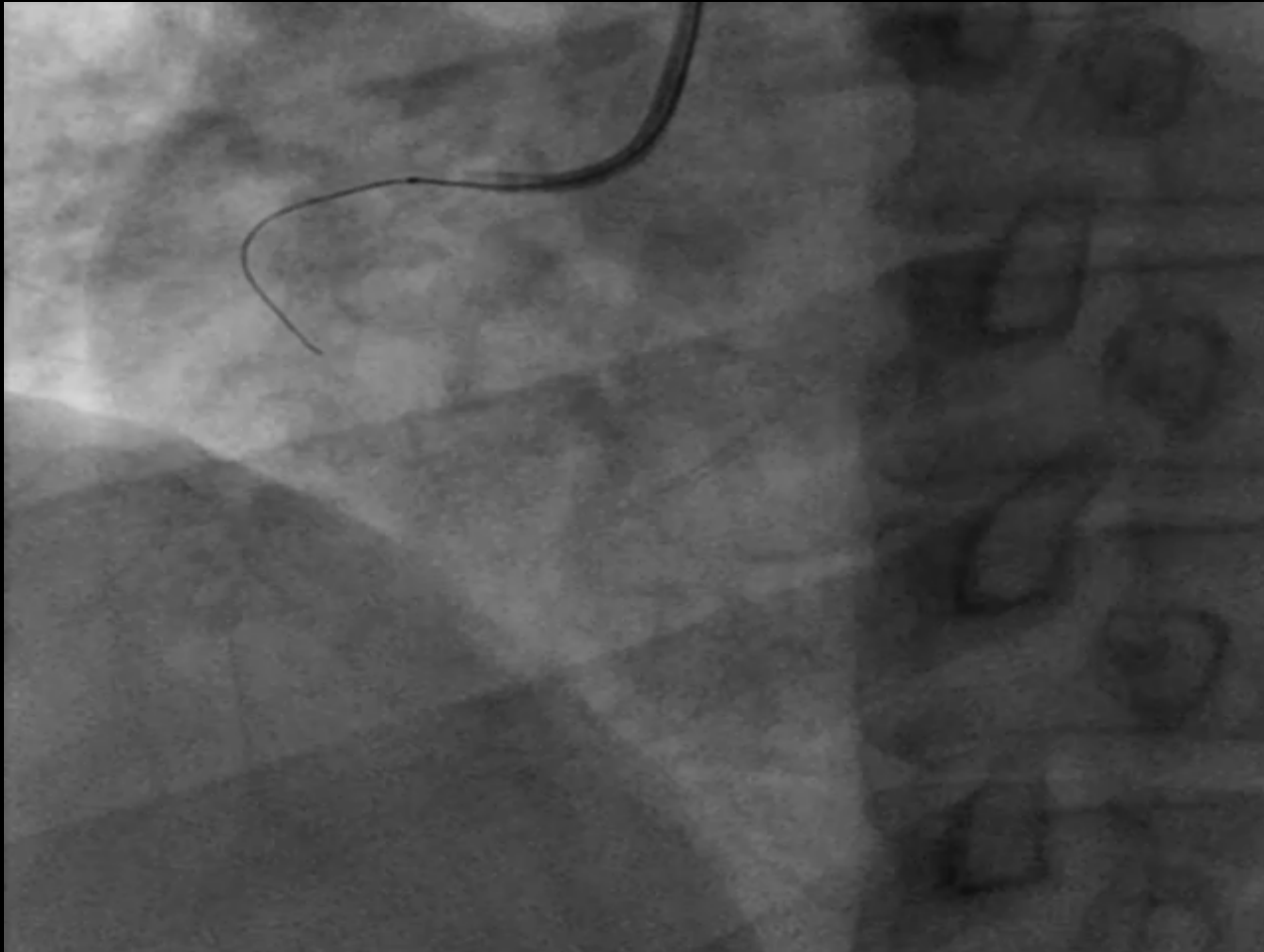


- ◆ TRI: right radial approach
- ◆ 6Fr. JR 4 Guiding catheter
- ◆ Runthrough G/W (0.014 inch) with 1.5 x 6 mm OTW balloon

# PCI at RCA with Miracle 3.0g

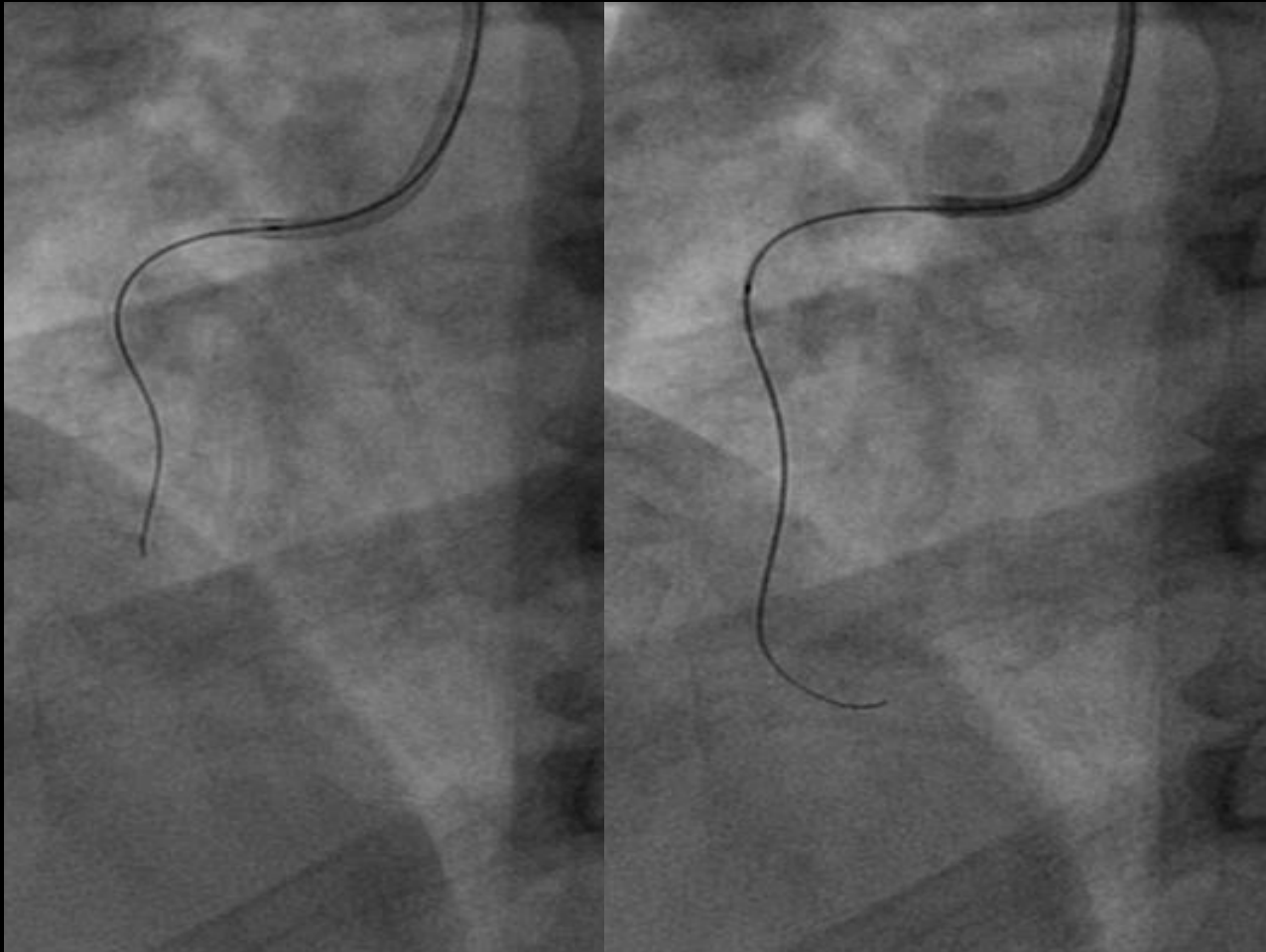


# PCI at RCA with ConquestPro 12g



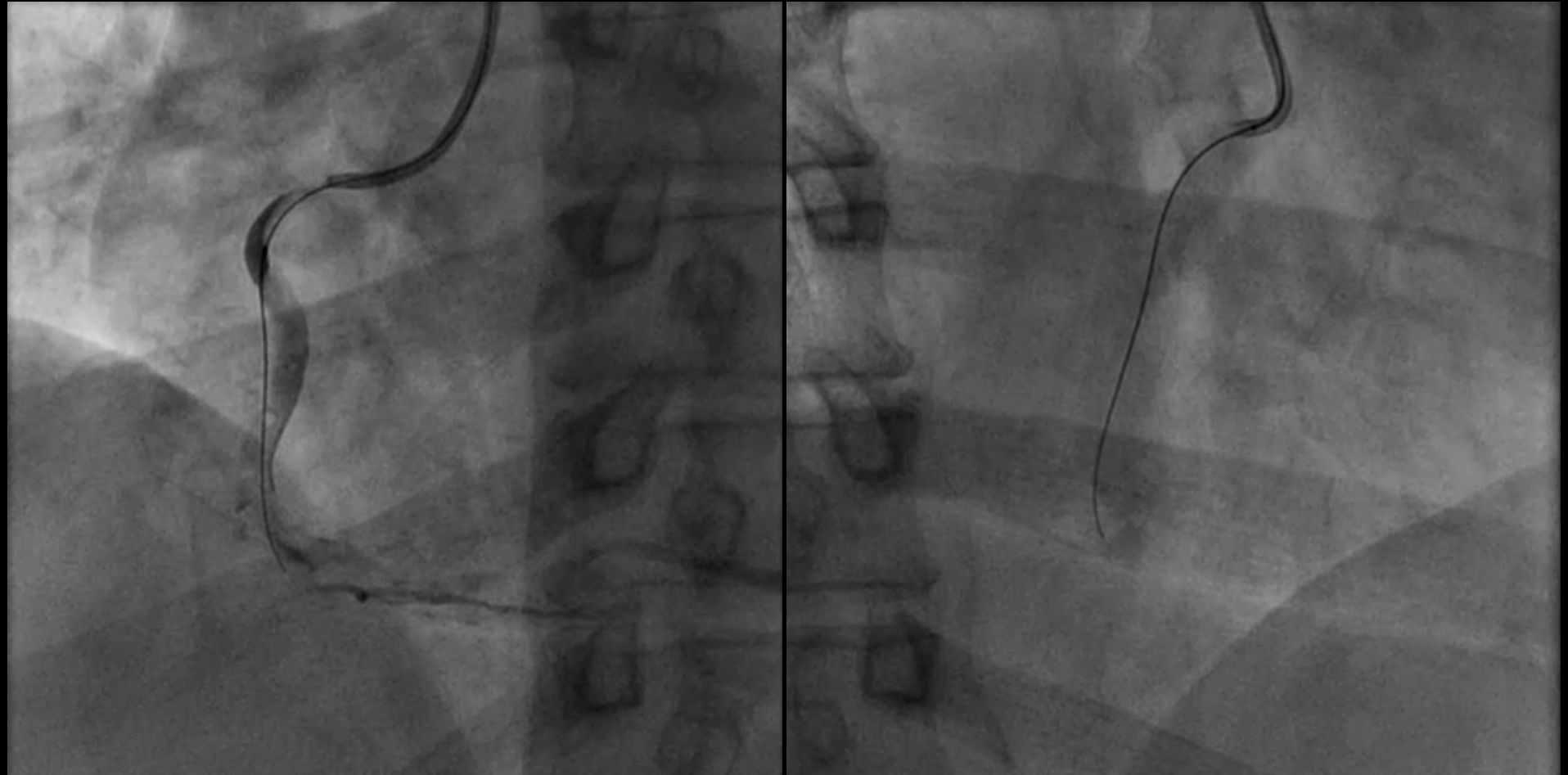


# PCI at RCA

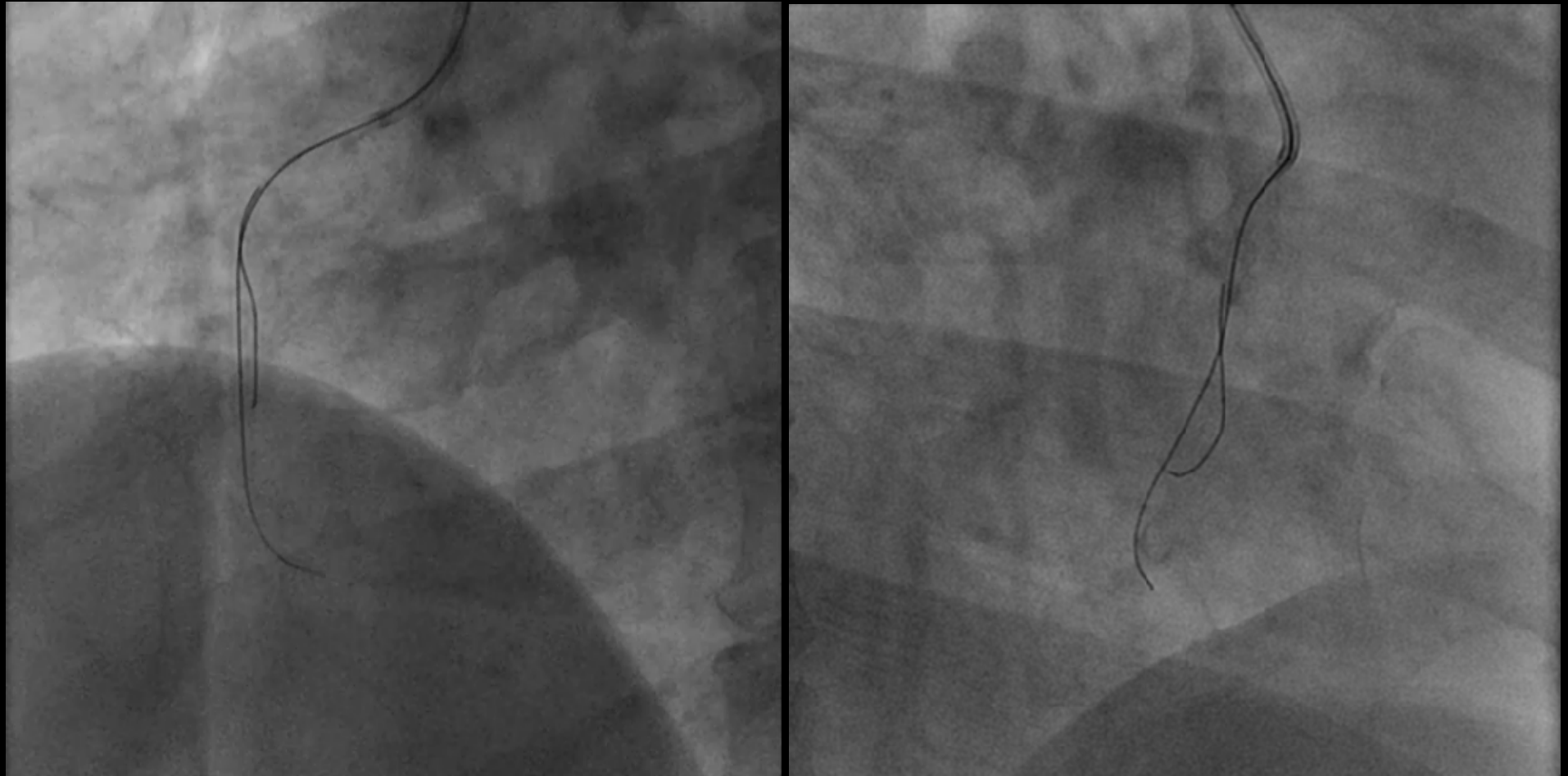


ConquestPro with  
OTW balloon  
(1.5 x 6 mm)

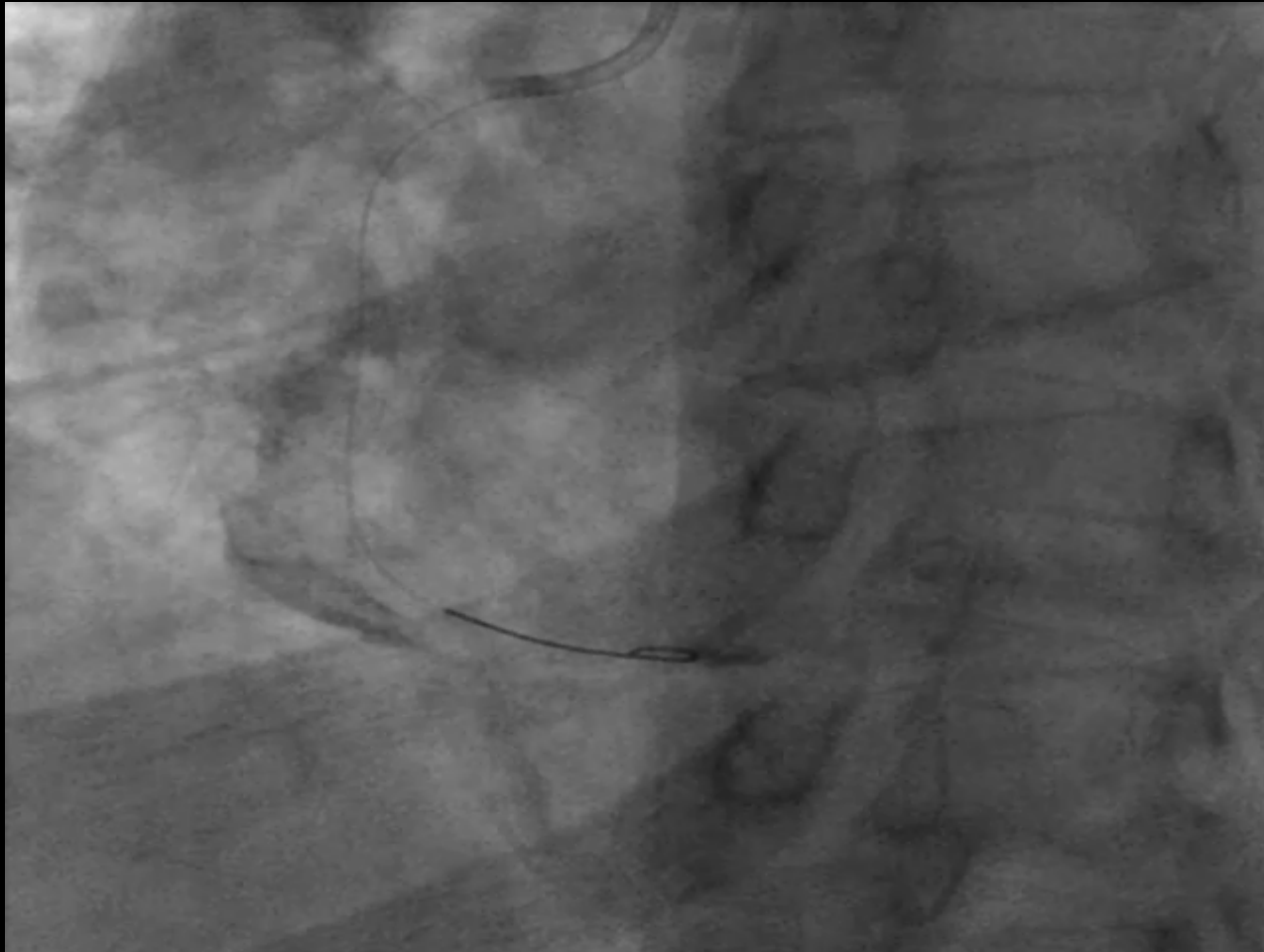
# RCA F/U CAG



# RCA PCI with parallel wire technique

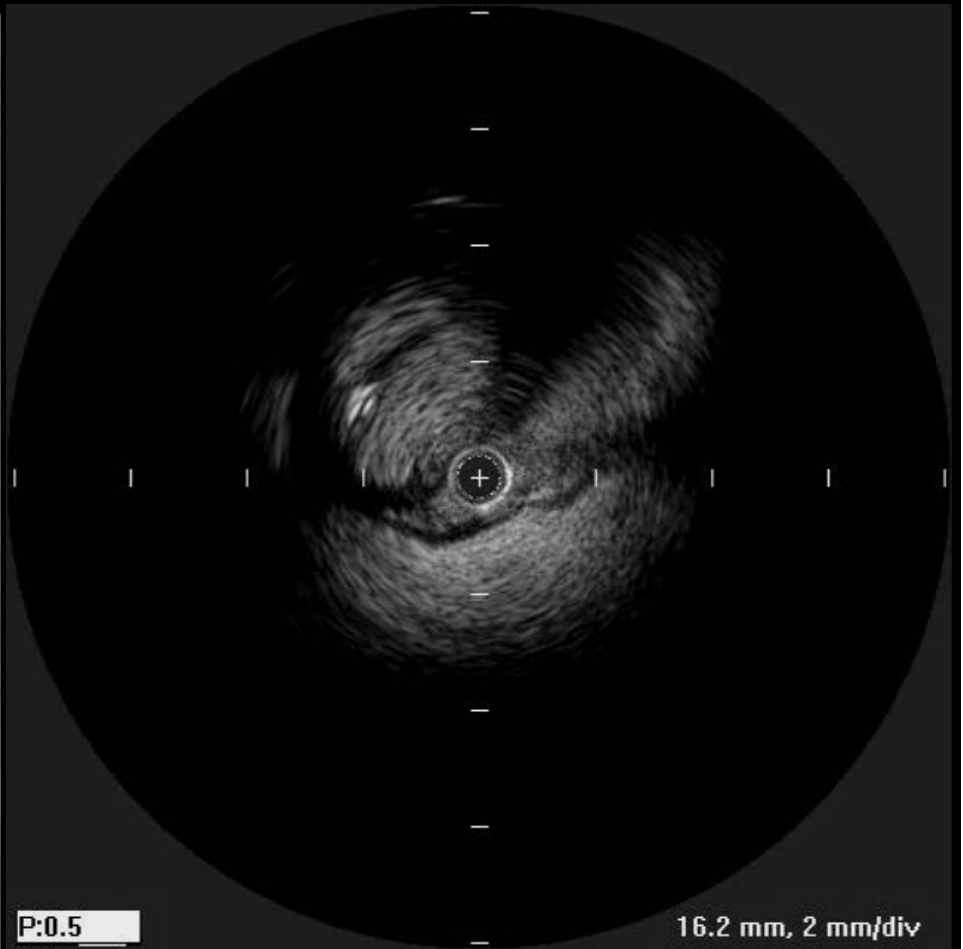
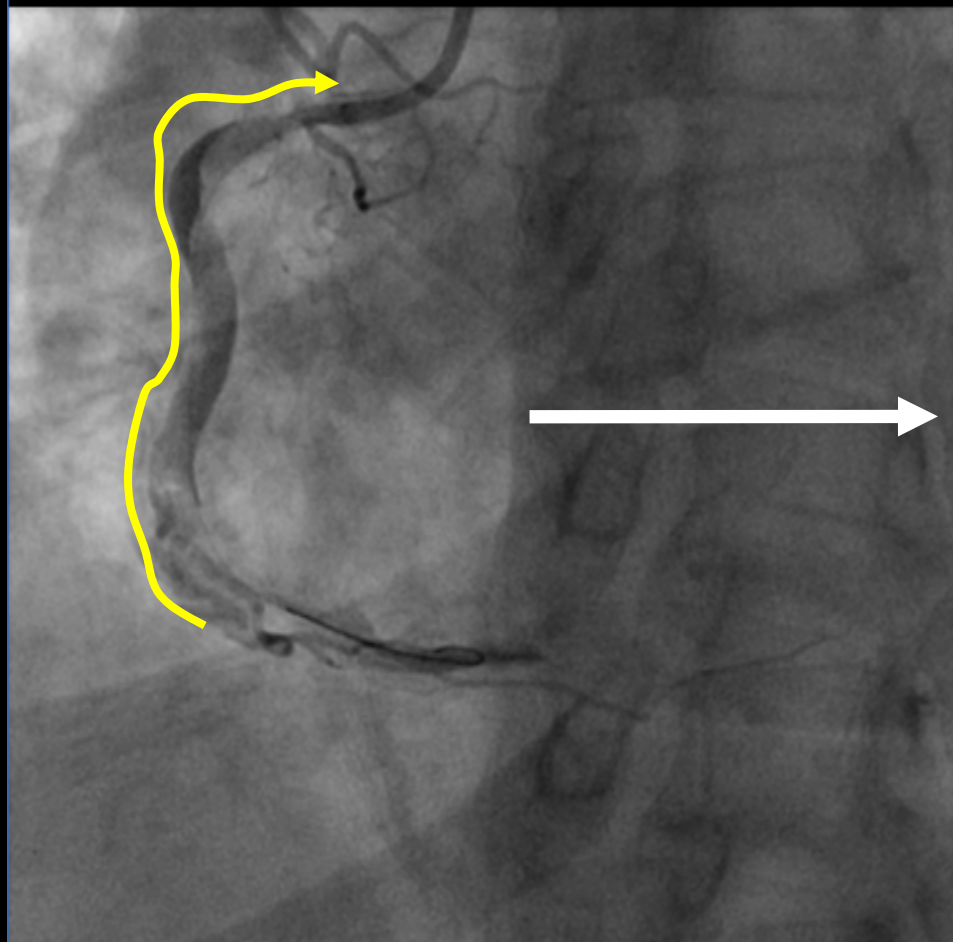


# RCA PCI

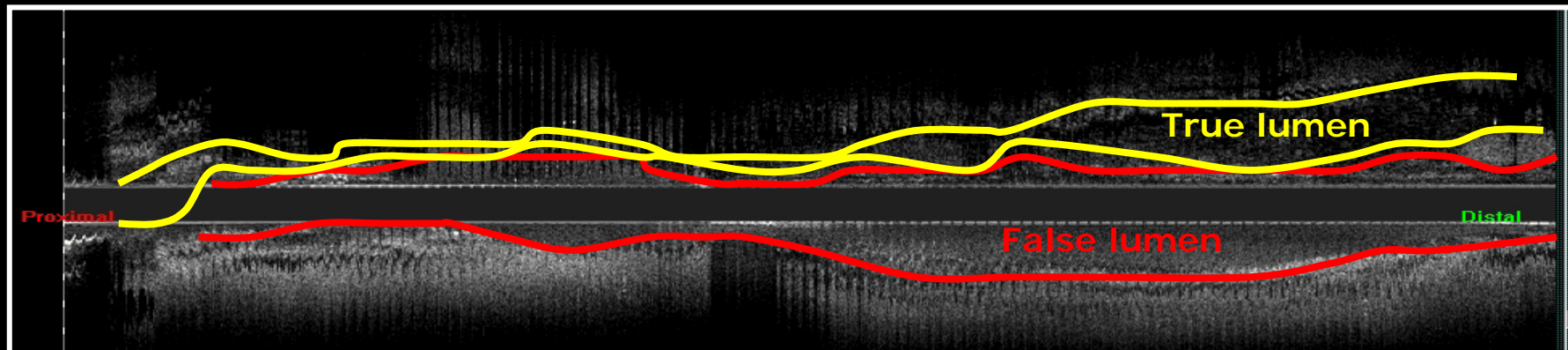
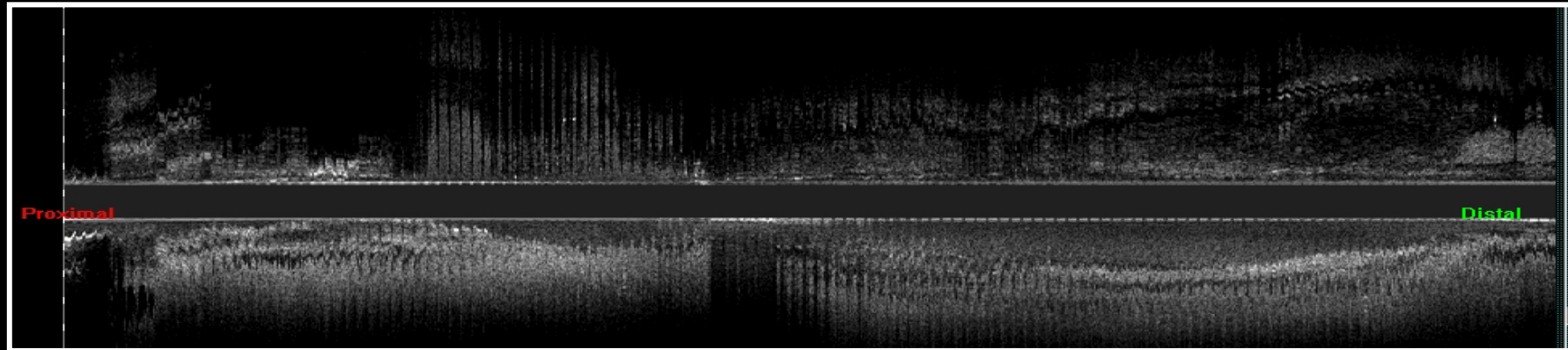


Ballooning with  
2.5 x 20 mm (ryujin)  
at p-RCA

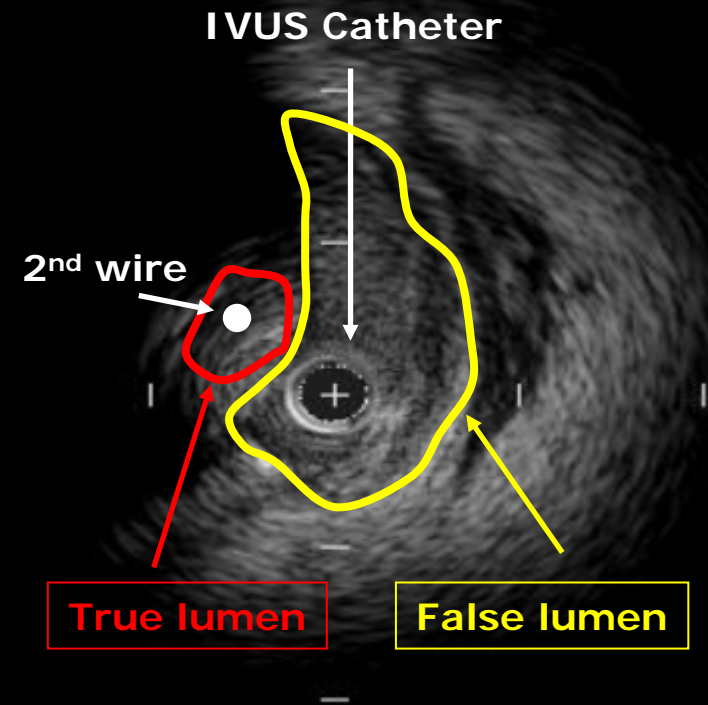
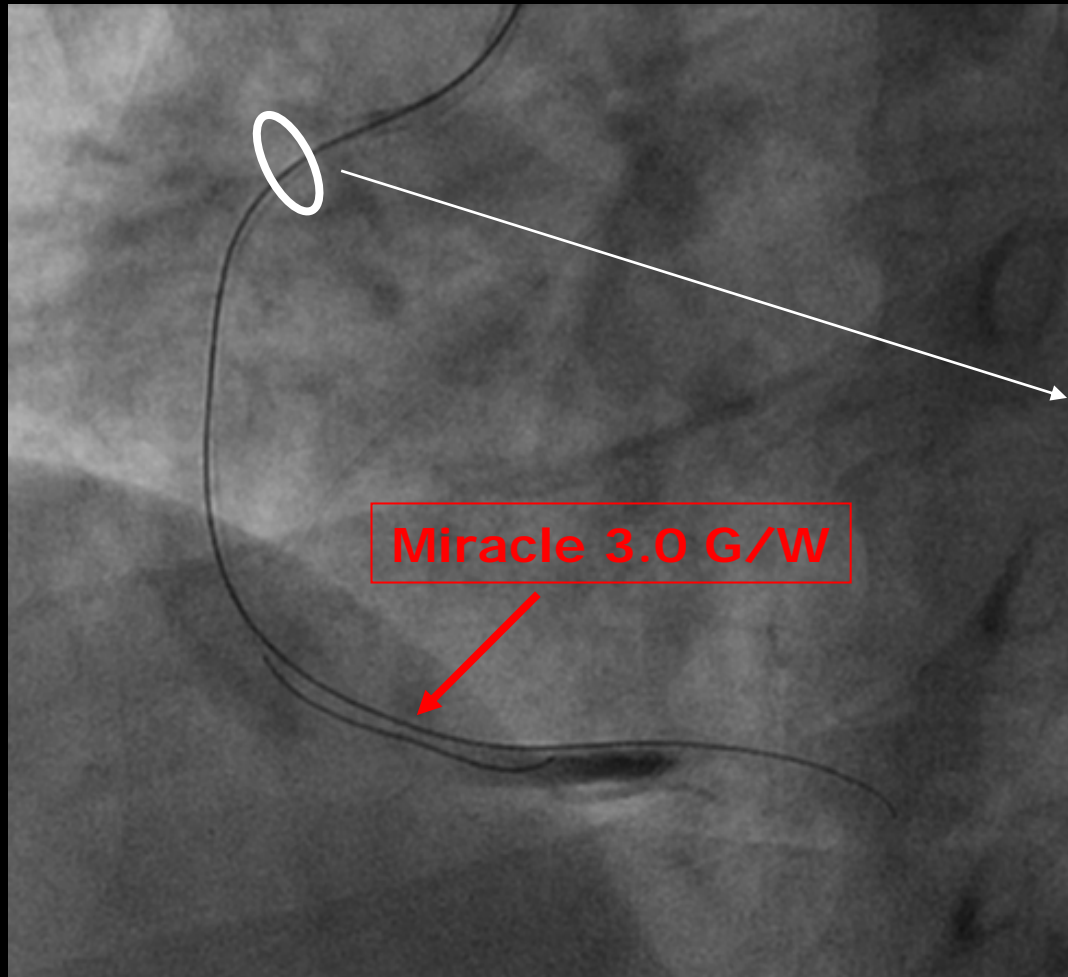
# 1<sup>st</sup> IVUS



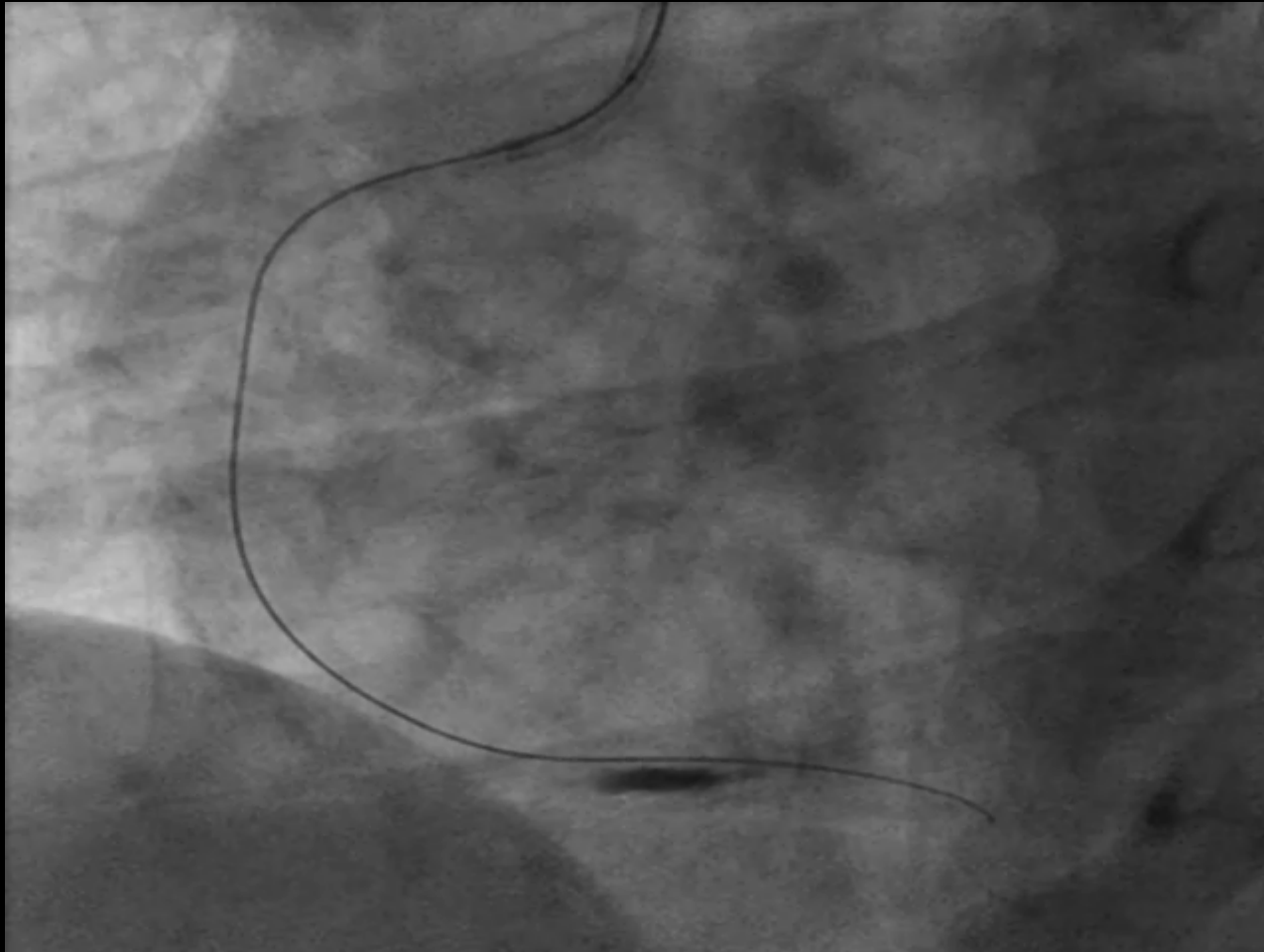
# IVUS: False lumen



# IVUS guide parallel wire technique



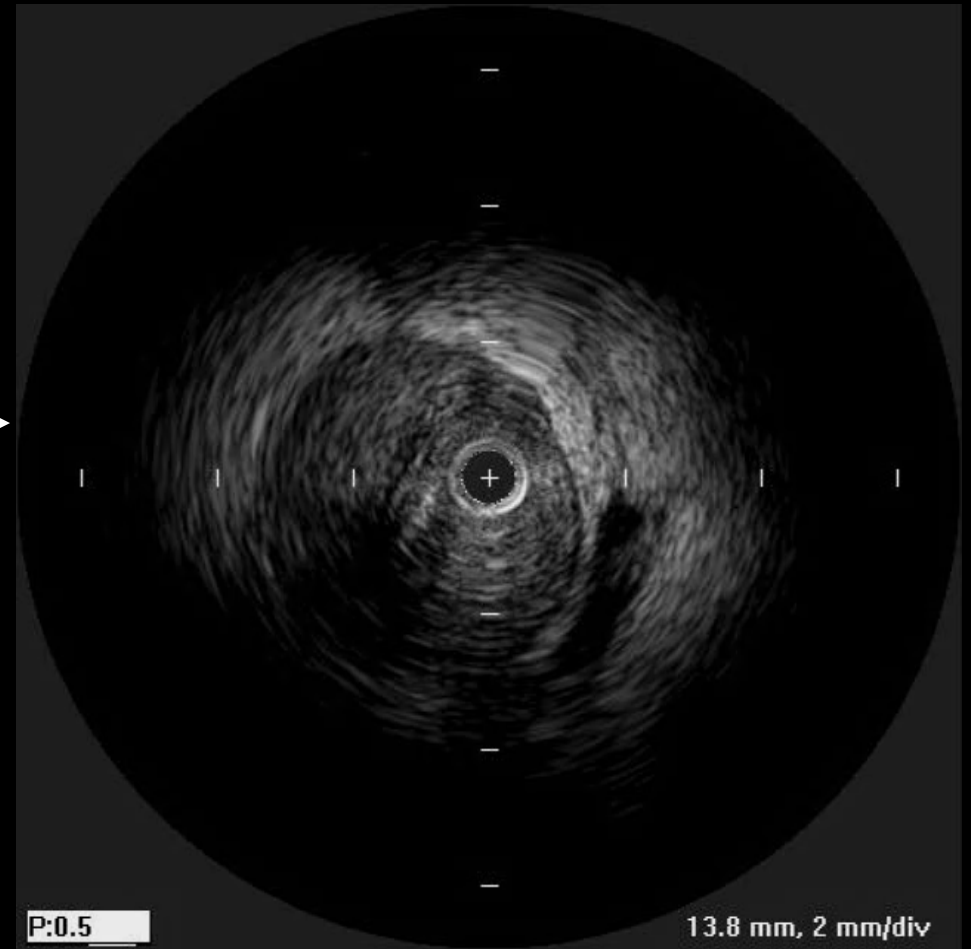
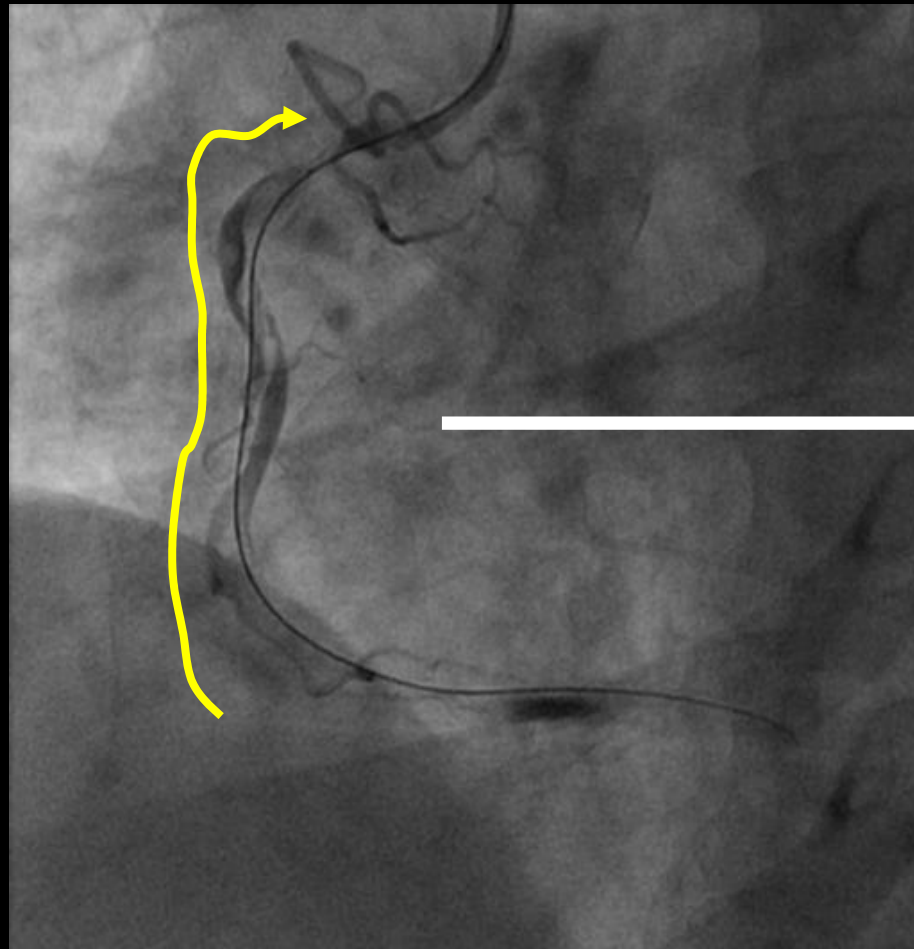
# RCA F/U CAG



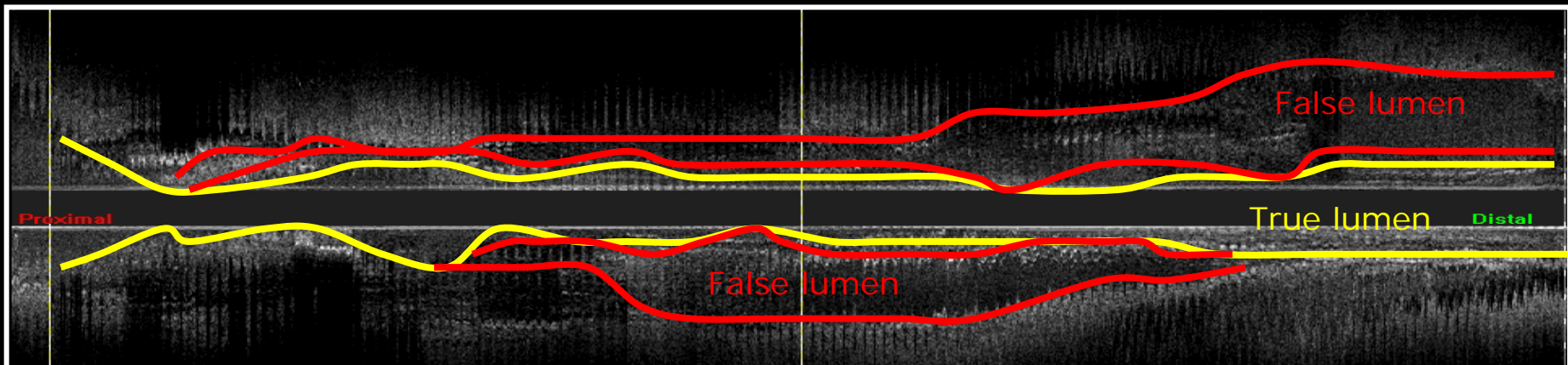
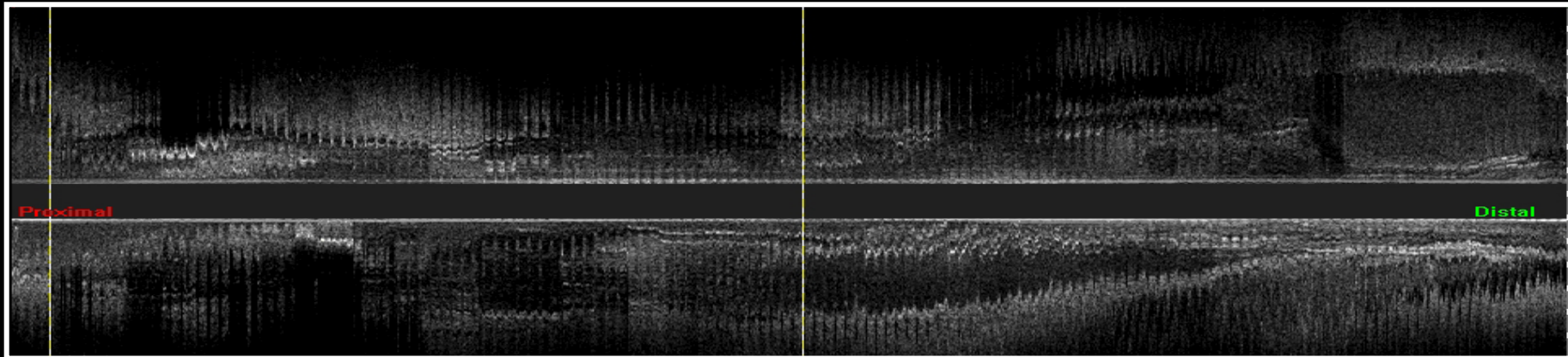
Still going the  
wrong way?



# 2<sup>nd</sup> IVUS



# IVUS: true lumen

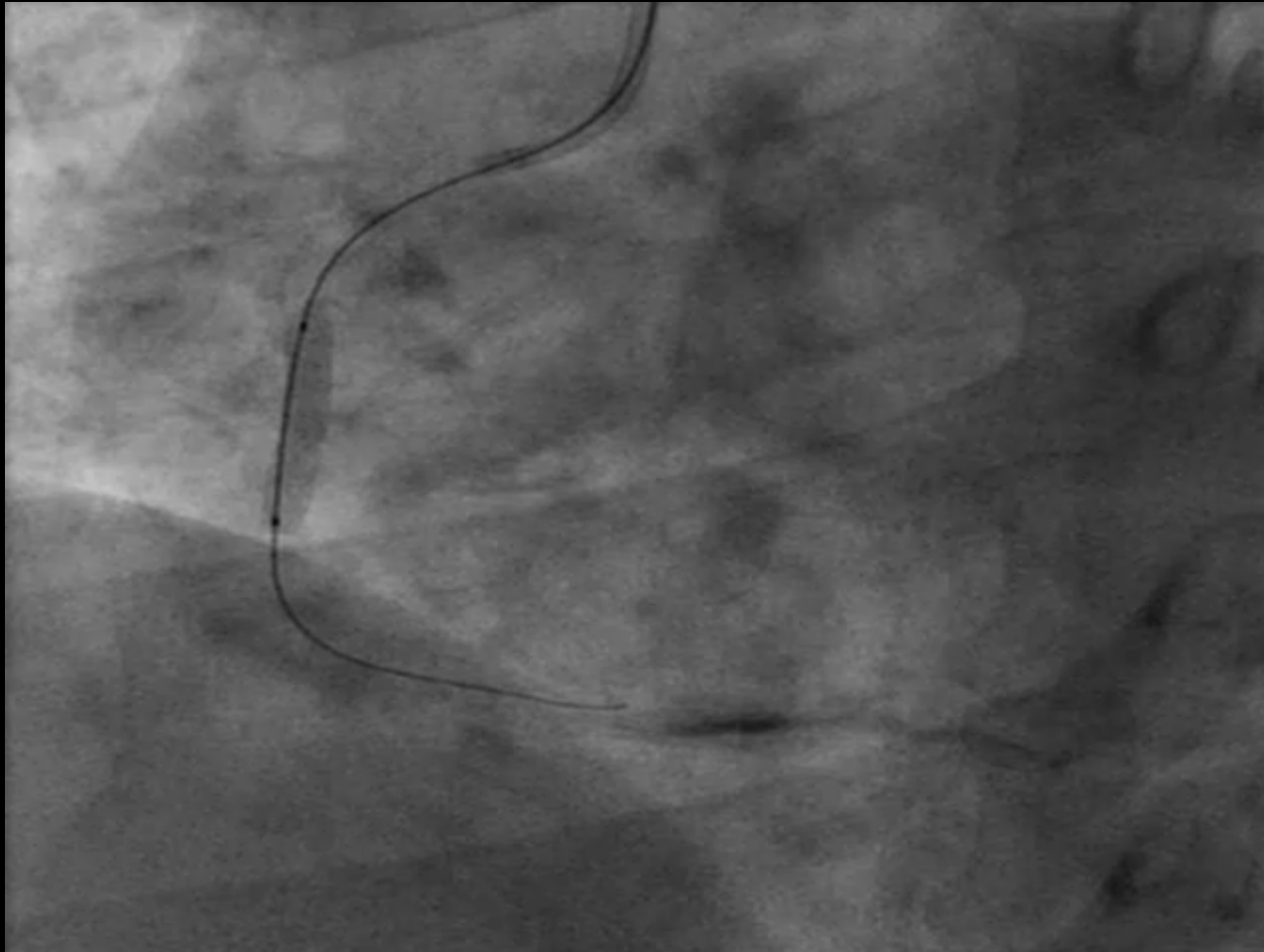


# RCA PCI



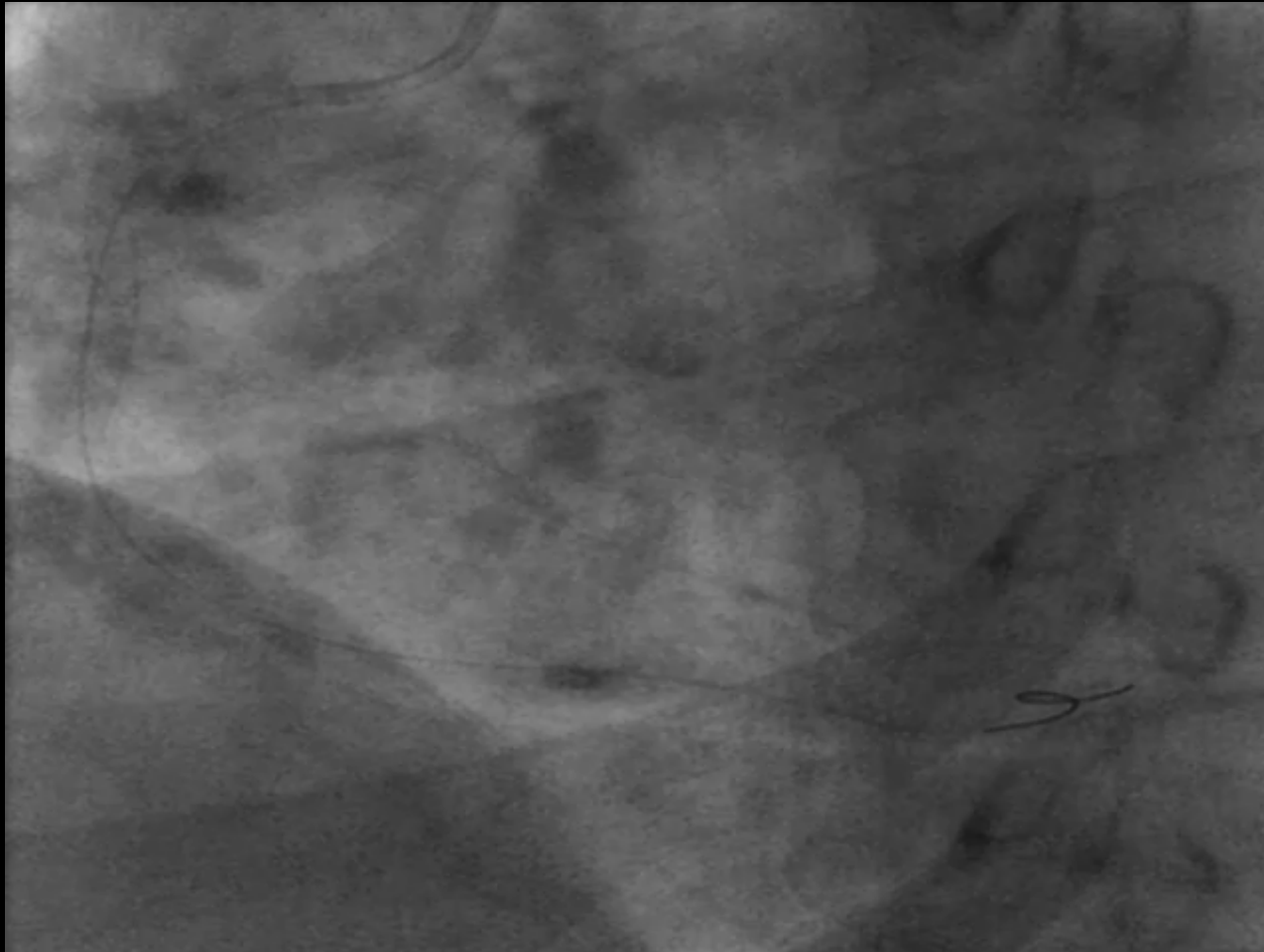
RCA os ~ p-RCA:  
Driver 4.0x30mm  
upto 18atm

# RCA PCI

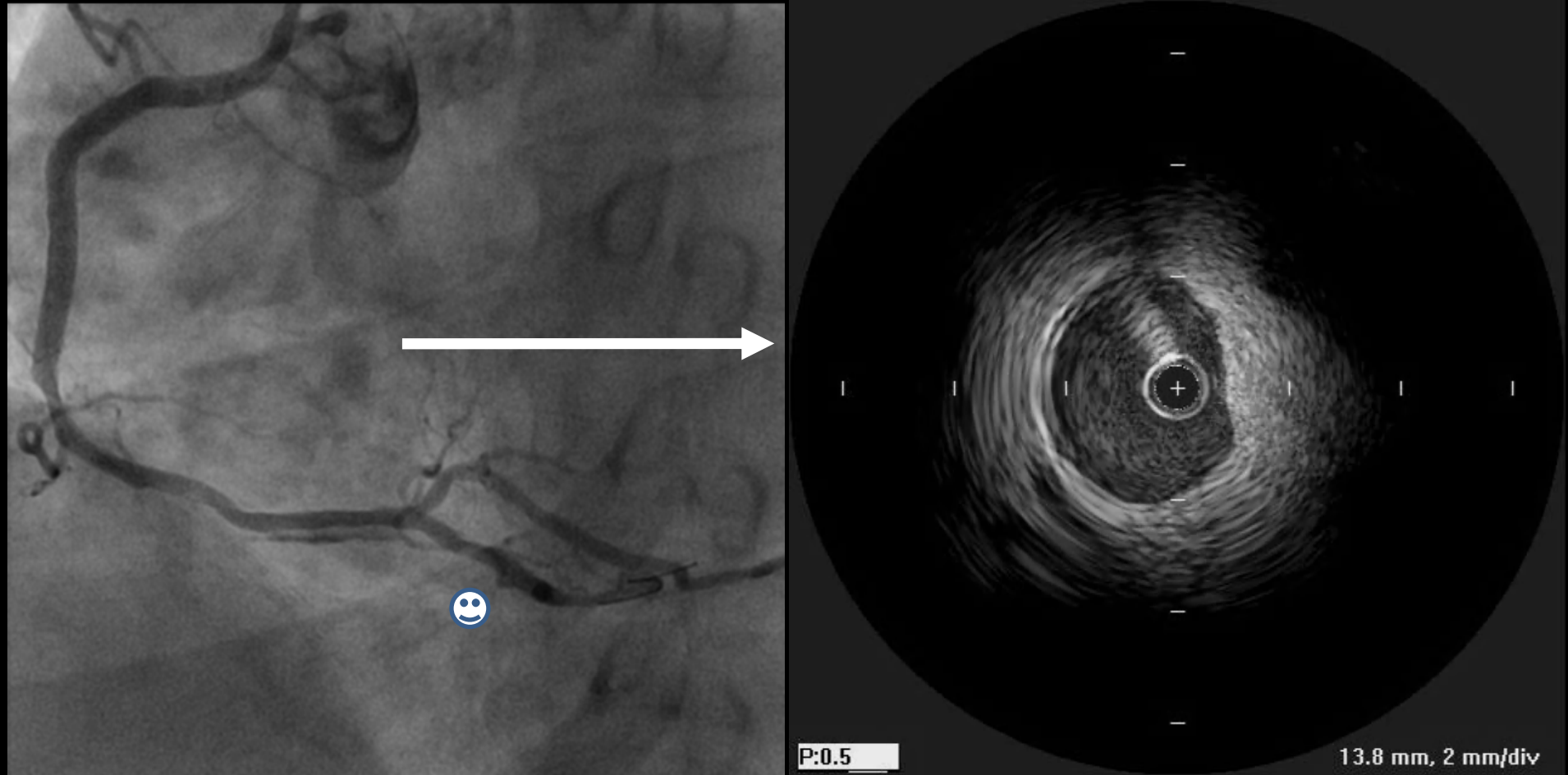


m-RCA:  
Endeavor 3.5x18mm  
upto 18atm

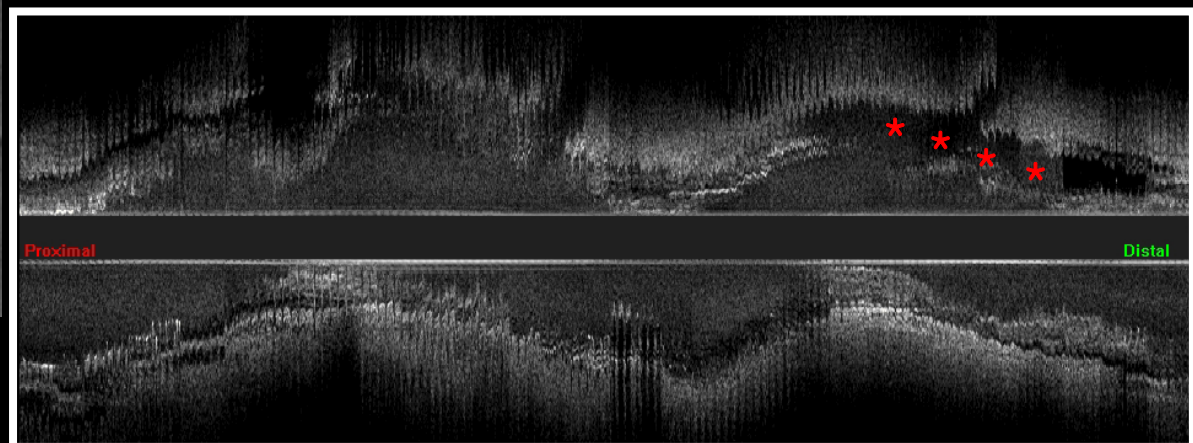
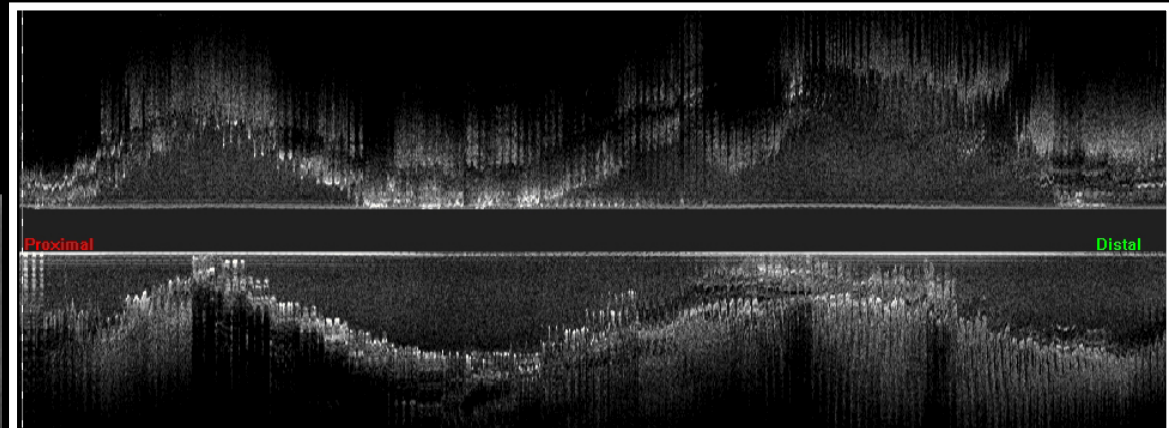
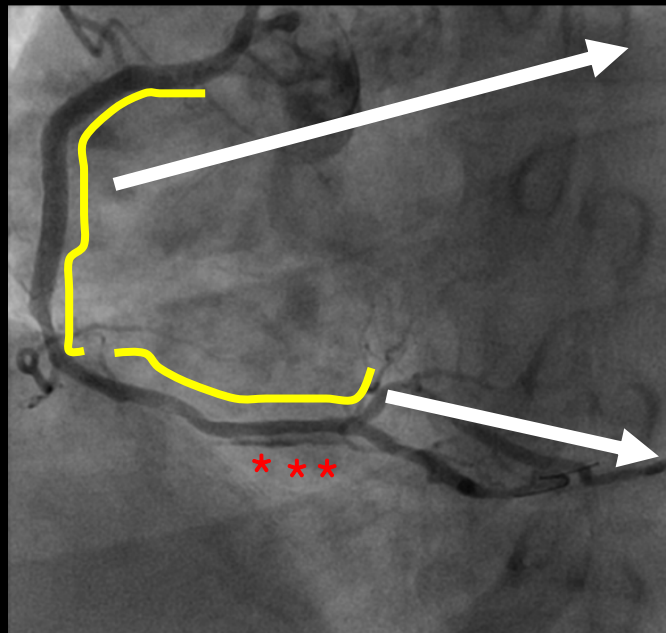
# Final angiography



# IVUS after PCI

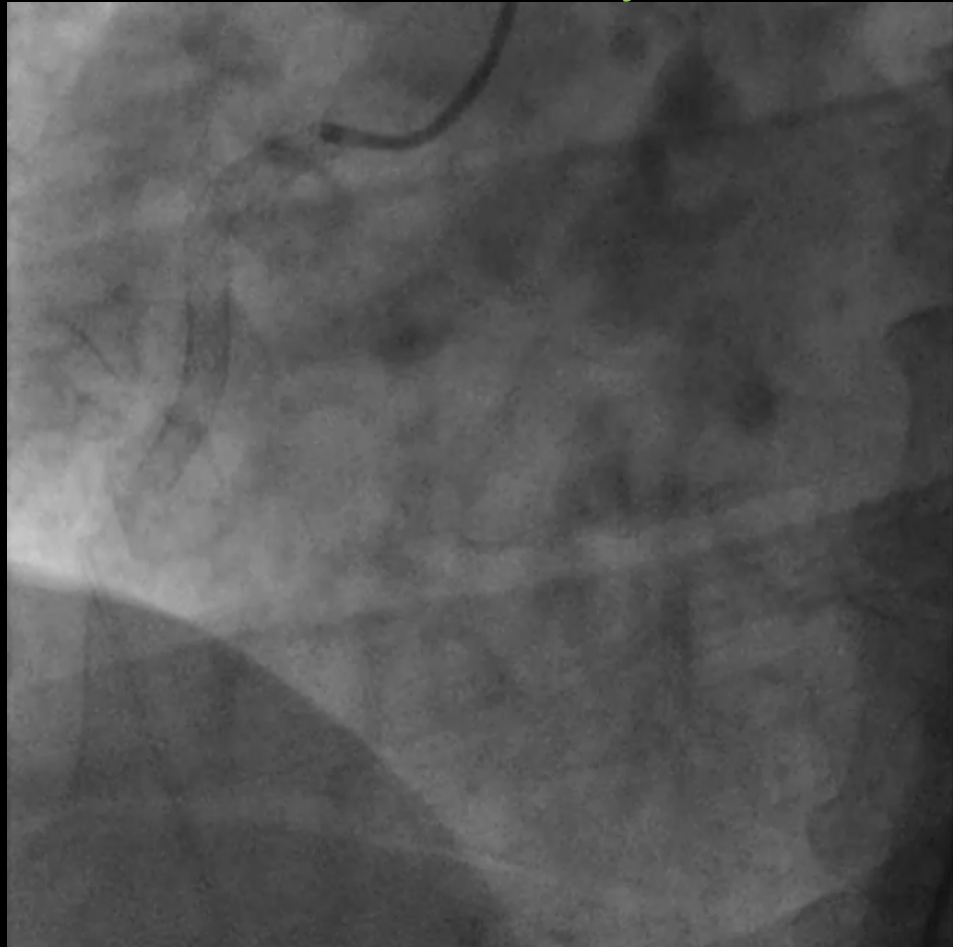


# IVUS after PCI

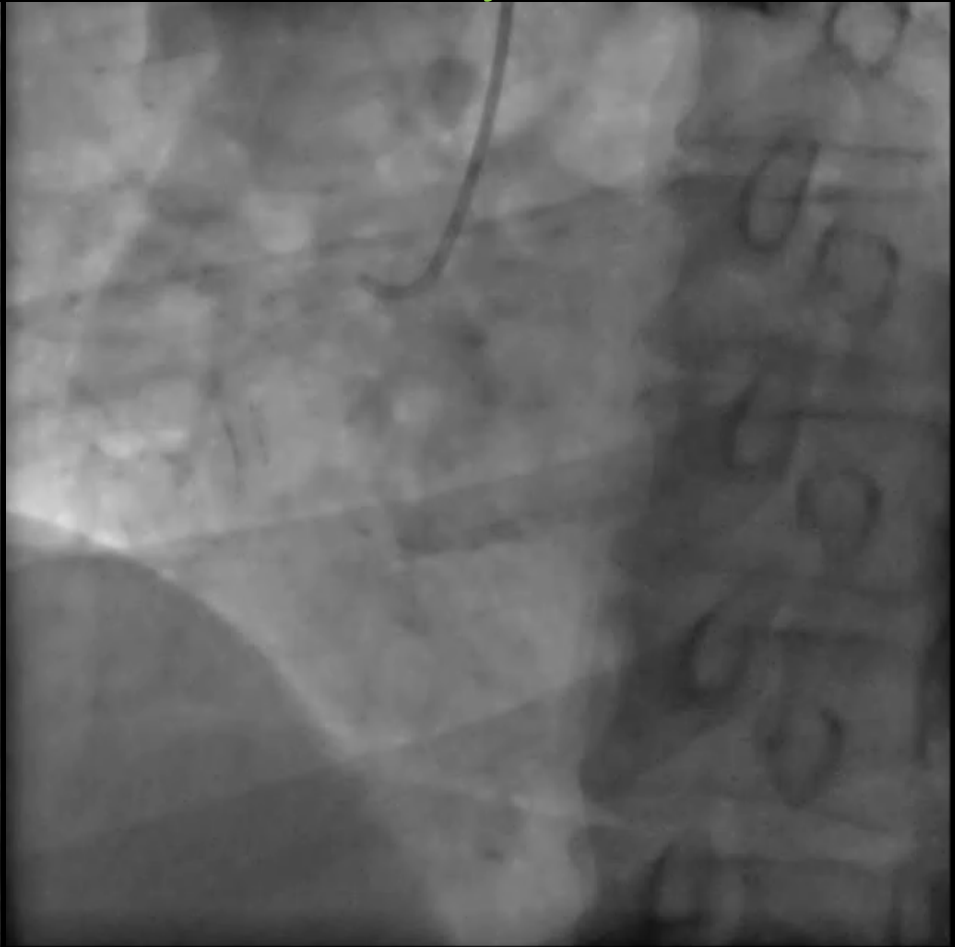


# F/U CAG

After 7 days



After 1 year





# Summary

- ◆ This case demonstrates
  - Once a false lumen has been created, IVUS can guide the wire to reenter into the true lumen.
  - IVUS guided wiring technique is a safe and very helpful technique to advance in a true lumen during CTO intervention.