

# Complex Case presentation

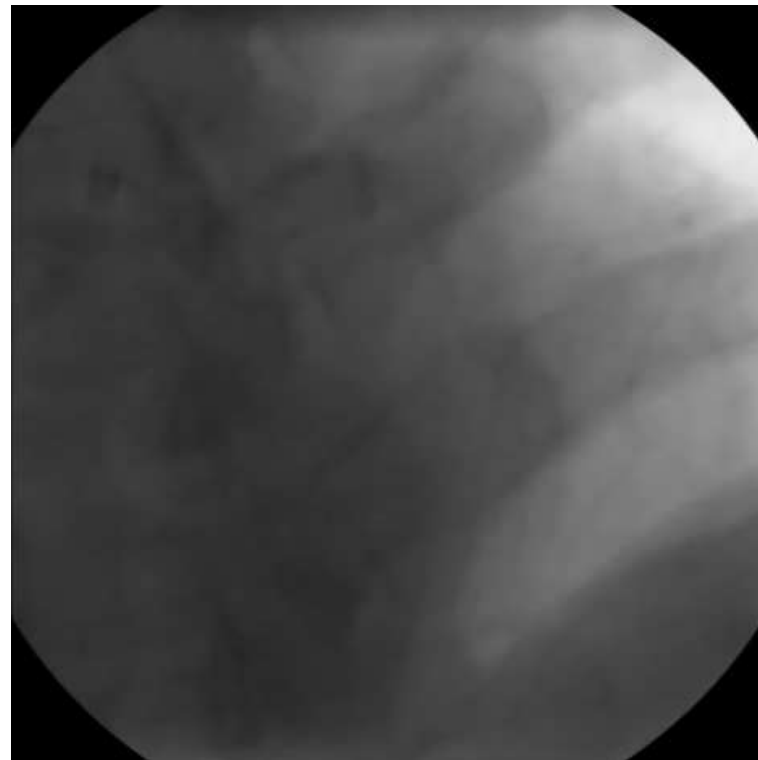
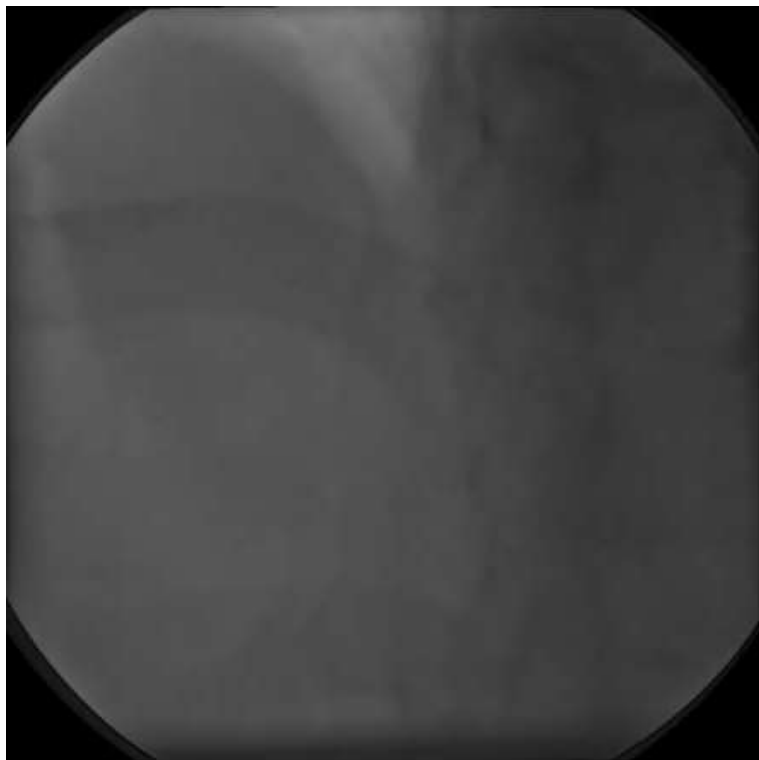
## *My Experience*

Yong-Hoon Yoon, MD

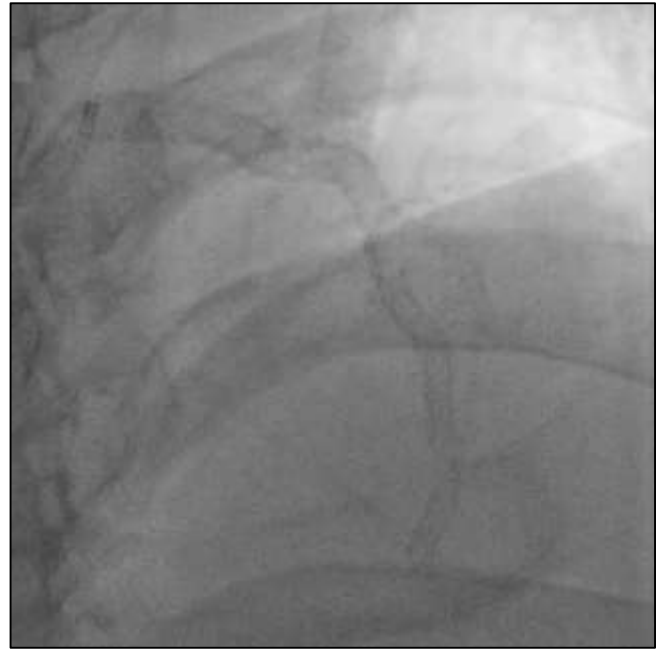
Heart Institute, Asan Medical Center,  
University of Ulsan College of Medicine, Seoul, Korea

- 63 y/o, Male
  - HTN/DM
  - S/P PCI at LAD, Cypher #2 (2003.4)
  - Chronic AF on NOAC
- 
- DOE and intermittent chest discomfort
  - Echocardiography; akinesia at inferior wall, EF 49%
  - SPECT; Reversible perfusion defect at LAD/RCA territory

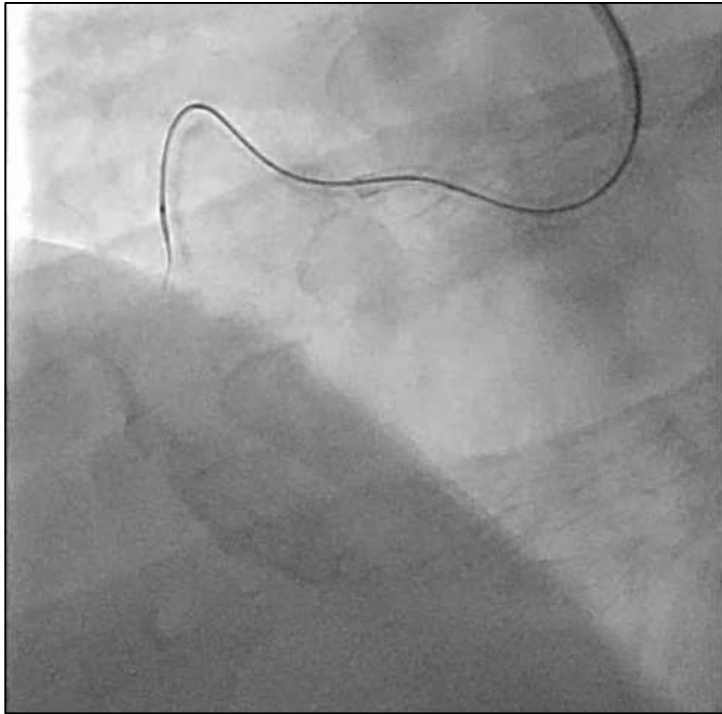
# 2003 angio



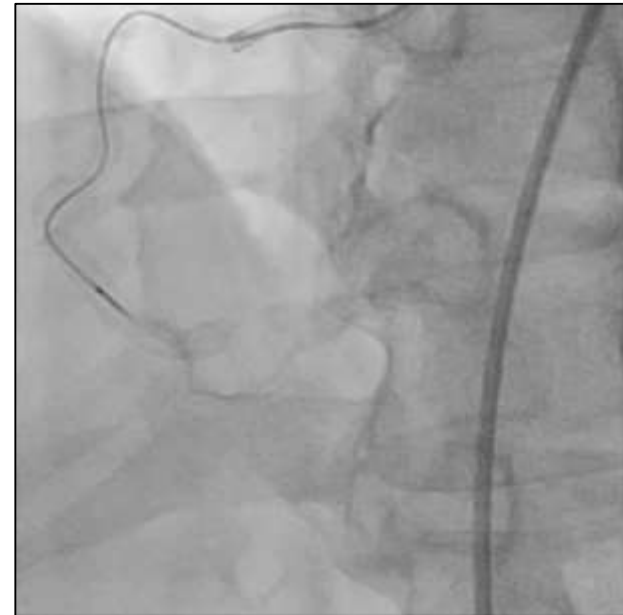
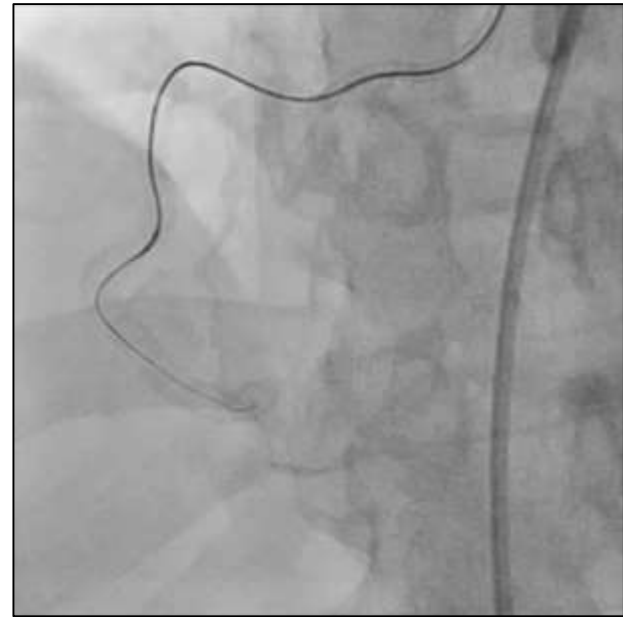
# 2018 angio



7Fr AL2 SH



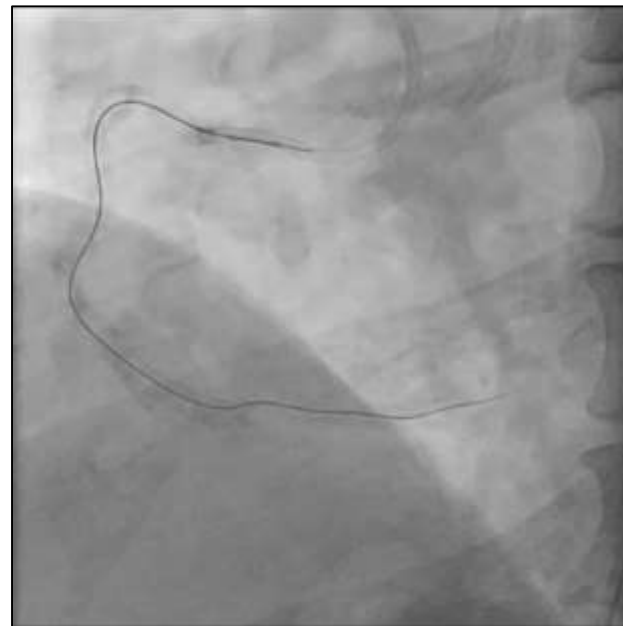
Corsair 2.6Fr  
Gaia 2 → XTA



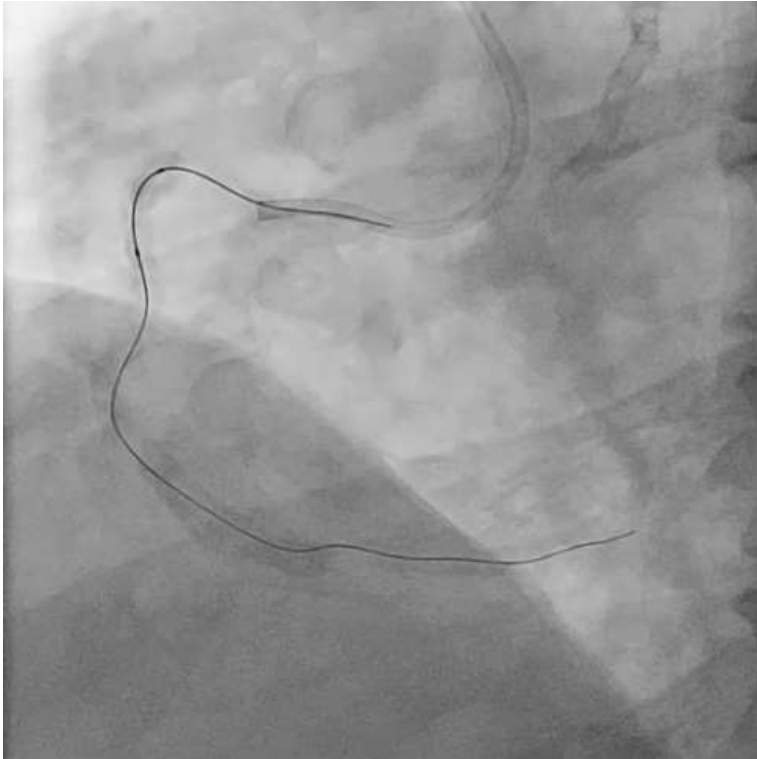
Distal RCA CTO



Caravel 2.6Fr  
Gaia 2 → XTA → Gaia2

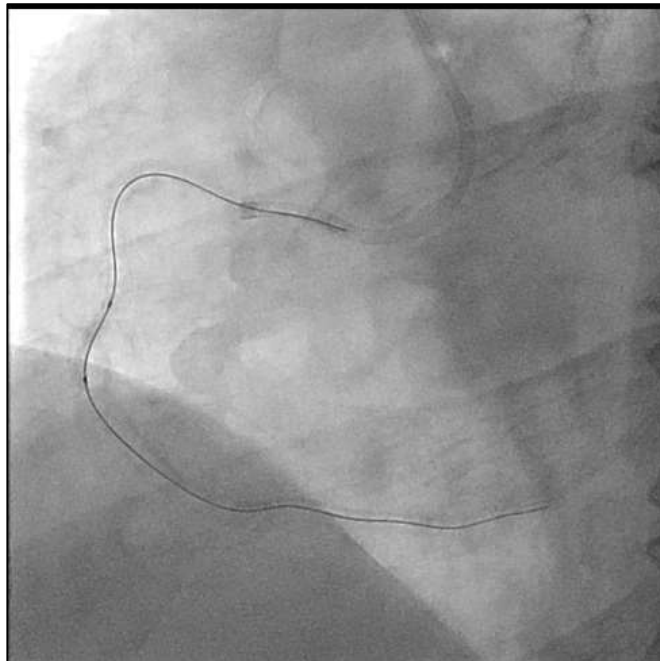
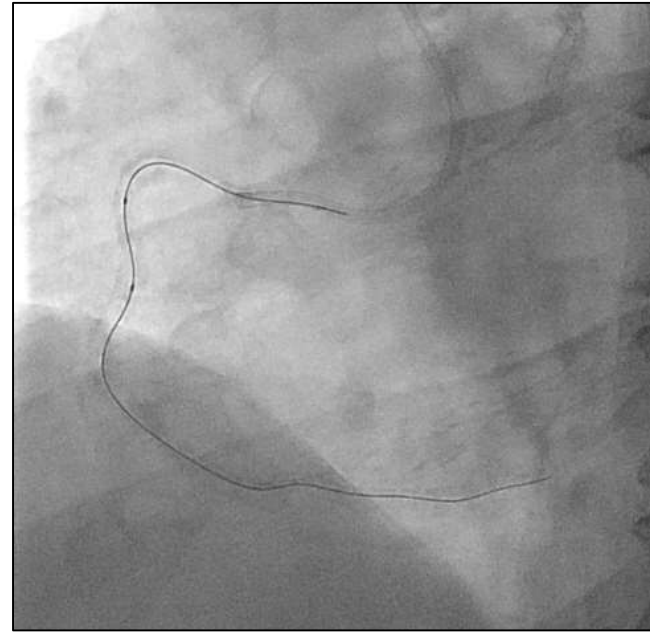


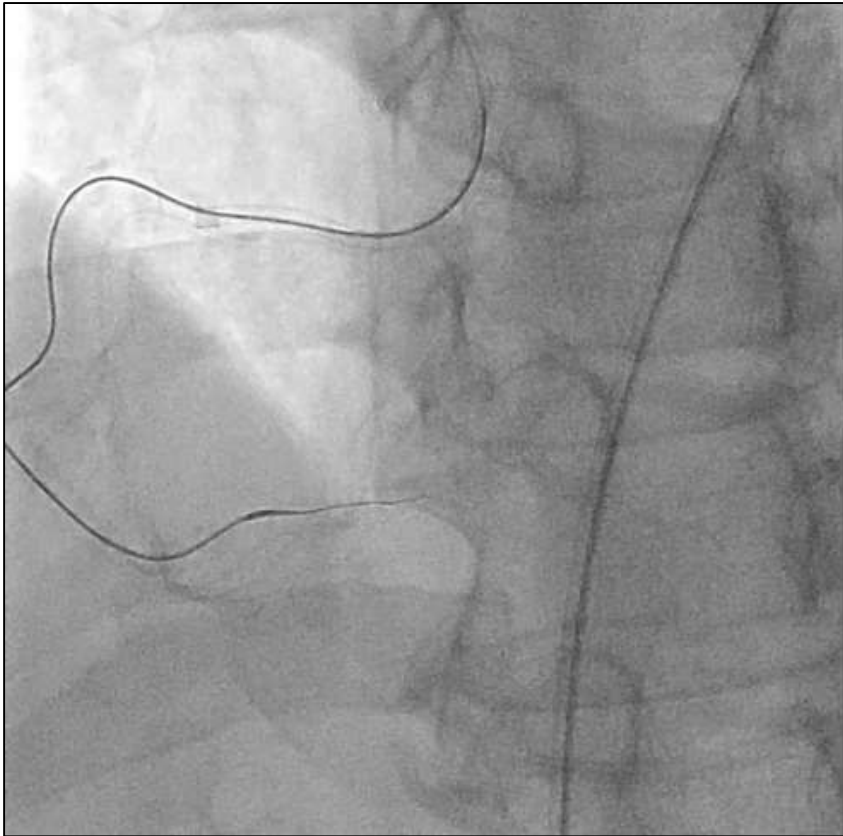
Proximal resistance for MC passage  
31 min



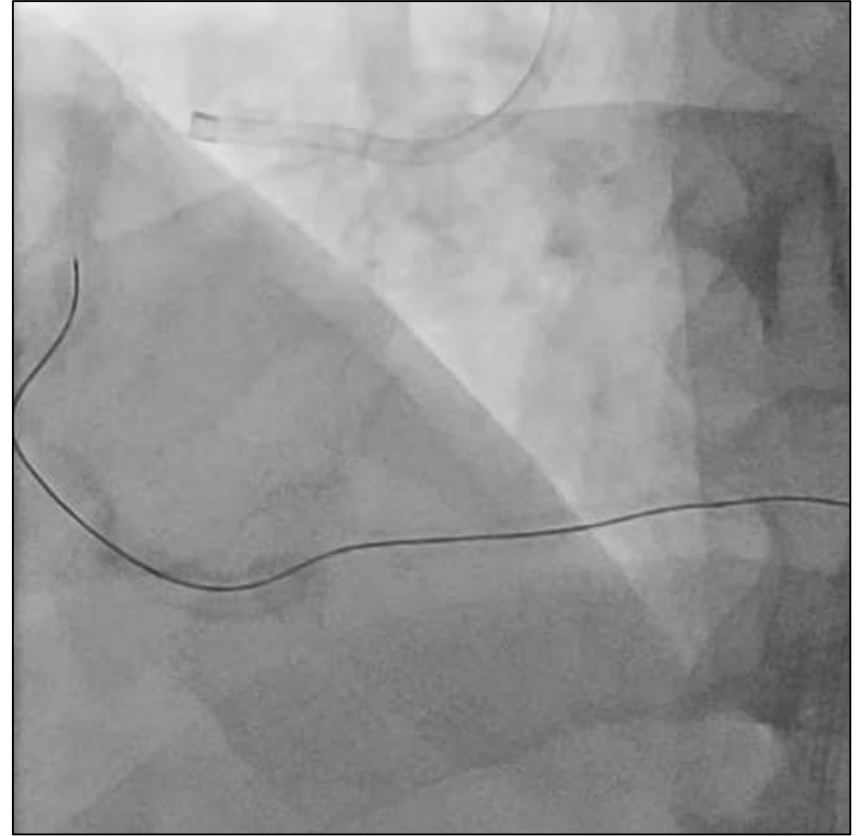
Tazuna 2.5 (15) 12 atm

Not so difficult for balloon passage



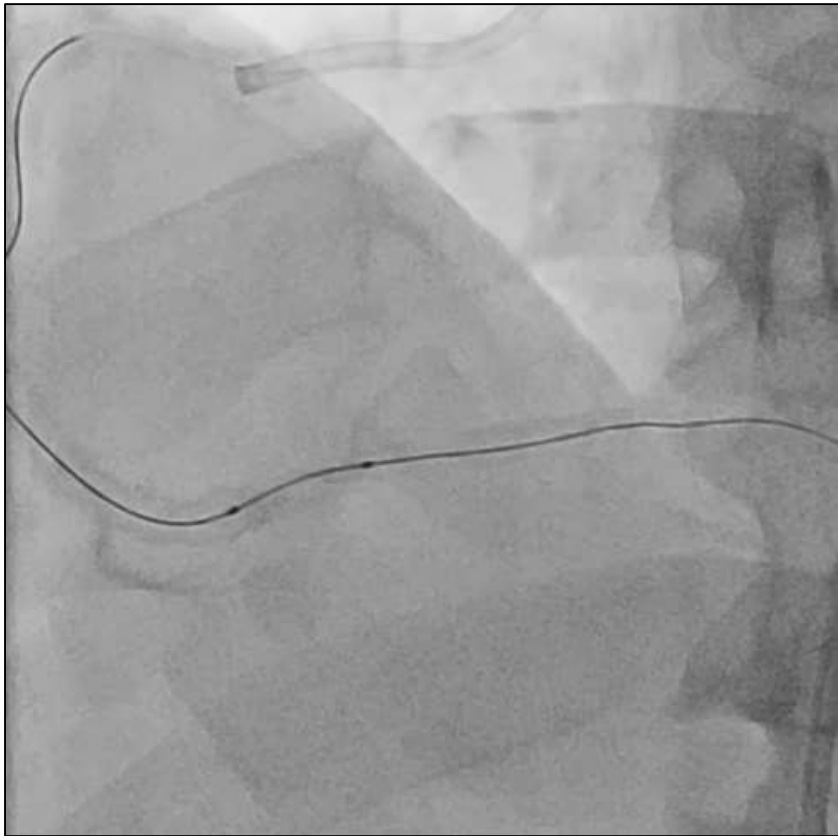


Corsair MC + Gaia 2

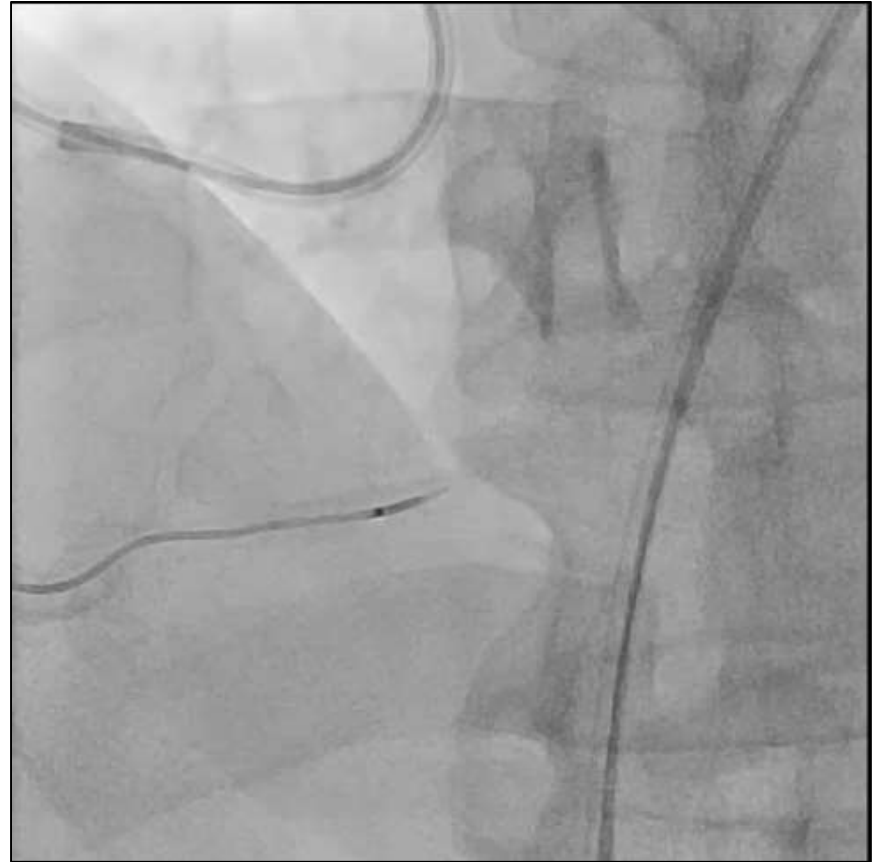


45 min



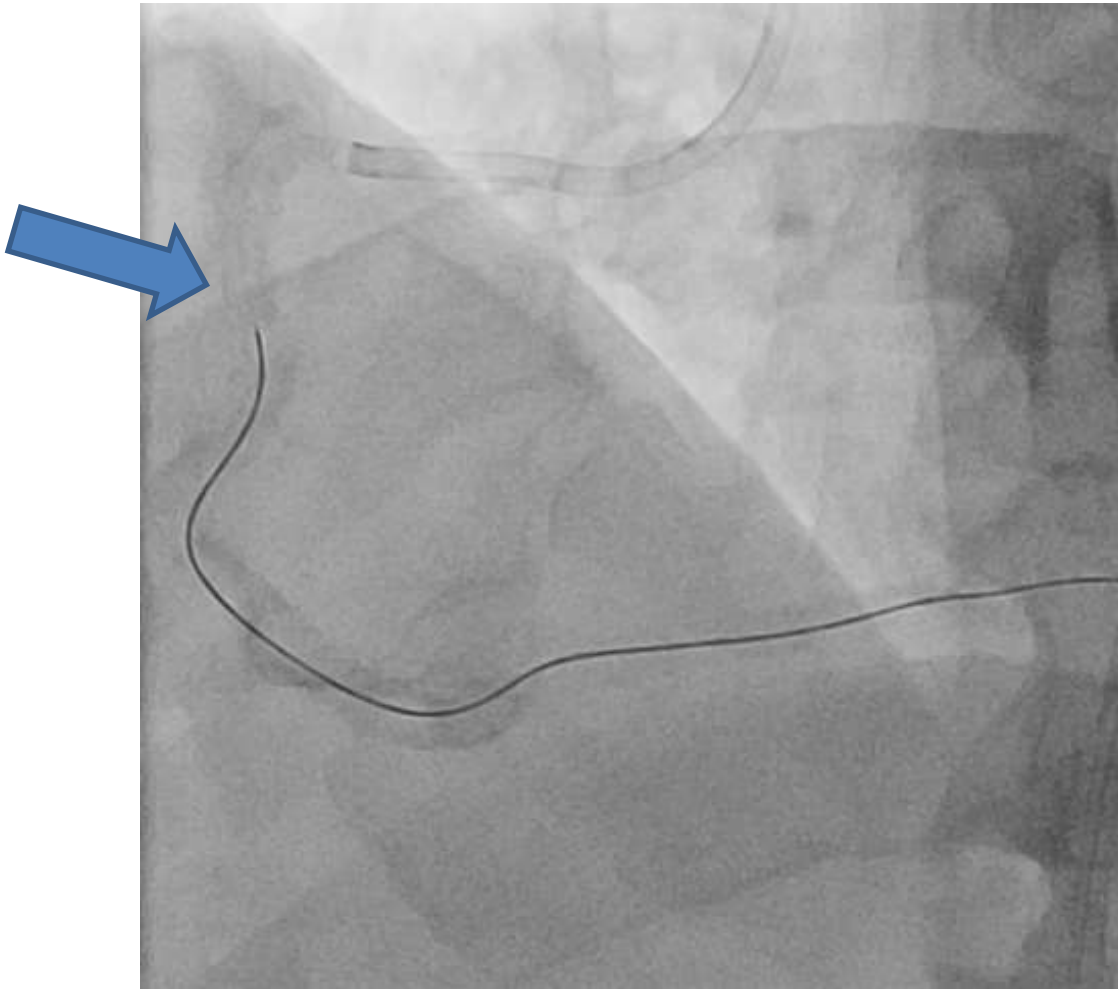


Lacrosse 1.0 (5) 12 atm  
Tazuna 2.0 (15) 16 atm



Exchanged to Sion wire  
55 min

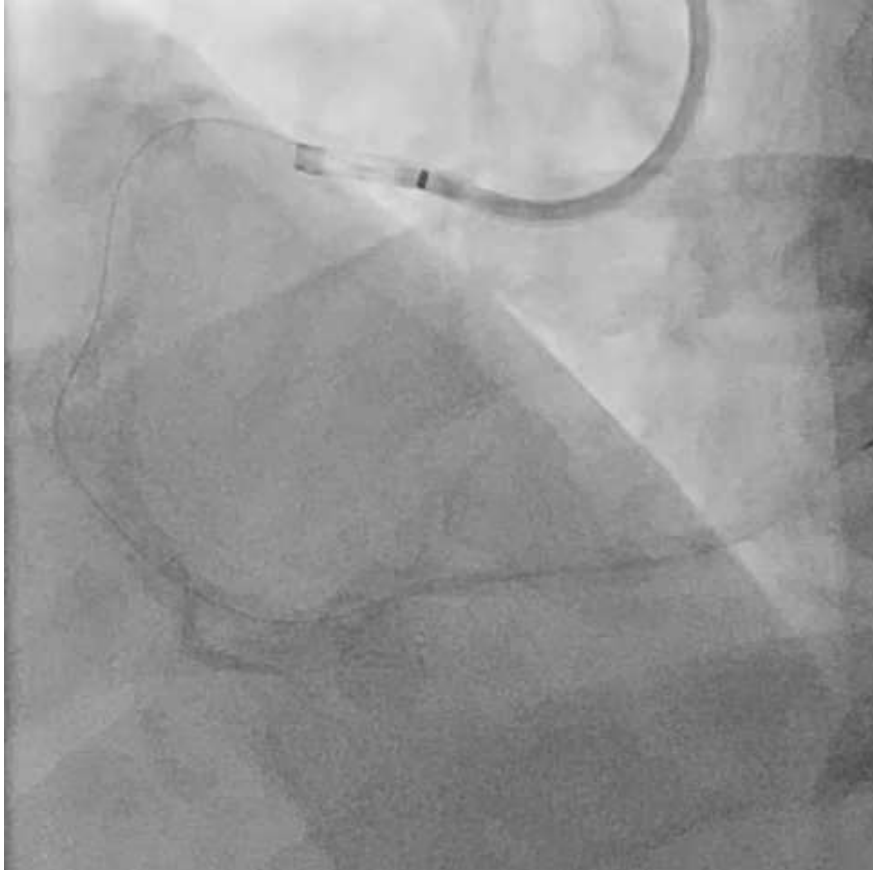
After this time point, no balloon could cross the proximal lesion



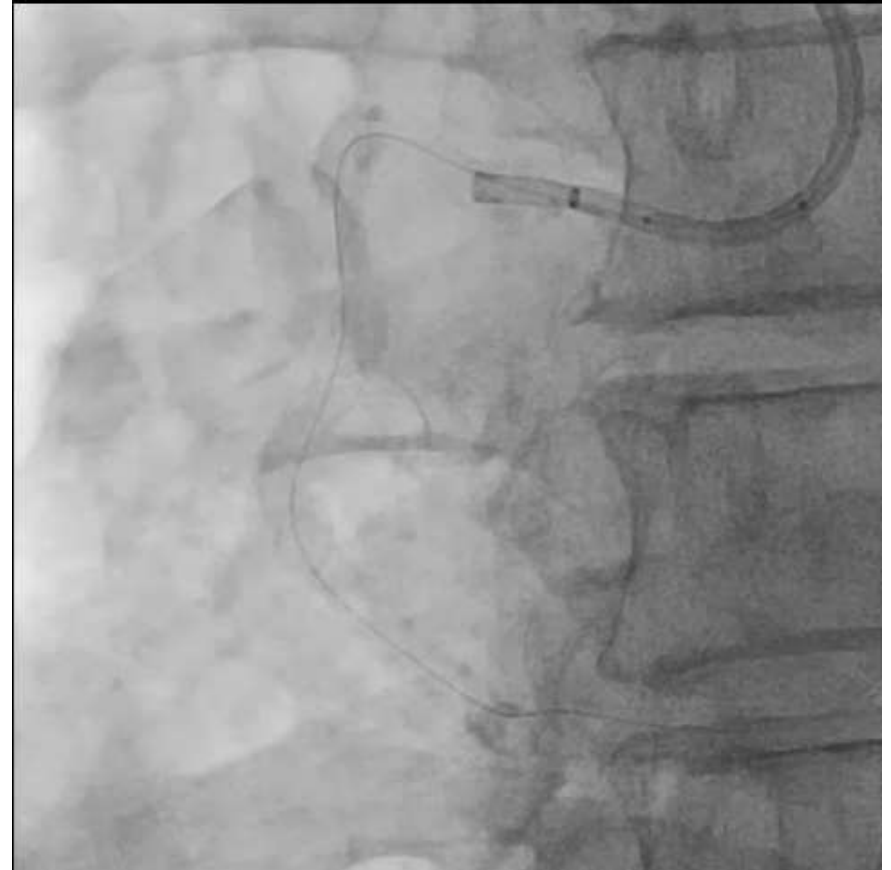
I inserted an extension catheter (Guidezilla 6 Fr) and changed the workhorse wire to BMW powerturn 300cm wire.

But nothing could cross the lesion

LAO

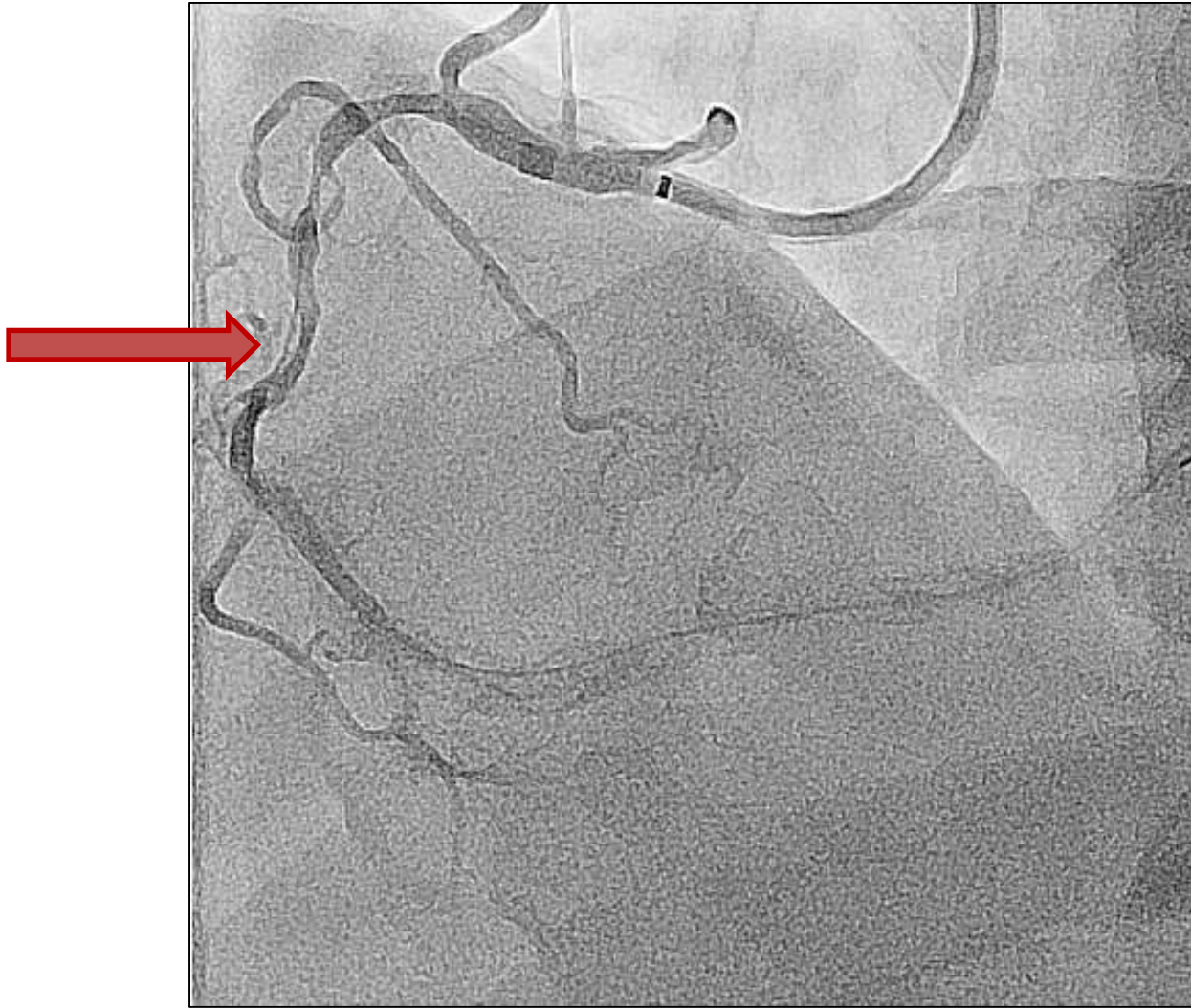


RAO

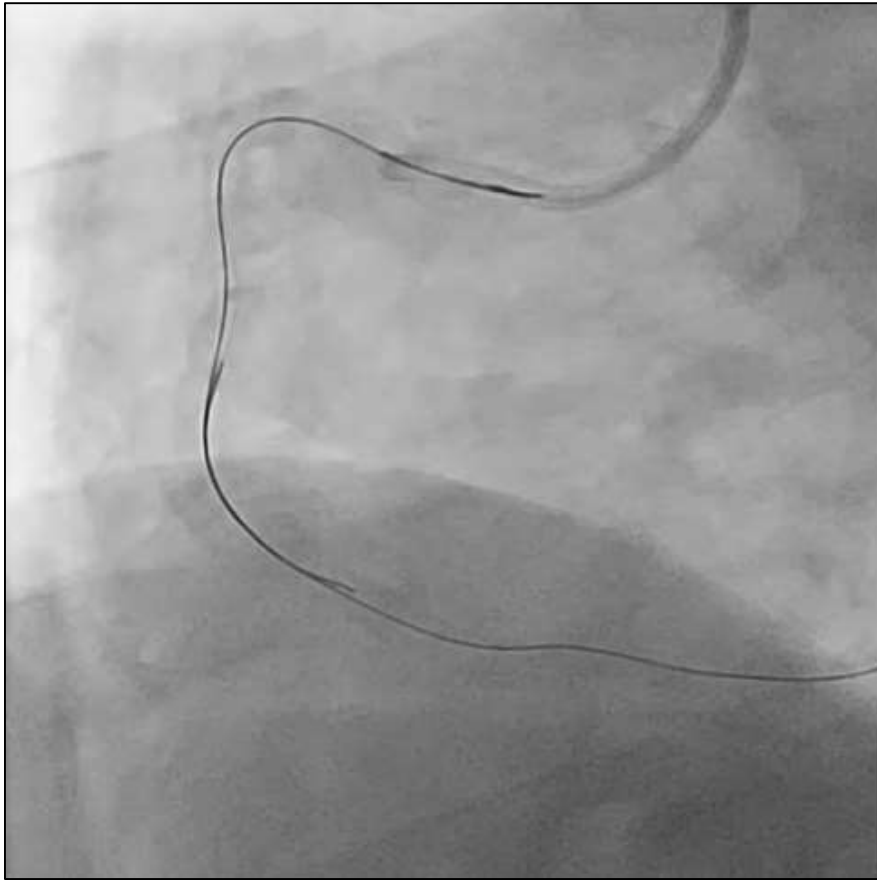


Wire position consistently appears to be outside the contrast- filled lumen.

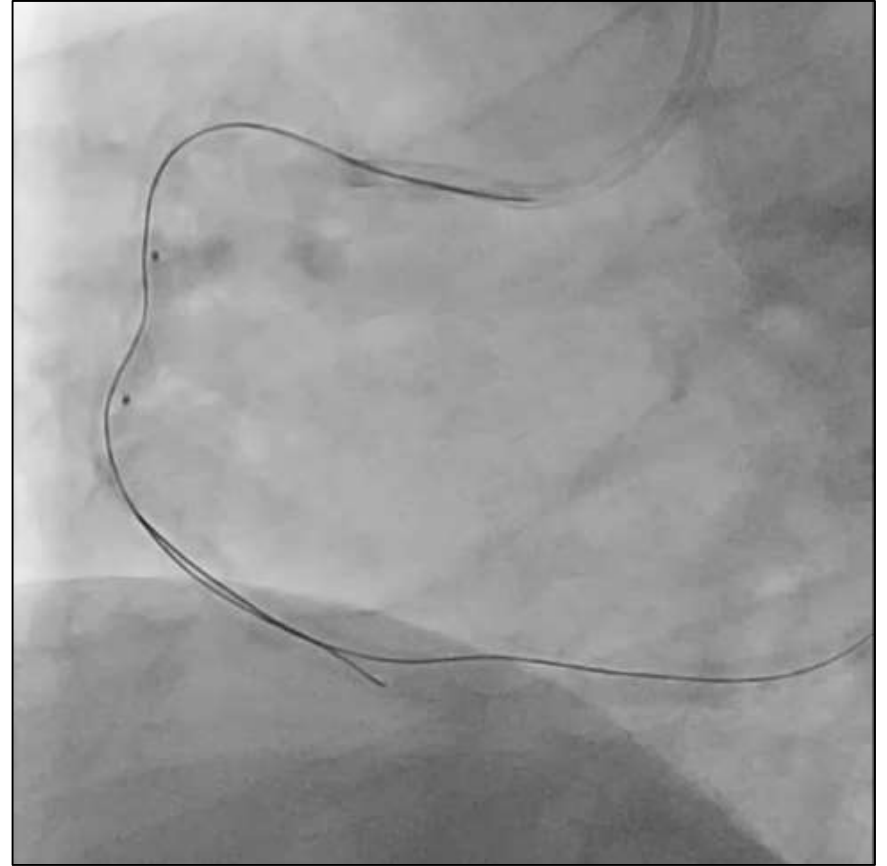
What happened?



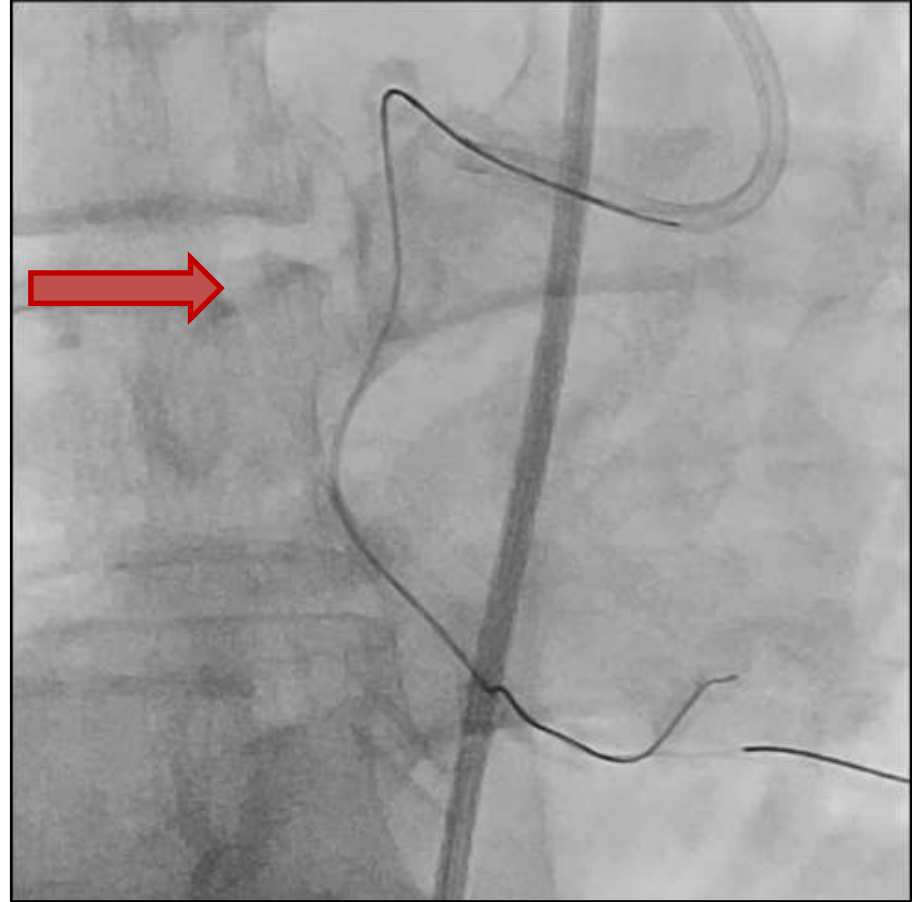
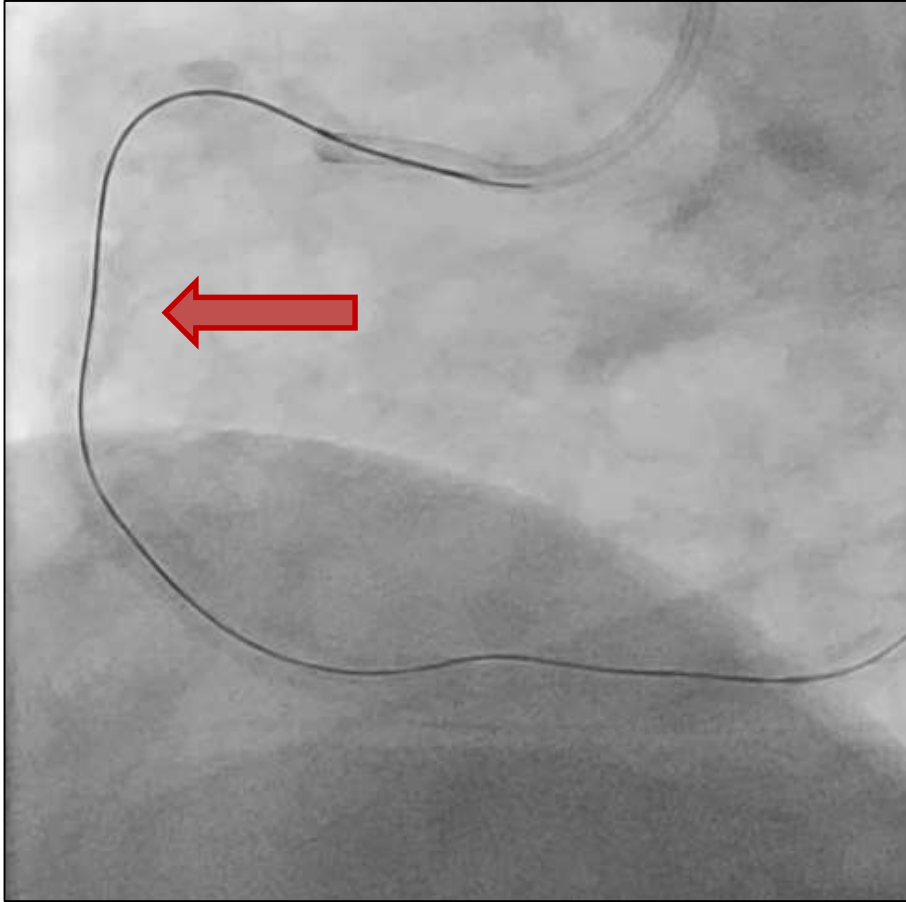
What should I do?



I inserted a Sion wire carefully  
into the contrast-filled lumen

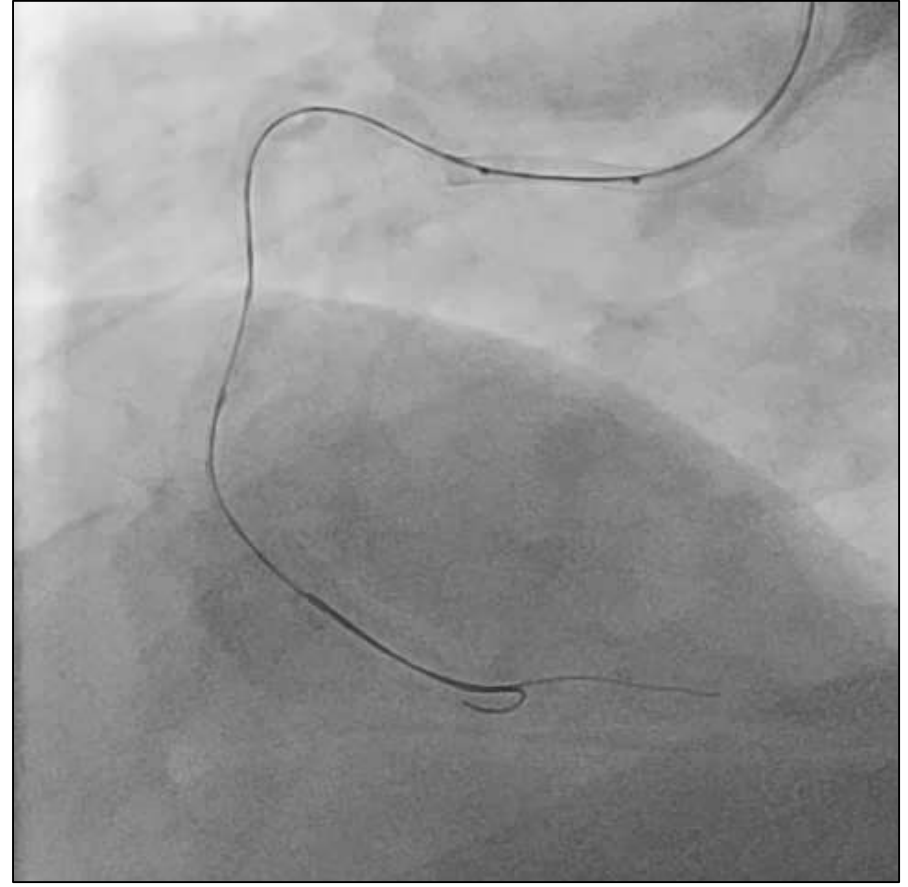
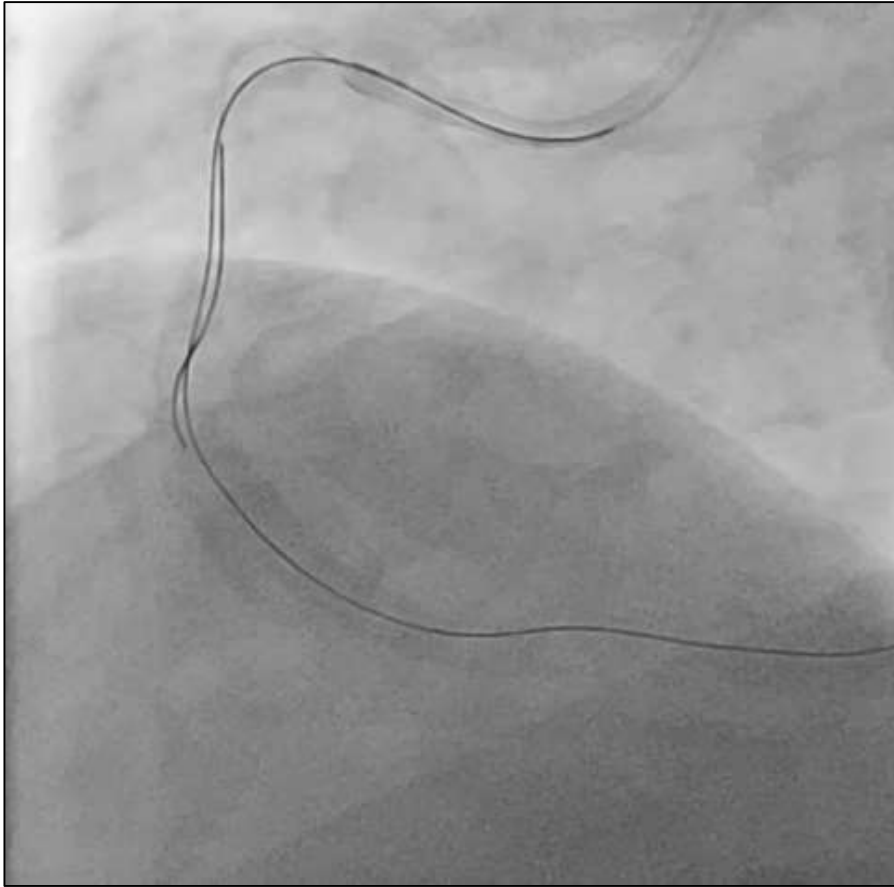


Ballooned the lumen



After removal of the balloon, 2 wires again appears to be in the same position outside the contrast-filled lumen

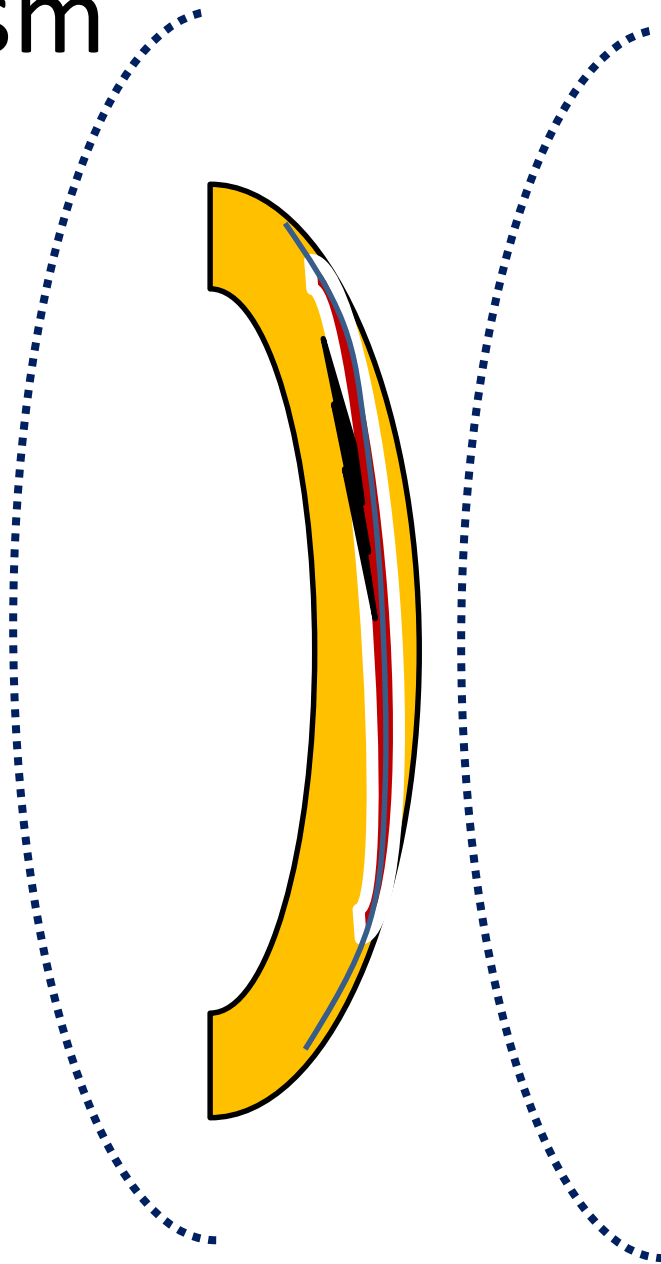
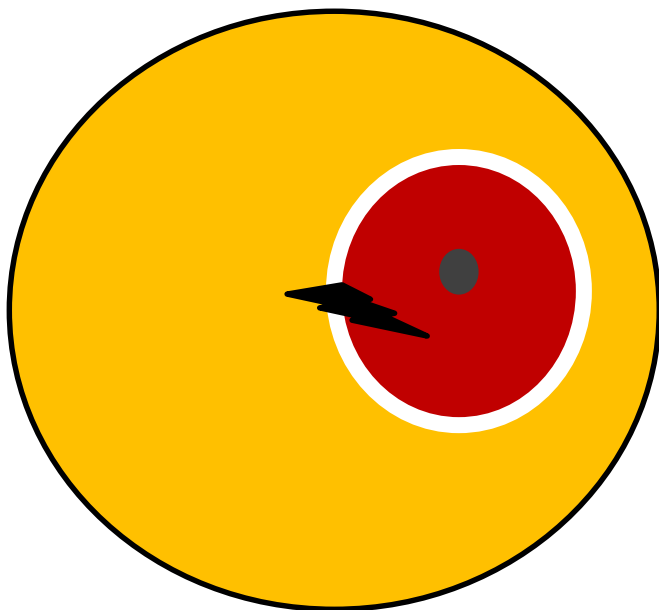
After attempt of balloon (Tazuna 2.0 \*15) pushing,



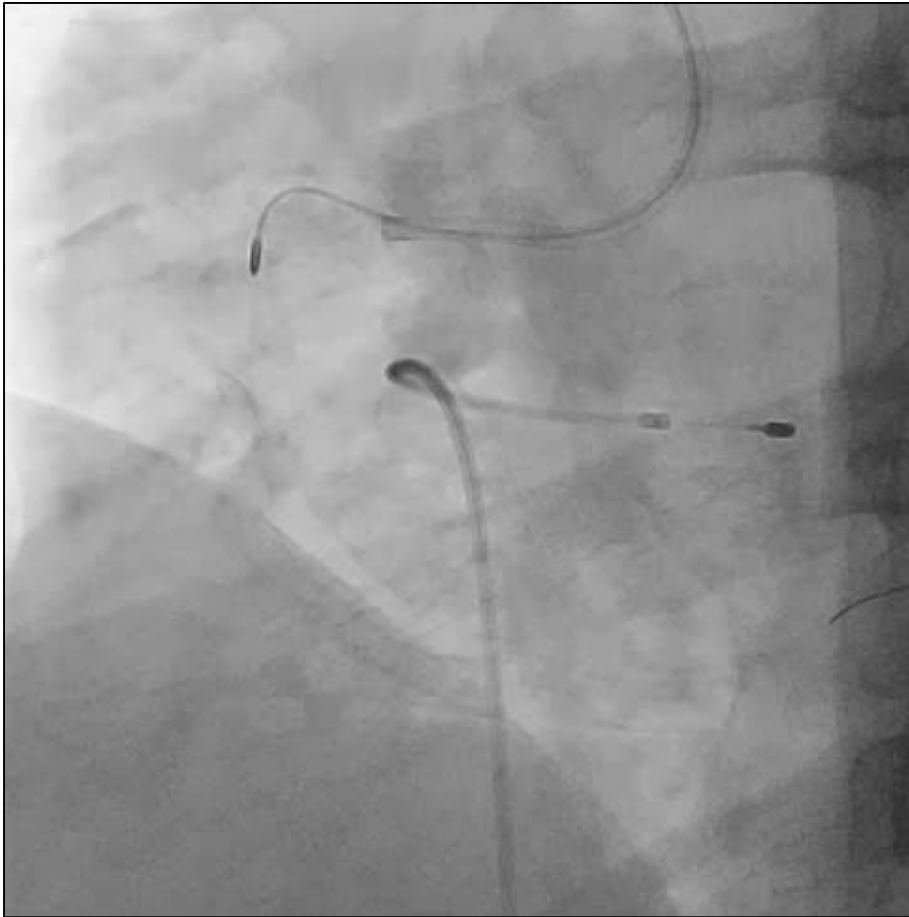
I repeated the process... 84min

# Mechanism

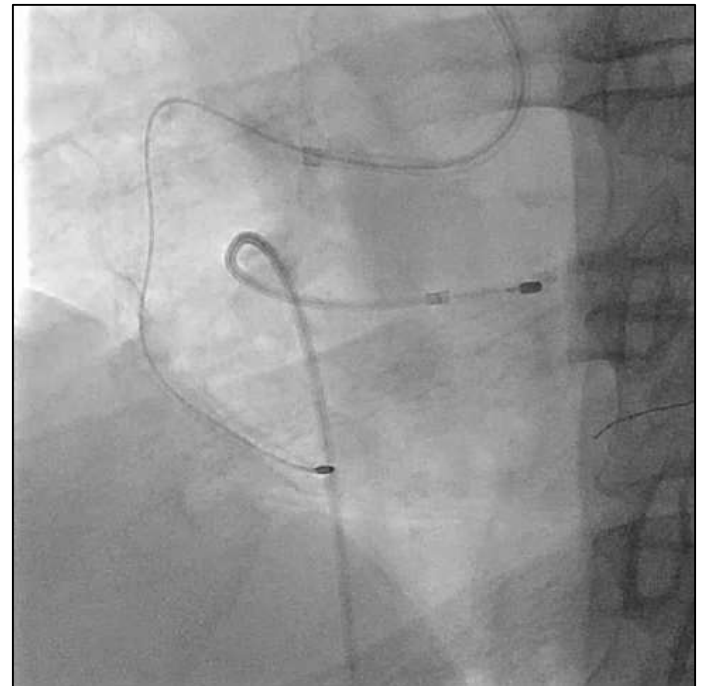
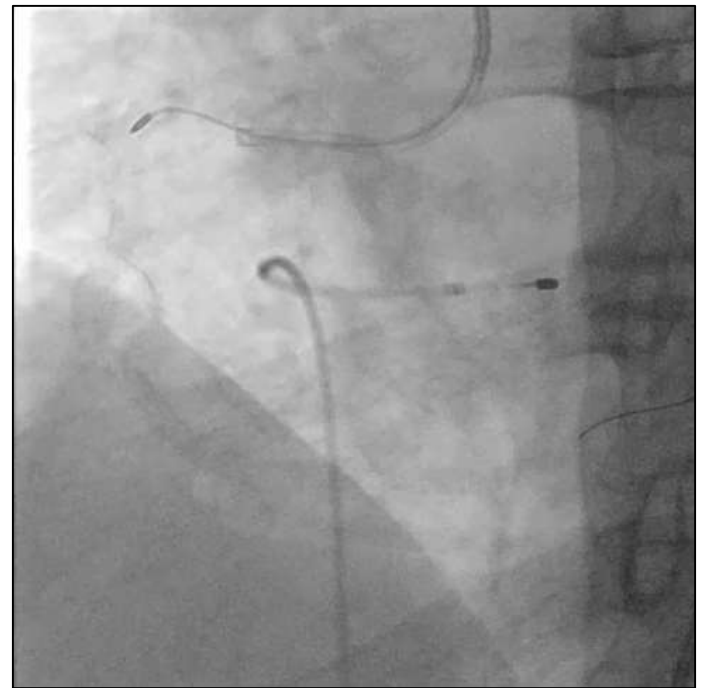
← Greater Curvature (LAO)

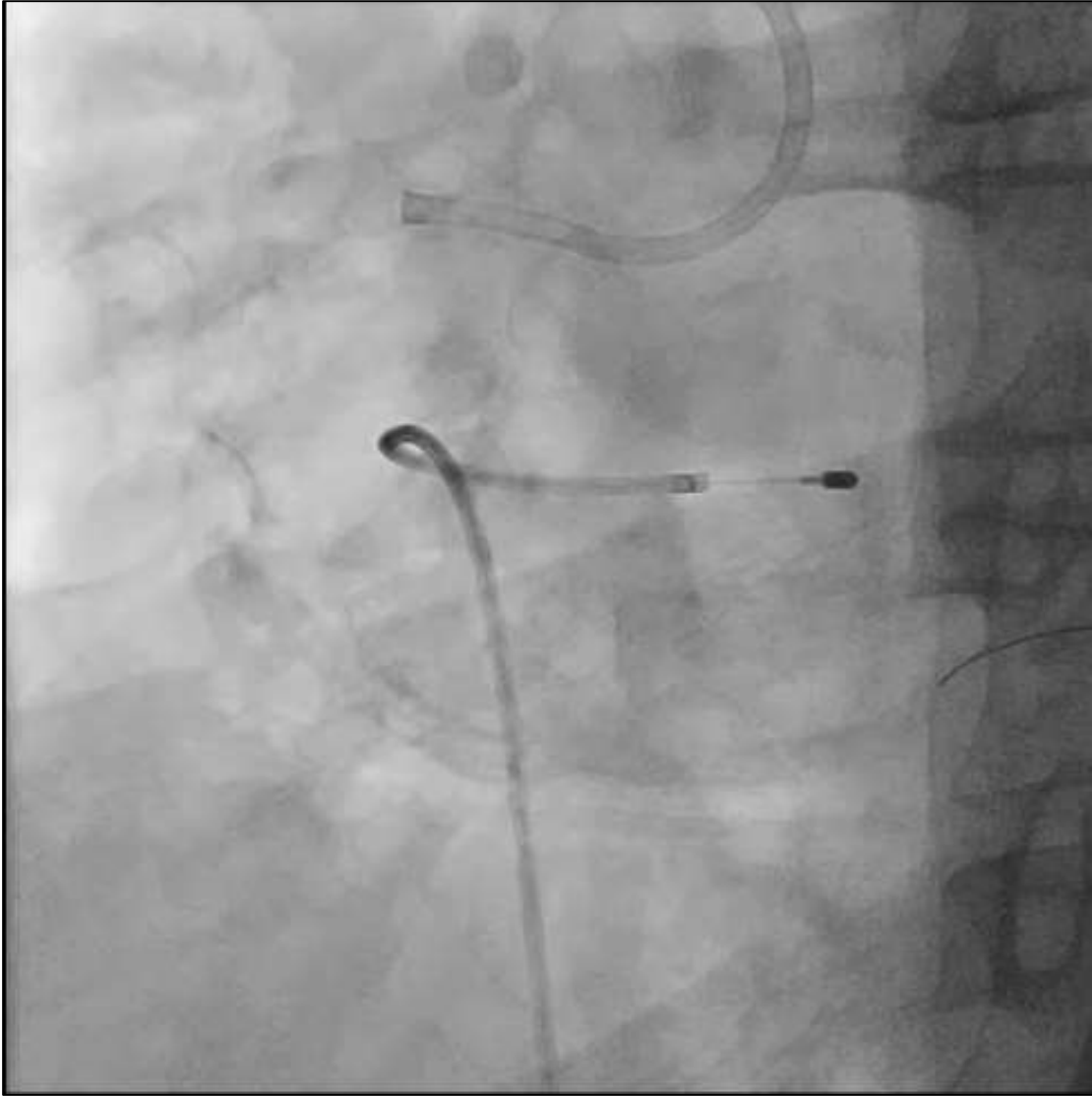




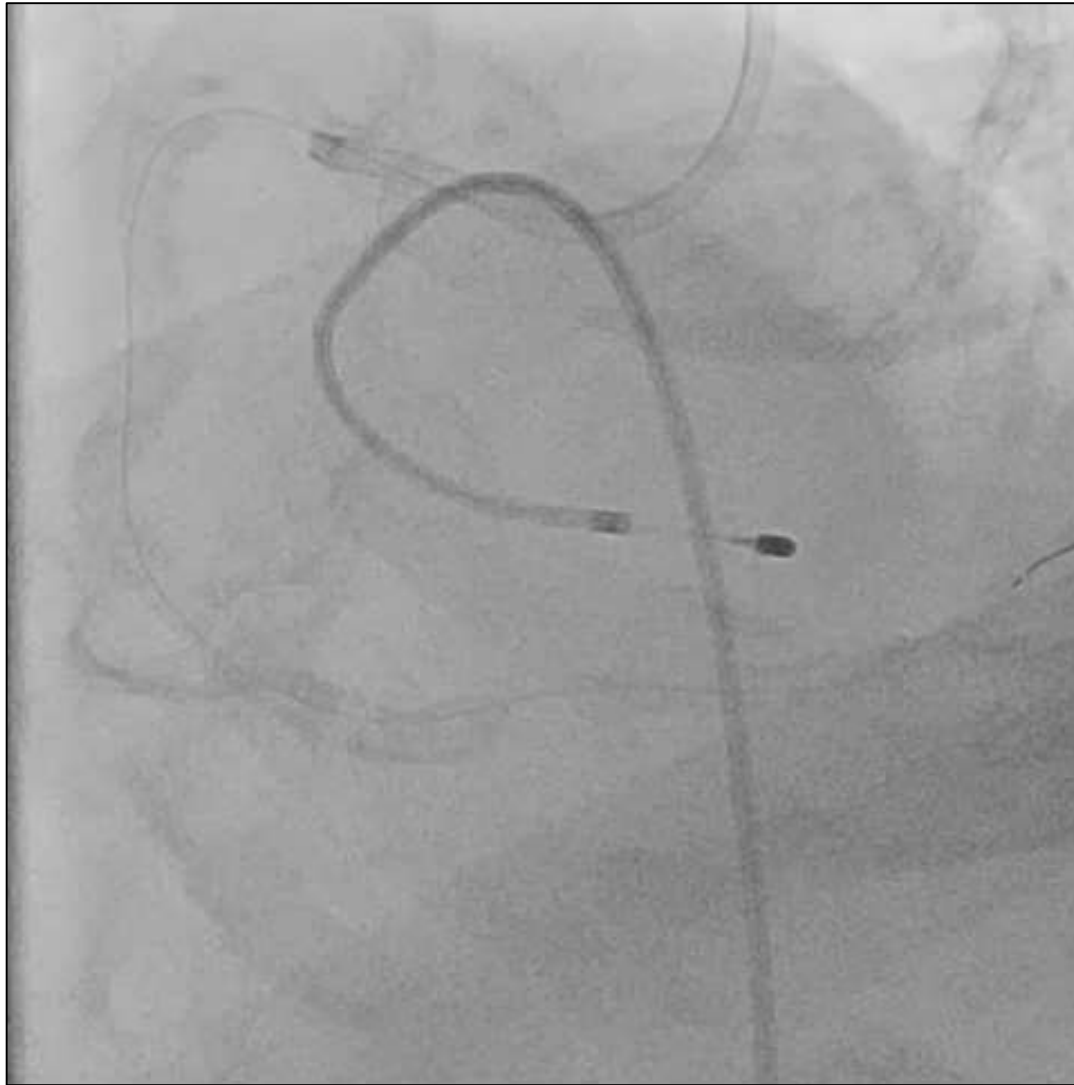


Rotablator 1.25



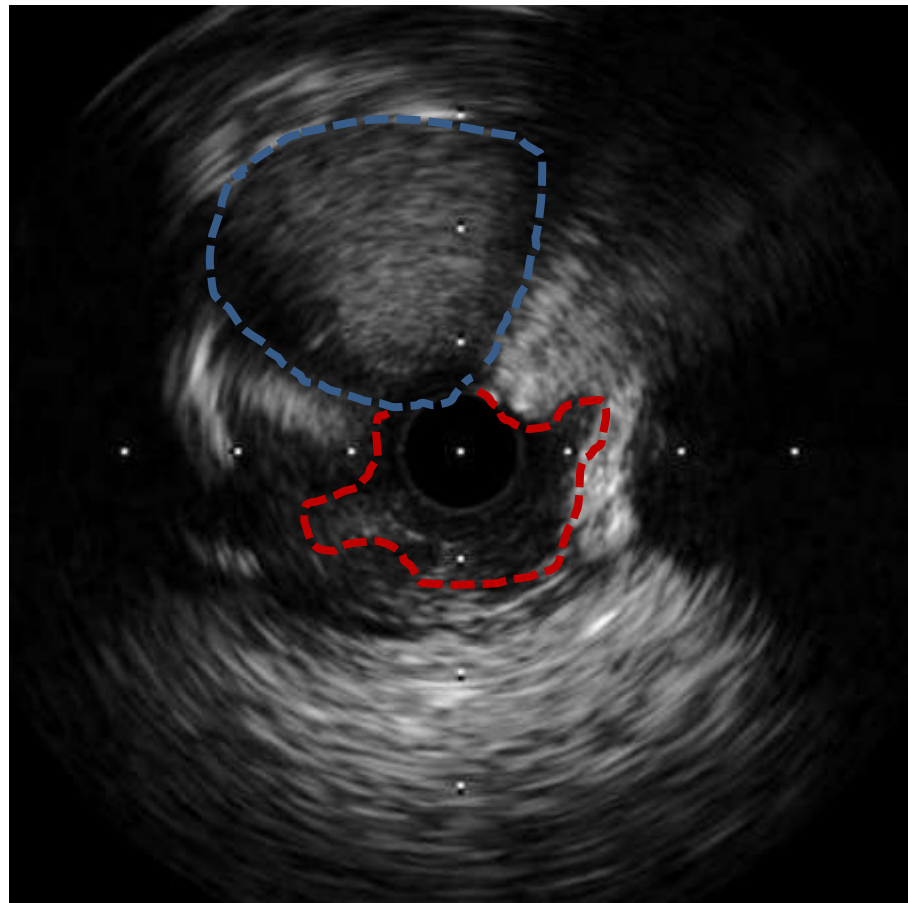
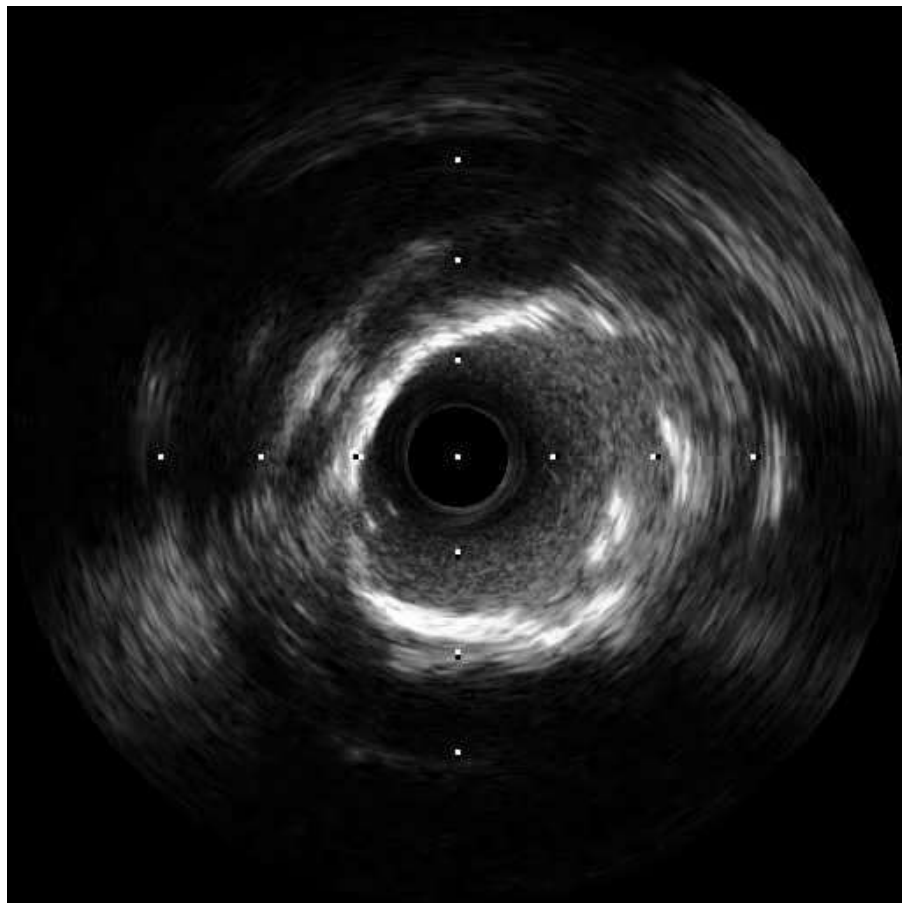


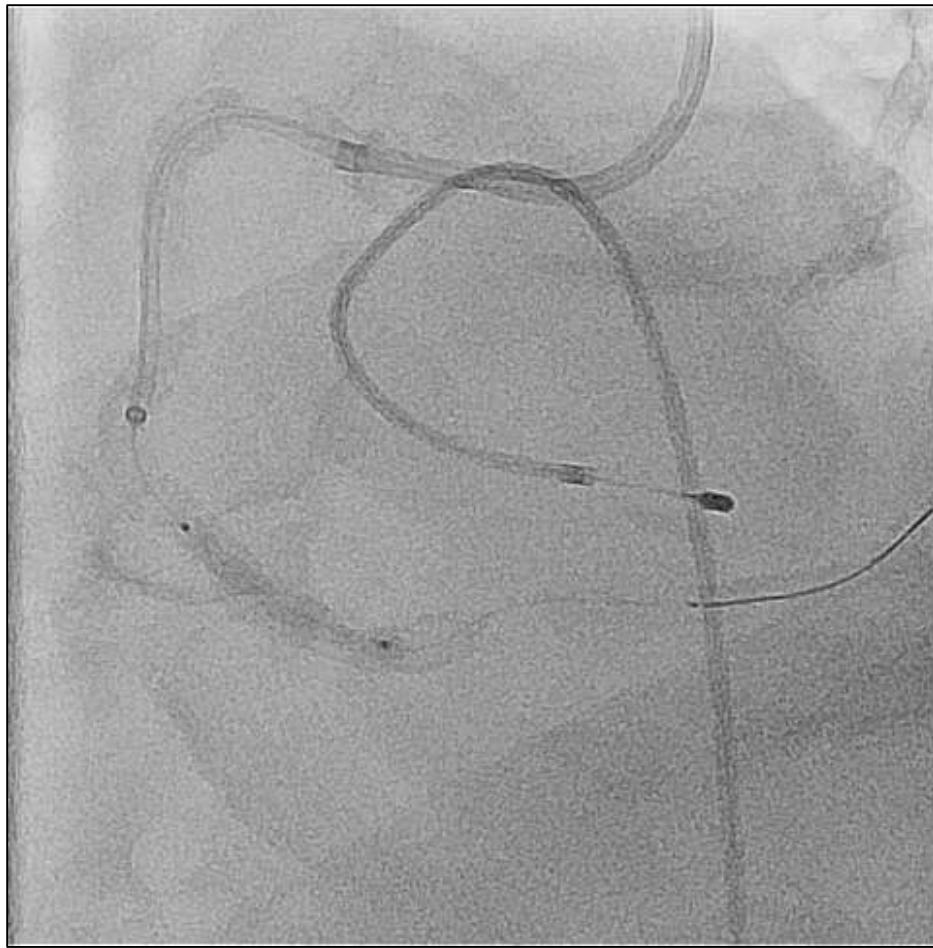
2 track



After further ballooning (upto NC TREK 3.0\*20)

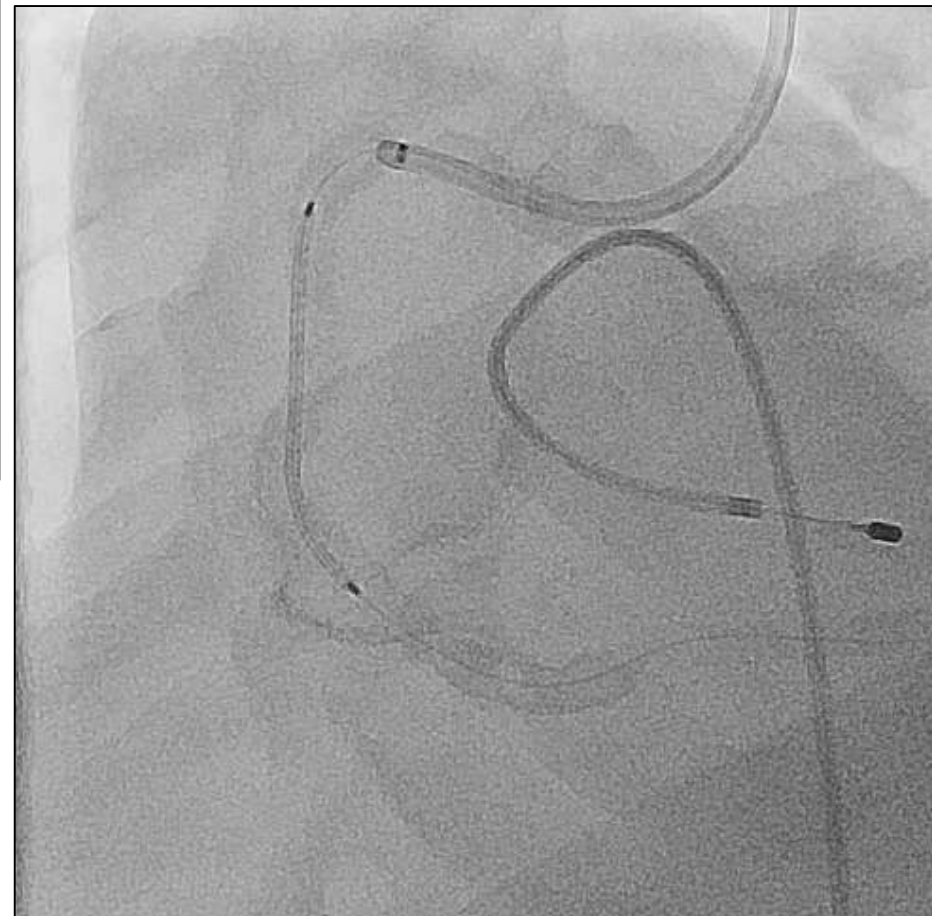
# IVUS

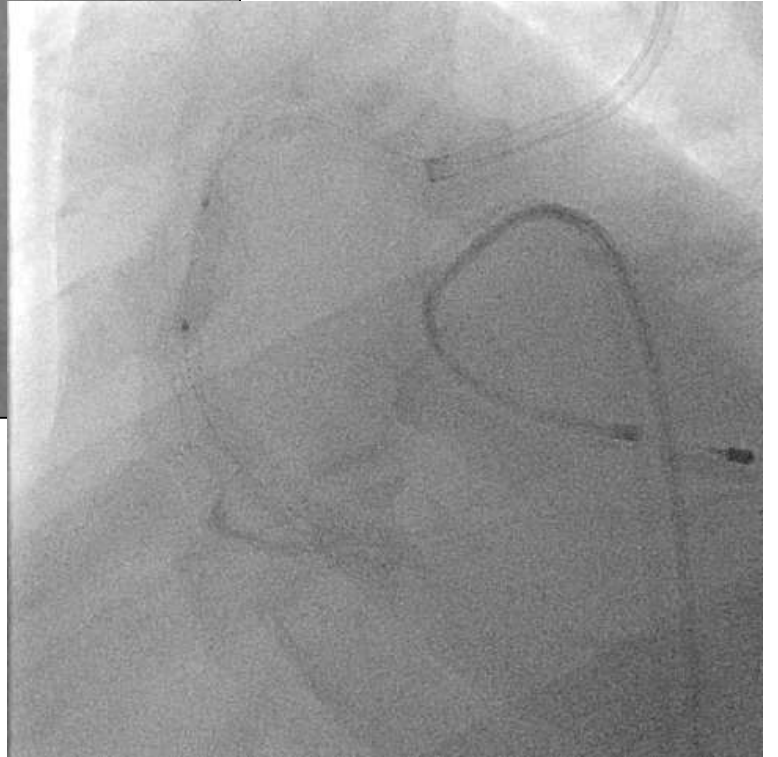
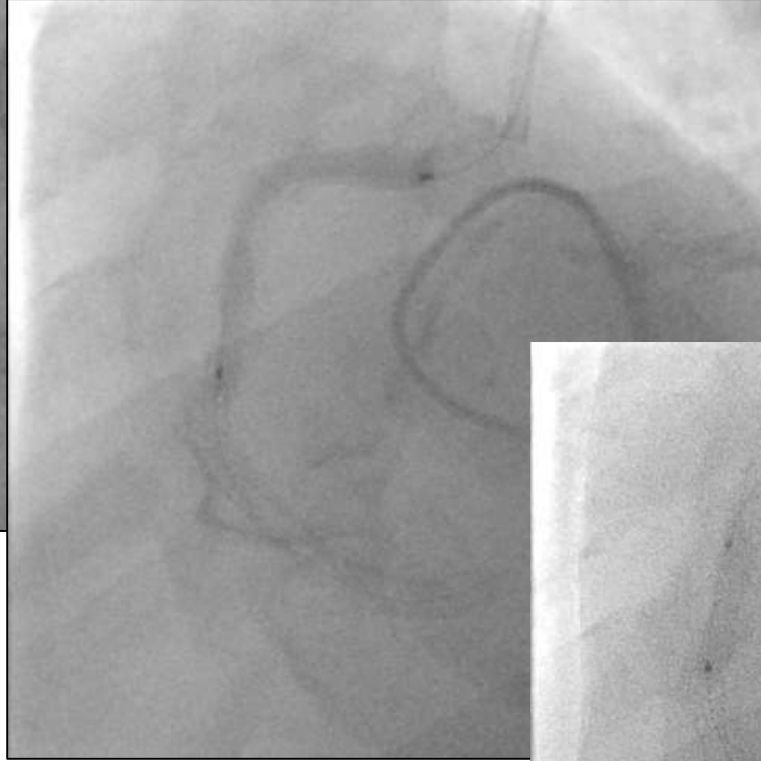




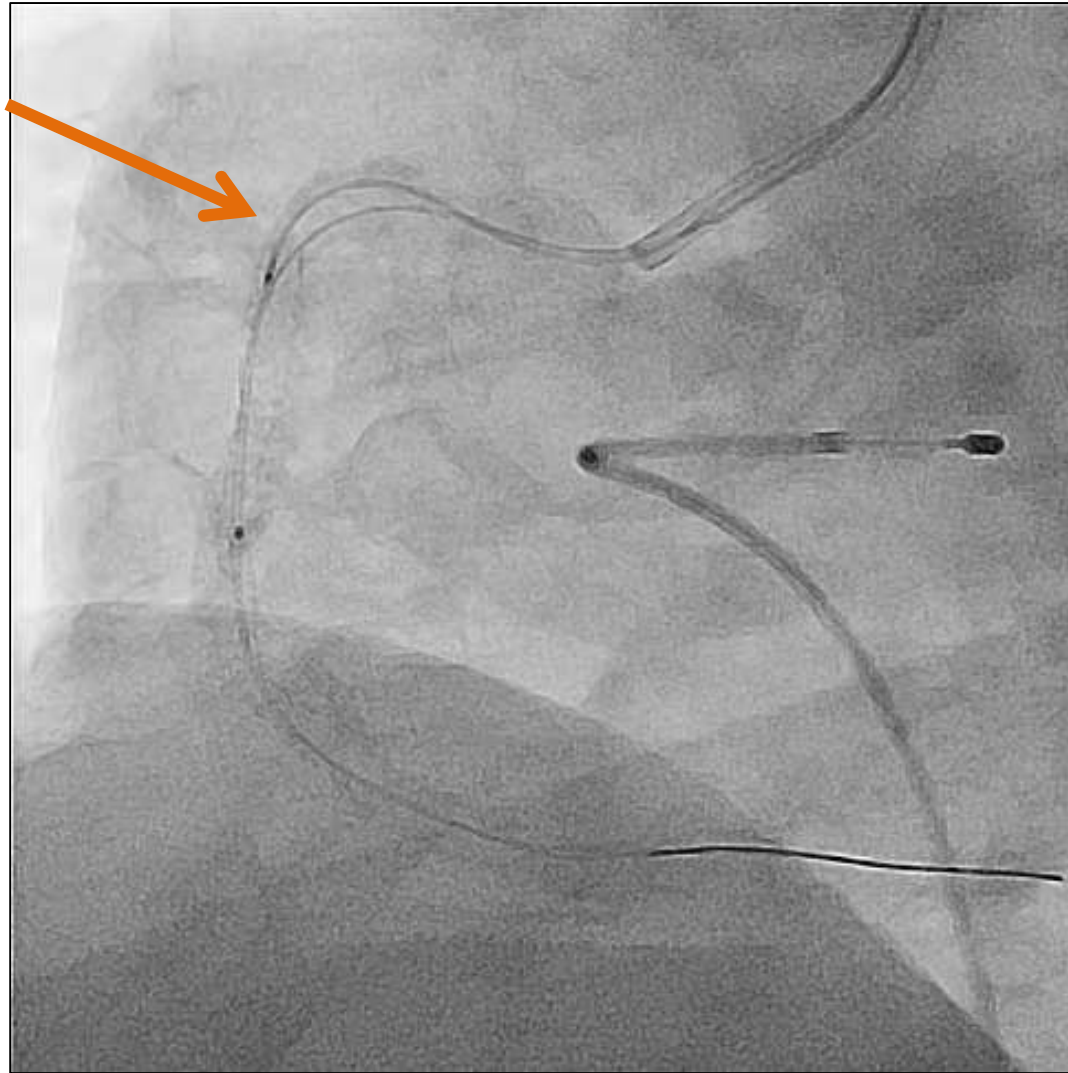
upto NC TREK 3.5\*15

Xience Alpine 4.0(38)

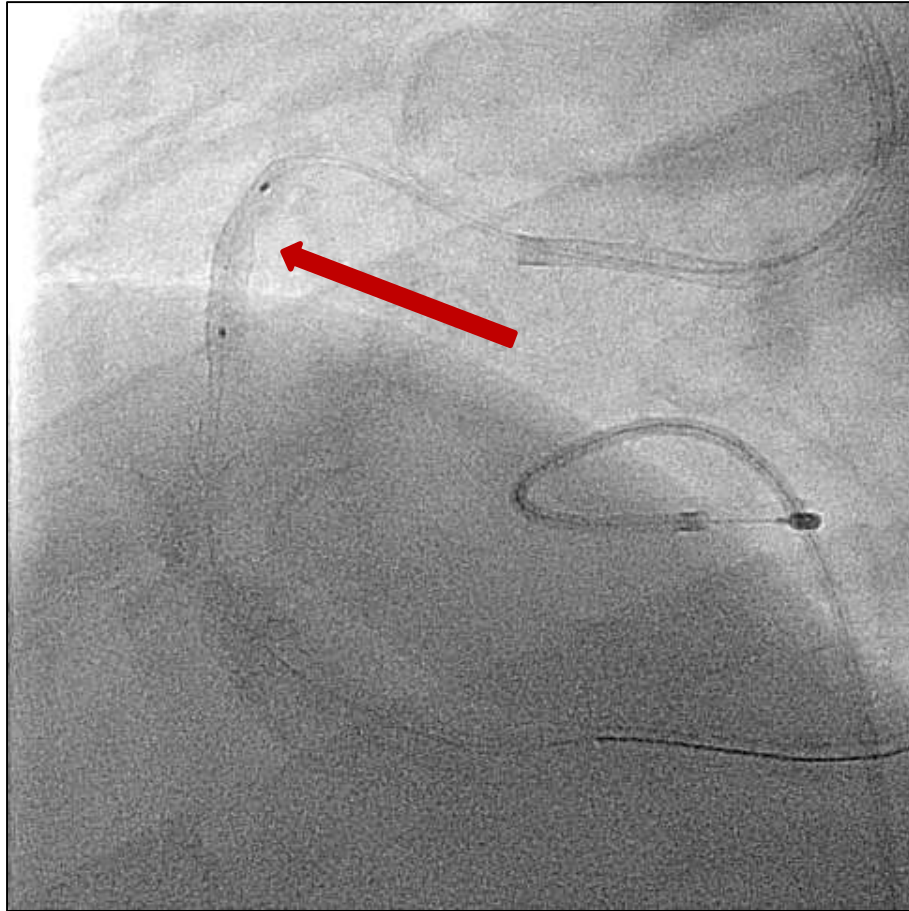




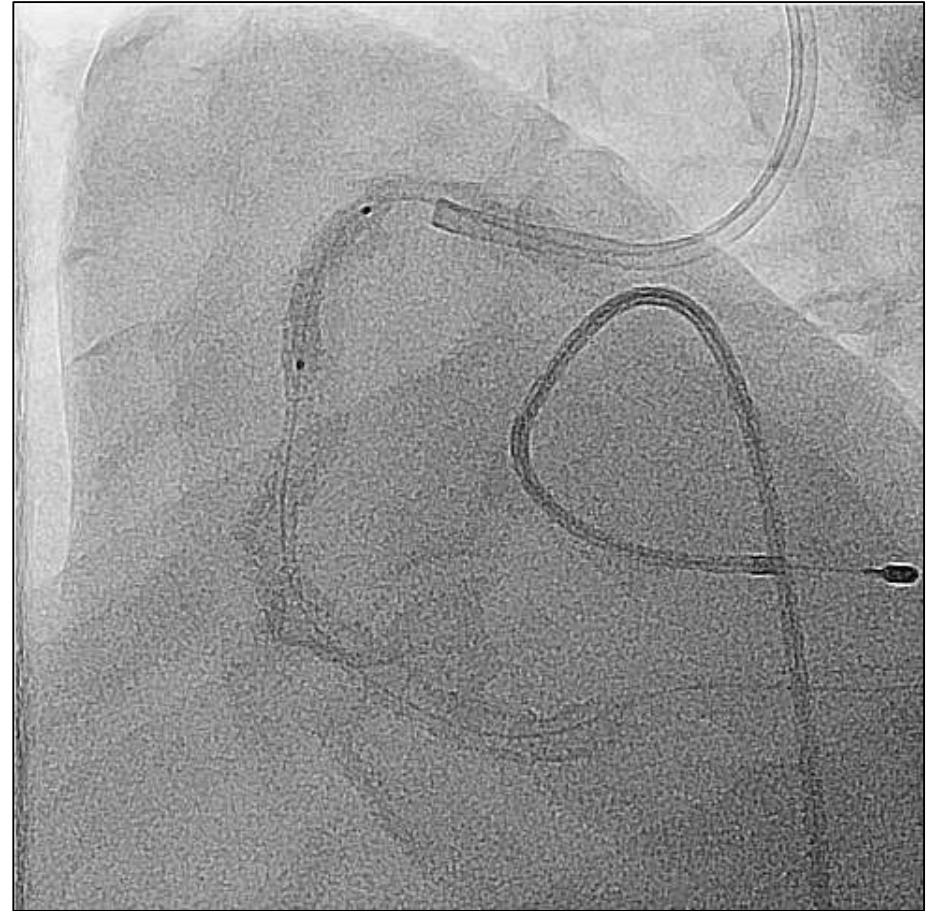
The second stent will never go in...121 min



Calcium, stent edge, angle, friction...

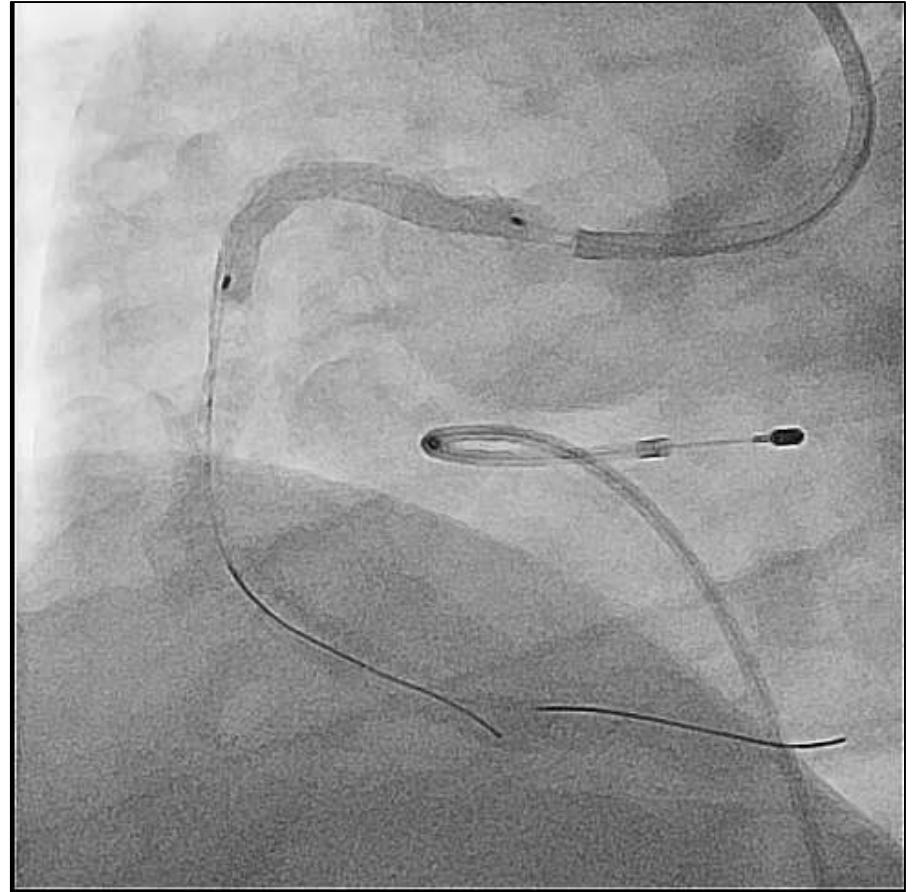
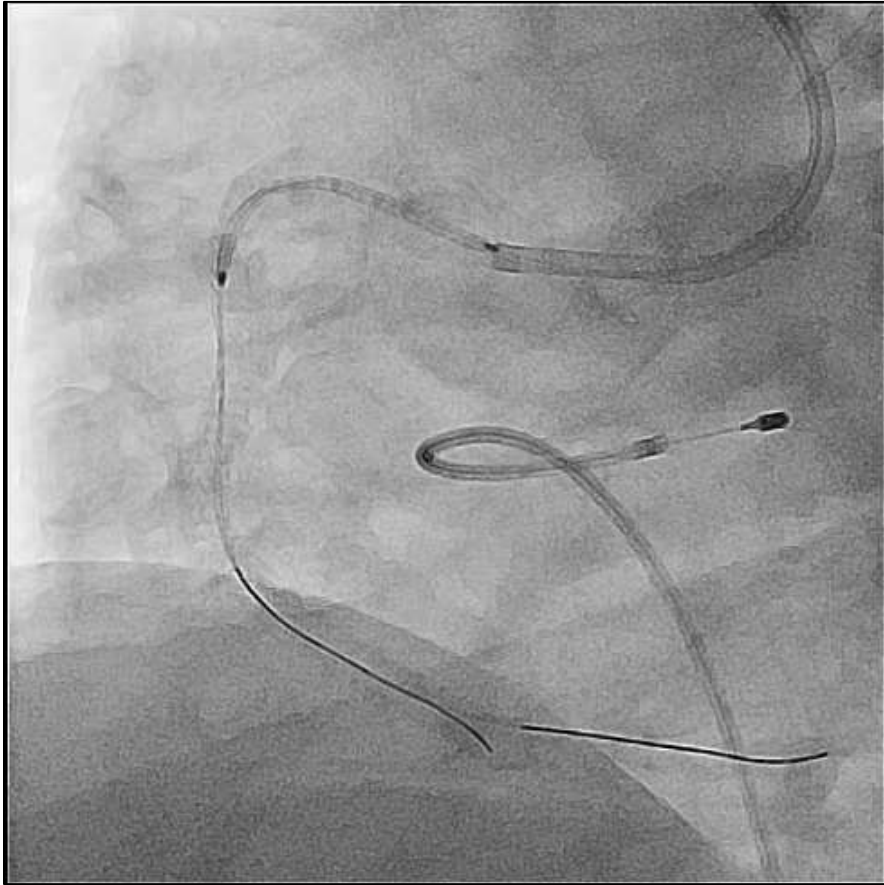


Balloon could hardly pass

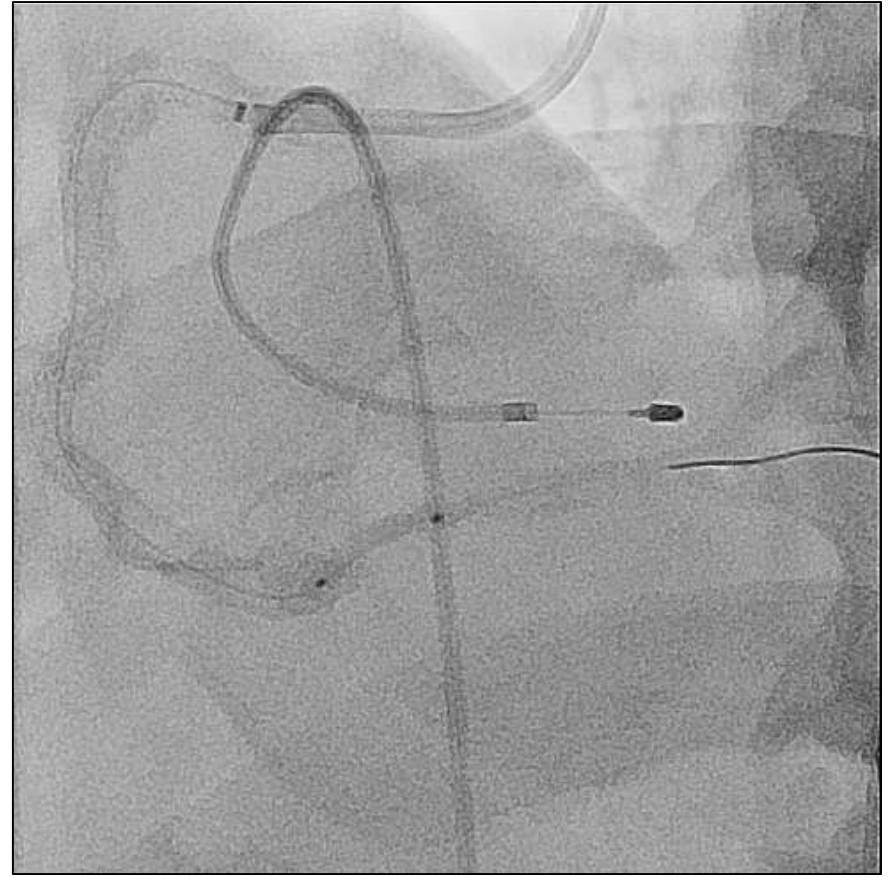
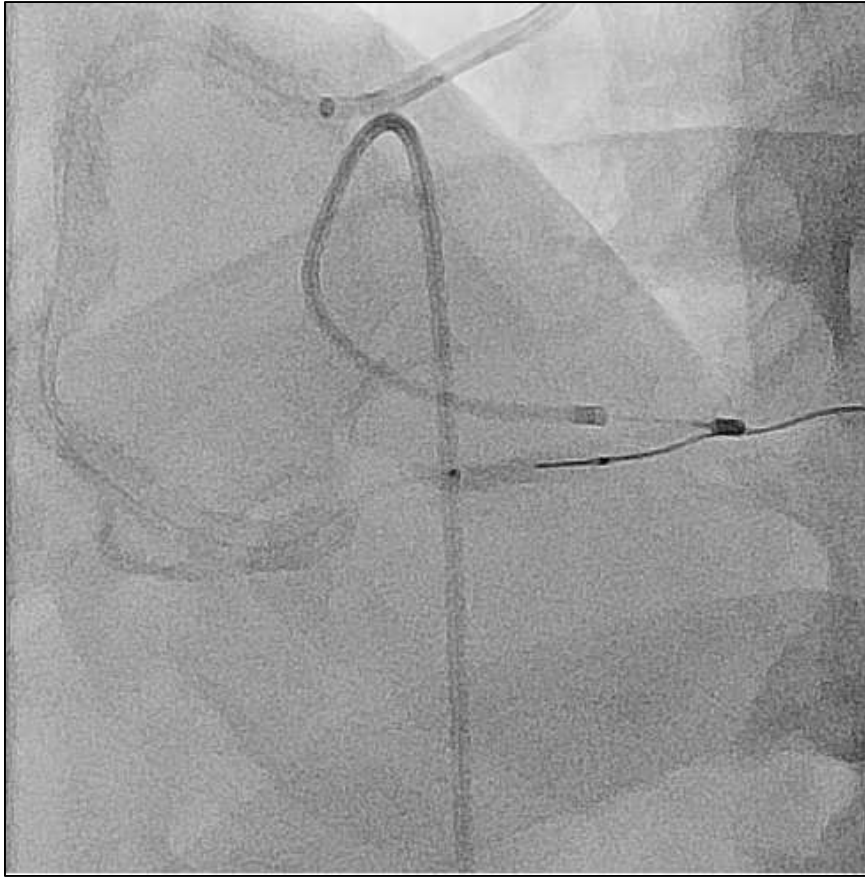


Sapphire NC 4.0 (15)





Xience Alpine 4.0 (33)



POBA for distal; Tazuna 2.5 (15)



214 min

# Lessons

1. Wire repositioning toward greater curvature of pRCA through calcium crack seemed to be the mechanism of difficult device delivery.
2. ROTA without hesitation may have more simplified my procedure (after having confidence in the mechanism of the finding).
3. Deliverability (lower profile) may be a more important characteristic for DES selection.