

A Challenging Case Report: Management of Wire Crossable, Device Uncrossable Heavily Calcified RCA lesions

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Disclosure

- I do not have any potential conflicts of interest

Case presentation

83 yr M with crescendo angina

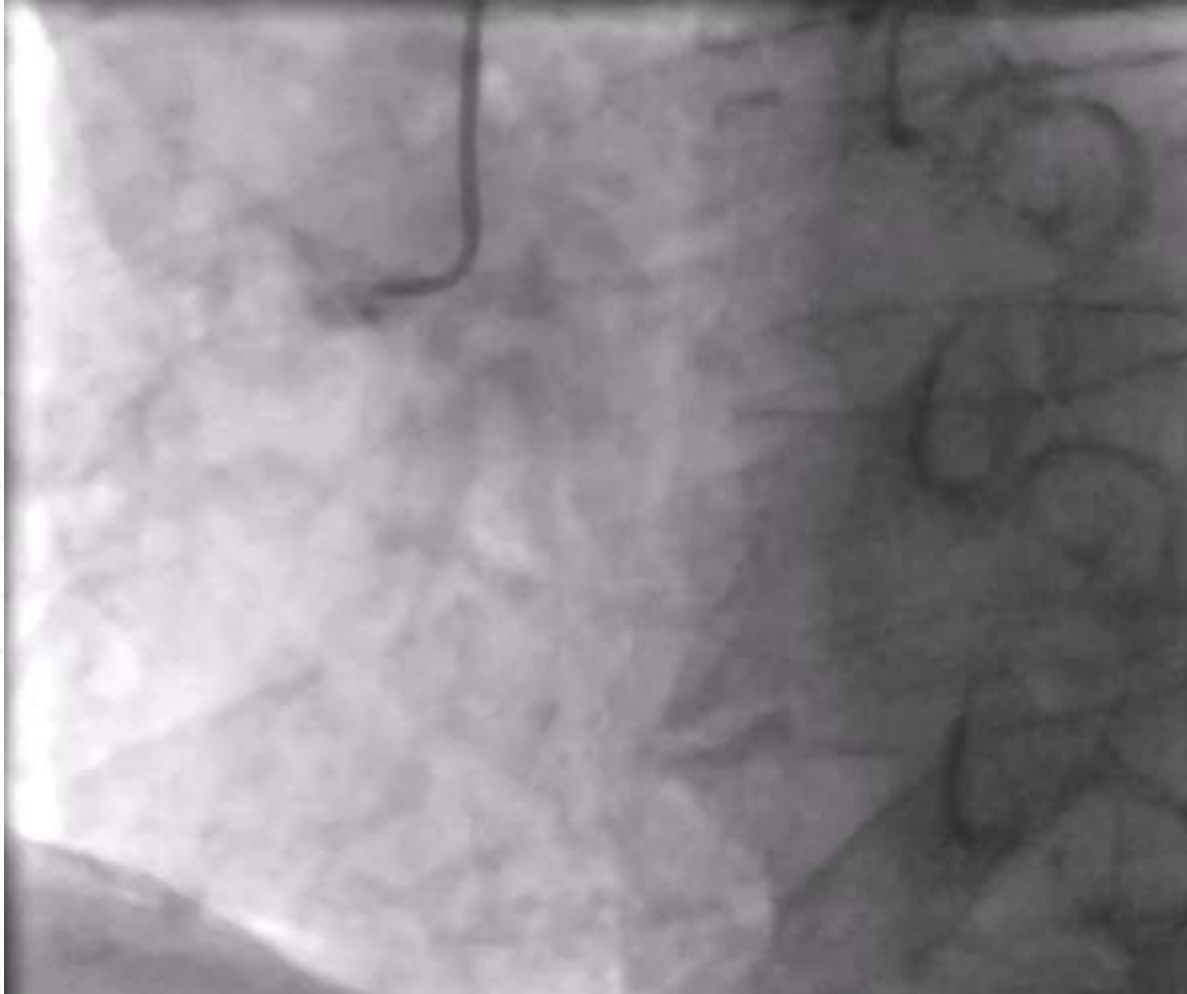
Background

- HFpEF – admission in 2021 with decompensated CCF
- COPD – ex-smoker quit 25 yrs ago, 55 pack year history
- Atrial fibrillation on NOAC
- Hypertension
- Hypothyroidism
- Moderate MR

LCA



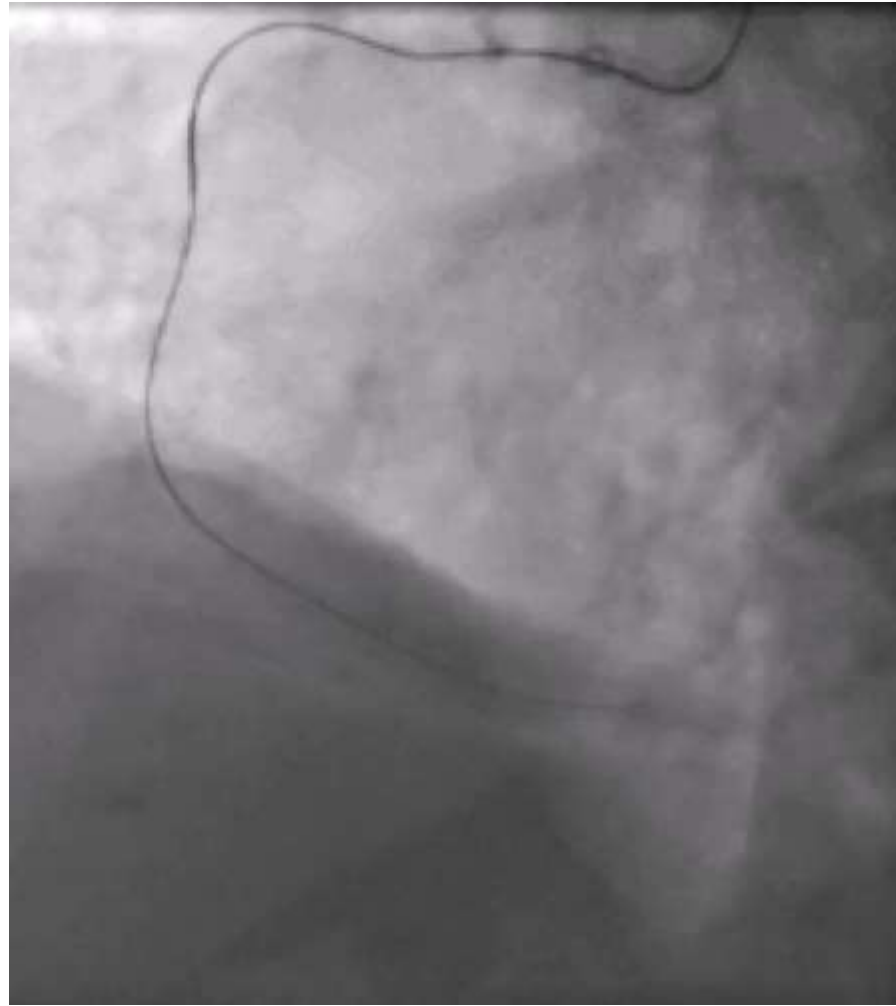
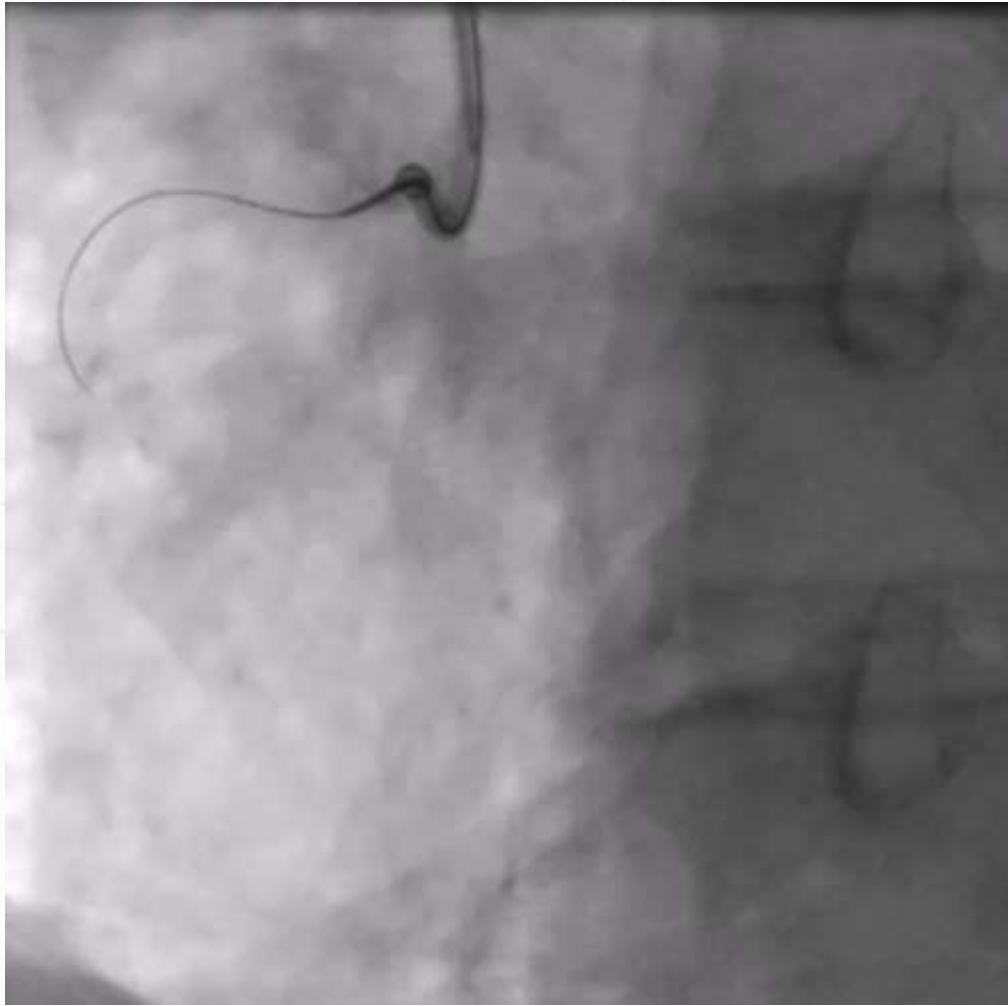
RCA





**Attempted PCI
by another
operator**

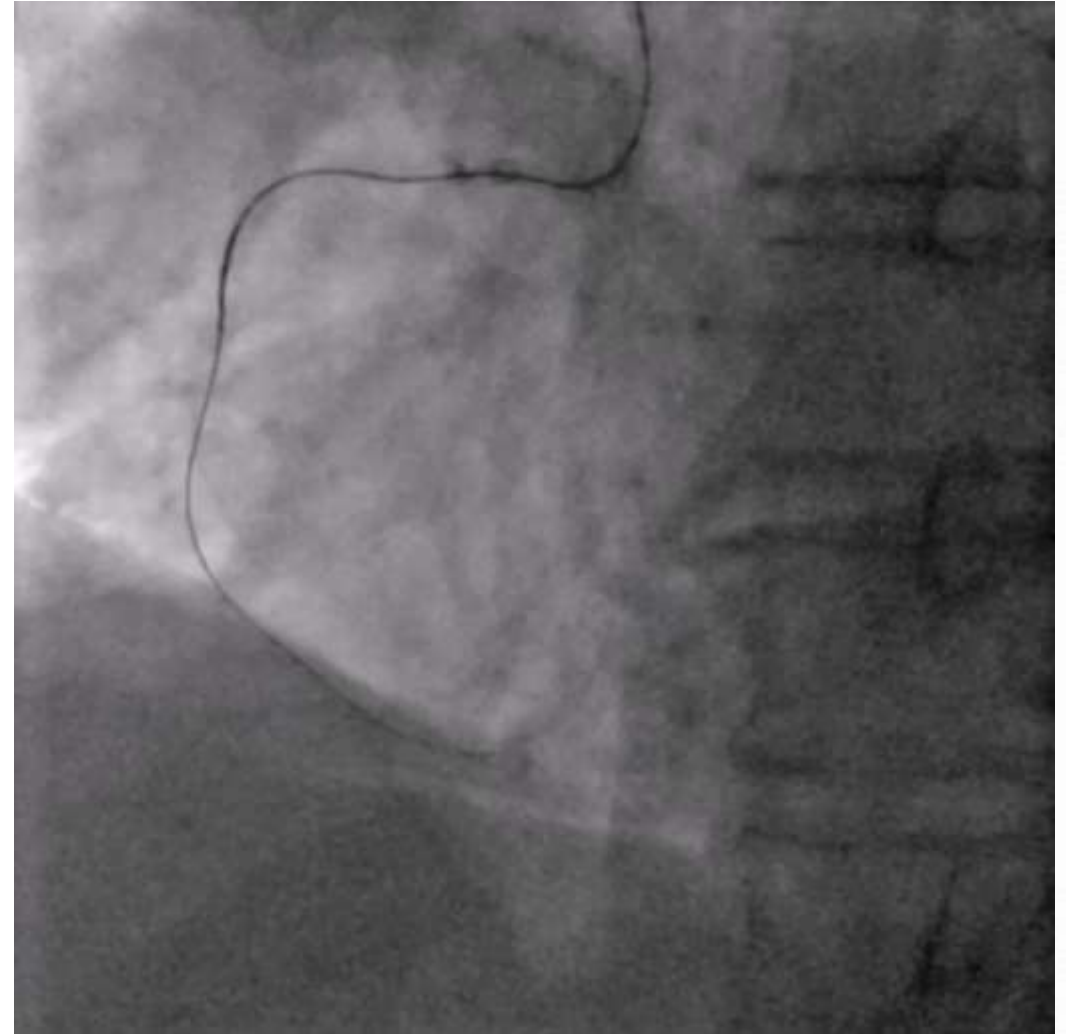
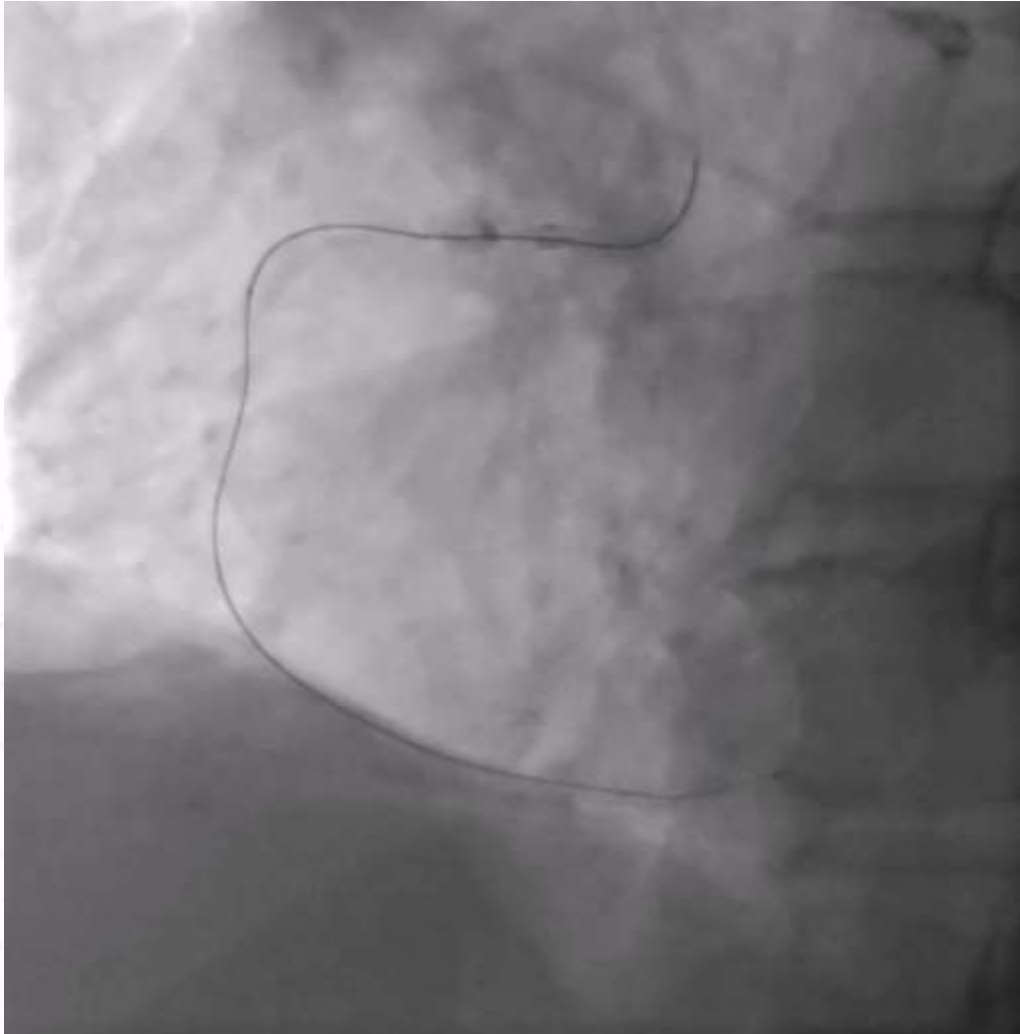
**Referred to our
complex PCI
program**



- 7Fr AL .75
- Turnpike LP
- Fielder XTR
- Gaia second
- Fielder XT-A
- Hornet
- Fielder XT-A
- Fielder XTR

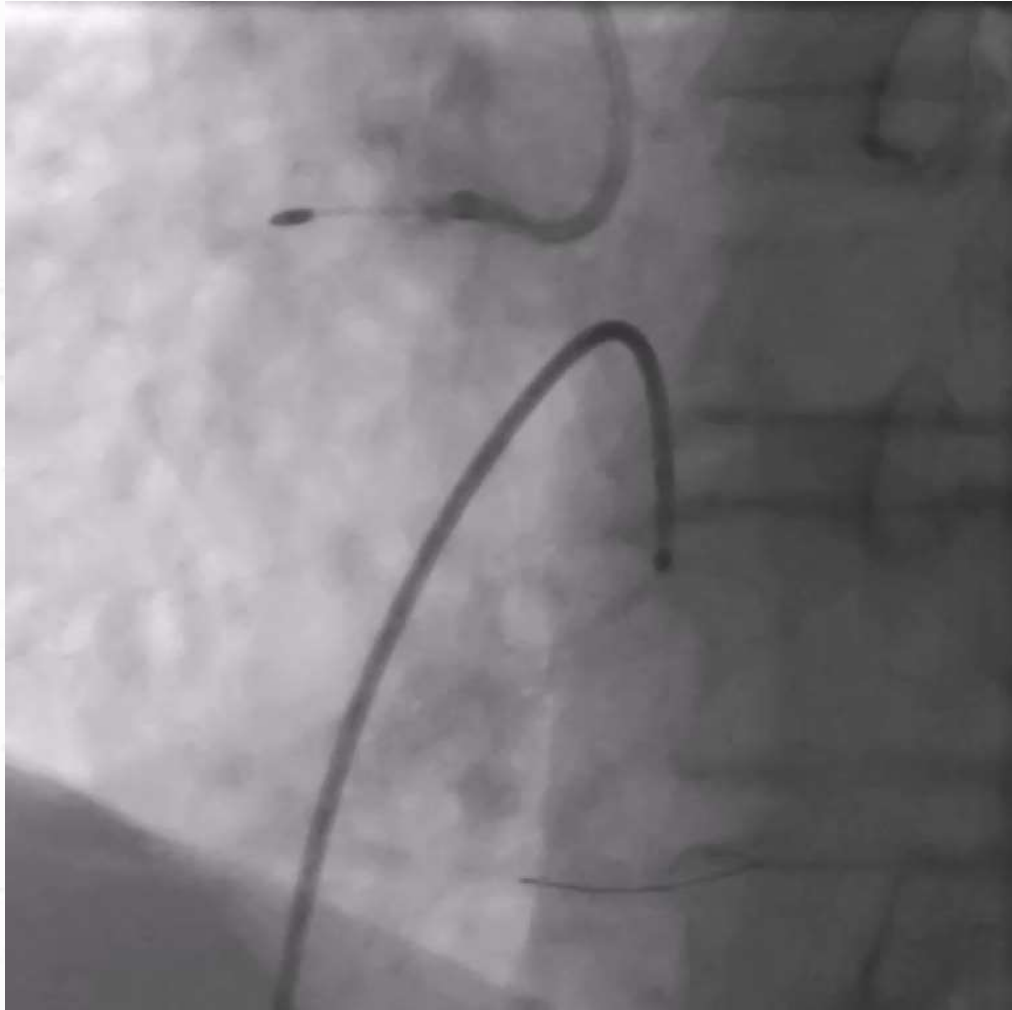
- Prox RCA lesion crossed with Fielder XT-A and mid RCA crossed with Fielder XTR

Wire crossable device uncrossable

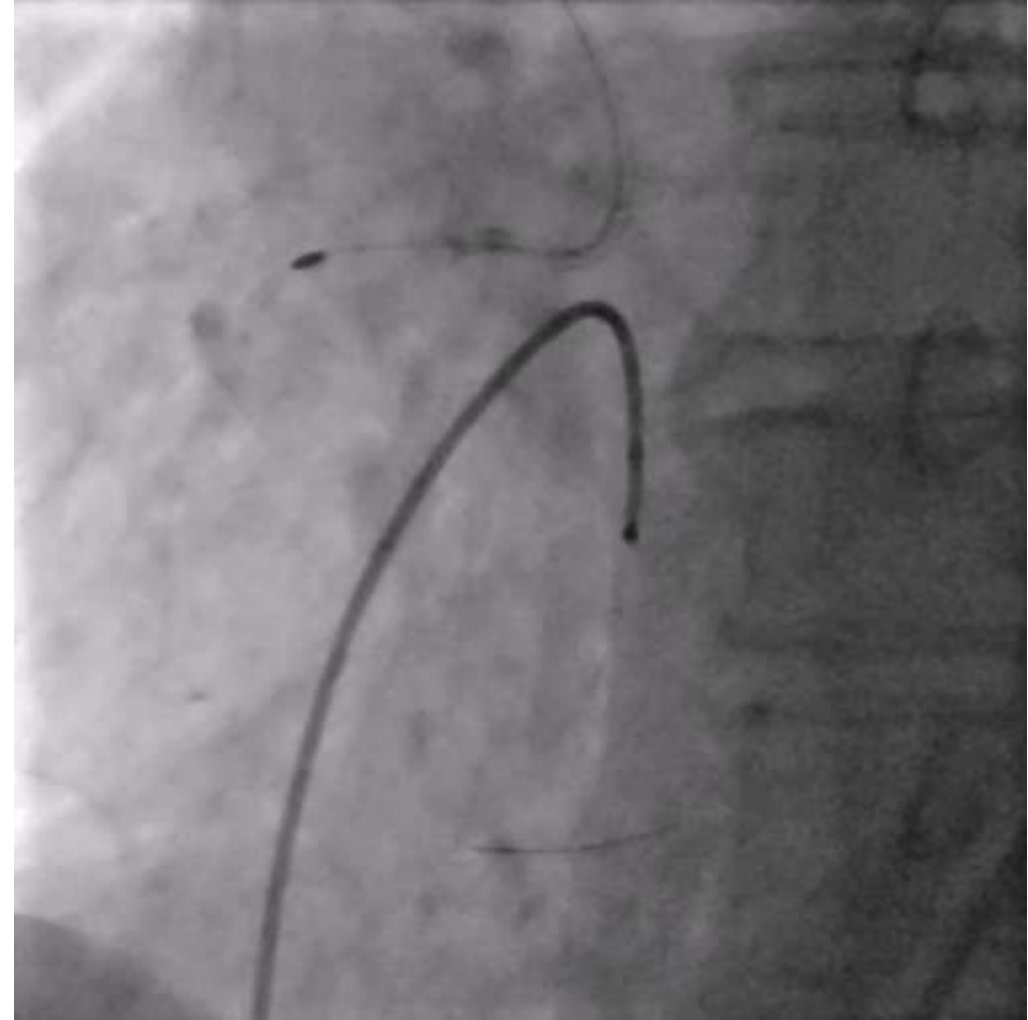


Sapphire 0.85 x 10 then changed to Turnpike Spiral

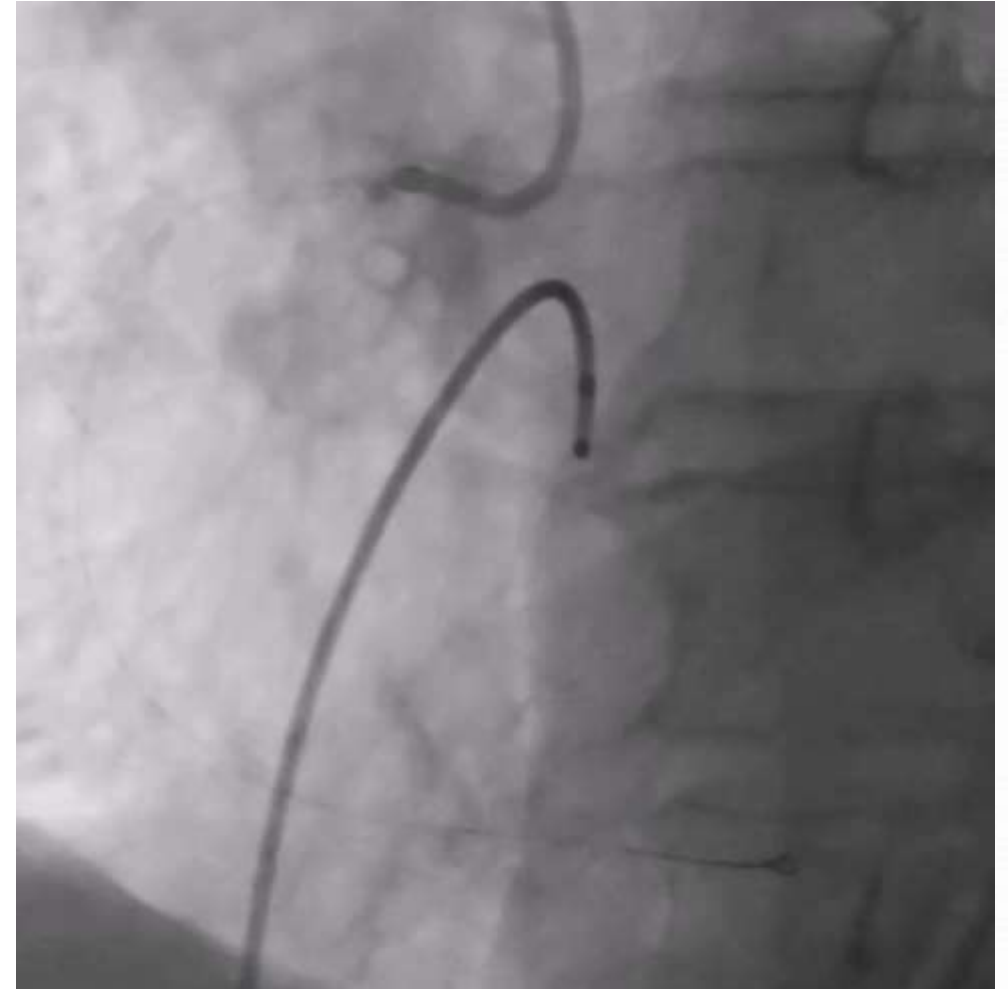
Rota 1.5 burr after 8 passes



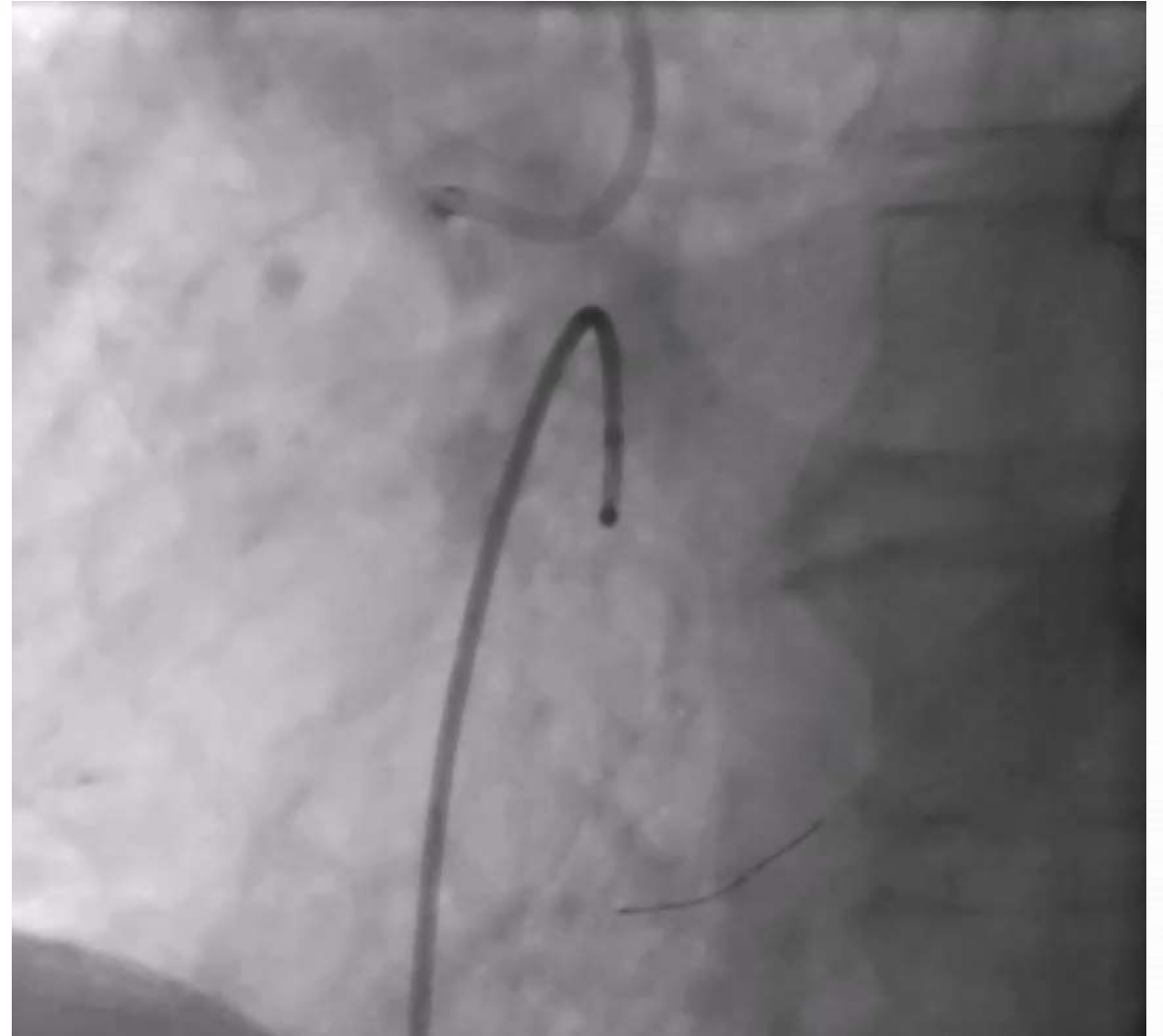
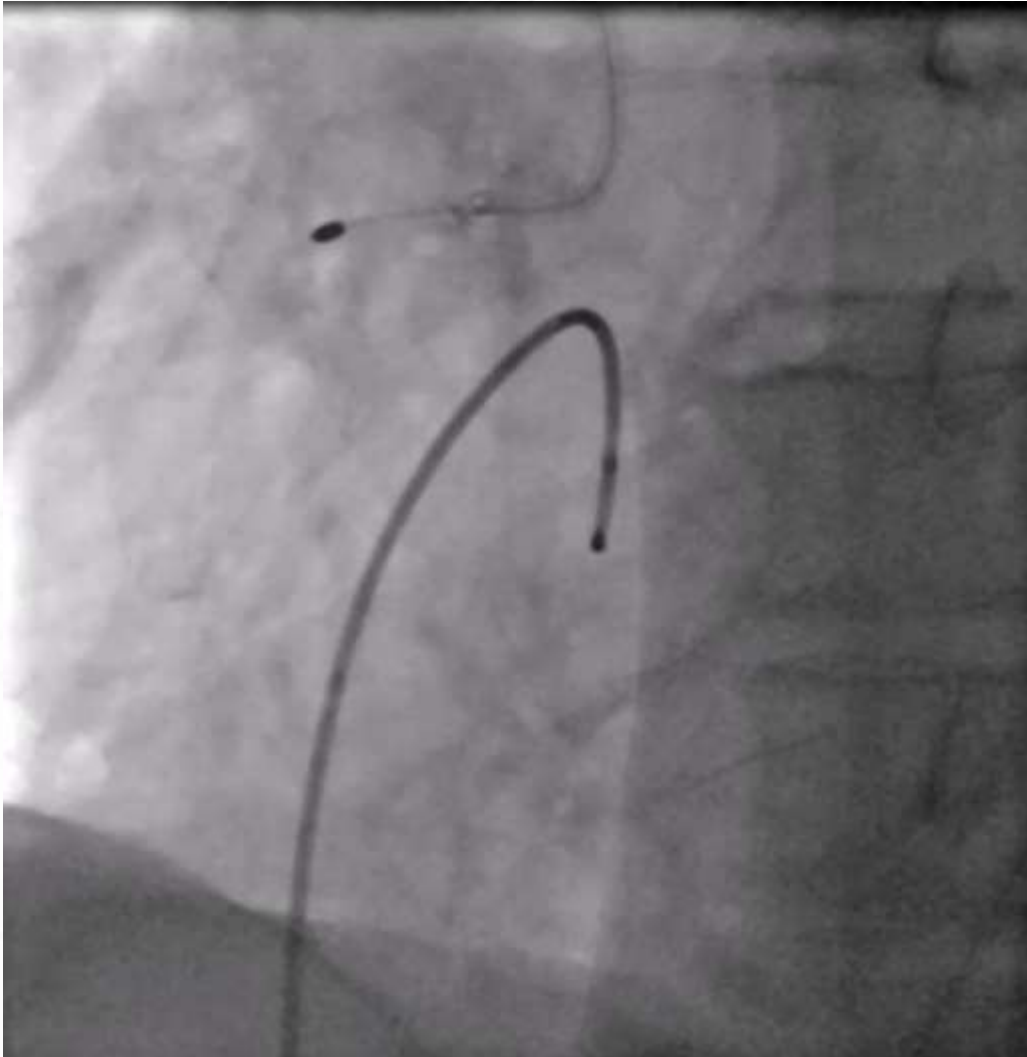
Crossed mid RCA on 11th pass



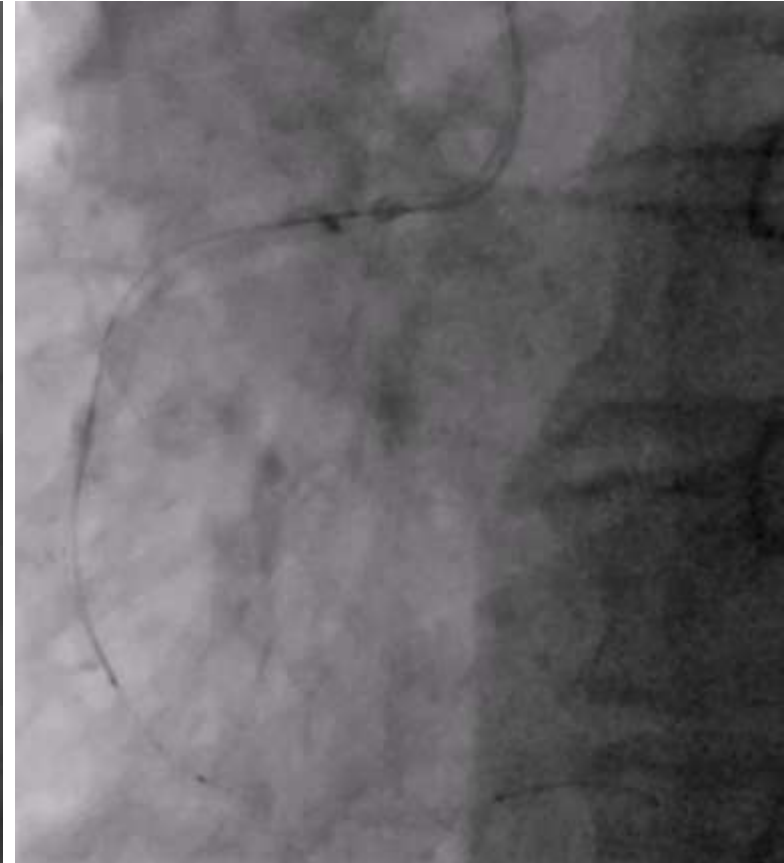
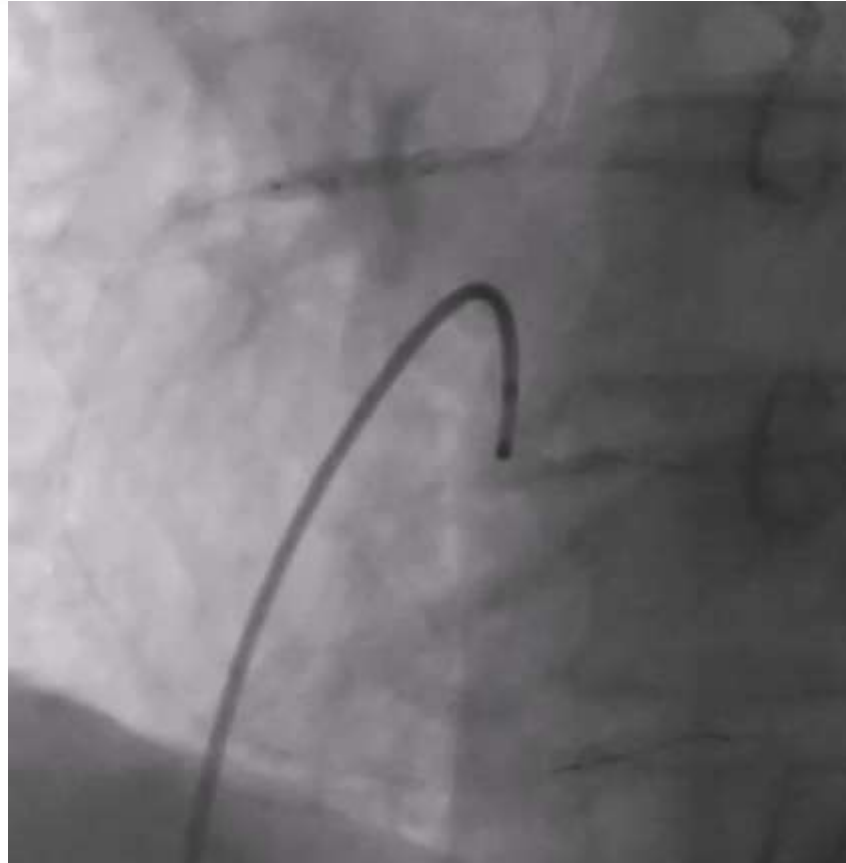
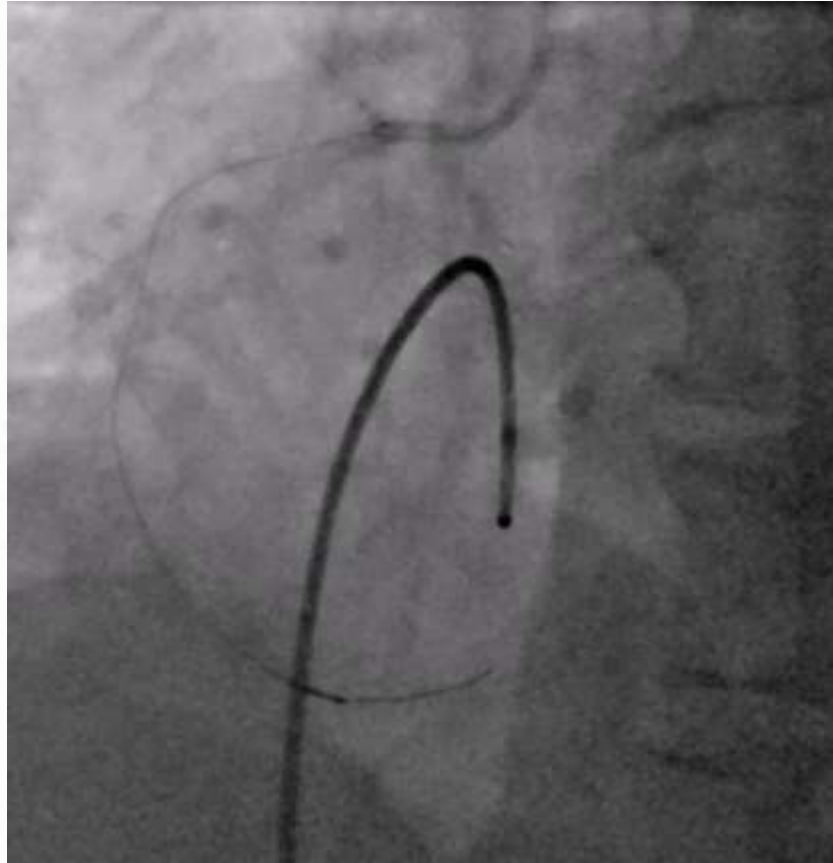
IVUS after rota 1.5



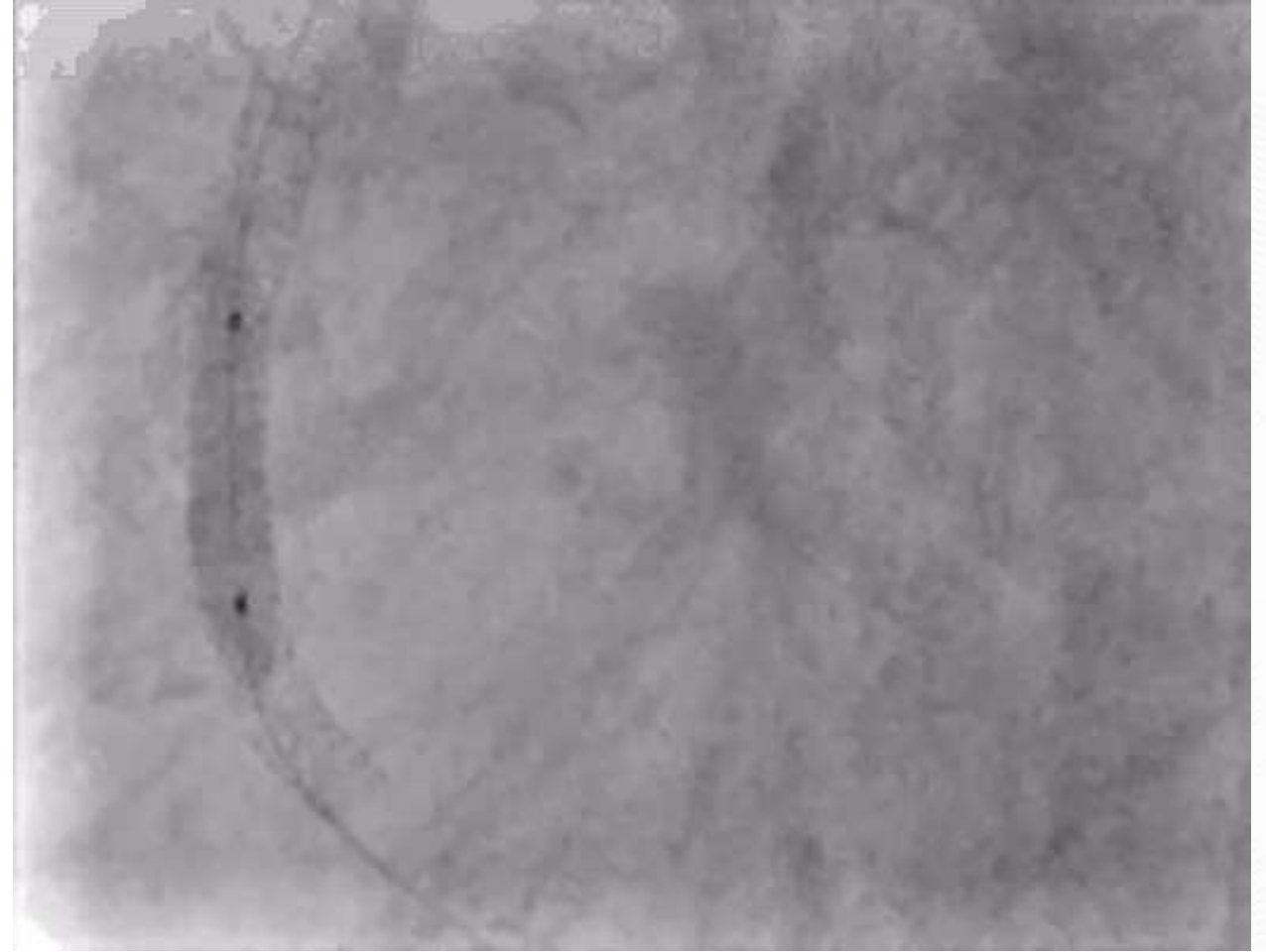
Rota 2.0 burr



Rotawire Drive changed to Wiggle wire, NC 3.5 x 12, IVUS



DES 4 x 38 stents x 2 then Post NC 4 x 15



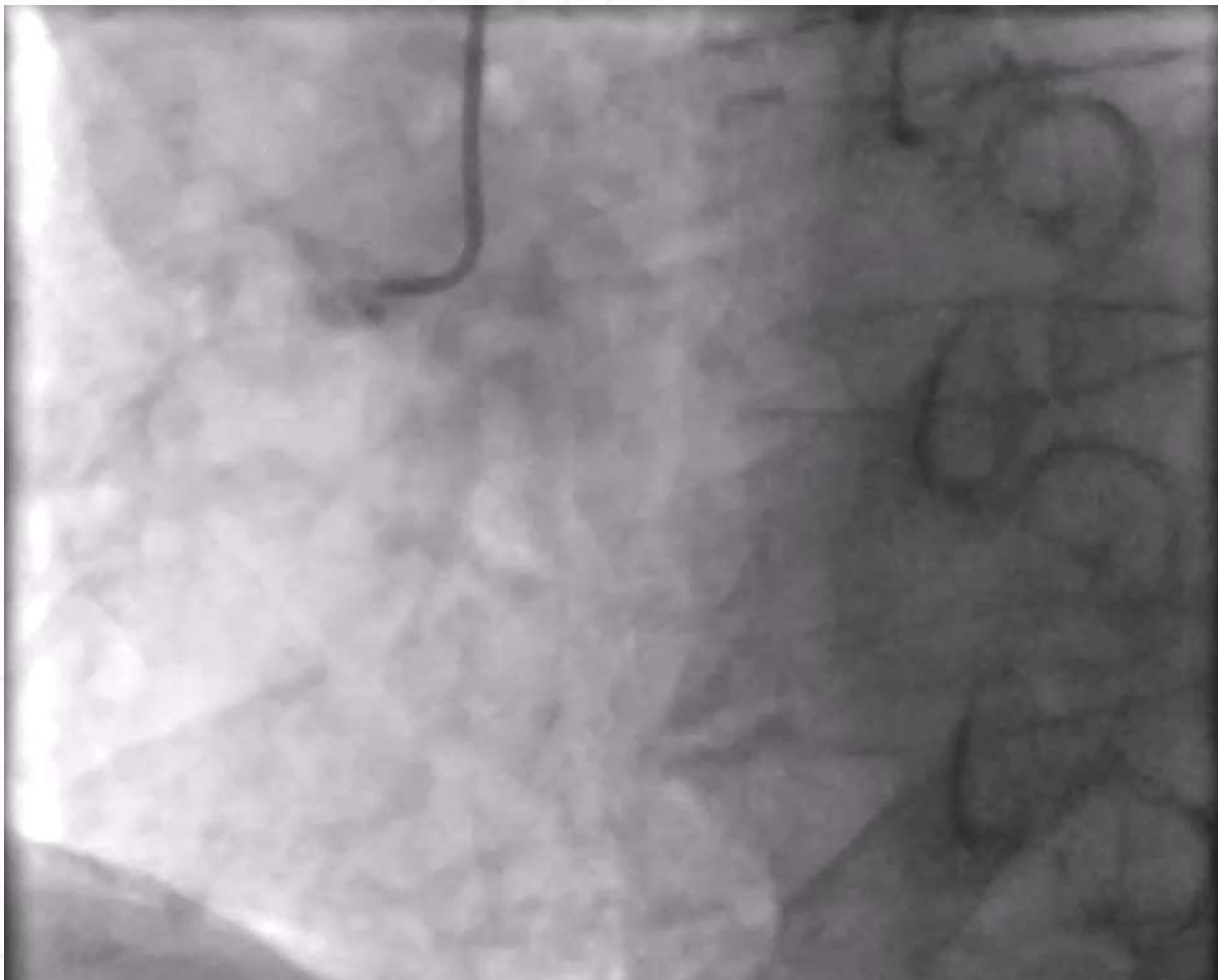
IVUS post PCI



Final result



Before



After



Discussion Points

- Management of wire crossable, device uncrossable lesion
- Choice of calcium modification tools
- Use of intravascular imaging - IVUS / OCT in calcified lesion

Conclusion

- Calcified coronary lesions are associated with adverse short and long term outcomes and management can be challenging
- Meticulous lesion preparation with calcium modification tools is essential to achieve optimal results
- Intravascular imaging is invaluable in assessing lesion severity, determining choice of calcium modification tools and effectiveness of modification and debulking method and optimizing the result of PCI