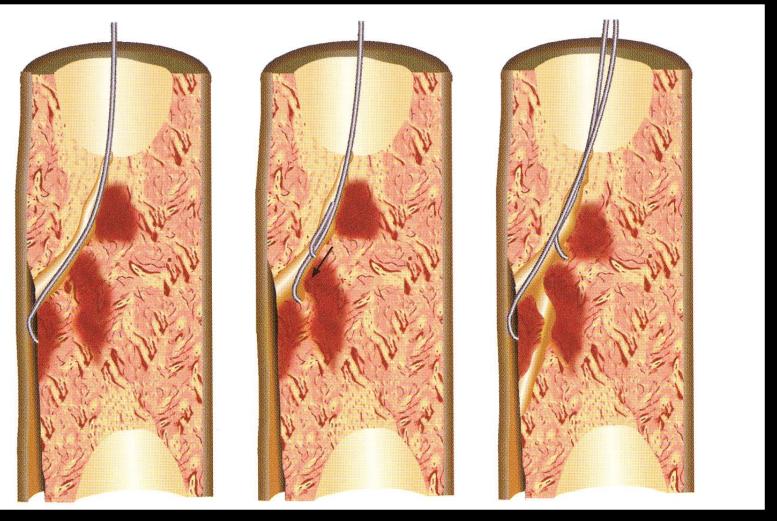
CCT@TCTAP2018 APR/28/2018
Session1: Current Status of CTO PCI

# Tips and Tricks of Parallel Wire and IVUS Guided PCI

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## Parallel wire technique



Parallel wire technique is used after  $1^{st}$  GW is advanced into non-ideal route.  $1^{st}$  GW is left and used as a landmark for  $2^{nd}$  GW. And then, wiring using  $2^{nd}$  GW attempts to get distal lumen.

O.Katoh 3<sup>rd</sup> Seminar of Angioplasty of Chronic total occlusion

# Tips and Tricks of Parallel Wire

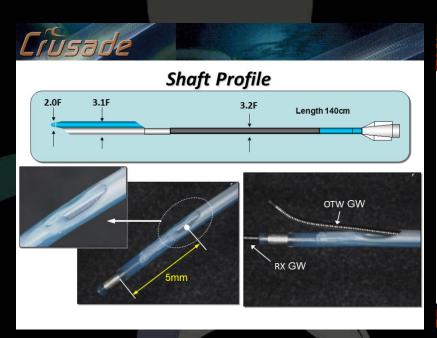
Use of double lumen catheter

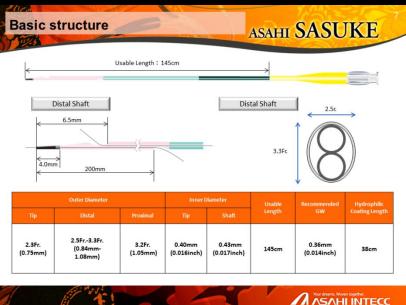


#### Option of parallel wire technique

With 2 micro catheters (See-saw wire technique) With double lumen catheter

# DLC available in Japan





# Tips and Tricks of Parallel Wire

- Use of double lumen catheter
- Guide wire selection
  - GaiaNext series



**SLIP-COAT®** Hydrophilic coating: 40cm

● Length : 190cm

Hydrophilic coating length : 40cm

Coil length : 15cm

Radiopaque length : 15cm

Coated with SLIP-COAT® coating



#### What is Next?



# ASAHI Gaia Next

PTCA GUIDE WIRE

#### XTRAND coil

- ✓ Decreased breakage risk within the occlusion
- ✓ Improved resistance in case of trapping into the lesion.
- ✓ Increased torque in both clockwise and counter clockwise rotation



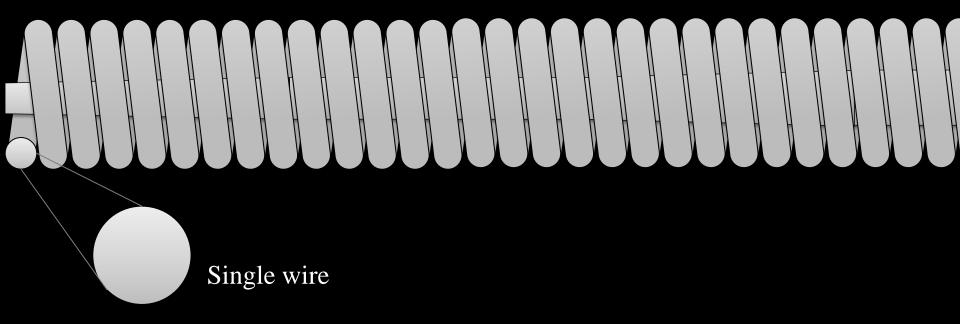
ASAHI Gaia Next 1	<2.0gf> 0.36mm/0.27mm
ASAHI Gaia Next 2	<4.0gf> 0.36mm/0.30mm
ASAHI Gaia Next 3	<6.0gf> 0.36mm/0.30mm



14inch/0.012inch)

# What's XTRAND coil

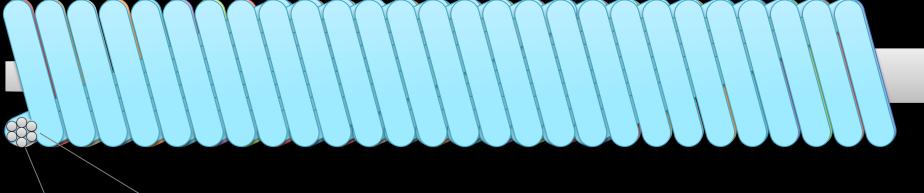
Conventional coil

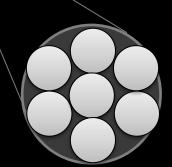


## What's XTRAND coil

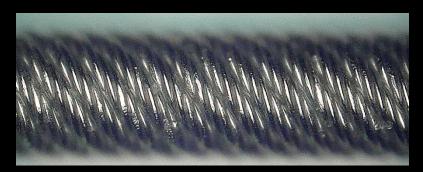
### XTRAND<sup>TM</sup> coil



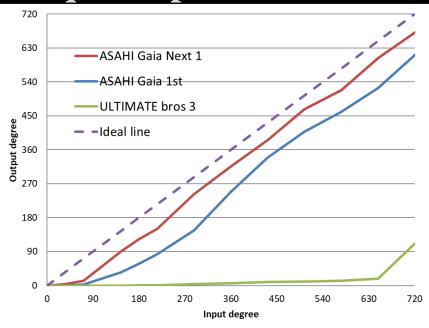


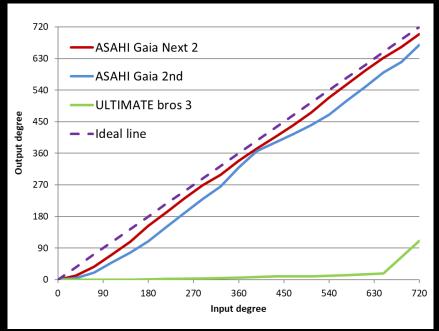


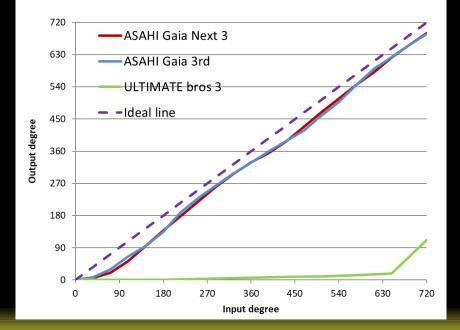
Ropecoil consist of plural line



Torque response of Gaia Next







✓ Test data shows Gaia Next1 and Next 2 have more 1:1 torque response than Gaia 1 and 2.

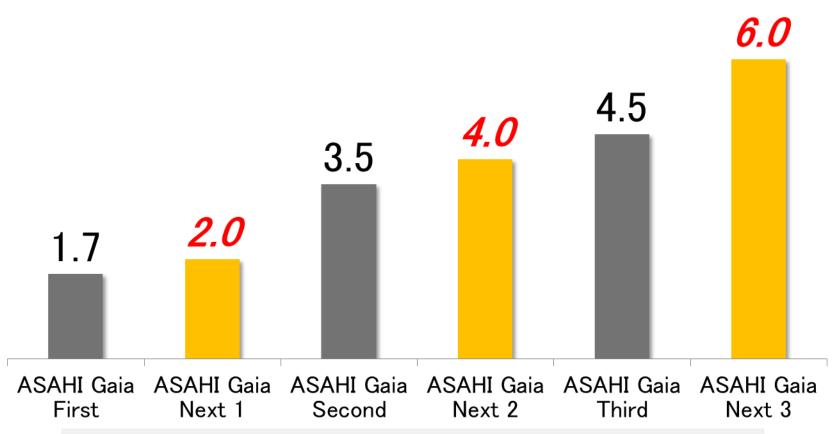


Tip load

#### ASAHI Gaia Next

PTCA GUIDE WIRE

Line-up



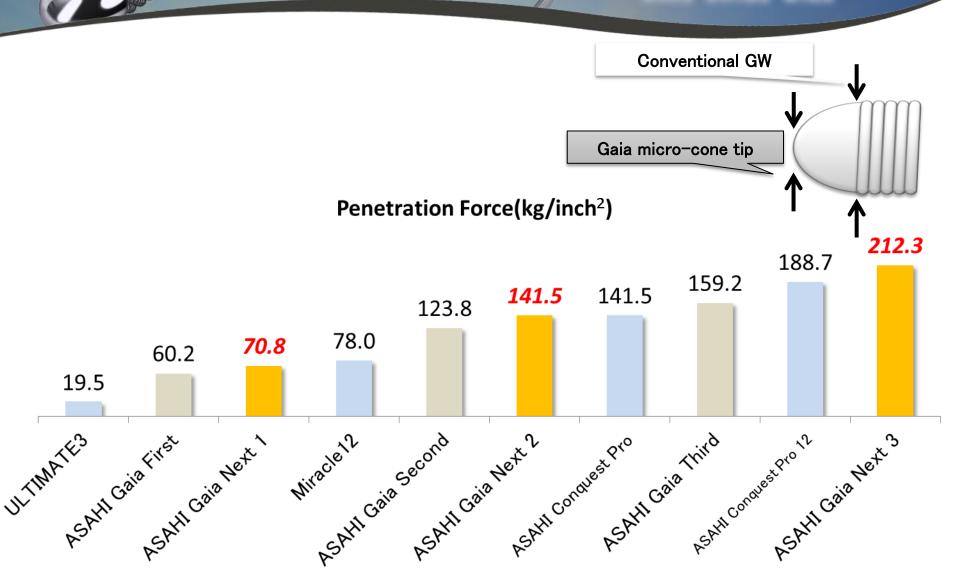
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#### Penetration force

#### ASAHI Gaia Next

PTCA GUIDE WIRE



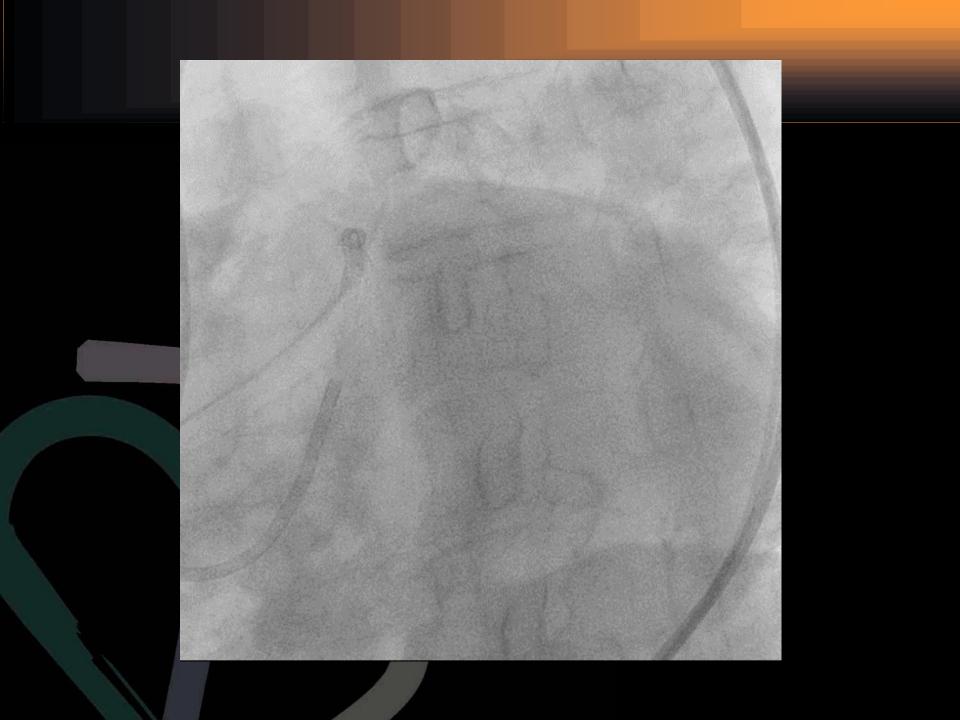
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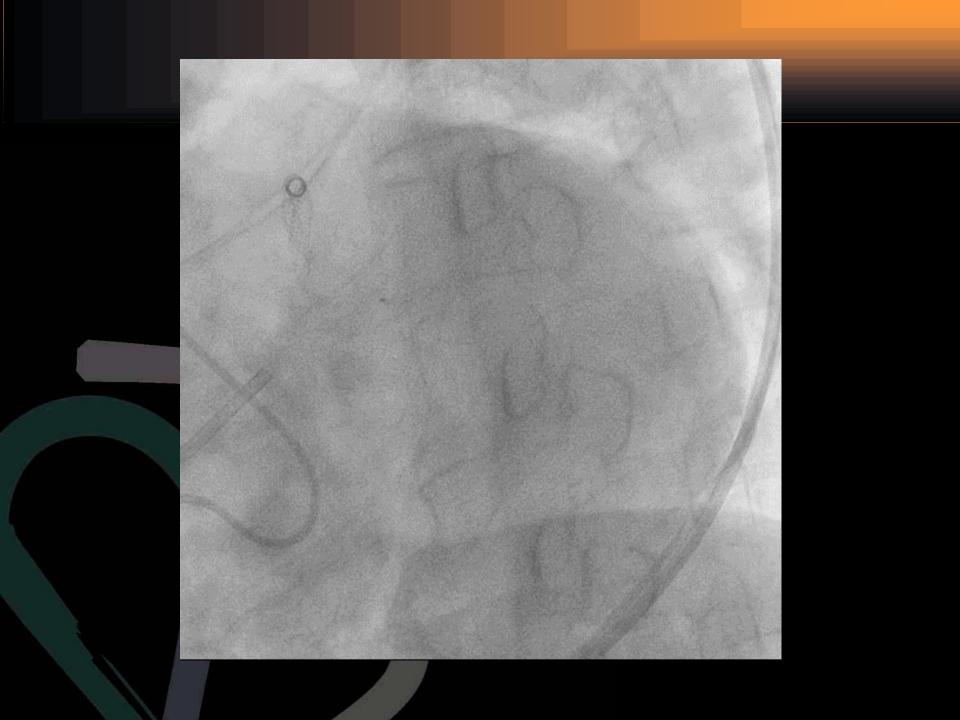
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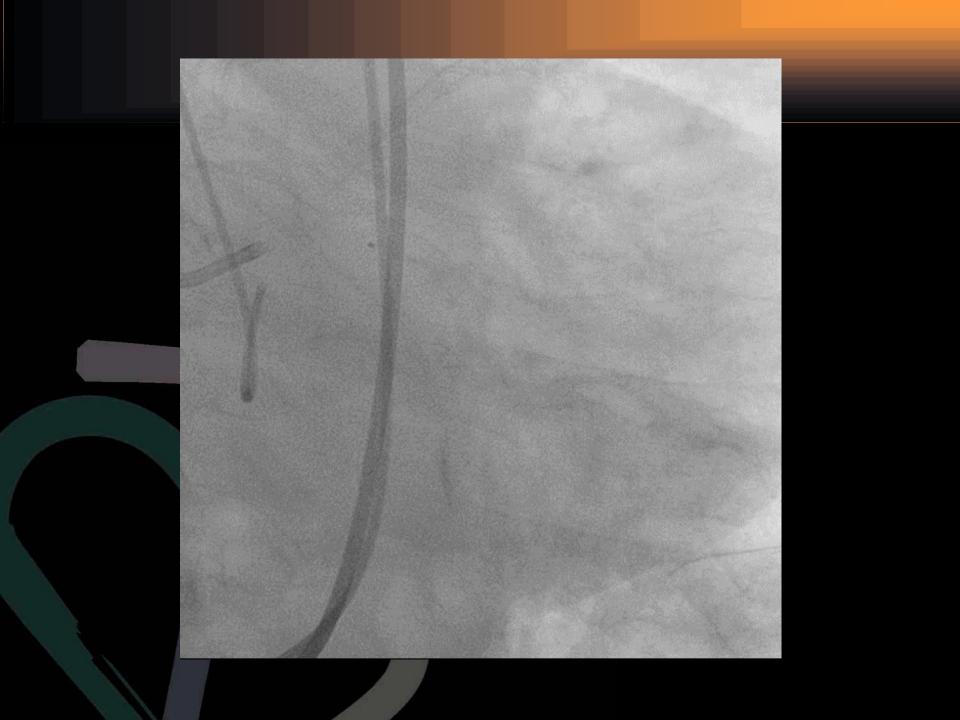


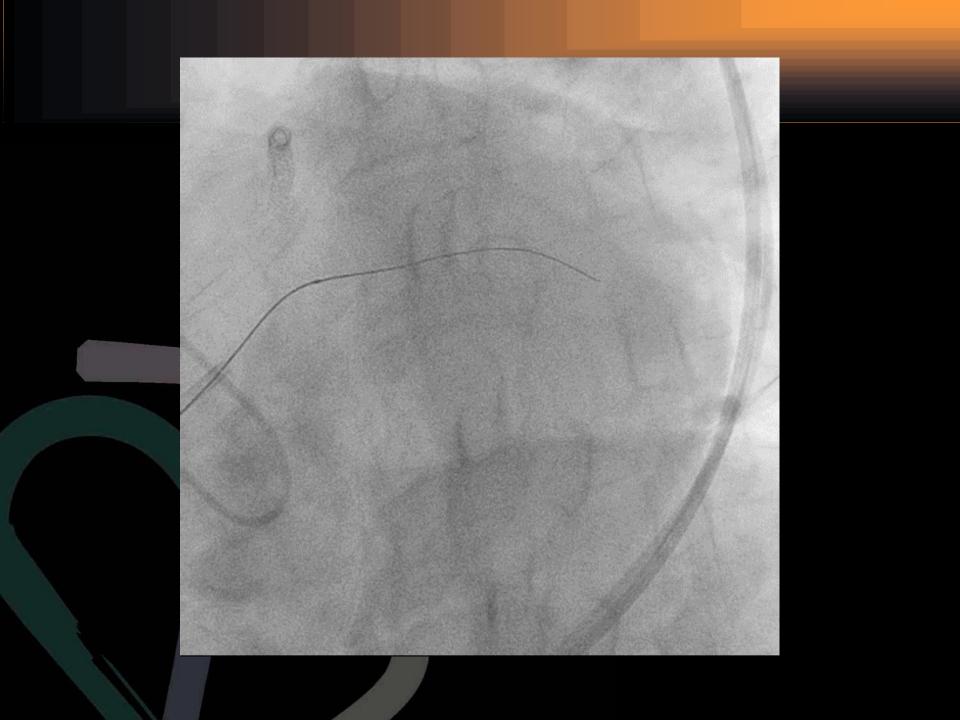
# Tips and Tricks of Parallel Wire

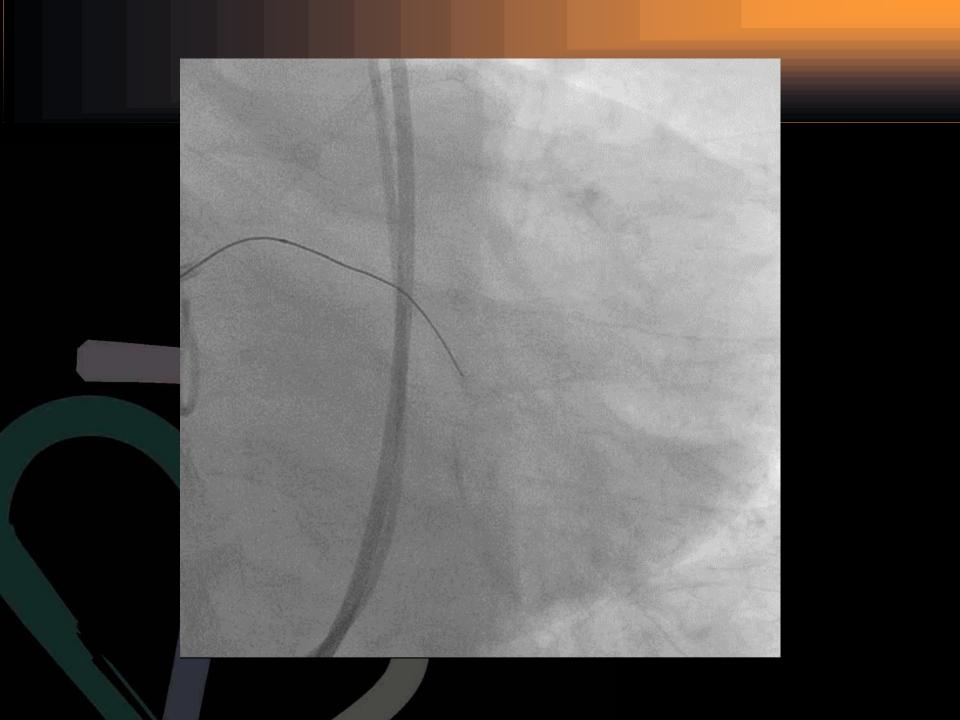
- Use of double lumen catheter
- Guide wire selection
  - GaiaNext series
- How to correct GW position
  - Multiple projection is used
  - Wiring is performed on the projection that distance between GW and target vessel is the farthest.

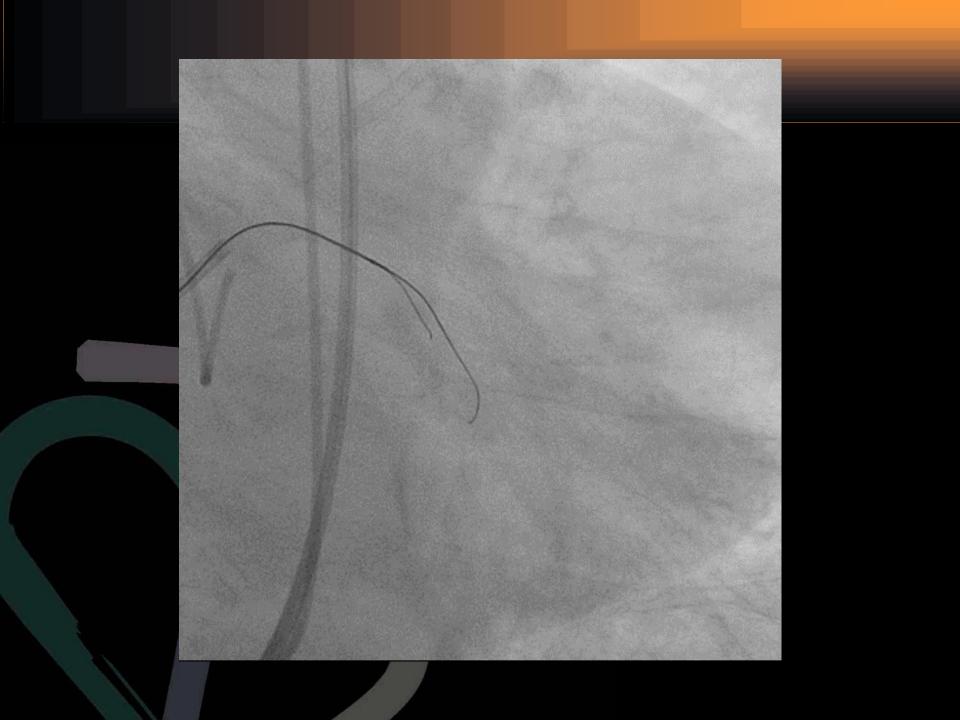


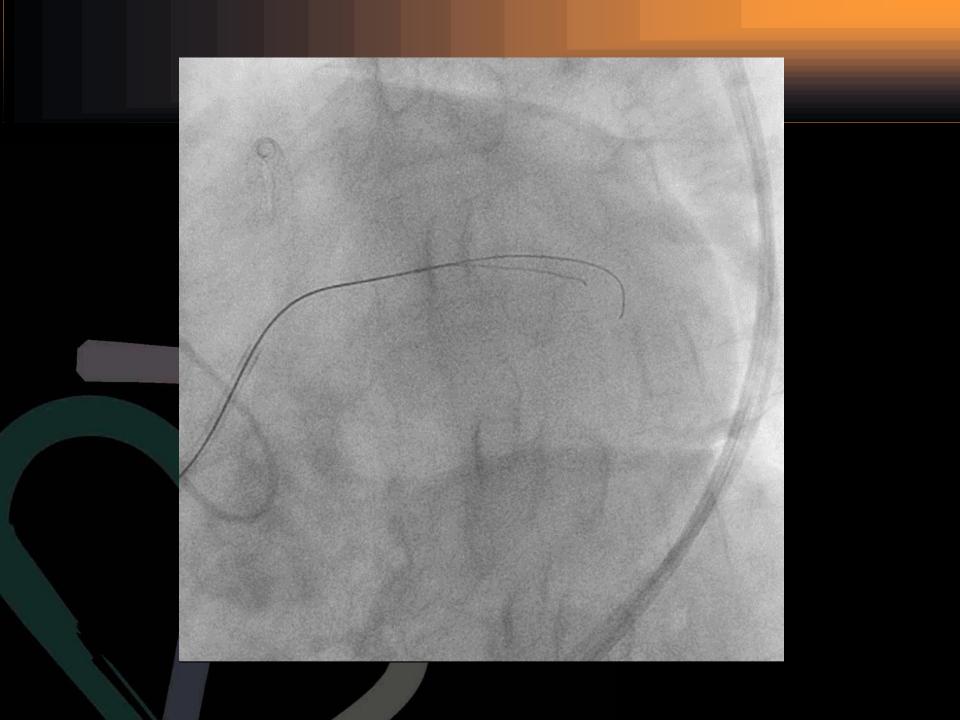


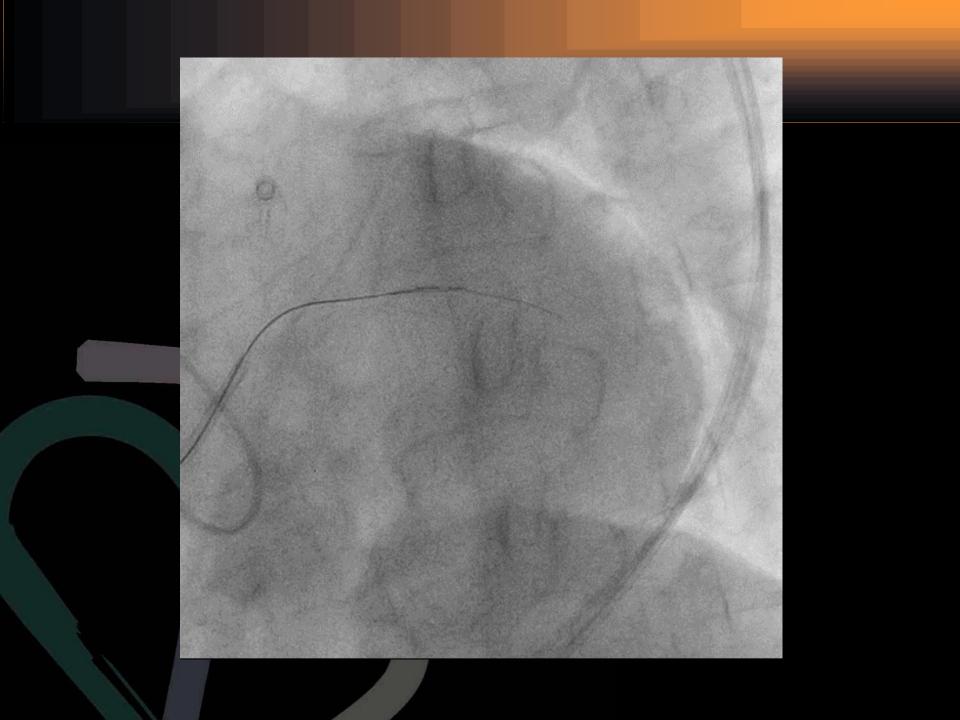


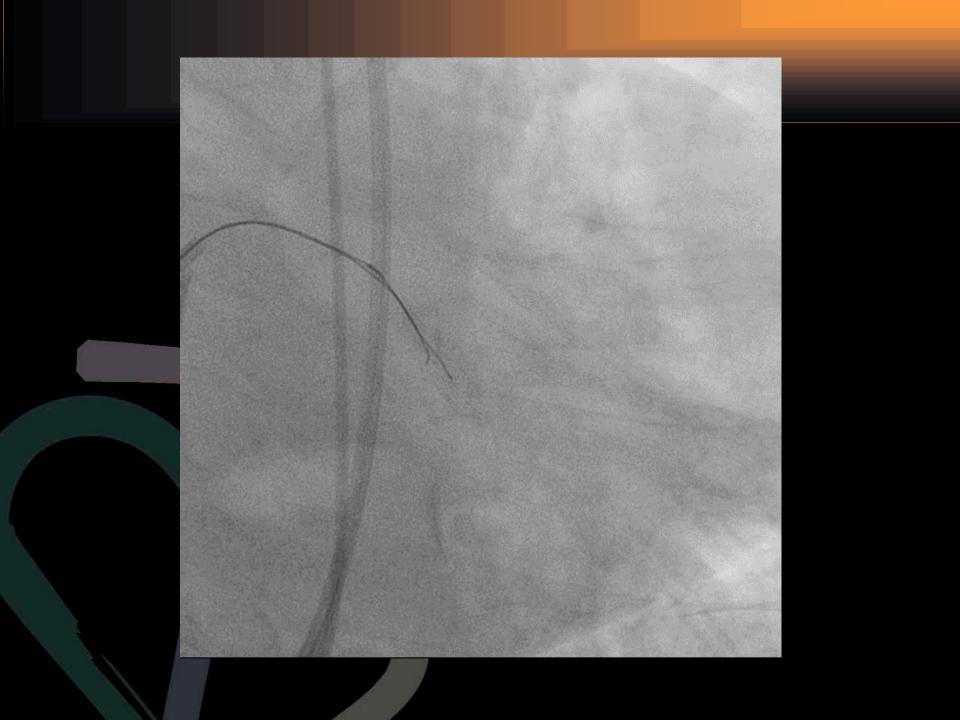


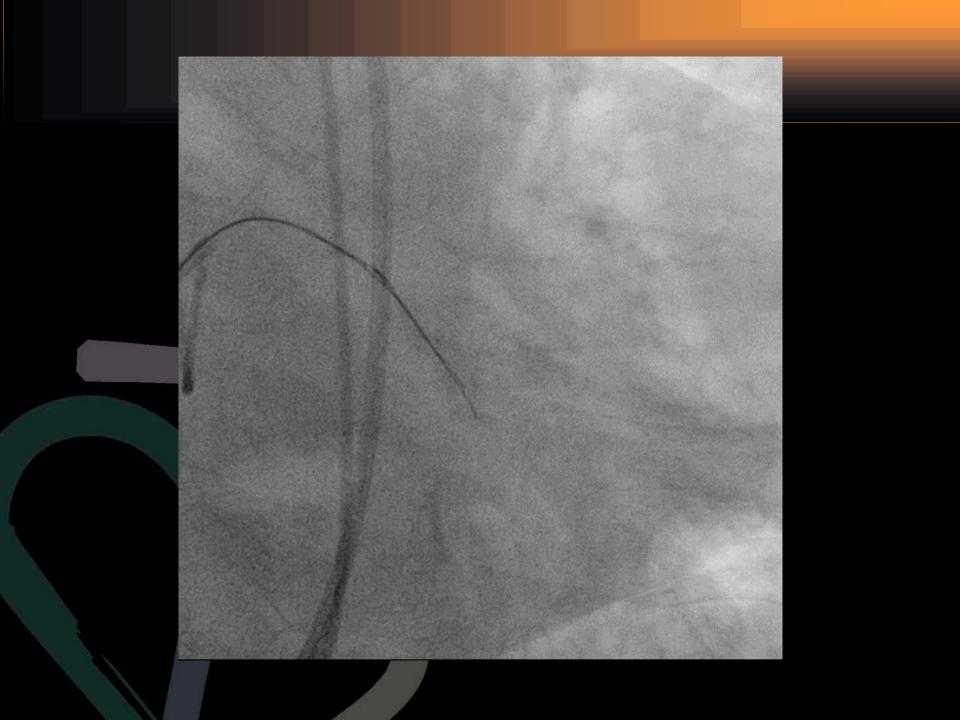


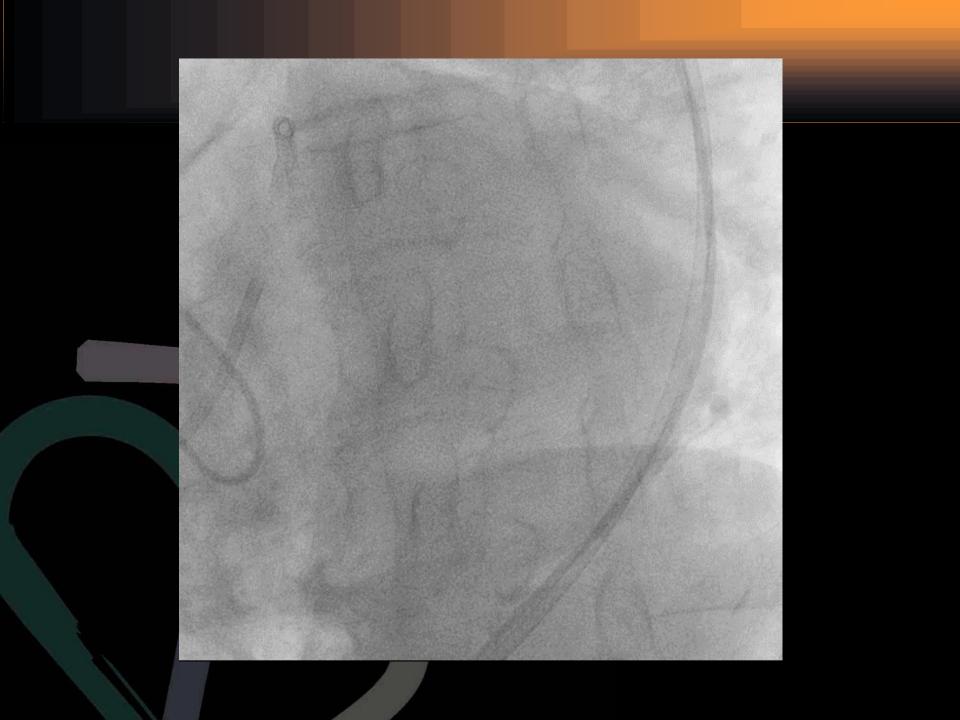


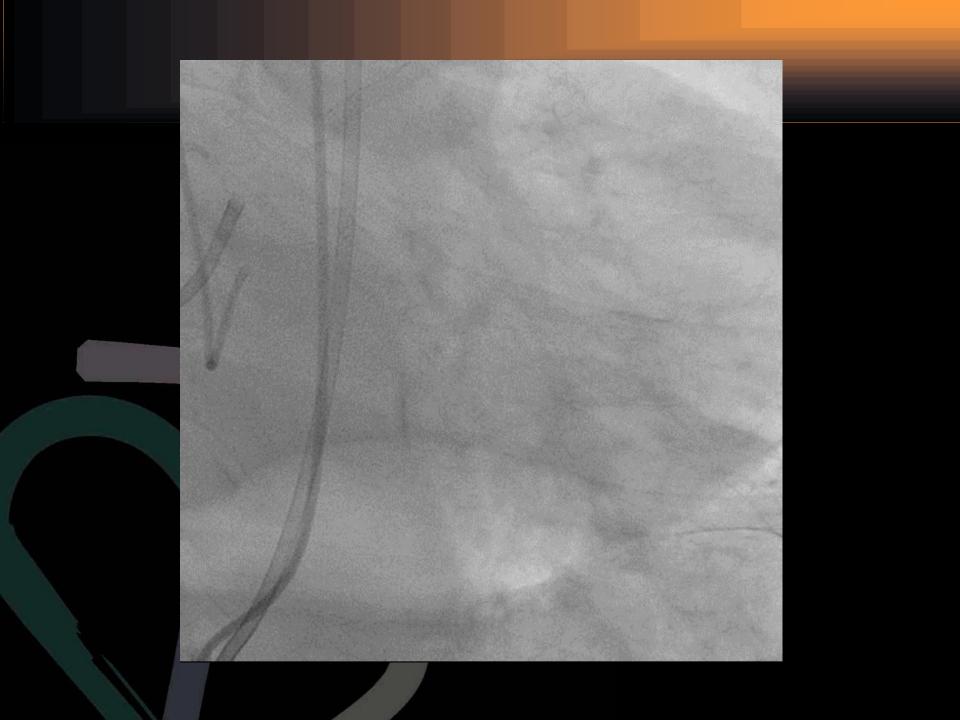








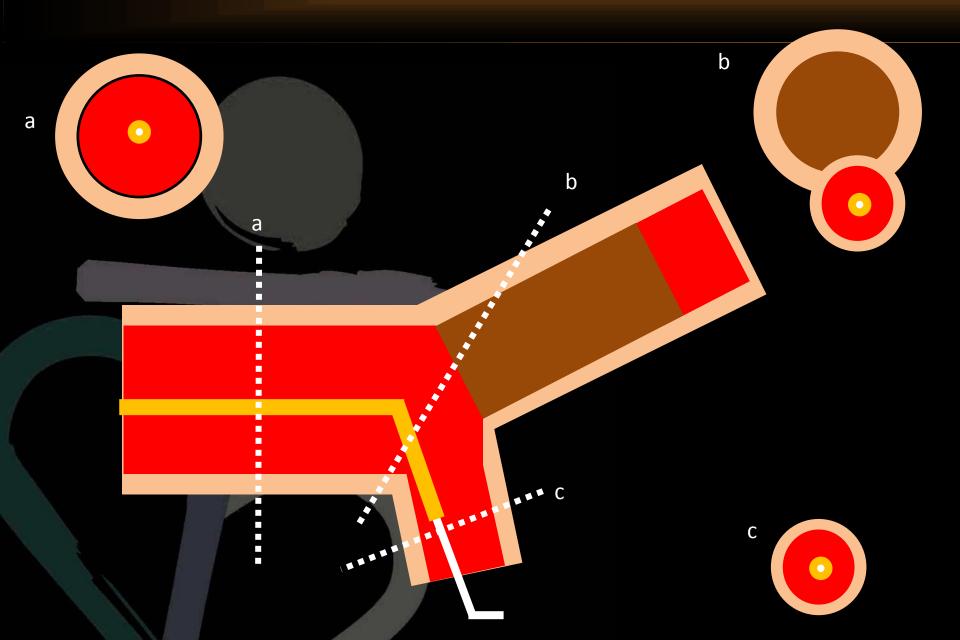




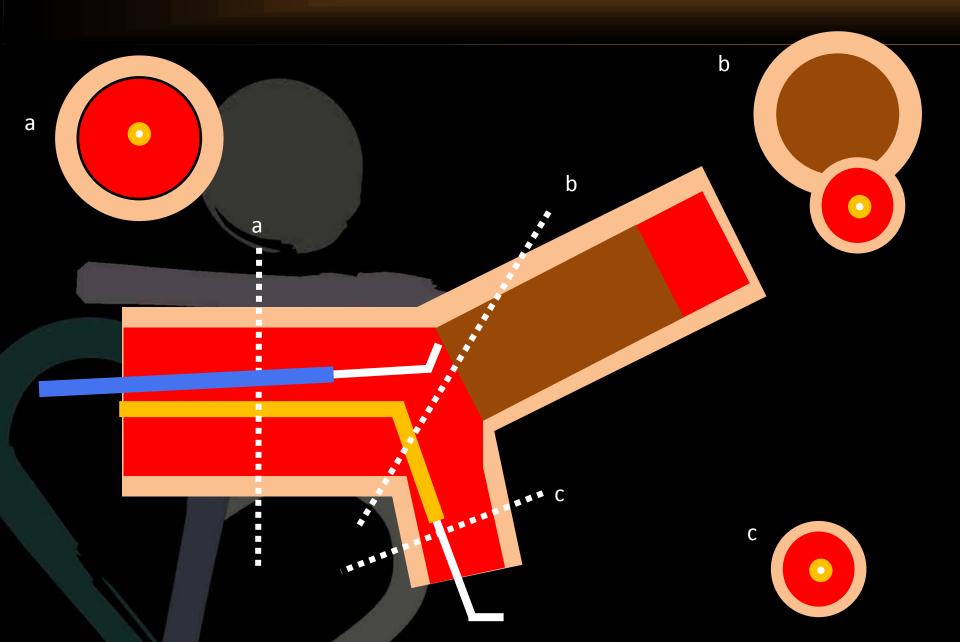
# Tips and Tricks of IVUS guided PCI

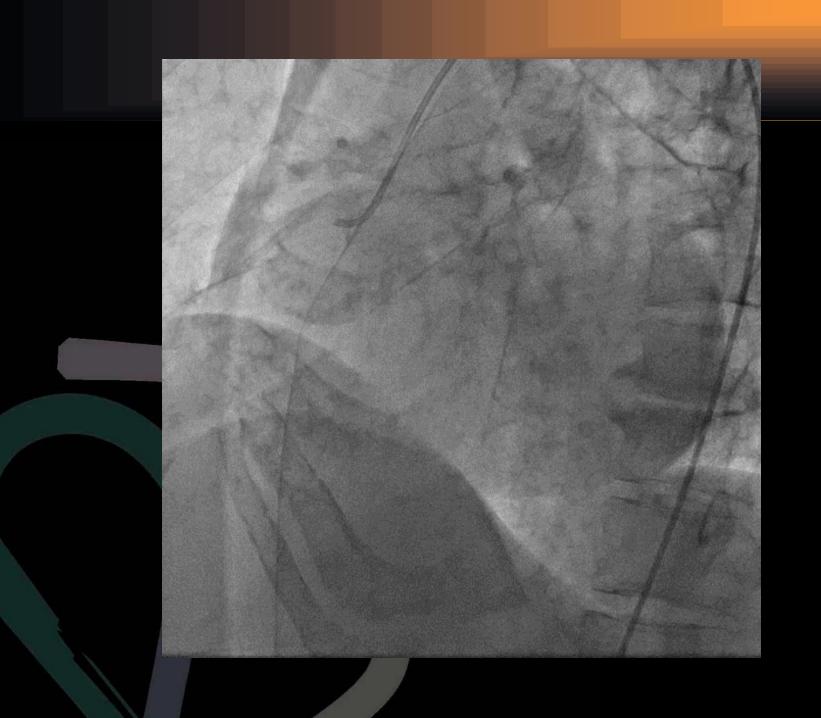
- Role of IVUS in CTO PCI
  - IVUS guided entry
  - IVUS guided wiring
- IVUS is left at wiring point during wiring and wiring is performed under IVUS image
- Advantage of use of IVUS
  - Ideal entry point

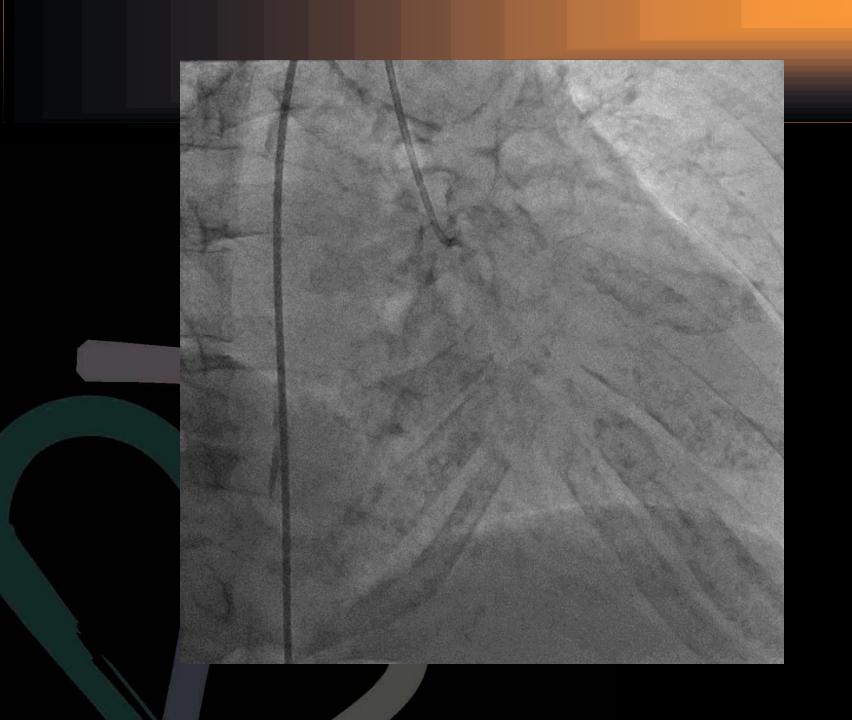
## Ideal entry point of IVUS guided entry

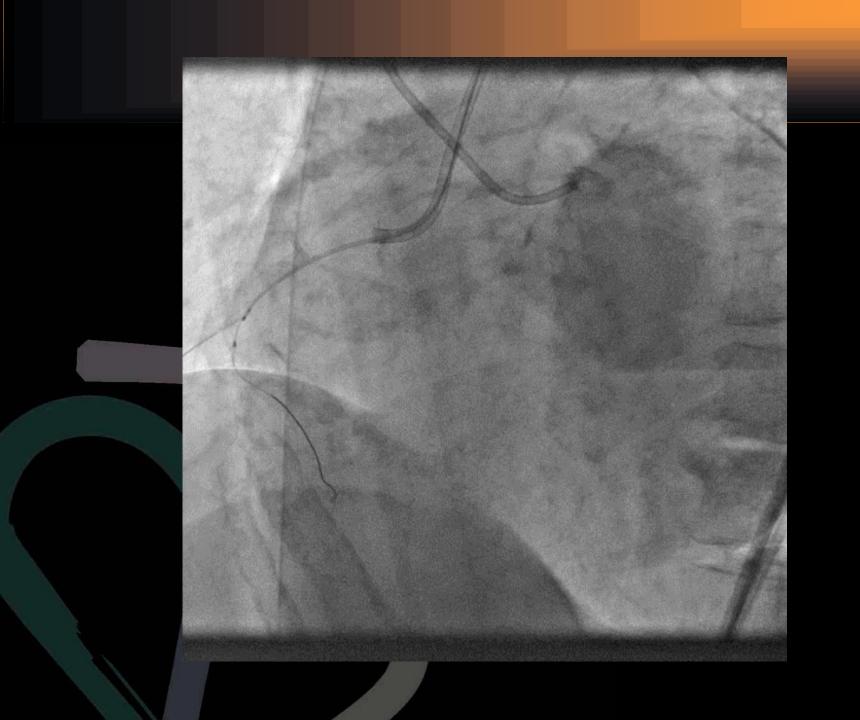


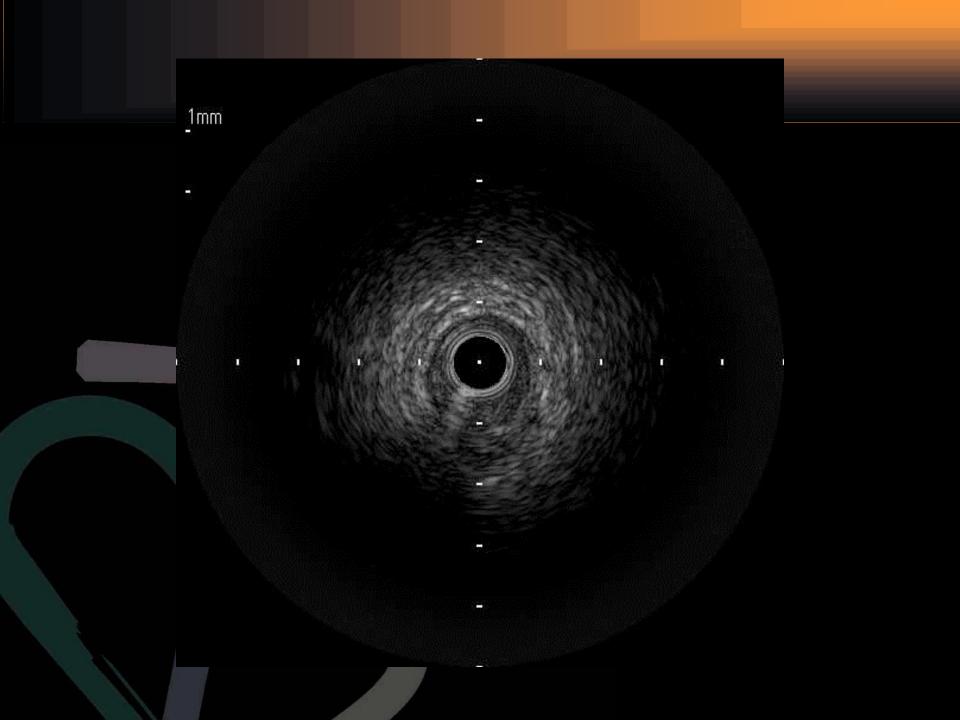
# Ideal entry point of IVUS guided entry

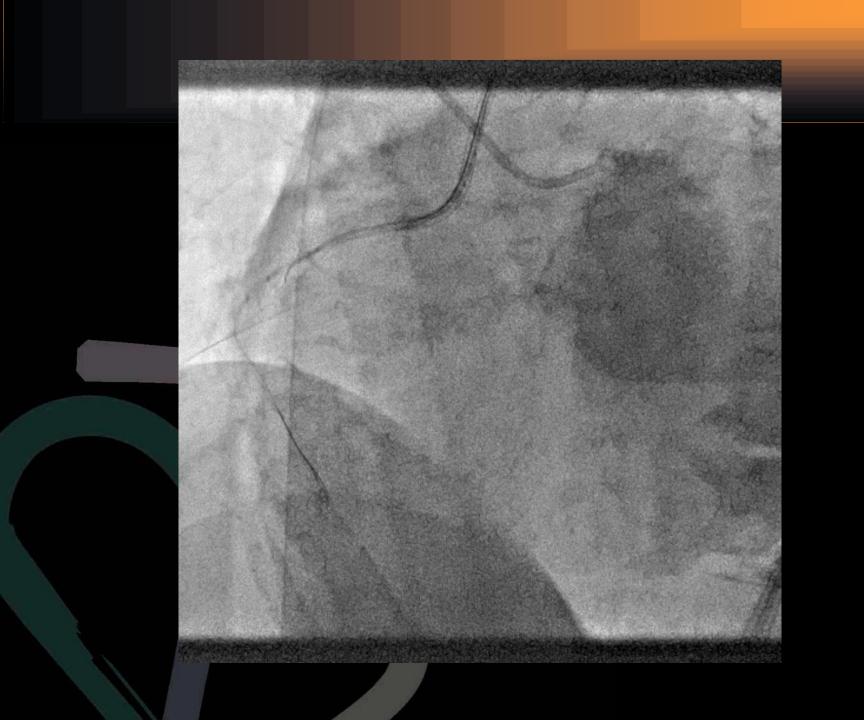


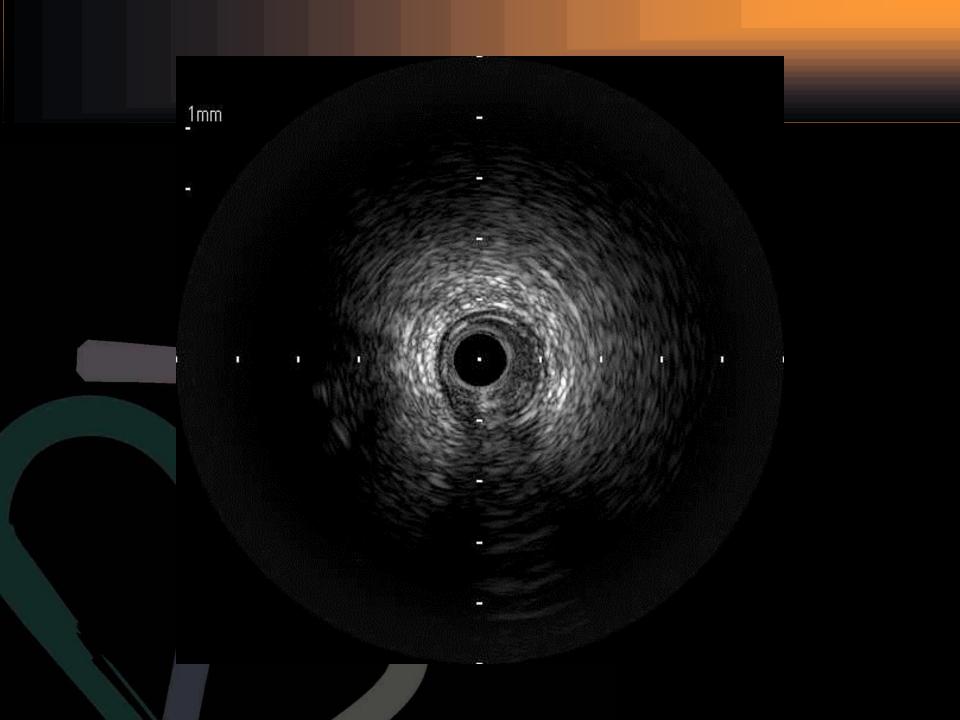


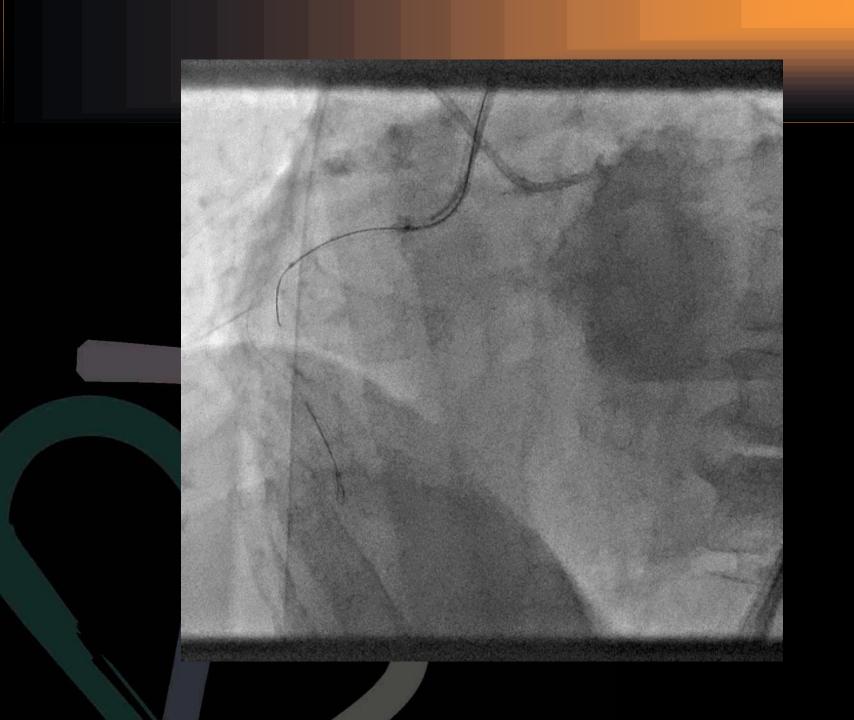


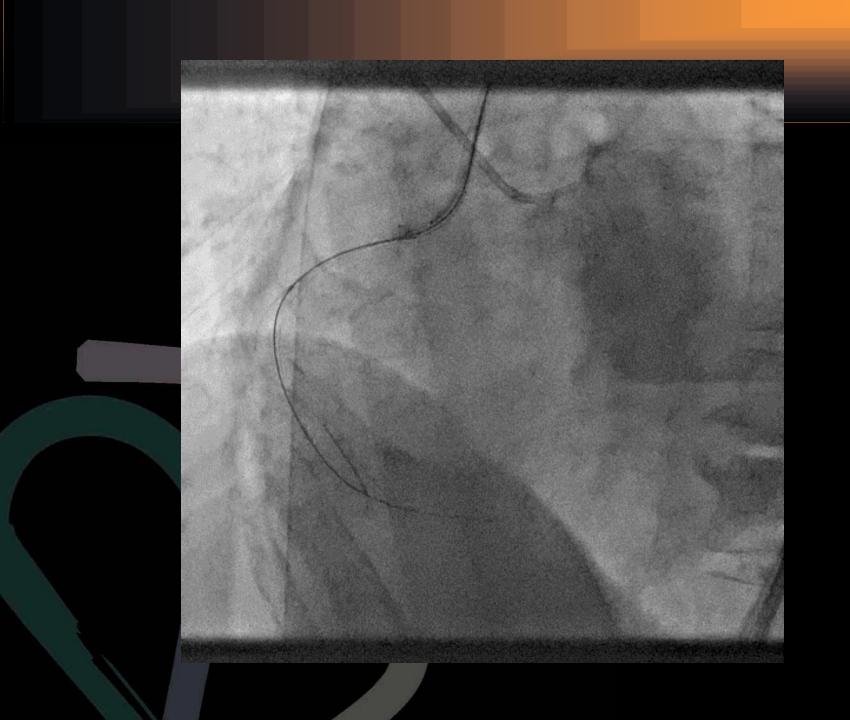






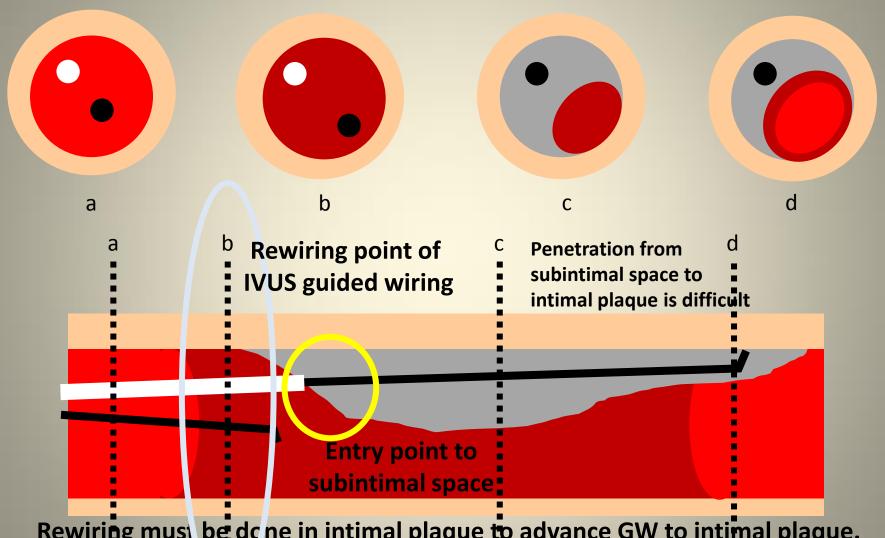








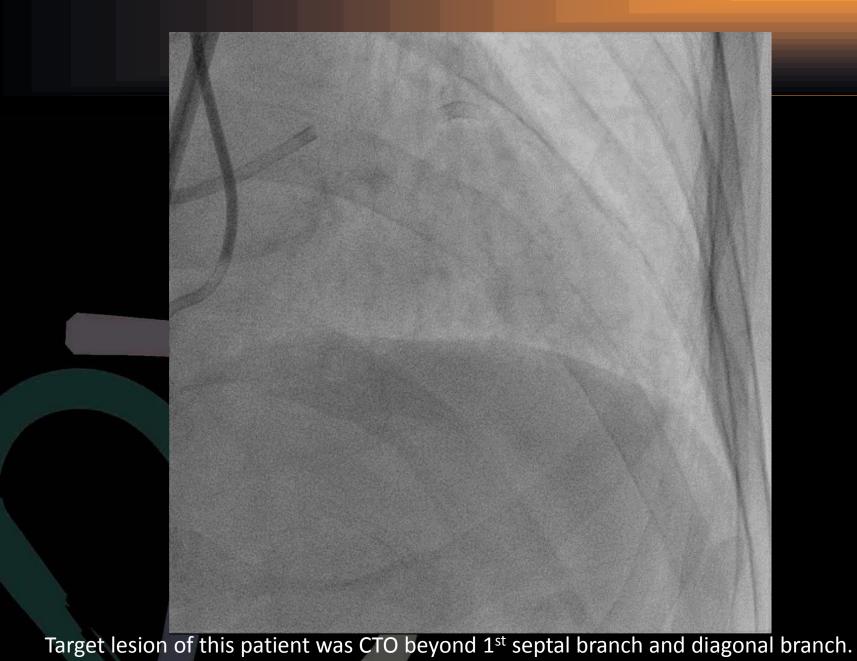
## Ideal entry point of IVUS guided wiring



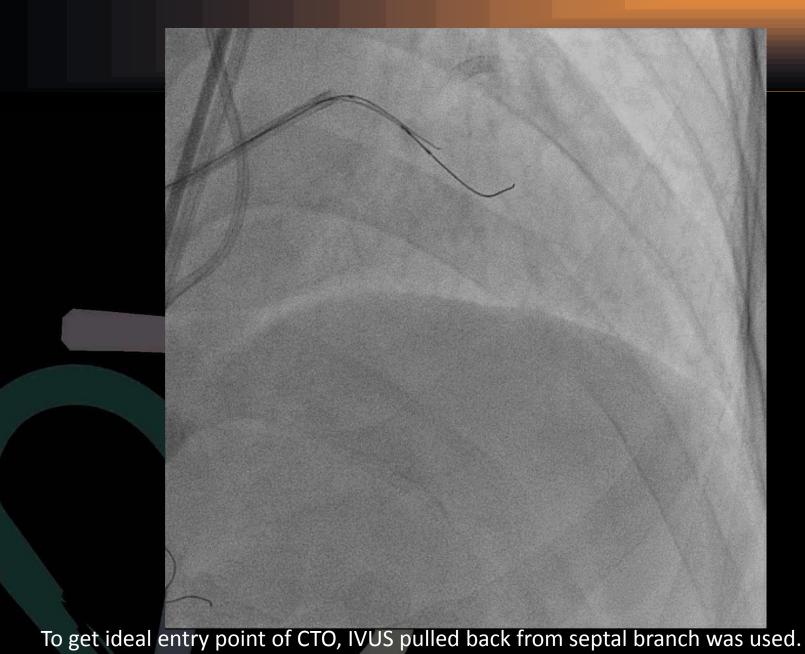
Rewiring must be done in intimal plaque to advance GW to intimal plaque.

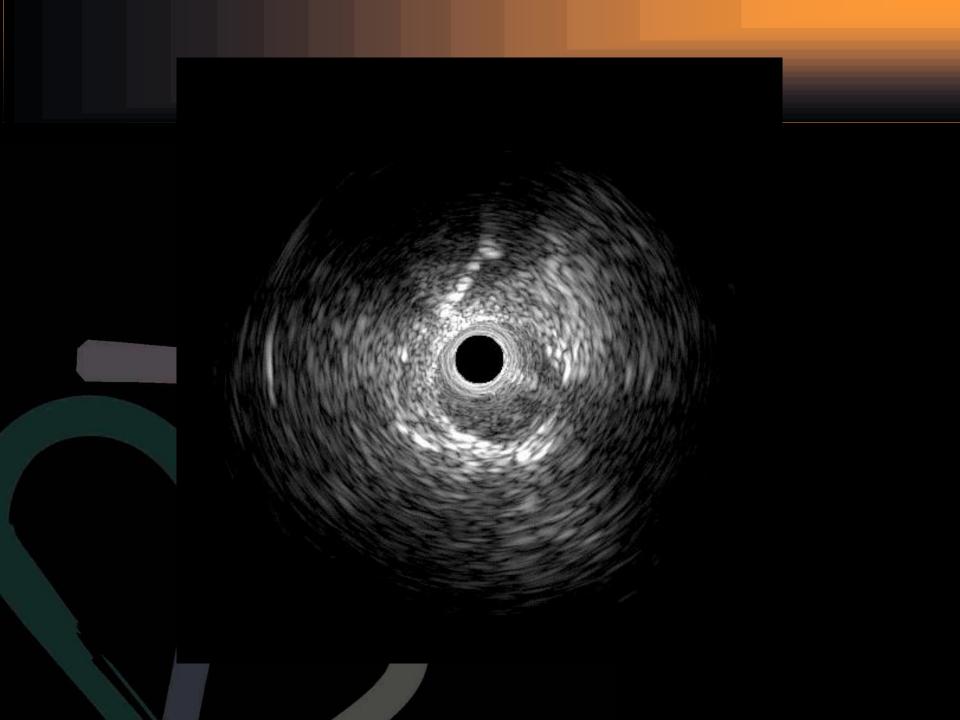
Role of IVUS is identifying entry point of 1<sup>st</sup> GW into subintimal space.

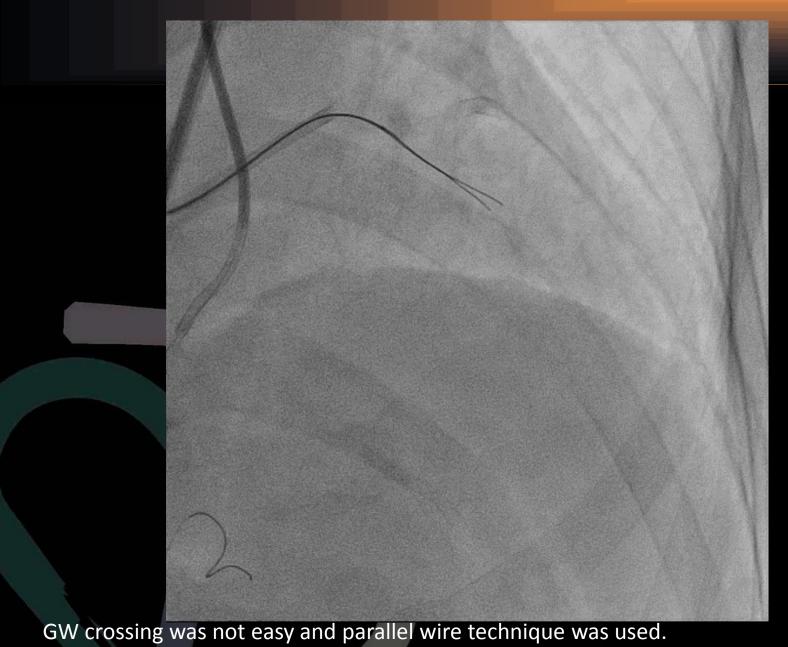
Rewiring starts at proximal site of this entry point based on IVUS findings.

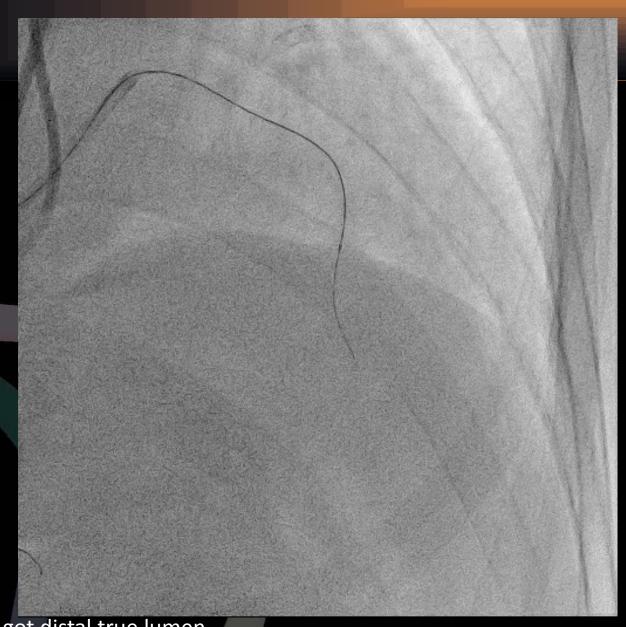


Target lesion of this patient was CTO beyond 1<sup>st</sup> septal branch and diagonal branch. This is no stamp CTO with branches.

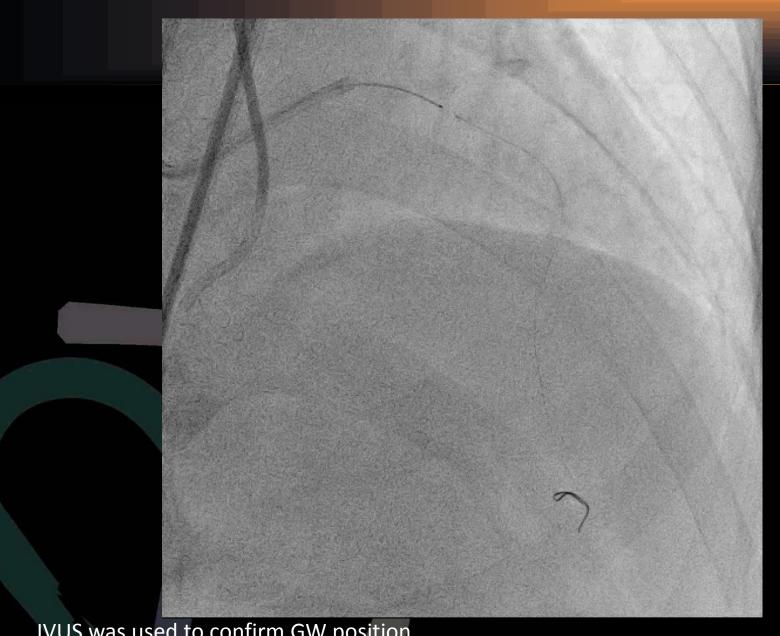




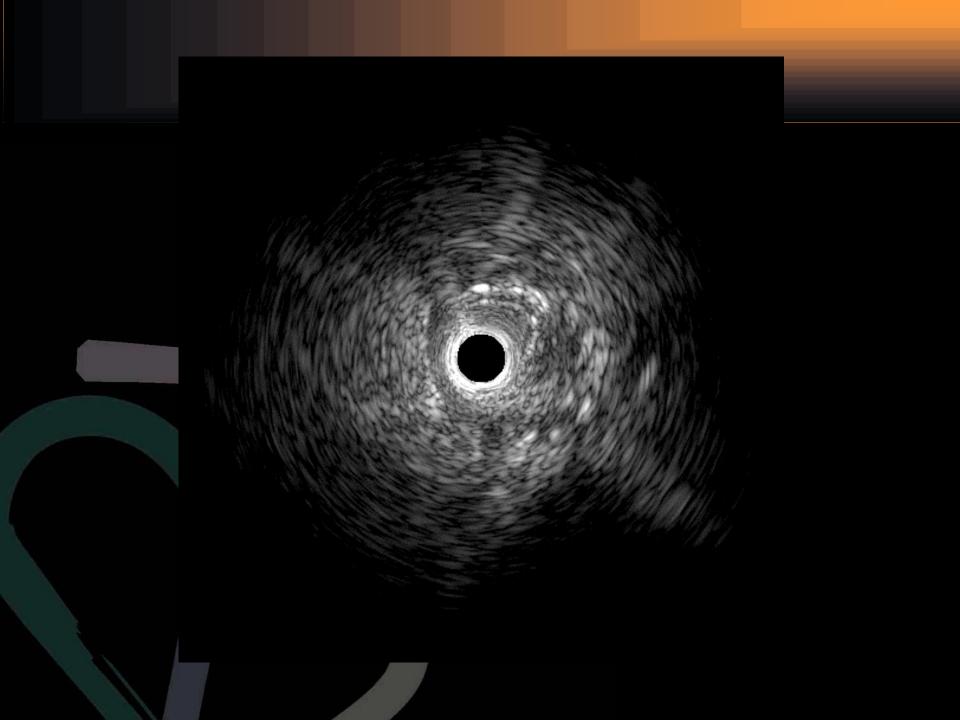


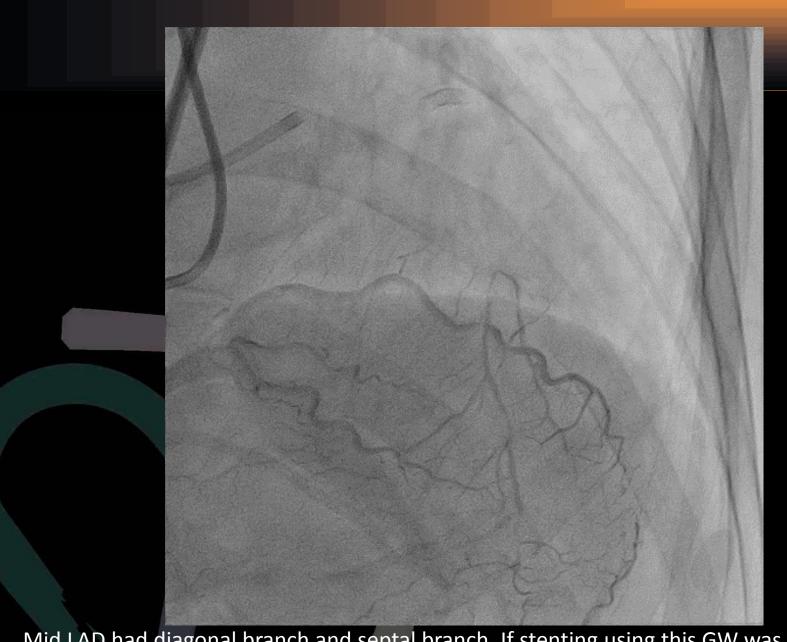


Finally GW got distal true lumen.

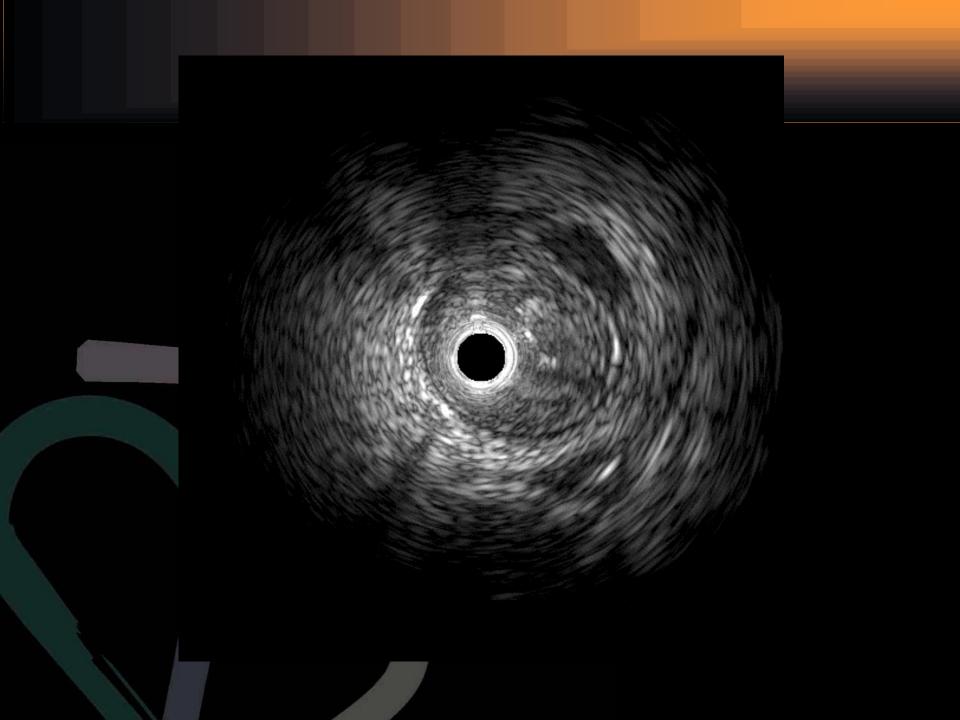


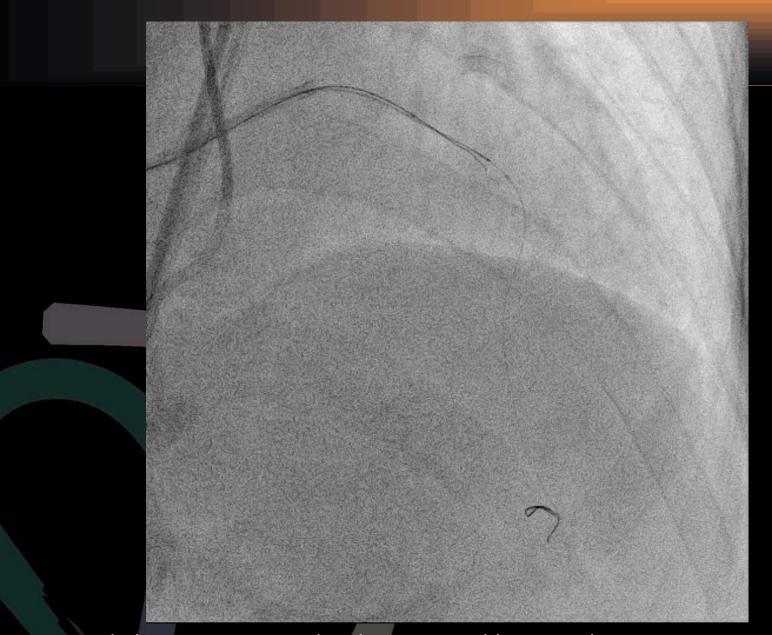
IVUS was used to confirm GW position.



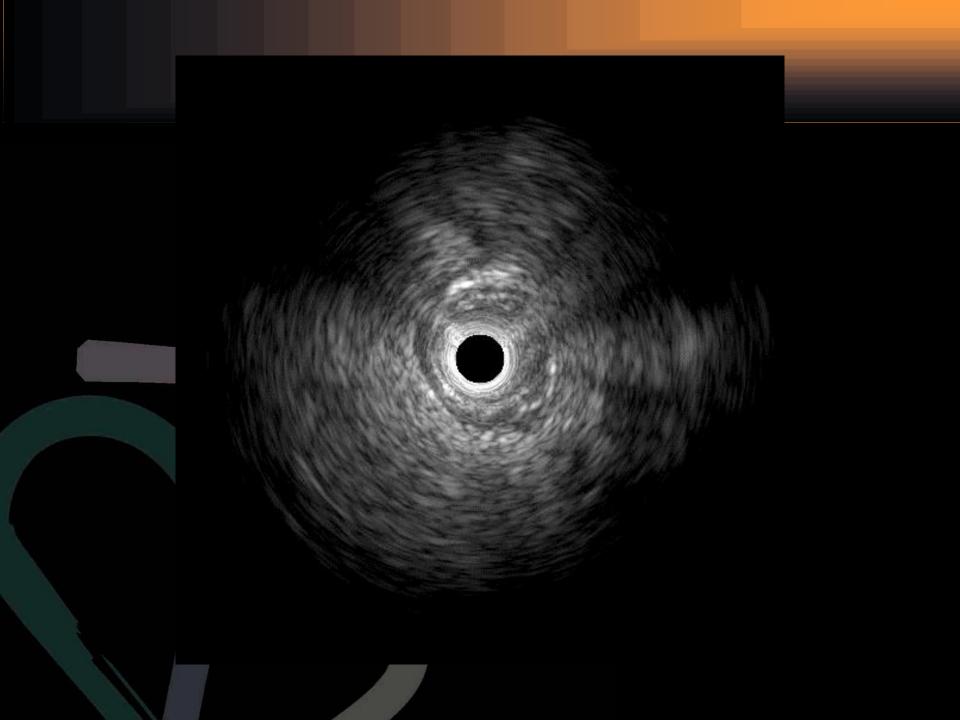


Mid LAD had diagonal branch and septal branch. If stenting using this GW was performed, these branches would be lost.





IVUS guided rewiring was used and Gaia1st could get true lumen.





## Summary

- Tips and tricks of Parallel wire
  - Use of Double lumen catheter
  - Use of GaiaNext series
  - How to correct GW position
    - Multiple projection is used
    - Wiring is performed on the projection that distance between GW and target vessel is the farthest.
- Tips and tricks of IVUS guided PCI
  - Role of IVUS in CTO PCI
    - IVUS guided entry
    - IVUS guided wiring
  - IVUS is left at wiring point and wiring is performed under IVUS image
  - Advantage of use of IVUS
    - Ideal entry point

## Thank you for your attention

