

# **BRA approach PCI with Cutting balloon for IMH with anomalous RCA-CTO (high anterior take-off)**

**Chiung-Jen Wu M.D., Chien-Her Lee M.D.**

**Chang-Gung Memorial Hospital Kaohsiung, Taiwan**

**TCT-AP 2018 Complex-PCIs Session**

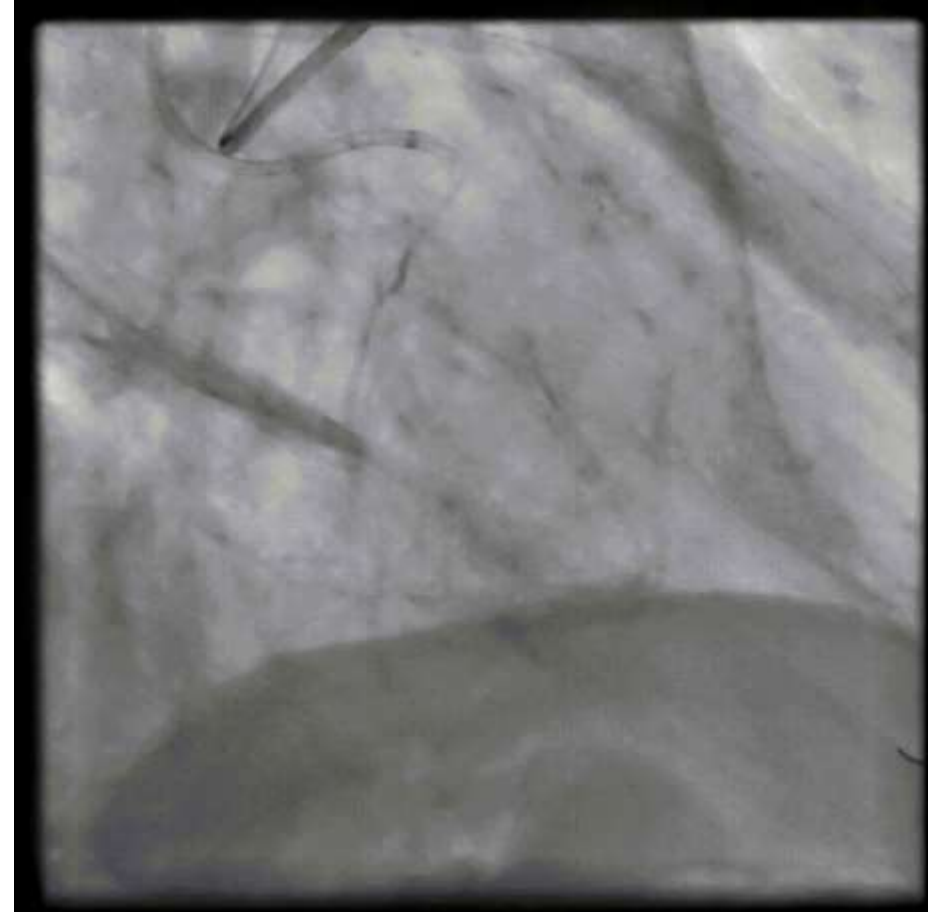
**Seoul, Korea**

**May 1<sup>st</sup>, 2016**

# Target mid-RCA CTO: via RRA Retrograde 7F BL4 guide (Terumo Corp.)

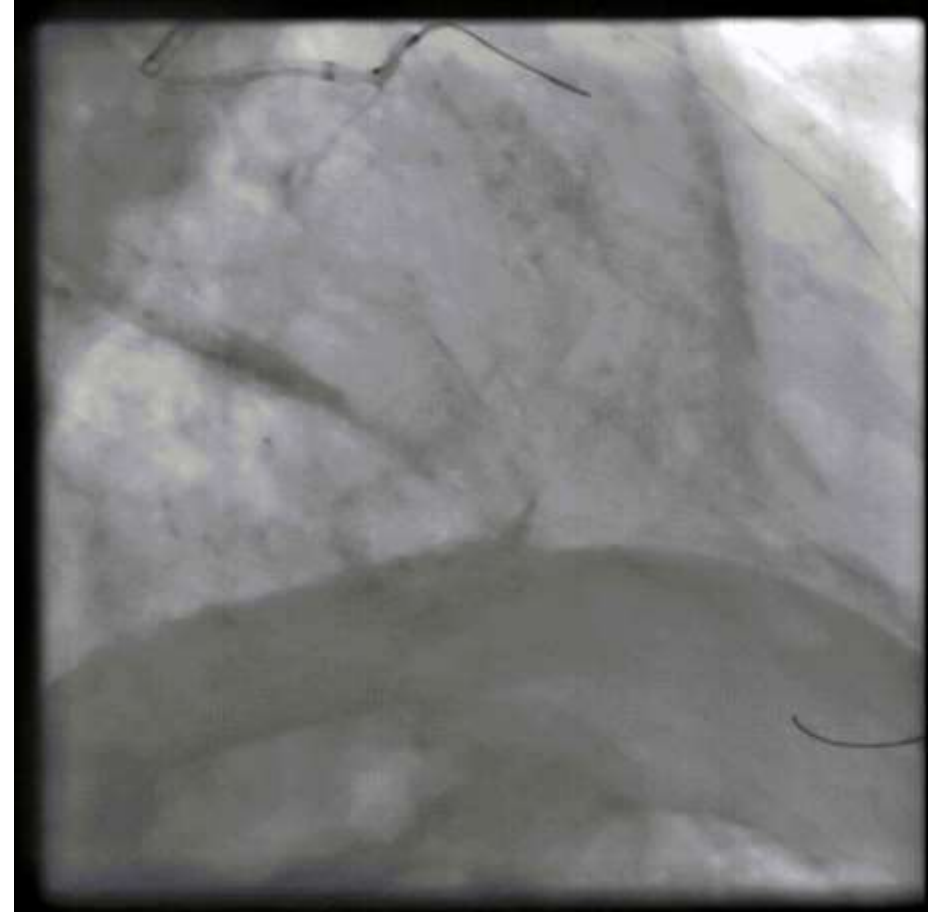
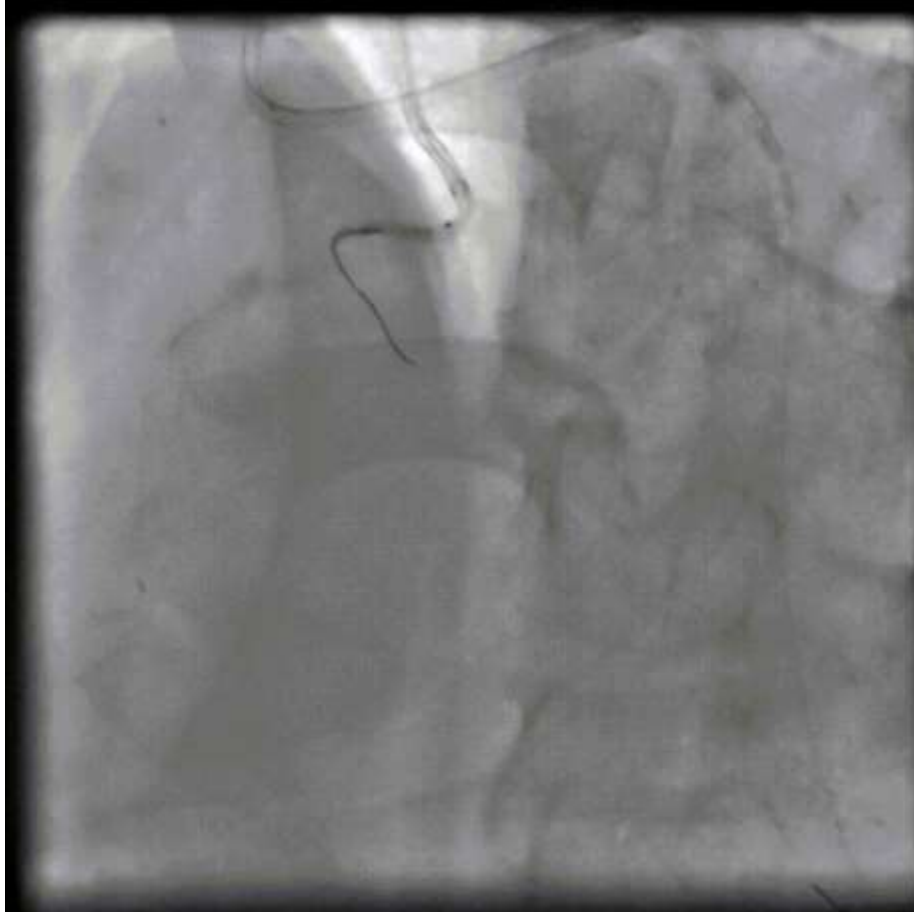


7Fr AL1, XTA guidewire



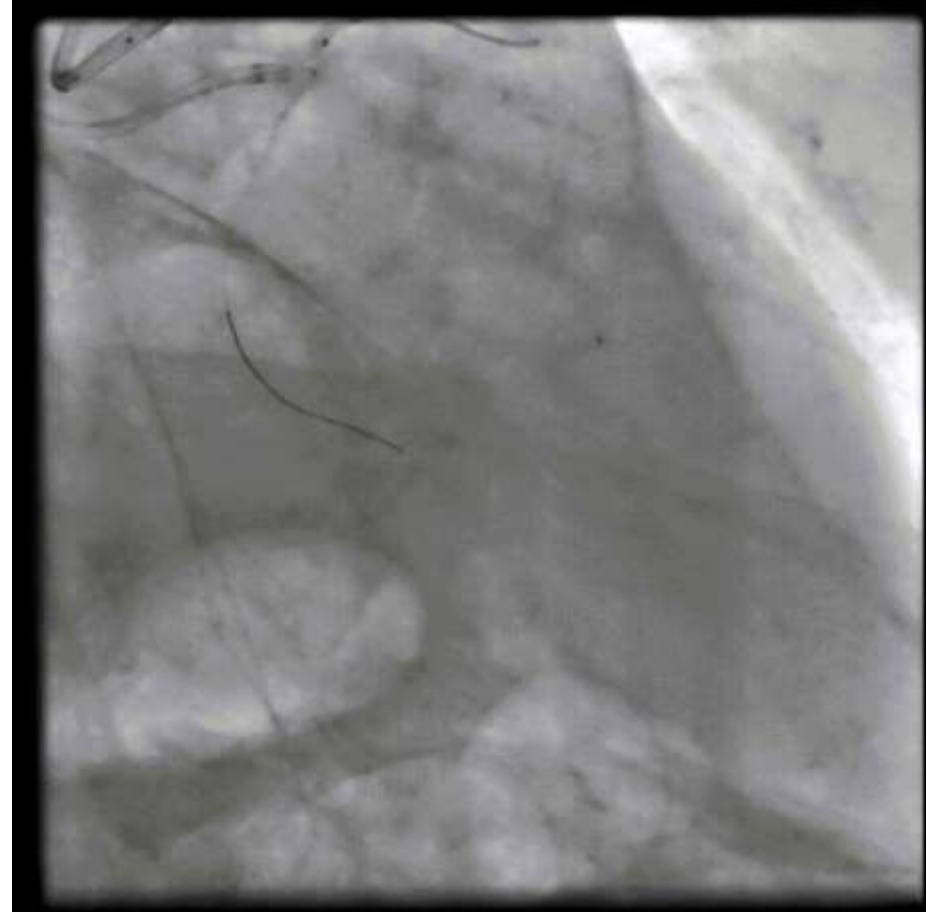
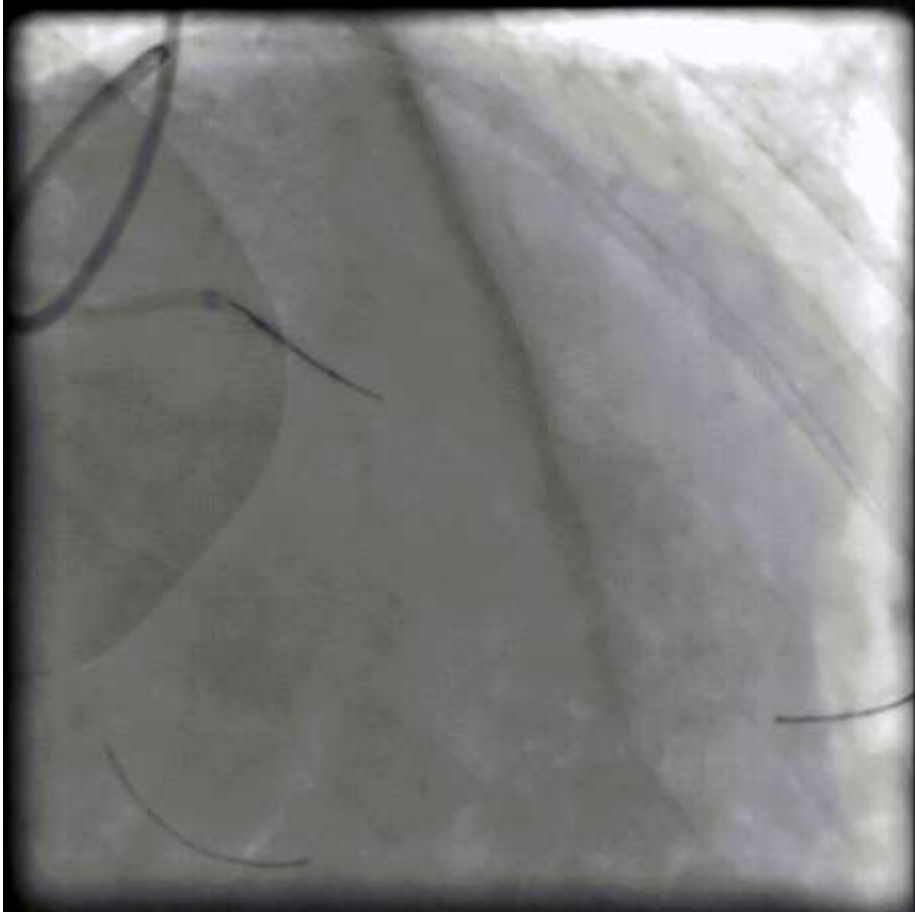
7Fr EBU 3.75

# Antegrade recanalization: LRA 7F AL1 with 2x12 mm balloon anchoring at conus branch

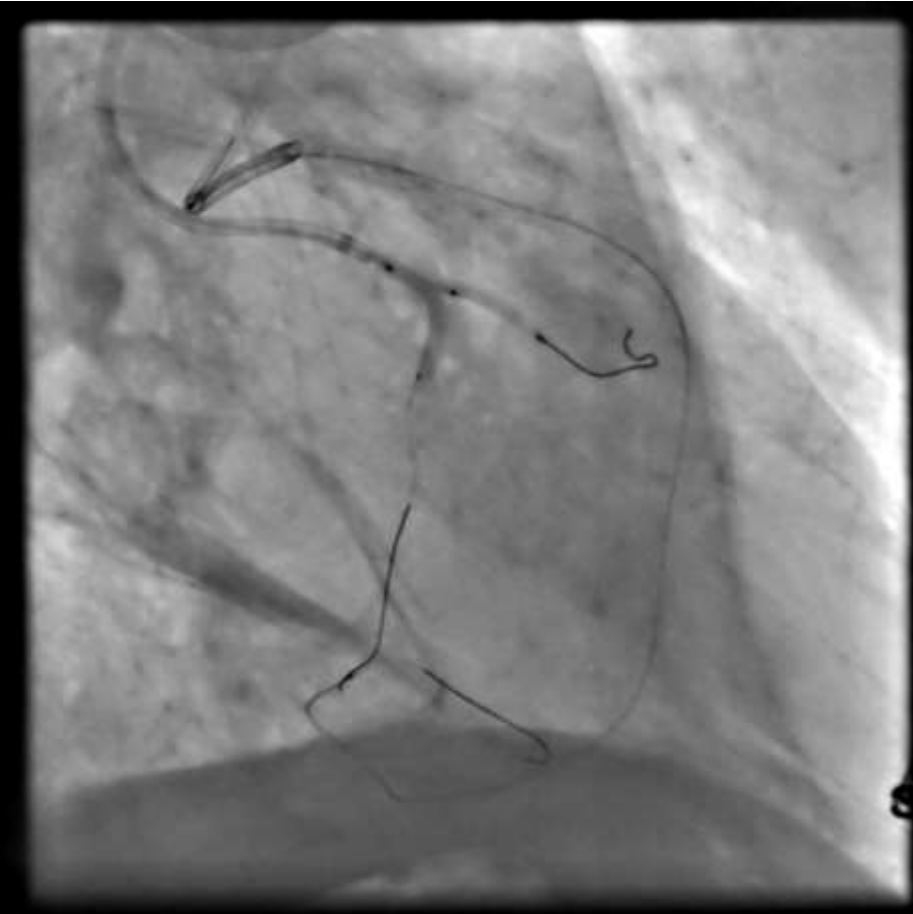
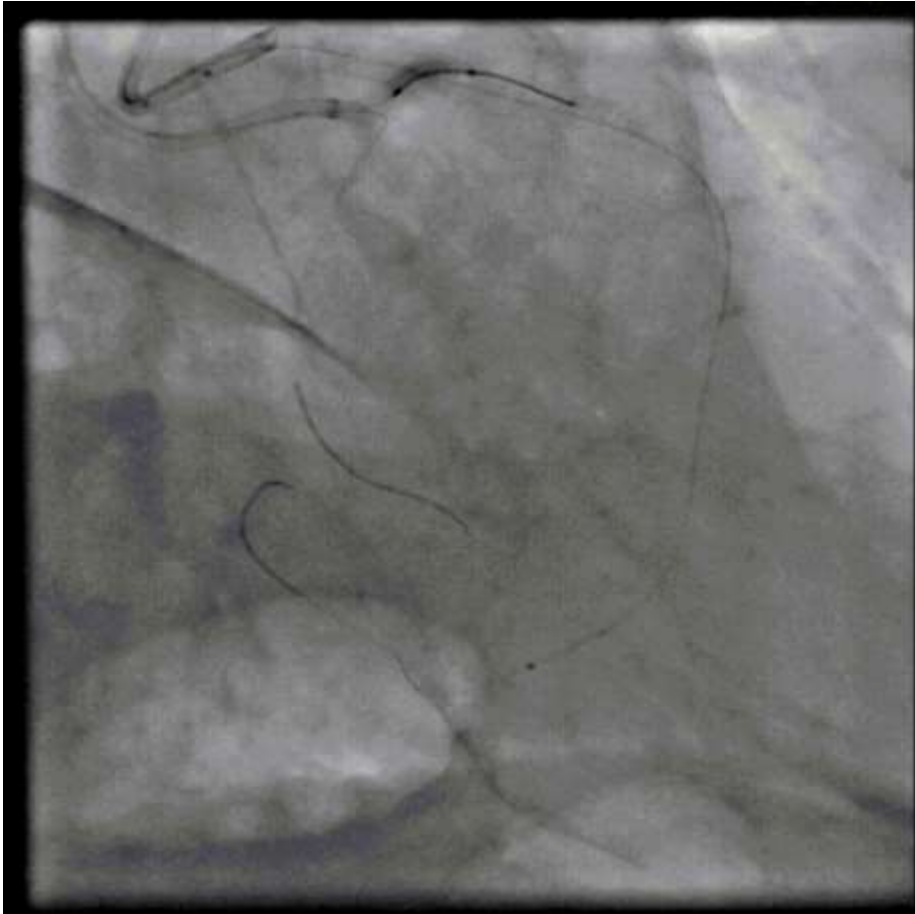


Finewire catheter in the acute marginal branch, but mid-RCA dissection, failed to get into d-RCA with Crusade

# Retrograde approach: Septal collaterals & selective angiography

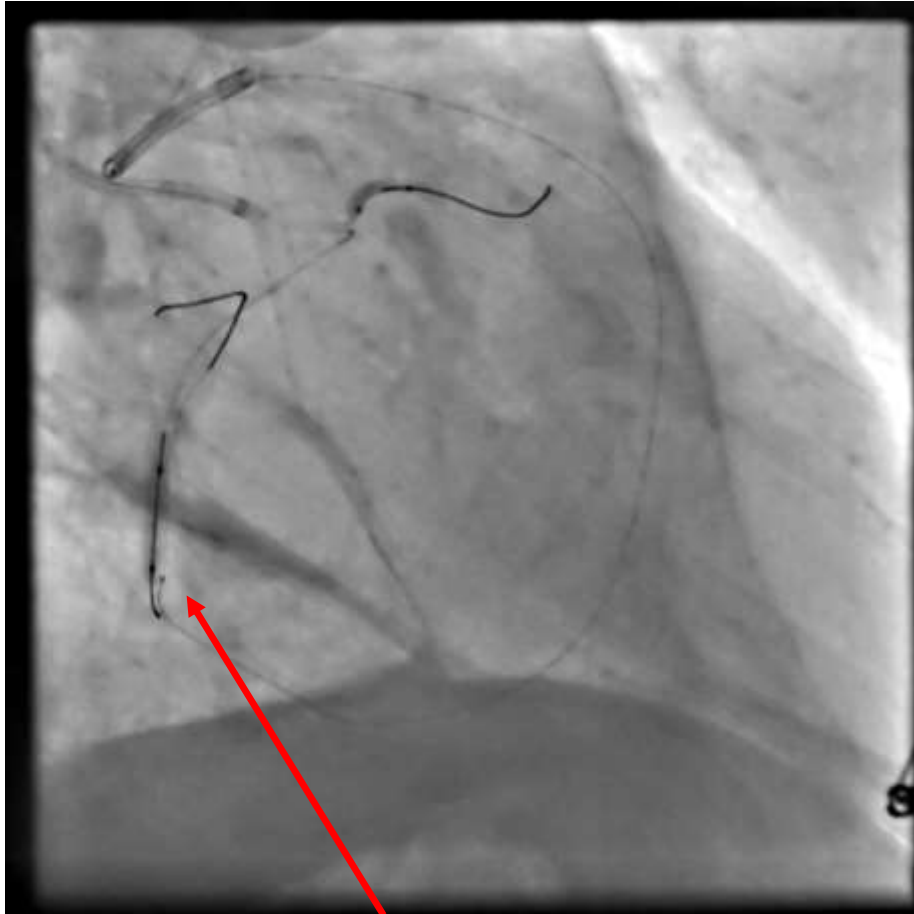


# Reverse CART: Crusade aiming retrograde wire & antegrade wiring with UB3 for preparing

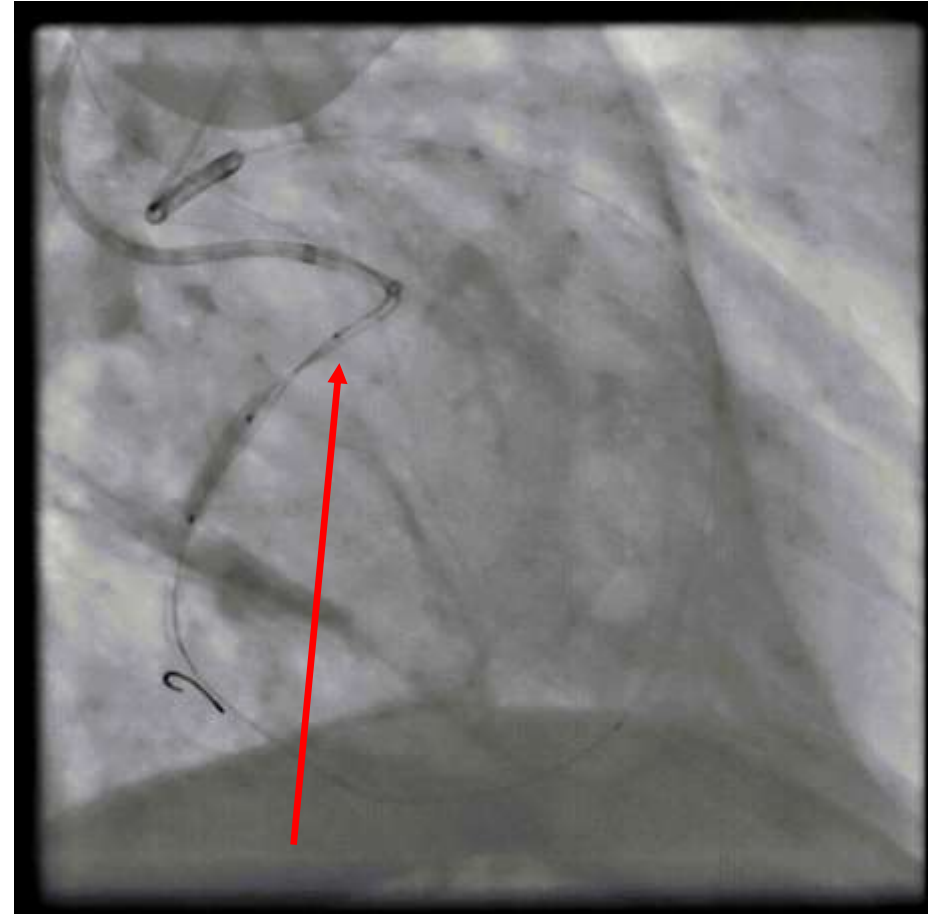


Reverse CART with a 2.5x15 mm balloon at 16 atm & 2x12 mm balloon anchoring at conus branch

# Externalization with 5 in 6 technique: accidentally antegr. Wire down into PL branch



Send Finecross retrogradely with anchoring balloon 2.5x15 mm qt 10 atm



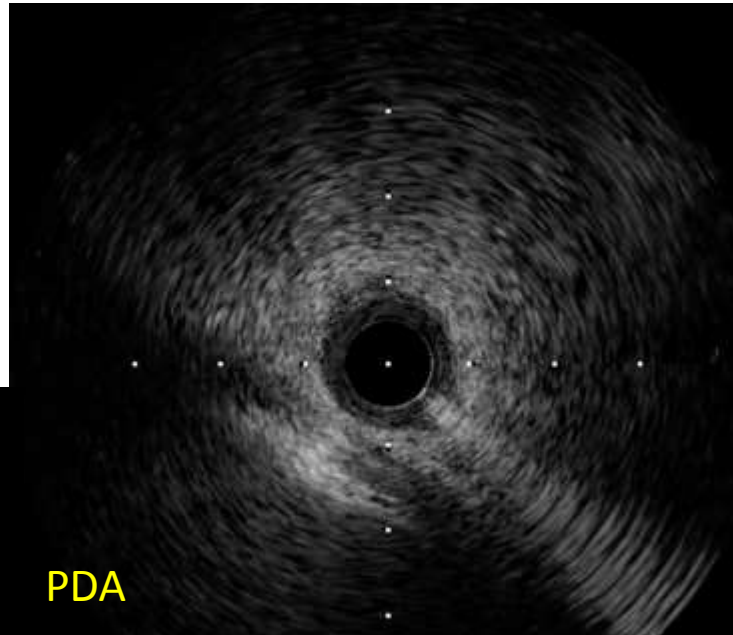
Advance 5 Fr guiding catheter with anchoring balloon & swallowing of retrograde F/C M,C., then externalization

# POBA from PDA-RCA with 2.5x15 mm 6 -16 atm

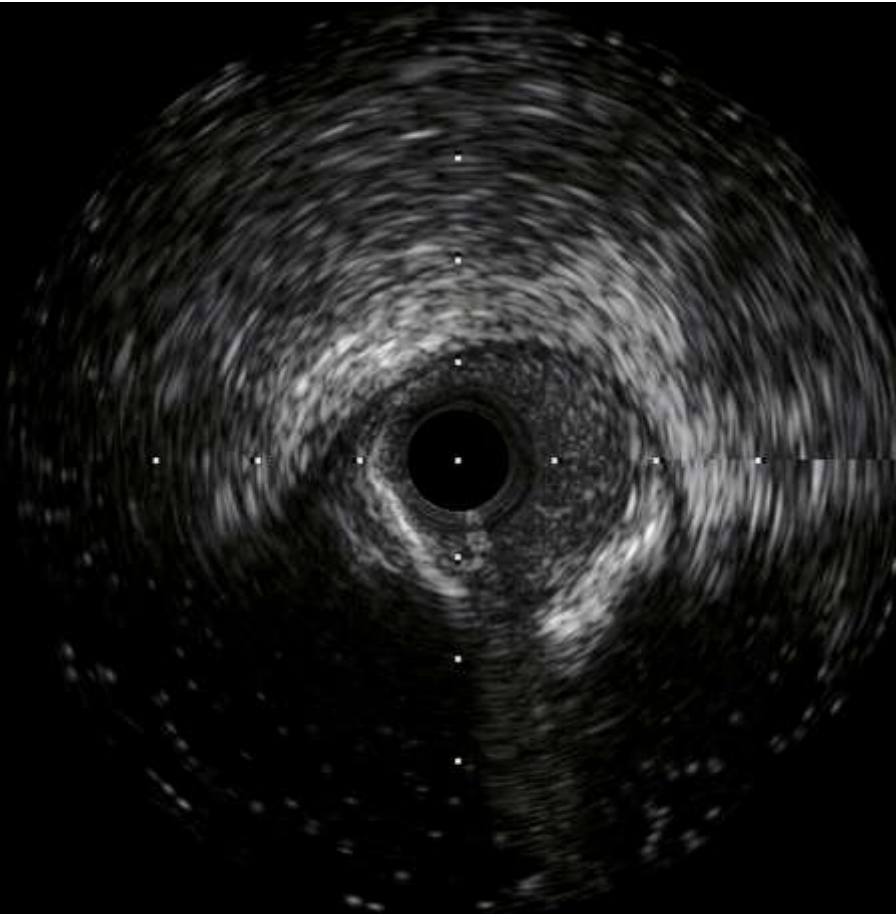


Sending a Runthrough guidewire to the PLB with the Crusade catheter

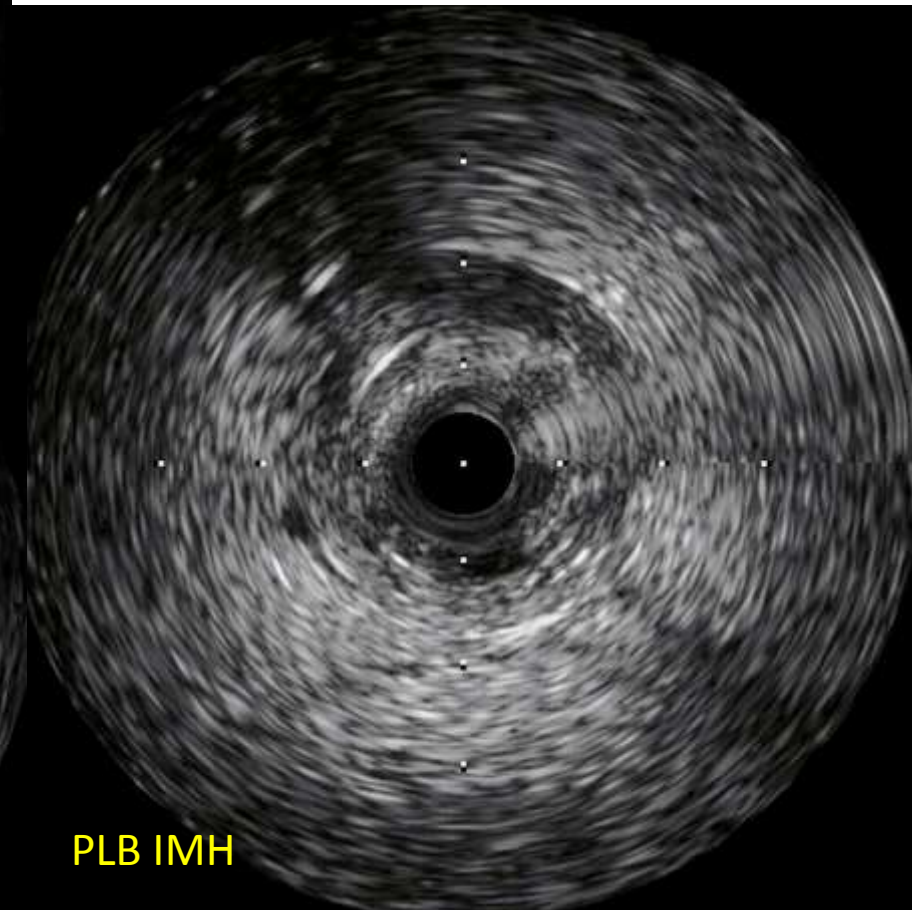
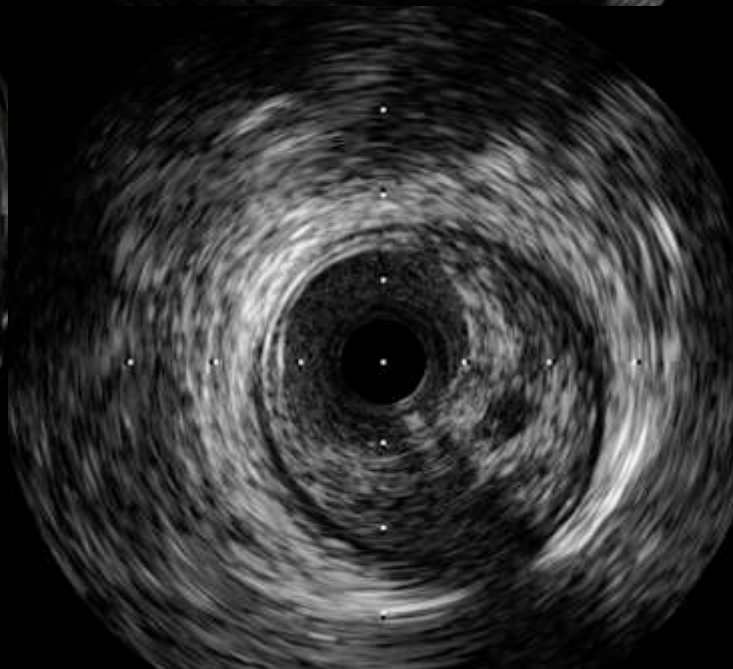
# IVUS



PDA



IMH in the PLB



PLB IMH

Wire was in the RCA true lumen



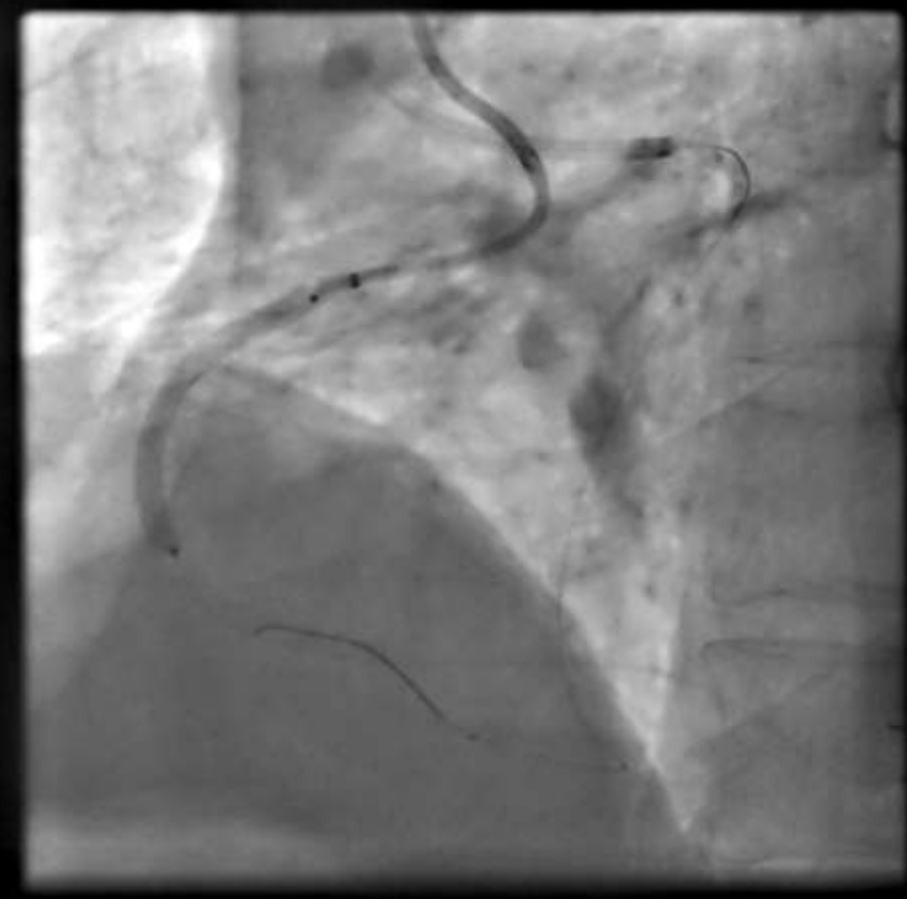
# Stenting from d-RCA



Removed RG-3 back into PDA before DES

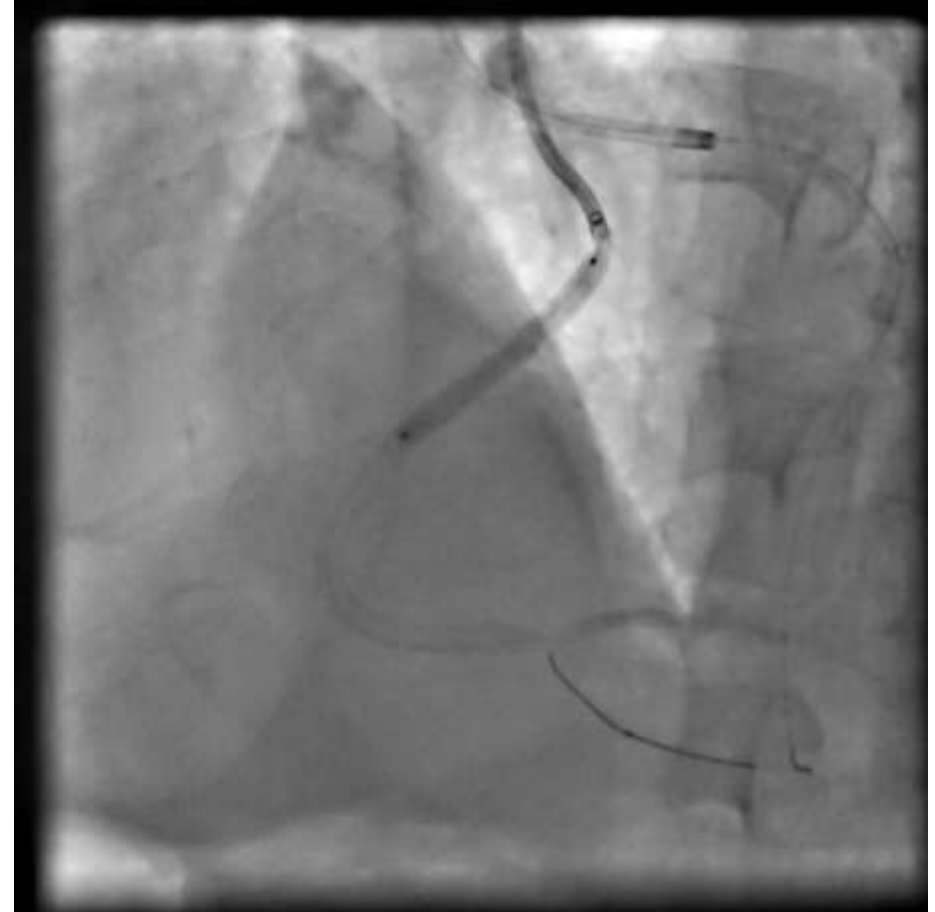


First 3.0x 38 mm stent

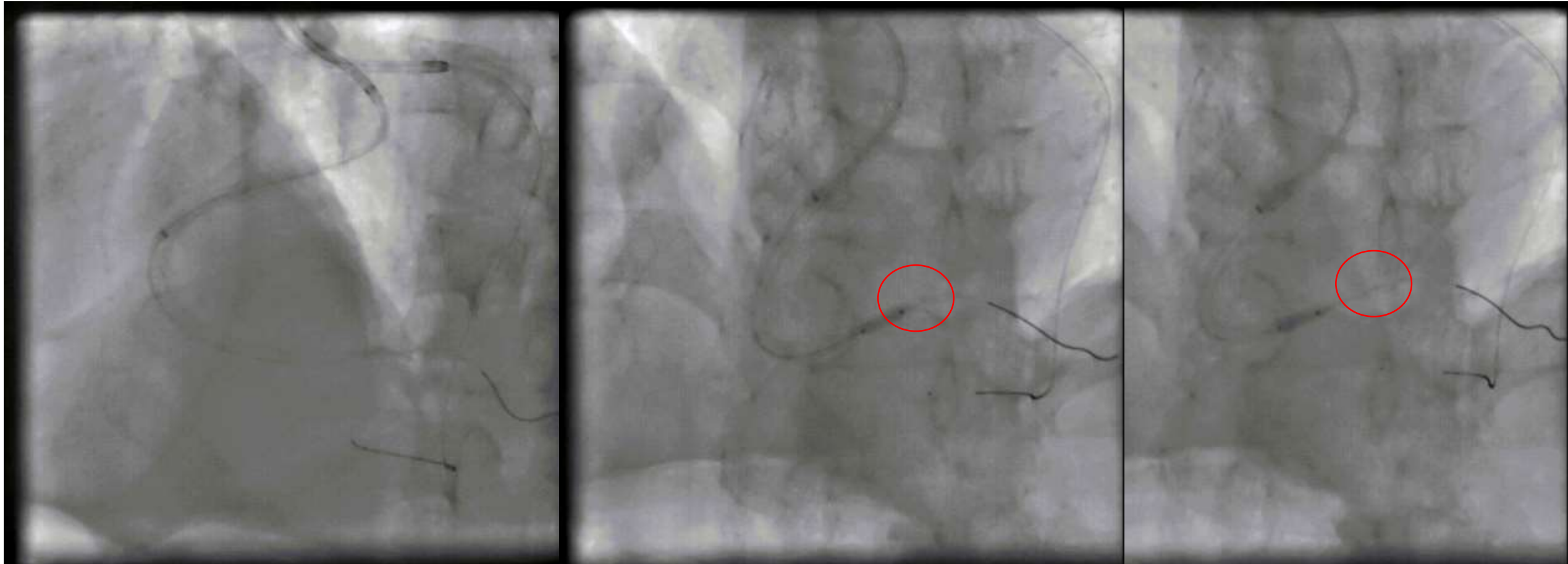


second 3.0x 38 mm stent

# Final DES from RCA-os 3.5x28 mm

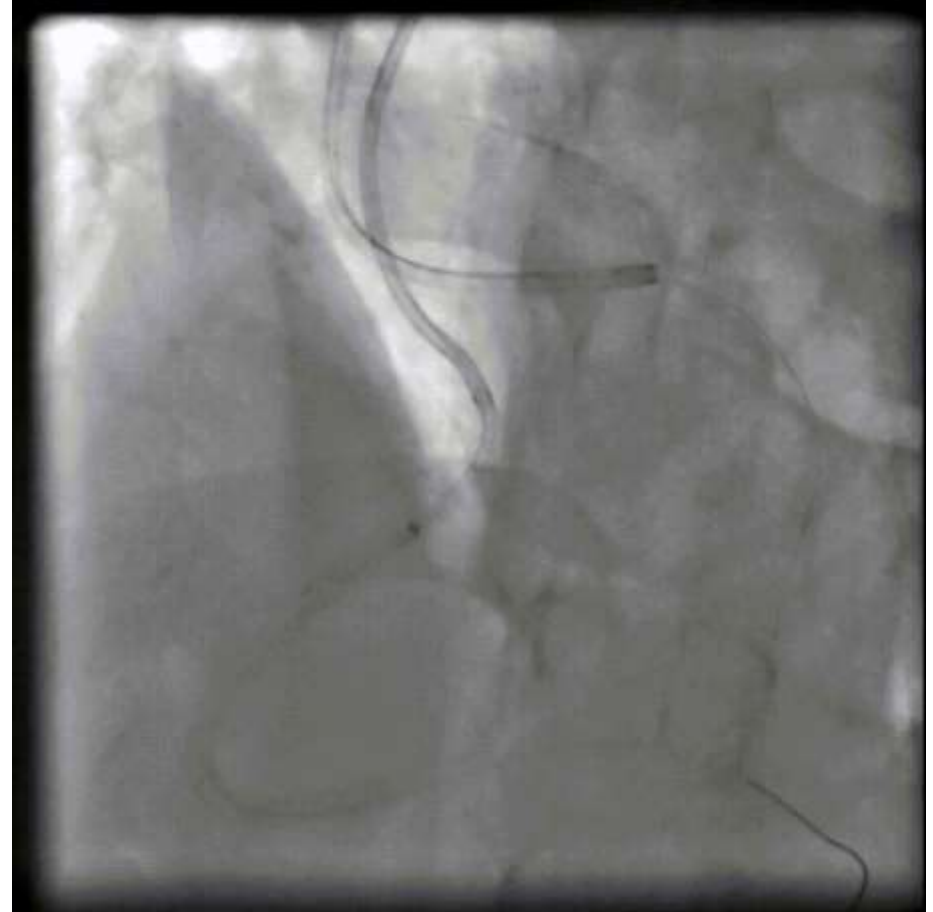


# IMH formation in the PLB

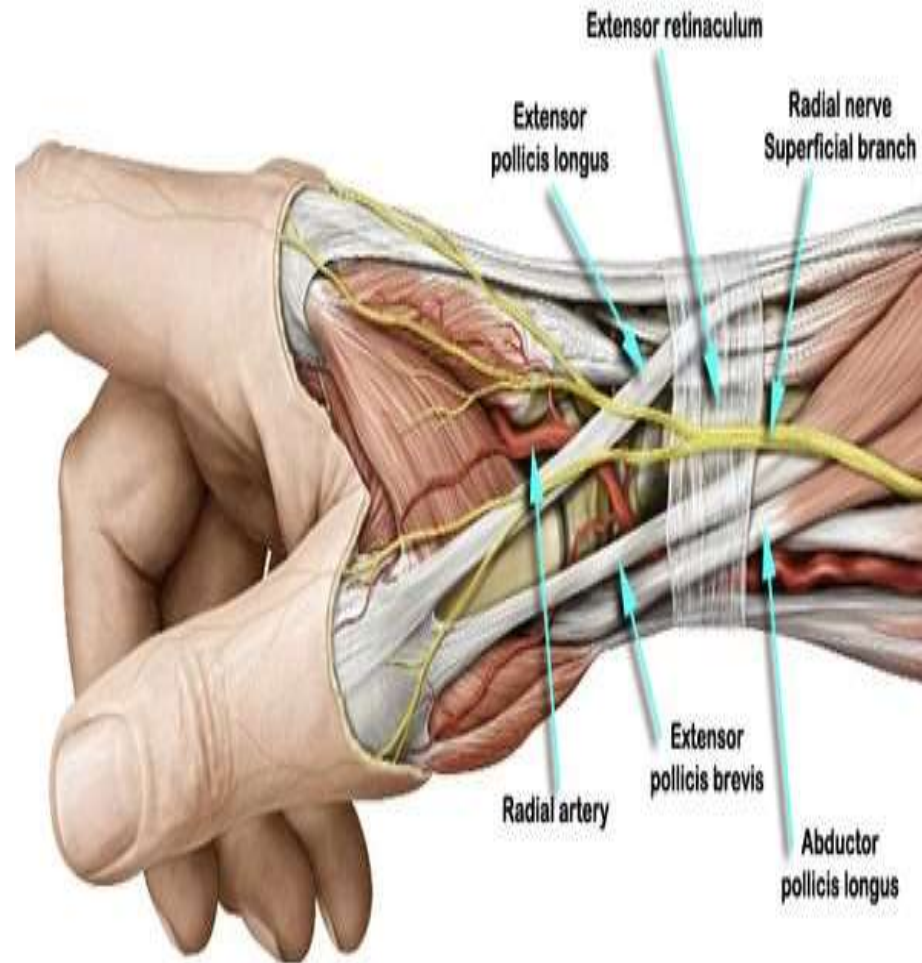
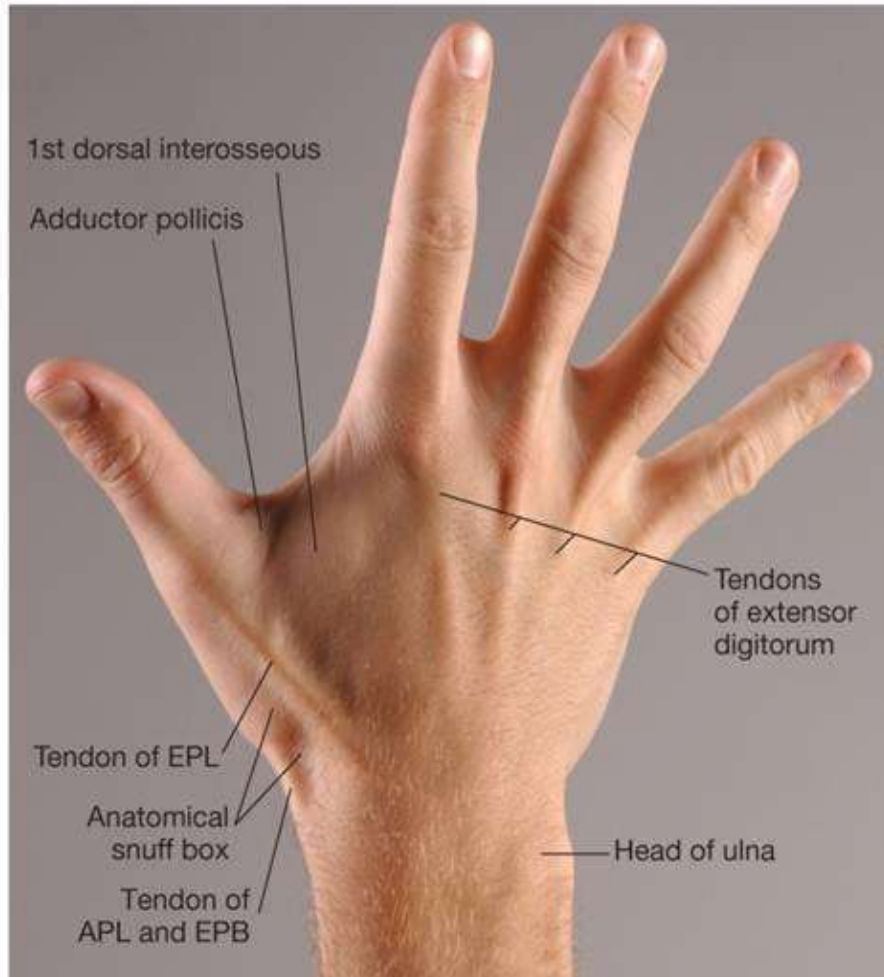


Cutting balloon 2.5x10 mm at 10-12 atm for PL-IMH, Dye stasis subsided after POBA

# Final angiography



# Coronary PCI done through d-Lt radial access (snuff box) using 6-7 F sheath



**1<sup>st</sup> Published: 70 patients (Simple PCI), 8 cases (11%) failure access**

JUST ACCEPTED ARTICLE

## Left distal transradial access in the anatomical snuffbox for coronary angiography (IdTRA) and interventions (IdTRI)

Published on 16 May 2017

no comment yet | print article

### Disclaimer:

As a public service to our readership, this article - peer reviewed by the Editors of EuroIntervention - has been published immediately upon acceptance as it was received. The content of this article is the sole responsibility of the authors, and not that of the journal or its publishers. To read the full content of this article, please download the PDF.

[Sign in to download the full article](#)

### KEYWORDS

- radial
- Miscellaneous
- Other

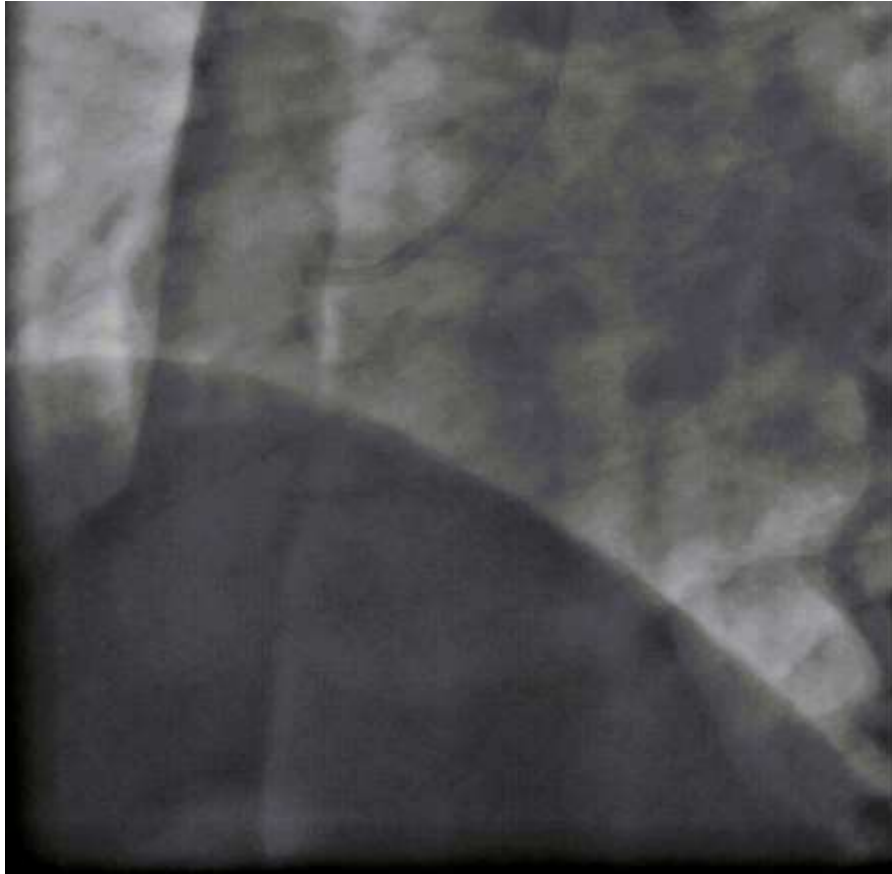
### AUTHORS

- Kiemeneij F

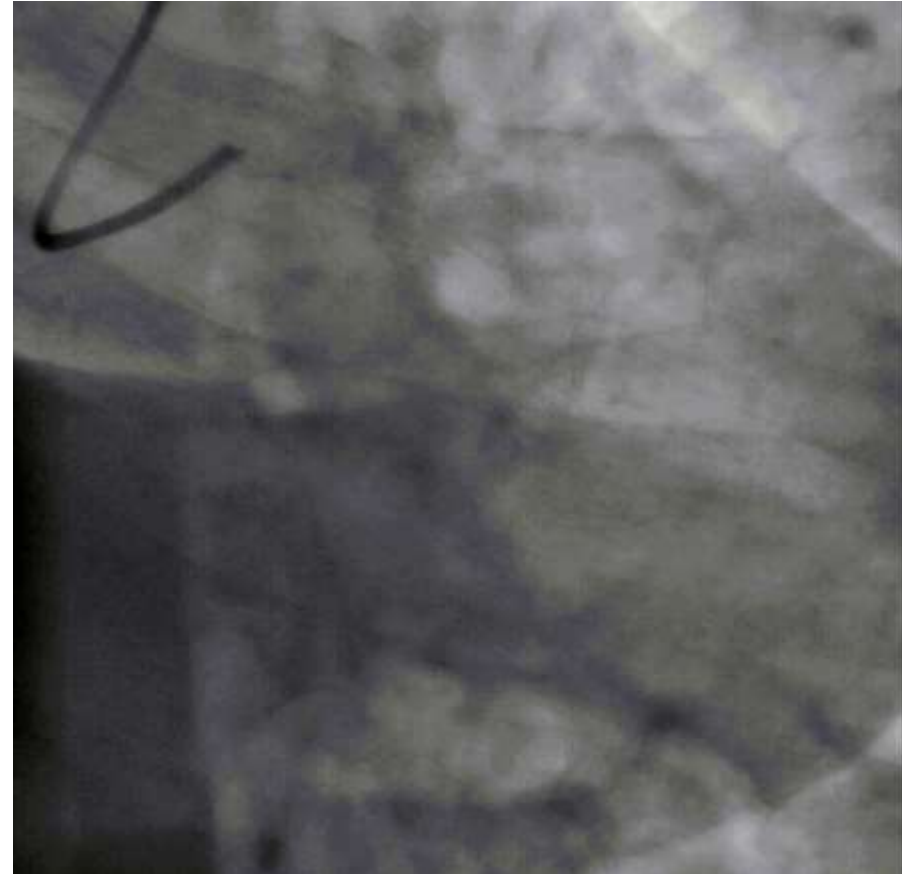
7F sheath via d-RRA for retrograde EBU4, antegrade via d-LRA Glidesheath 7F AL1-ST, Snuffbox access for re-attempt RCA-CTO (case example)



Second attempt via BRA snuffbox access: 6F  
IL4 at 2017-12-27 (1.5 mo after first attempt)



CTO at distal RCA



Collaterals from septal  
branch and d-LCX



Glideshea

# Glidesheath Slender®

Hydrophilic Coated Introducer Sheath

## POCKET GUIDE

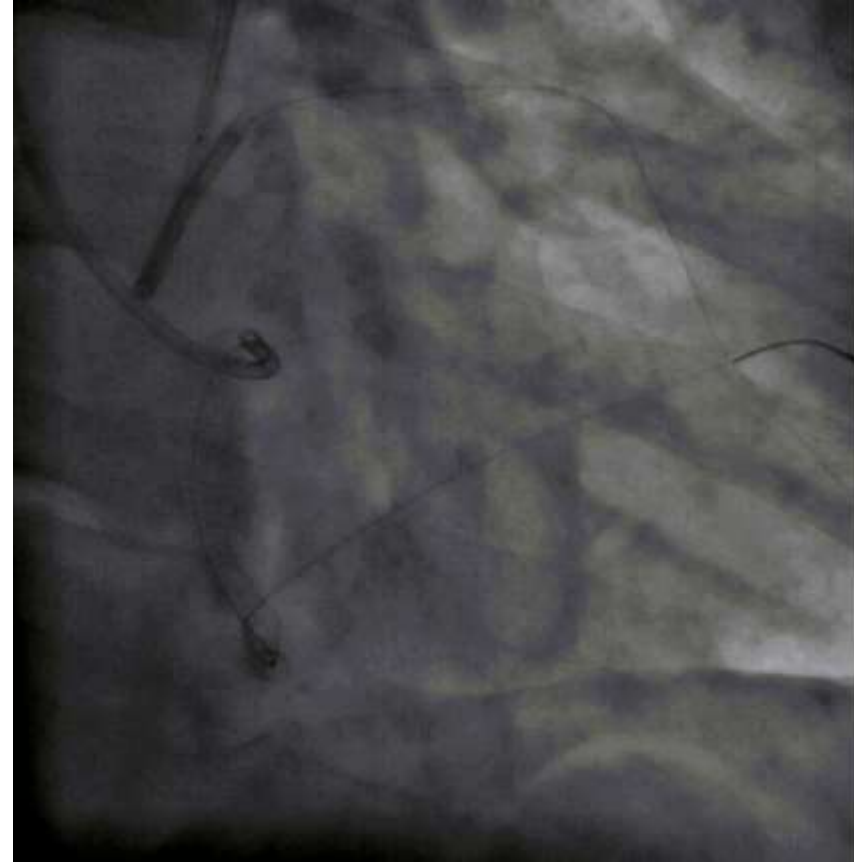


### 5, 6, and 7Fr sheaths Increase Your Radial Access Options



Inner

**Final angiography: proc. time 179 min,  
Fluro. T 82 min, contrast volume 400 ml**



**Un-eventful discharge at 2<sup>nd</sup> day, Doppler study  
revealed patency of both RA at snuffbox access site**

# **Hemostasis using figure of “8” and saving usual radial and ulnar access for future intervention**



# Complex PCI Need Advanced Techniques ( A. B. C. D. E. F. )

- ★ • Ancor technique
  - Wire anchor
  - Balloon anchor
    - coaxial
    - branch
- ★ • Buddy wire technique
- Changing guiding catheter
- ★ • Deep seating guiding catheter (child catheter crossover lesion)
- Engage coaxially
- ★ • Five in seven Fr guiding catheter (Child in mother technique)
  - Terumo Heartrail ST01 guiding catheter
  - Guidezilla/GuideLiner catheter

➔ Plus snaring technique at aorto-ostia CTO

# Conclusions:

- BRA approach with Glidesheath Slender 7/7 F antegrade & retrograde is feasible, and able to achieve similar results as BFA approach & definitely can reduce access site complications
- D-LRA snuffbox approach may even easier for operator & reduced radiation
- Anomalous RCA with CTO is always be challenging at support, anchoring with 5 in 7 technique did improve co-axial support & DES stent delivery
- Reverse CART making IMH downstream extension, we should cover IMH from PL to RCA, but localized residual IMH at PL with slow flow can be treated efficiently by cutting balloon angioplasty
- Familiar different kind of techniques & instruments with good fundamental skill is the key of success during PCI for CTO lesions

Thanks for your attention !  
Welcome to Kaohsiung, Taiwan

