Successful Recanalization of Stumpless Ostial LAD CTO through Bilateral Radial Approach in a Patient with Distal Aorta Total Occlusion : "The Real Never Give Up"

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Clinical Information

1. CC; A 59 years old male had history of recurrent chest pain for 3 years.

2. Risk Factors

; Hypertension (+), Diabetes (-), non-Smoker

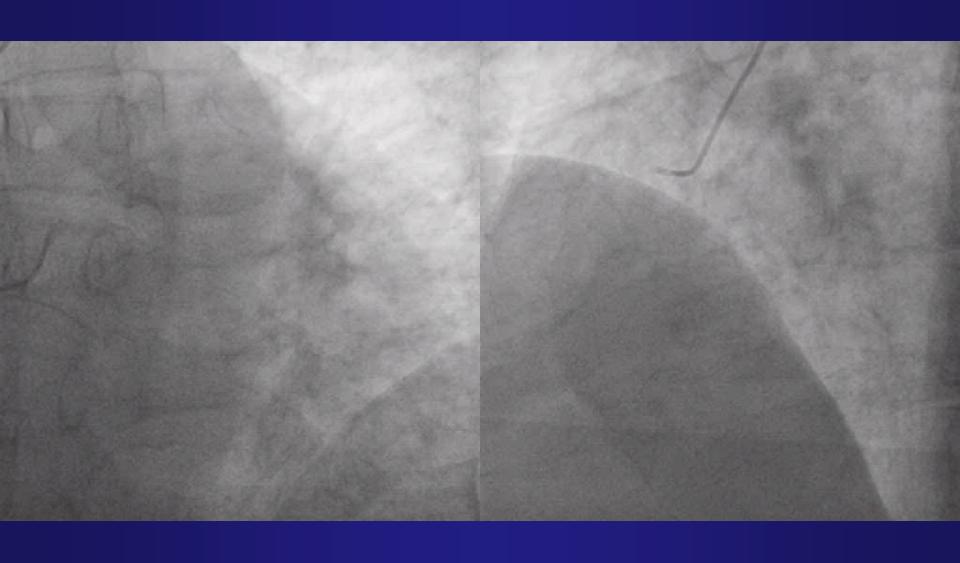
3. Previous PCI History

; Previous history of peripheral vascular disease (No specific treatment)

4. Lab Finding

- 1) Biochemistry & Serology; unremarkable.
- 2) EKG showed NSR
- 3) Echocardiography showed dilated LV with impaired global LV systolic function (EF: 28%) with RWMAs in LAD territory and RCA territory

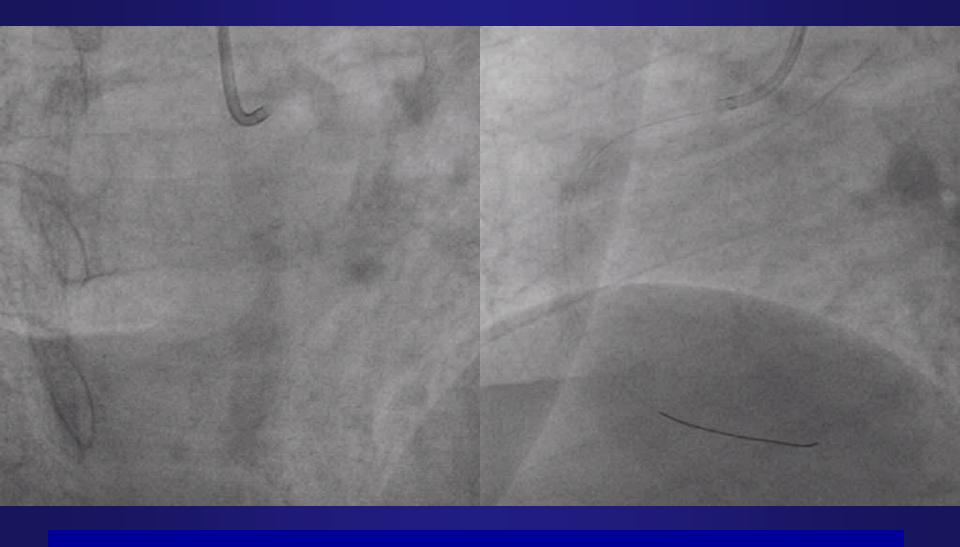
Baseline CAG



Lower Extremity CT Angiography

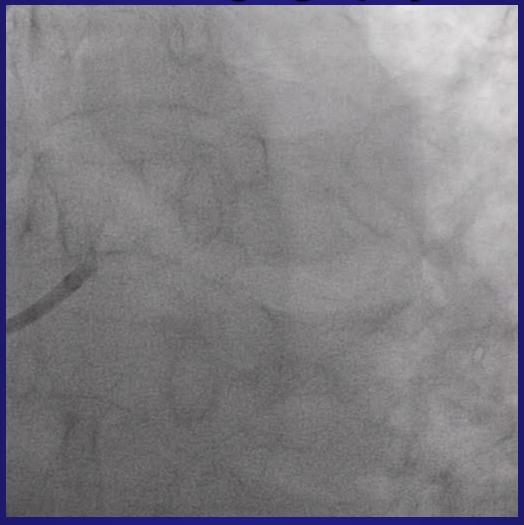


RCA Intervention



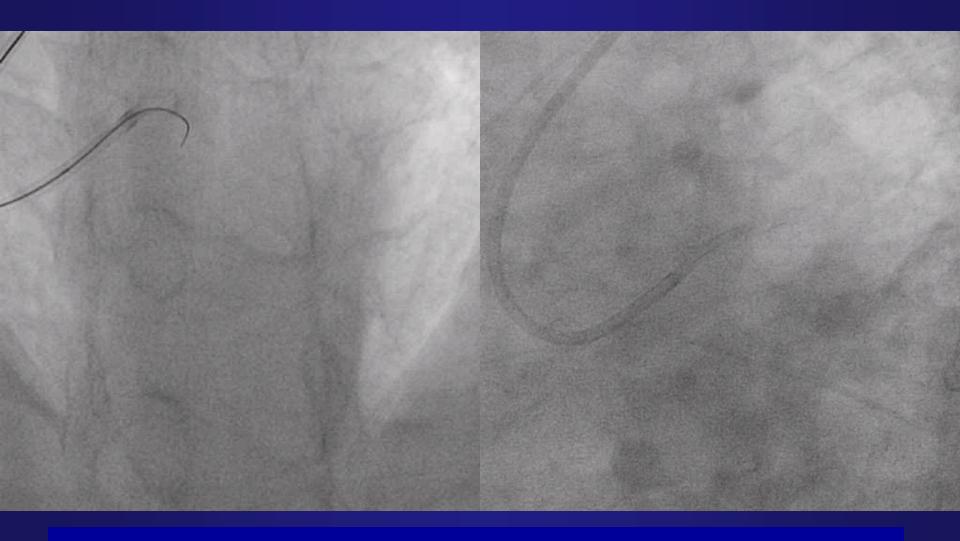
6F JR4 via Rt Radial Endeavor Resolute 3.5X24mm (14/10)

Baseline Angiography; LCA



7F EBU 3.5 for anterograde approach & Rt radial a, Fielder XT→Miracle 6→ Conquest Pro/Microcatheter

Anterograde Wire-Failed



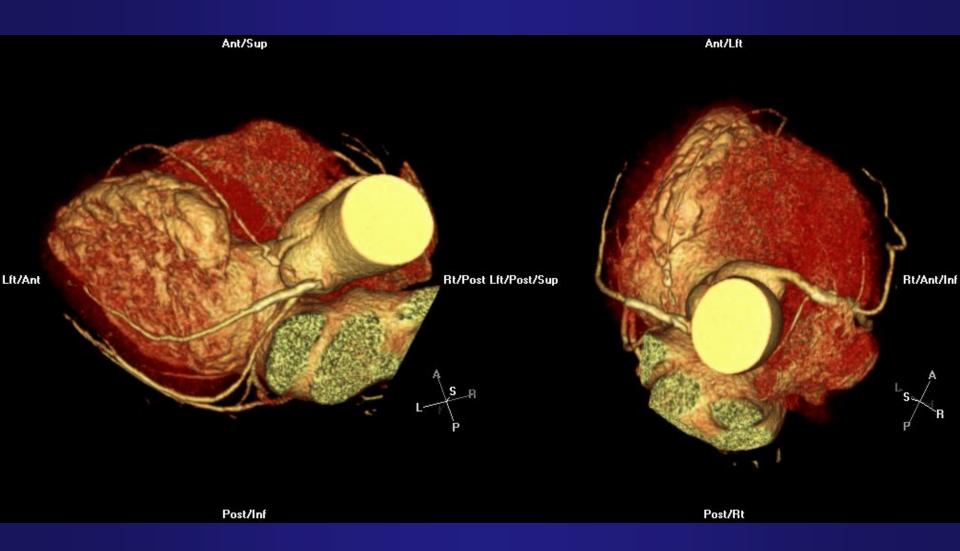
Anterograde wiring-Extravasation/Extensive injury..

LM to Ramus Intervention (Jan 18, 2011)



To seal the extravasation in the LAD os... Endeavor Resolute 3.0X24mm

Coronary CT angiography

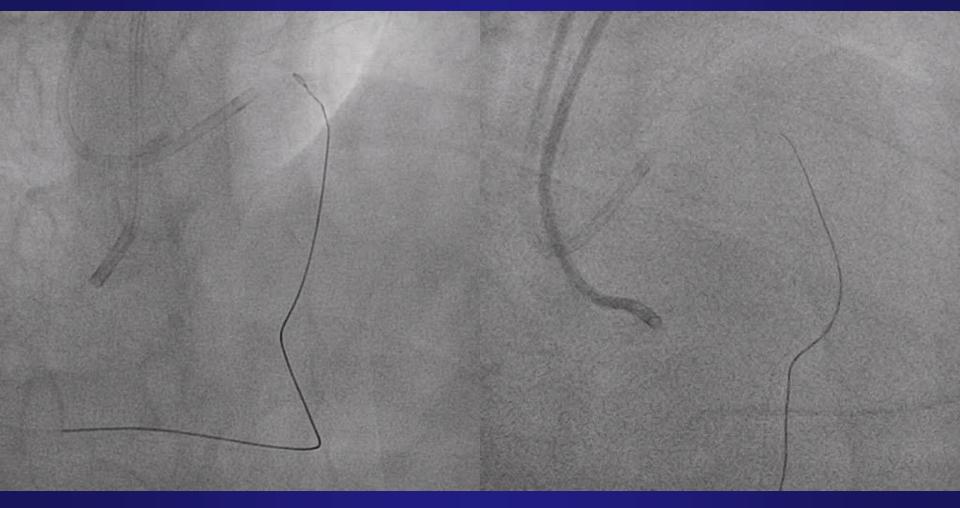


LAD Repeat Intervention (Jan 27, 2011)



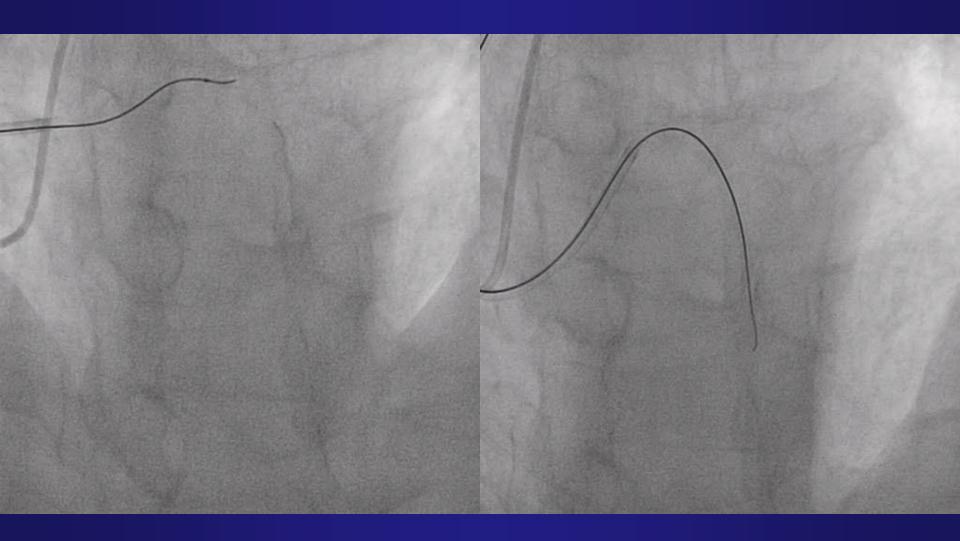
Second attempt for LCA; Primary Retrograde Approach Bilateral Radial; Lt (6F EBU 3.5), Rt (7F AL-1)

Retrograde Wiring-Failed



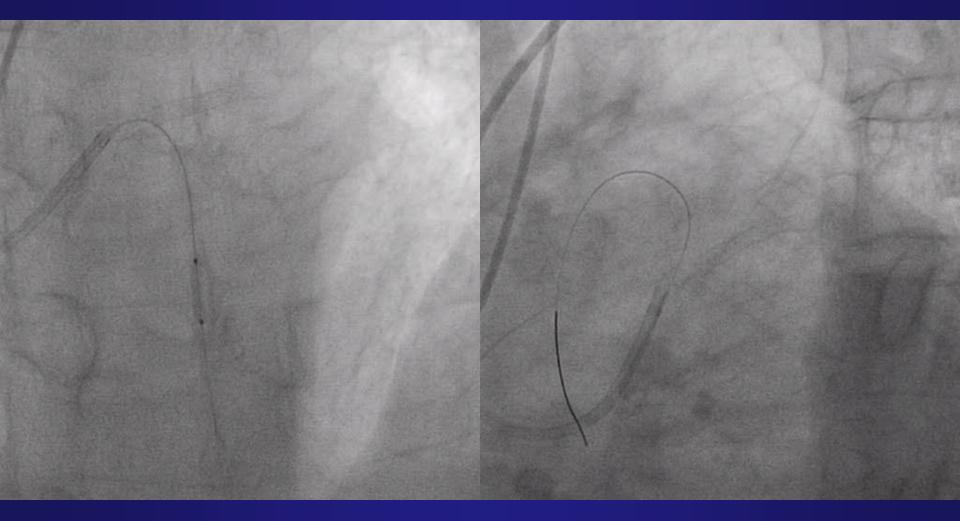
Retrograde approach was attempted; multiple Fielder FC & XTs wires/ Finecross microcatheter support. Septal dilation by Sprinter legend 1.25X10mm-microcatheter could not pass...

Anterograde Wiring; Again...



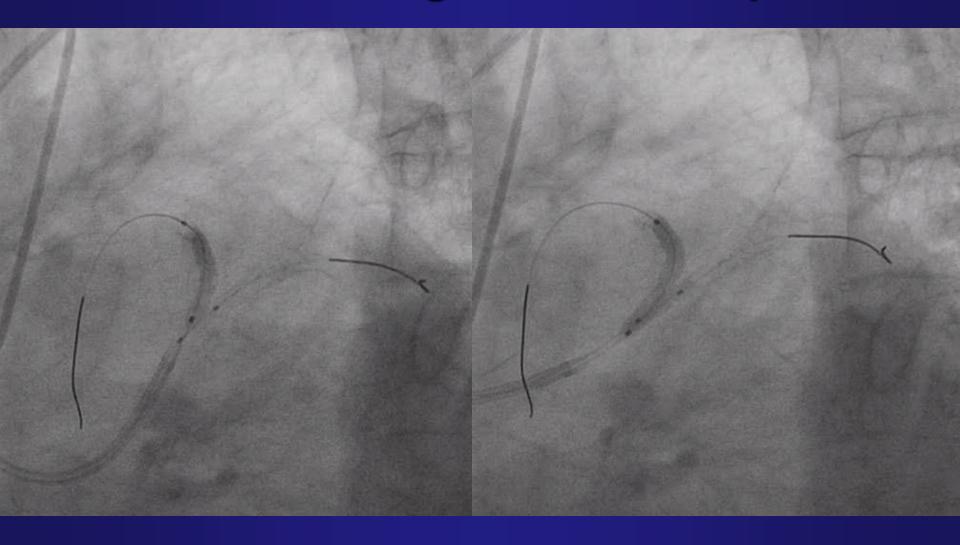
Final Penetrating Wire; Conquest pro 12

Predilation



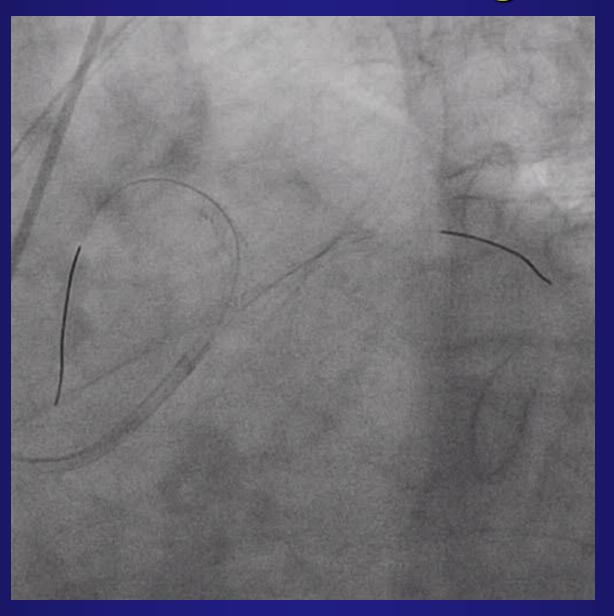
Sequential predilation using Sprinter legent 1.25X10mm and then, Mercury 2.0X14mm

LAD Stenting: TAP technique



LAD os to prox; Endeavor Resolute 2.75X30mm LM to Ramus prox; Durastar 2.75X10mm

Post LAD Stenting

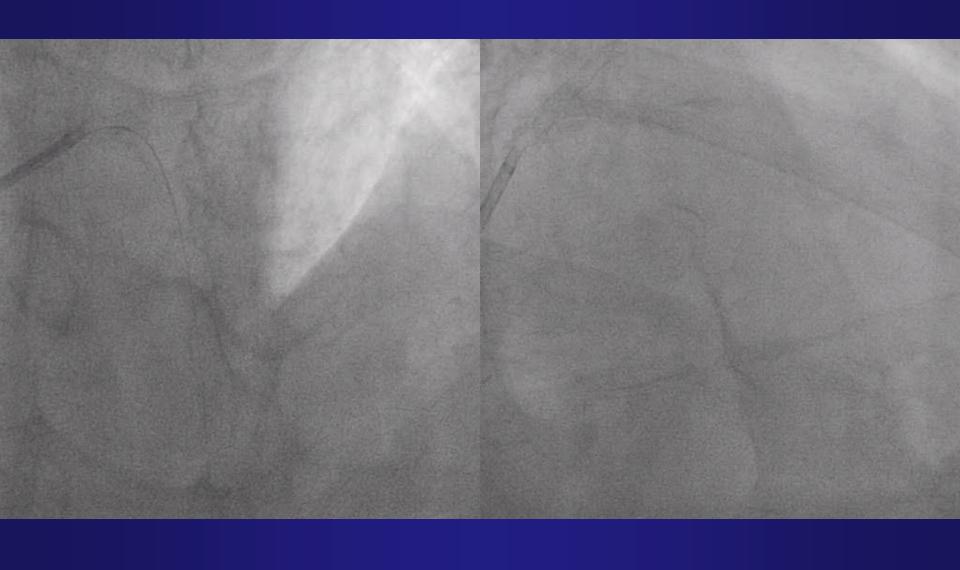


LAD-Low Pressure POBA

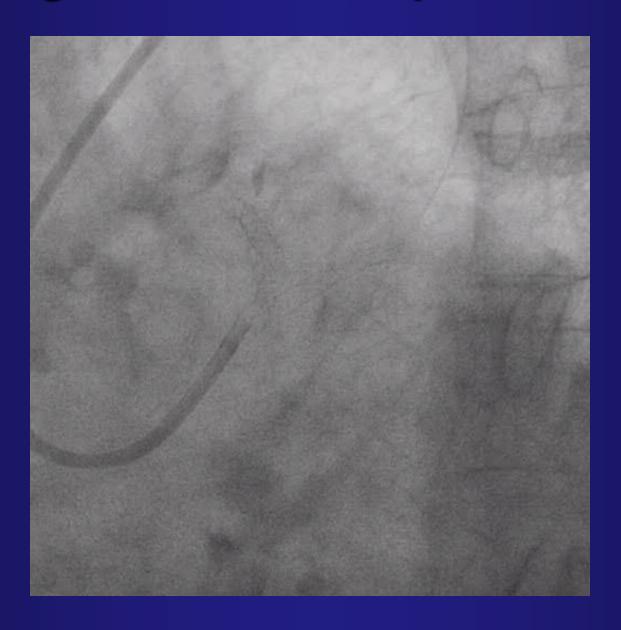


Mid to distal LAD; Mercury 2.0X14mm

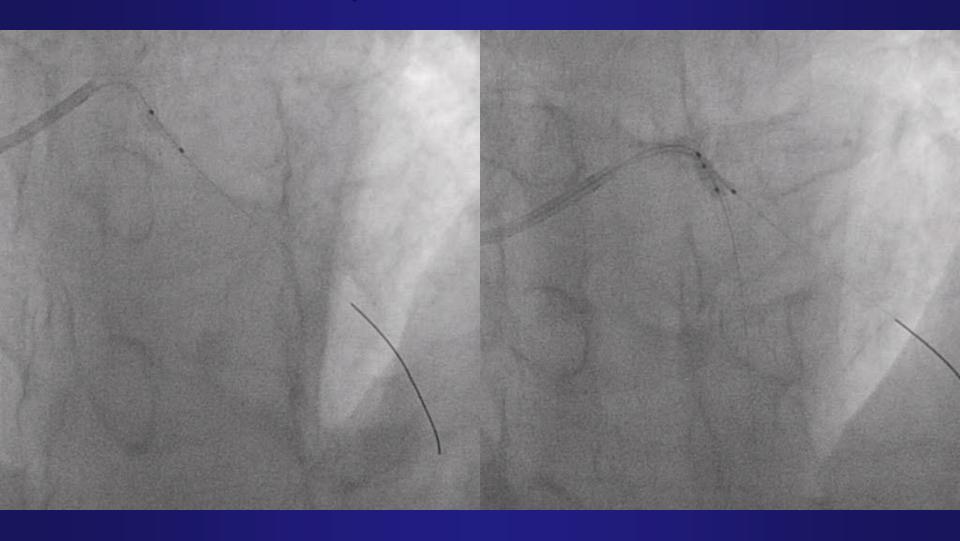
Post POBA in LAD



Diagonal Branch; Open or not?

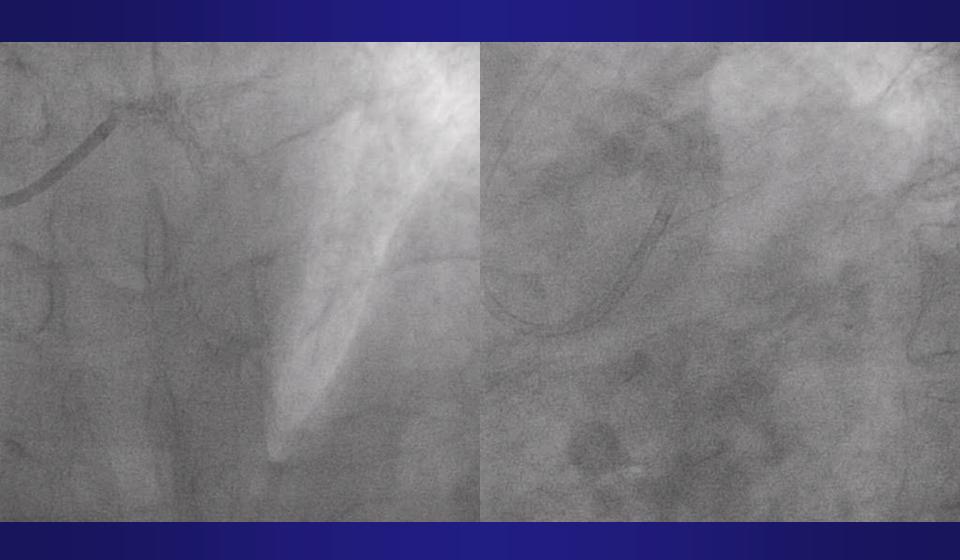


D1; POBA & FKB



D1; Mercury 2.0X14mm LAD prox; Durastar 3.0X10mm

Post POBA in LAD/D1 Bifurcation



Discussion

- 1. Can radial artery be a good alternative approach for complex CTO intervention?
- 2. What is the optimal interval for reintervention after coronary dissection or perforation?
- 3. How to effectively attack to stumpless CTO lesion?: MDCT guided, IVUS guided...
- 4. Efficacy of TAP technique in LM bifurcation
- 5. Efficacy of low pressure POB in atrophic CTO segment
- 6. Importance of channel dilator (Corsair) in retrograde approach

Thank You for Your Attention!!

