CHALLENGING CASE:
IN-STENT CTO PCI, USING ADR TECHNIQUE

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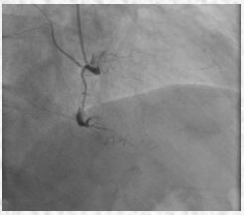
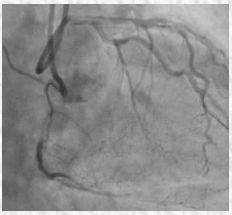
Clinical Presentation:

- Male, 73 years old
- Myocardial infarction (MI) in 2015 (PCI to LAD with 2 stents)
- MI in June 2023 with unsuccessful stent implantation in RCA
- Medications: Aspirin, Clopidogrel, Atorvastatin, Bisoprolol 2.5 mg
- Symptoms: CCS Class II Angina + NYHA Class II Dyspnea
- Myocardial perfusion imaging: Mild inferior ischemia
- Left ventricular ejection fraction (LVEF): 66%





Diagnostic Catheterization:

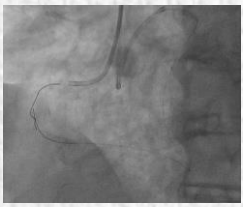
Septal collaterals from LAD

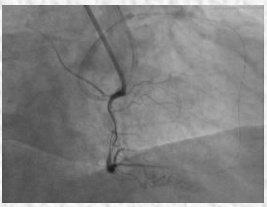
No connection of the true lumen with the stent

Previous attempt – Ad Hoc:

AWE (Antegrade Wire Escalation): Finecross, Fighter, and Judo 06

RWE (Retrograde Wire Escalation): Finecross, Whisper





Case Planning:

- J-CTO Score: 2 (due to lesion length and second attempt)
- Plan A: Antegrade Dissection Re-entry (ADR) using **Stingray®**
- Plan B: RWE, Reverse CART
- Dual injection: Radial (Right) 6F EBU ACE; Femoral 7F AL1 for RCA
- IVUS planned for procedural guidance.

CTO PCI:

Access to the Distal True Lumen:

Subintimal wire passage

Distal portion of the stent within the true lumen

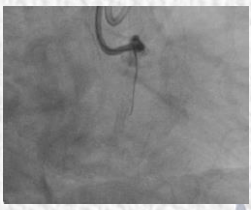
MATERIALS:

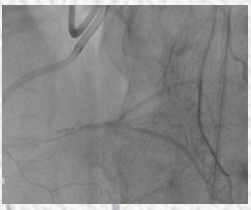
Catheter: AL 1 7F , EBU 7F catheter

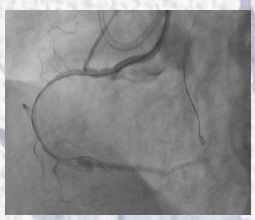
Wires: Fielder XT-A, Miracle 12, Stingray, Hornet

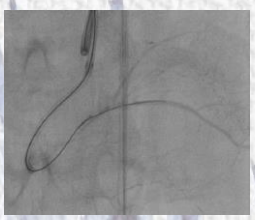
Microcatheter: Stingray LP, Mamba Flex

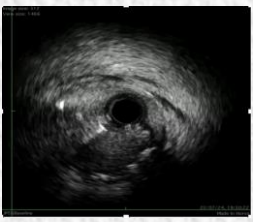
Extension Catheter: Guidezilla II

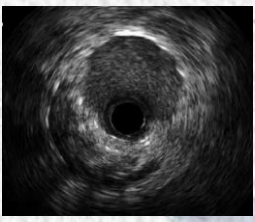


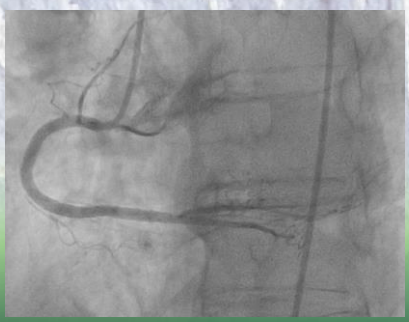












Post-Procedural Evolution:

350 ml of contrast used

108 mm of stents implanted

No change in serum creatinine (Post: 1.64 mg/dL | Baseline: 1.49 mg/dL)

Discharged after 24 hours

Max post-procedure high-sensitivity Troponin: 32 ng/L (Ref: ≤34 ng/L)

60-day follow-up: No angina, NYHA Class I