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Providing modern cardiac treatments at an affordable cost.

# Calcified Native Multivessel High Risk PCI Without Rotablation

#### Dr. Mir Nesaruddin Ahmed

MBBS, DTCD, MD, FACC Associate Professor & Senior Consultant National Heart Foundation Hospital & Research Institute



#### **Disclosure Statement of Financial Interest**

I, Mir Nesaruddin Ahmed DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.



# **Clinical profile**

- 66 years old gentleman
- Effort Angina , CCS class-III.
- H/o CABG 5 years Back
- HTN
- ECG T  $\downarrow$  in V1-V6.
- Echo reveals segmental wall motion abnormality with Global LVEF 50%.
- Hematological and Biochemical Profile were within Normal limit



## CAG Findings: Left Coronary System



Severe left main , LAD –critically and diffusely diseased from its origin and totally occluded from mid segment and a very angulated LCX with moderate disease in its distal part.

#### **Right Coronary Artery :**





RCA : 80 % lesion in the proximal segment ,99% lesion in its distal segment

## **Graft Vessel**





LAD graft was degenerating and other graft were totally closed

#### PCI



![](_page_7_Picture_2.jpeg)

After Discussion we offered Staged PCI. Lcx and LAD –warred with the help of the microcatheter

# IVUS

![](_page_8_Picture_1.jpeg)

![](_page_8_Picture_2.jpeg)

## Pre dilatation with 2.0 x 15 NC balloon

![](_page_9_Picture_1.jpeg)

![](_page_9_Picture_2.jpeg)

# After pre dilatation

![](_page_10_Picture_1.jpeg)

![](_page_10_Picture_2.jpeg)

#### Stent: 2.75 x 30 mm DES

![](_page_11_Picture_1.jpeg)

Stent implanted across the LAD from Distal to proximal

![](_page_11_Picture_3.jpeg)

![](_page_12_Picture_0.jpeg)

![](_page_12_Picture_1.jpeg)

![](_page_12_Picture_2.jpeg)

#### 3.0 x 38 mm DES

![](_page_13_Picture_1.jpeg)

![](_page_13_Picture_2.jpeg)

![](_page_14_Picture_0.jpeg)

![](_page_14_Picture_1.jpeg)

![](_page_14_Picture_2.jpeg)

#### 3.5 x 24 mm DES in LMCA to LAD

![](_page_15_Picture_1.jpeg)

![](_page_15_Picture_2.jpeg)

![](_page_15_Picture_3.jpeg)

![](_page_16_Picture_0.jpeg)

![](_page_16_Picture_1.jpeg)

![](_page_16_Picture_2.jpeg)

# Left main Stent

![](_page_17_Picture_1.jpeg)

#### IVUS after stenting

![](_page_17_Picture_3.jpeg)

![](_page_17_Picture_4.jpeg)

![](_page_18_Picture_0.jpeg)

![](_page_18_Picture_1.jpeg)

![](_page_18_Picture_2.jpeg)

![](_page_19_Picture_0.jpeg)

![](_page_19_Picture_1.jpeg)

![](_page_20_Picture_0.jpeg)

Final Results of the Left coronary system

![](_page_20_Picture_2.jpeg)

# 4 days later , left side was checked while doing PCI to RCA

![](_page_21_Picture_1.jpeg)

![](_page_21_Picture_2.jpeg)

#### RCA : warring and predilatation with NC balloon

![](_page_22_Picture_1.jpeg)

![](_page_22_Picture_2.jpeg)

![](_page_22_Picture_3.jpeg)

![](_page_23_Picture_0.jpeg)

![](_page_23_Picture_1.jpeg)

#### 2.5 x 24 mm DES( Distal Segment)

![](_page_24_Picture_1.jpeg)

![](_page_24_Picture_2.jpeg)

# 3.0 x 16 mm DES (Proximal Segment)

![](_page_25_Picture_1.jpeg)

![](_page_25_Picture_2.jpeg)

![](_page_25_Picture_3.jpeg)

![](_page_26_Picture_0.jpeg)

![](_page_26_Picture_1.jpeg)

![](_page_26_Picture_2.jpeg)

# **Final Result**

![](_page_27_Picture_1.jpeg)

![](_page_27_Picture_2.jpeg)

![](_page_27_Picture_3.jpeg)

#### **Conclusion /Take home messages**

- Post CABG native coronary arteries tend to be heavily calcified.
- To tackle such vessels, rotablation is one of the best option
- When rotablation is contraindicated, unavailable or high risk, other tools may be helpful (NC balloon, Cutting balloon etc) to optimize the outcome.

![](_page_28_Picture_4.jpeg)

# **Conclusion /Take home messages**

- IVUS helps to clarify the situation.
- Staging the procedure may be required in complex situation.

![](_page_29_Picture_3.jpeg)