

# How would you Treat Complex Lesions

*Everything is simple than you think  
and at the same time*

*More complex than you imagine when you  
execute*

Supported by:

Terumo India Private Limited

Dr.Jivraj Mehta Research Foundation

# Disclosures

- *I do not have any Potential conflict of Interest*

# Essential Elements of DES

## Long Term Safety

- Reduce the inflammation
- Fast neointimal coverage
- Good endothelialisation
- Minimise vessel injury

## Acute Performance

- Better crossability
- Better Apposition

# Ultimaster components



## Stent platform

80 $\mu$ m CoCr · 2links 8 crowns design  
flexible platform



## Drug & Polymer

Gradient coating polymer resorbed within  
3-4months and sirolimus 70ug/cm<sup>2</sup>



## Delivery system

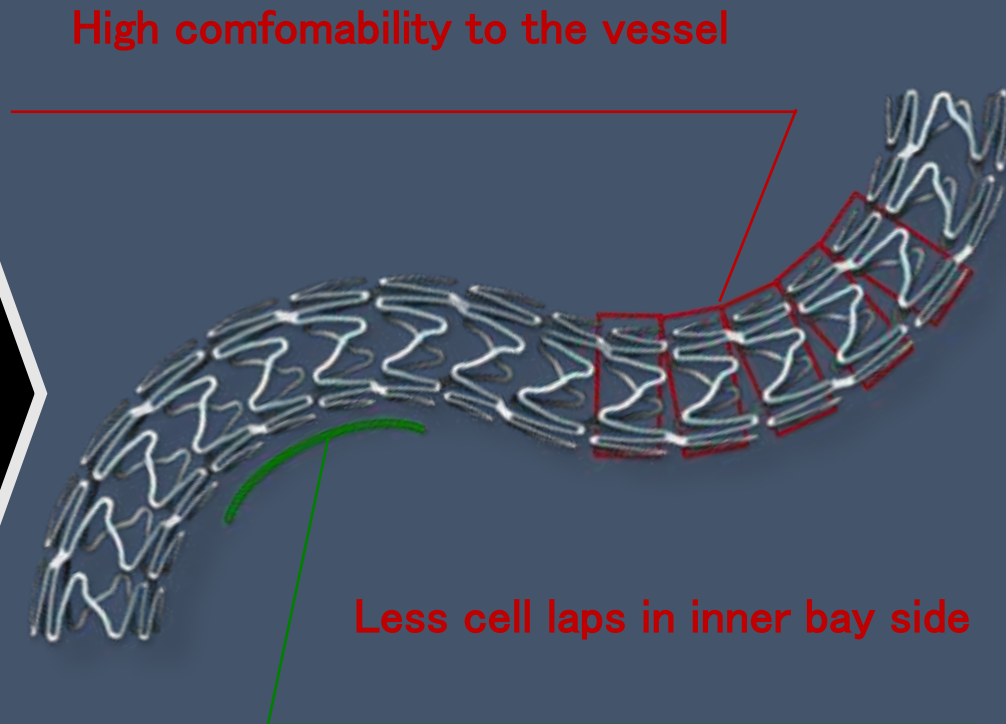
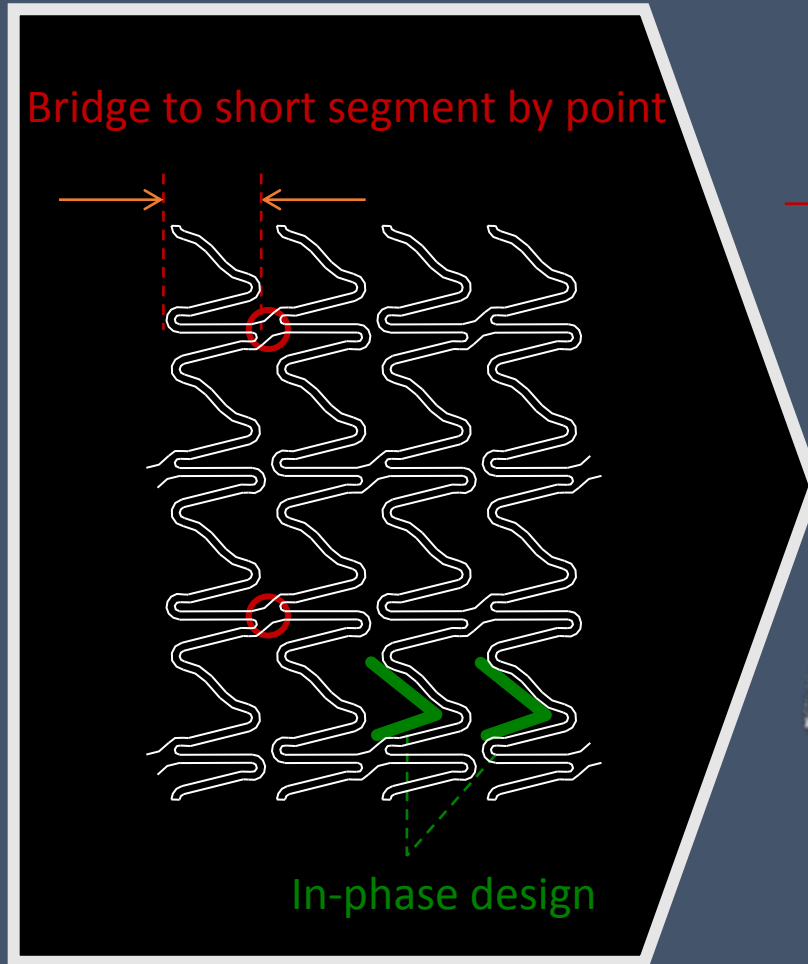
Minimal entry profile and flexible stent mount  
portion

## Differences between Ultimaster to Xience



	Ultimaster DES	Xience DES
Platform	Thin-strut (80 $\mu$ m) Co-Cr Open cell design	Thin-strut (81 $\mu$ m) Co-Cr
Drug Carrier	PDLLA-PCL copolymer resorbed within 3-4m	PVDF-HFP non-erodable fluorinated copolymer
Coating	Abluminal gradient coating technology	Circumferential coating
Drug	sirolimus 70 $\mu$ g/cm <sup>2</sup>	everolimus 100 $\mu$ g/cm <sup>2</sup>

# High flexibility from the in-phase design bridged by point



# Case #1

77 year old male was admitted with

ACS & Acute LVF

Echocardiography – LVEF 35%, mild MR and RWMA+++

Cardiac enzymes Elevated

Prior History

- CABG- 15 years back X 3 grafts,
- LIMA → LAD, SVGs to OM & PDA)
- PTCA to LCx lesions( x 2 Cypher stents) eight years back for ACS with occluded SVG grafts.
  
- Advised angiography:

# Angiography Results:

- LMCA to LCx junction: New lesion, eccentric calcified 80-85% severity with bend, extending into proximal stent.
- LAD: totally occluded
- LCx: Stents Patent
- RCA: CTO(no fresh change)
- LIMA to LAD: Patent
- SVG to OM & PDA: occluded

Plan:    1) PTCA of LMCA to LCx  
          2) PTCA of RCA(CTO)



# Angiographic Result:

**LMCA to LCx junction: New lesion,  
eccentric calcified 80-85% severity with  
bend, extending into proximal stent.**

**LAD: totally occluded**

**LCx: Stents Patent**

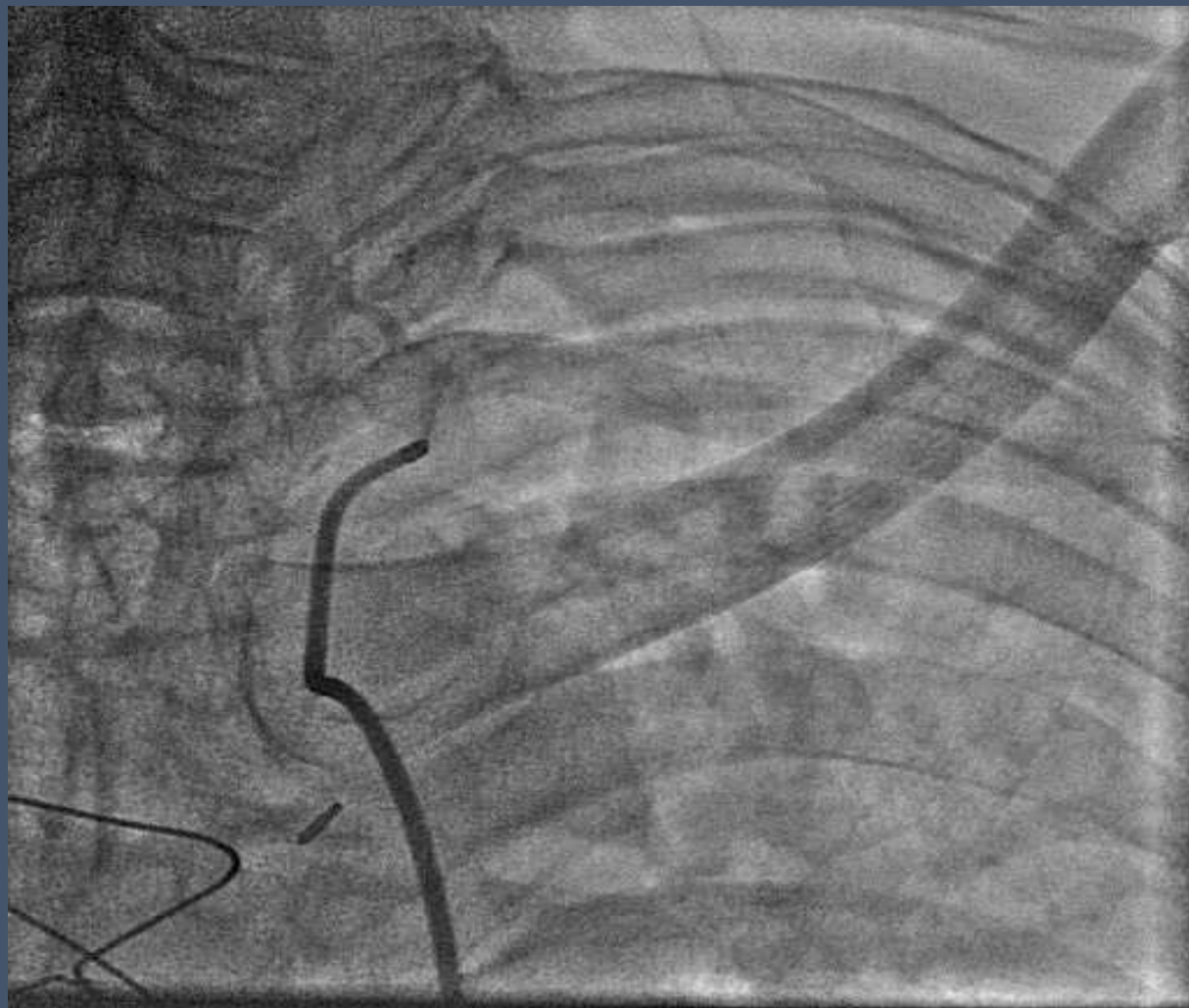


# Angiography results:

RCA: CTO(no fresh change)

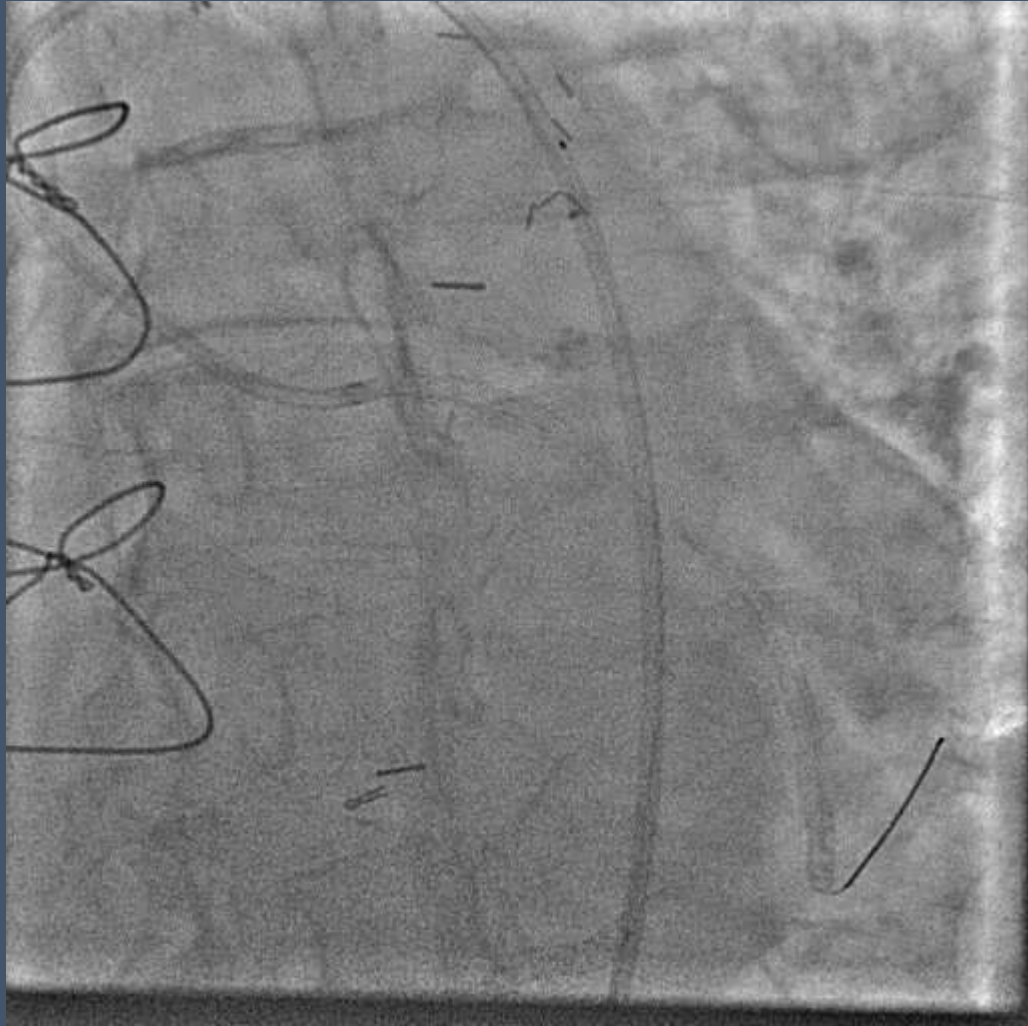
LIMA to LAD: Patent

SVG to OM & PDA: occluded

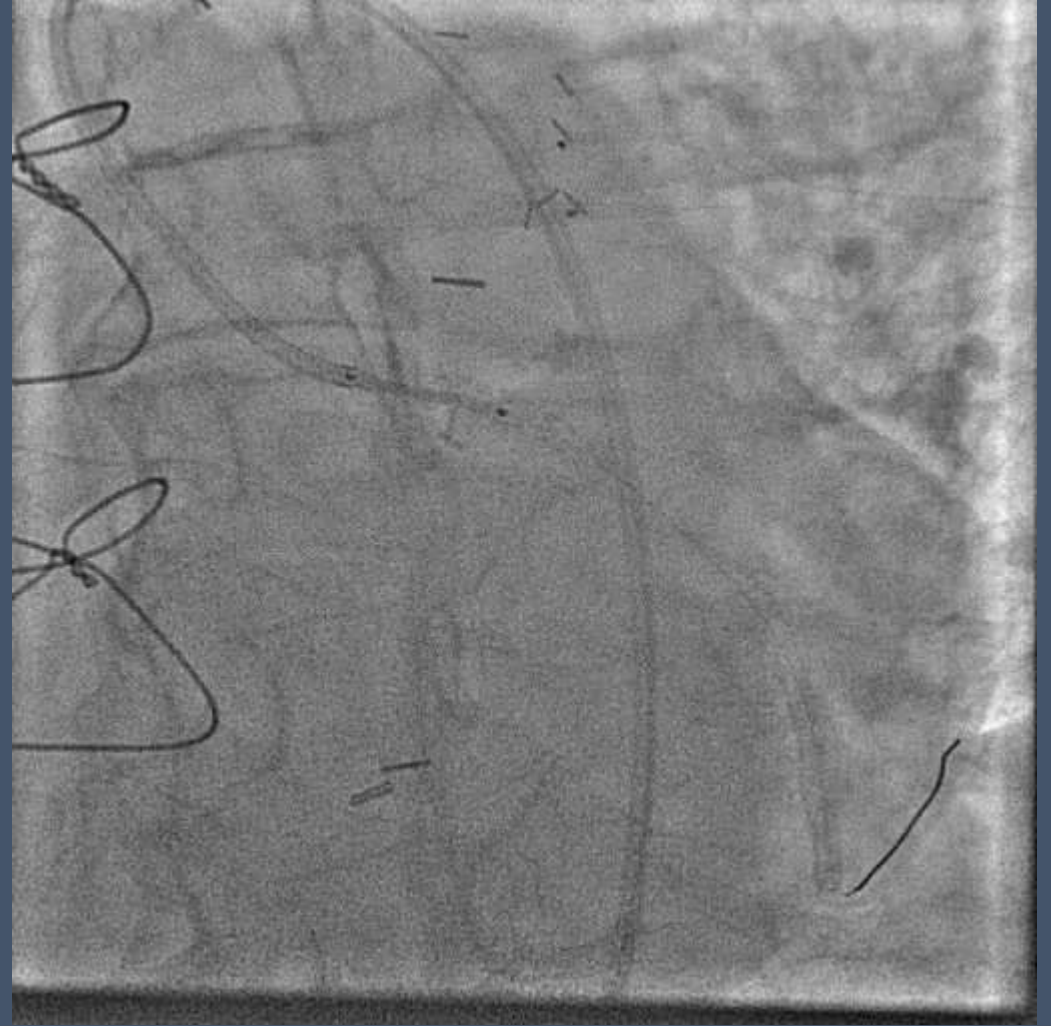


# PTCA of LMCA to LCx

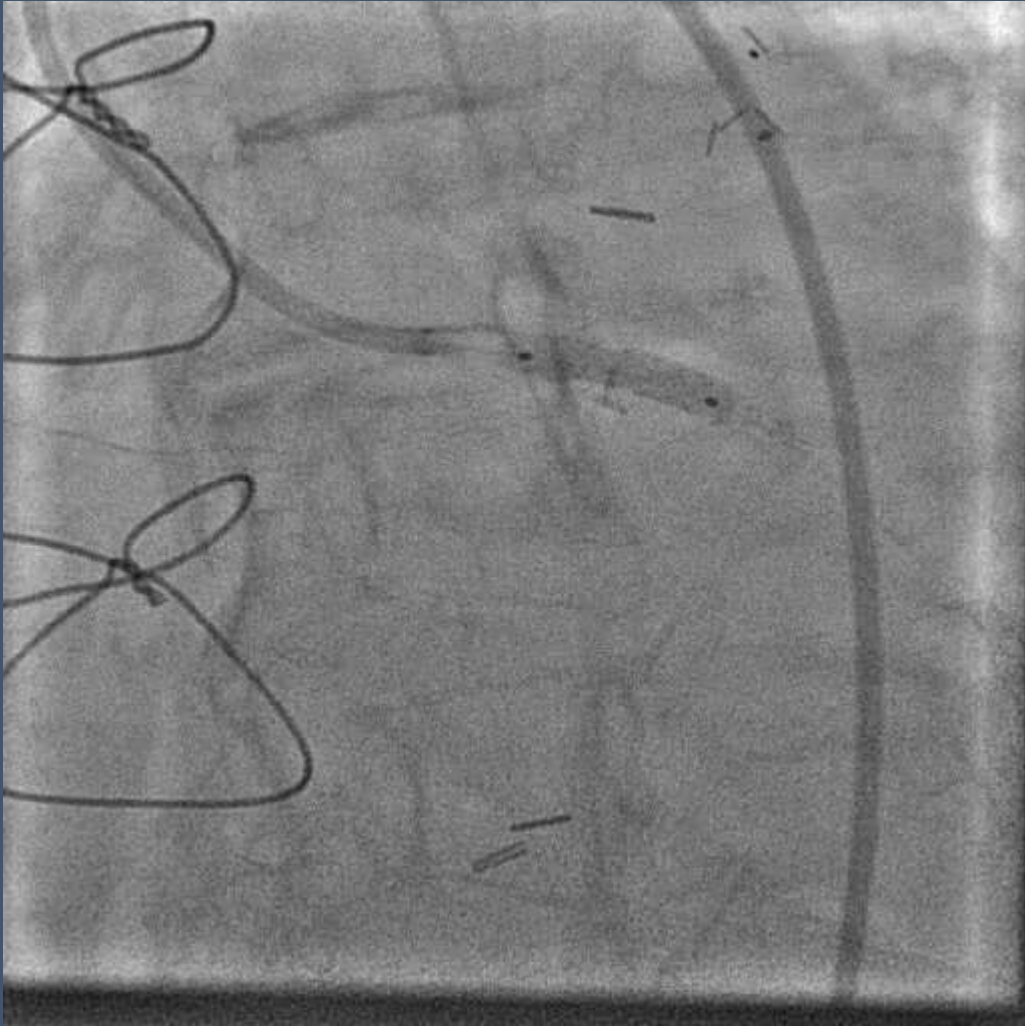
GW stabilizer GW  
pre dilatation: Hiryu 3.0x8 mm



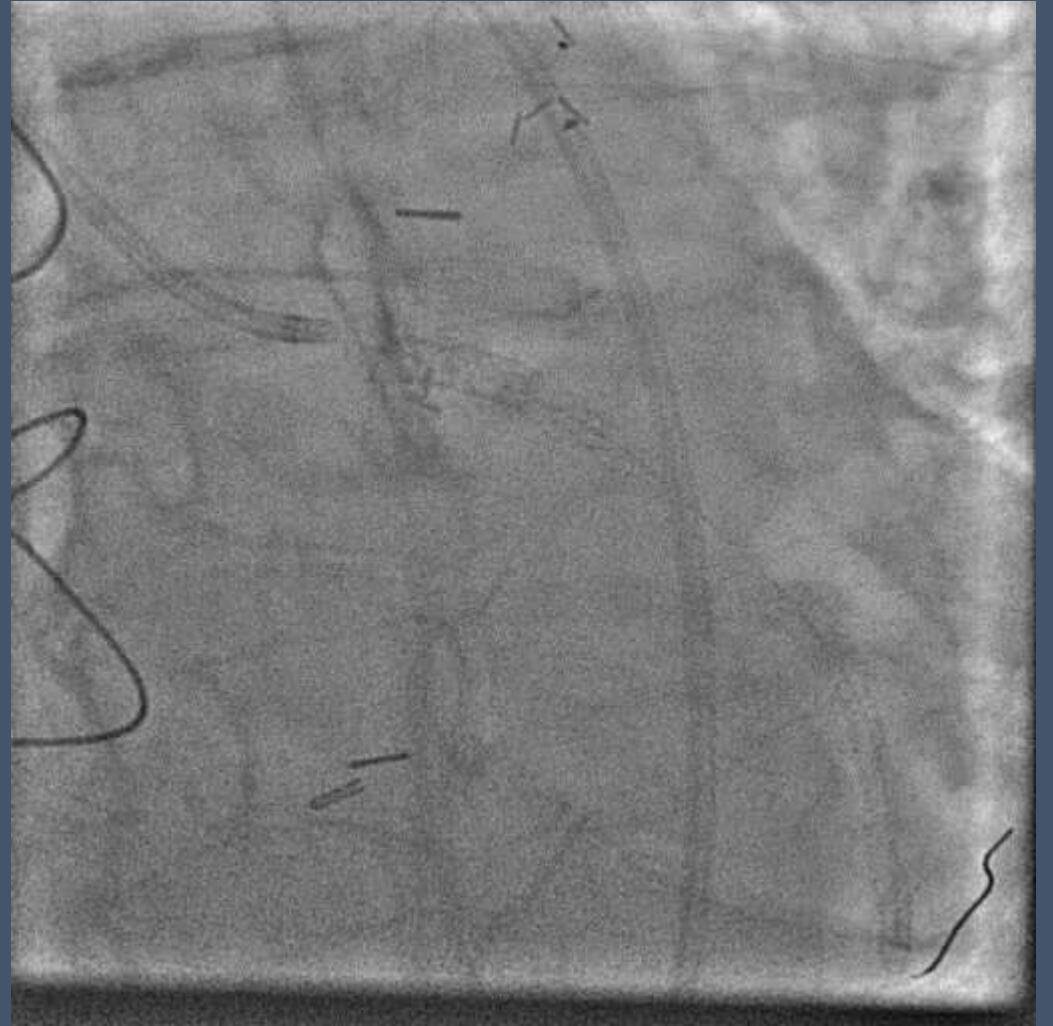
Stenting done (Ultimaster DES  
3.5x15mm)



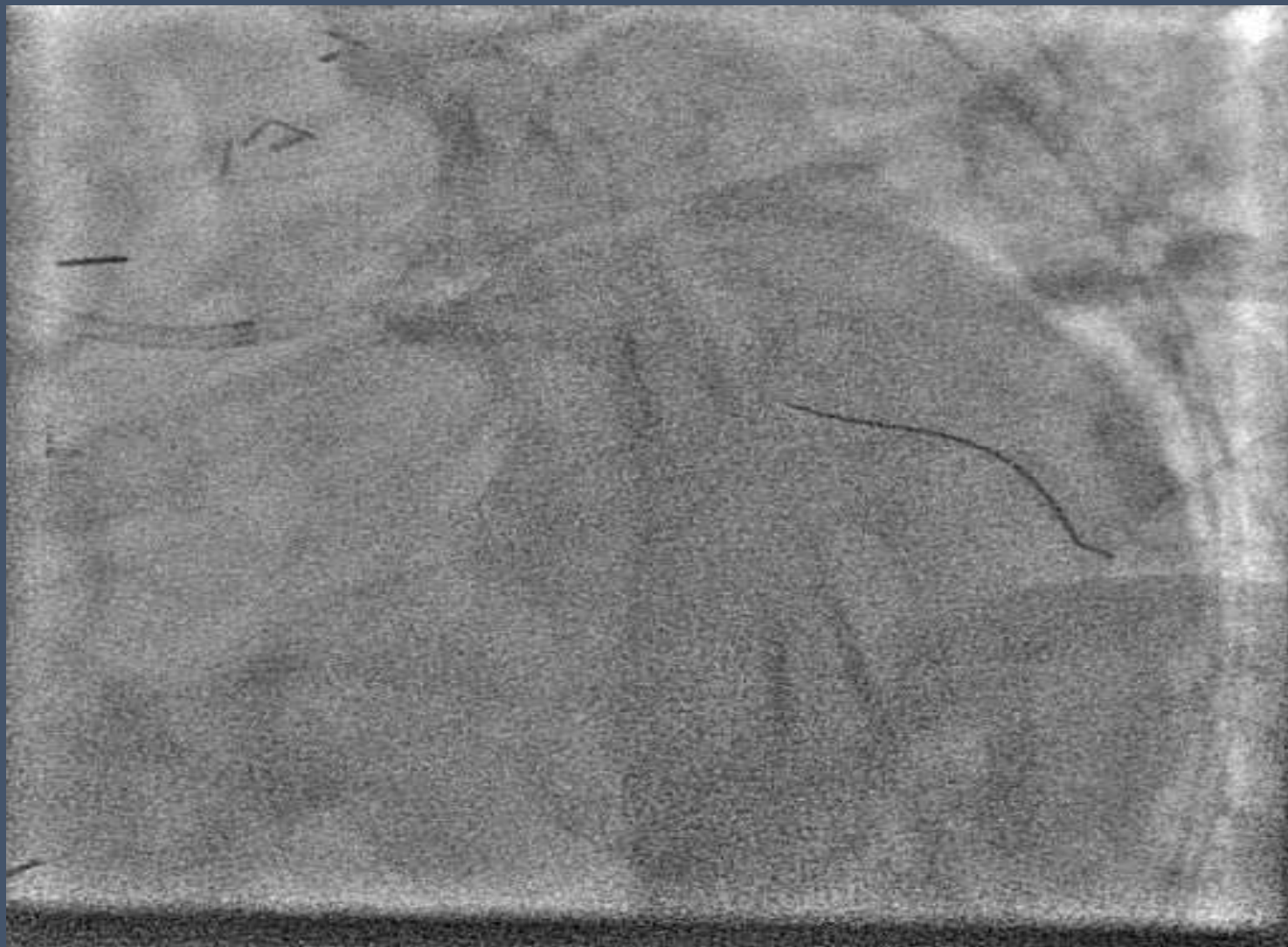
Stent deployed at 14 atm



Result after post dilatation



Final Result



# Case #2

60 year old male attends the ED following an episode of severe rest angina of two days duration

## Prior History

- PTCA of RCA done with Stenting five years back
- ECG shows ST T changes in fro lateral leads ,
- Echo: LVEF 45%, RWMA ++, LVH.
- CPK mb & Trop I : +ve.

## Advised : CAG

- LMCA, LAD & LCx : no critical lesions
- RCA: dominant, tortuous vessel in stent
- In-stent: 20-30% narrowing
- Distal RCA(PLV): 99% lesion

# Angio Result:

LMCA, LAD & LCx : no critical lesions

RCA: dominant, tortuous vessel.

In-stent: 20-30% narrowing

Distal RCA(PLV): 99% lesion

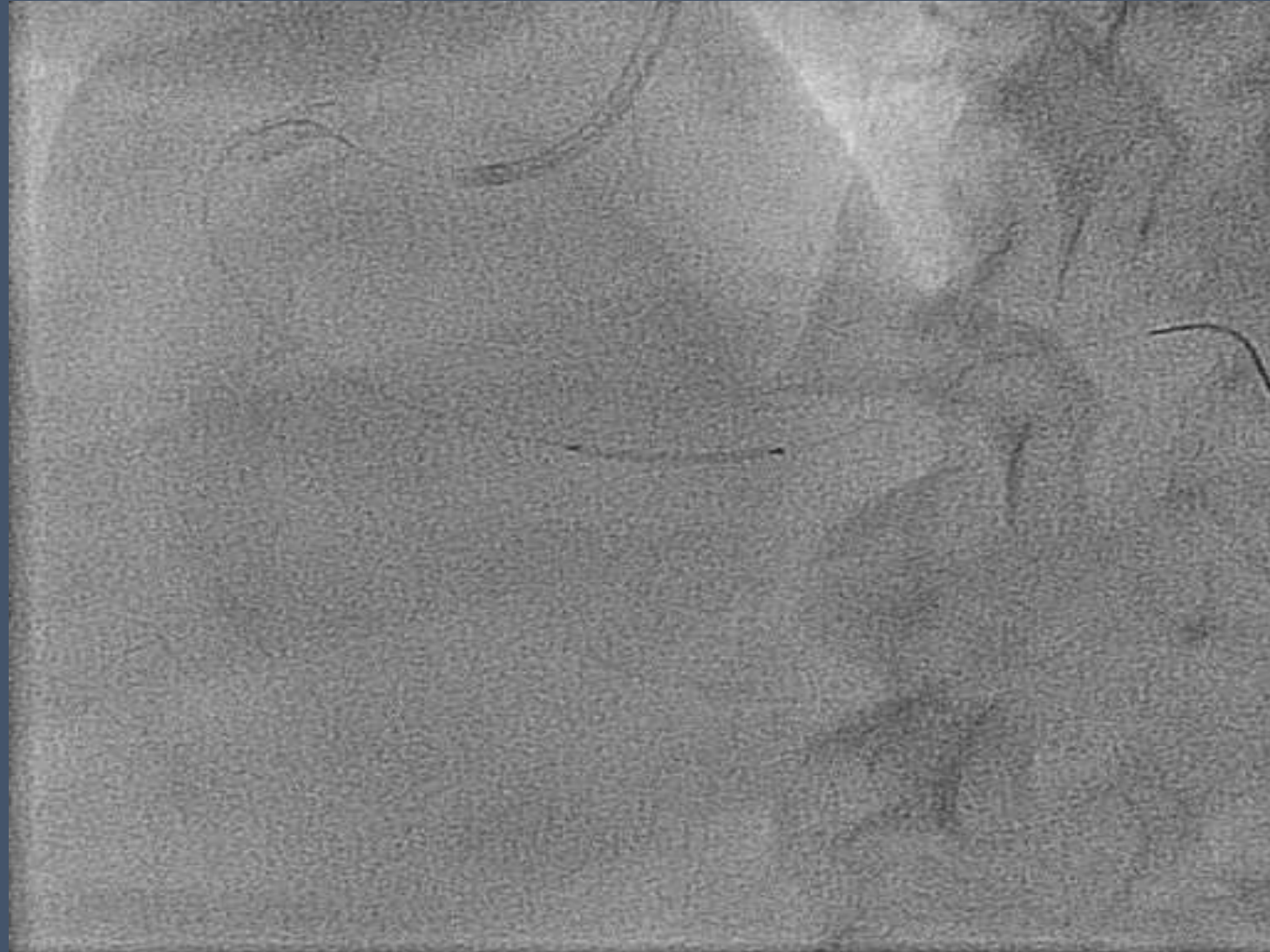


# Approach :

Guide Catheter : 6F JR3.5

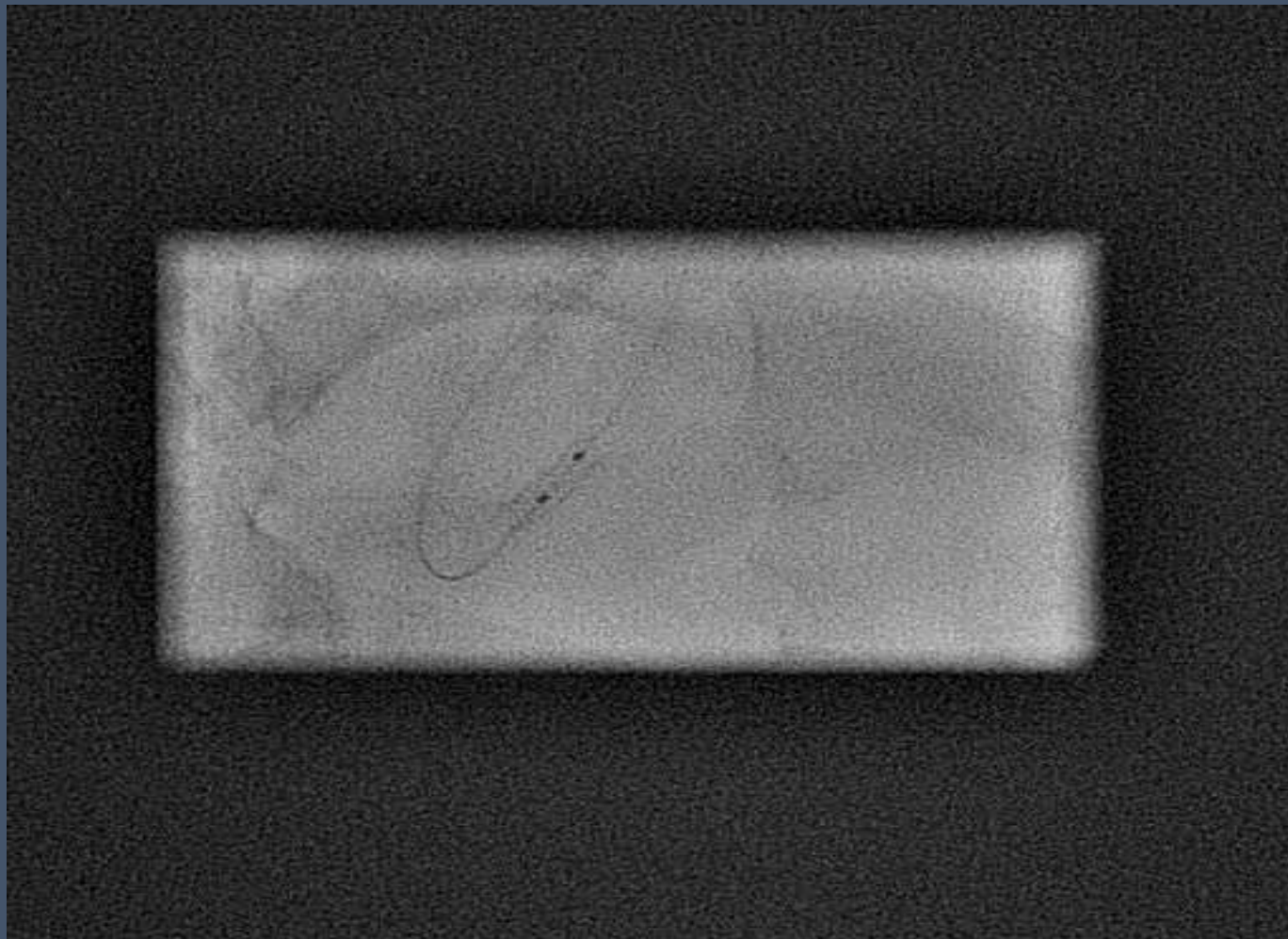
Direct stenting with Ultimaster (2.75x 15)

DES.





Post dilation with NC 3.0x8mm at 16 atm for 30 sec,



Final result



# Case#3

60 year old male referred from another hospital with following history

Extensive Ant. wall MI four days back.

Thrombolysis with Tenecteplase

Recurrent post MI angina with LVF

Past History:

PTCA to RCA done (4 years back)

Echo: LVEF 28%, mild MR, RWMA+++, PRVSP 45 mmHg

Advised : CAG

Results:

- LMCA & LCx : no critical lesions
- RCA: dominant, no in-stent restenosis
- LAD: 95% tight long lesion, D1: totally occluded.
- Plan: PTCA of LAD, D1 bifurcation lesions



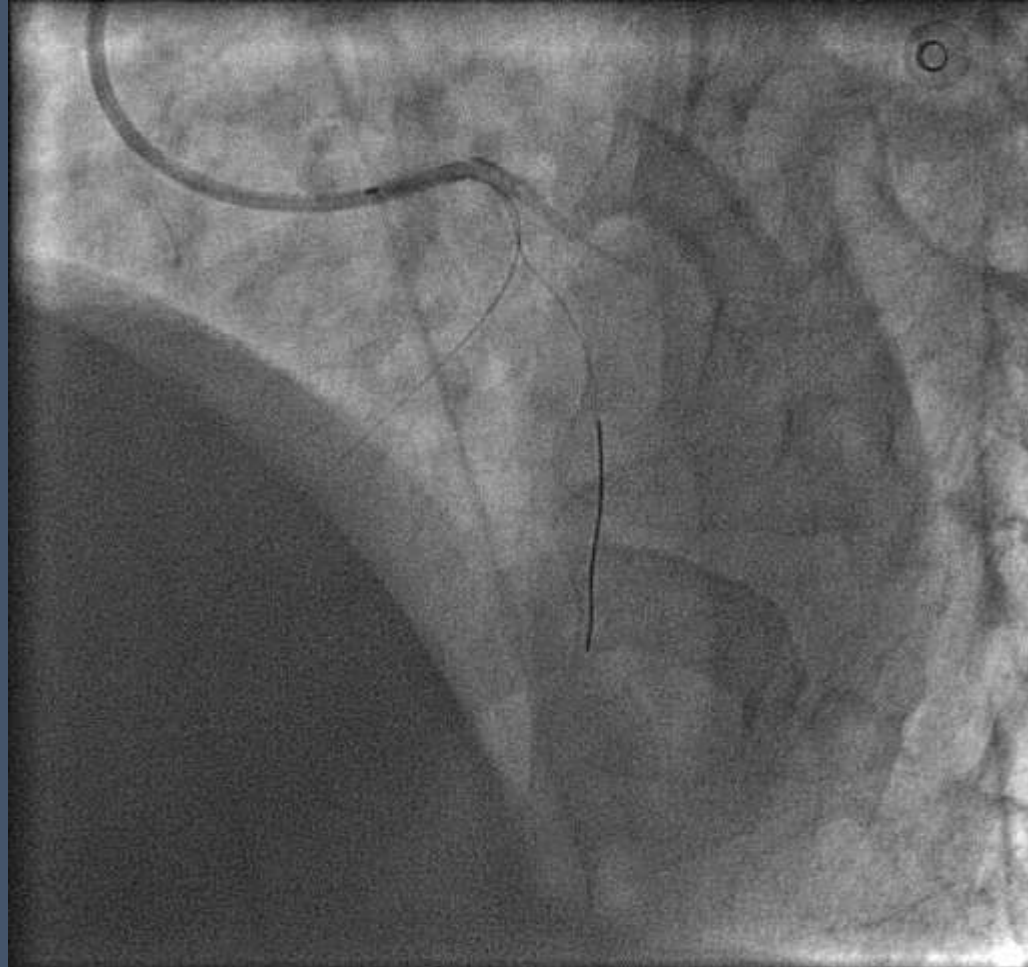
# Approach:

GW Runthrough NS (D1) & Cougar XT(LAD)

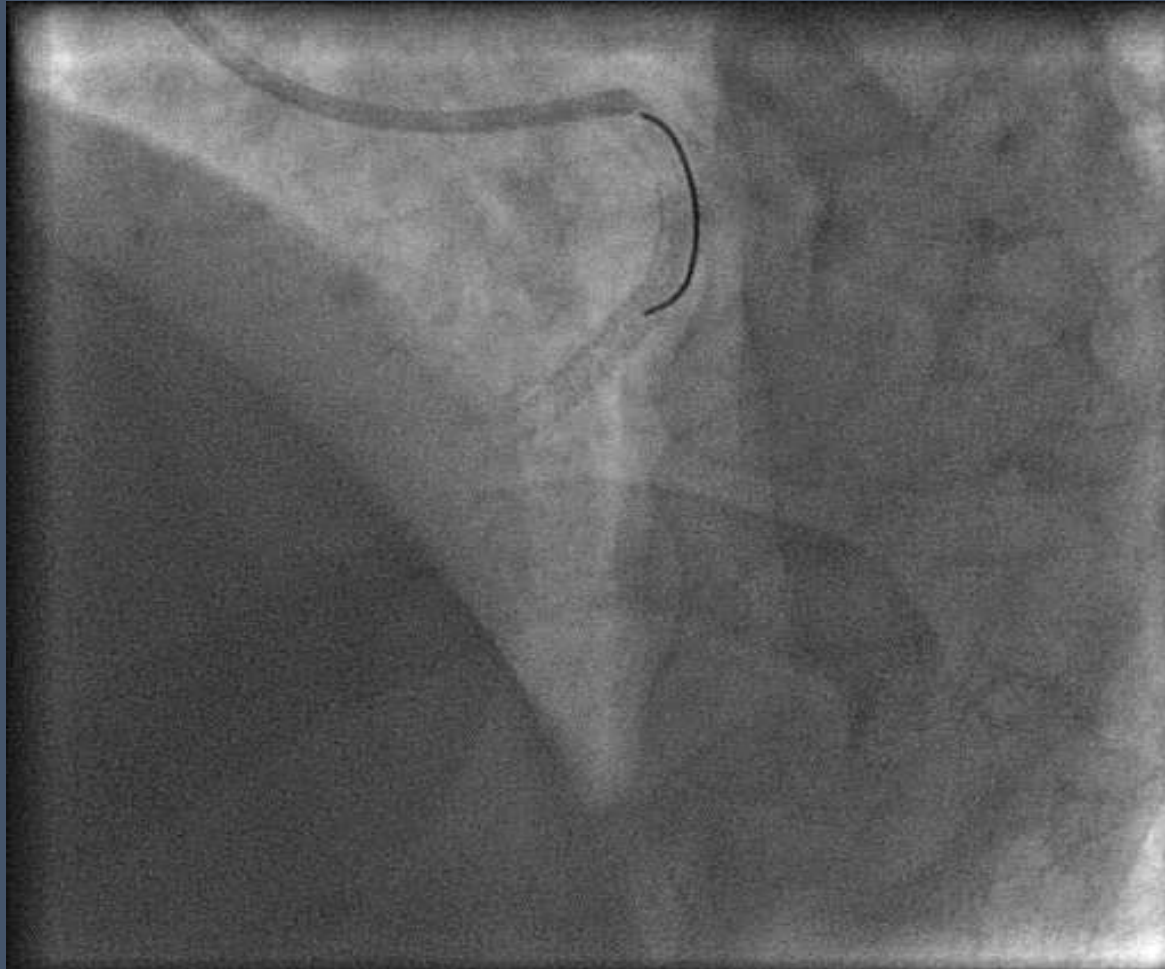
Balloon: 1.0x5mm & 1.5x15 mm in D1  
2.0x10 (LAD)

Stent: Ultimaster DES(3.0x38)

Post dilatation: 3.5x8mm



# Final Result



Thanks

“Simplicity is Complexity Resolved”