

Left Main stenting done with Provisional approach- Can Imaging with IVUS make a difference

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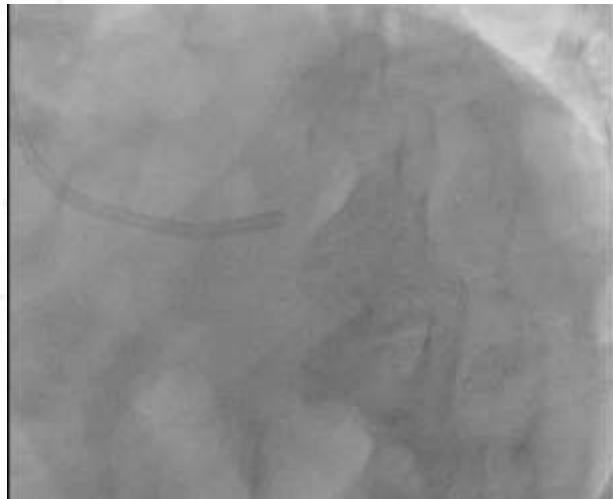
**Director Cardiology Max Superspeciality Hospital Bathinda,
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Disclosure

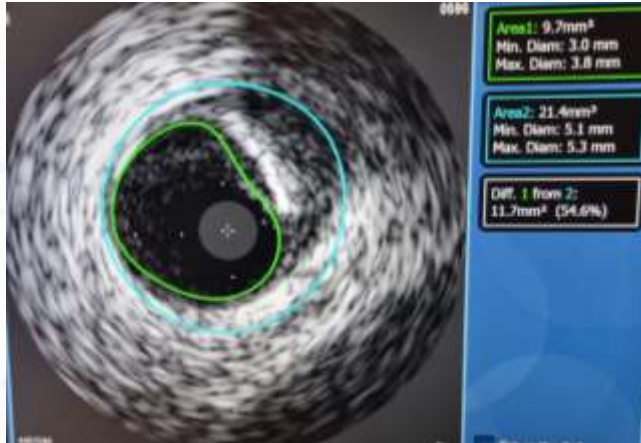
- There are no conflict of interest.

Patient Details-

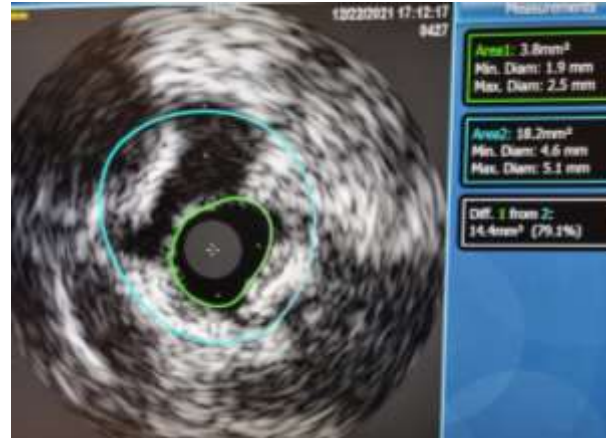
- 79 Year old Male
- AOE 3
- Chest Pain
- Dyslipidemic
- Hypertensive
- Family history of CAD



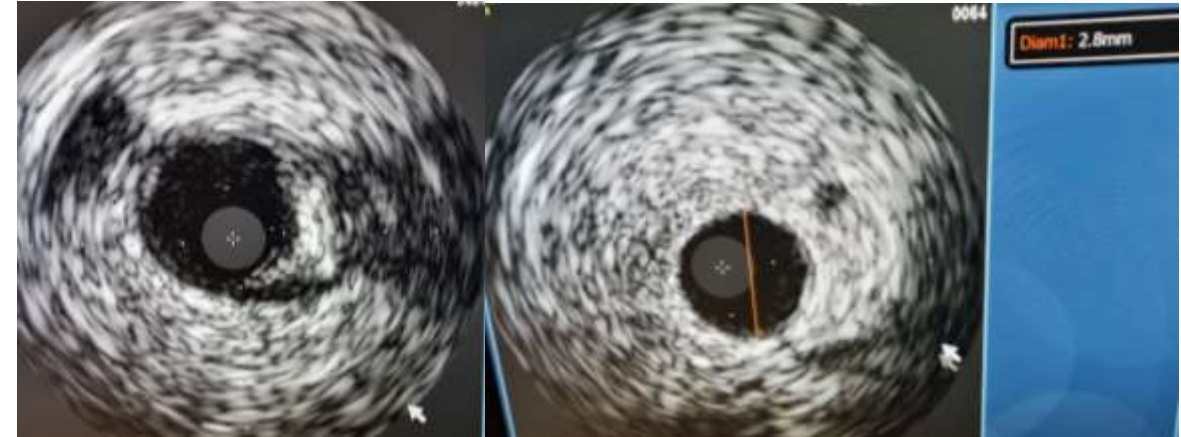
Angiography Reveals DVD- LAD and LCX Diseased



A.



B.

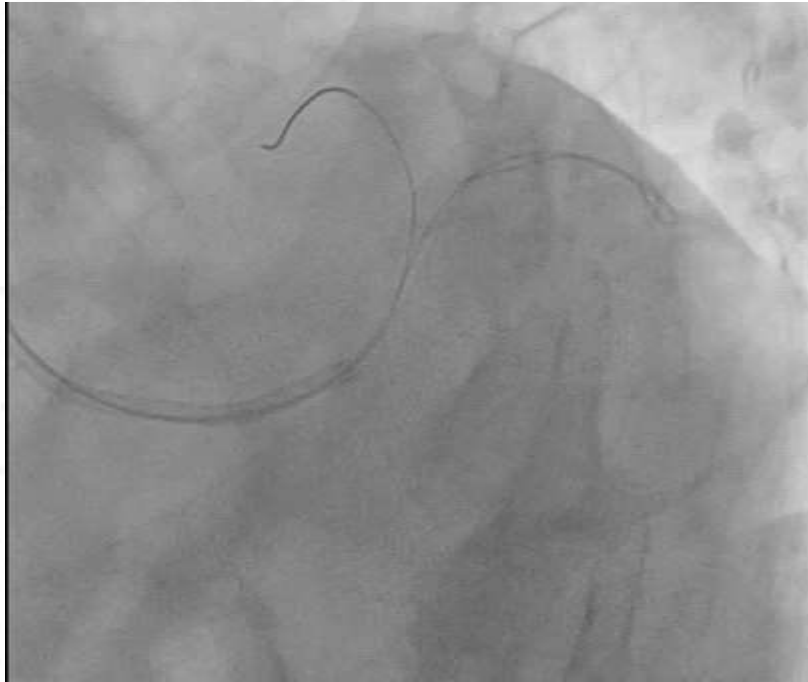


C.

D.

- A.- LM diseased
- B.- Tightest point
- C.- LAD ostium
- D.- Distal Reference Diameter

LM hooked with EBU 3.5 6F catheter and crossed with BMW wire



A



B

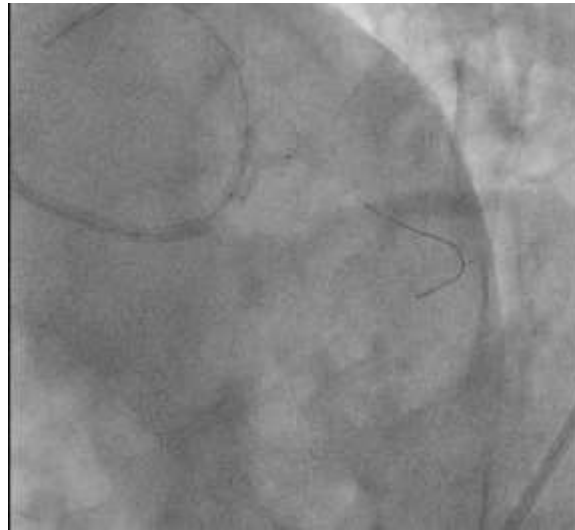
A.- LAD crossed with BMW wire & LCX with Floppy wire
B.-2.75x38mm DES In LAD at 14 ATM

4.0x22mm DES in LM to LAD at 16 ATM

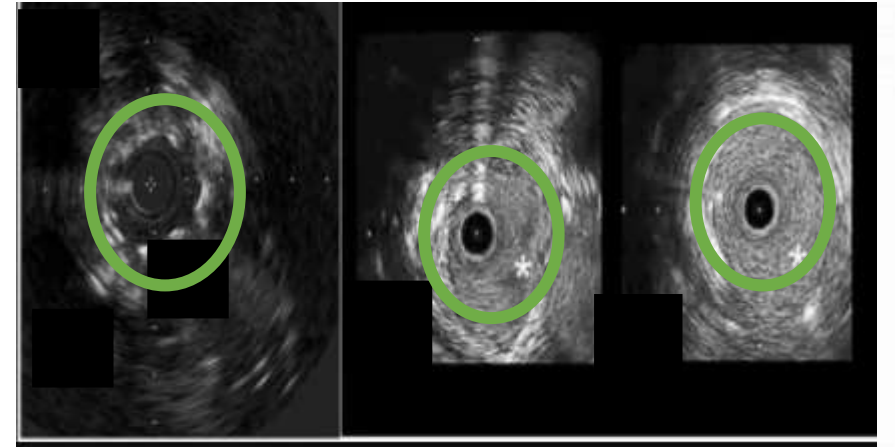




A



B



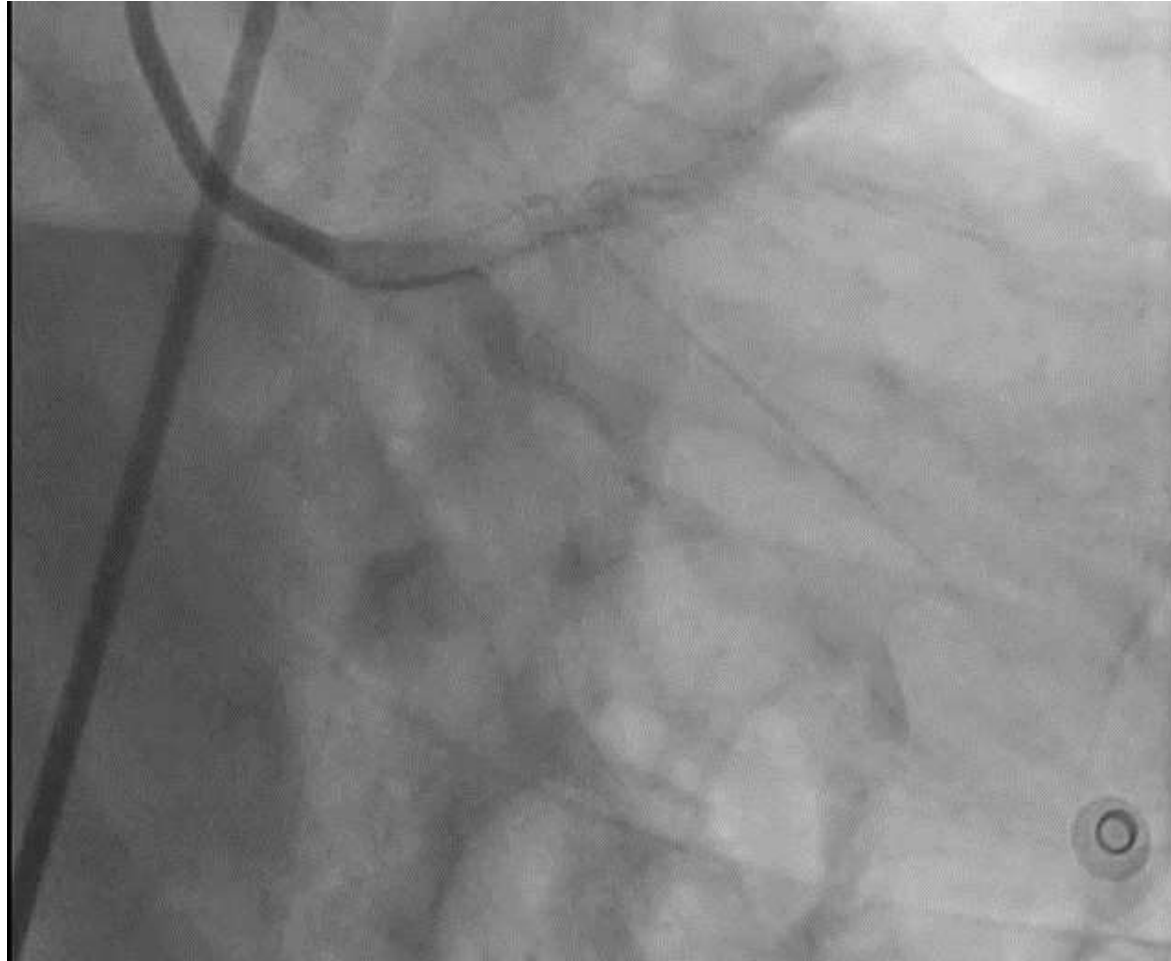
C

A.- 2.5x12mm in LCX at 14 ATM using TAP technique

B.- KBT done with 2.5mm balloon in LCX & 3.5mm balloon in LM to LAD

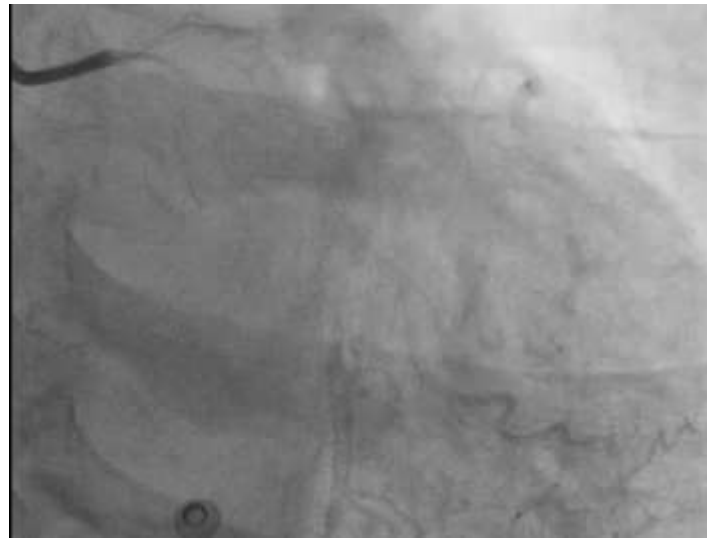
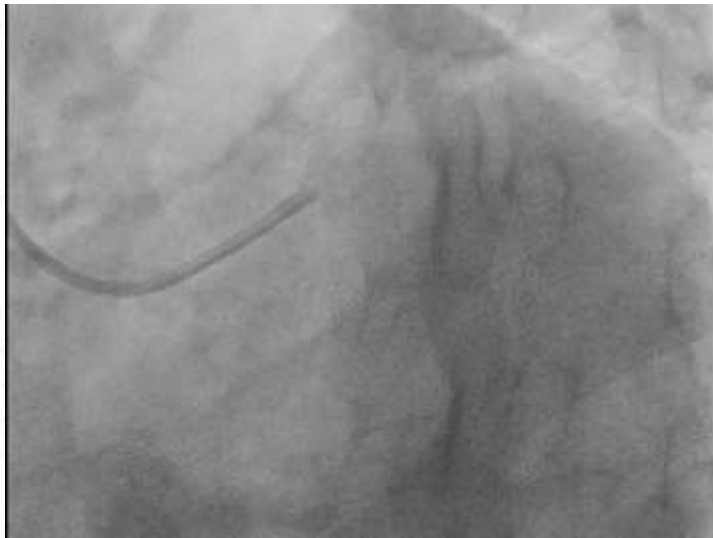
C.- IVUS images after KBT

Final Result

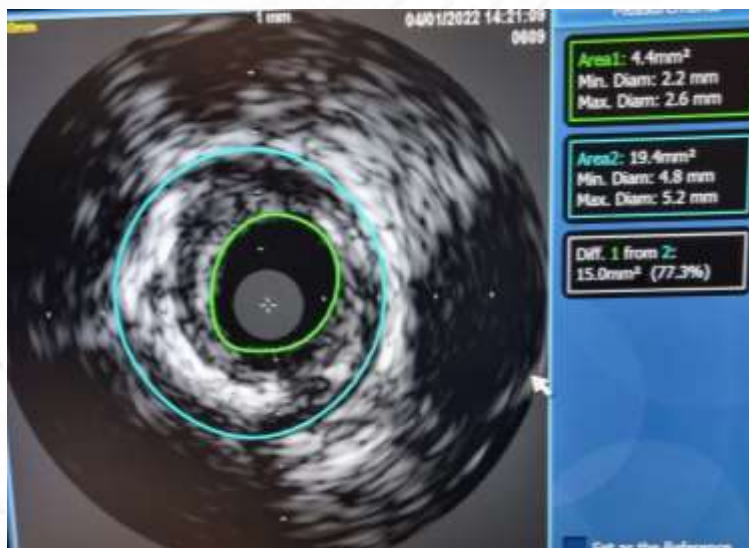


Case 2

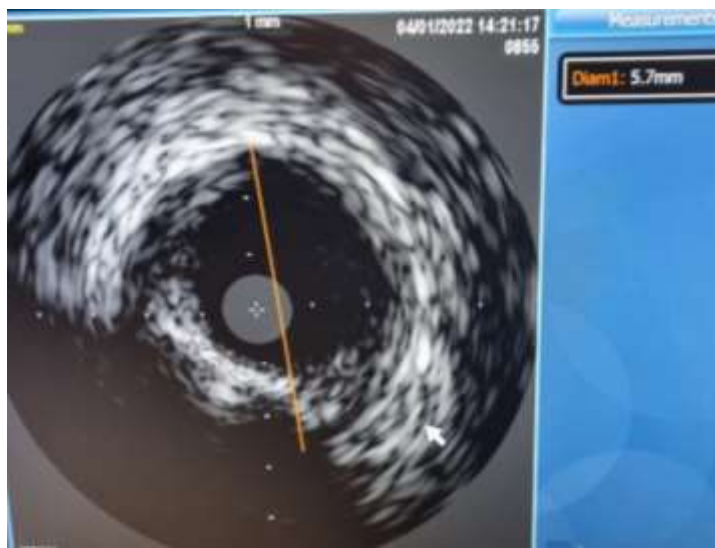
- Patient Details-
- 73 Year old Male
- Diabetic
- Hypertensive
- AOE 3
- DOE 3



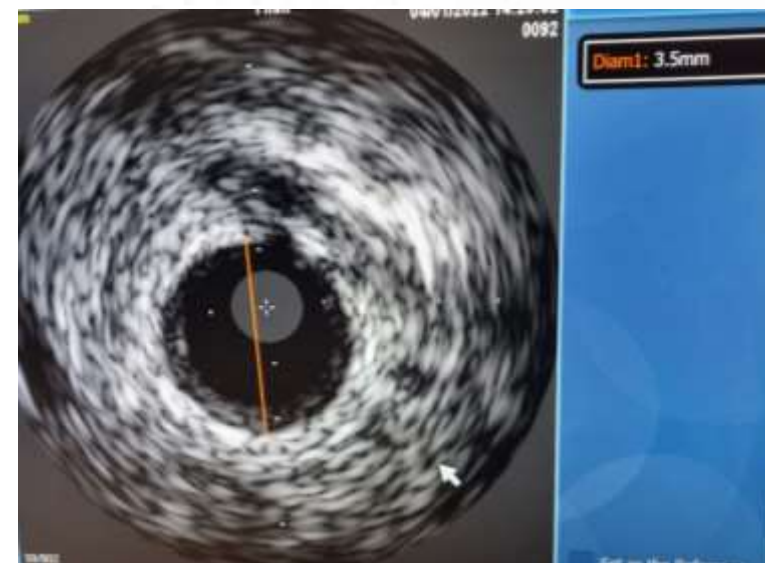
Angiography reveals LM disease with LAD 90% & LCX 85%



A.

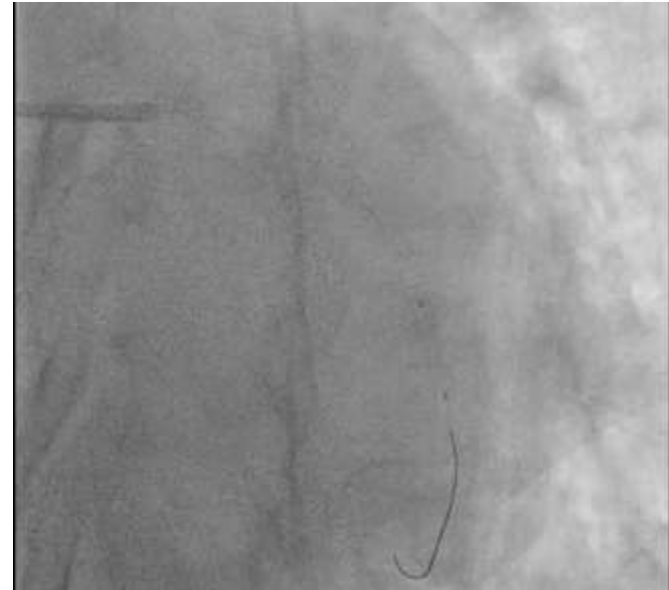


B.

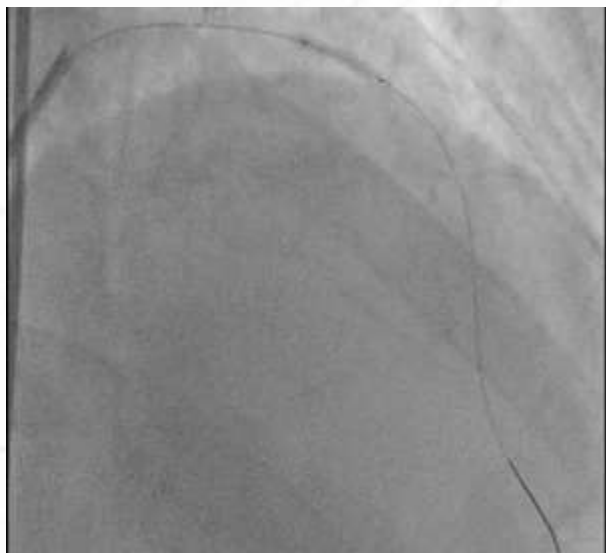


C.

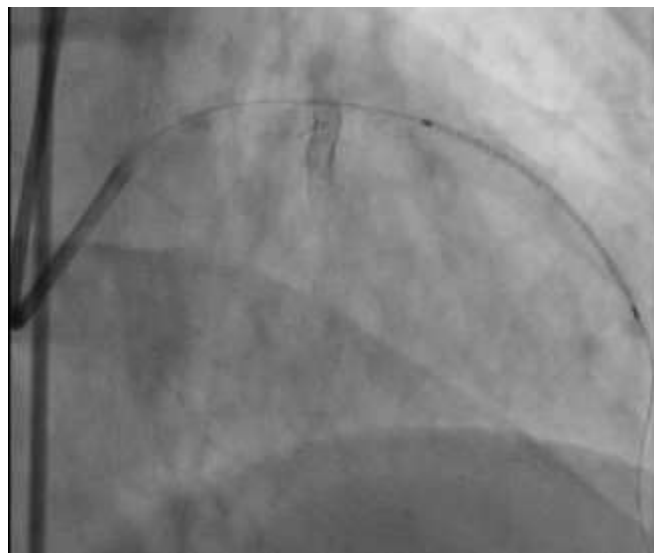
- A.- Tightest Point
- B.- LM Reference Diameter
- C.- LAD ostium



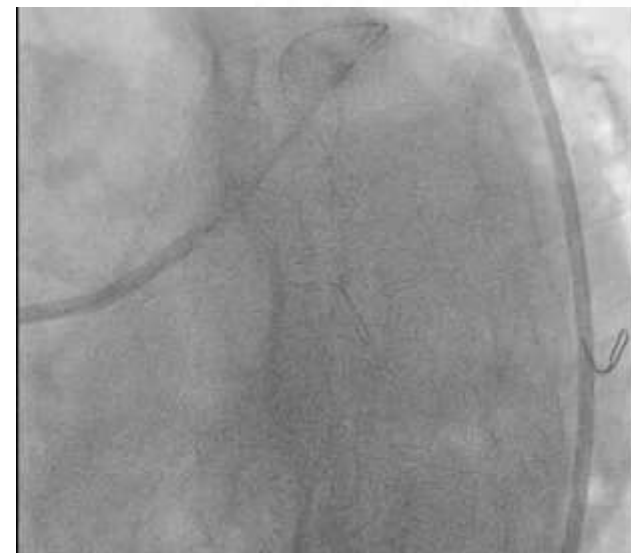
- 3.5x28mm DES deployed in Mid LCX
- 3.5x12mm DES deployed in Distal LCX



A.



B.



C.

- A.- Pre-Dilatation done with 2x8mm balloon in LAD
- B.- 3.5x38mm DES deployed in mid to Distal LAD
- C.- 4.0x38mm DES deployed in Proximal to Mid LAD

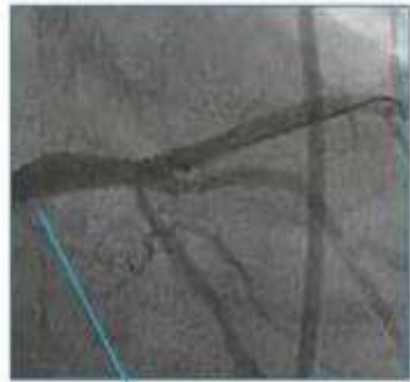


A.

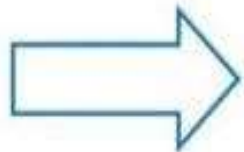


B.

A.- Another 3.5x23mm DES deployed in LM to LCX at 14 ATM using TAP technique
B.- KBT done with 3.5mm balloon in LM to LCX & 4mm in LAD

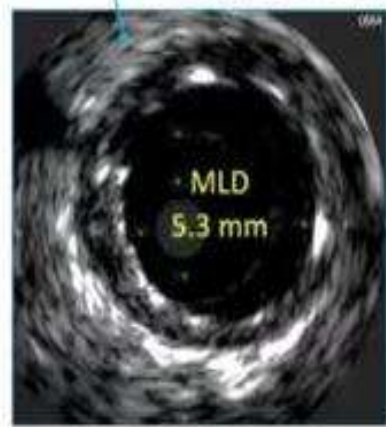
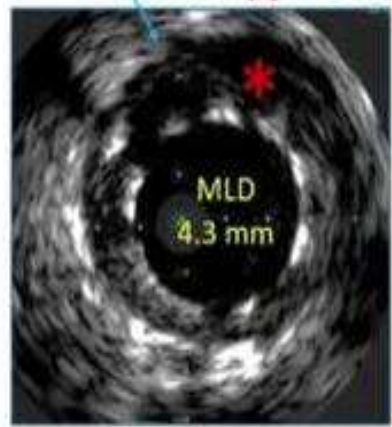


POT with
Semicompliant
Balloon 5 mm



Malapposition

Apposition



Final Result

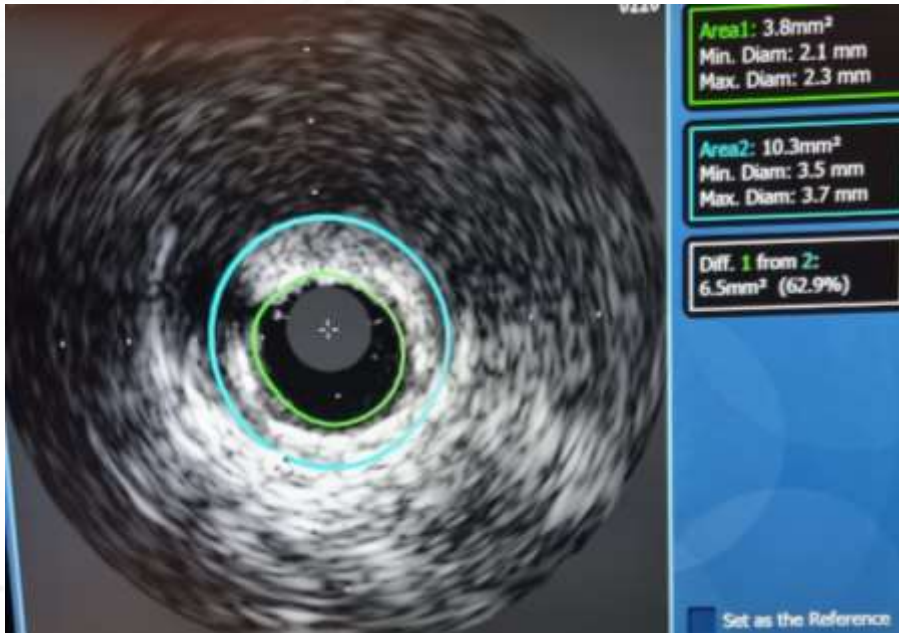


Case 3

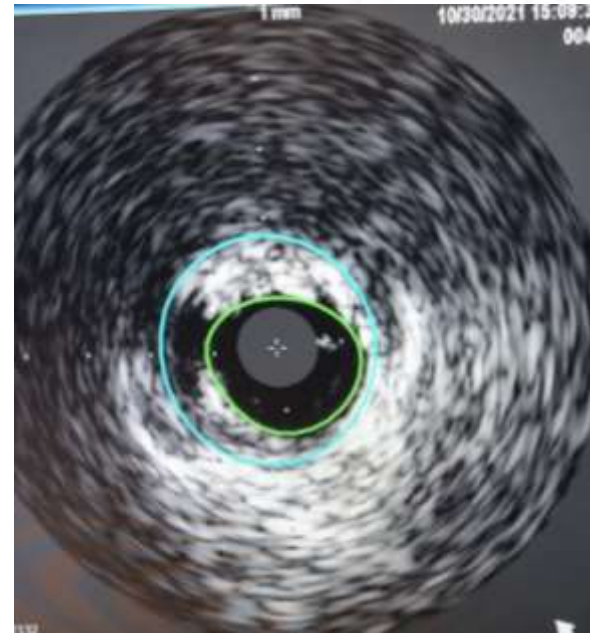
- Patient Details-
- 59 year old female
- Non Diabetic
- AOE 3
- DOE 3
- Family History of CAD



Angiography reveals TVD



A.

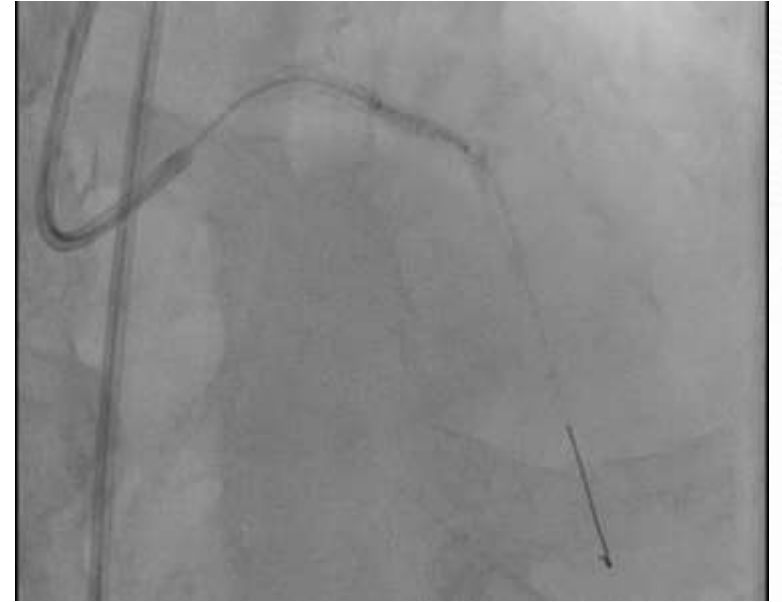
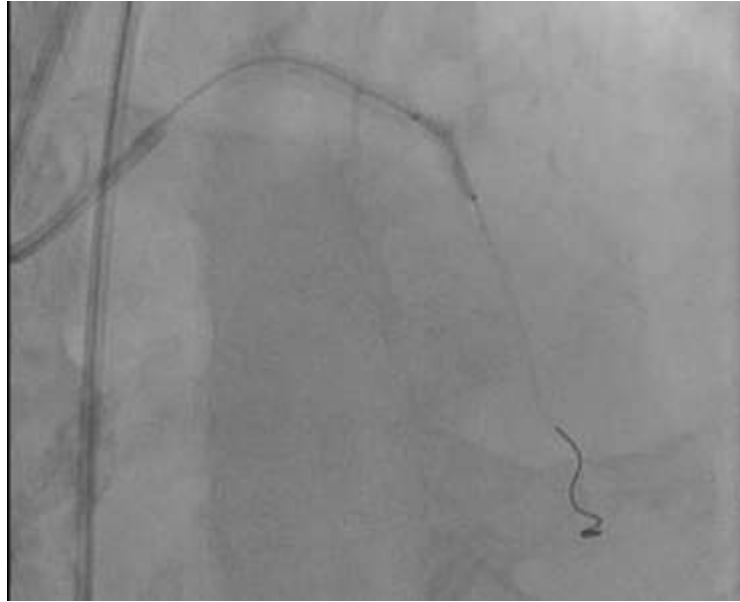


B.

A.- LAD ostium with Concentric Calcium

B.- Tightest point, even IVUS catheter was not able to cross it.

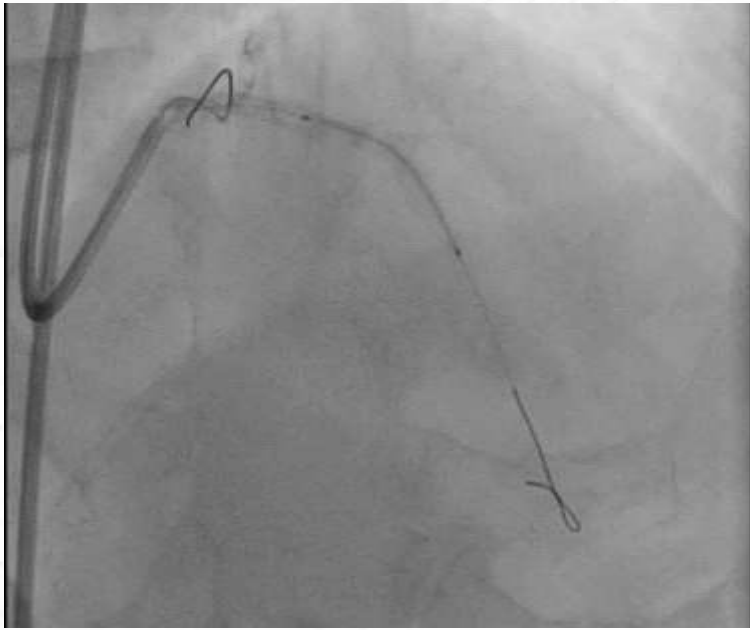
40 Pulses given in LAD using 3.0x12mm IVL catheter



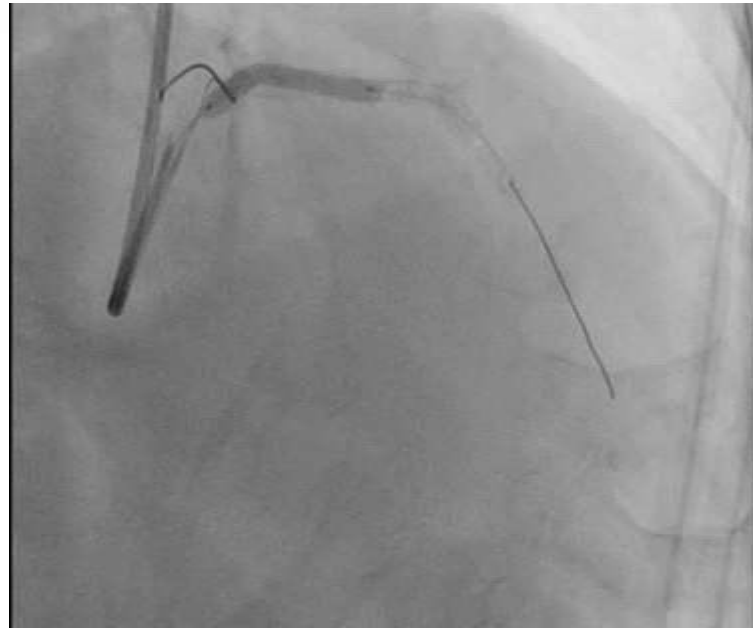
Pre-Dilatation done with
2.5x15mm Balloon

IVL balloon fully expanded clearly visible under Sync Vision





A.



B.



C.

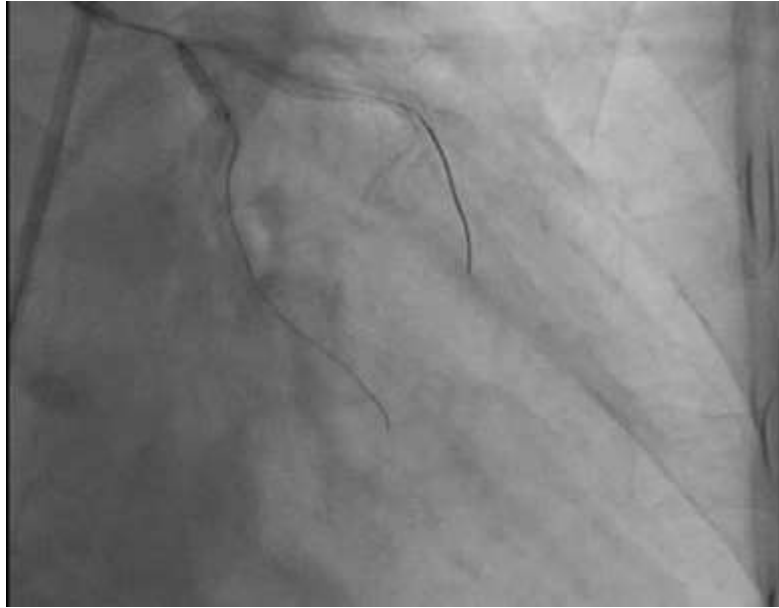
A.- 2.5x28mm DES deployed in Mid LAD

B.- Another 3.0x22mm DES deployed in ostial LAD at 18 ATM

C.- Pre-Dilatation done with 1.5x15mm Balloon



A.



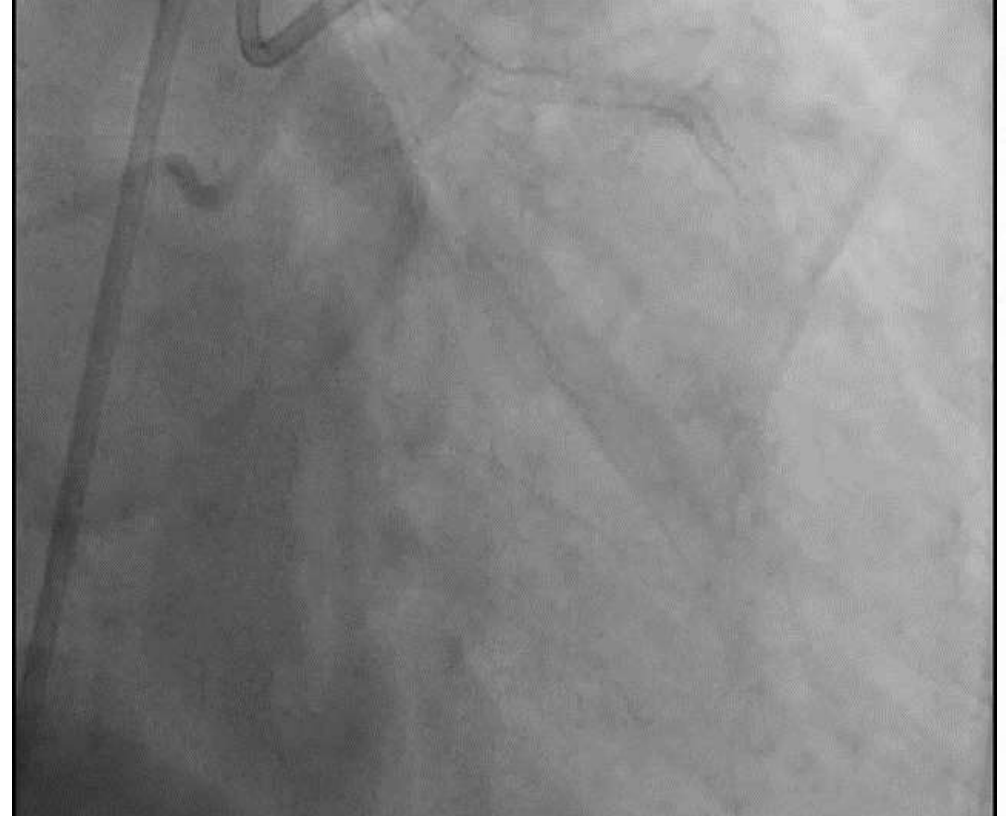
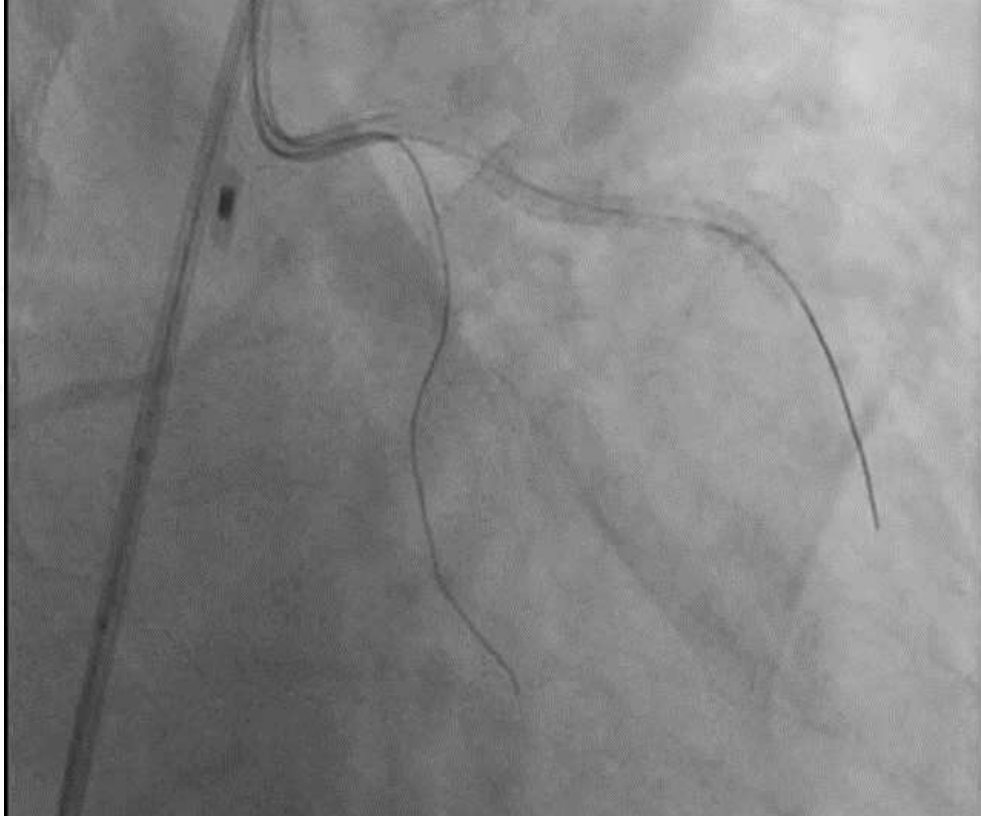
B.



C.

- A.- In LCX 40 pulses given with 2.5x12mm IVL catheter
- B.- 2.25x12mm DES deployed in mid LCX at 16 ATM
- C.- 2.5x18mm DES in proximal LCX at 16 ATM

Final Result



Conclusion

- Multilayered Provisional strategy remains treatment of choice for Left Main Bifurcation Lesions.
- In Provisional stenting Second stent can be deployed is and when required
- There is a considerable role of IVUS Imaging and Physiology in optimizing the results and improving outcomes
- IVL has emerged as an important tool for LM bifurcation disease. Sync vision with Philips gives important information with clear dog boning and subsequent expansion of the stent.
- Kissing Balloon is an important step in LM Bifurcation strategy proper technique is important to prevent future side branch occlusion. Double kissing in various technique give better results.
- IVUS imaging can identify the underexpansion during kissing technique.