



Balloon assisted TAP technique may help
proper placement of stent

Prof. Dr. Fazila-Tun-Nesa Malik

MBBS, FCPS (Med.), MRCP(UK), FRCP (Edin), FACC, FSCAI

Chief Consultant Cardiologist,

National Heart Foundation Hospital & Research Institute,

Dhaka, Bangladesh

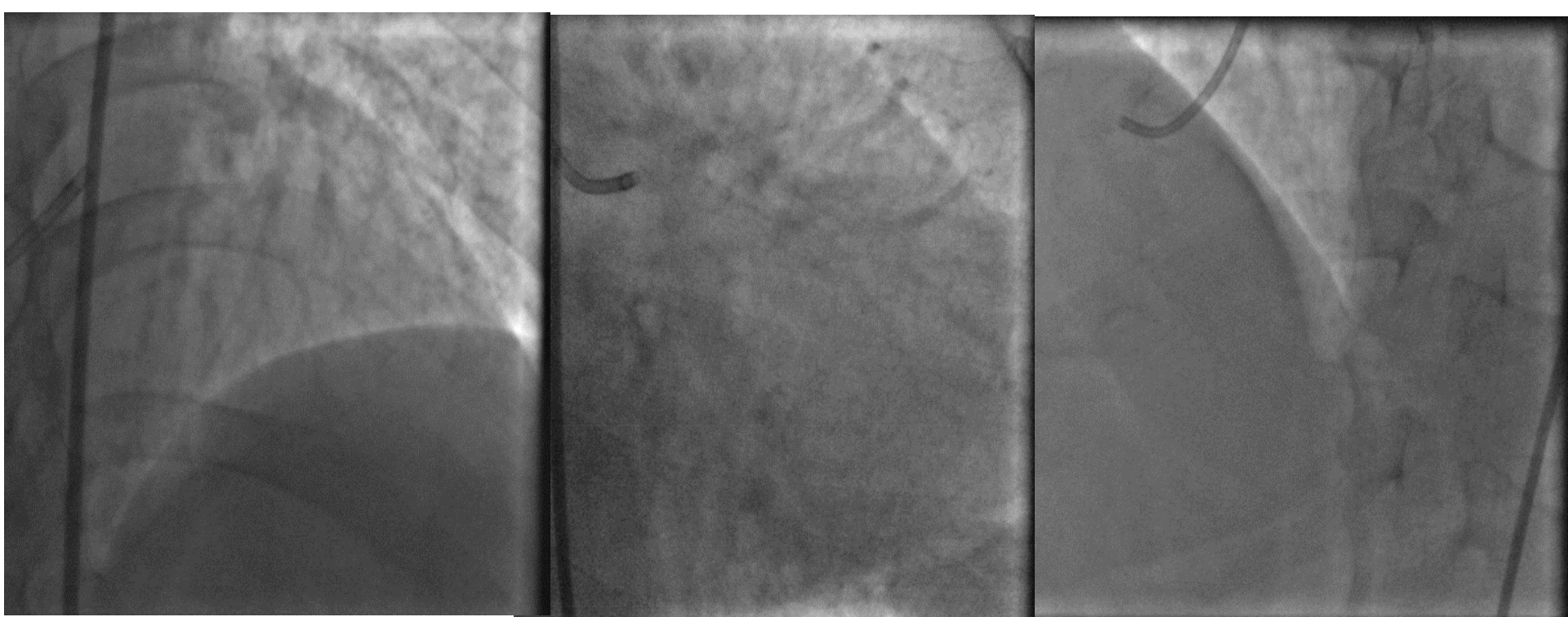
LMCA: Free of disease.

LAD: Proximal, 95-98% stenosis involving the origin of D1 & D2 branches.

D2 is angulated with severe stenosis at its origin.

LCX: Good size & tortuous vessel, having 90-95% stenosis in its proximal segment.

RCA: Dominant vessel & free of significant disease.

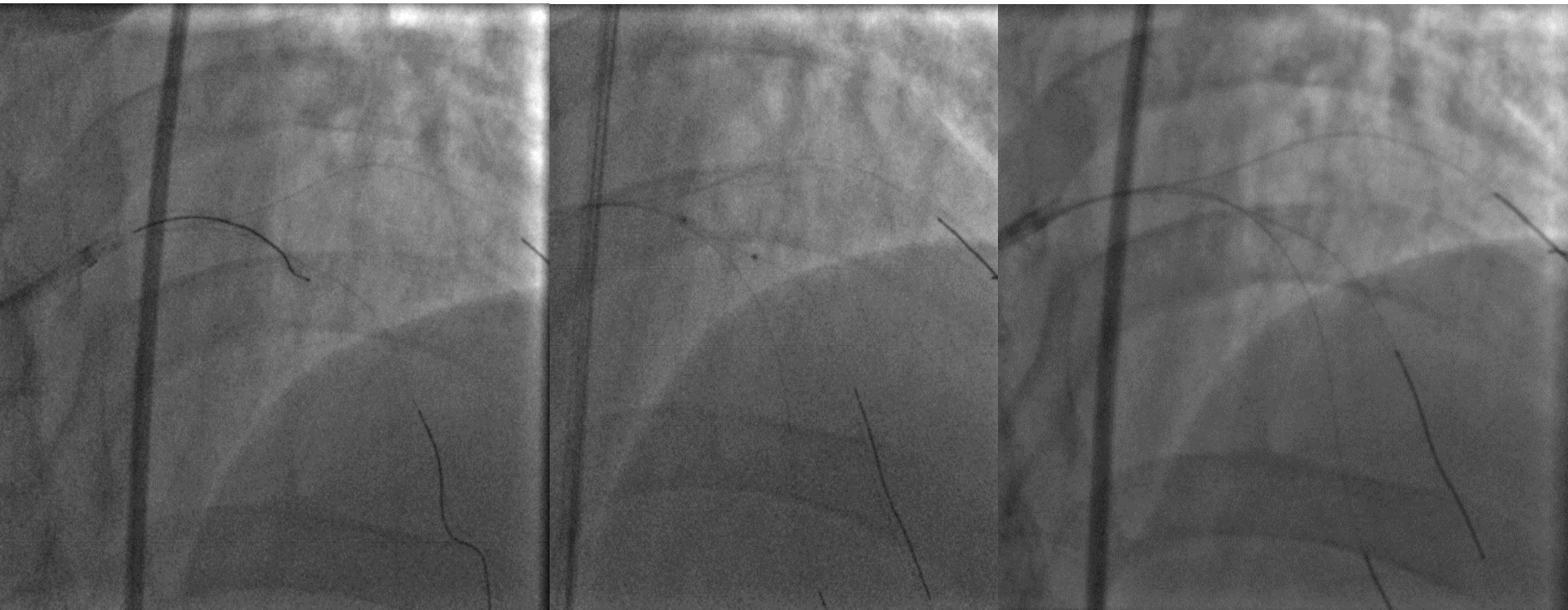




Challenges

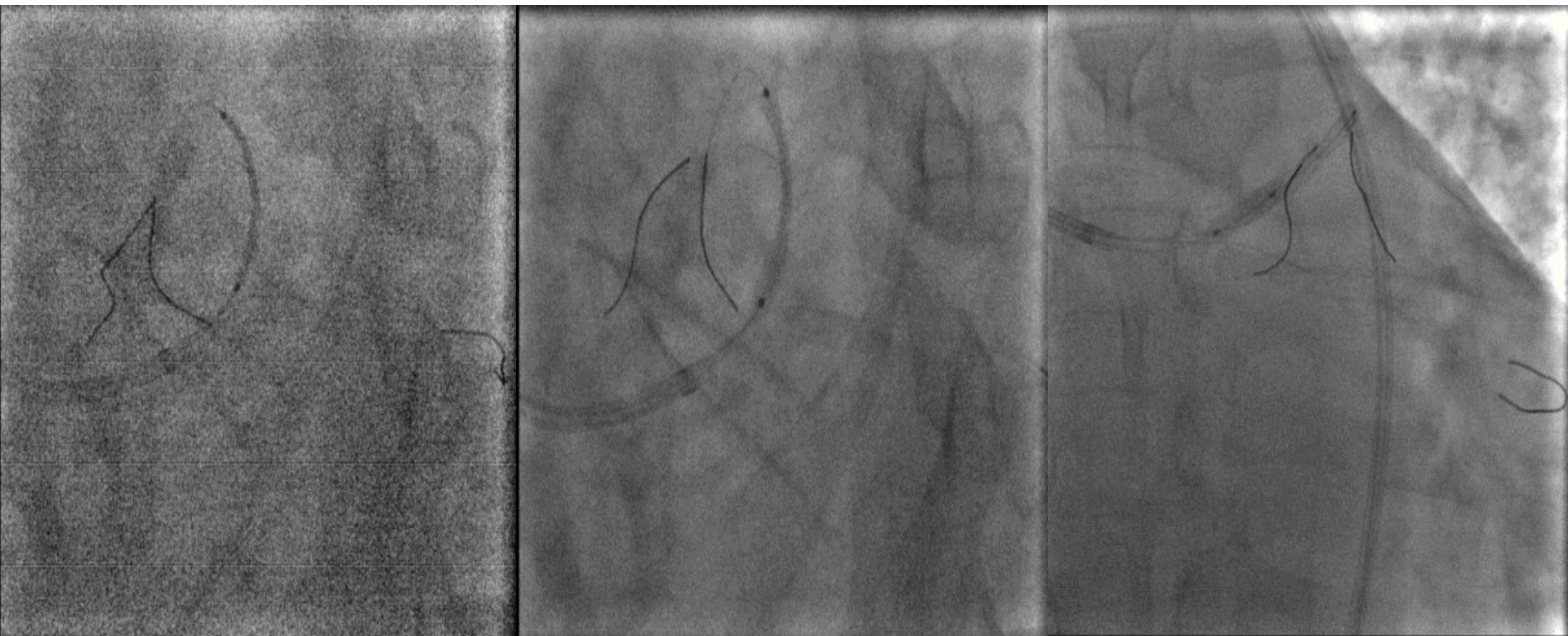
- True bifurcation lesion (1,1,1).
- Long segment lesion of the main branch.
- Large sized Diagonal branch.
- Difficult angle between LAD & diagonal.

LAD, D2 & LCX were wired with floppy wires and pre-dilatated with NC balloons.



3.0 x 38 mm DES (LAD ostium to D2).

POT done
3.5 X 12 mm NC balloon

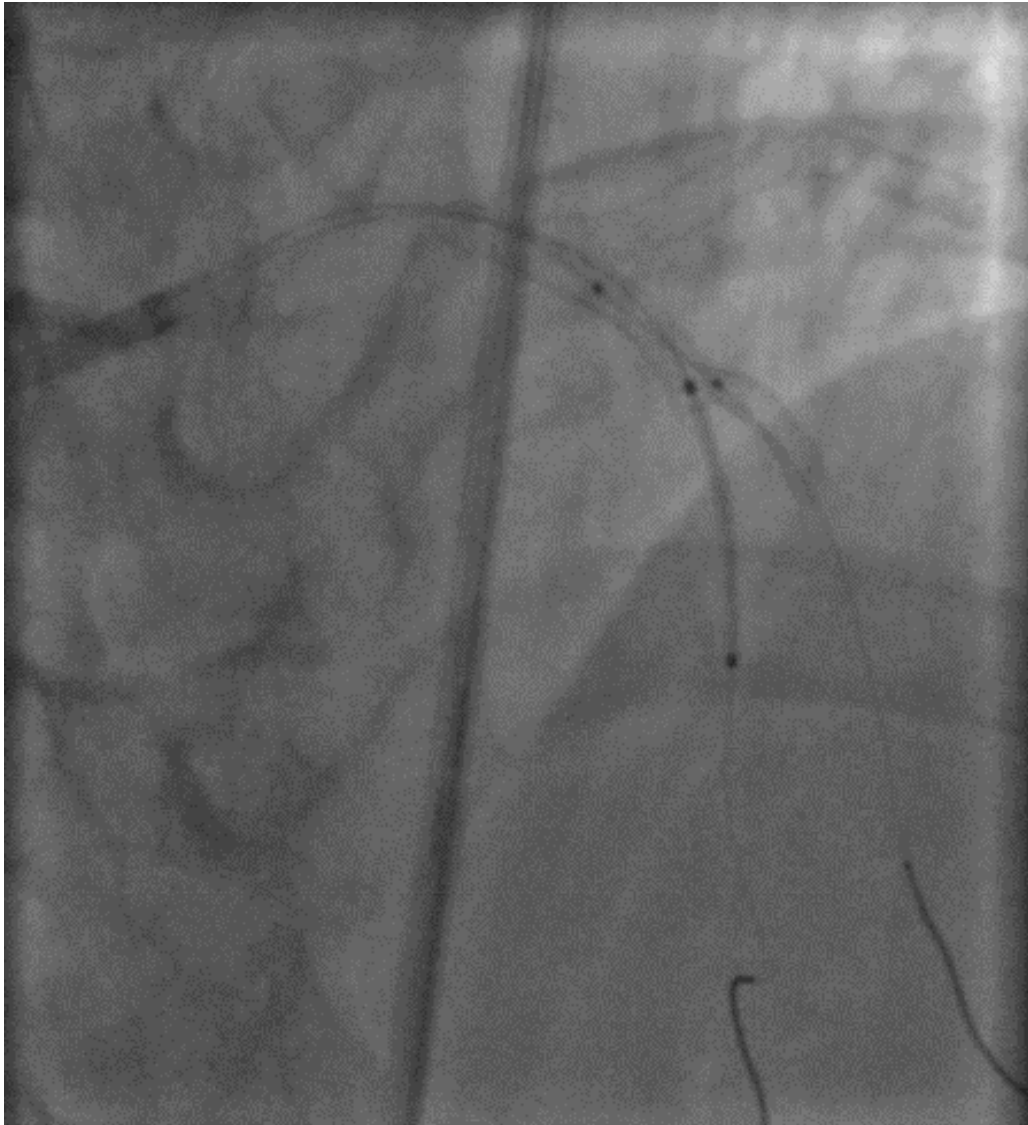


LAD re-wired through the
distal stent strut

Kissing balloon performed with
2.5x12 mm in LAD & 2.75x12 mm
NC balloons in D2



Balloon assisted TAP



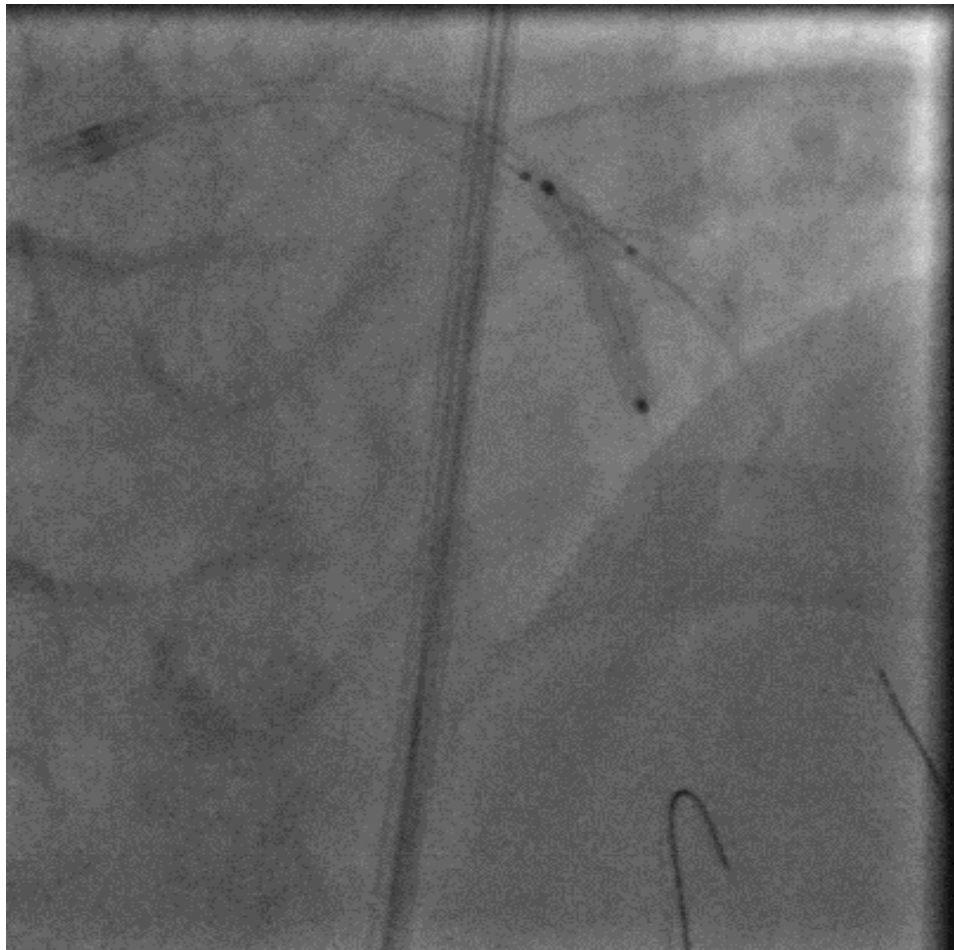
- Positioning of uninflated 3.0 X 12 mm NC balloon across LAD to Diagonal.
- Positioning of uninflated 2.75 X 18 mm DES in mid LAD.



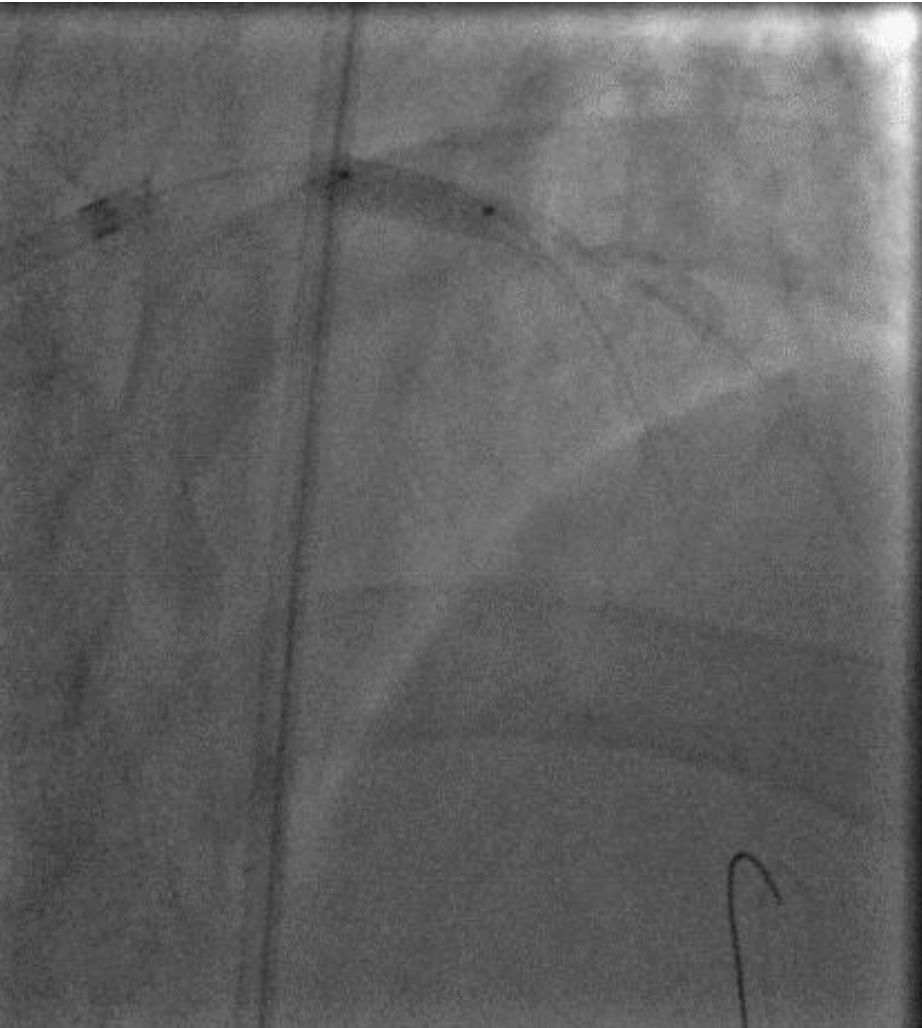
- The balloon across LAD to diagonal partially inflated (4-6 atm).
- Gently uninflated stent pulled until it abuts the partially inflated balloon.
- Once the stent is deployed up to 6 to 8 ATM partially inflated balloon should be deflated.
- At this stage stent is deployed at nominal pressure and deflate.

- Stent balloon slightly pulled back and inflated at higher pressure (16 atm)
- Sequential inflation of both balloons done.

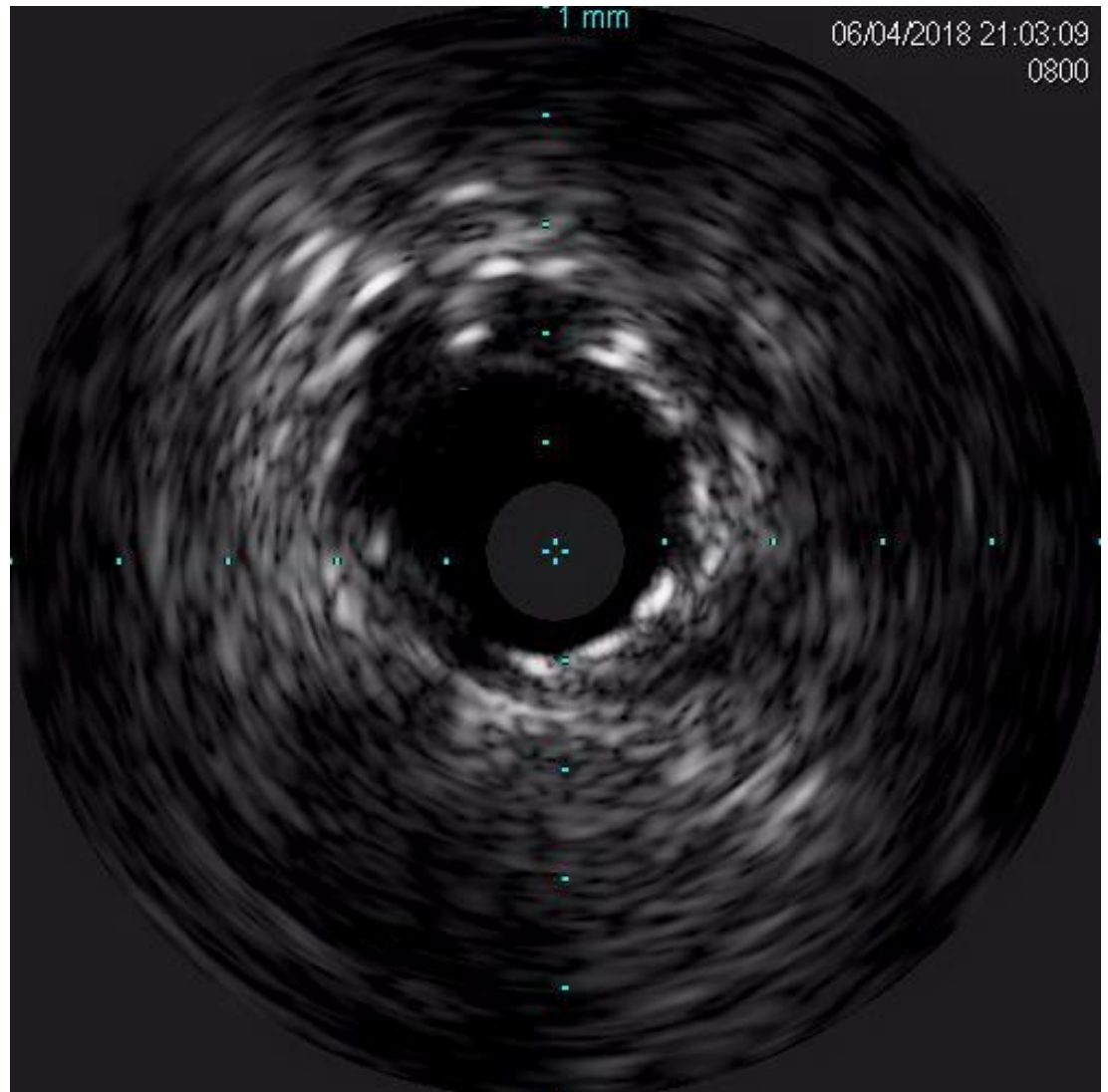
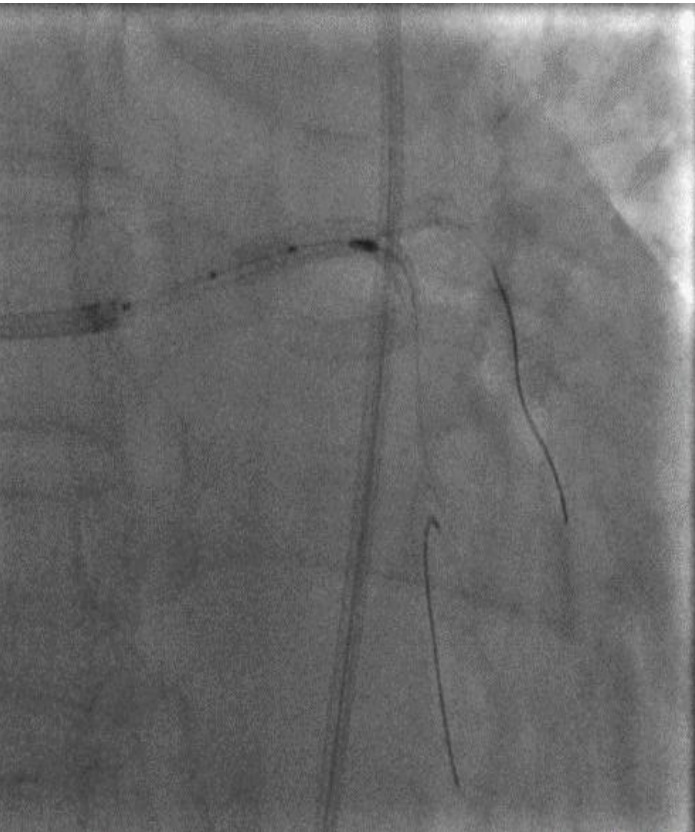
- Final kissing done at nominal pressure (12 atm)



Re-POT done with 3.5x12 mm NC balloon

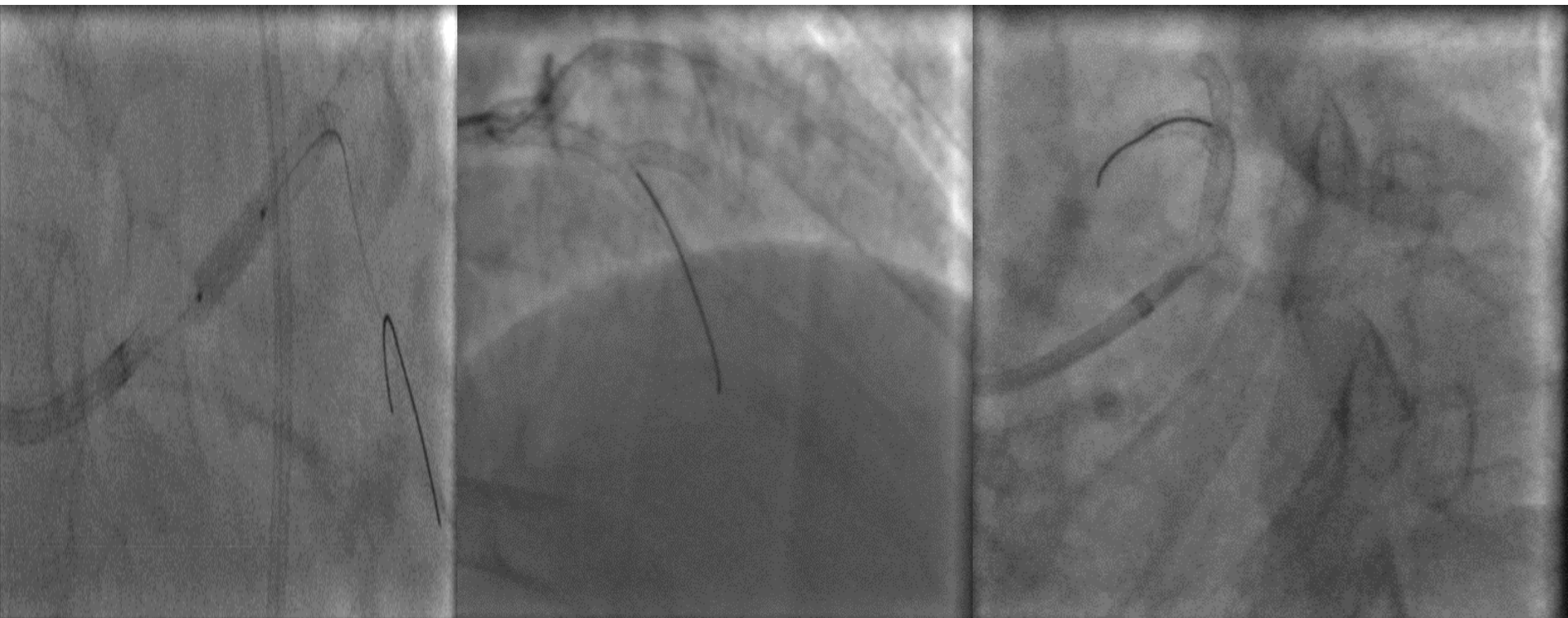


IVUS study



Again re-POT done with
4.0x12 mm NC balloon at
20 ATM

Final result



In conclusion

- Tackling the more angulated vessel first during double stent strategy simplifies the procedure.
- Balloon assisted TAP prevents Geographic miss as well as Excessive protrusion of stent in MB

