



IVUS guided primary PCI to left main coronary artery

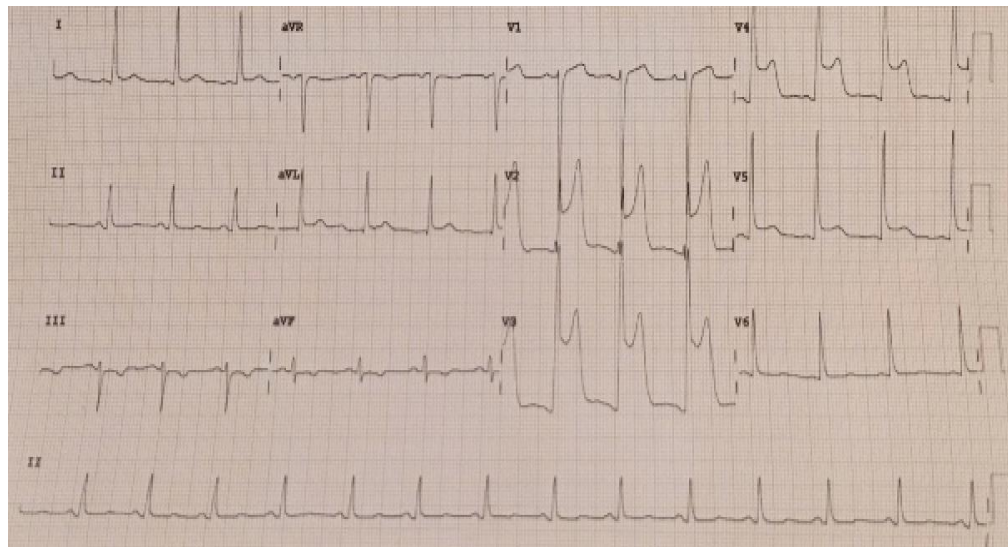
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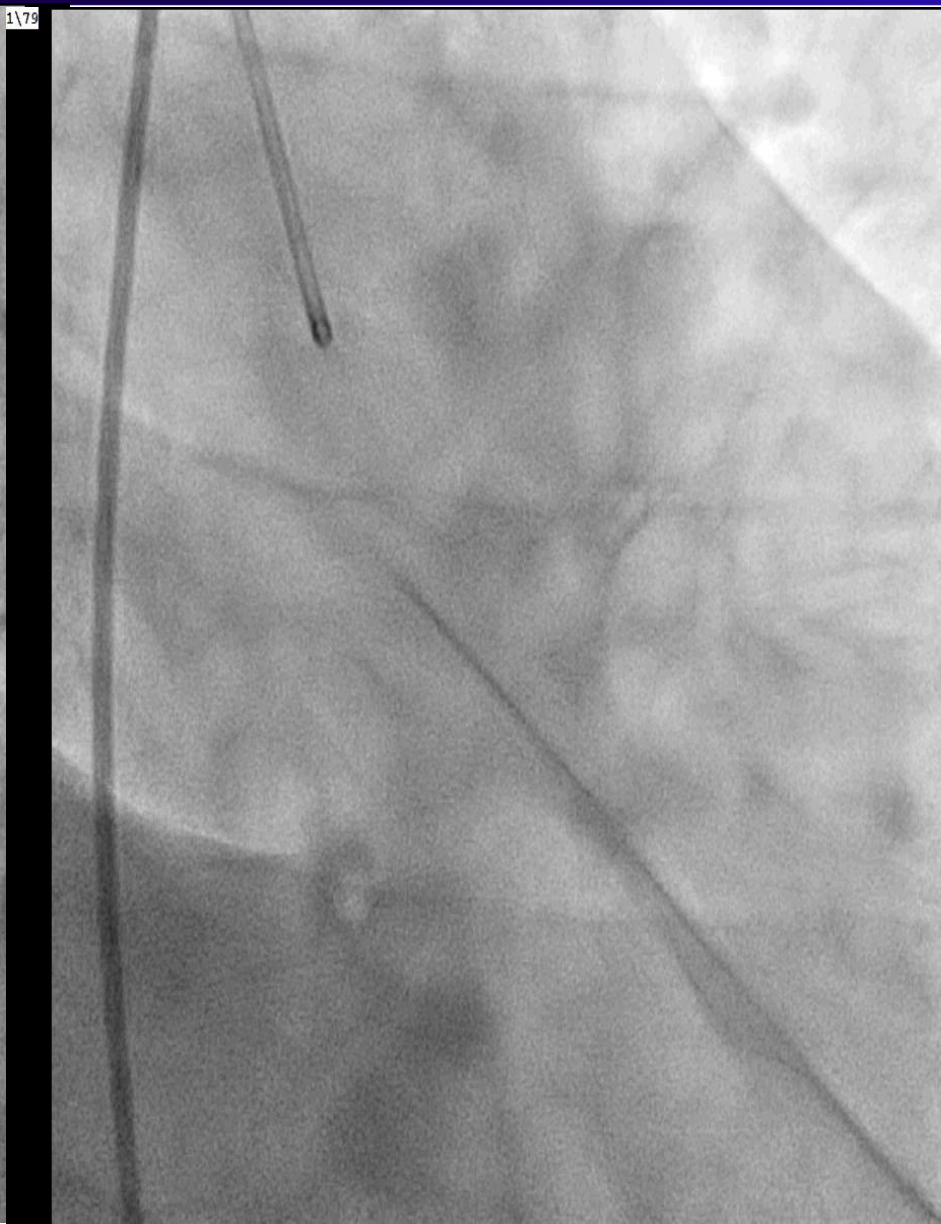
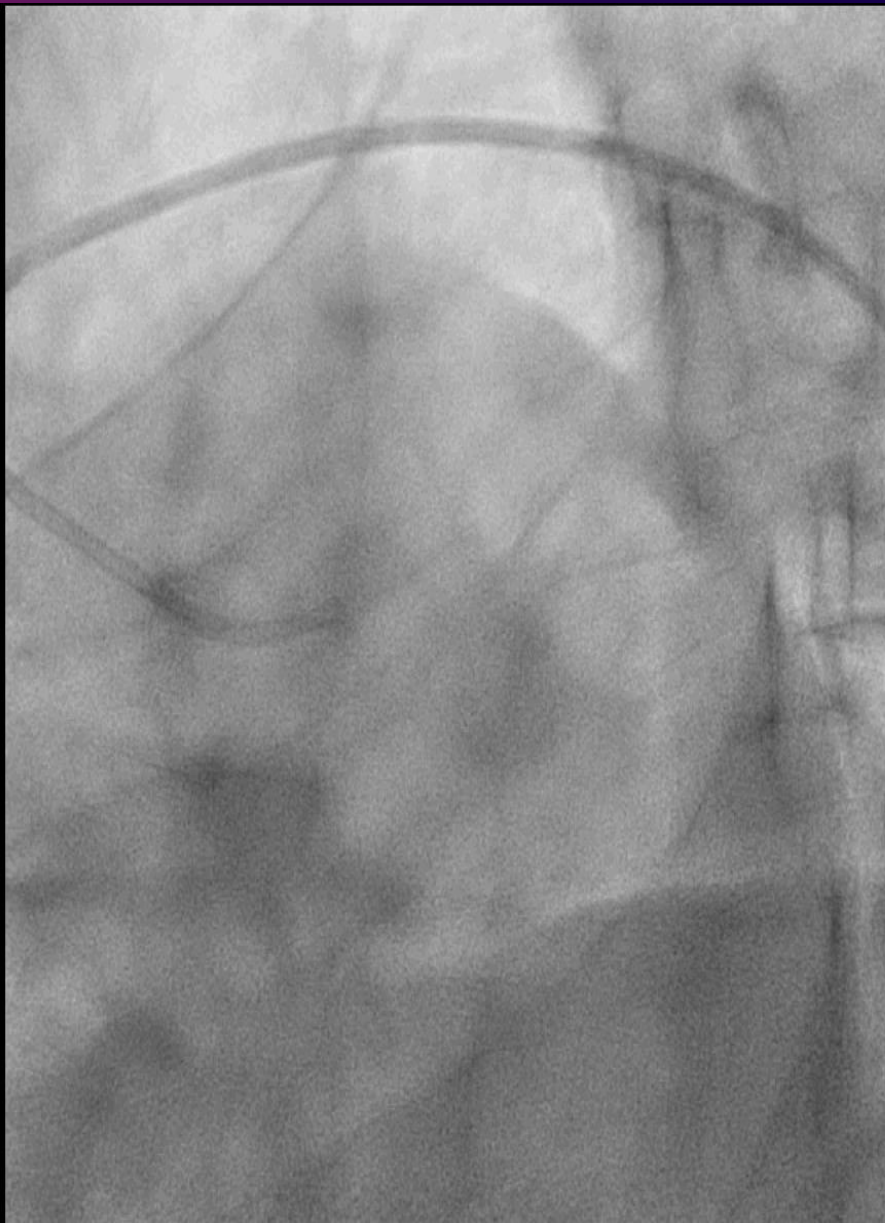
Case history

- 40 / M
- Hypertension – 2 years
- AWMi – window period 2 hours - Primary PCI – stable hemodynamics
- Echo – apical, anterior and septal severe hypokinesia, LVEF 35 %



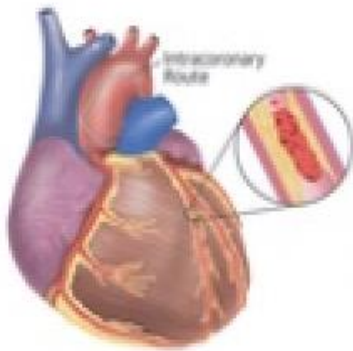
Options

- Balloon dilatation - undersized small or 1:1 balloon dilatation
- Thrombus aspiration - LAD / LCX
- Perforated balloon (PB) - LAD – Tirofiban 25 mcg/ kg / SNP 100 mcg boluses



Large thrombus burden – greatest dimension > 2 vessel diameter Distal drug delivery

Proximal



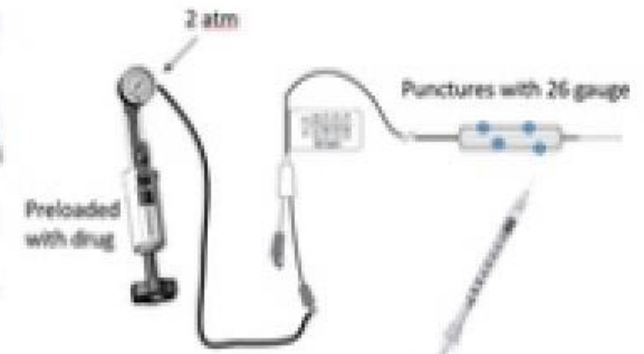
Intralesional



Distal



Intralesional and distal



Guide catheter

- Poor distal drug delivery
- Systemic side effects

Clearway catheter

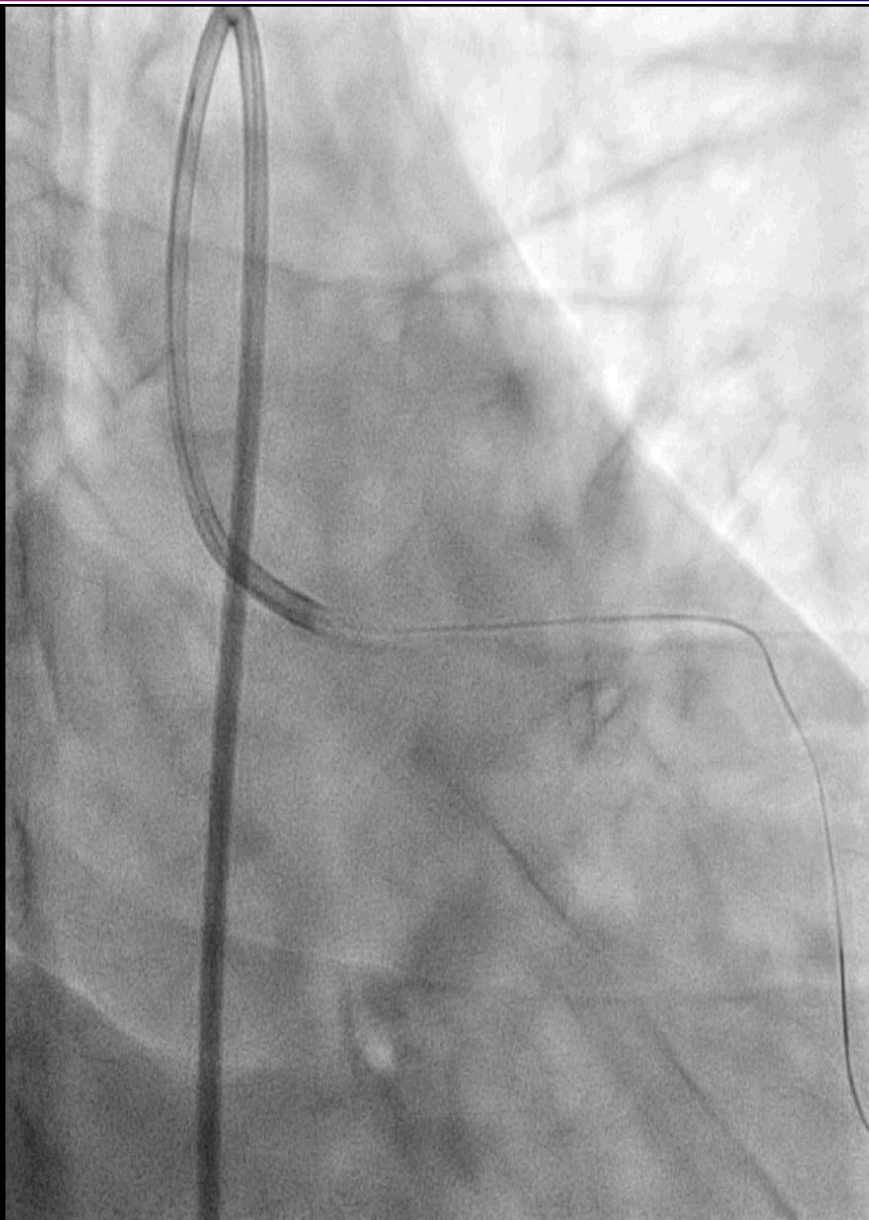
- targeted drug delivery
- No longer available

Thrombectomy catheter Perforated 2x15 mm balloon

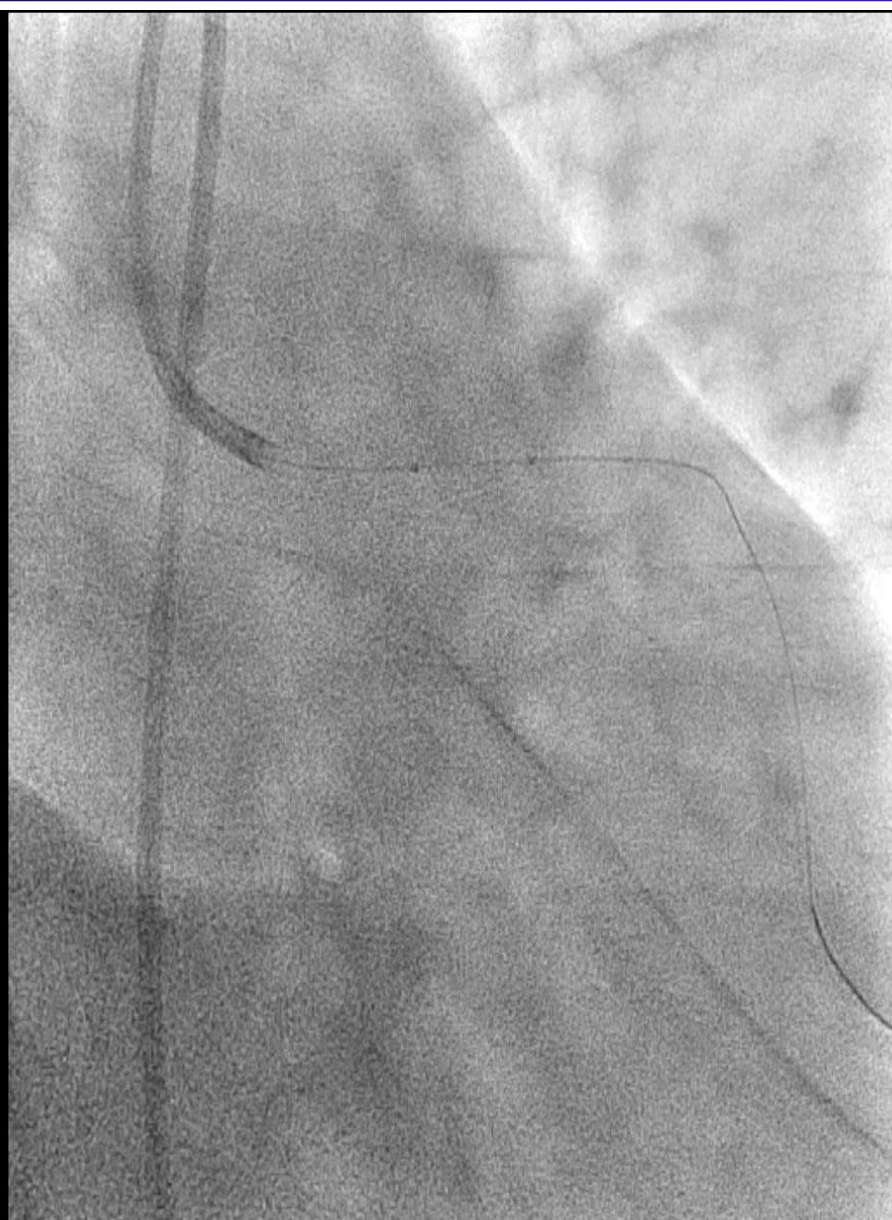
- Stiff and bulky
- Difficult to deliver distally
- Proximal / distal embolism
- Intralesional and distal drug delivery
- Superior tracking
- Maintains distal wire

- Right femoral – 7 F EBU 3.5 - Sion Blue wire
- Perforated balloon (PB) - Ostial LAD – Tirofiban 25 mcg/ kg / SNP 100 mcg

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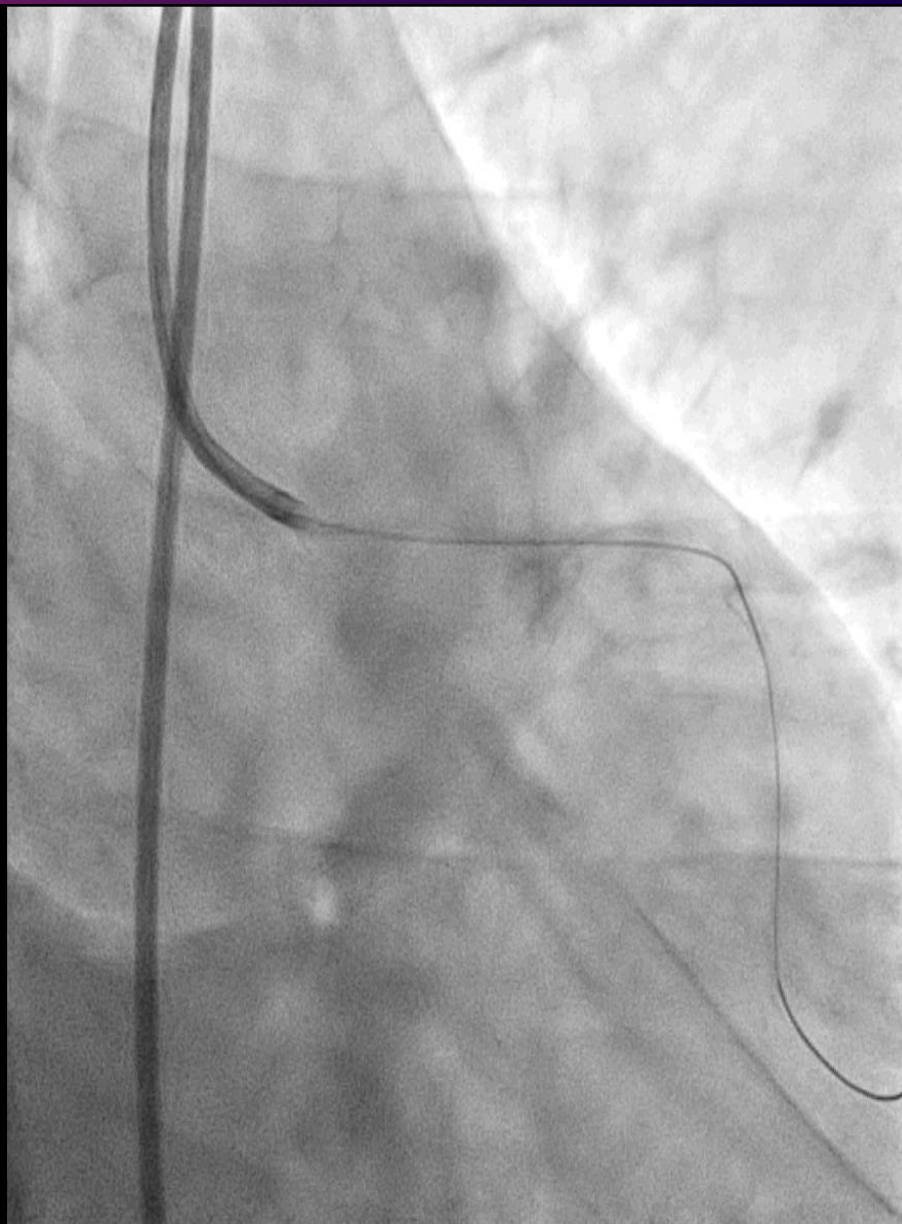


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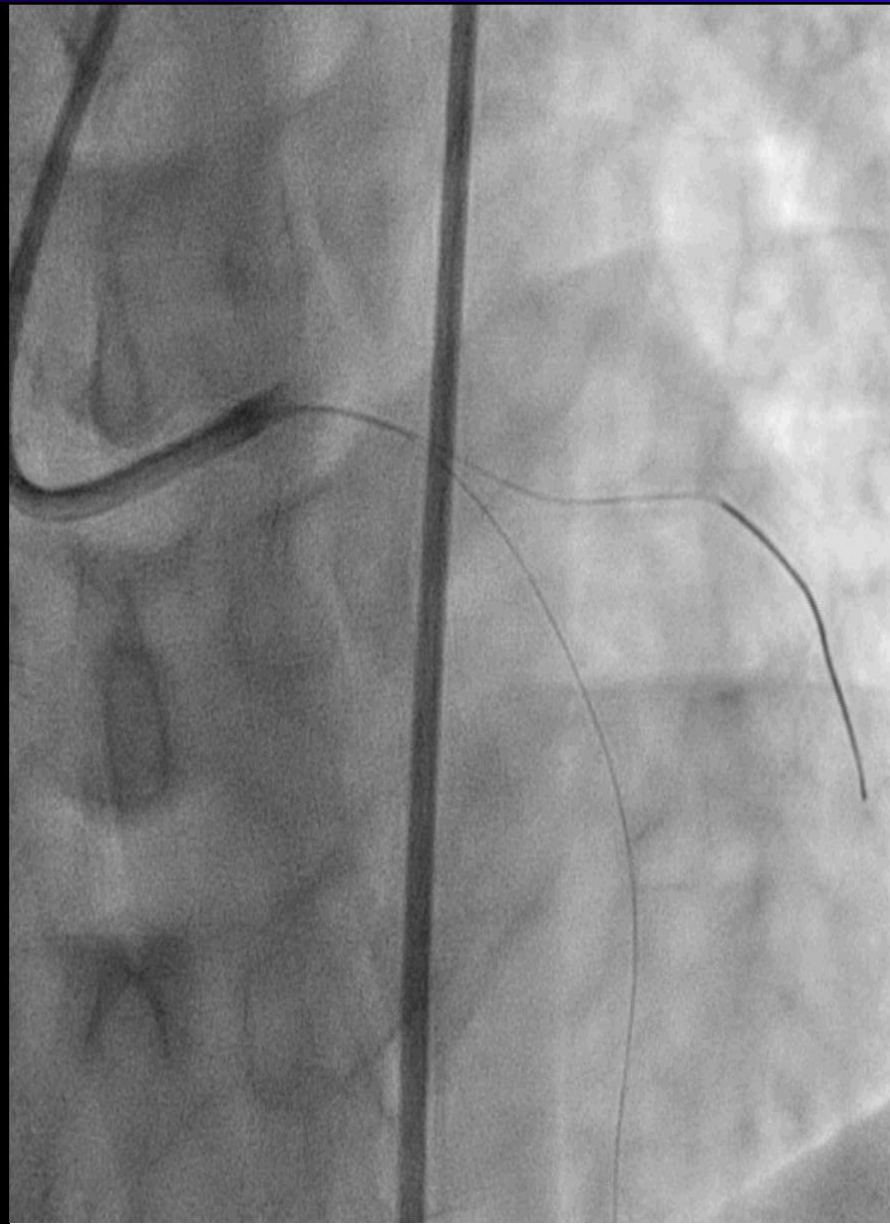


- TIMI II flow distal LAD

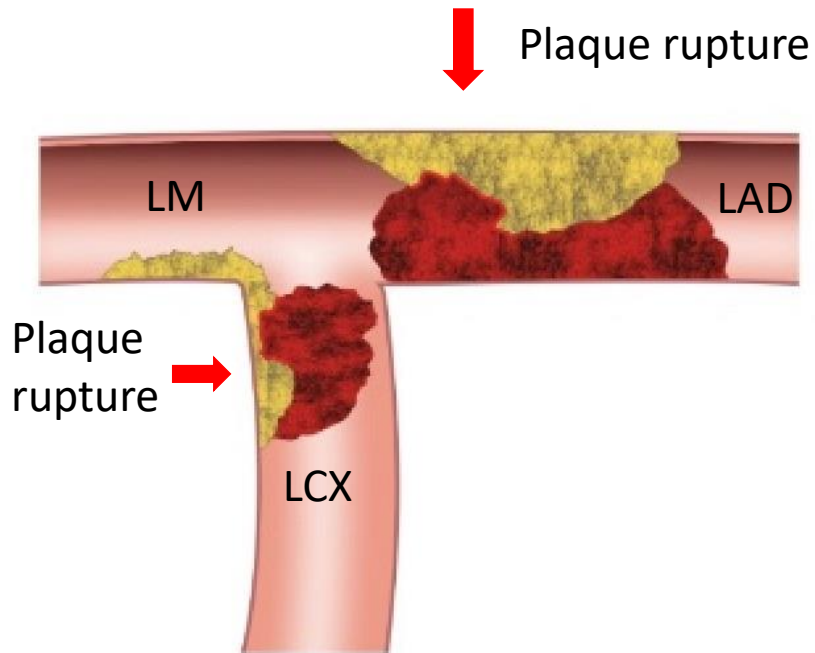
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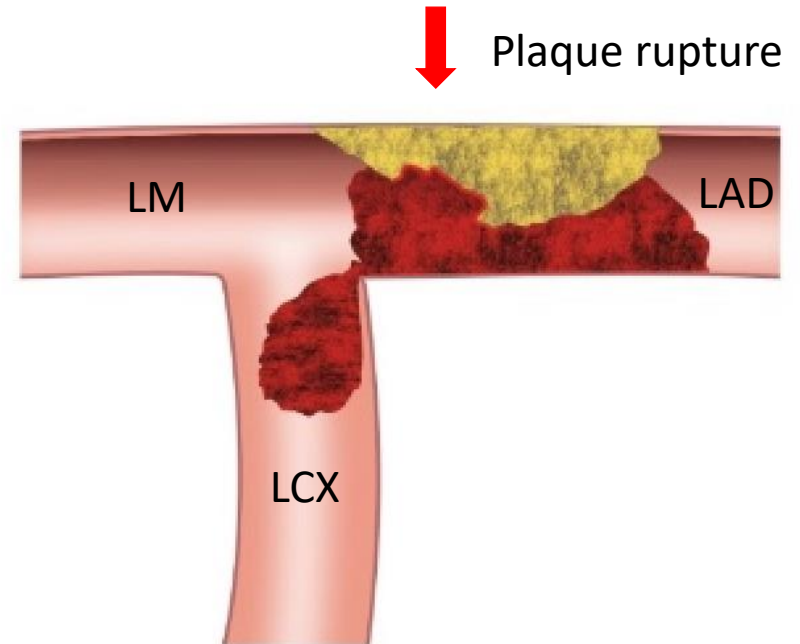


Option 1



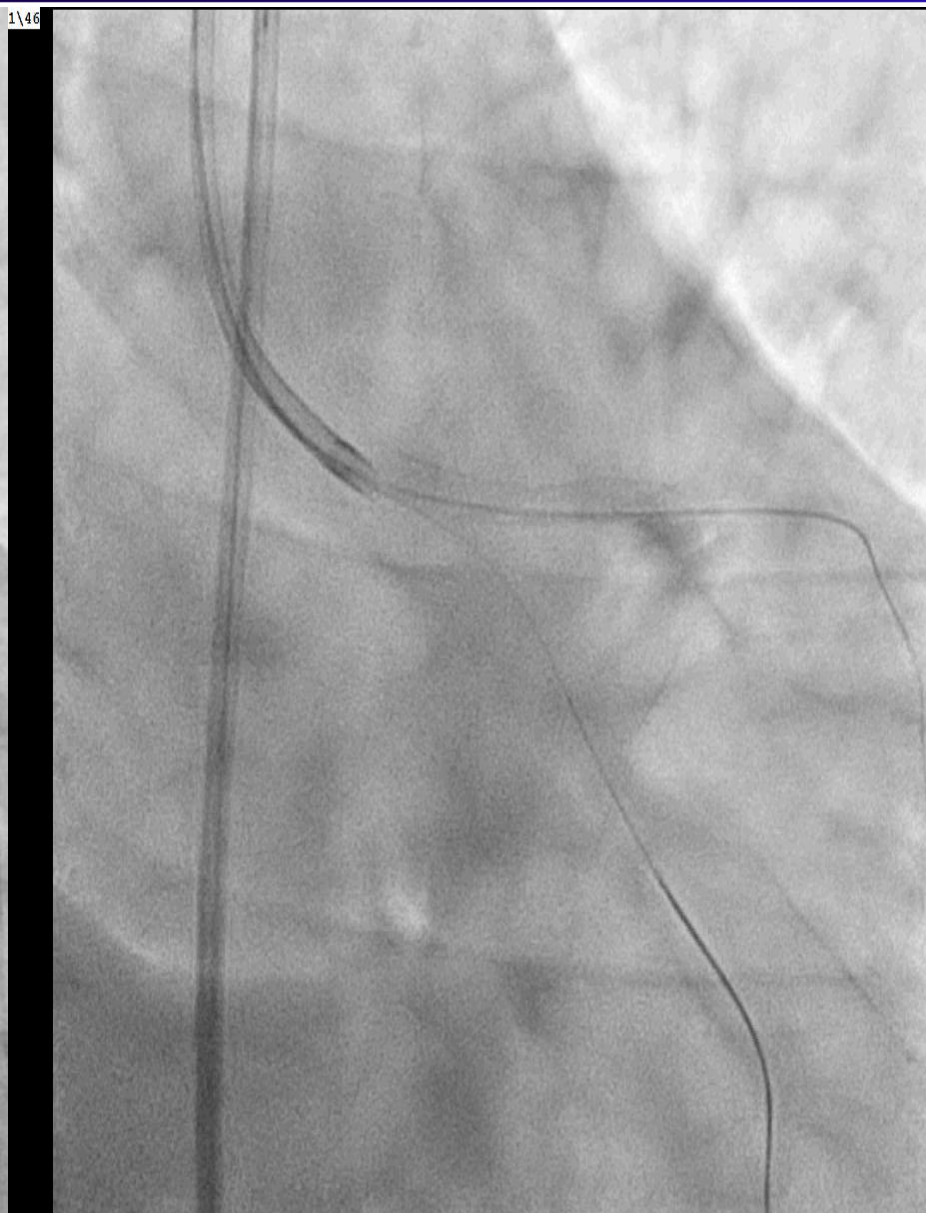
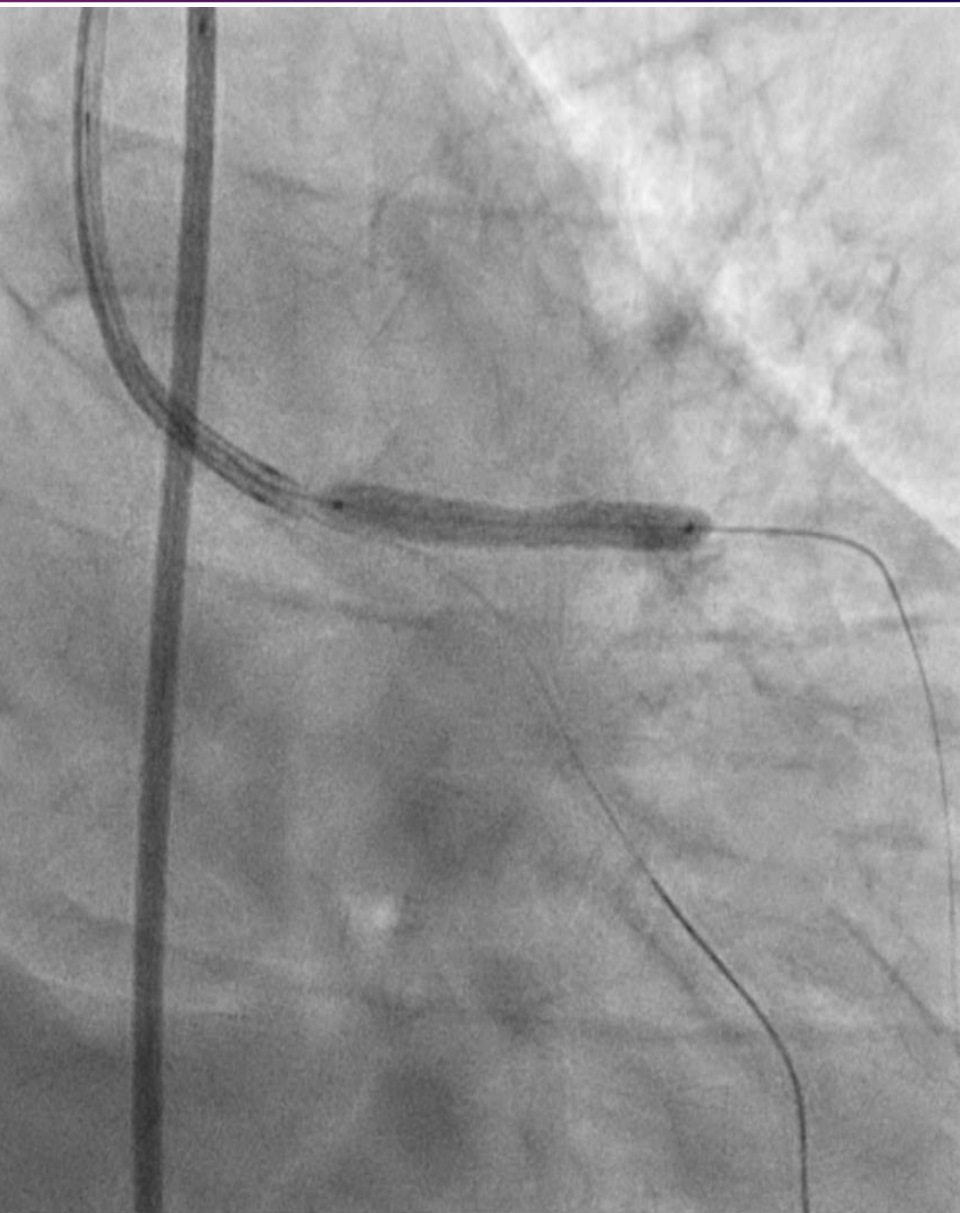
LMCA LAD /LCX - 2 stent
DK crush/ TAP

Option 2

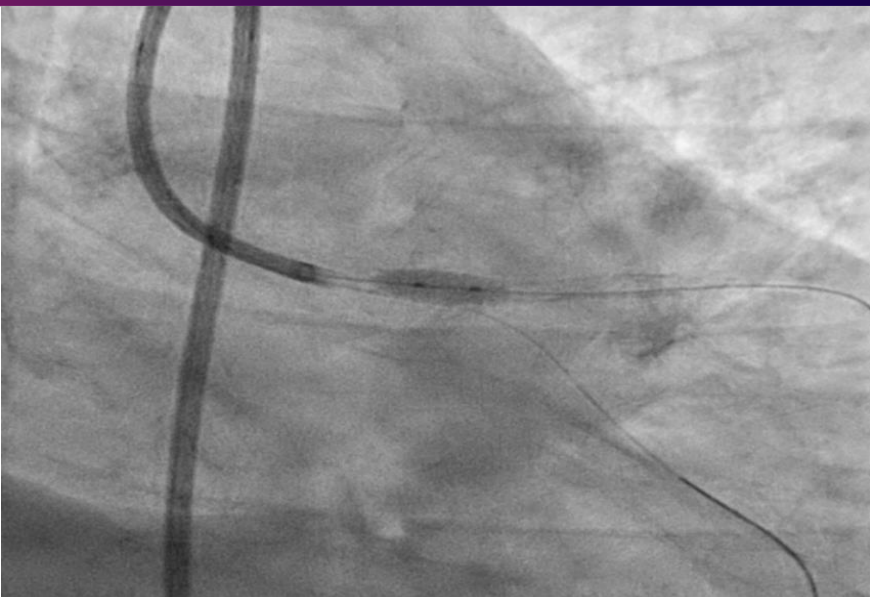


Left main LAD crossover stent
Provisional LCX

- Followed option 2
- Treat DES 3.5 x 29 nominal, LCX thrombus persistent



- POT 4.5 x 8 NC, LCX thrombus persistent

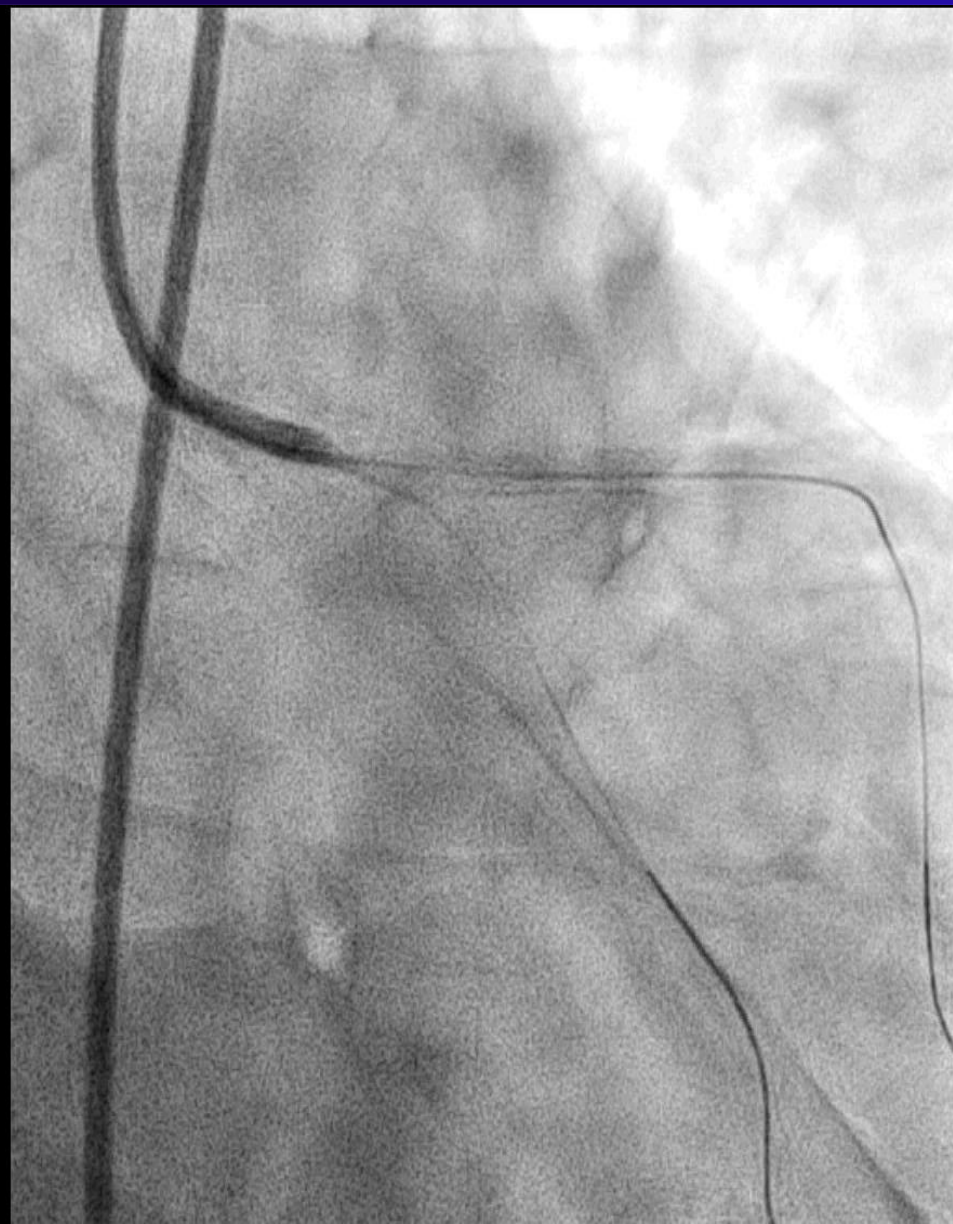


Vikas Mane 40Y/M

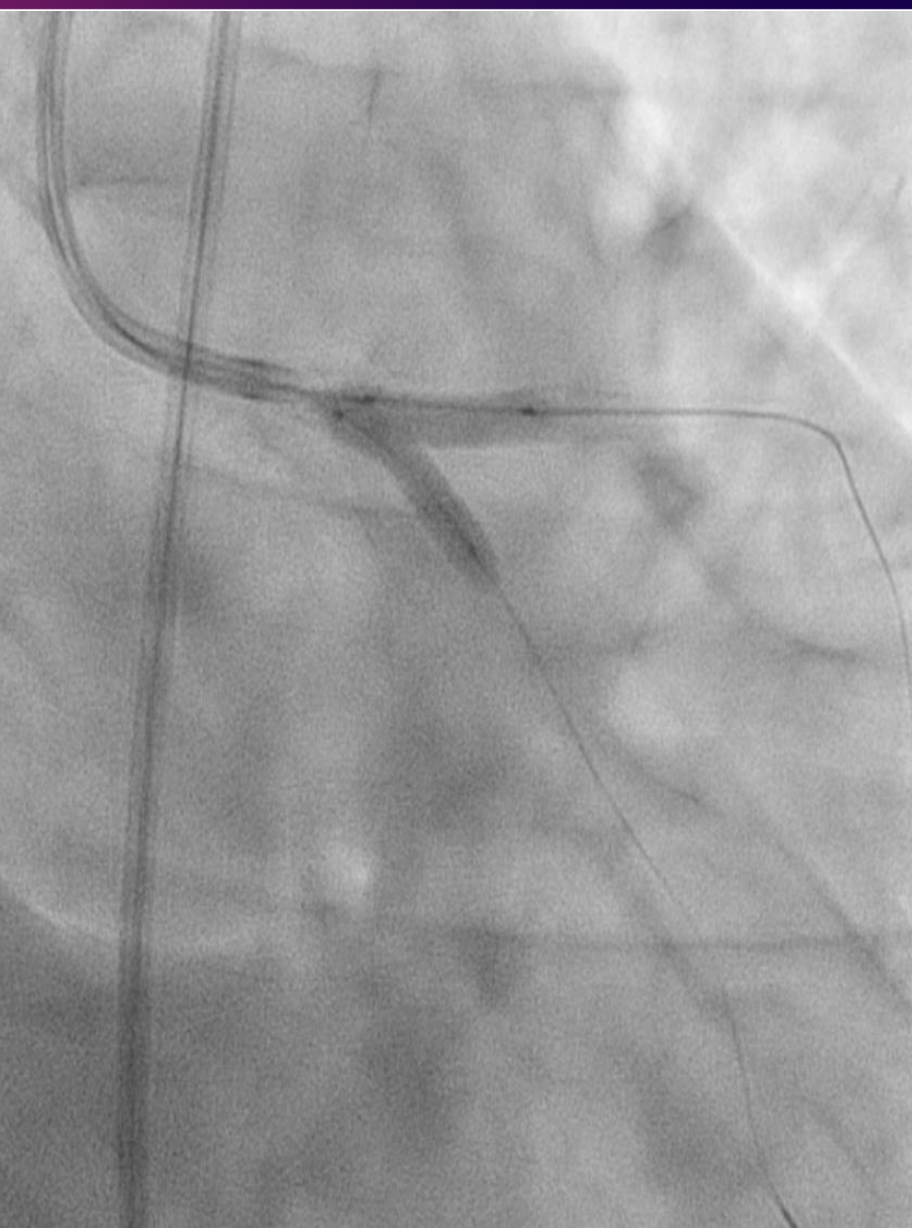
RAO 27
Caud 27
Run Number:
5025
Reliability:
100 %

POT 4.5 x 8 NC 20 atm – 4.7 mm

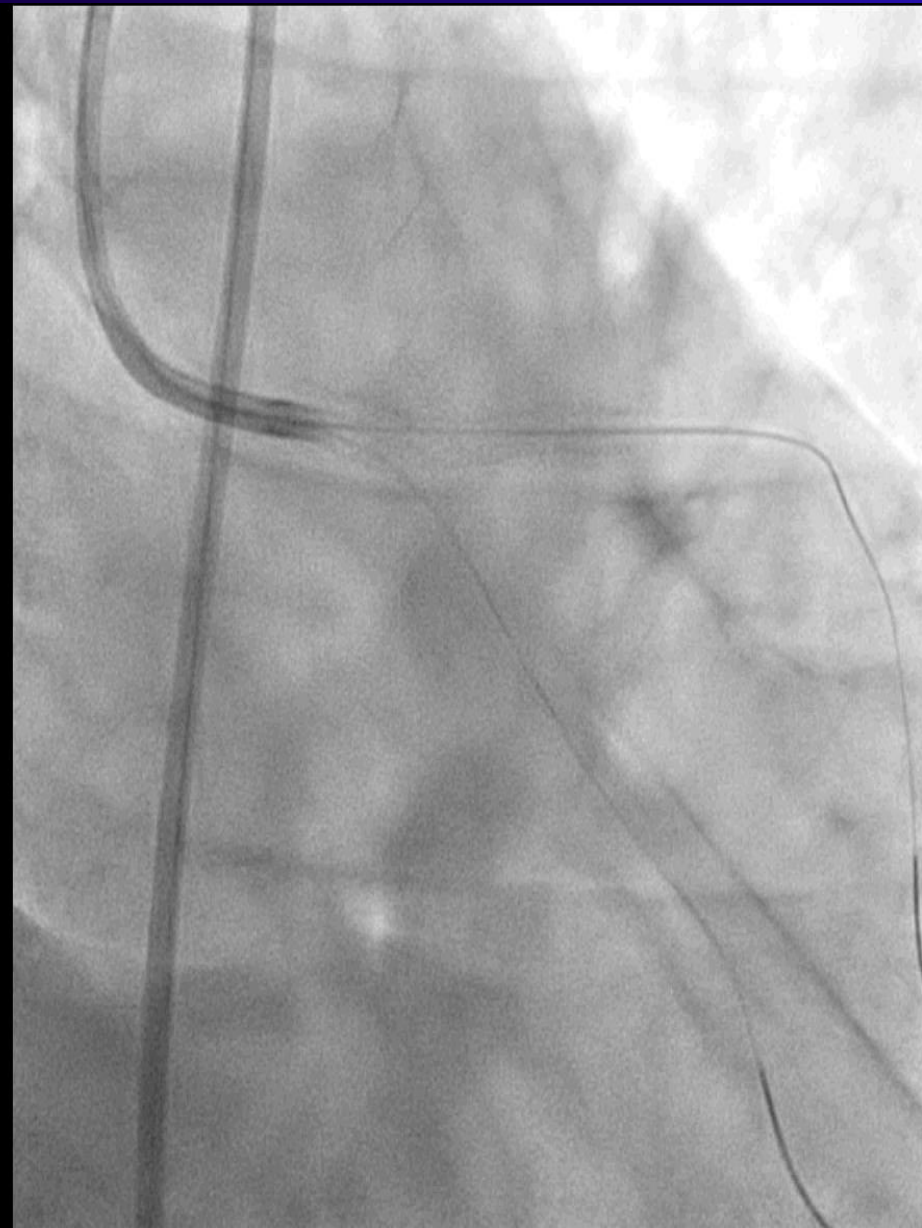
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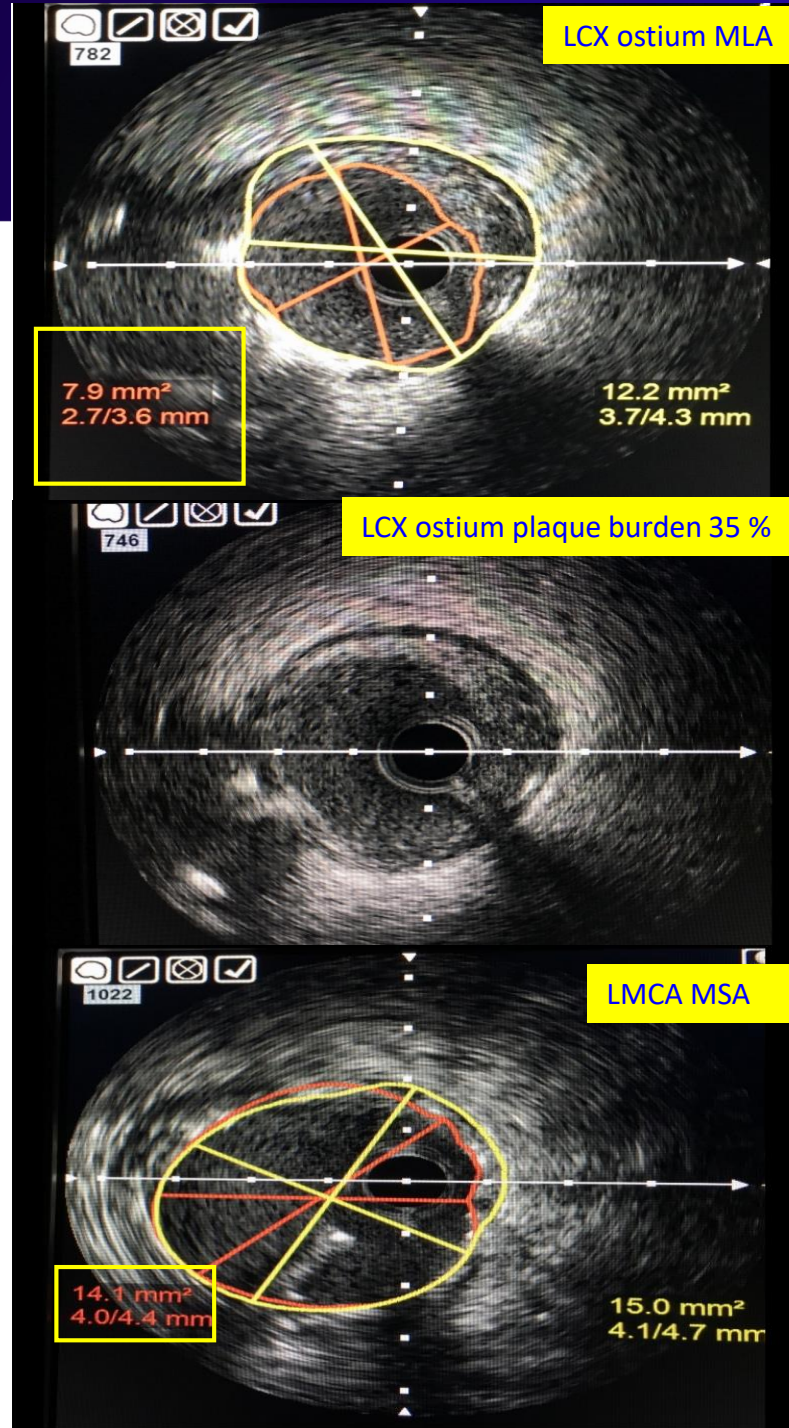
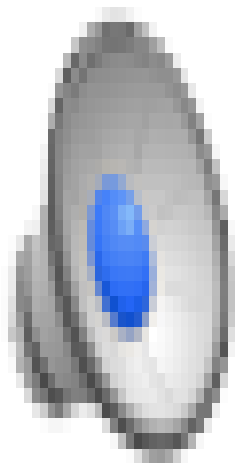
- KBT – 2 - 3.5 x 15 NC – 2 step – 20/10/10, LCX thrombus disappeared



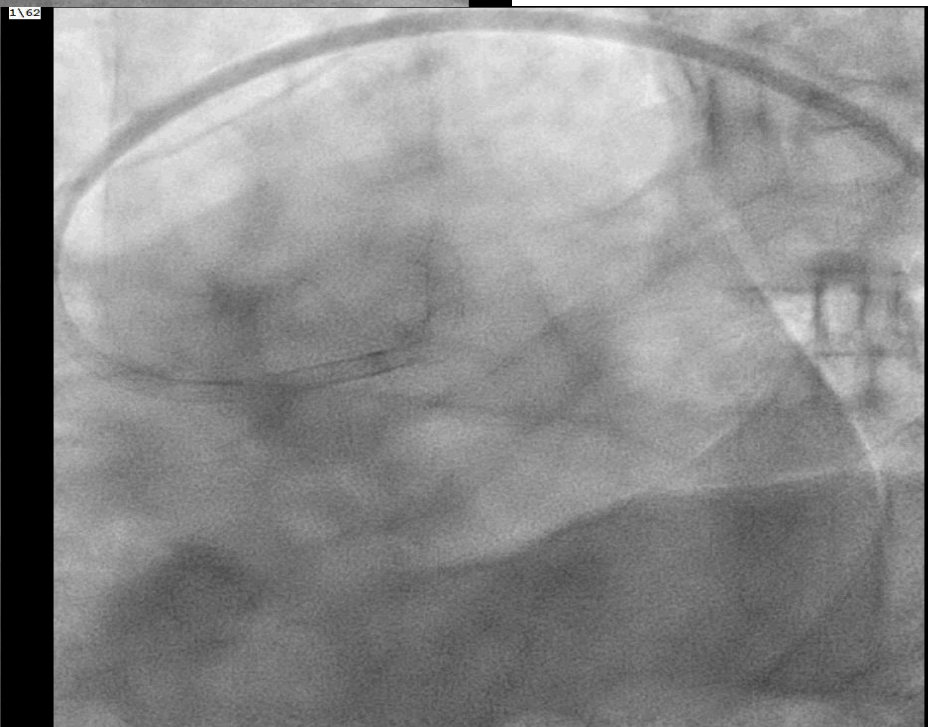
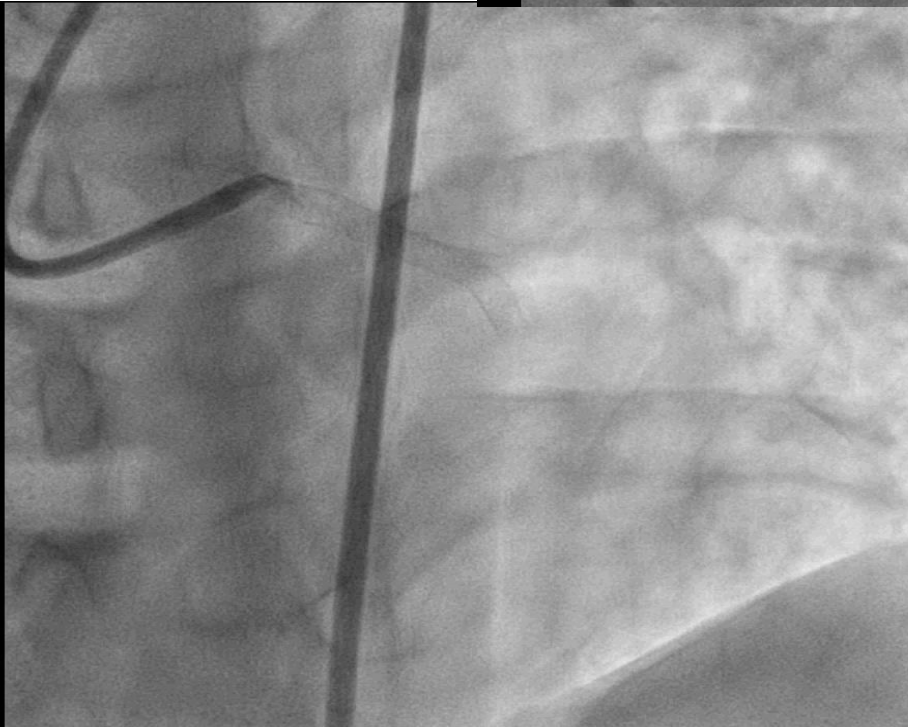
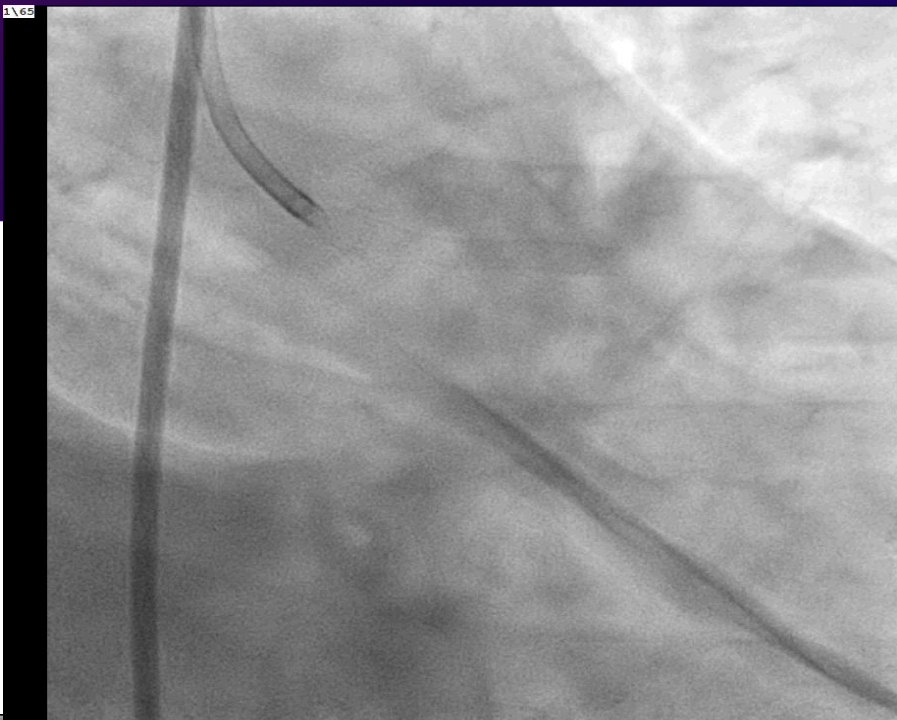
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- LM – LCX pullback



- Final result



Conclusion

- LAD ostial occlusion and LCX ostial sub-total thrombus is scary situation. Even transient slow/ no flow in LCX would have been life threatening. In hemodynamically unstable no flow in PPCI intracoronary adrenaline is a life drug.
- Perforated balloon has smaller profile and better trackability as compared to thrombus aspiration catheter and has lesser chances of proximal and distal thrombus embolization.
- Rupture in single left main LAD plaque with thrombus extension to LCX ostium is most plausible explanation for this lesion subset.
- Provisional stenting with less metal in left main bifurcation (whenever feasible) is always a better strategy.
- Post procedure IVUS delineating plaque burden and minimal lumen area in non-stented vessel provides objective evidence of good result.