

TAP Technique for Bifurcation PCI

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Disclosure

- No financial conflicts of interest to disclose concerning the presentation

Case M/70

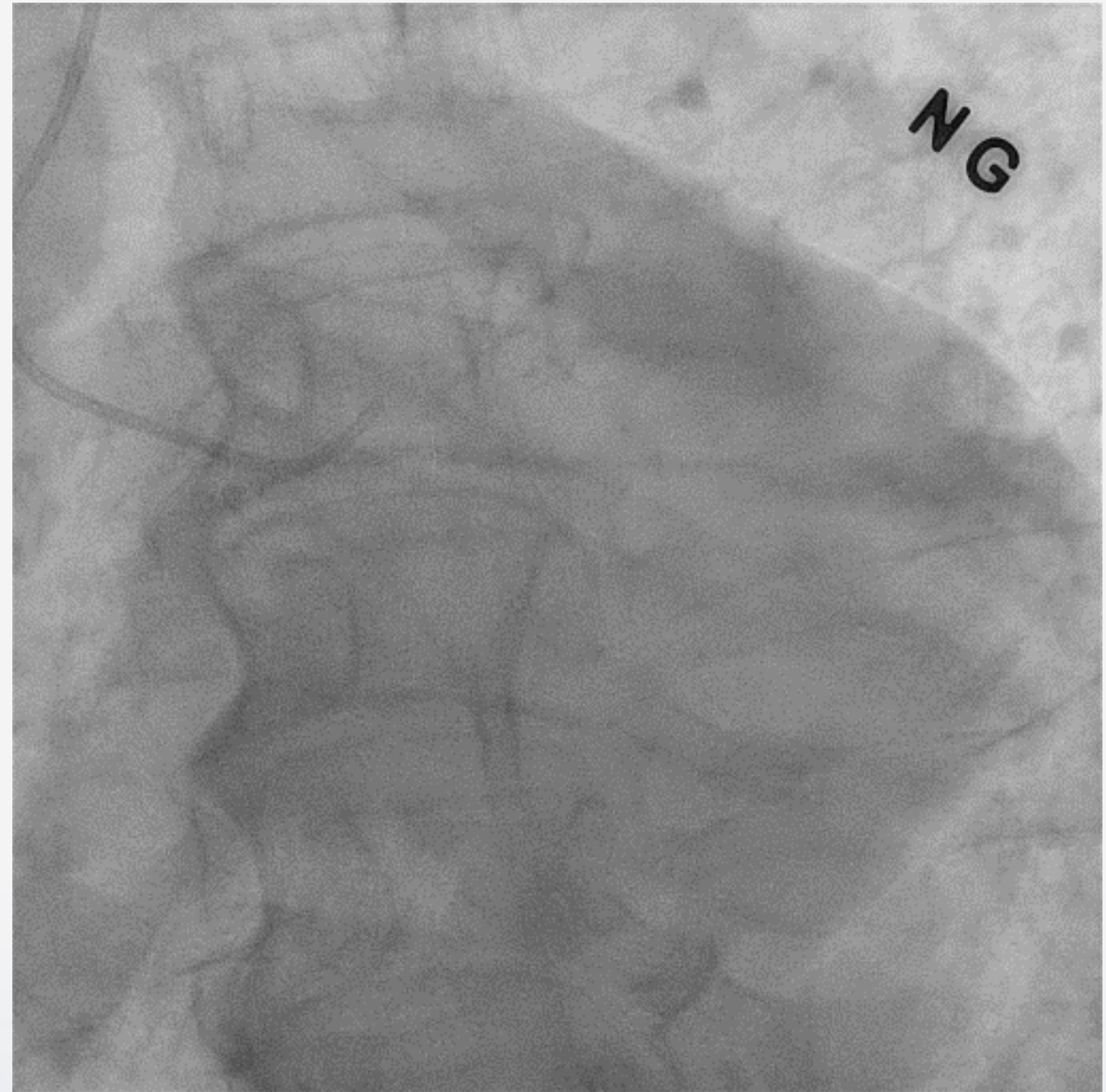
C/C Exertional chest pain for 3 months, aggravated recently

- Coronary CTA at local hospital
 - LM bifurcation lesion
- Echocardiography
 - RWMA (-), Normal LVEF
 - Diastolic dysfunction grade 1
- Past medical history
 - Hypertension (+)
 - Diabetes (-)
 - Chronic kidney disease (-)
 - Paroxysmal A-fib



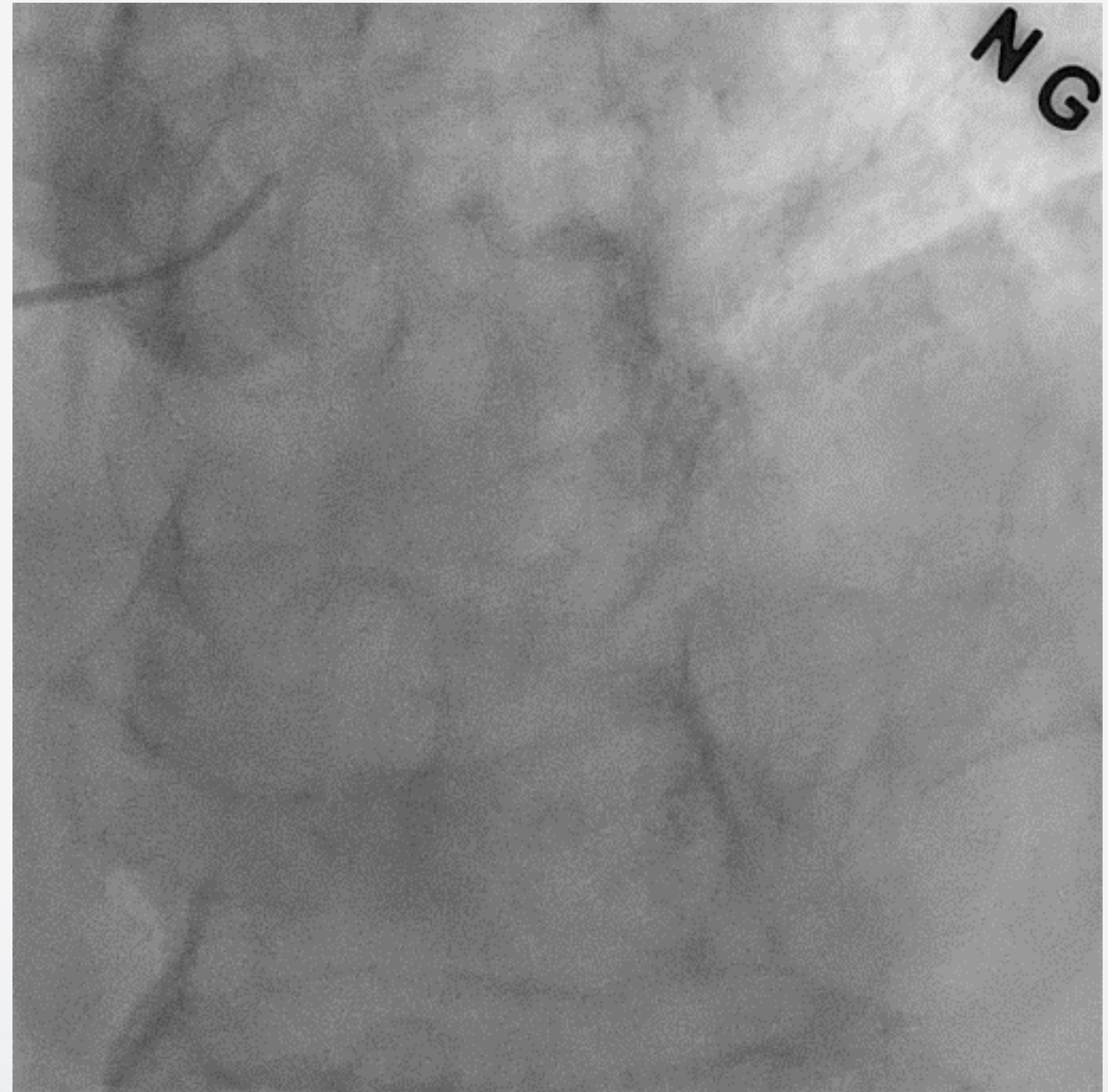
Diagnostic Angiogram

- RCA: no significant disease
- Severe distal LM bifurcation lesion (Medina 1,1,1)
- Moderate stenosis in proximal LCX

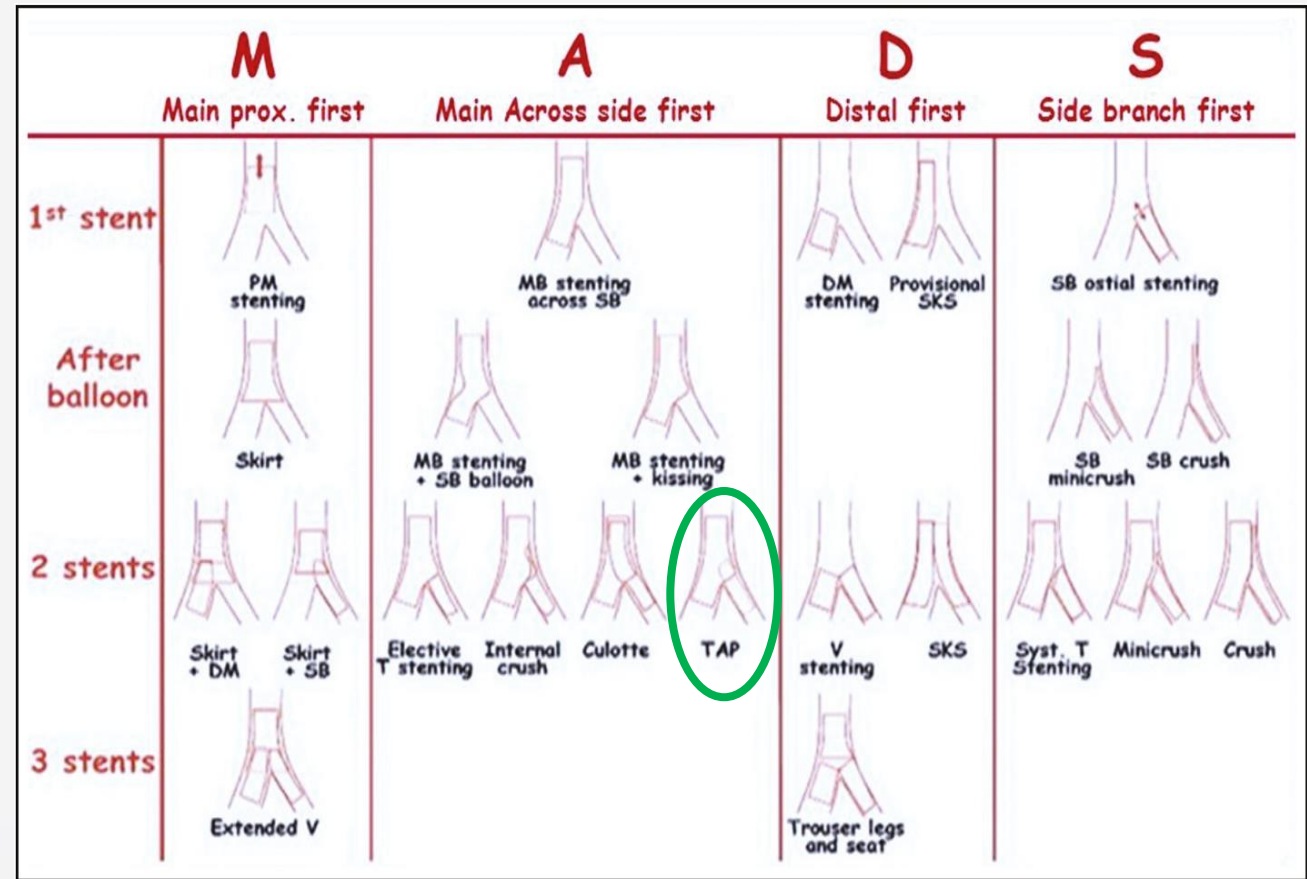
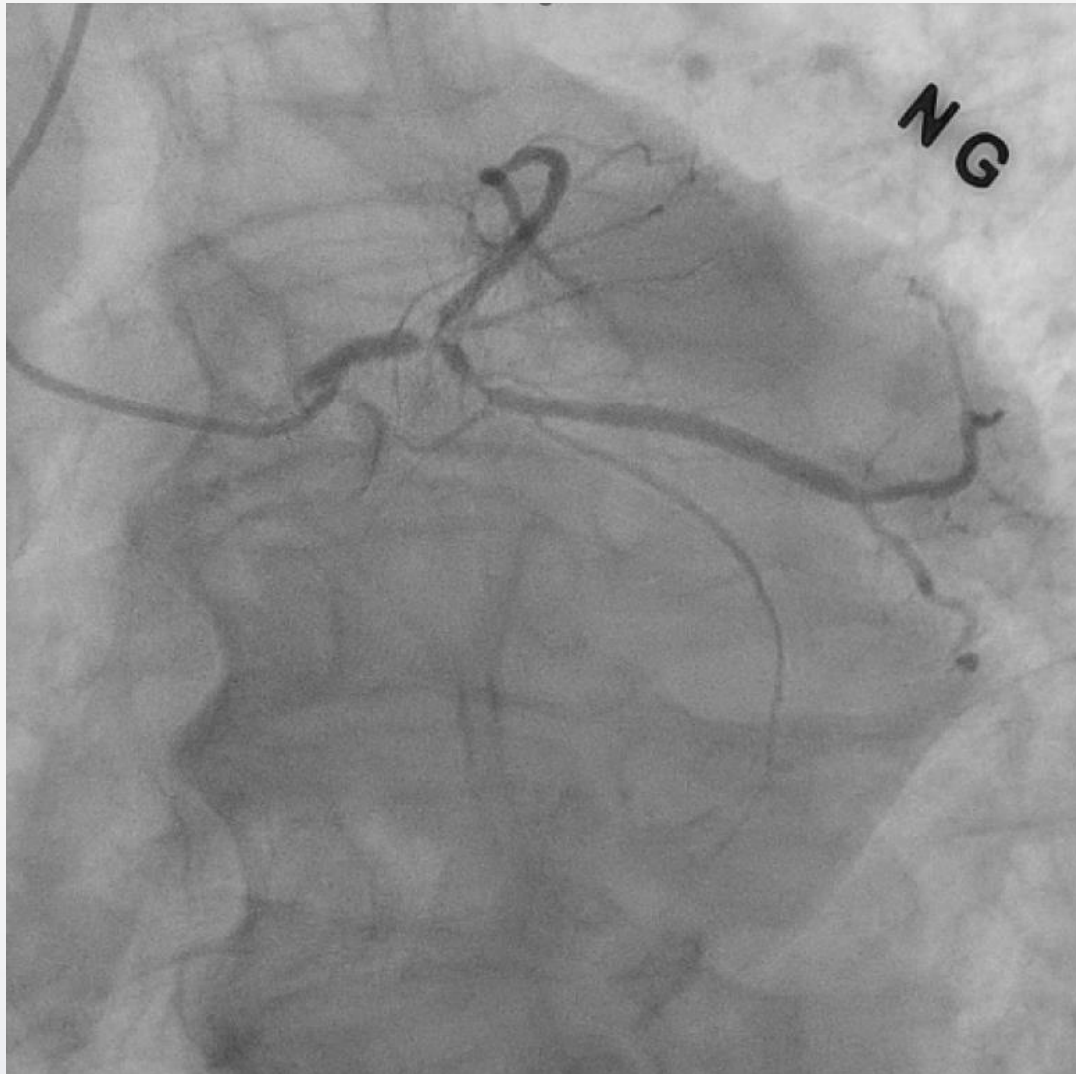


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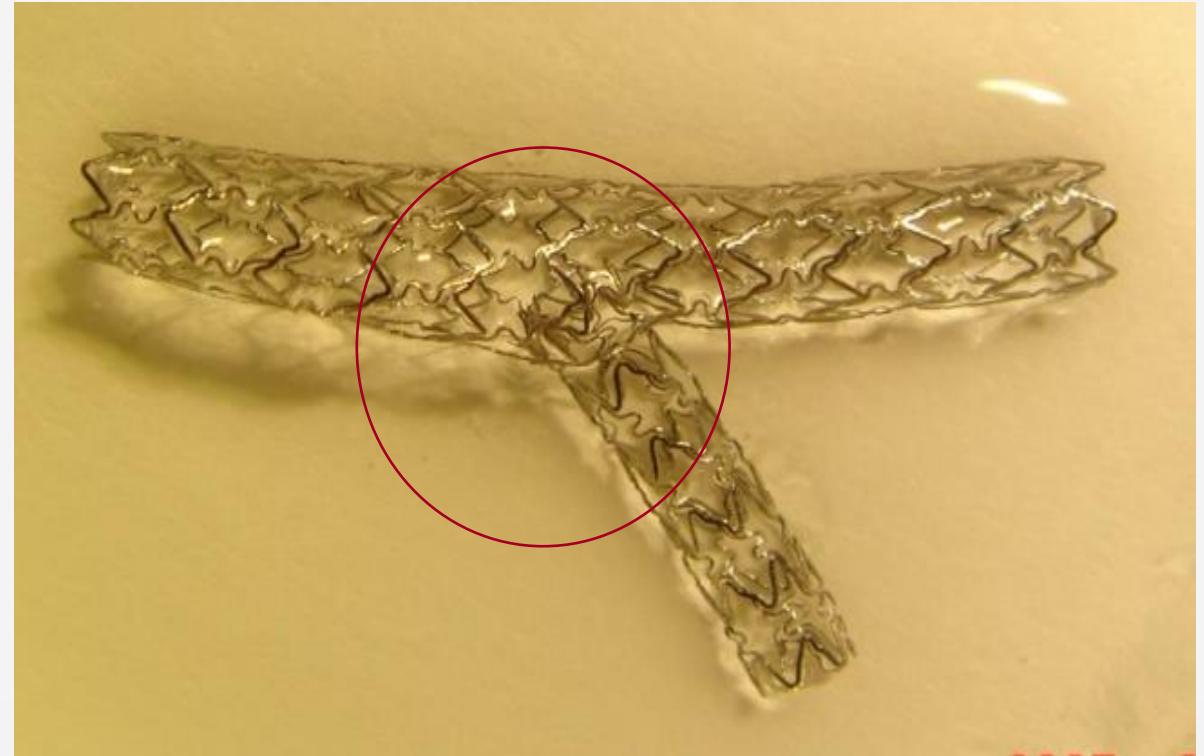
My treatment strategy for this case



The best 2-stent technique is the one you are most familiar with.

T-and-Small Protrusion (TAP) Stenting

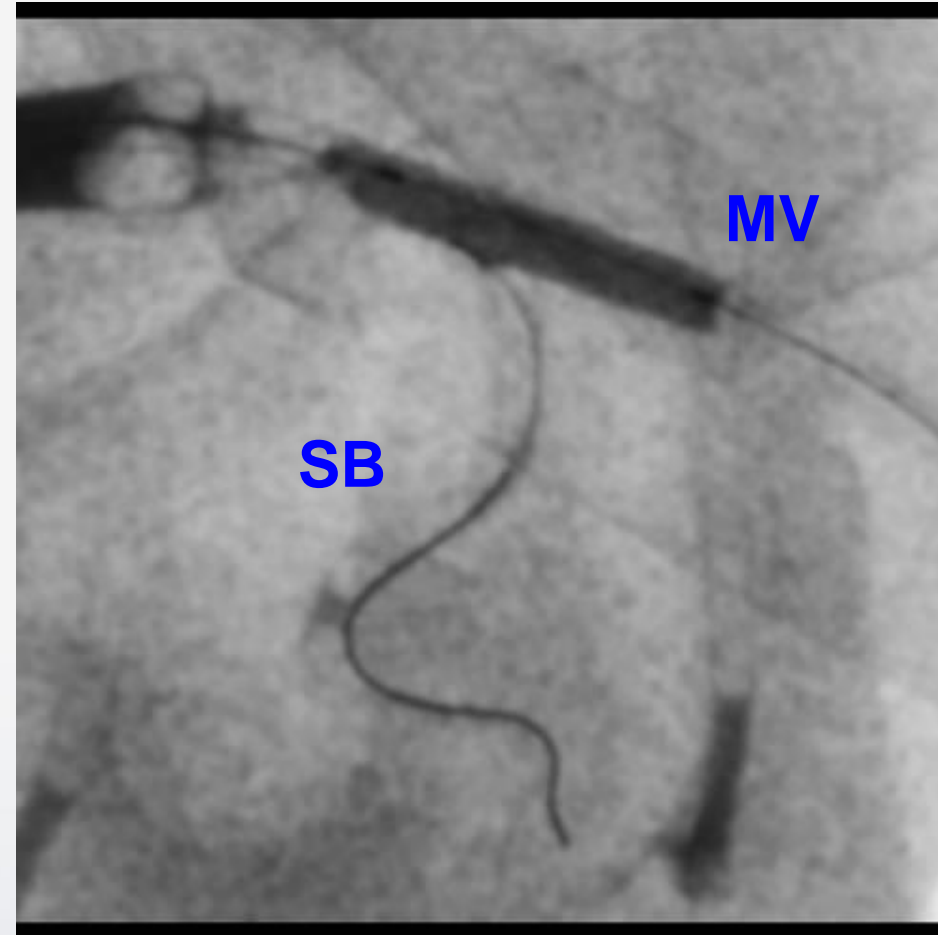
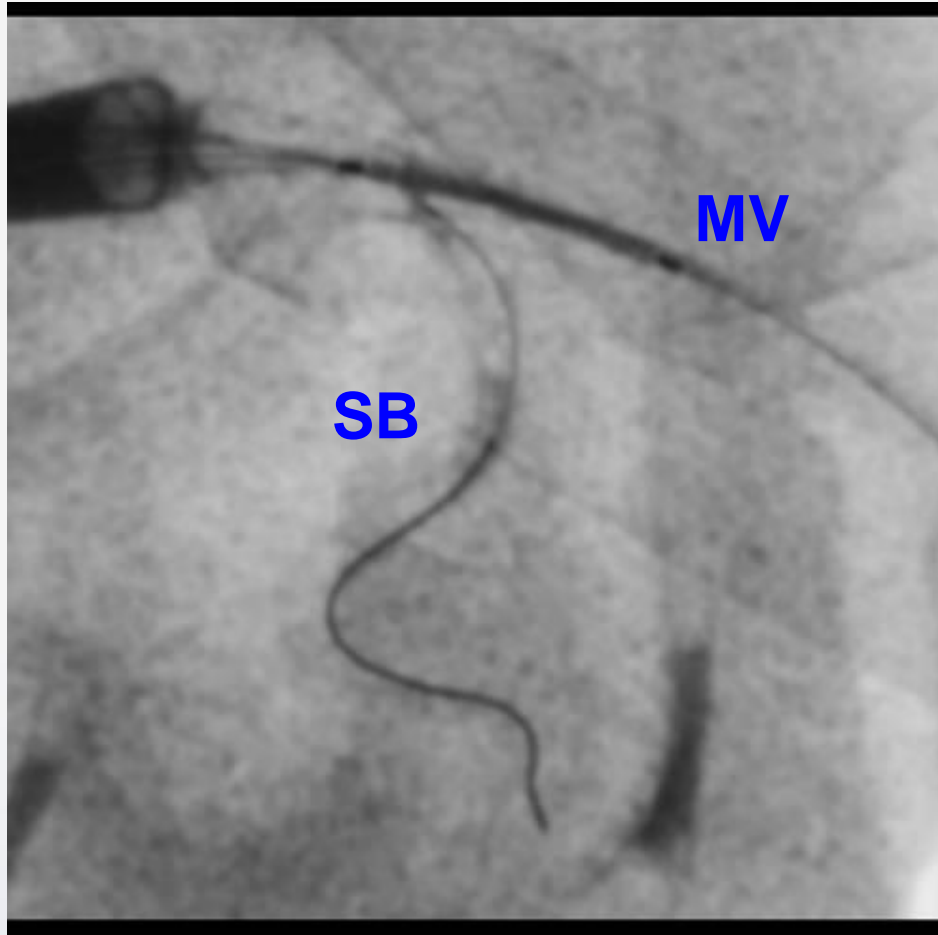
- Slight protrusion of SB stent into MB to get SB ostium coverage
 - Suitable for large bifurcation angles
 - Suitable for smaller SB
- **Advantages**
 - ✓ Easy and Fast!!
 - ✓ No loss of wire access to MB
 - ✓ No multiple stent layers
 - ✓ No crushed mangled stent
- **Disadvantage**
 - ✓ Leaves a small neo-carina



TAP Stenting: Step-by-Step

Francesco Burzotta, EBC Meeting

- Step 1: Stenting on MV with jailed guidewire on SB



TAP Stenting: Step-by-Step

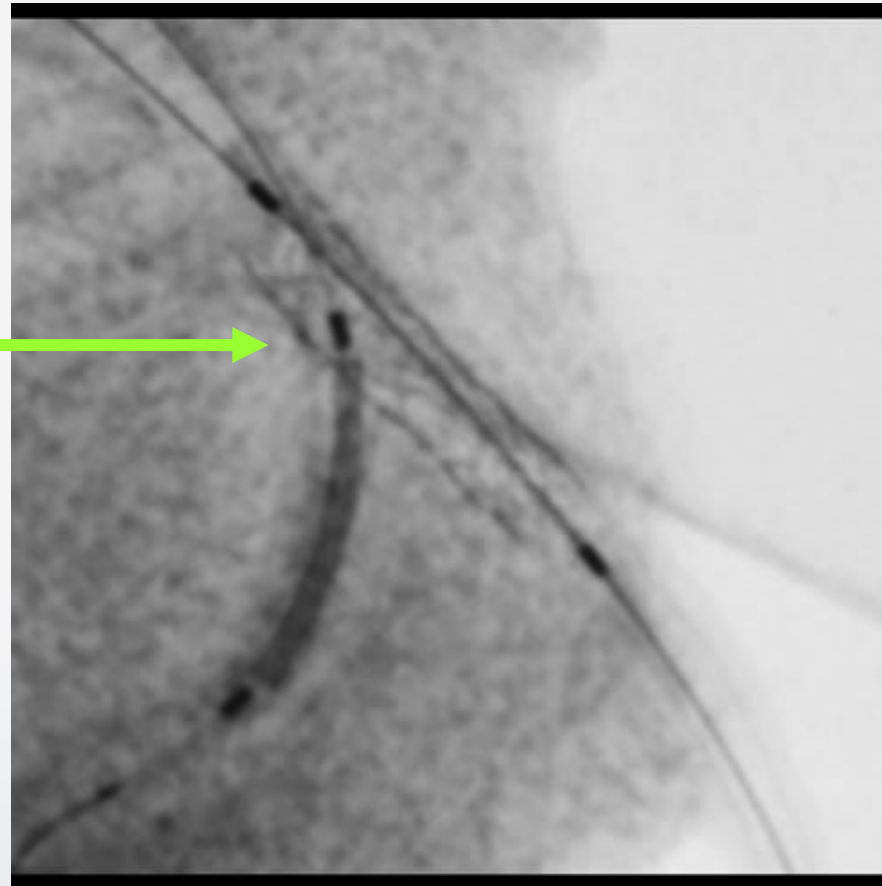
- Step 2: Kissing on MV and SB after rewiring of the SB



TAP Stenting: Step-by-Step

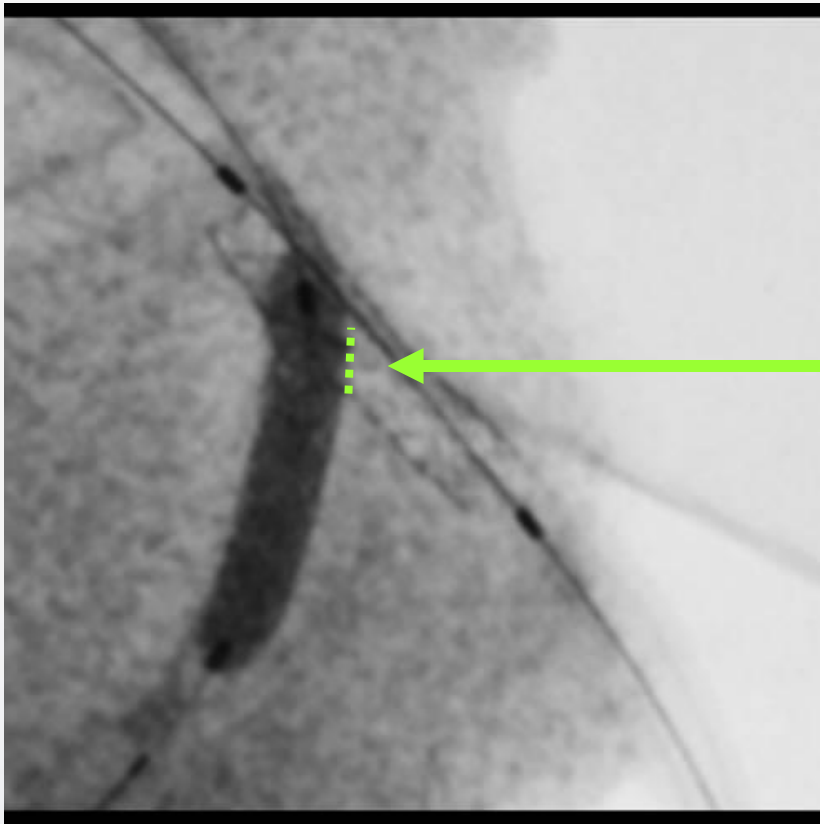
- Step 3: Stent placement on the SB with uninflated balloon on MV ready for FKB

Position SB stent edge at proximal SB ostium border to ensure full coverage of SB ostium



TAP Stenting: Step-by-Step

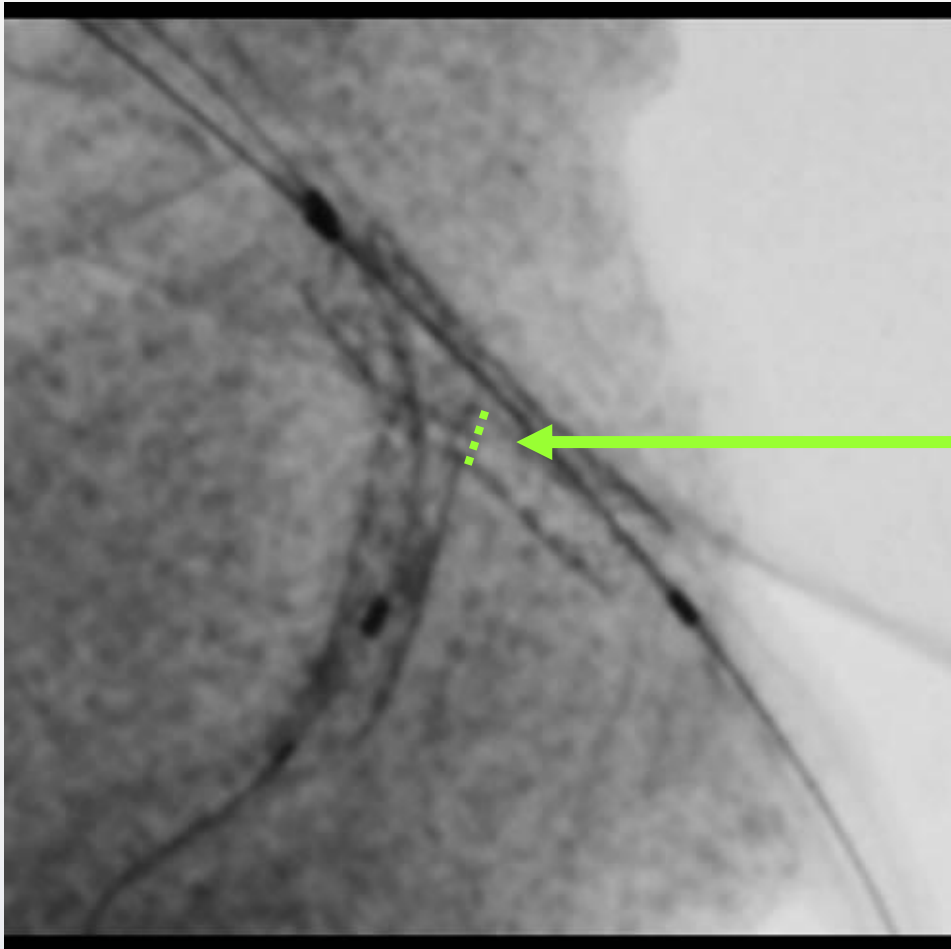
- Step 4: Inflate SB stent. Keep uninflated balloon in MB



The SB stent protrudes into the MB only at the distal edge of the SB ostium

TAP Stenting: Step-by-Step

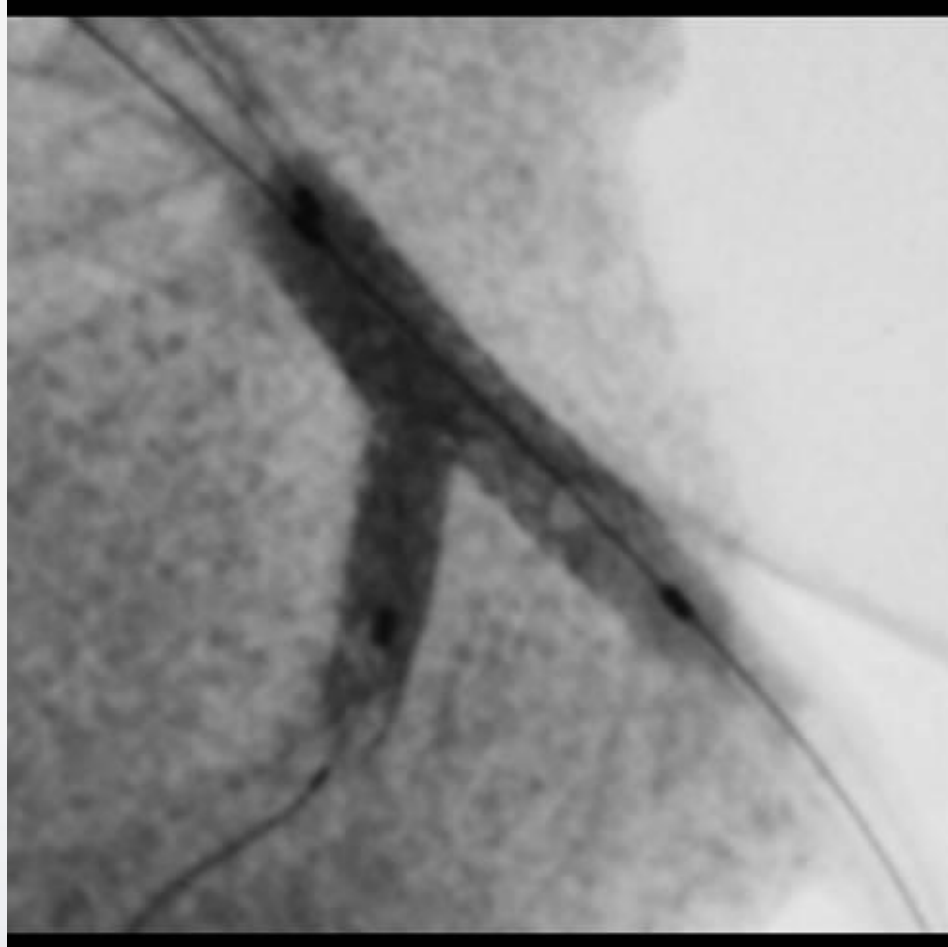
- Step 5: Pull SB stent balloon slightly back into the MB for kissing balloon inflation



The SB stent protrudes into the MB only at the distal edge of the SB ostium

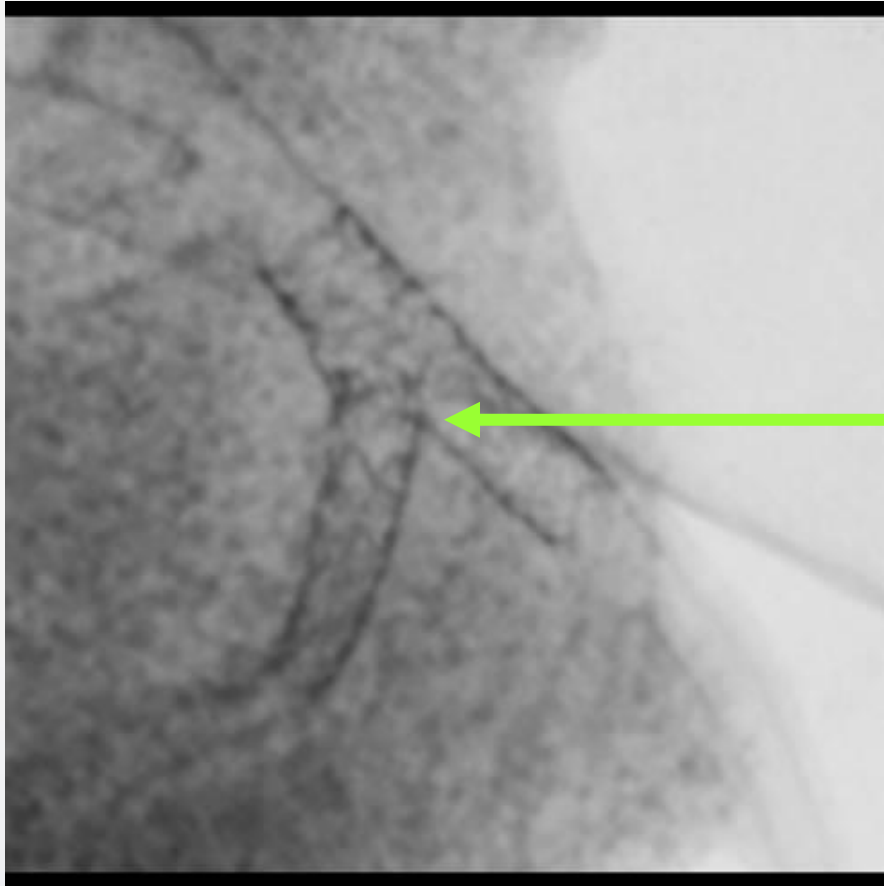
TAP Stenting: Step-by-Step

- Step 6: Kissing balloon angioplasty with SB balloon pulled into MB



TAP Stenting: Step-by-Step

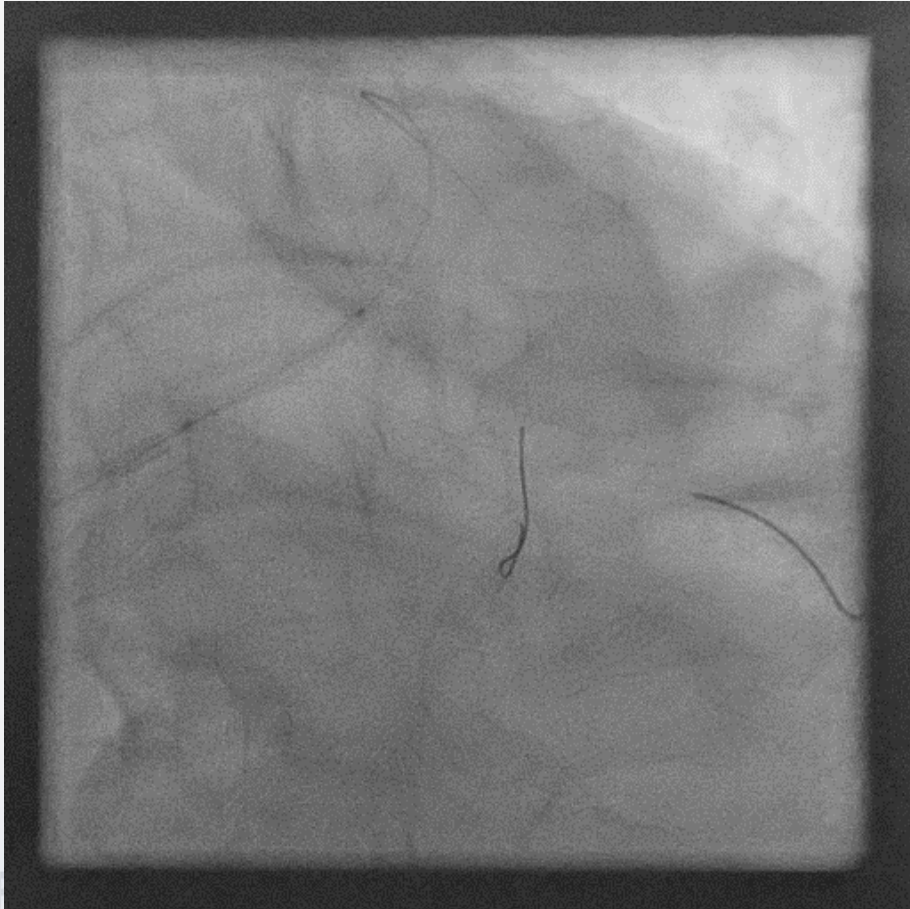
- Final Result



- Kissing balloons modifies the angulation of SB stent struts protruding into the MV to create a small, single layer, neo-carina

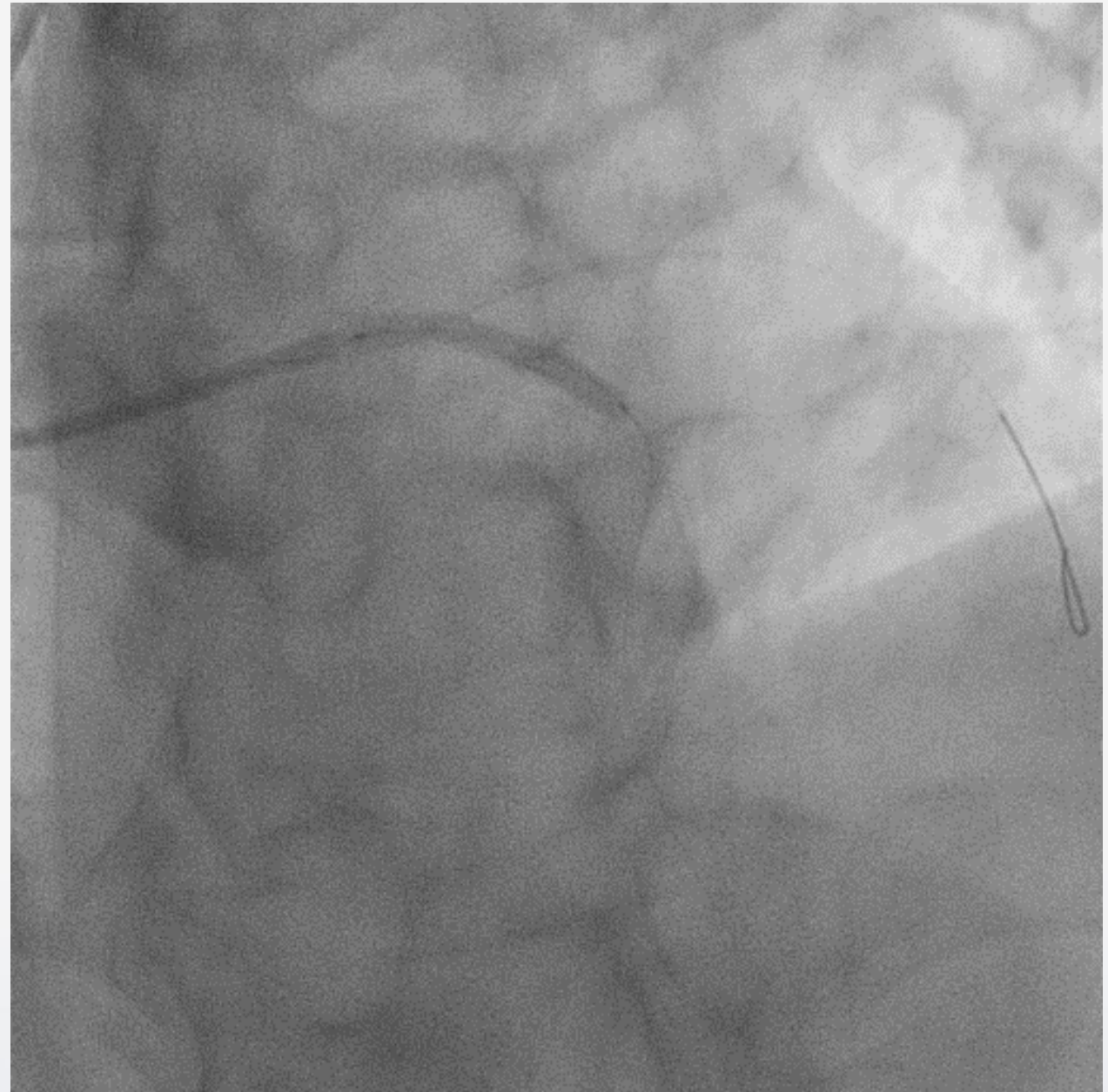
PCI with TAP technique

2.5x20mm balloon at LM-pLAD & -pLCX



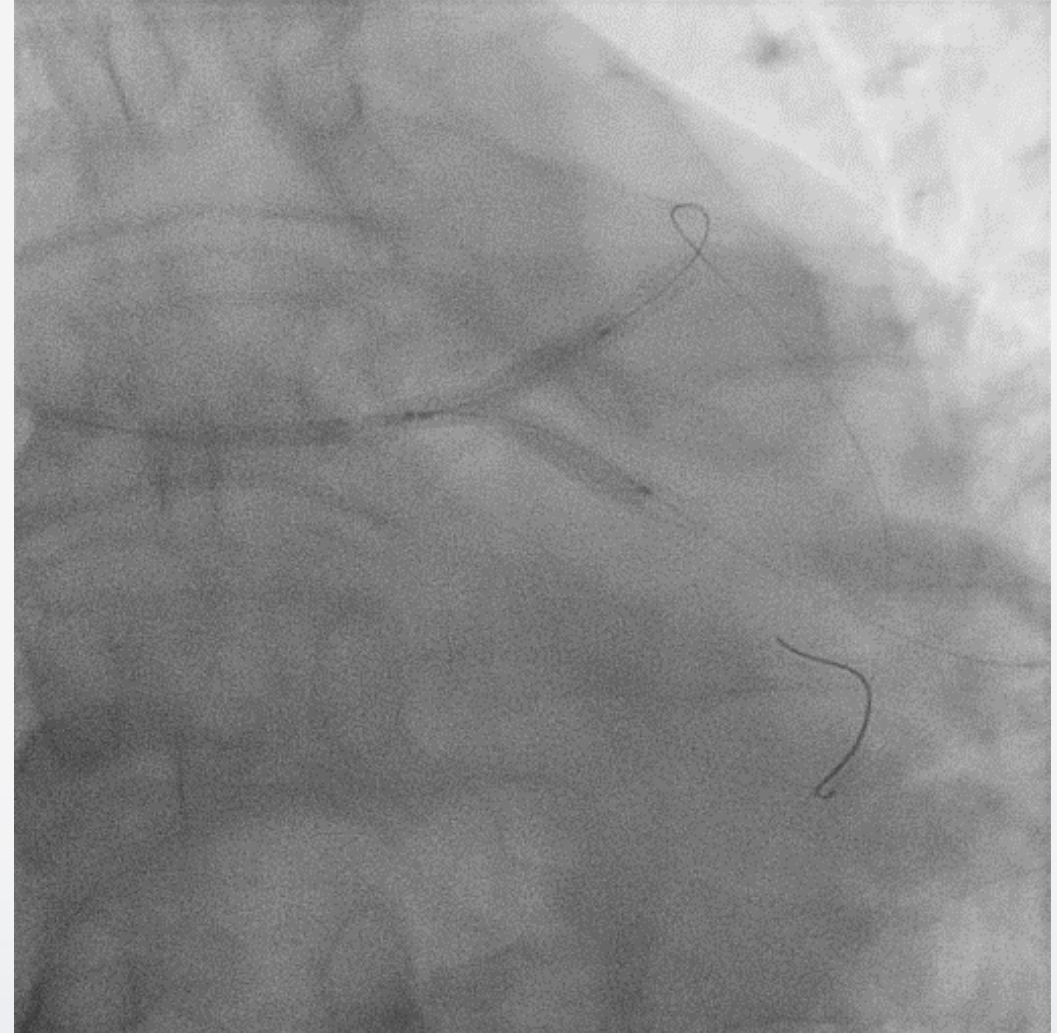
PCI with TAP technique

- **Step 1:** Stent implantation with 3.25x33mm DES to LM-pLAD with jailed guidewire on LCX



PCI with TAP technique

- **Step 2:** Rewire LCX and perform kissing balloon angioplasty with 3.25mm and 3.0mm balloons



PCI with TAP technique

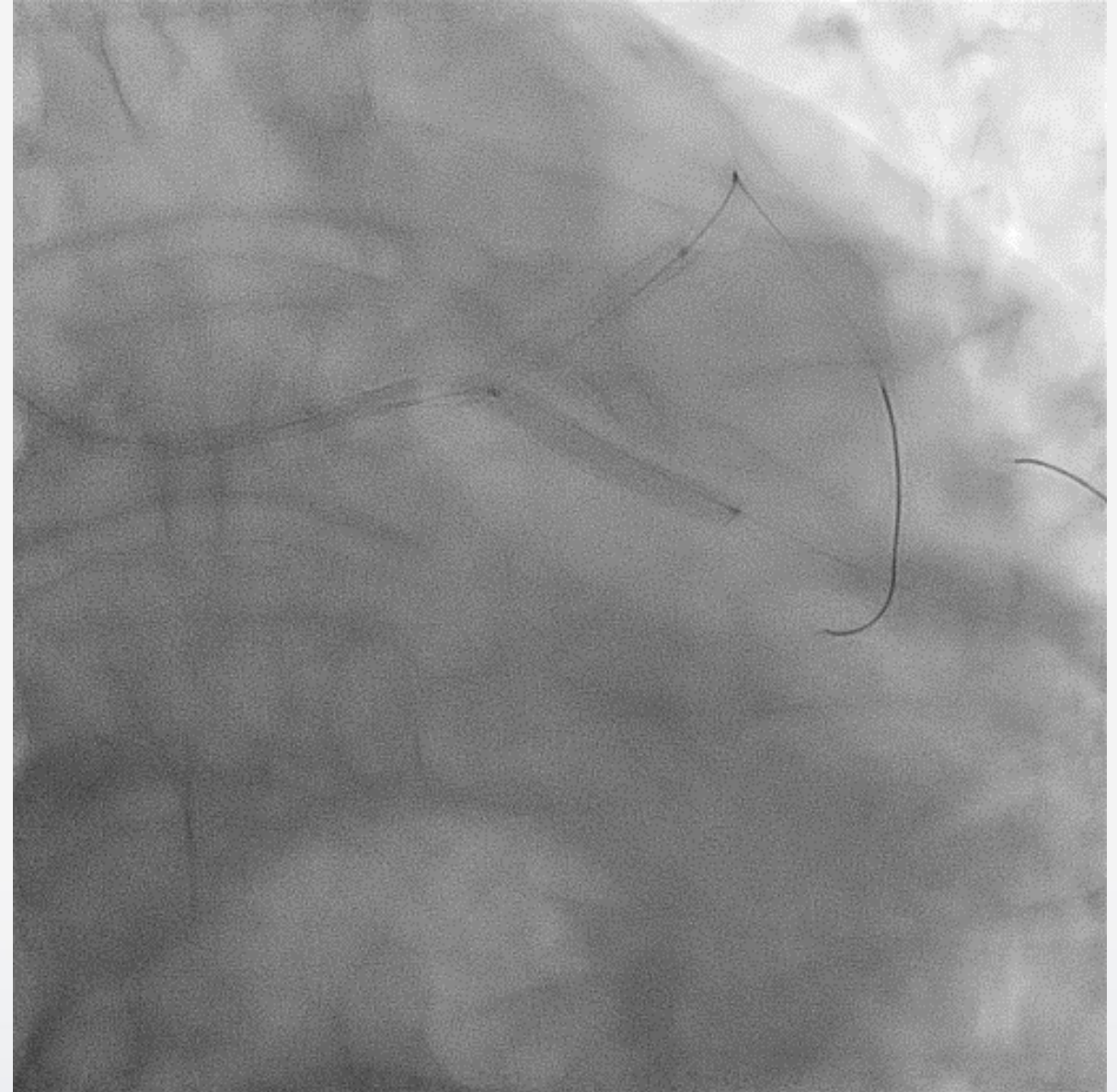
- **Step 3:** Advance uninflated balloon to LAD. Position LCX stent edge at proximal LCX ostium border to ensure full coverage of ostium of LCX

- Optimal angiographic views of the SB ostium should be obtained
- Stent augmentation tools should be used for successful T stenting



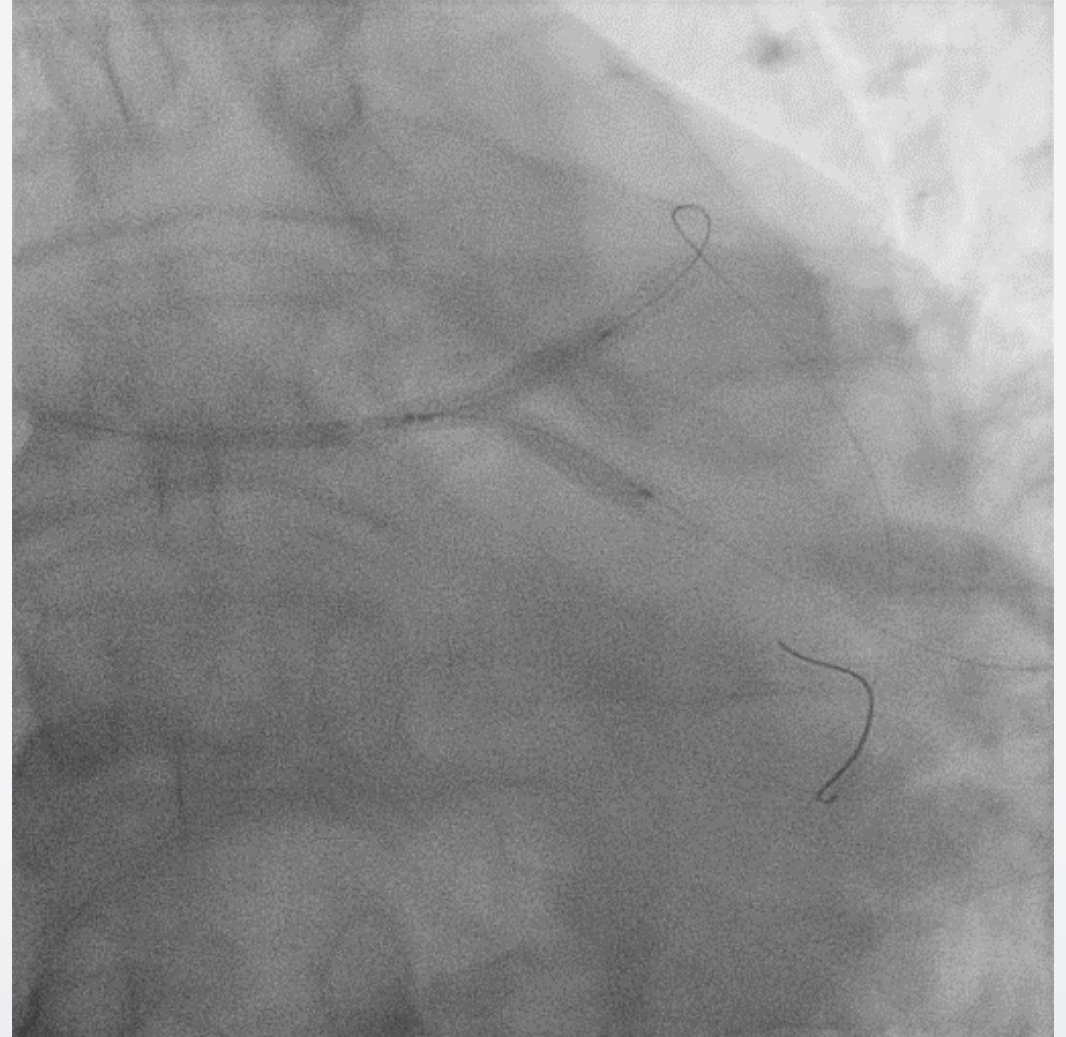
PCI with TAP technique

- **Step 4:** Stent implantation with 3.0x24mm DES to LM-pLCx. Keep uninflated balloon in LAD
- **Step 5:** Pull LCX stent balloon back into the LAD to prepare for kissing angioplasty

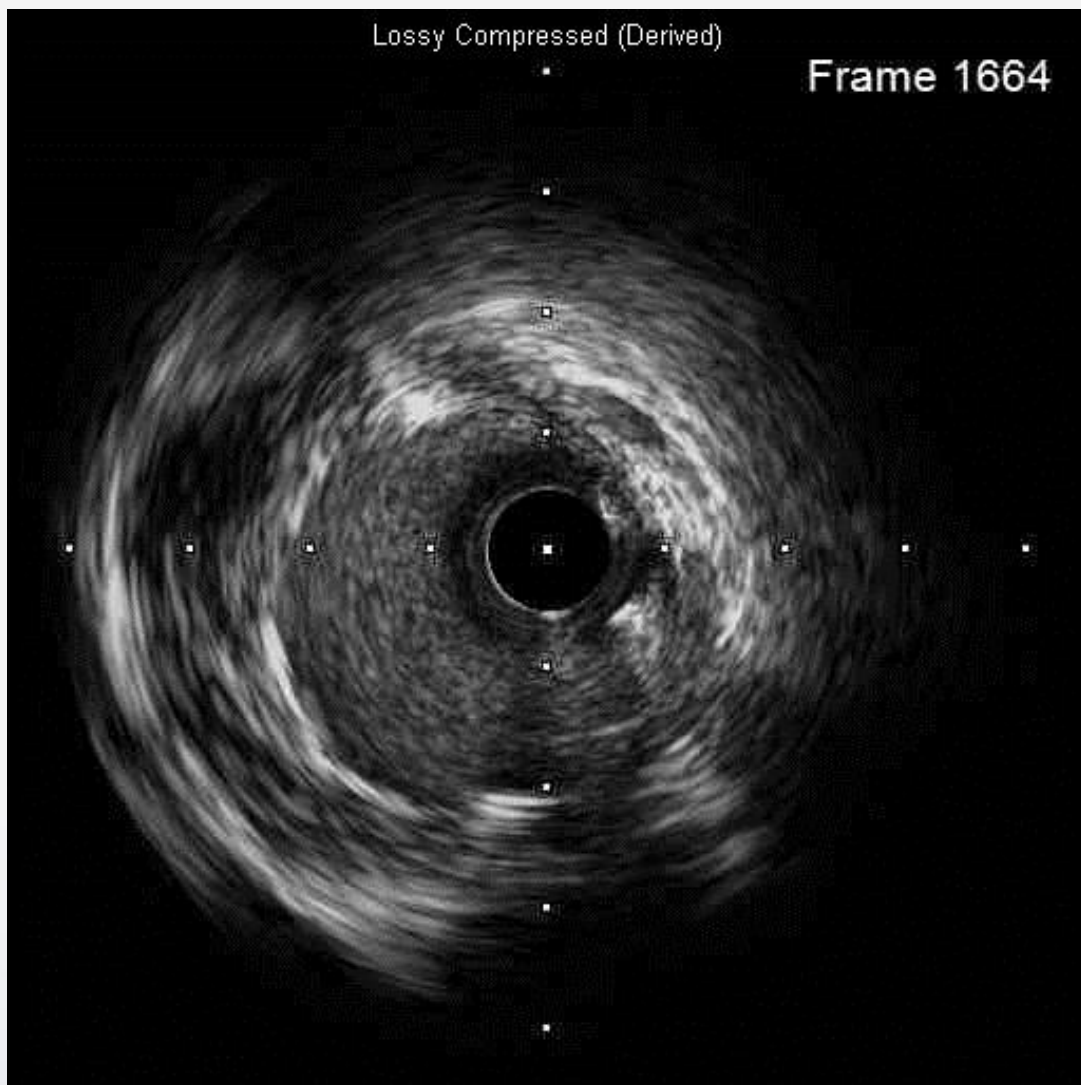


PCI with TAP technique

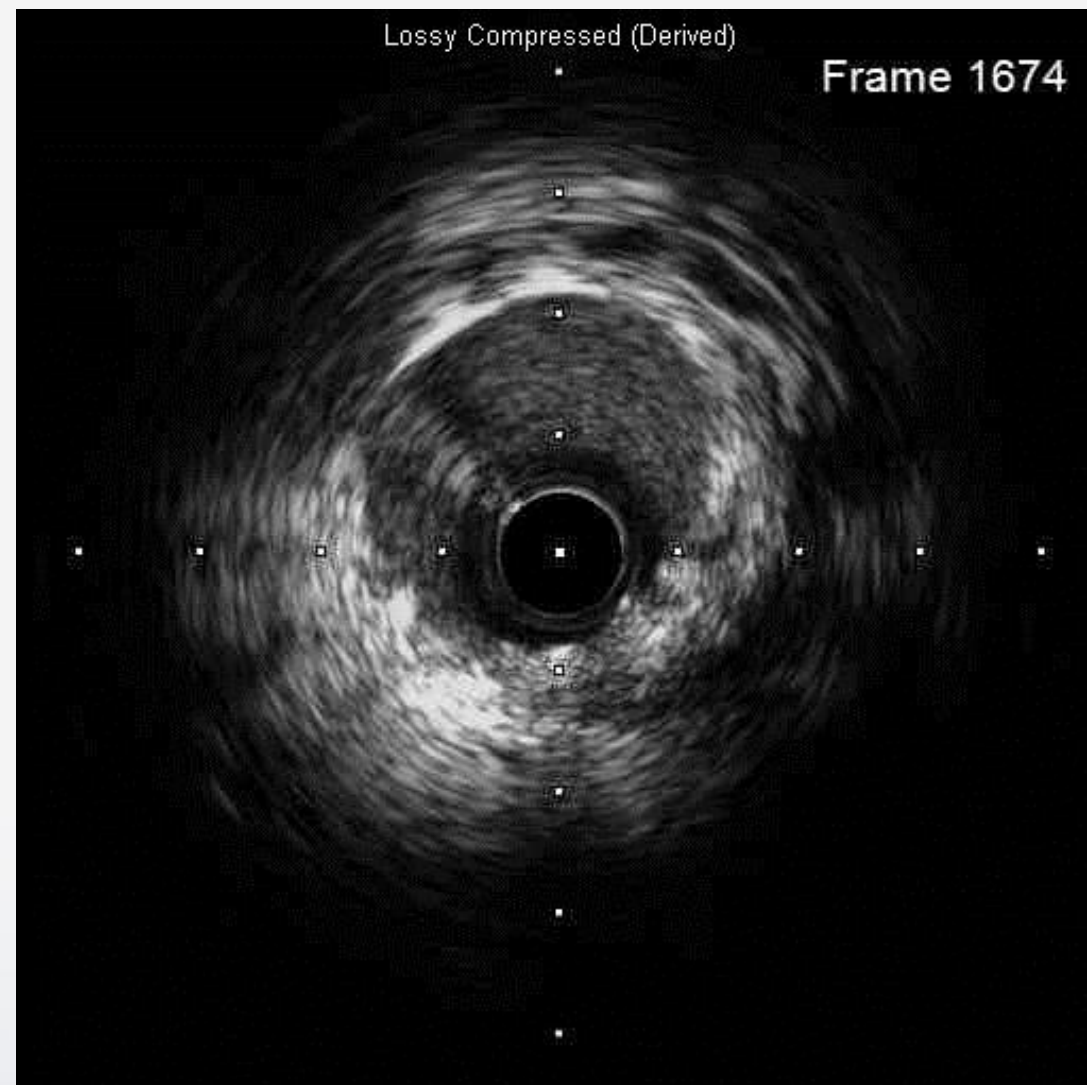
- **Step 6:** Kissing balloon angioplasty with stent balloon



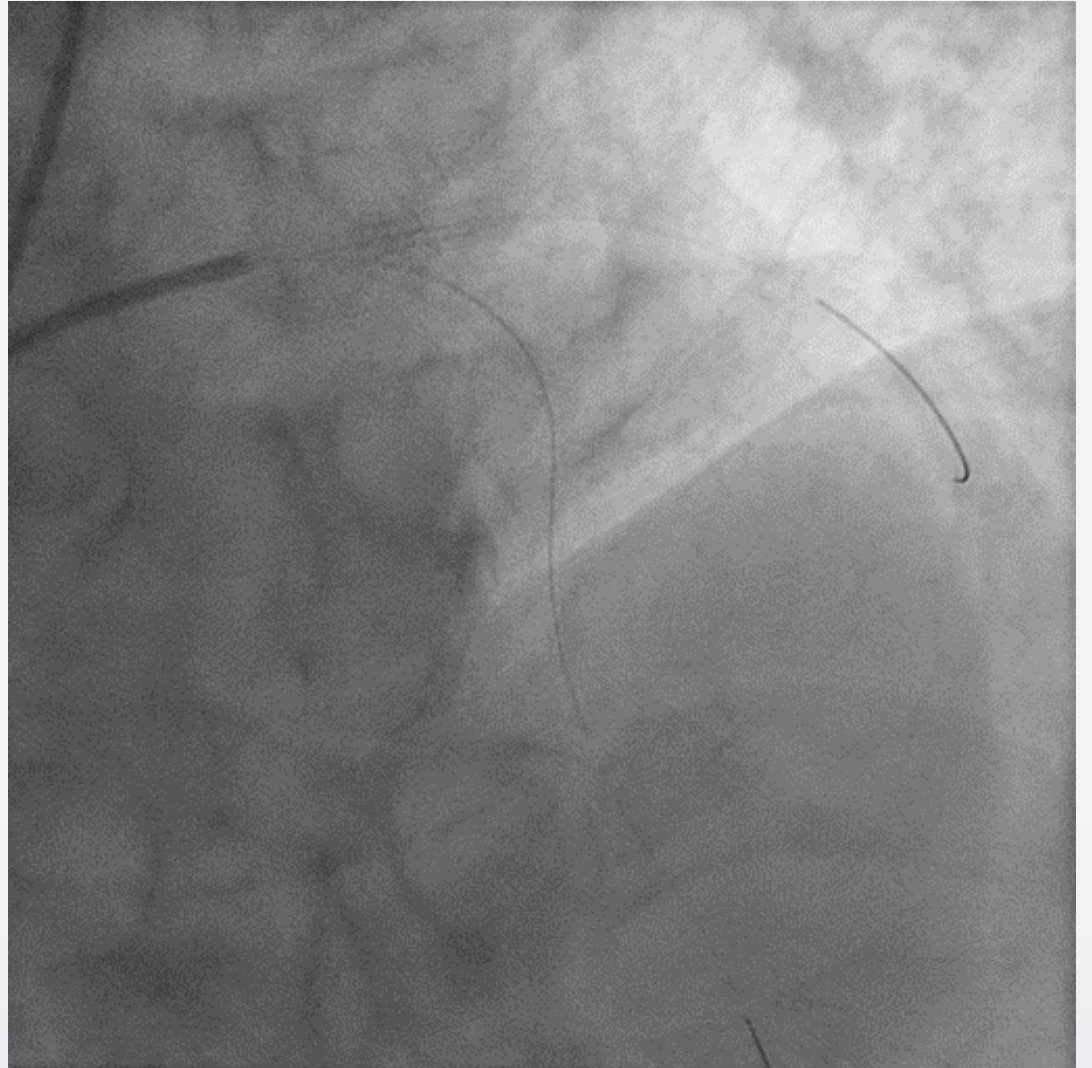
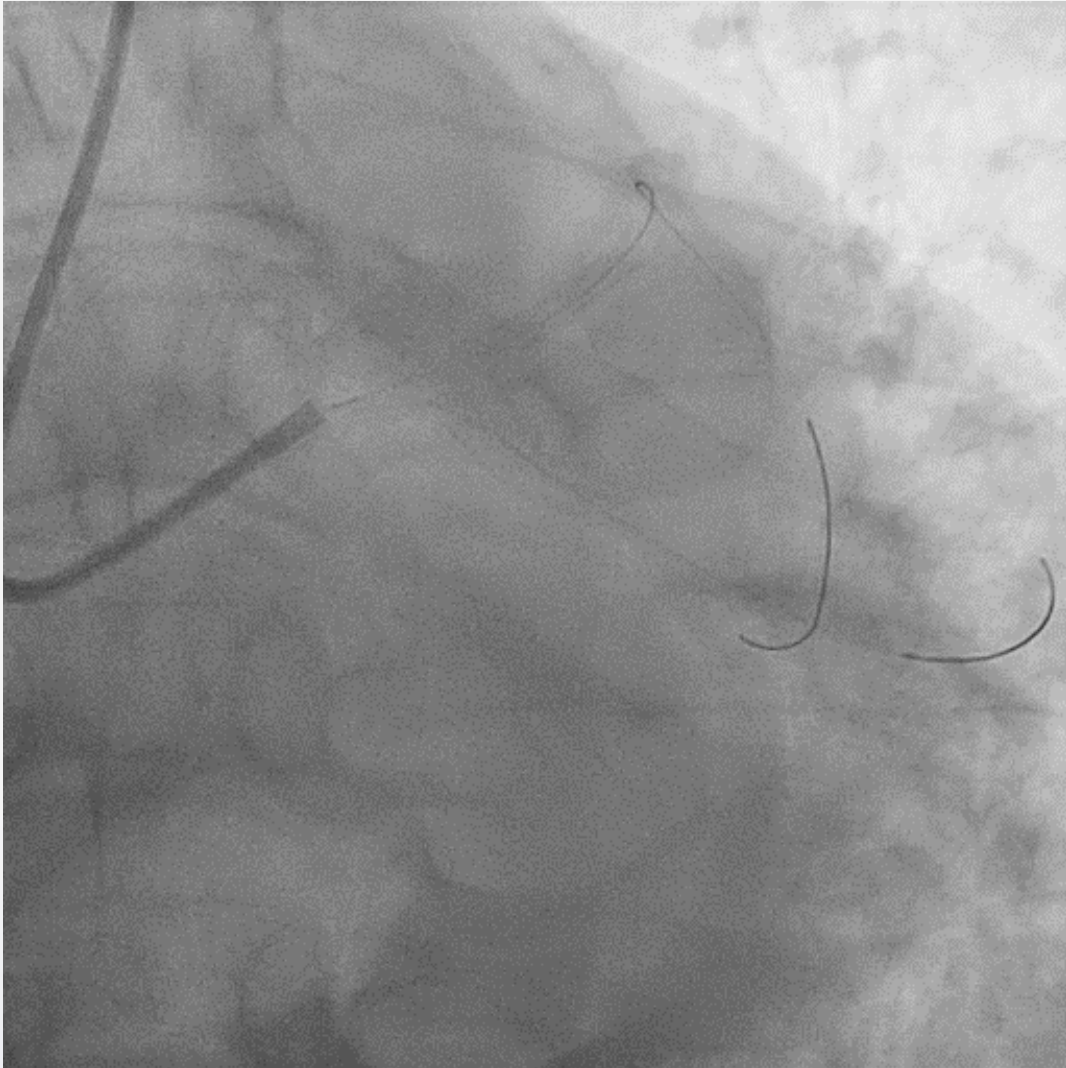
IVUS from LAD



IVUS from LCX



Final



Summary & Conclusion

- **TAP** is an **easier provisional stenting technique** compared to others and can be considered for Smaller SBs or Larger bifurcation angles.
- **TAP** is a modification of T-stenting, with slight protrusion of SB stent into MB to get full SB ostium coverage.
 - ✓ **Technically straightforward**
 - ✓ **No loss of wire access to MB**
 - ✓ **No multiple layers**
 - ✓ **No crushed mangled stent**
 - ✓ **Leaves a small, single-layer neo-carina**