

Beauty of Mini-Crush with Two Stent Technique

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Diseases

Crush Variations

- **Mini-Crush:** Minimizing the length of SB stent (2-3 mm) in the MB
- **Inverted Crush:** MB stent deployed first and then crushed by the SB stent
- **Reverse Crush:** SB stent stent crushed within the MB stent
- **Modified or Sequential crush:** First stent crushed by a balloon and not by a stent (avoid the need for 2 stents in the guiding at the same time). Allowed 6 Fr radial PCI
- **DK-Crush:** 2-step kissing

Background

The best option on the treatment of coronary bifurcation lesions is a subject of considerable debate.

However, recent evidence suggests that bifurcation lesions might be treated with implantation of drug-eluting stents on both branches using the Mini – Crush Technique with a low rate of major adverse cardiac event and restenosis.

Bifurcation Angle Measurement

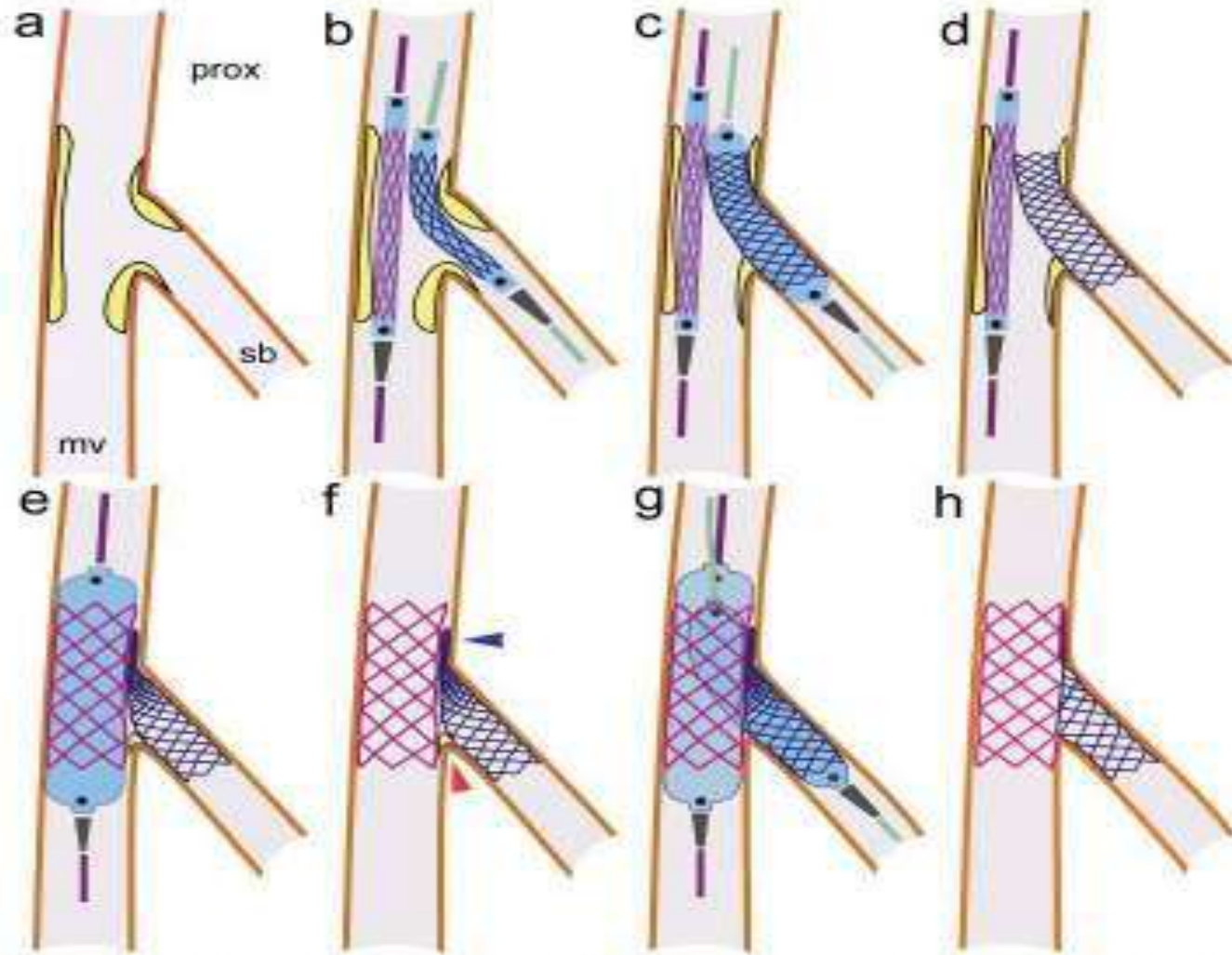


In general a small bifurcation angle gives a better result with mini-crush or culotte a large angle with T or T and protrusion

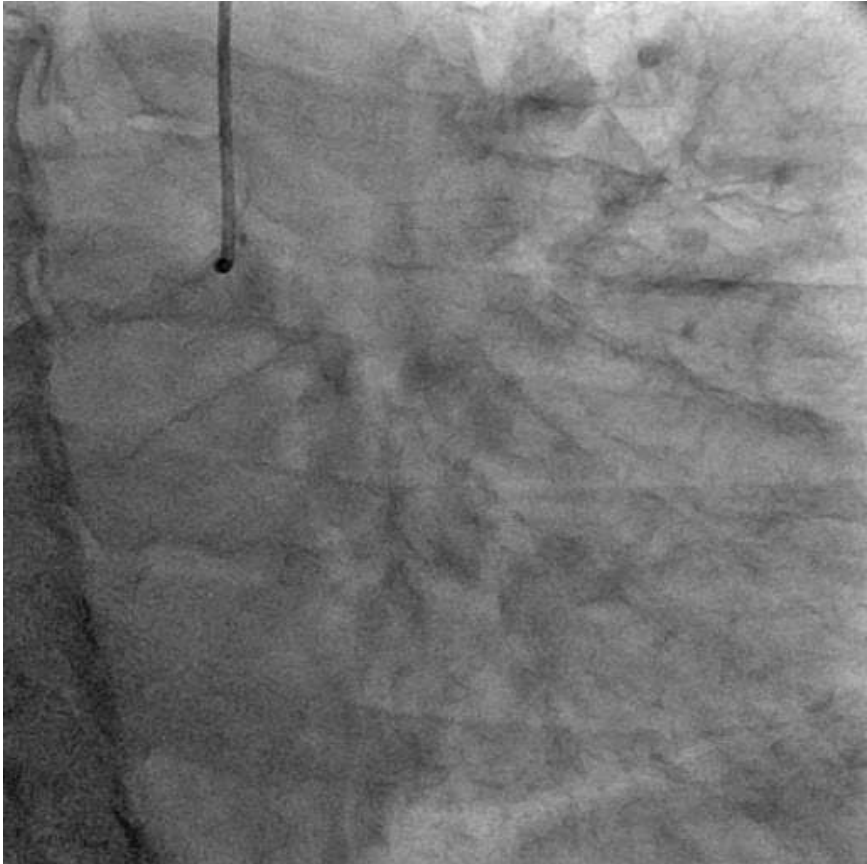
With 2 stents an appropriately performed final kiss minimizes the effect of the bifurcation angle

Bifurcation angle

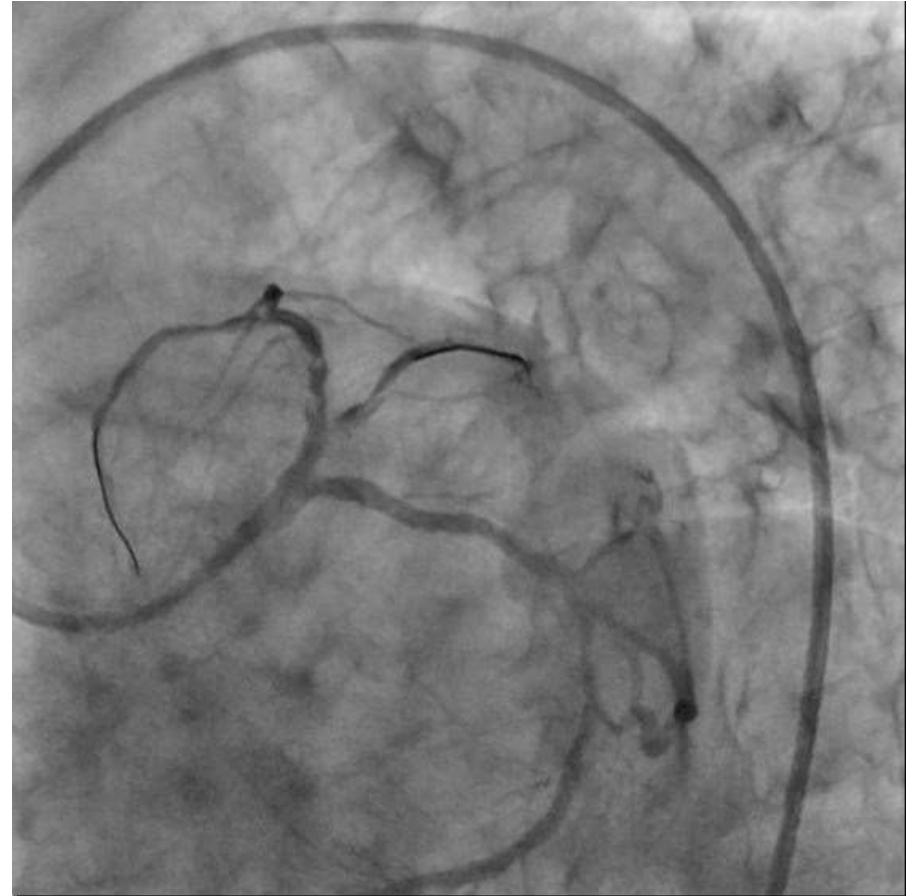
Mini-Crush Technique



Mini Crush Technique : Case I



Crush Technique: Pre-dilation



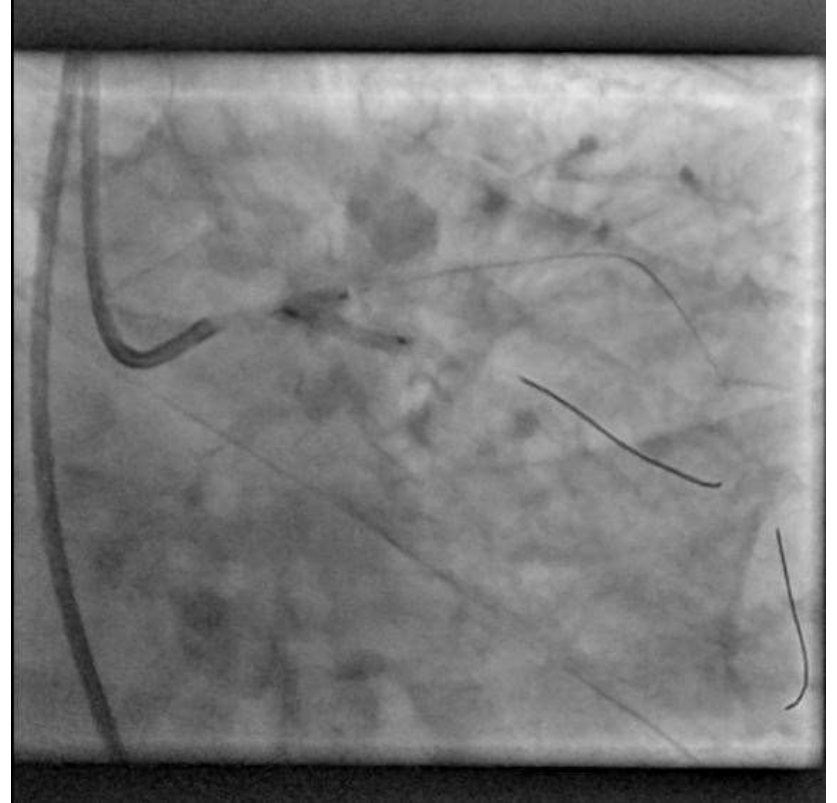
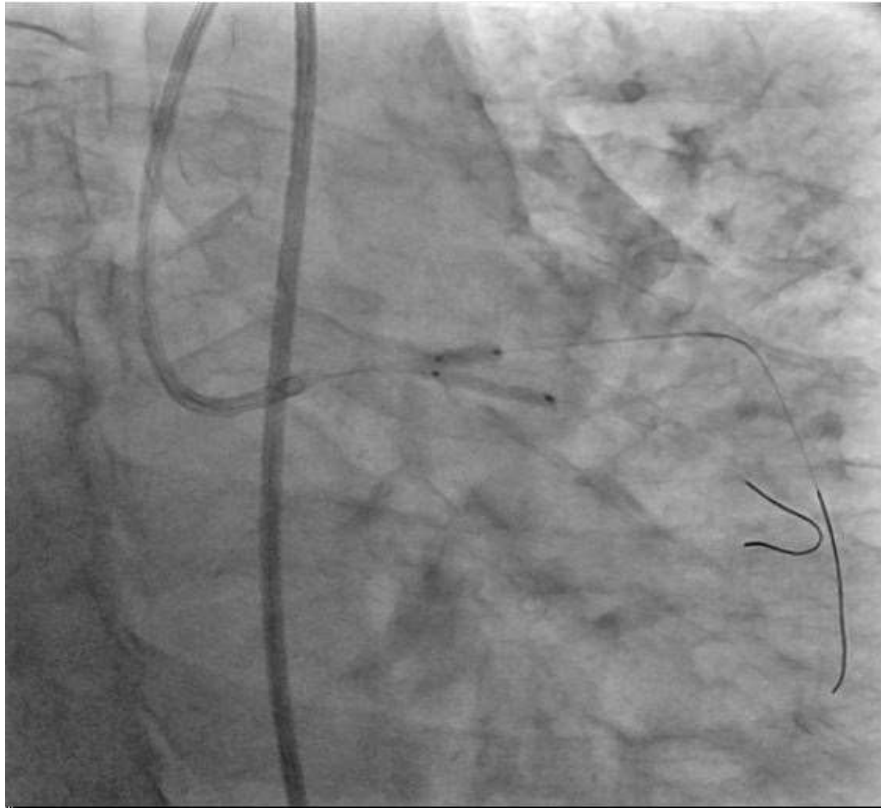
Crush Technique: 2 stents in place; SB stent deployed first



**Crush Technique: MB stent the inflated
crushing SB stent previously deployed;
SB wire removed**



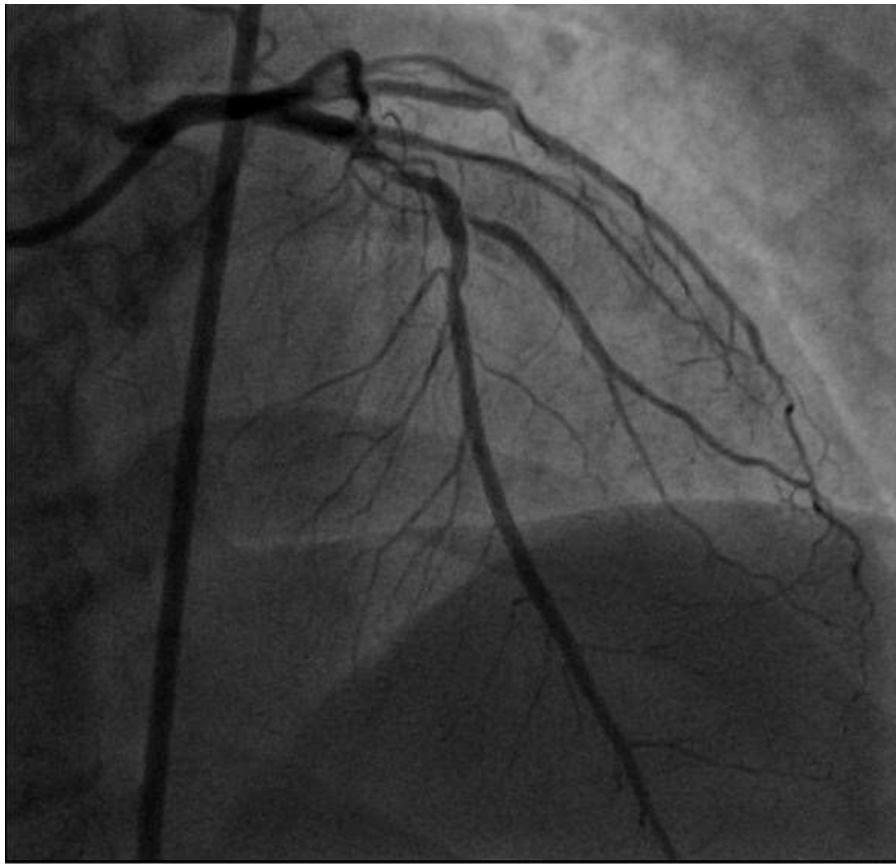
Crush Technique: Final kissing



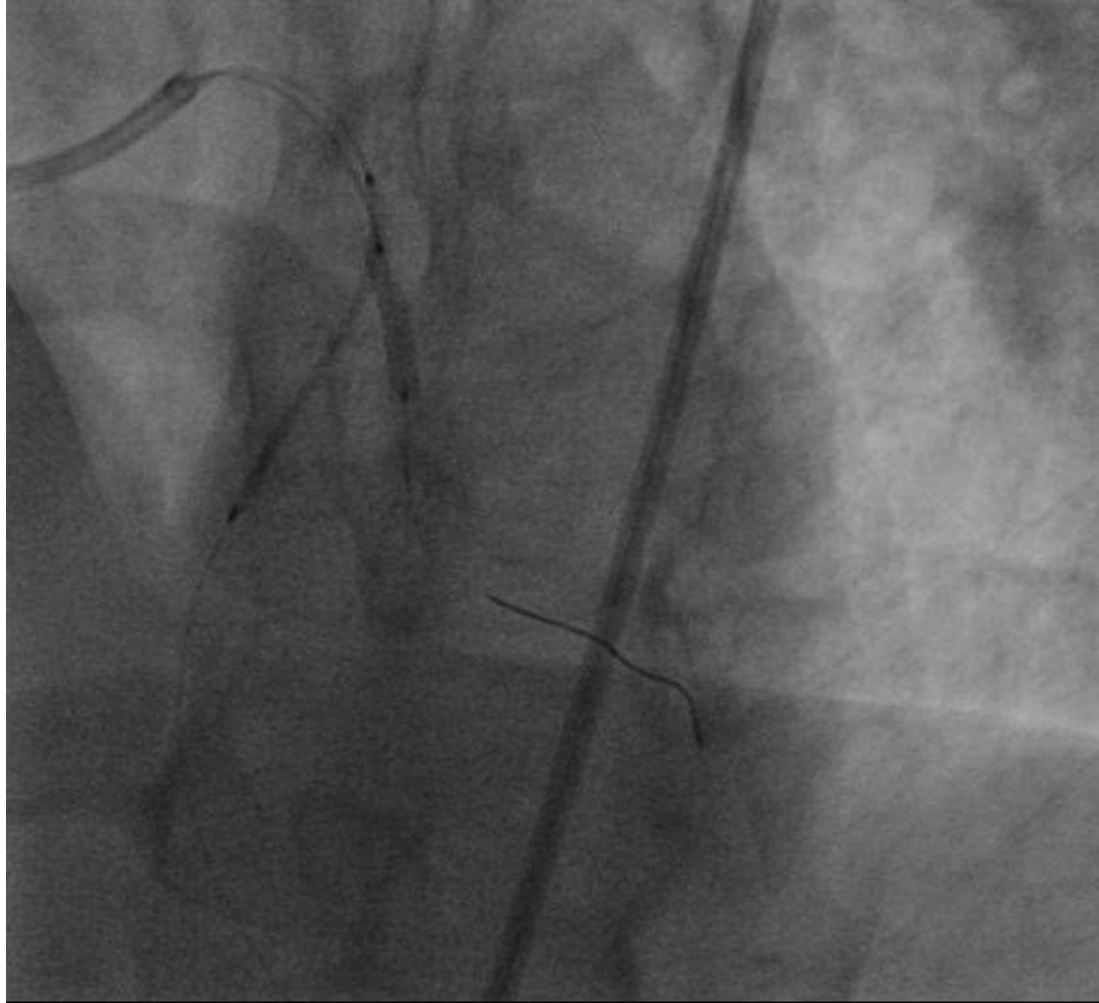
Crush Technique: Final



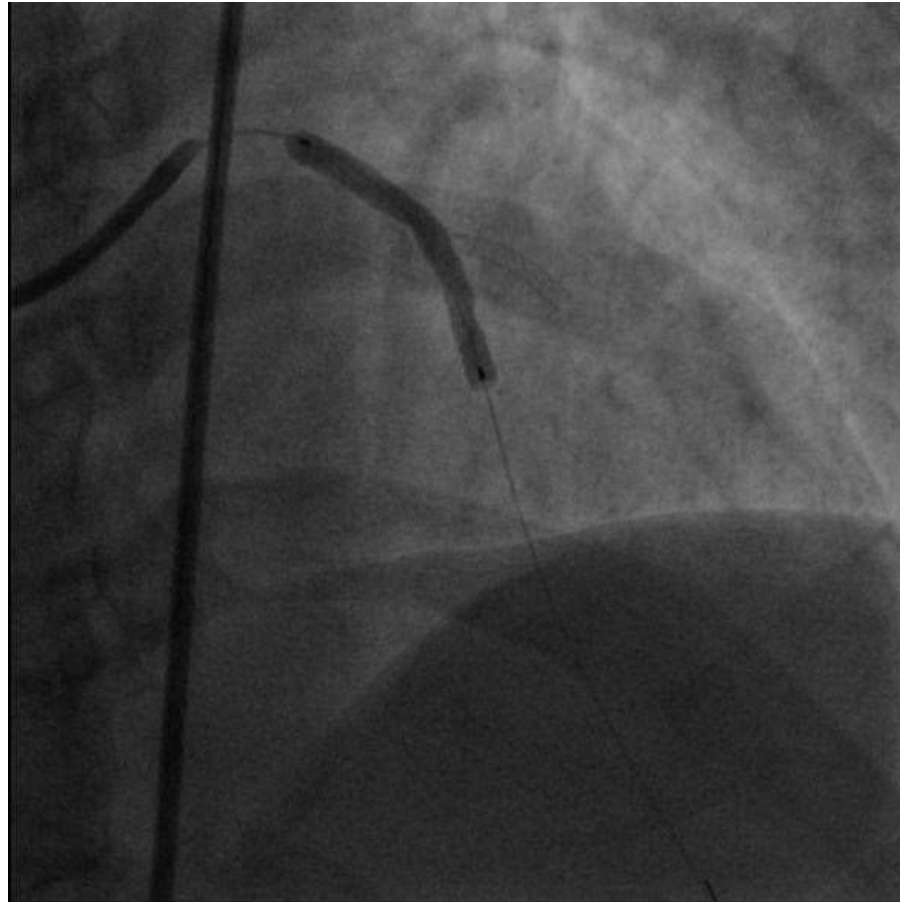
Mini Crush Technique : Case 2



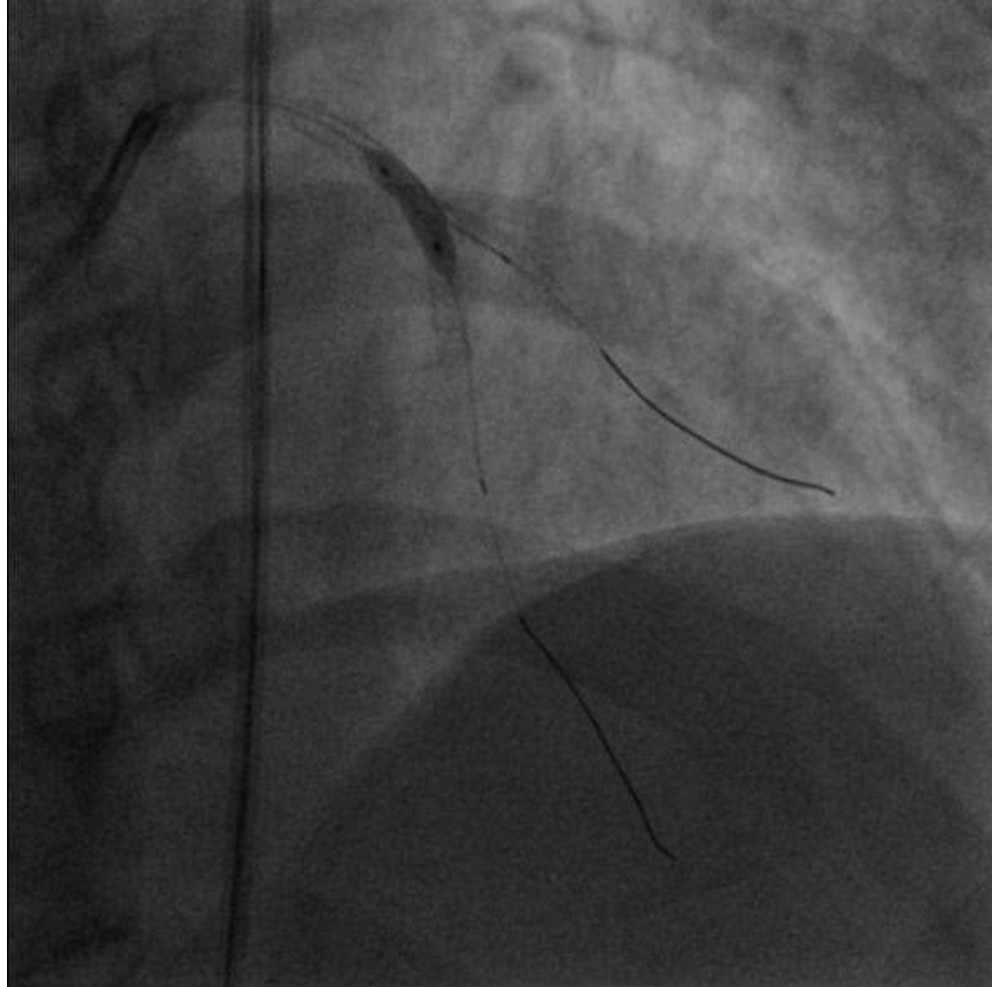
Crush Technique: 2 stents in place; SB stent deployed first



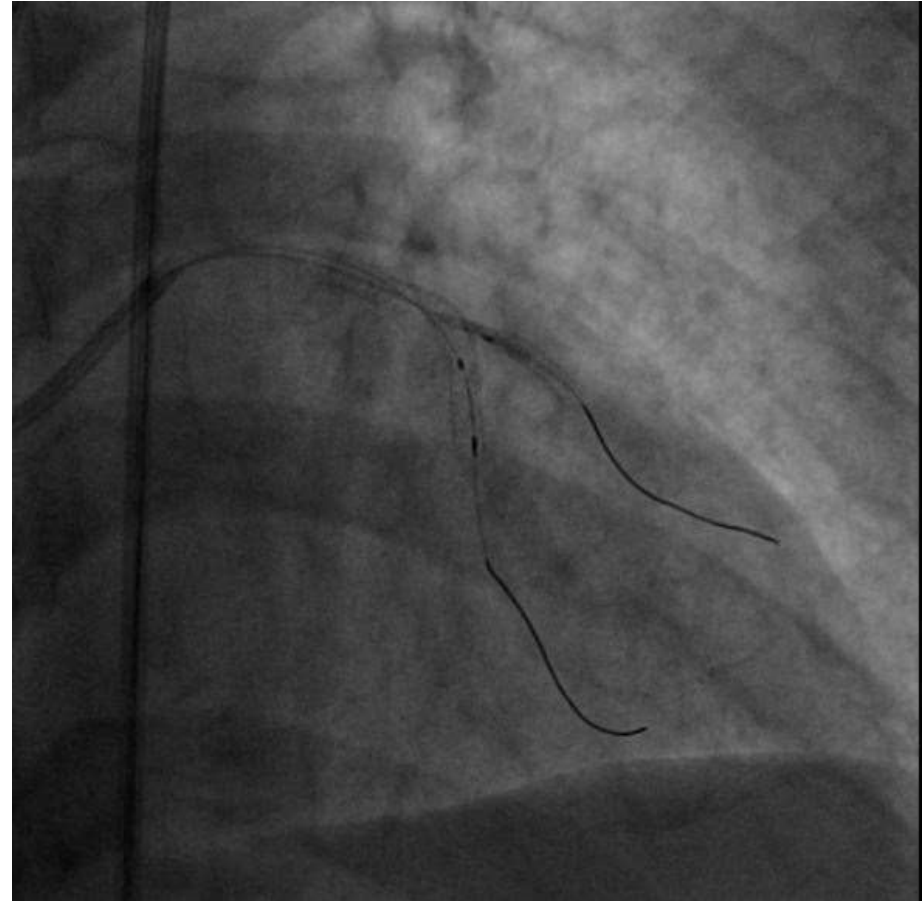
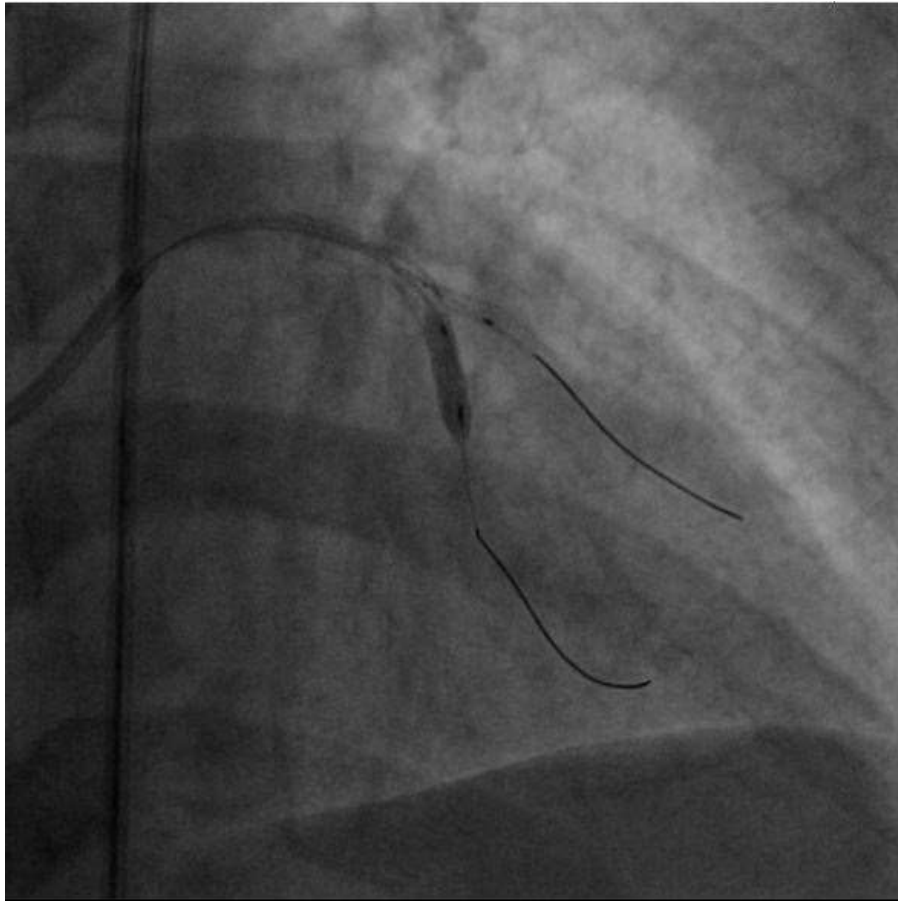
**Crush Technique: MB stent the inflated
crushing SB stent previously deployed;
SB wire removed**



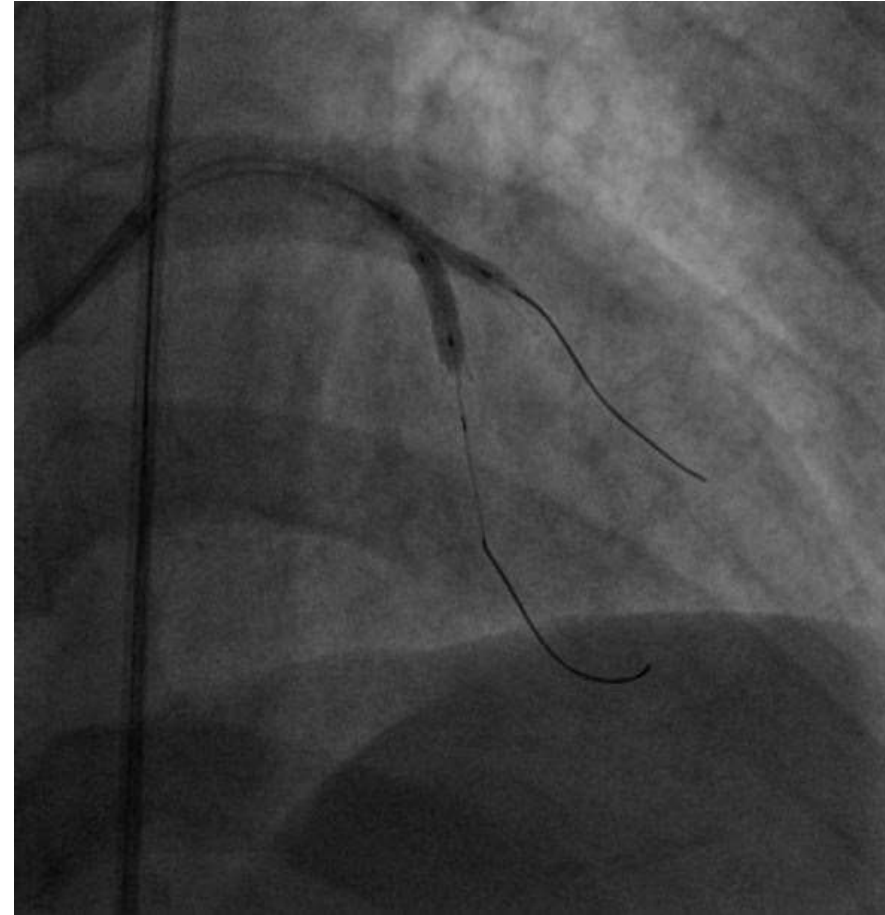
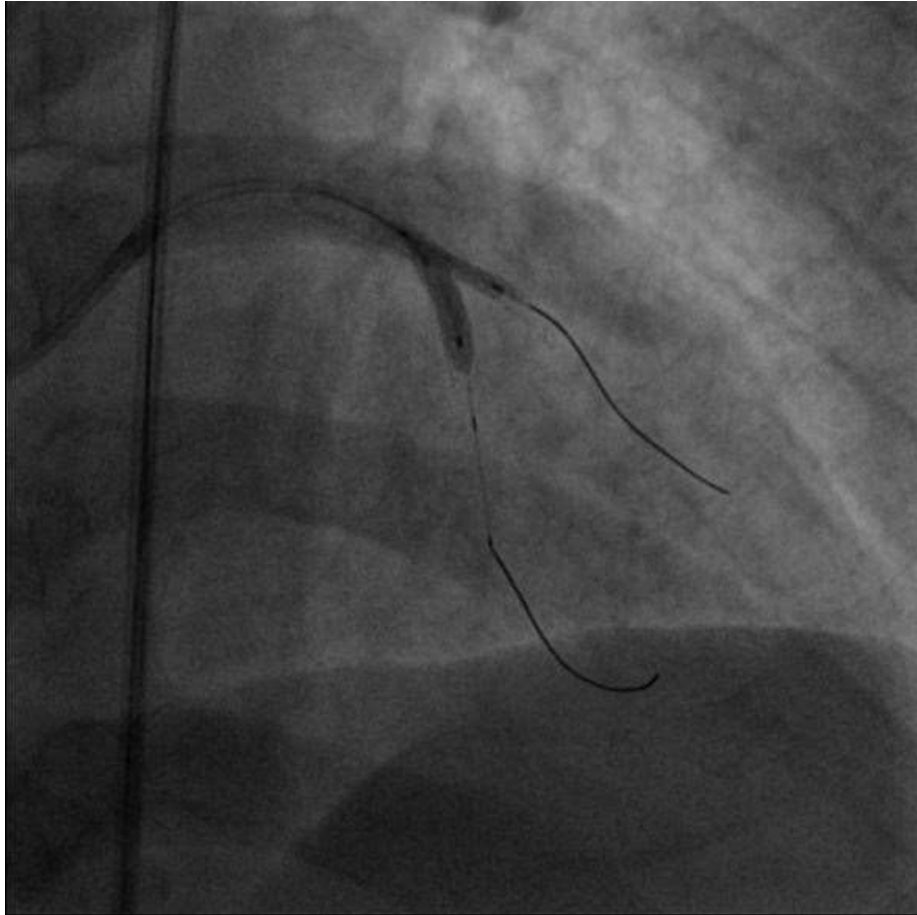
Crush Technique : Balloon Crossing Technique



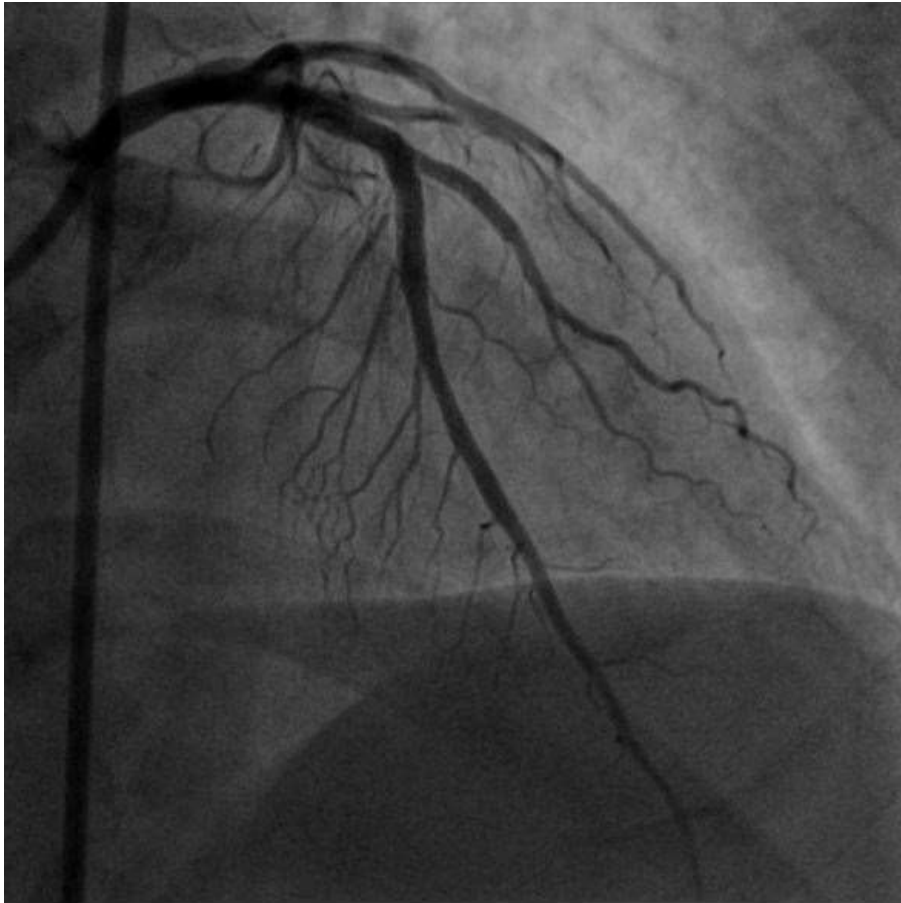
Crush Technique : Balloon Crossing Technique



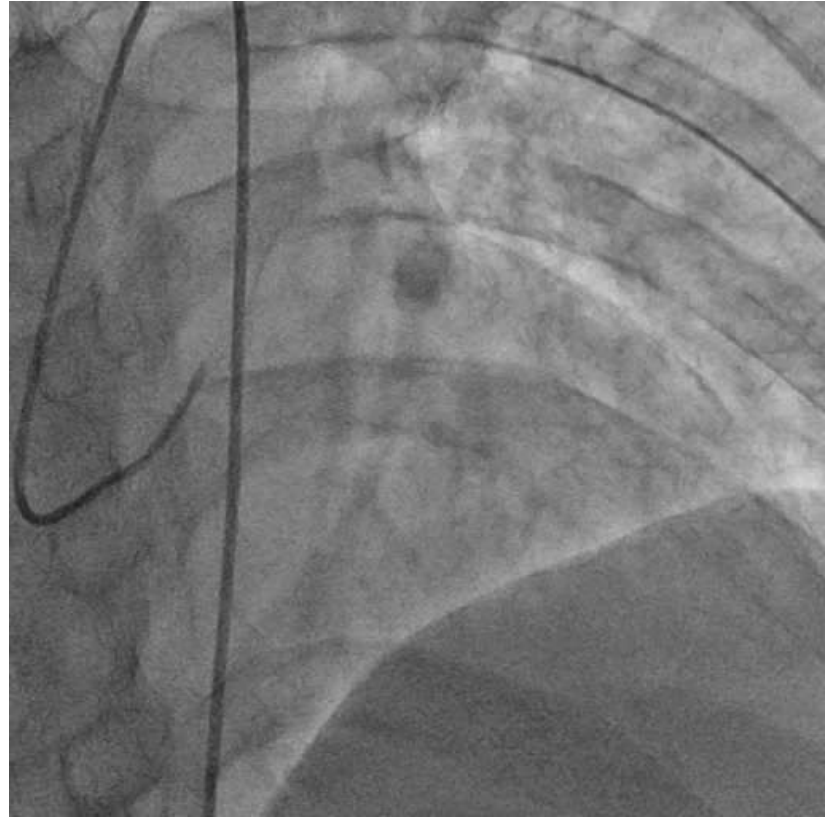
Crush Technique: Final kissing



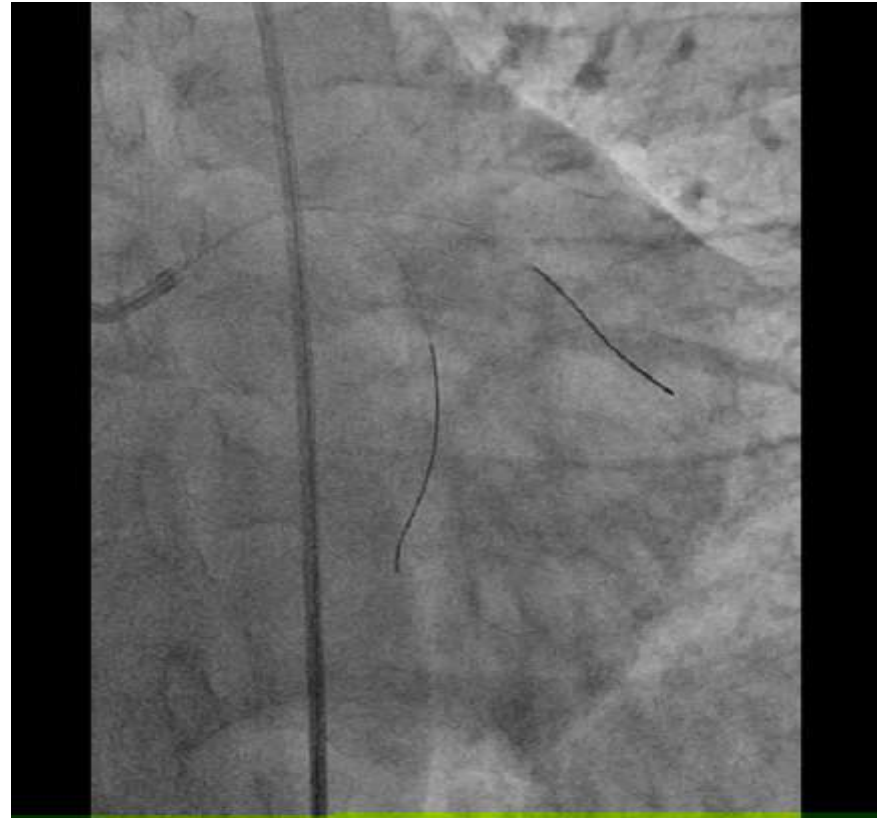
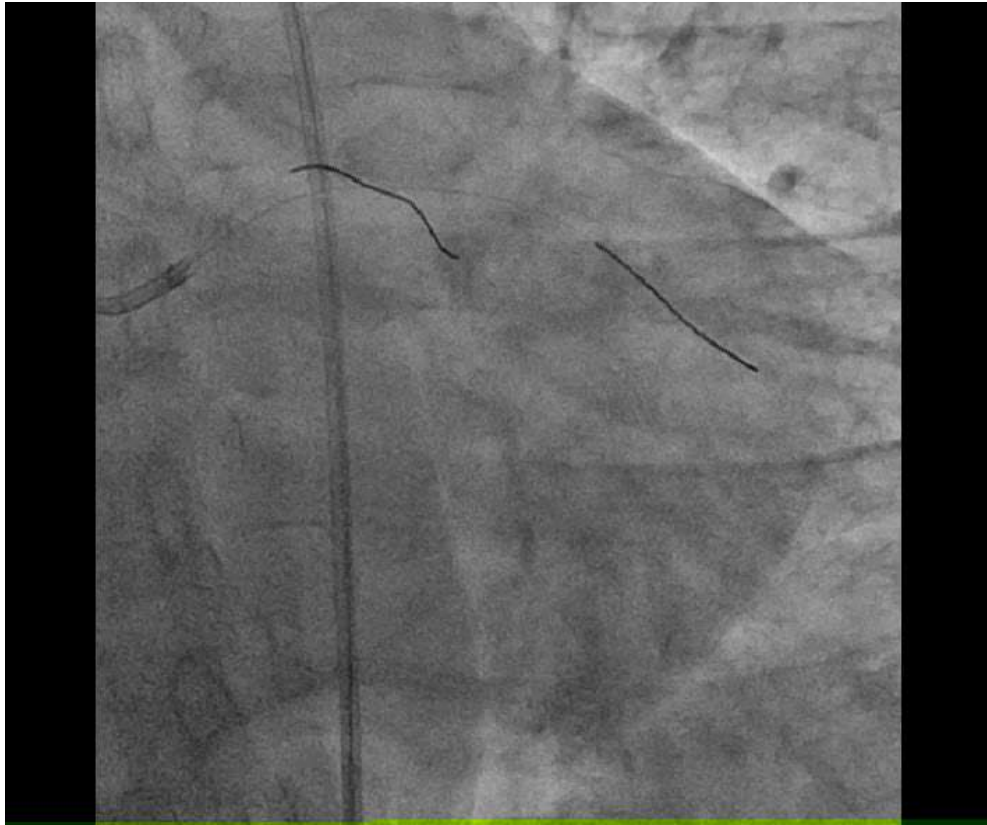
Crush Technique: Final



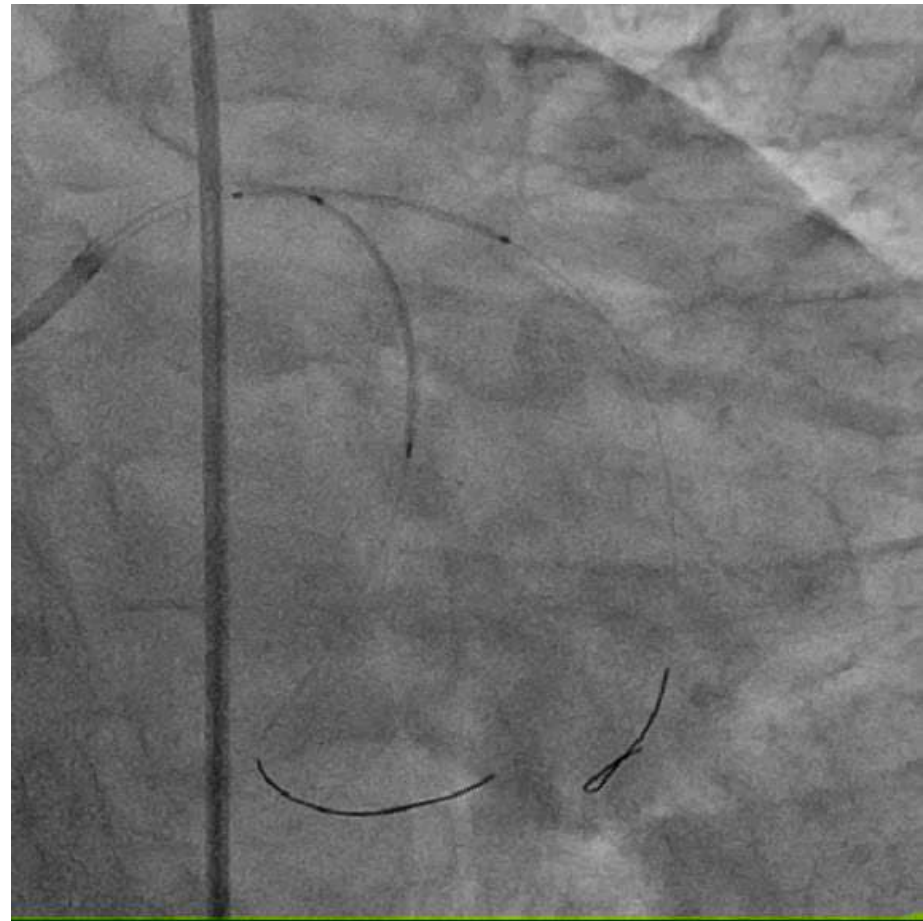
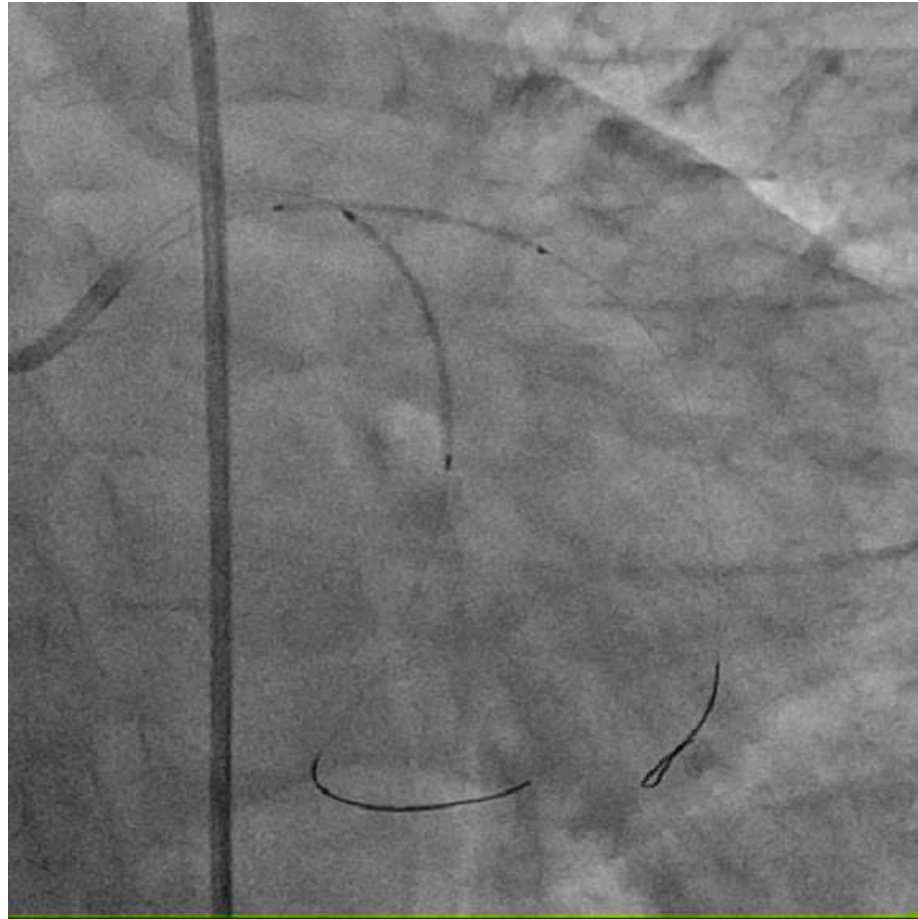
Mini Crush Technique : Case 3



Mini Crush Technique



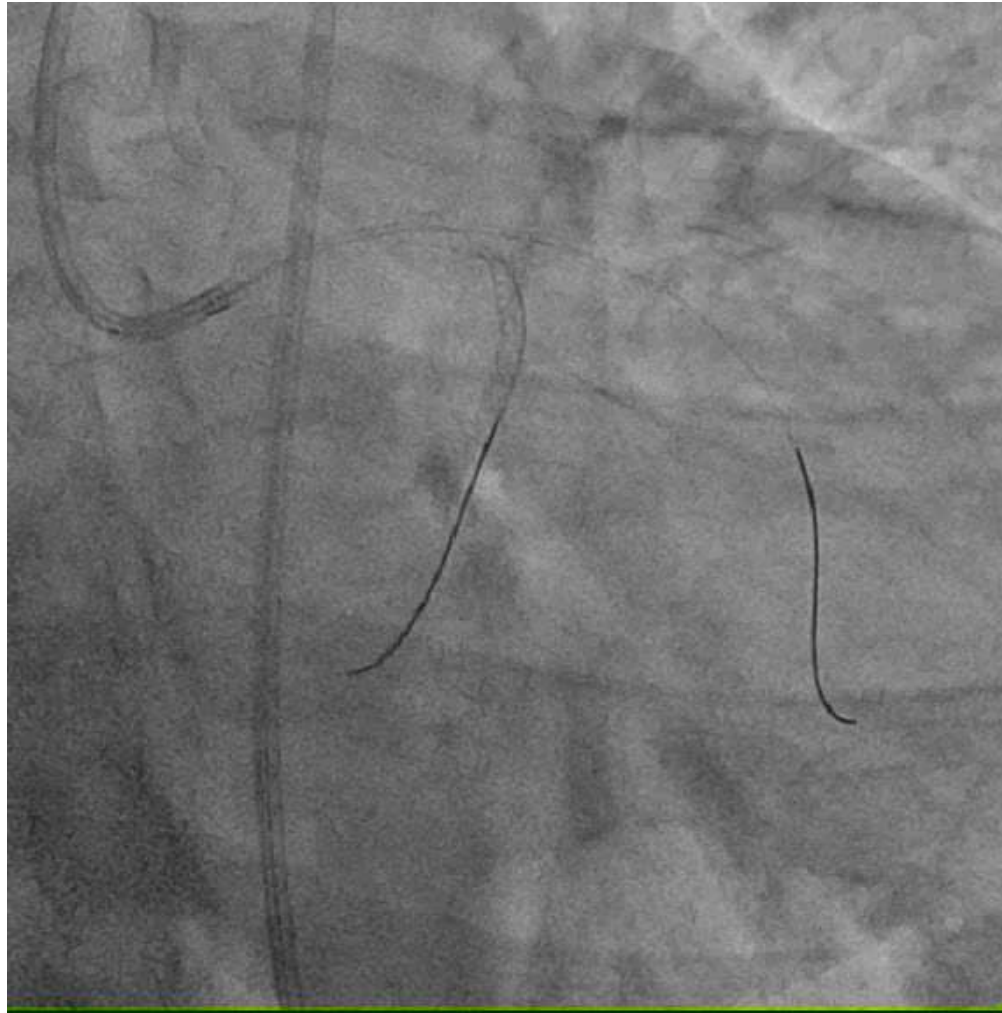
Crush Technique: 2 stents in place; SB stent deployed first



**Crush Technique: MB stent the inflated
crushing SB stent previously deployed;
SB wire removed**



Crush Technique: No Kiss



Crush Technique: Final



Crush Technique

Advantages and limitations

Advantages :

Immediate patency of both the branches with no risk of branch closure

Limitations :

Difficulty in SB rewiring for final kissing inflation (less with DK-Crush; hydrophilic wire can help)
Presence of multiple layers of crumpled stent at the SB ostium, substantially increasing the rate of SB ostial ISR