

Seoul, Korea: 29-30 November 2018

Complex PCI in Complex Situations

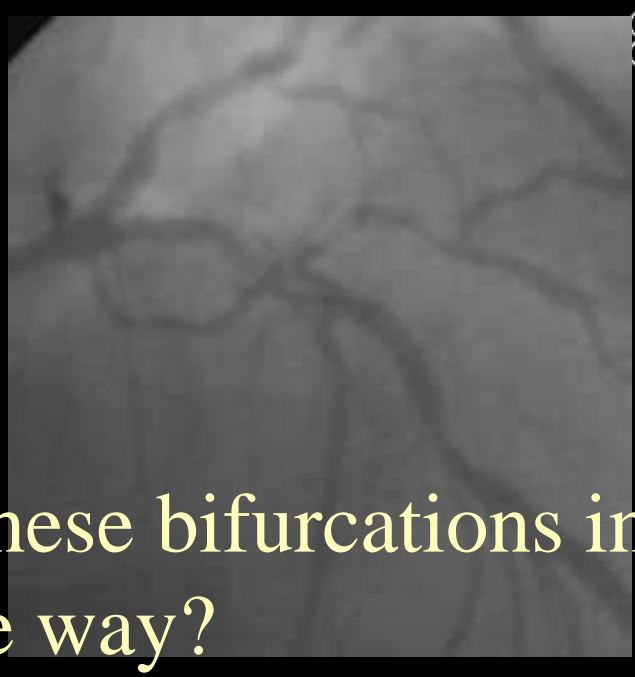
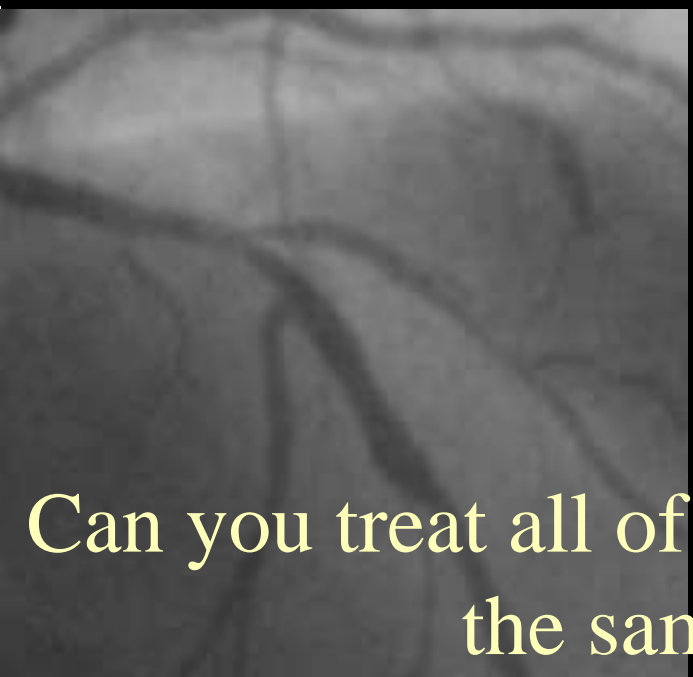
Bifurcation Lesions: Present and Future

Speaker - 8'

Antonio Colombo

EMO GVM Cento Cuore Columbus Milan, Italy

No conflicts to disclose



Can you treat all of these bifurcations in the same way?



Update in Bifurcations

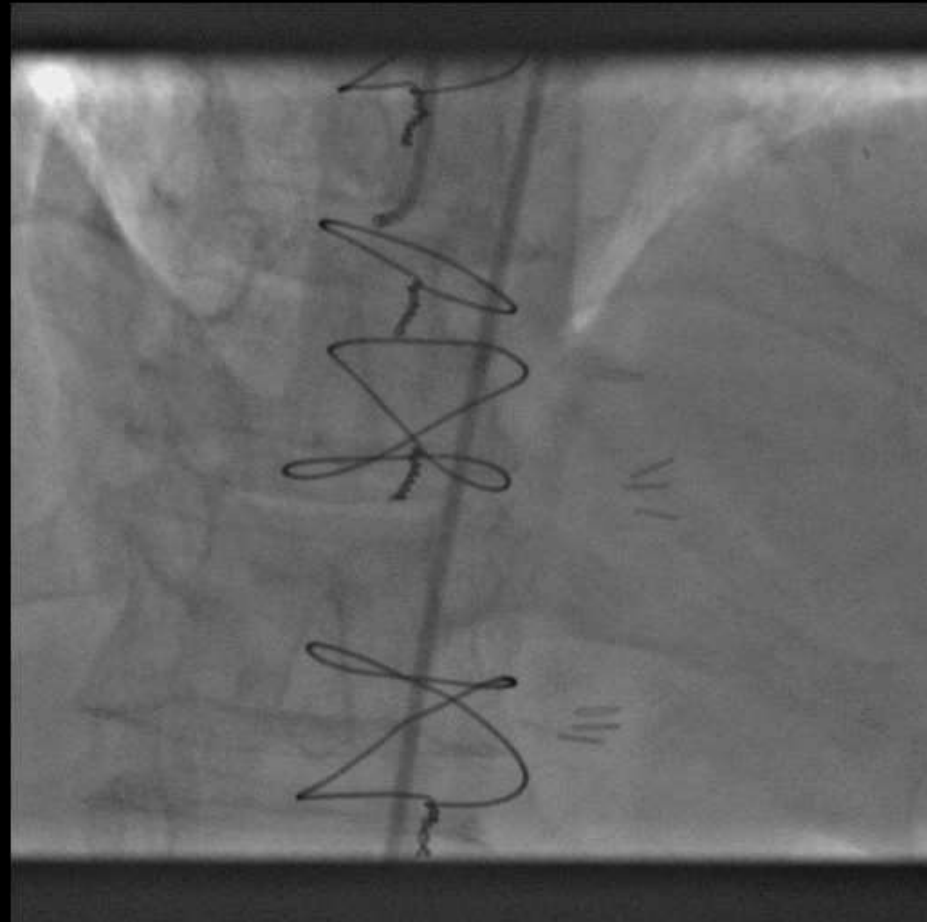
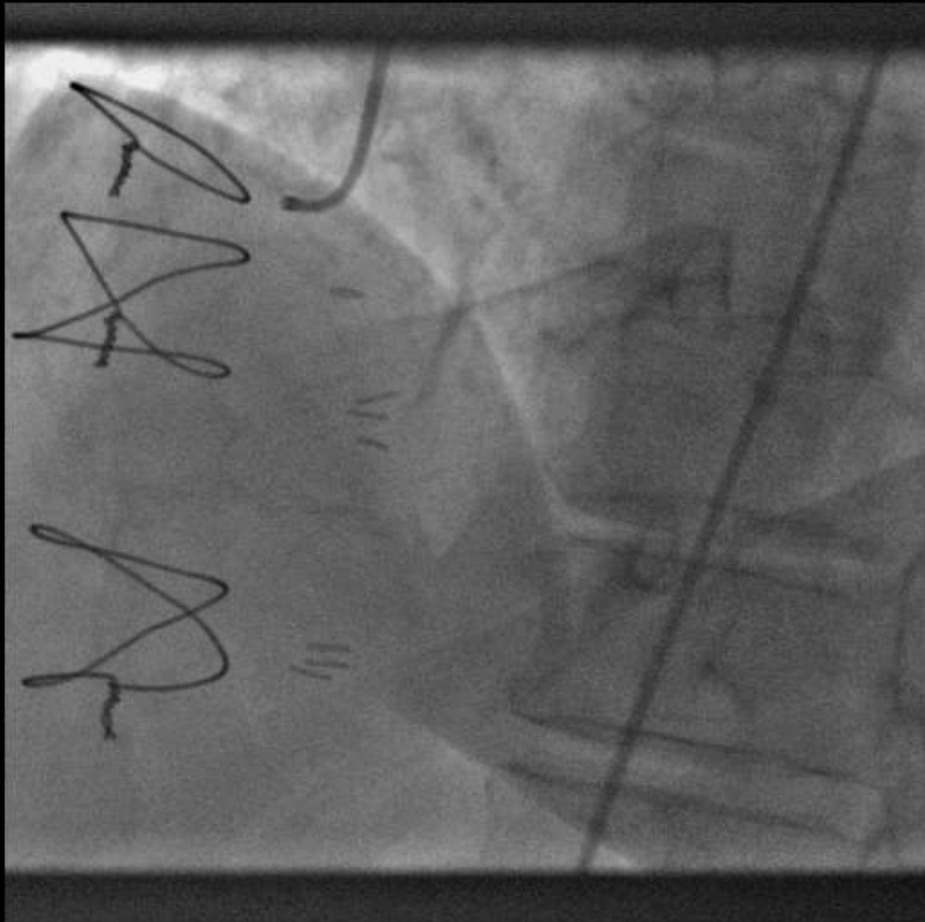
10 Learning Points

1. Keep it Simple
2. Always wire both branches

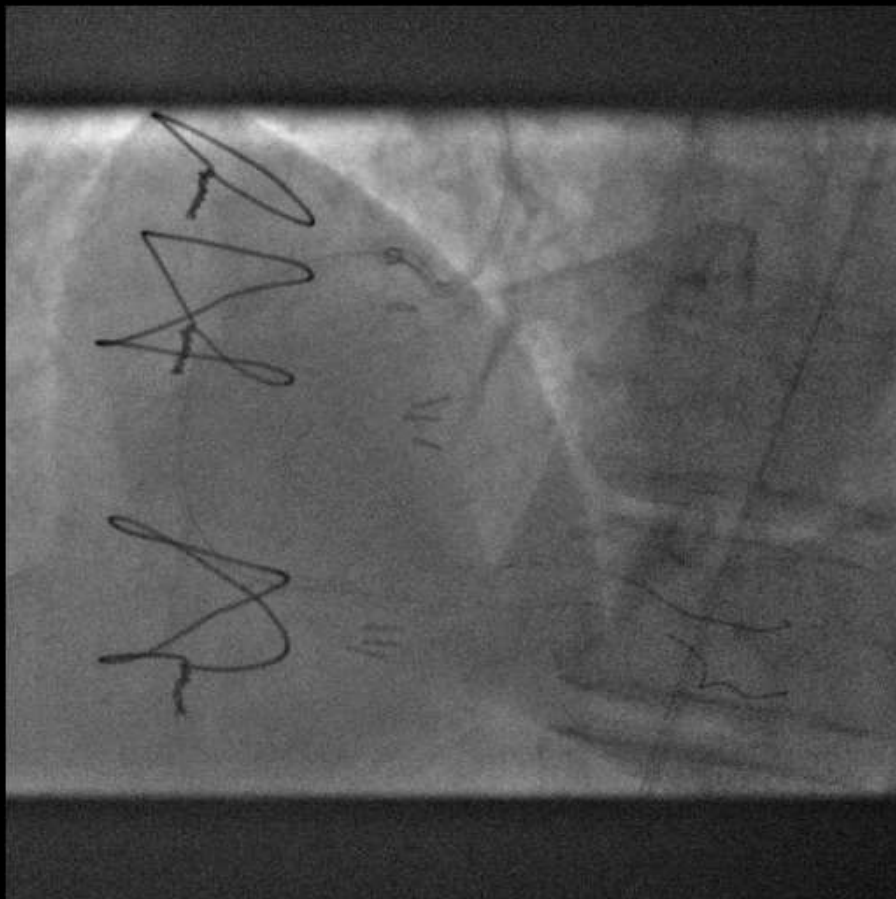
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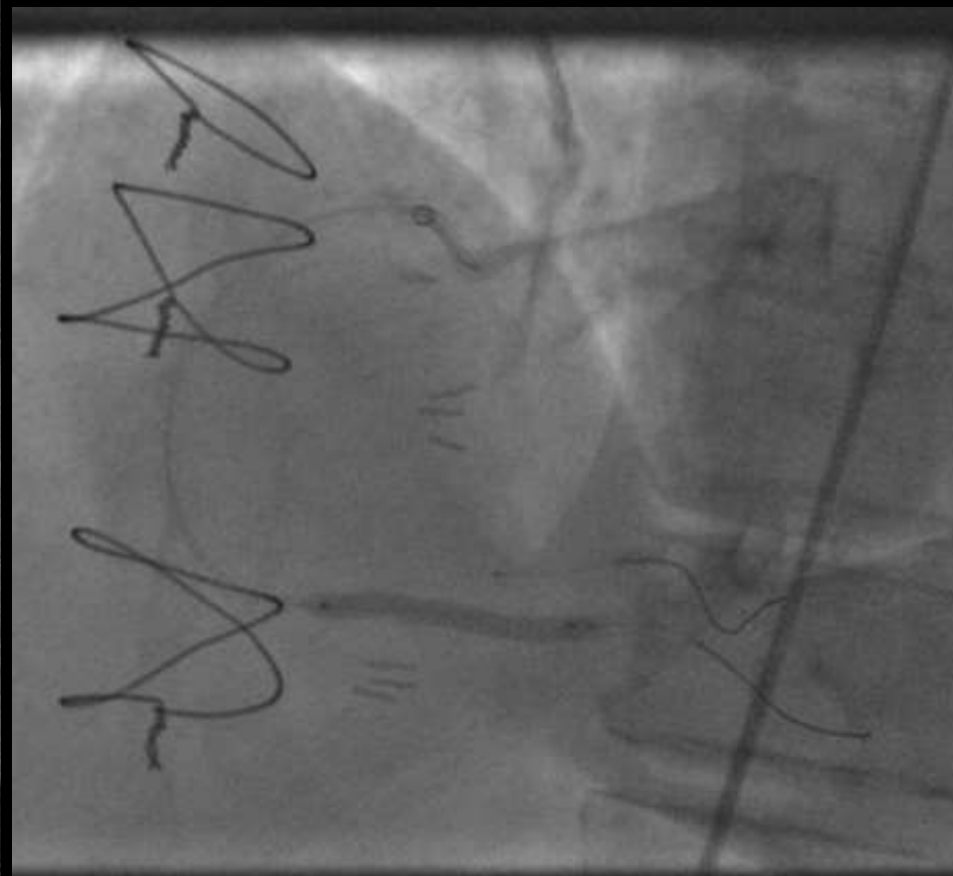
1. Keep it Simple
2. Always wire both branches
3. KIO and Provisional are now default strategy



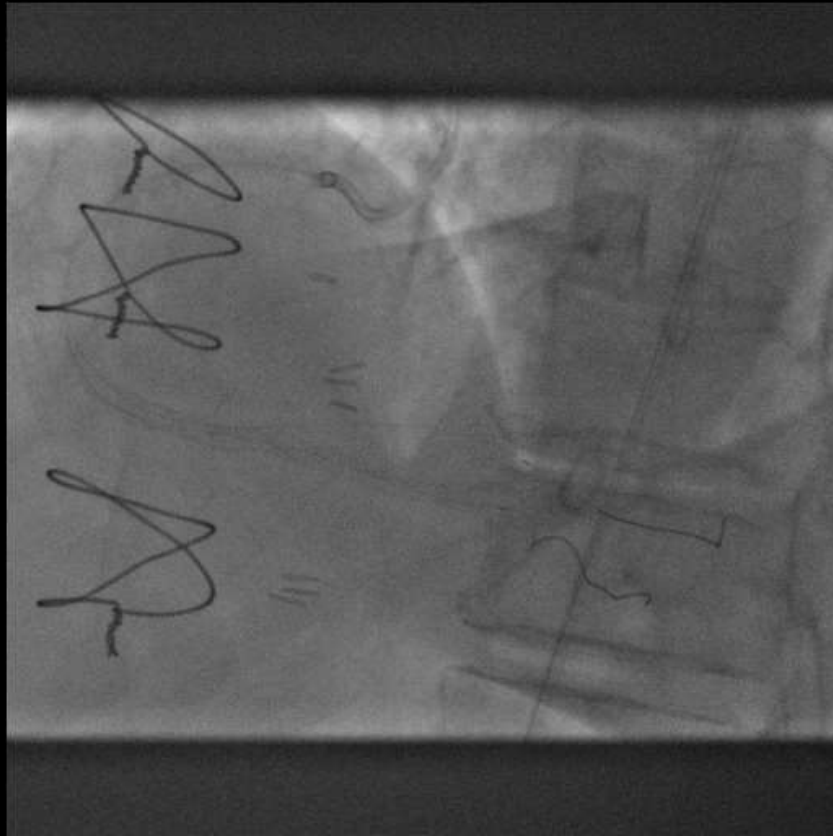
Baseline Angiogram – RCA-PD/PL bifurcation



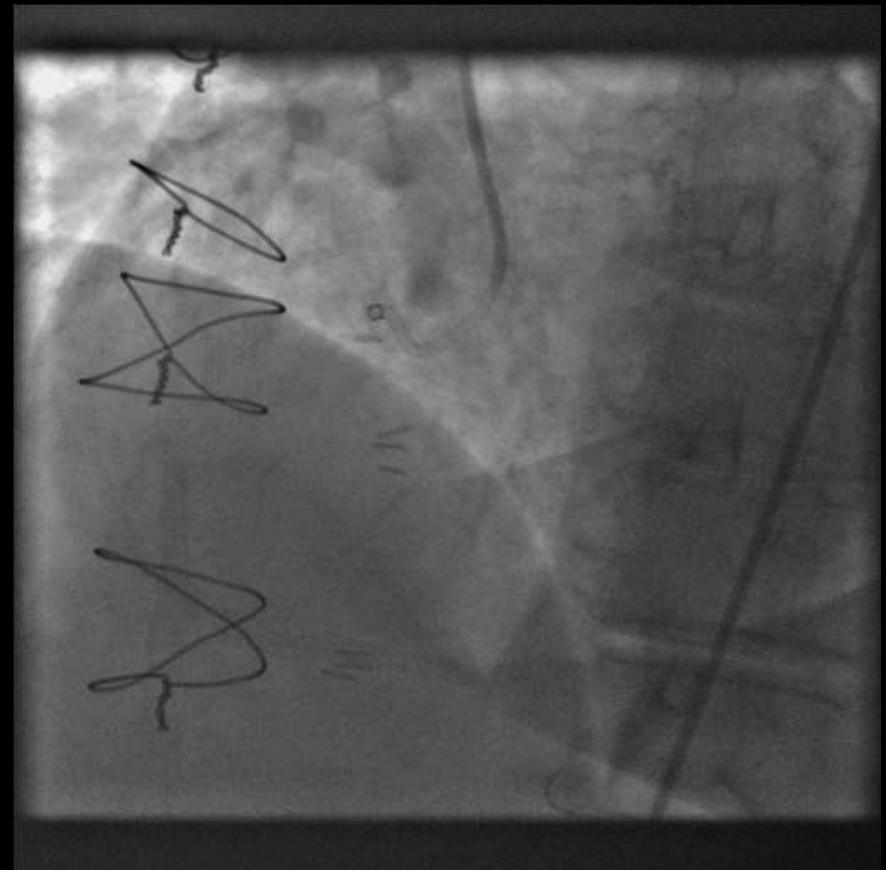
Wire both branches
No predilatation of SB



RCA-PD stented
Promus 2.5x28mm, 3x28mm



Result after stenting
Good TIMI flow in SB (PL)
No postdilatation or kissing



Final result after wires removed

Update in Bifurcations

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3. KIO and Provisional are now default strategy
4. Predilate SB if necessary

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4. Only predilate SB if absolutely necessary
5. Carina shift is an important cause of SB narrowing

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6. Optimal provisional includes the POT

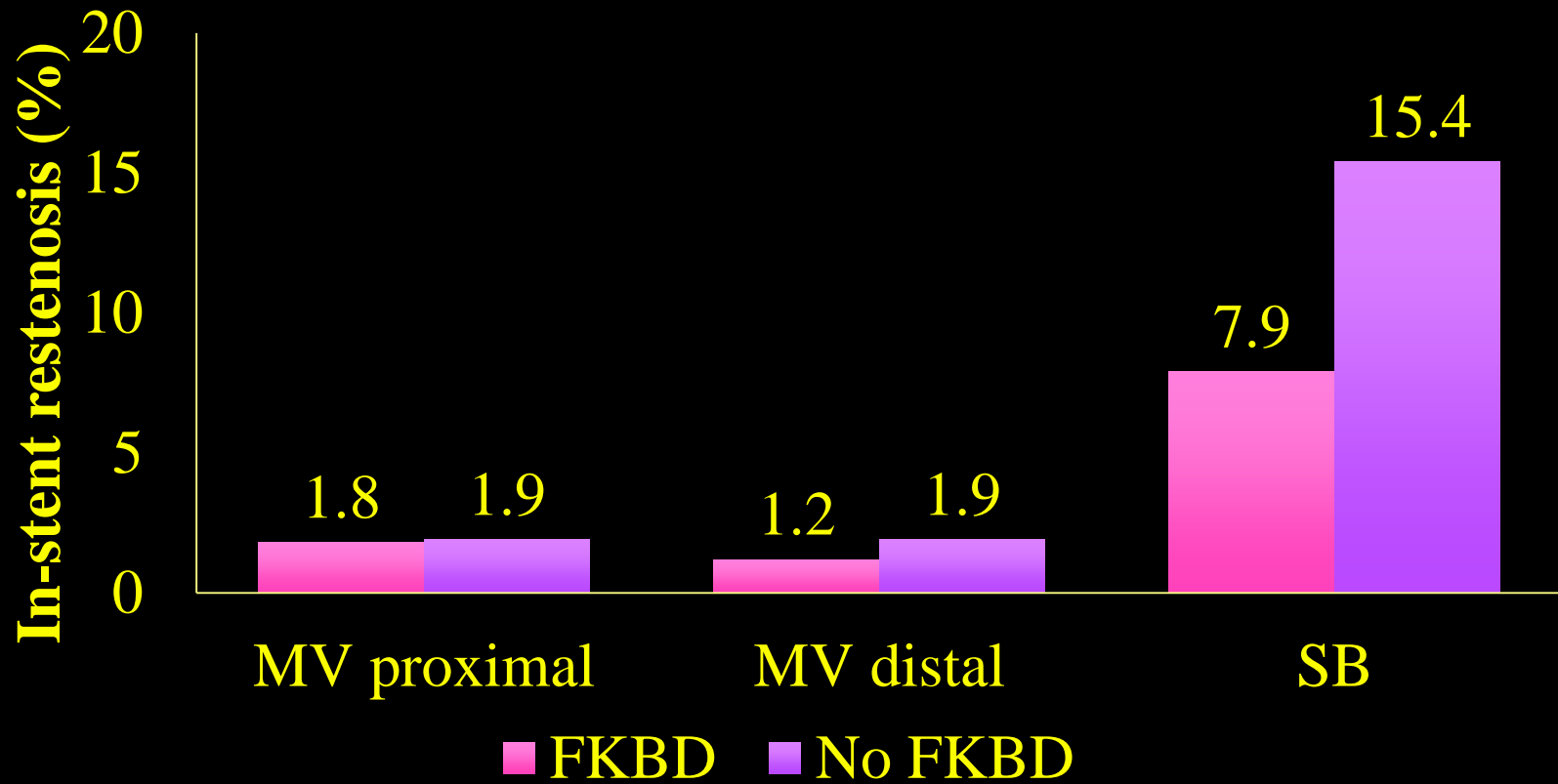
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7. Kissing inflation is not mandatory for provisional

Side Branch (SB) Binary stenosis

$P=0.039$

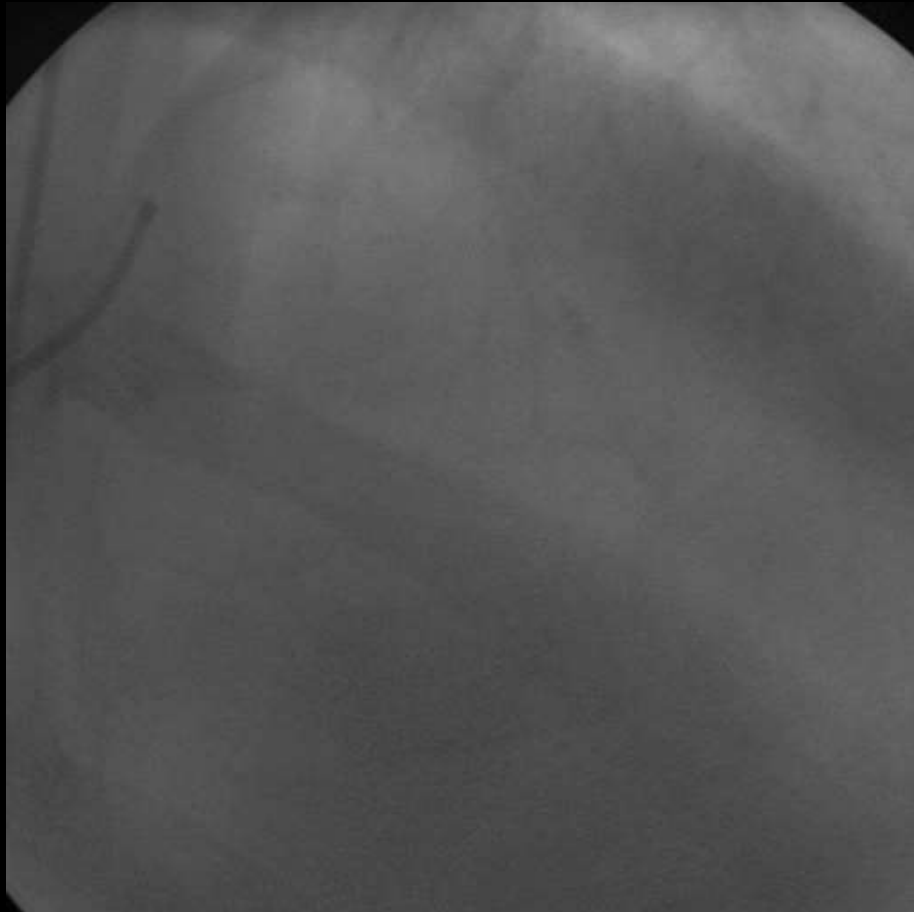


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7. Kissing inflation is not mandatory for provisional
8. Two-stent approach as cross-over vs. intention-to-treat

Provisional requiring cross-over



Baseline

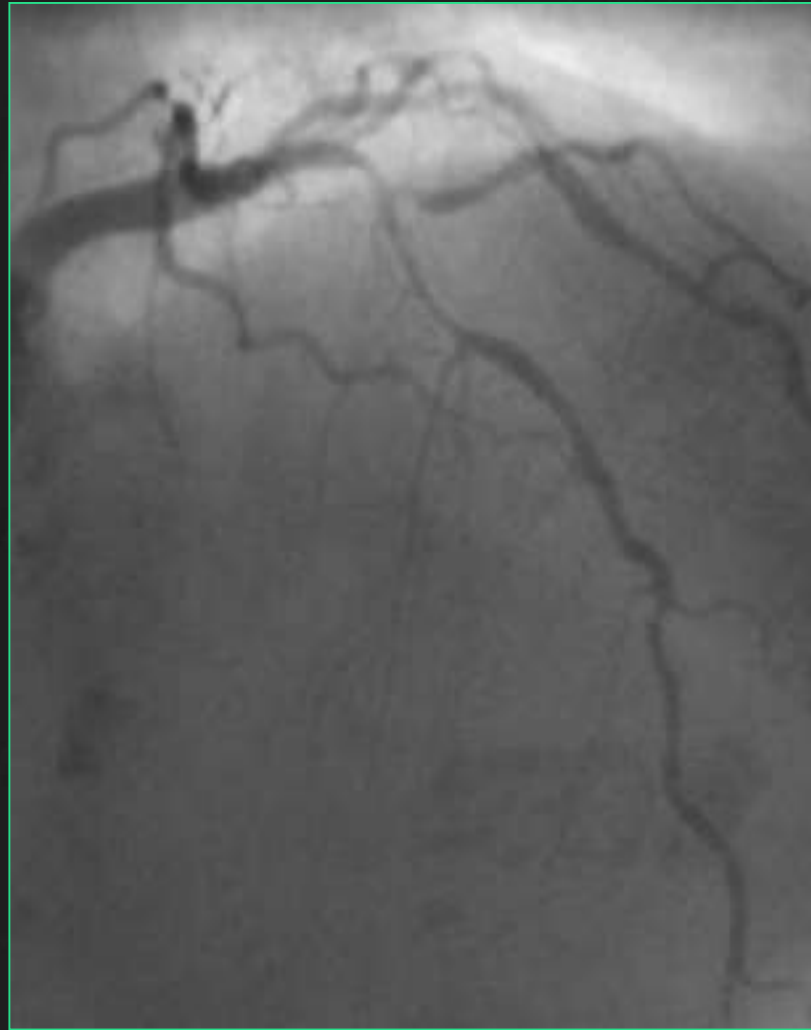


After MB stenting and FKI

When?

- SB dictates the approach
- Usually want to stent the SB first
- Importance of SB to patient?
- SB diameter and territory?
- Extent of SB disease?
- Bifurcation angle – difficulty in wiring SB?

Importance of SB to patient?



80-yr old male with severely depressed LV fxn (EF=20%)

Importance of SB to patient?



After Kissing – Severe hemodynamic compromise

Importance of SB to patient?



Final Result after TAP stenting of SB

SB diameter and territory?

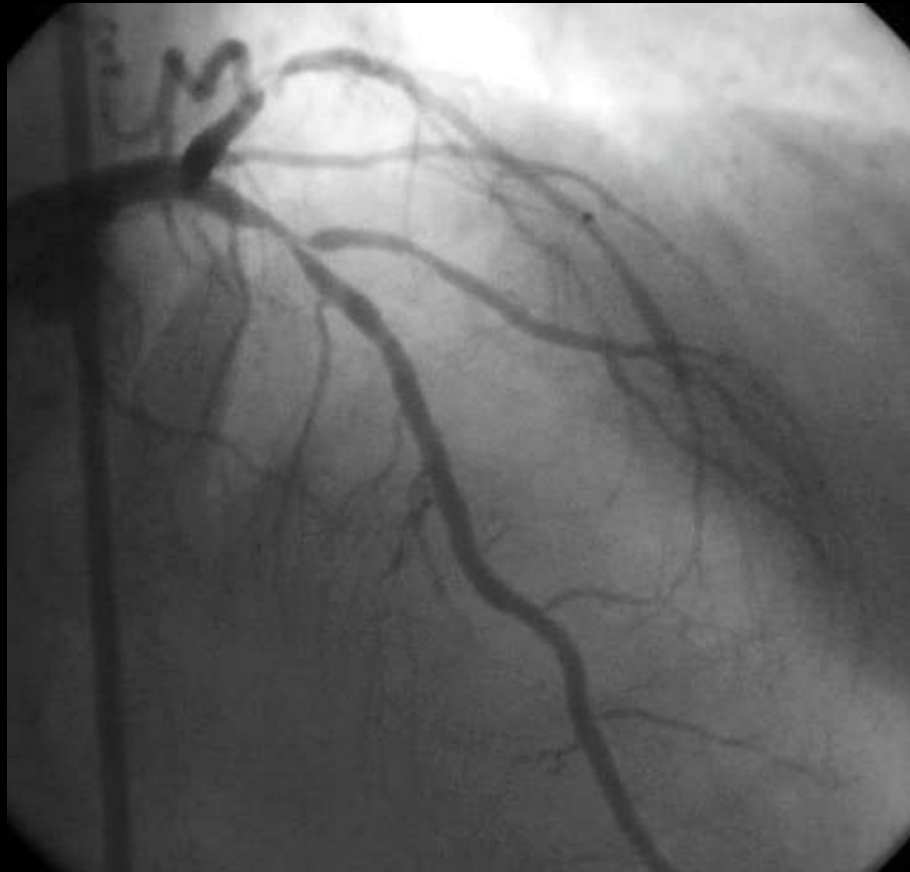


Small with diffuse disease → KIO



Large SB with large territory → 2-stents

Extent of SB disease?



Focal ostial disease → Provisional



Diffuse disease → 2-stent

Bifurcation Angle?



Difficult to access SB. Access may be even more challenging or even impossible after MB stenting

Accurate assessment of lesion severity, distribution, extension, and presence of concomitant disease



True Bifurcation

(significant stenosis on the main and side branches)



Approach is dictated by the Side Branch!



Large in diameter (>2.5mm) and territory of distribution



SB disease is diffuse & extends well beyond the ostium (10-or more)



SB has unfavorable angle for recrossing after MB stent implantation



Elective implantation of two stents (MB and SB)

Conclusions

- No two bifurcations are identical and an individualized approach is appropriate
- Strategy is determined by the size, importance and extent of disease in the side branch
- The provisional strategy (or KIO) is appropriate in the majority of true and non-true bifurcations
- About 20% of true bifurcations require a stent in both branches
- In 2-stent techniques, optimization of technique & IVUS guidance is essential for a good long-term result