

For complex bifurcation:
Two stents or hybrid?

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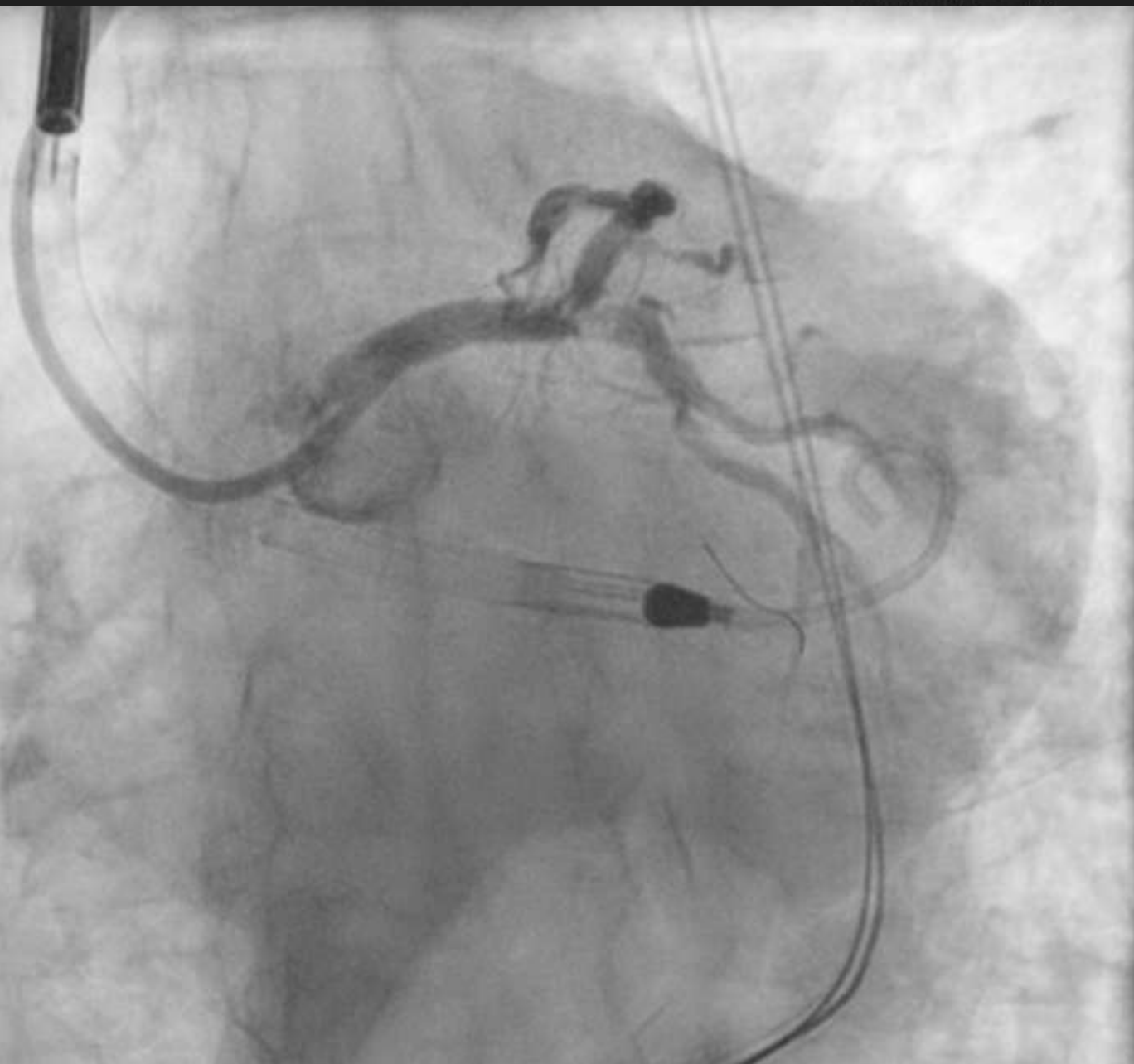
Nothing to disclose

February 10-12, 2011
Rome, Italy

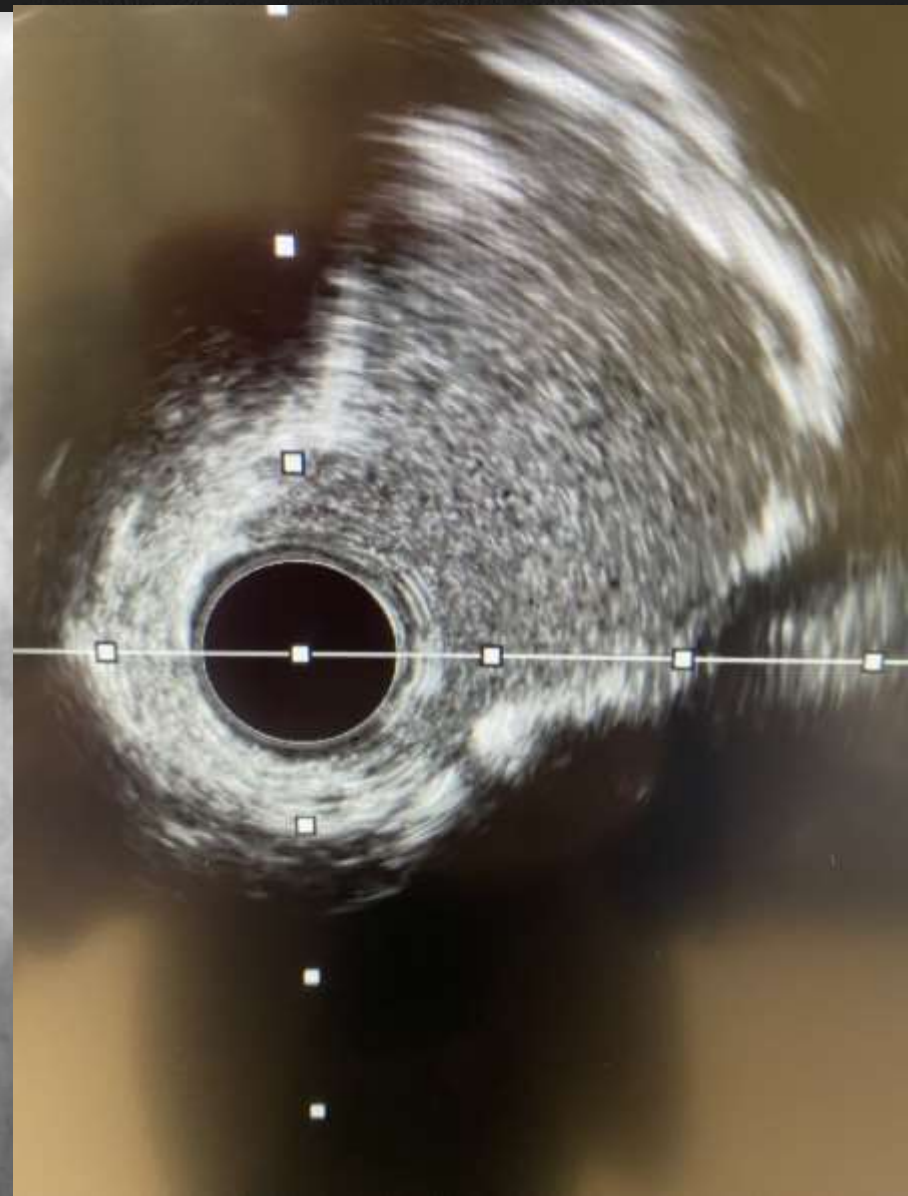
International meeting

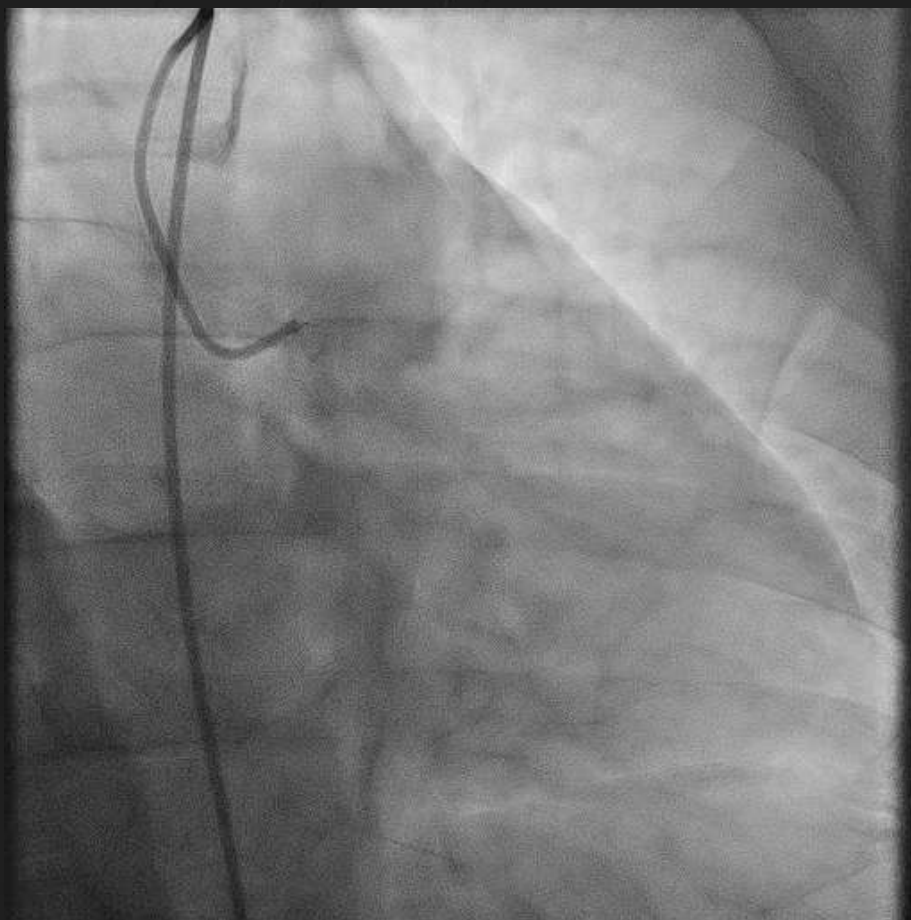
Rotablation 1.5
and 1.75 on
LAD and LCX
Shockwave on
both
and DKCrush

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Final result



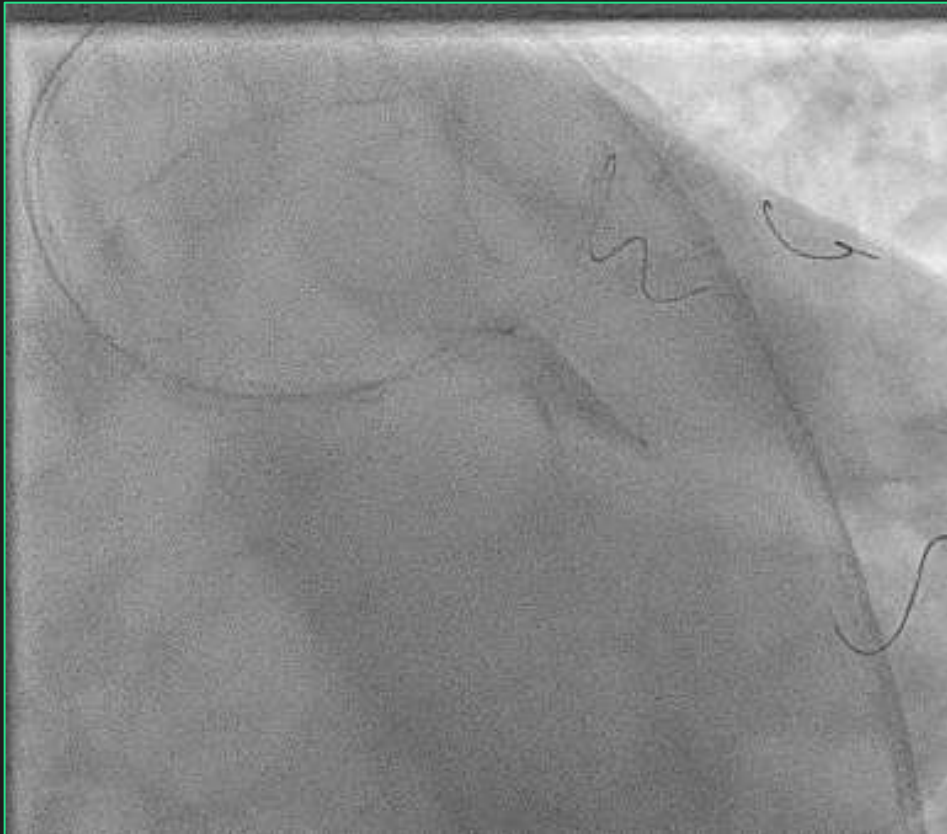


Baseline

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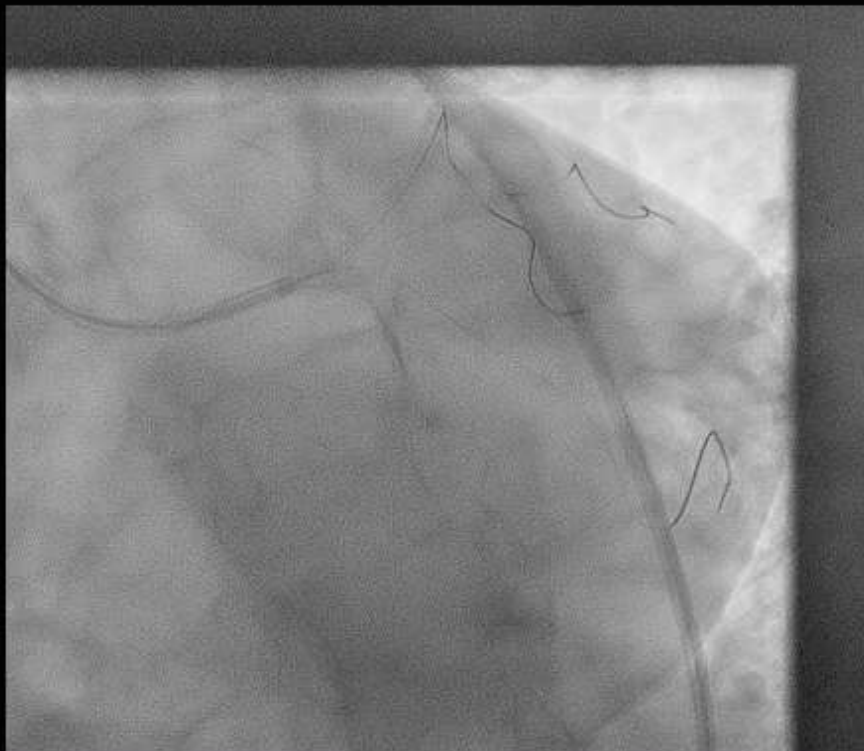
Results after predilatation of the SB may help to select the final approach





Kissing Balloon 3.0 + 3.0 mm

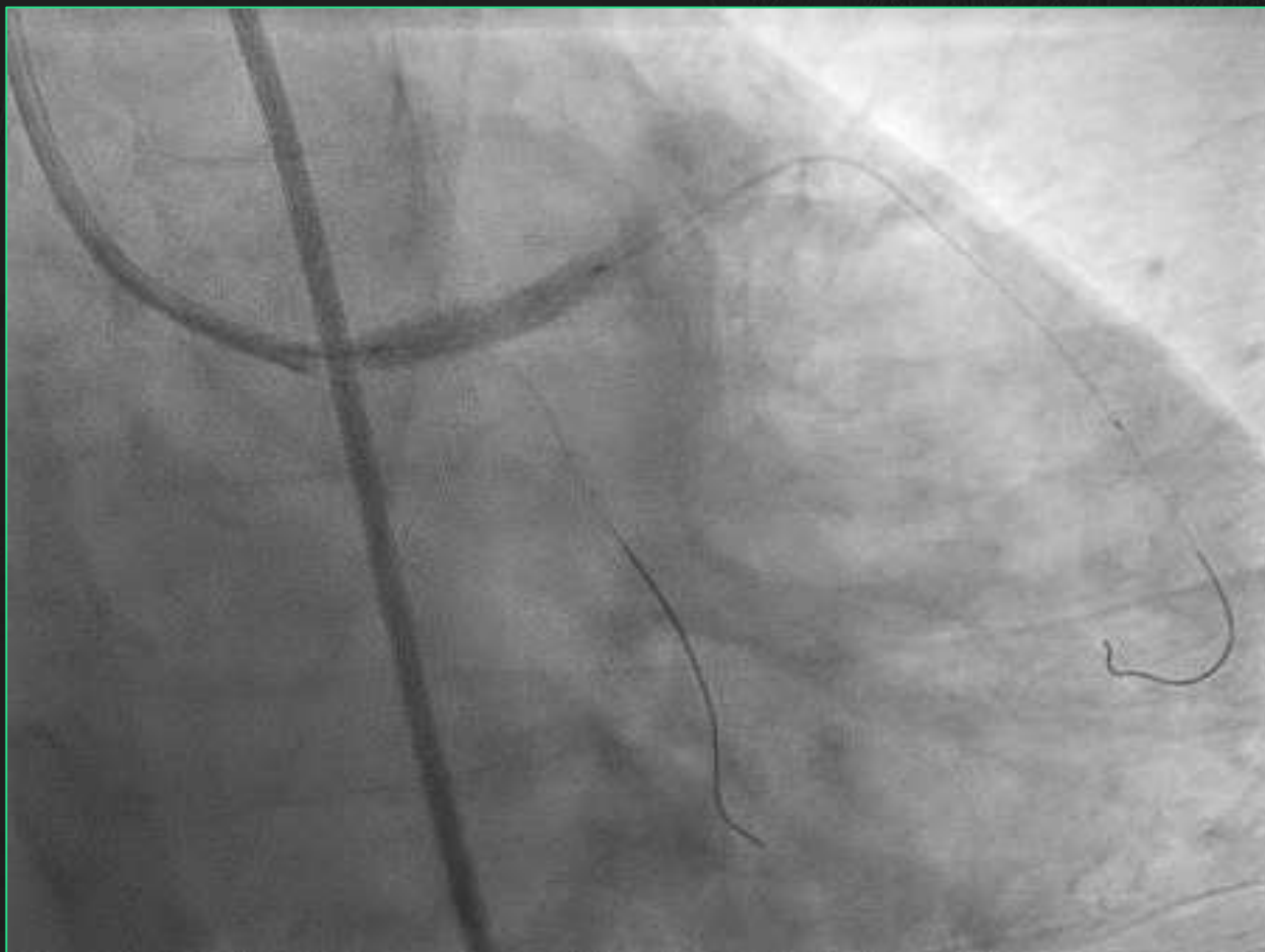
These steps are important to support further decisions



After Kissing Balloon

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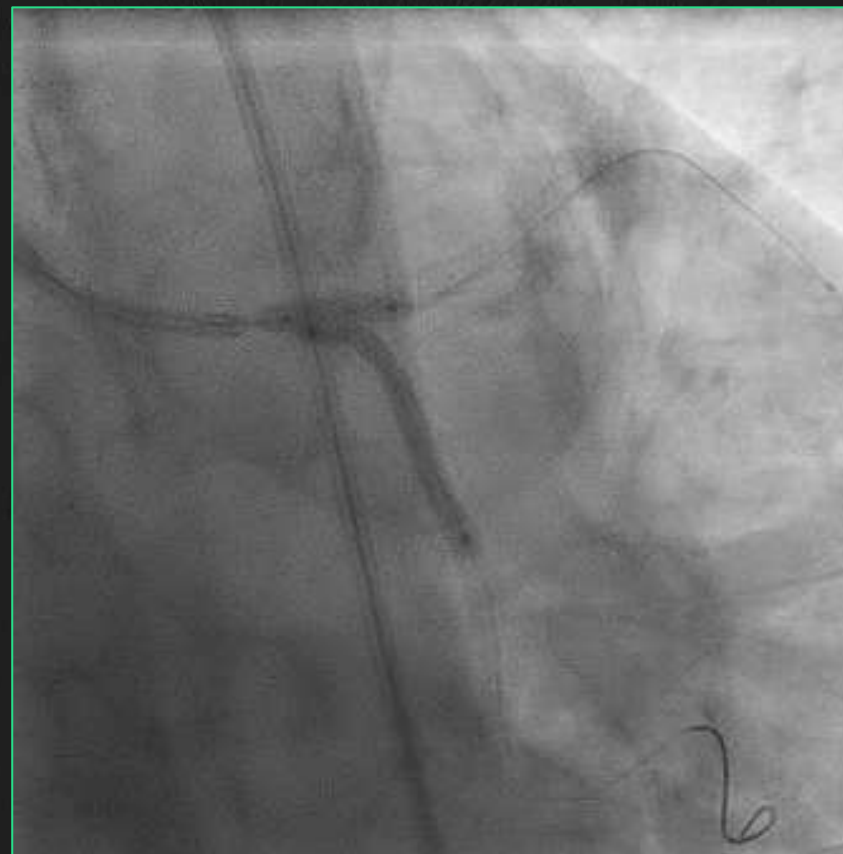
3.5 x 20 mm DES

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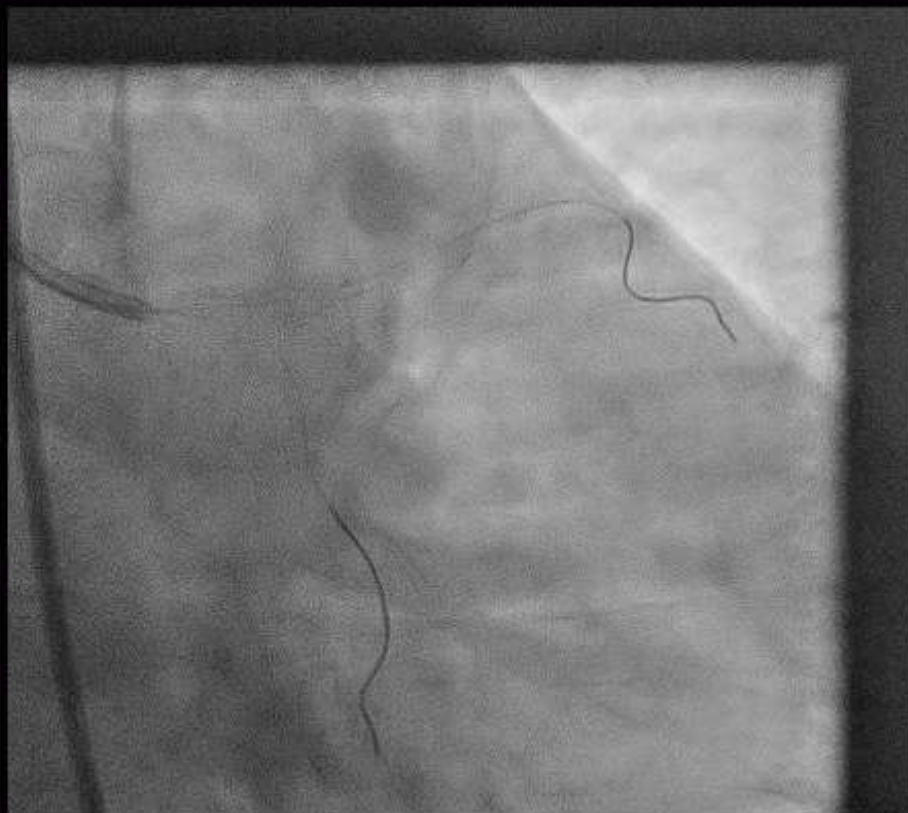
International meeting



POBA 3.0x 20 mm



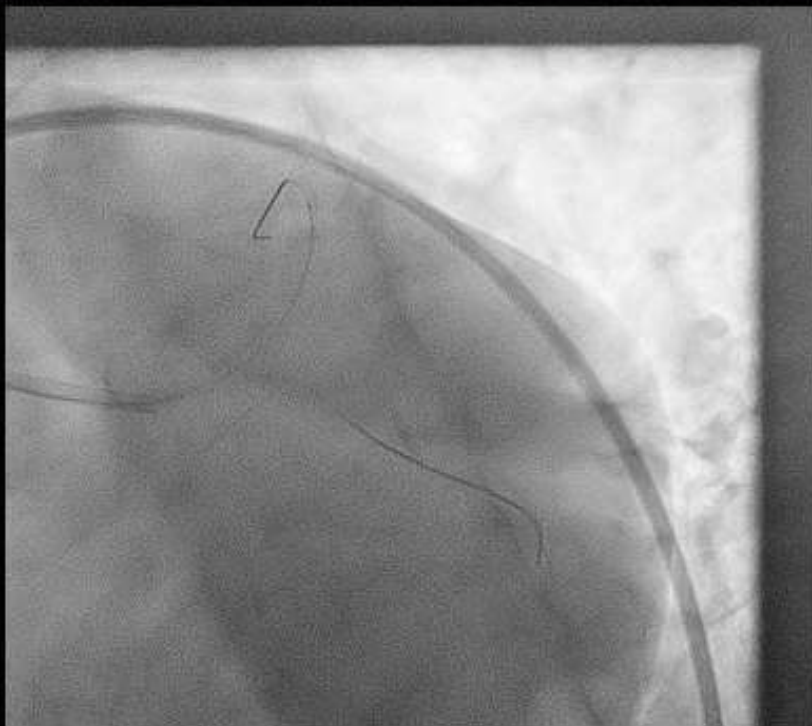
**DCB on LCX
3.5 mm POBA on LAD**



Final Result

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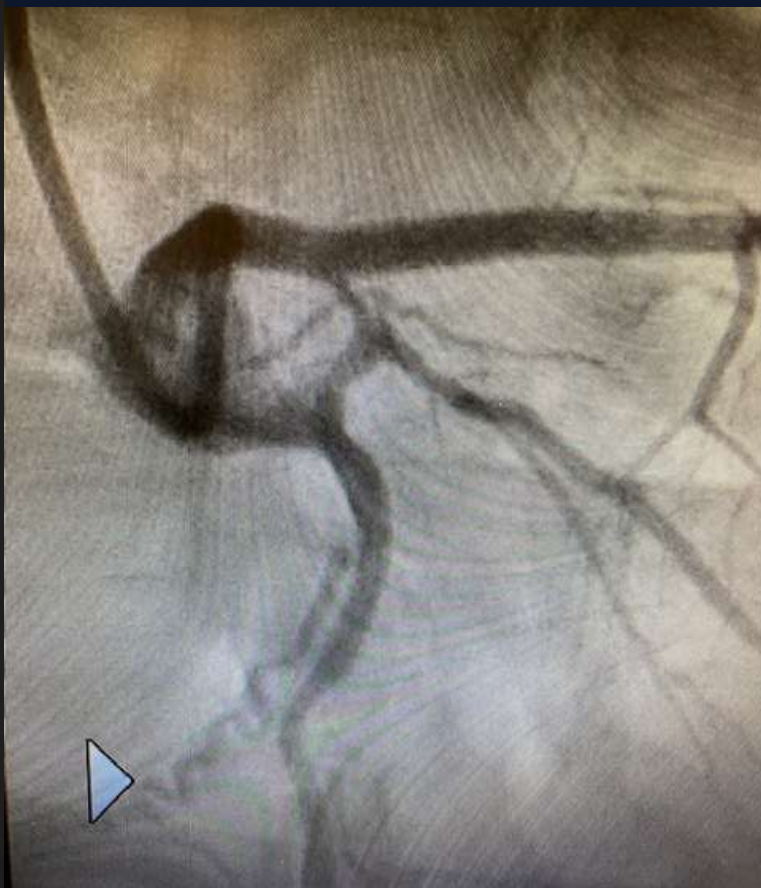


Final Result

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Baseline



Final post DCB



1 year FU



1 year FU

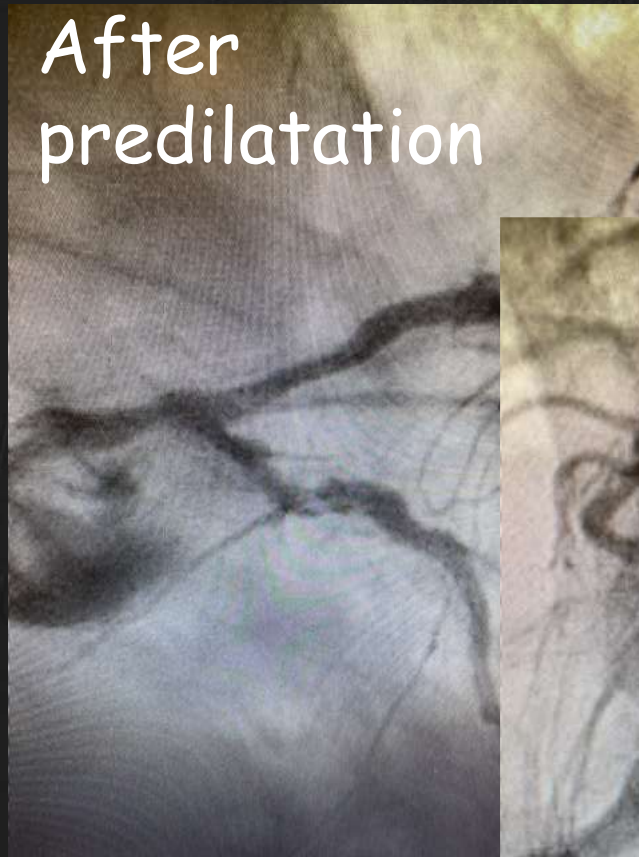


To simplify the procedure

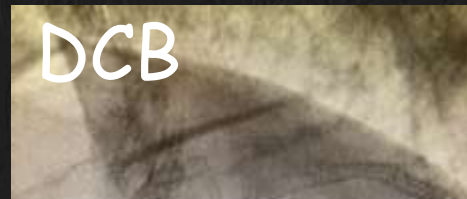
Baseline



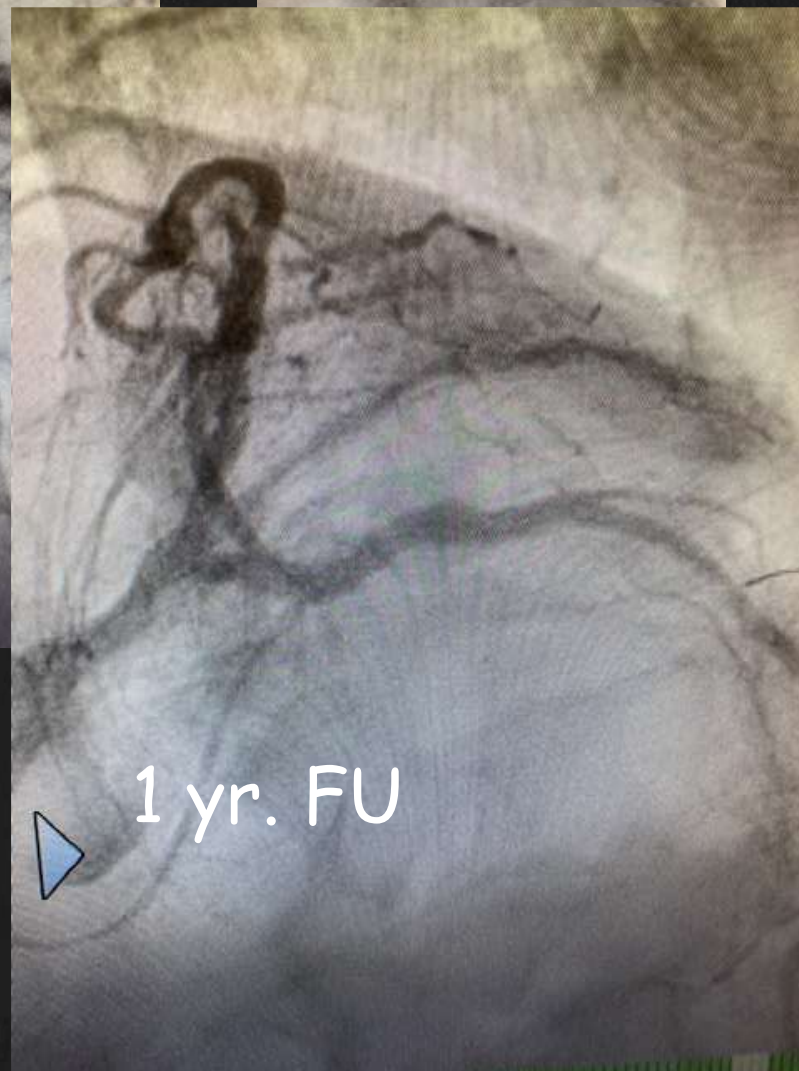
After
predilatation



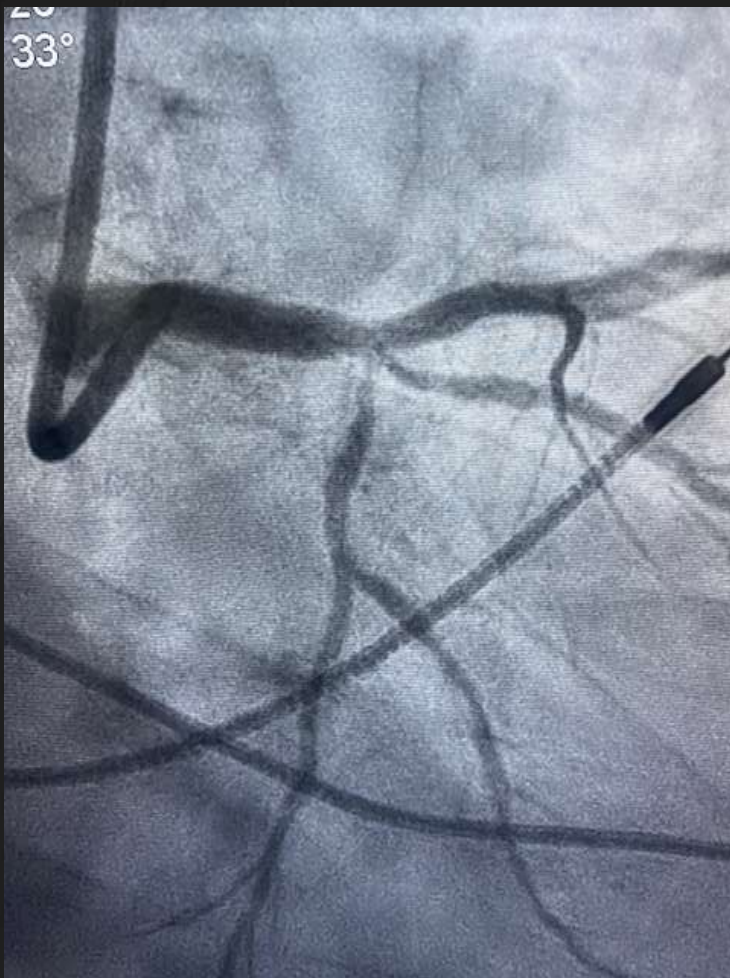
DCB



1 yr. FU

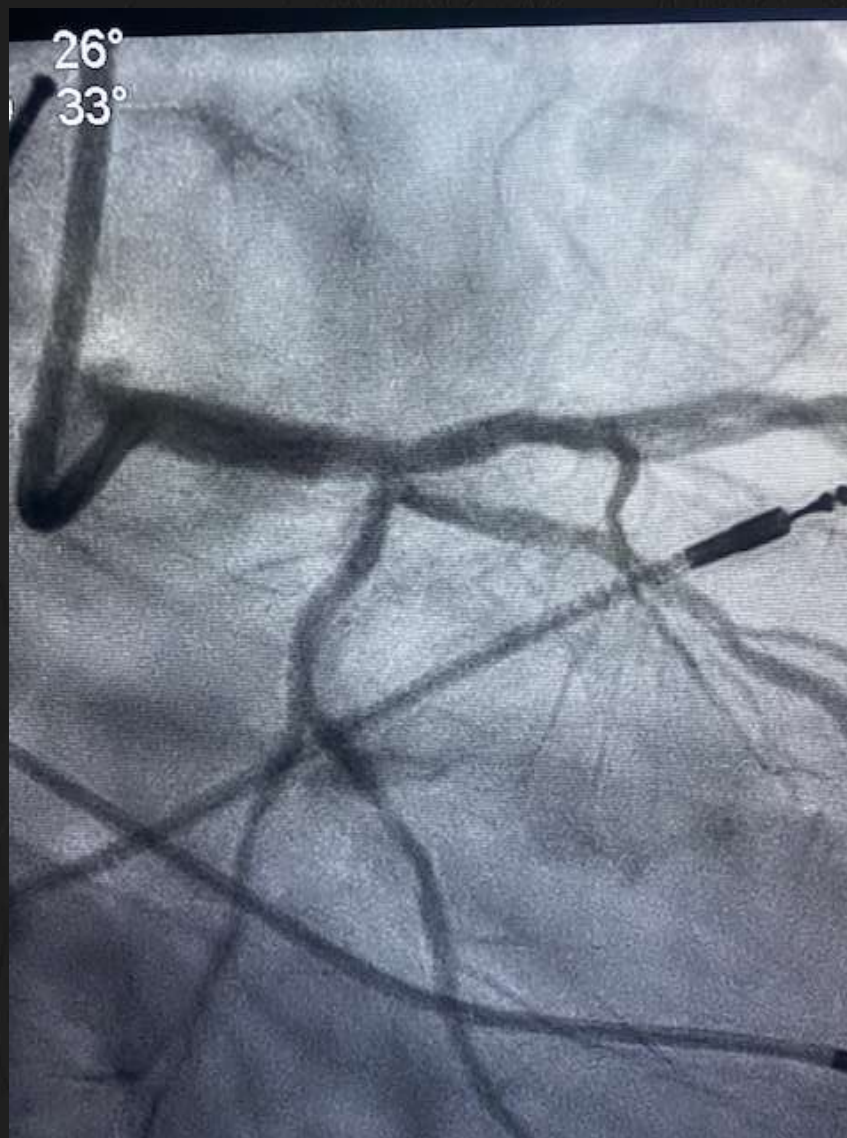


To simplify the procedure



2017

International meeting



International meeting

July 10-12, 2011

Rome, Italy

Image size: 512 x 512
View size: 1454 x 1104
WL: 128 WW: 256

193/2021
Cardiac -- Left Coronary
2021

Image size: 512 x 512
View size: 1454 x 1104
WL: 128 WW: 256

193/2021 (70 y, 70 y)
Cardiac -- Left Coronary 15 fps Medium
2021080110110623
4

Zoom: 284% Angle: 0
Im: 1/60

JPEGLossless:Non-hierarchical-1stOrderPrediction

01/06/

Zoom: 284% Angle: 0
Im: 42/60

JPEGLossless:Non-hierarchical-1stOrderPrediction

01/06/2021, 12:46:33

Made In: CstIX

International meeting

Predilatation

Image size: 512 x 512
View size: 1404 x 1404
WL: 128 WW: 256

193/2021 (76 y , 76 y)
Cardiac - Left Coronary 15 fps Normal
2021060110110623 w: 256

25



193/2021 (76 y , 76 y)
Cardiac - Left Coronary 15 fps Normal
2021060110110623 w: 256

23



193/2021 (76 y , 76 y)
Cardiac - Left Coronary 15 fps Normal
2021060110110623 w: 256

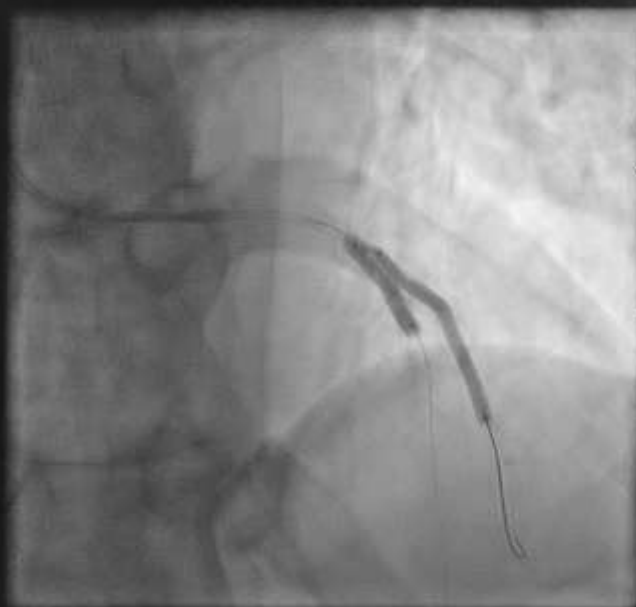
27



Image size: 512 x 512
View size: 1404 x 1404
WL: 128 WW: 256

193/2021 (76 y , 76 y)
Cardiac - Left Coronary 15 fps Normal
2021060110110623 w: 256

40



Zoom: 274% Angle: 0
Int: 1/18
JPEGLosslessNon-hierarchical-1stOrderPrediction

01/06/2021

01/06/2021, 13:23:15
Made in Osirix

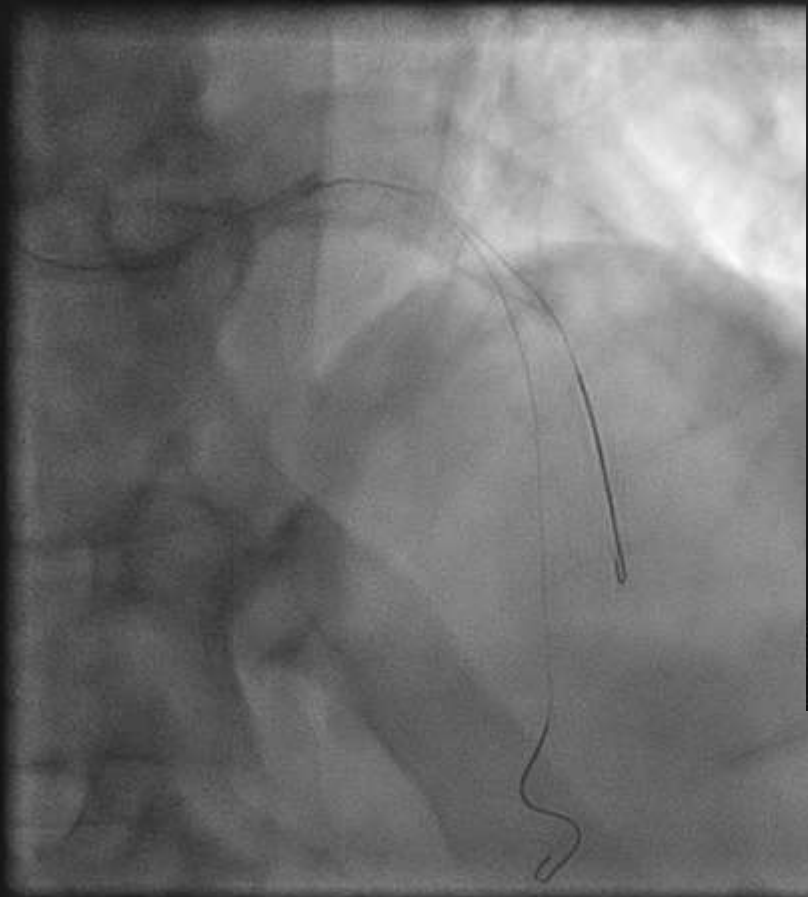
DCB in each
branch
and kiss

Zoom: 274% Angle: 0
Int: 1/19
JPEGLosslessNon-hierarchical-1stOrderPrediction

01/06/2021, 13:41:28
Made in Osirix

Image size: 512 x 512
View size: 1404 x 1404
WL: 128 WW: 256

19:
Cardiac -- Left



Zoom: 274% Angle: 0

Im: 1/52

JPEGLossless:Non-hierarchical-1stOrderPrediction

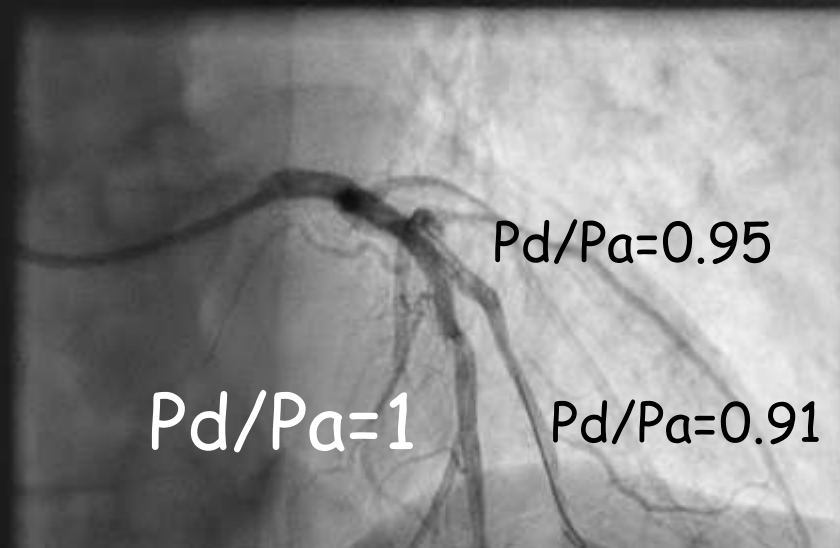


Image size: 512 x 512
View size: 1404 x 1404
WL: 128 WW: 256

193/2021 (76 y , 76 y)
Cardiac -- Left Coronary 15 fps Normal
2021060110110623

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How I perform bifurcation PCI in "MOST" Medina 1.1.1

- Predilatation of of MB and SB
- Kissing balloon
- Evaluation of the result, consider cutting balloon on SB if result is suboptimal
- DES on MB unless the result is stent like
- Kissing balloon
- If SB lumen is adequate: DCB on SB and balloon on MB
- If SB lumen is inadequate or occlusive dissection on SB: DES on SB with T technique

PEPCAD V registry (EUROINTERVENTION, 2011) a prospective, multicentre, single arm 28 patients DCB (Sequent Please) inflation in both branches followed by BMS implantation in the MB alone (4 patients received bailout stenting of SB). Nine-month binary restenosis of 3.8% and 7.7% in the MB and SB respectively. Late lumen loss (LLL) 0.38 ± 0.46 mm in the MB and 0.21 ± 0.48 mm in the SB. There were also two episodes of ST.

J Herrador, J Interv. Cardiol. 2013); 50+50 pts. DCB vs POBA on SB; LLL 0.09 ± 0.4

Schulz et al. (Clin Res Cardiol 2014) reported the use of a DCB-only strategy (SQP or Falcon) in 39 consecutive patients with denovo bifurcation lesions. Stent implantation in 4 pts. At 4 months angio FU, TLR 7.7%

BIOLUX-I (S. Worhley Cardio. Rev. Medicine 2015); 35 pts. LLL 0.10 ± 0.43 , no restenosis.

DEBSIDE (J. Berland, EuroIntervention 2015); 52 pts. LLL -0.04 ± 0.34 , no restenosis.

Babilon Trial; López Mínguez JR et al EuroIntervention 2014

*Multicenter randomized trial (108 pts) with the **SQP DCB+BMS** versus DES implantation in the MB and provisional SB stenting with the T-stent technique, all SB treated with **DCB***

*SB bailout stenting was 7.8% (**DCB+BMS**) vs. 8.9% (DES)*

SB, LLL was respectively 0.04 ± 0.76 and 0.03 ± 0.51 ($p = 0.98$).

*TLR at 24 months was **15.4% DCB group vs. 3.6% DES group**, $p=0.045$).*

MB restenosis was significantly higher in the DCB+BMS group (13.5% vs. 1.8%; $p=0.027$ in DES),

SB restenosis was not significantly different (5.8% vs. 3.6%, $p = 0.67$)

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A drug-eluting Balloon for the trEatment of coronarY bifurcatiON lesions in the side branch: a prospective multicenter ranDomized (BEYOND) clinical trial in China

2020

Quan-Min Jing¹, Xin Zhao¹, Ya-Ling Han¹, Ling-Ling Gao², Yang Zheng³, Zhan-Quan Li⁴, Ping Yang⁵, Hong-Liang Cong⁶, Chuan-Yu Gao⁷, Tie-Min Jiang⁸, Hui Li⁹, Jun-Xia Li¹⁰, Dong-Mei Wang¹¹, Geng Wang¹, Zhan-Chun Cong¹, Zhong Zhang¹²

222 pts all with DES on MB randomized to SB with PCB

RESULTS: less LLL and less restenosis compared to POBA

Main limitation: the SB lesion was focal

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The randomized study Gao JACC 2024 evaluated DCB on SB in "simple bifurcations" with a reduction in MI (?)

We suggest to evaluate DCB in complex bifurcations



DCB availability should lower the need of SB stenting

Take away messages

The SB is the decision maker

Some bifurcations when the SB is 3 mm or larger, with disease extending for more than 10 mm, with calcium may require 2 DES as intention to treat

Except for these rare bifurcations (Very complex), I suggest SB dilatation, kissing balloon and the **DECISION**: DES on MB and DCB on SB; DCB on both; DES on both

Most bifurcations with very focal SB disease require simple POBA with kissing balloon on the SB or just Keep it Open approach