INSTITUT CARDIOVASCULAIRE PARIS SUD

Complex Bifurcation PCI Techniques

Step-by-Step Lessons from Expert PCI

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www.icps.com.fr

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Disclosure Statement of Financial Interest

Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

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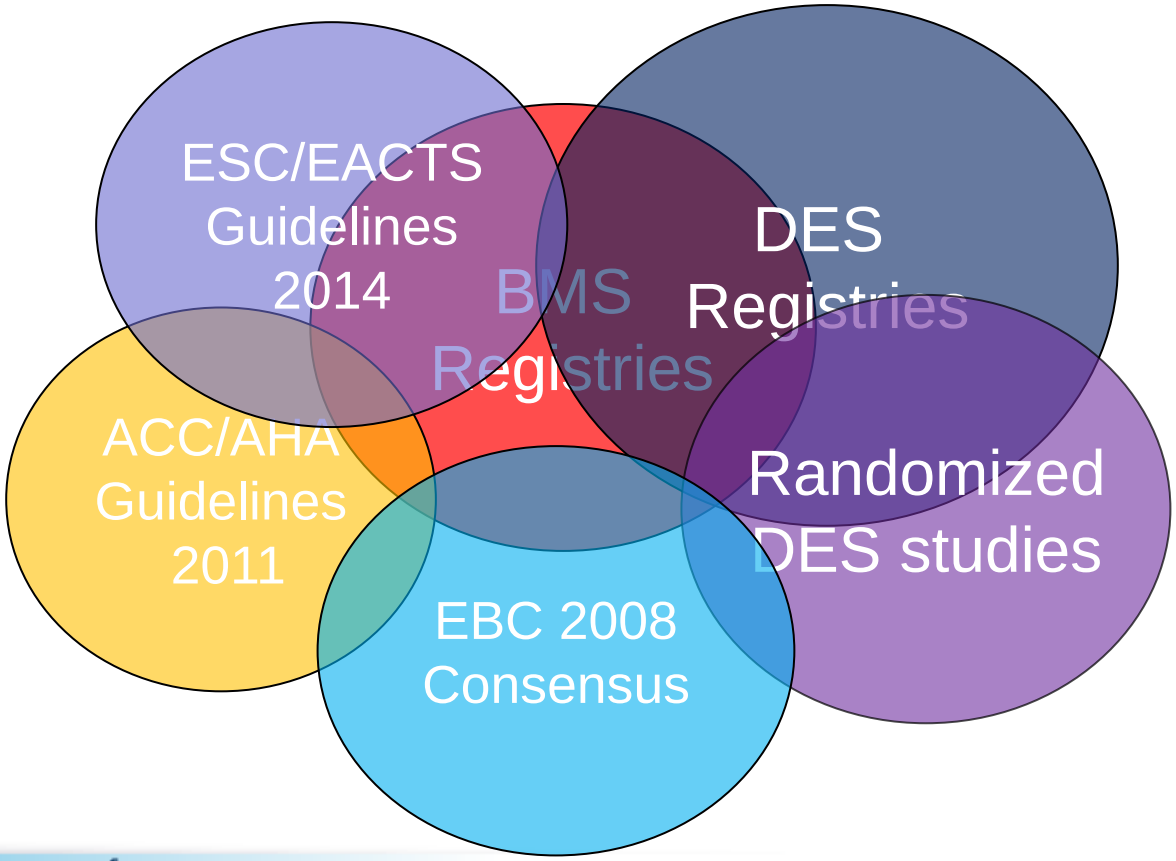
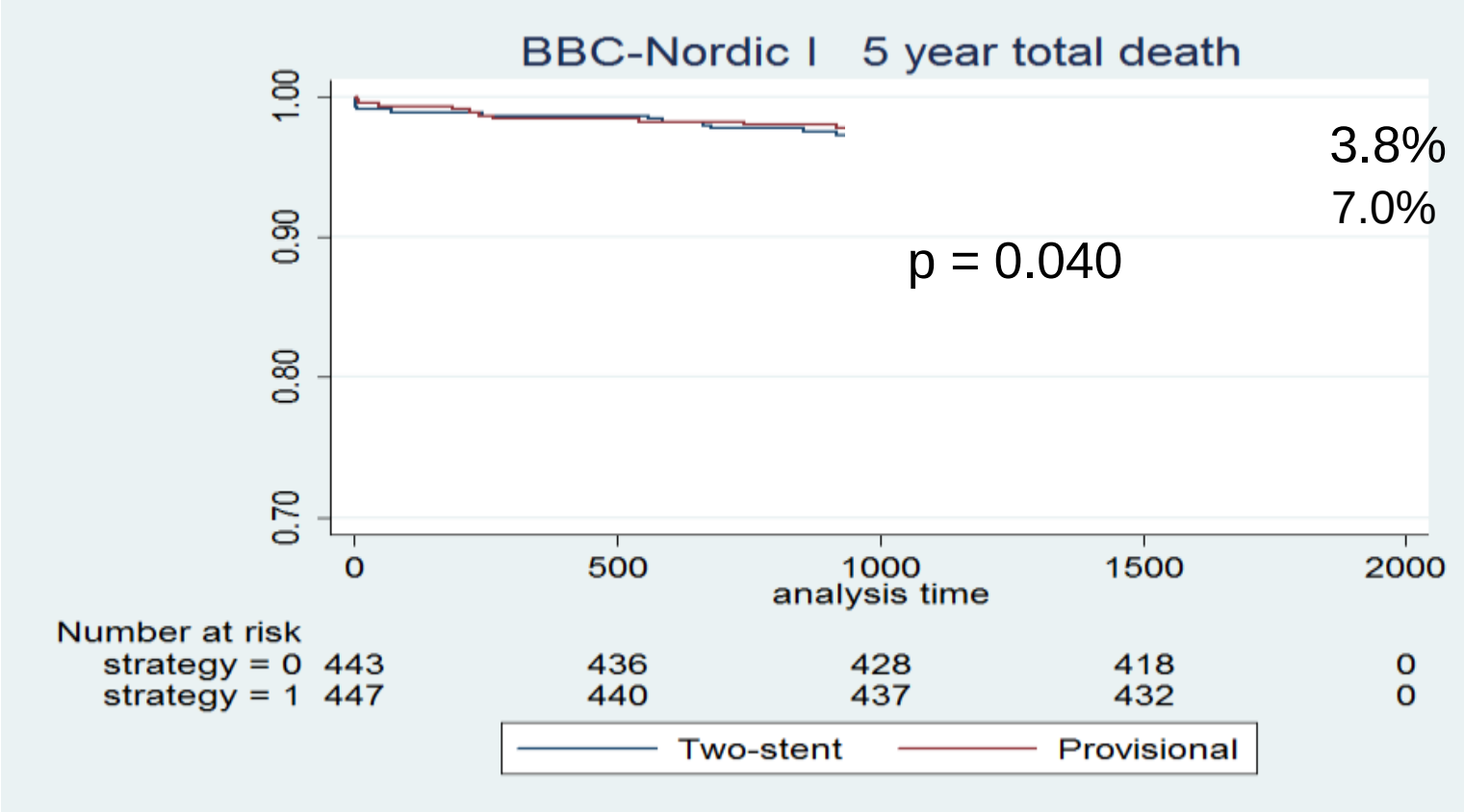
• Intellectual Property Rights	
• Other Financial Benefit	

Provisional Side Branch Stenting Should Be the Default Approach



BBC-Nordic: 5-year Death



Cox proportional hazards model stratified by study

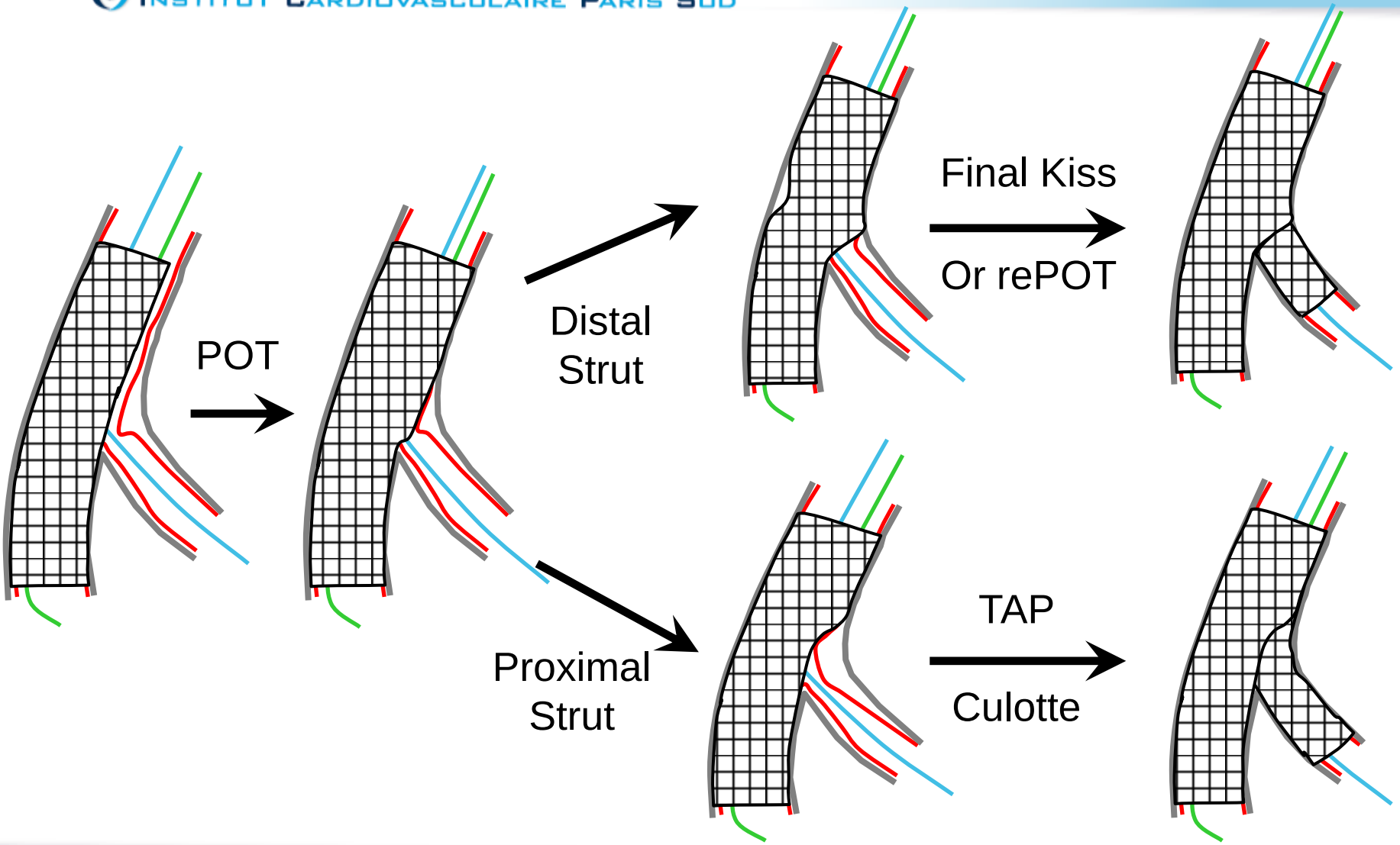
Behan et al. European Heart J 2016; 37: 1923-8

One stent when we can

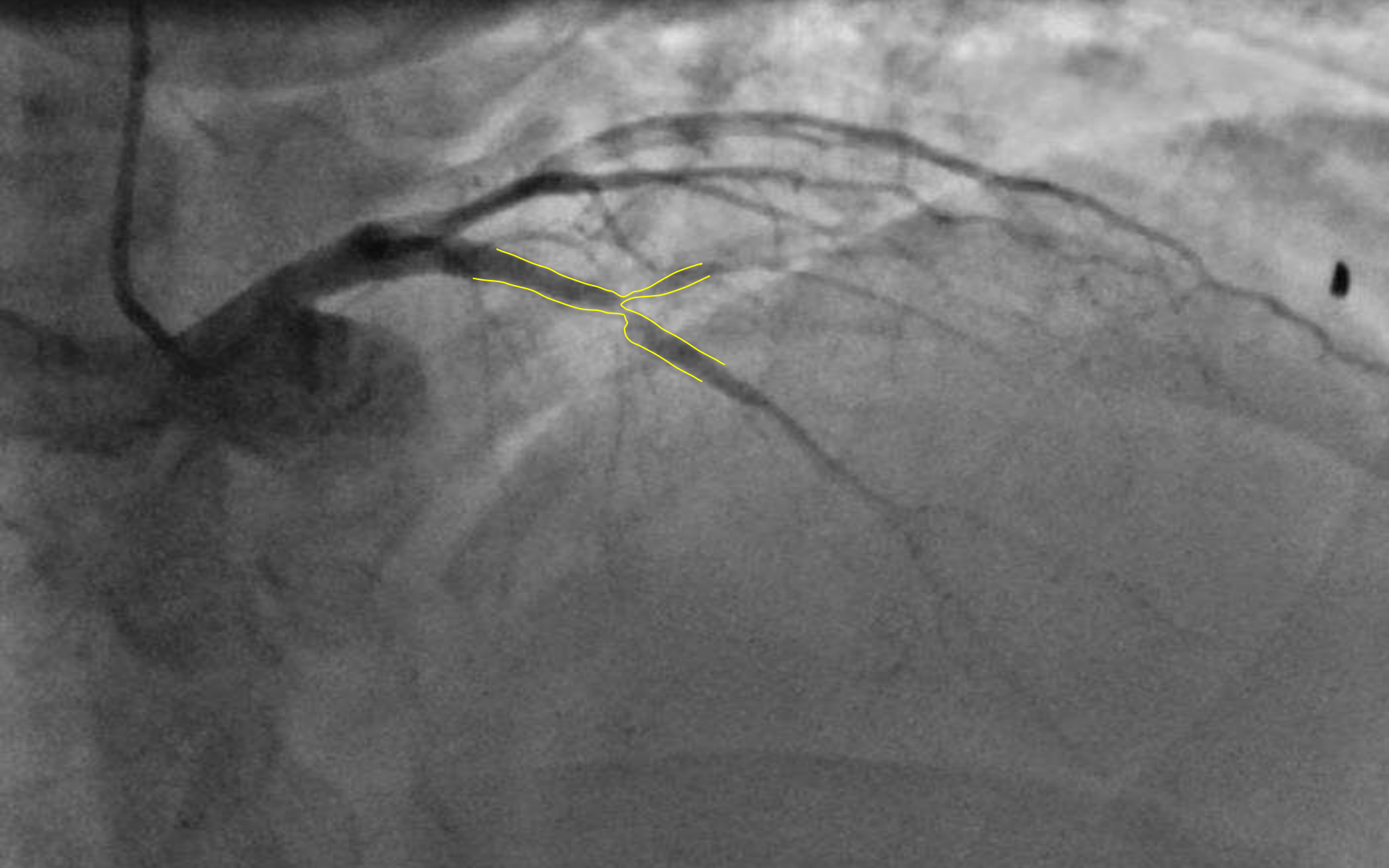
Optimal strategy for high success rate and low need for SB stenting

Two stents when needed

Optimal mastering of two stent techniques


POT
Distal
Strut
Final Kiss
Or rePOT
Proximal
Strut
TAP
Culotte

Mr Per... 63 years old, ACS



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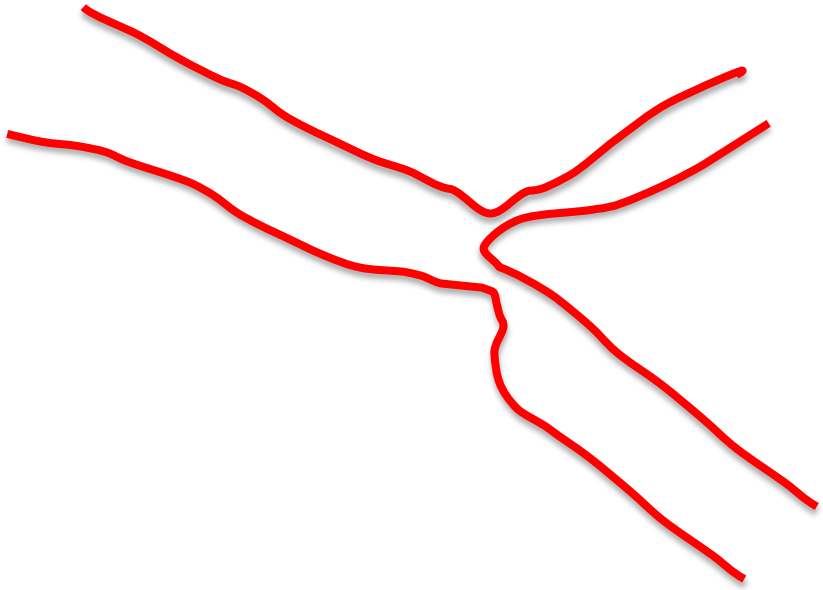


Medina 1,1,1

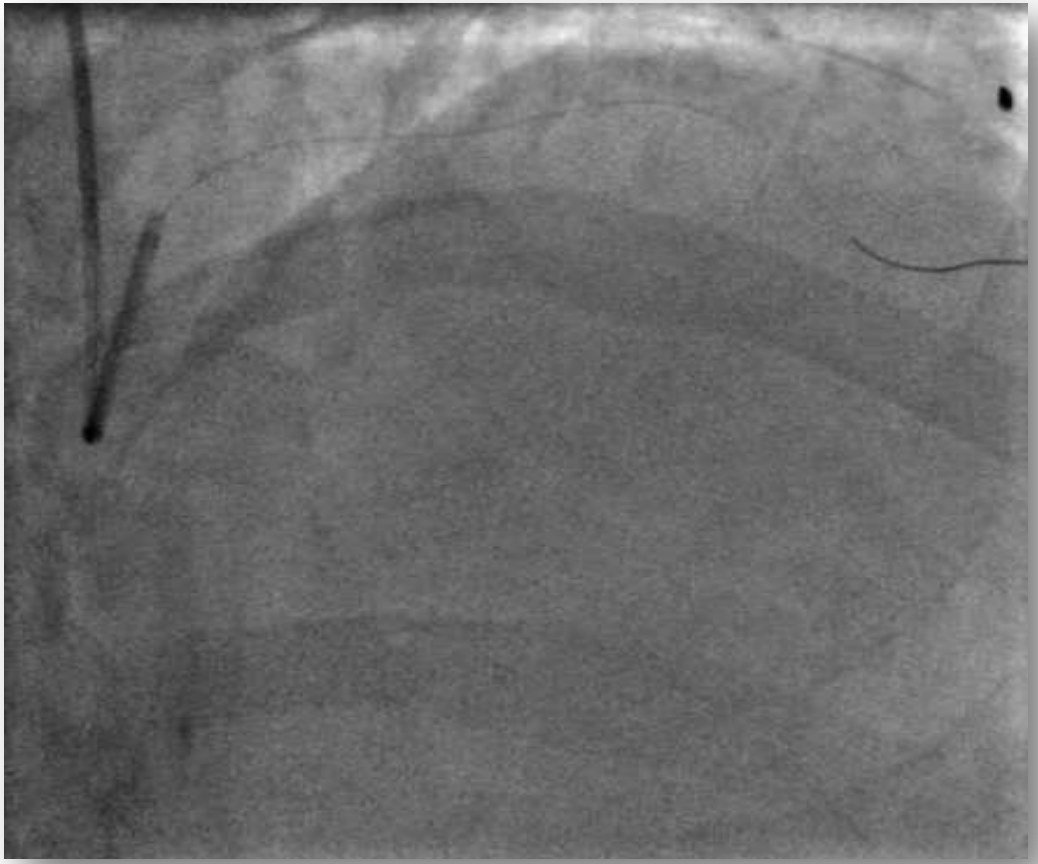
SB ref. 1.9 mm

SB Lesion lenght < 3 mm

MB prox. Ref. 2.8 mm

MB distal ref. 2.5 mm

Mr Per... 63 years old, ACS



Right TRA

EBU 3.5 6F

Runthrough SB

Mr Per... 63 years old, ACS

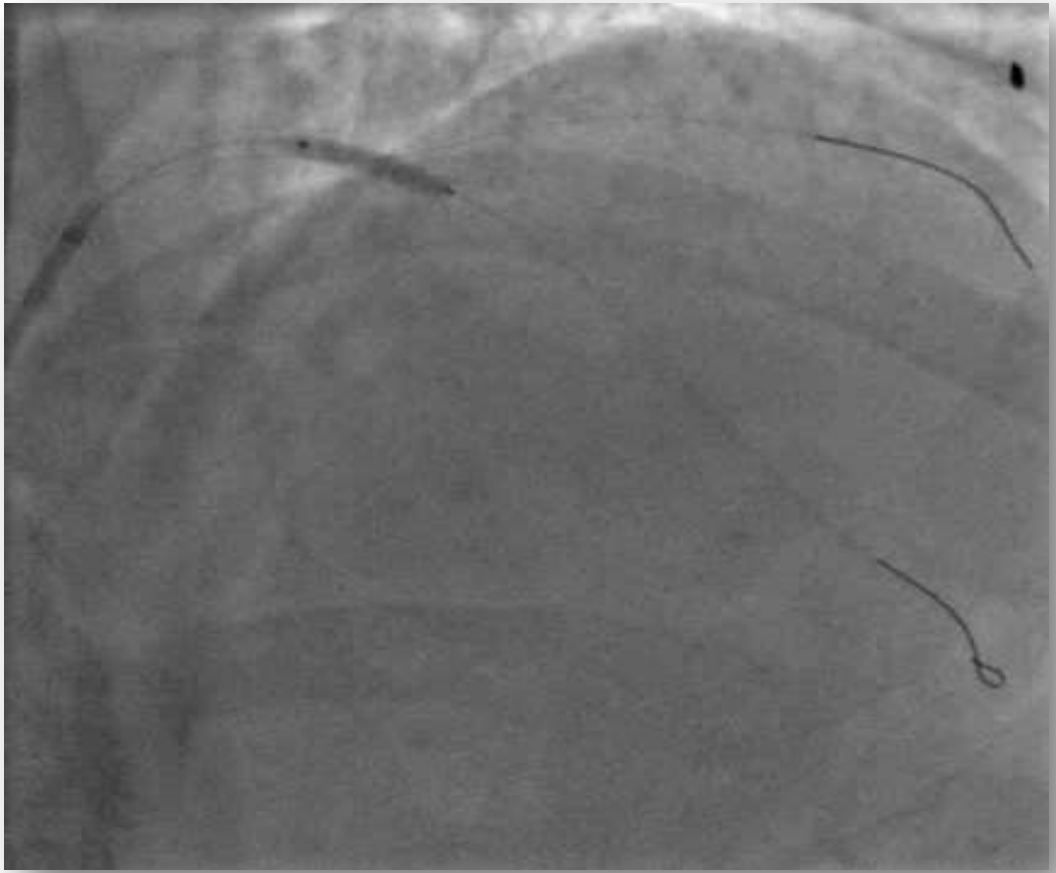
Right TRA

EBU 3.5 6F

Runthrough SB

Runthrough MB

Mr Per... 63 years old, ACS



Right TRA

EBU 3.5 6F

Runthrough SB

Runthrough MB

Xience 2.75 x18

Mr Per... 63 years old, ACS

Right TRA

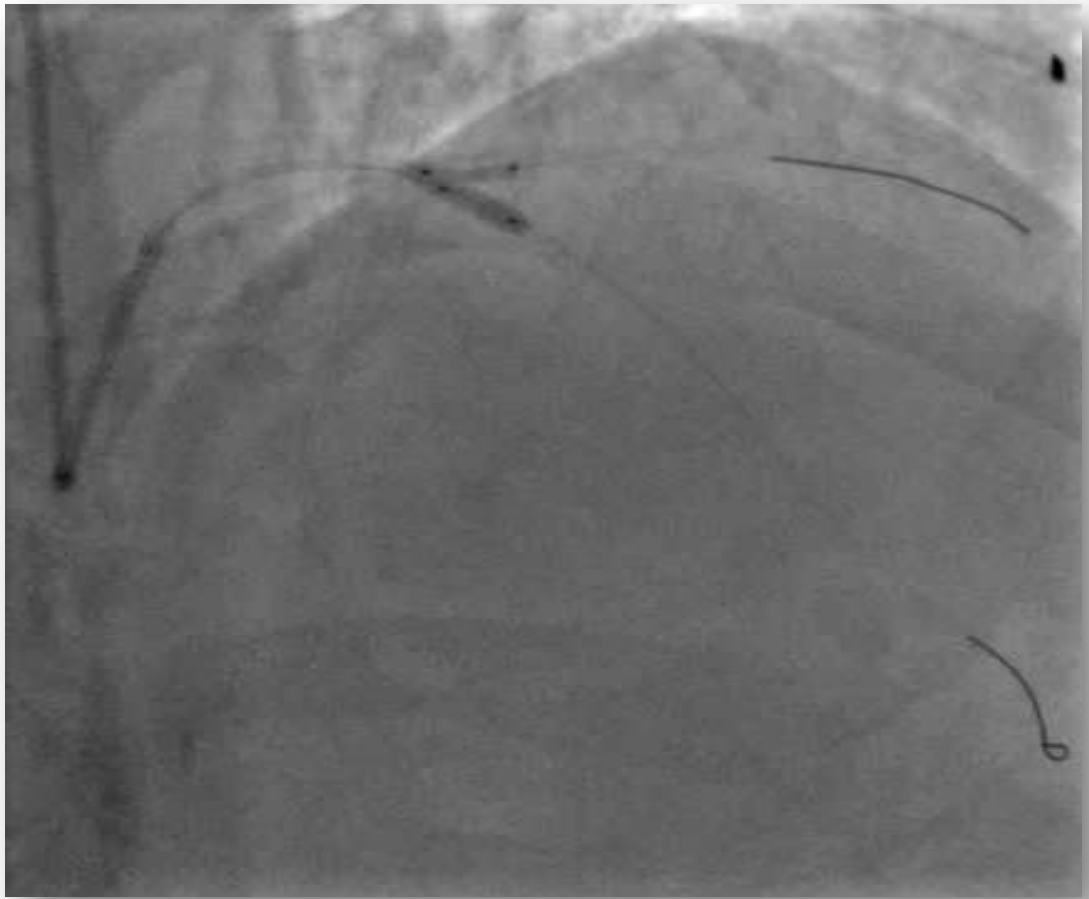
EBU 3.5 6F

Runthrough SB

Runthrough MB

Xience 2.75 x18

Mr Per... 63 years old, ACS



Right TRA

EBU 3.5 6F

Runthrough SB

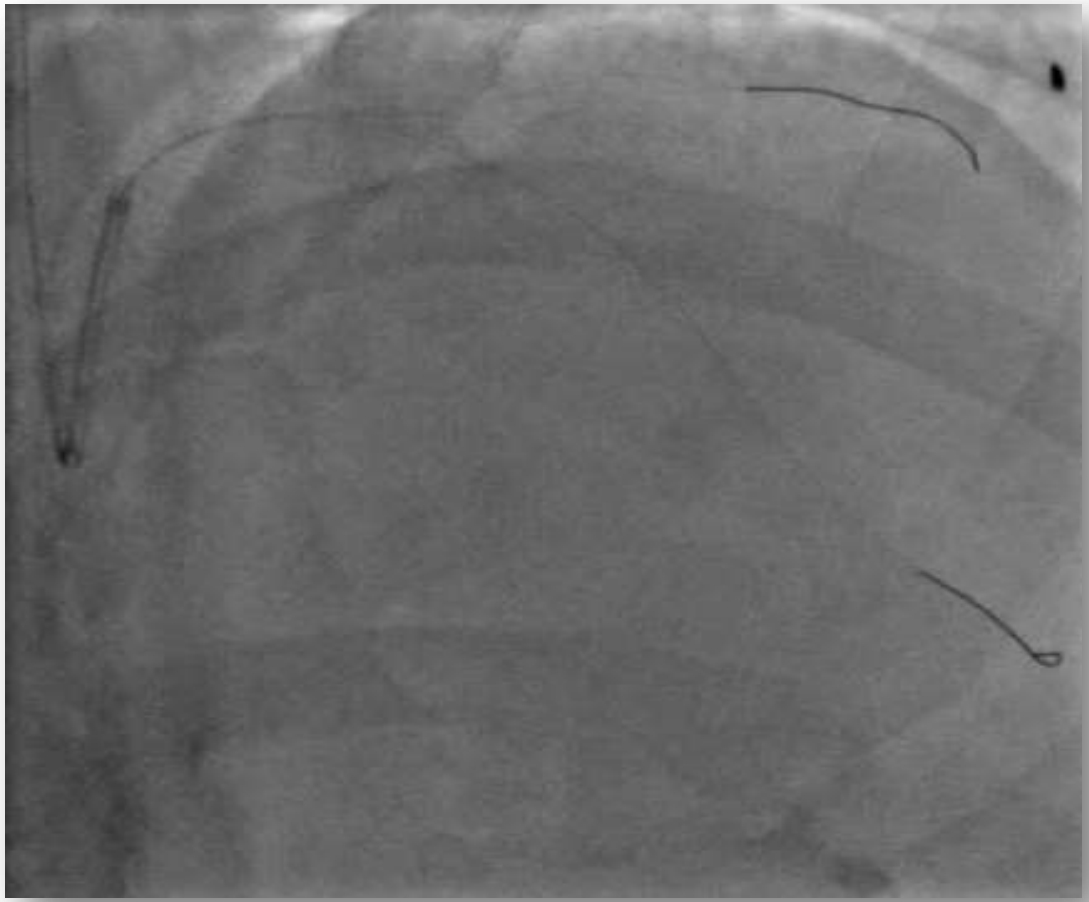
Runthrough MB

Xience 2.75 x18

Hiryu 2.25x10

Hiryu 2.75x10

Mr Per... 63 years old, ACS

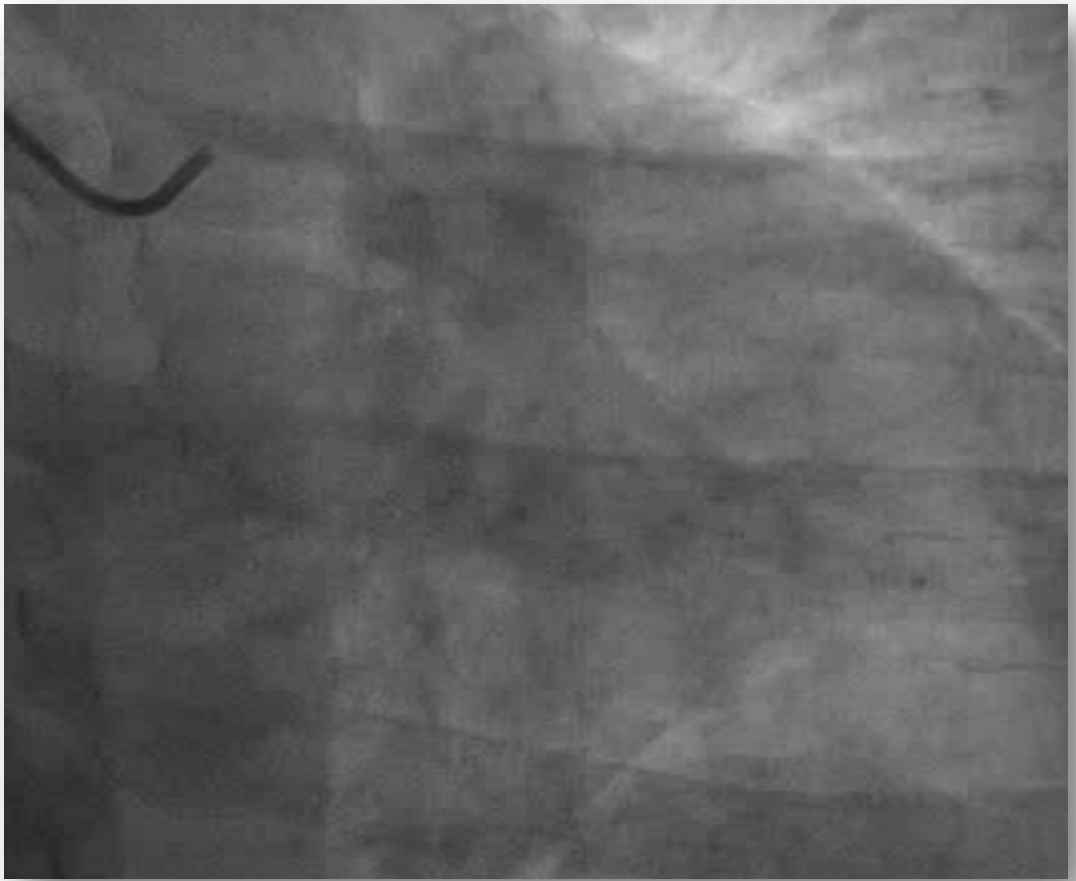


CM 72 cc

Fluoro 8.1 min.

AK 0.61 Gray

Mr Thu... 40 years old, ACS



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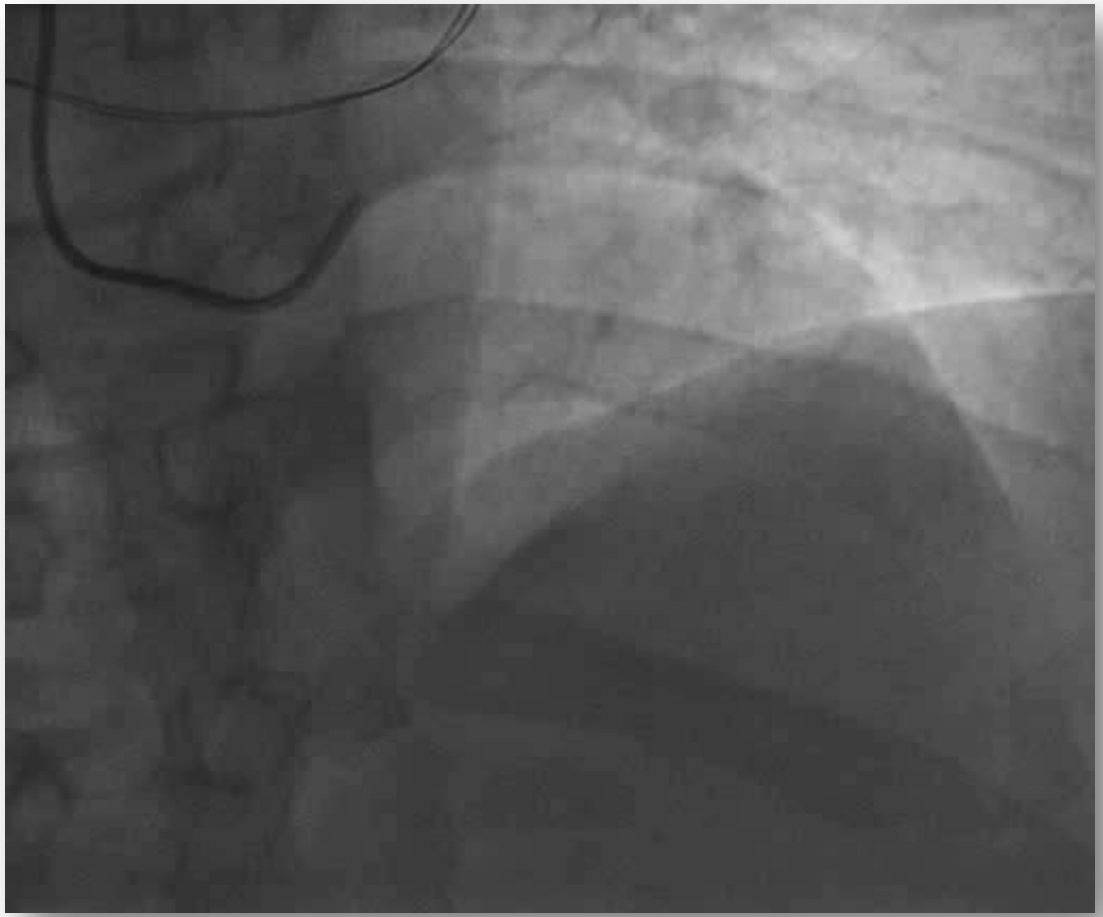

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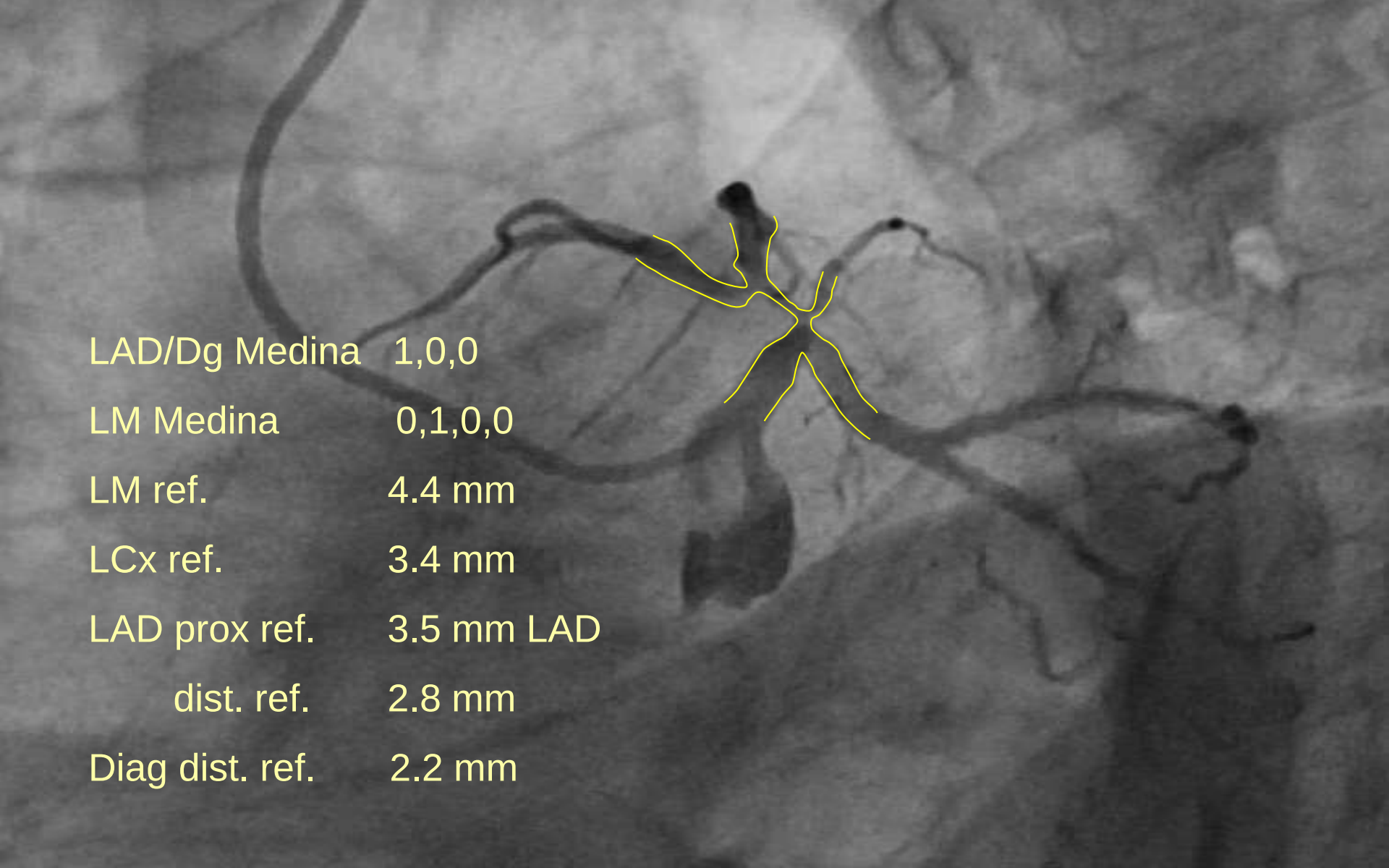
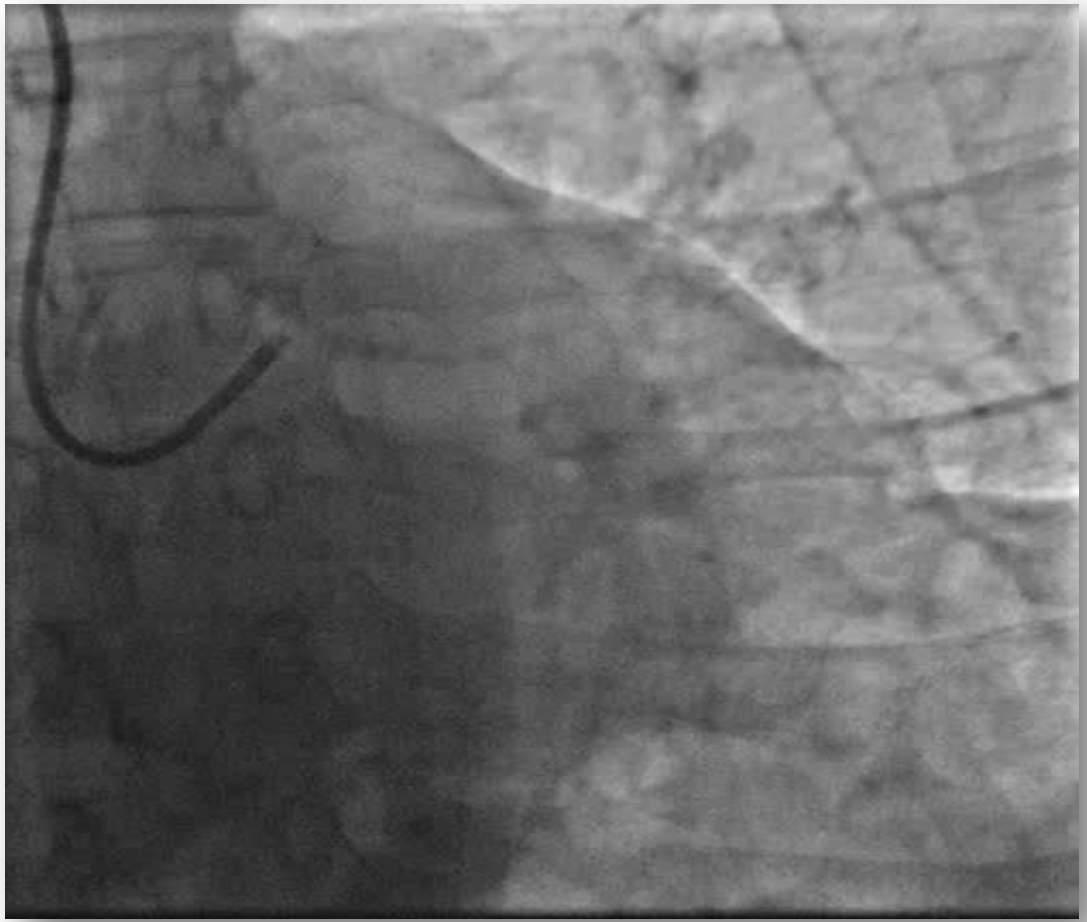

LAD/Dg Medina 1,0,0
LM Medina 0,1,0,0
LM ref. 4.4 mm
LCx ref. 3.4 mm
LAD prox ref. 3.5 mm LAD
dist. ref. 2.8 mm
Diag dist. ref. 2.2 mm

Mr Thu... 40 years old, ACS



Right TRA

EBU 3.5 6F

Mr Thu... 40 years old, ACS

Right TRA

EBU 3.5 6F

Runthrough LCx

Runthrough Dg

Runthrough LAD

Mr Thu... 40 years old, ACS

Right TRA

EBU 3.5 6F

Runthrough LCx

Runthrough Dg

Runthrough LAD

Nobori 3.0x28

Mr Thu... 40 years old, ACS

POT LAD

3.0 @ 20 atm.

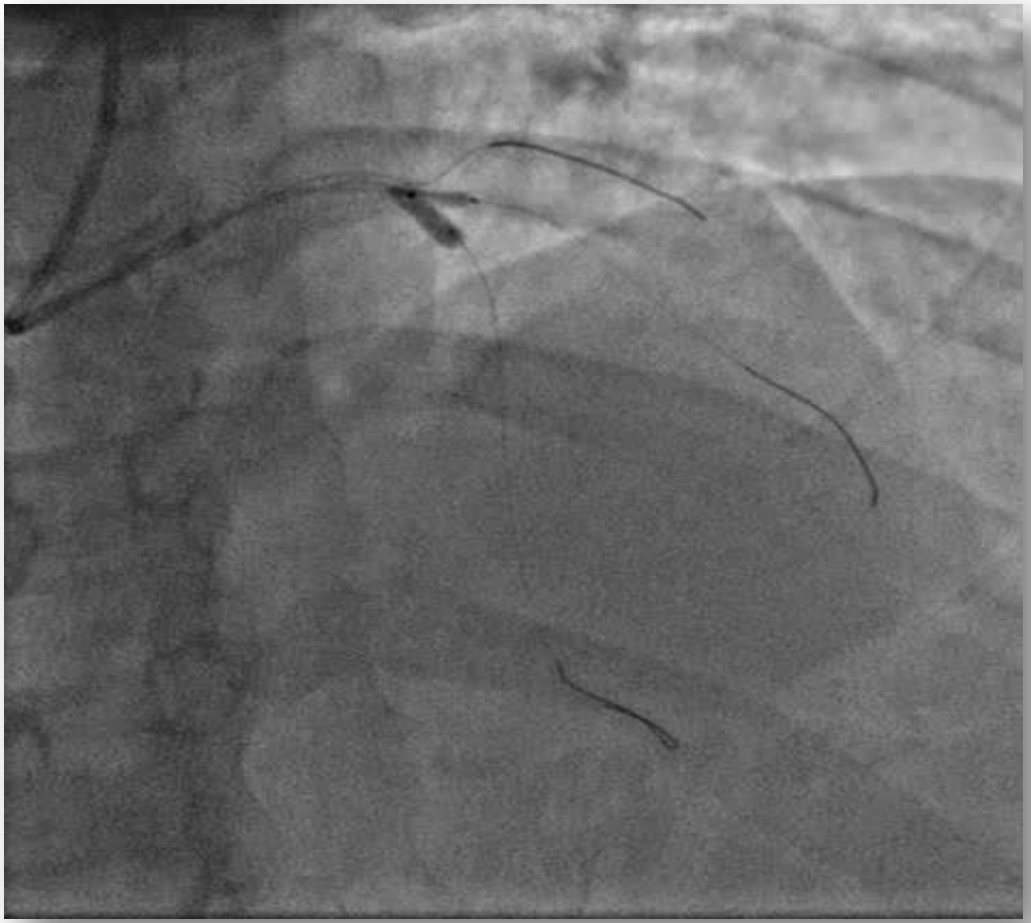
Mr Thu... 40 years old, ACS

POT LM

Hiryu 4.5 mm

@ 20 atm.

Mr Thu... 40 years old, ACS



LAD wire in Dg

Dg wire in Circ

Circ wire in LAD

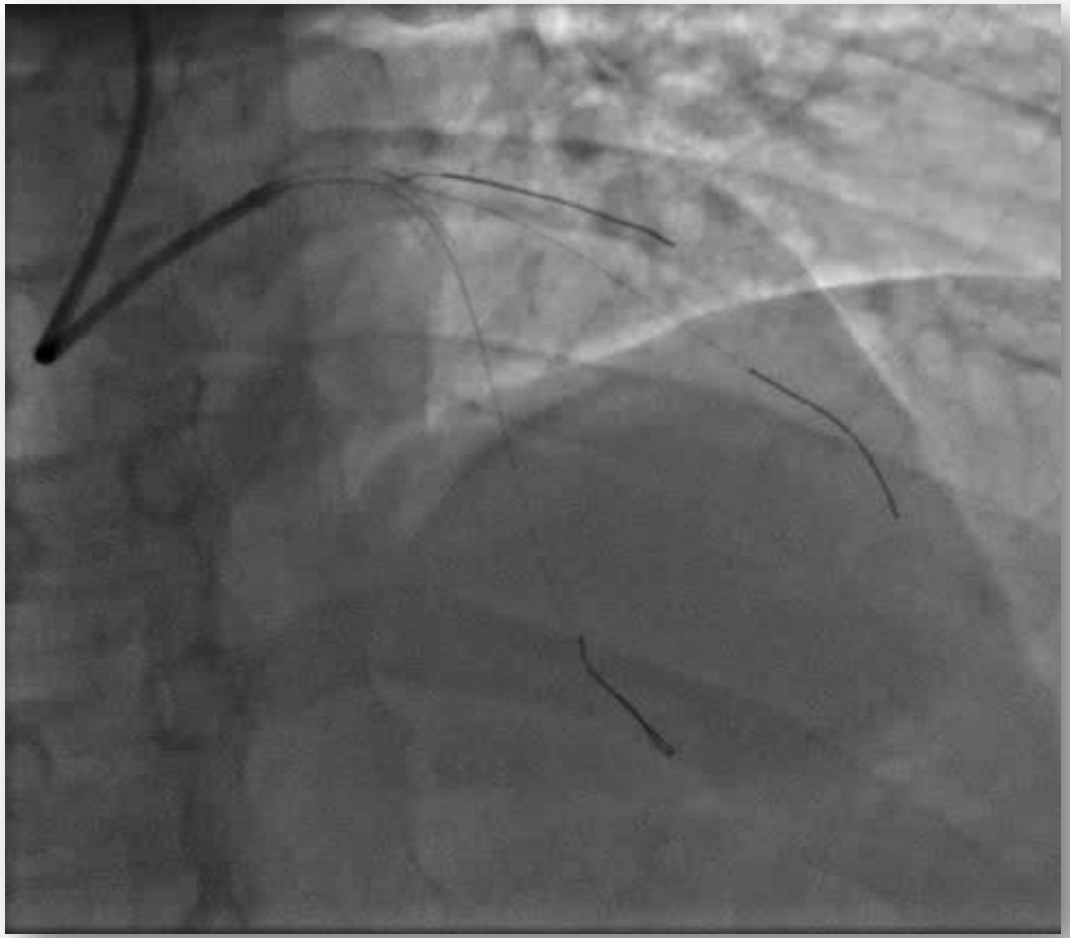
Kiss LAD/Dg

Hiryu 3.0 mm

Hiryu 2.25 mm

@ 14 atm.

Mr Thu... 40 years old, ACS



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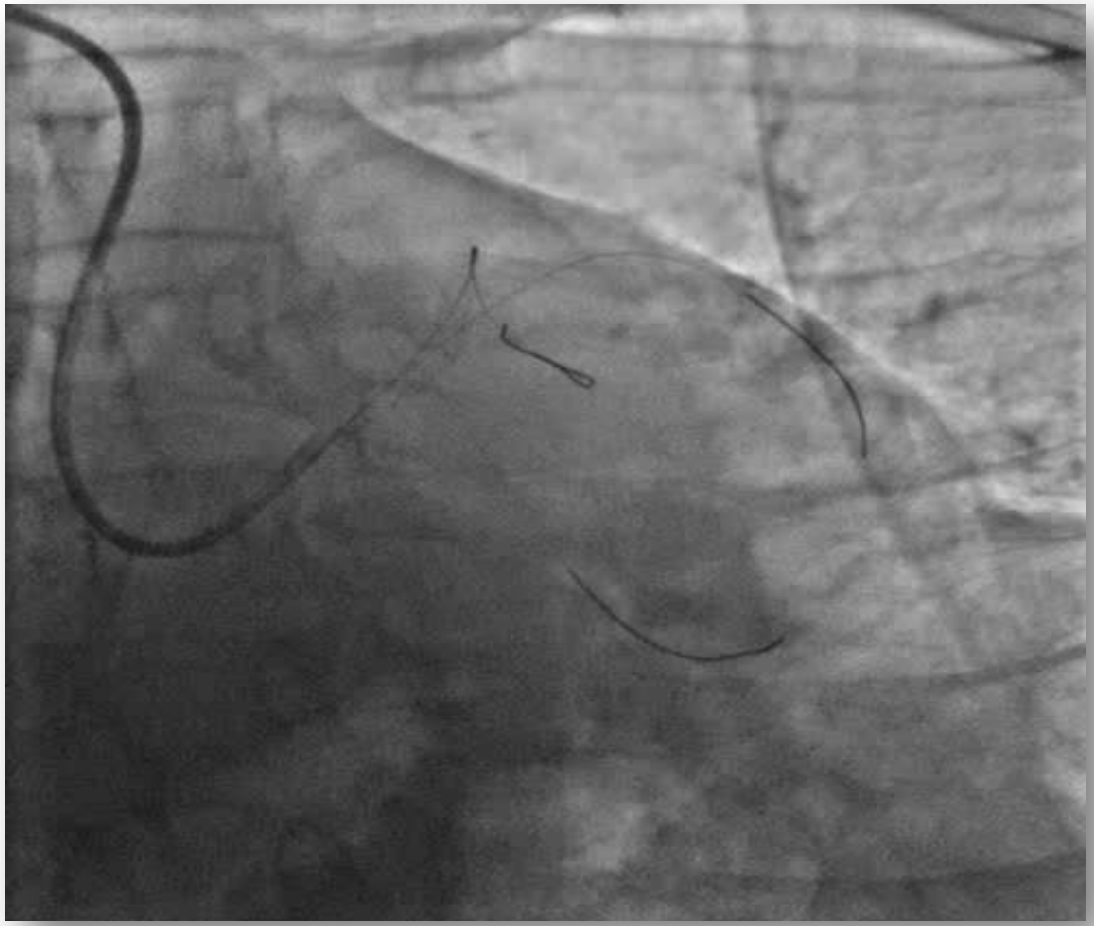

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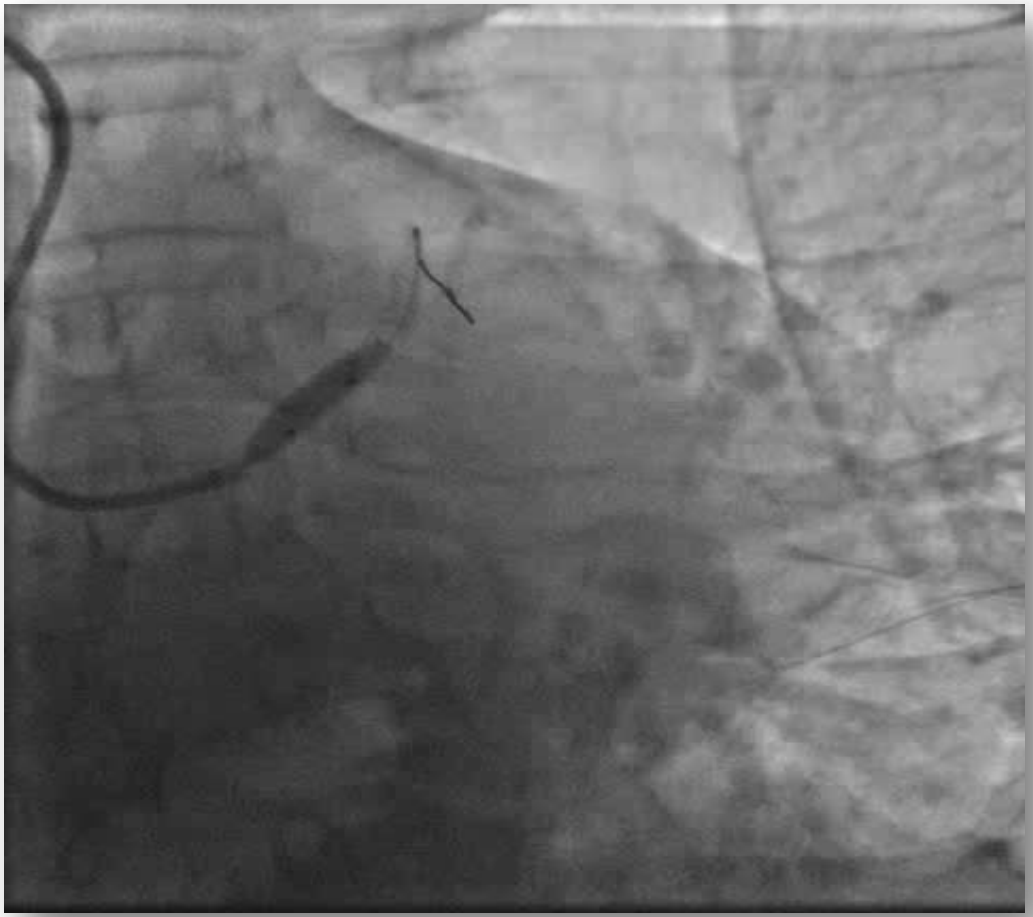
Kiss LAD/LCx

Hiryu 3.5 mm

Hiryu 3.25 mm

@ 14 atm.

Mr Thu... 40 years old, ACS

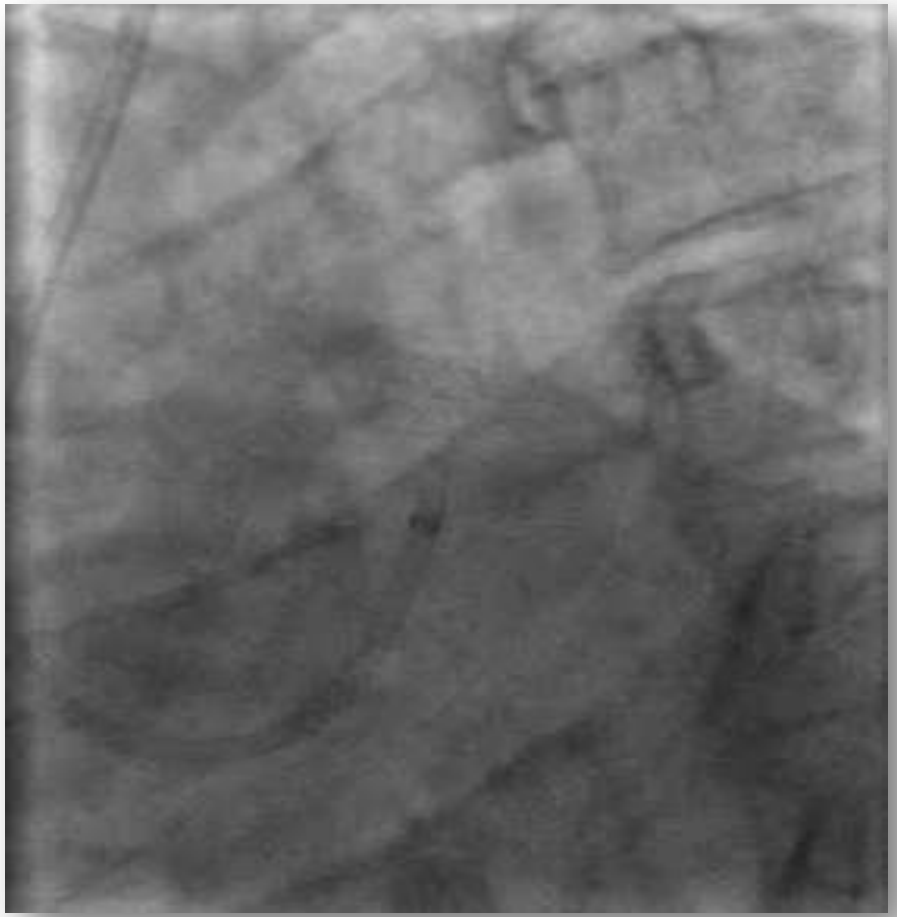


P0T

Hiryu 4.5 mm

@ 20 atm.

Mr Thu... 40 years old, ACS



CM 120 cc

Fluoro 12.8 min.

AK 0.79 Gray

Mr Thu... 40 years old, ACS

Take home message

Provisional side branch stenting approach can be used in the majority of cases with excellent long term outcomes.

The rate of success depends mainly on very simple rules:

- Optimal view and well defined strategy
- One wire in each branch
- MB stent size according to distal reference
- Liberal use of the POT technique
- Access toward the distal strut
- Non compliant balloons for kissing

For more technical informations:

EBC consensus, Eurointervention (2004 to 2016)

Bifurcation supplement, Eurointervention 2011 and 2015

Updated bifurcation chapter, PCR-EAPCI textbook 2014