



INSTITUT
CARDIOVASCULAIRE
PARIS
SUD

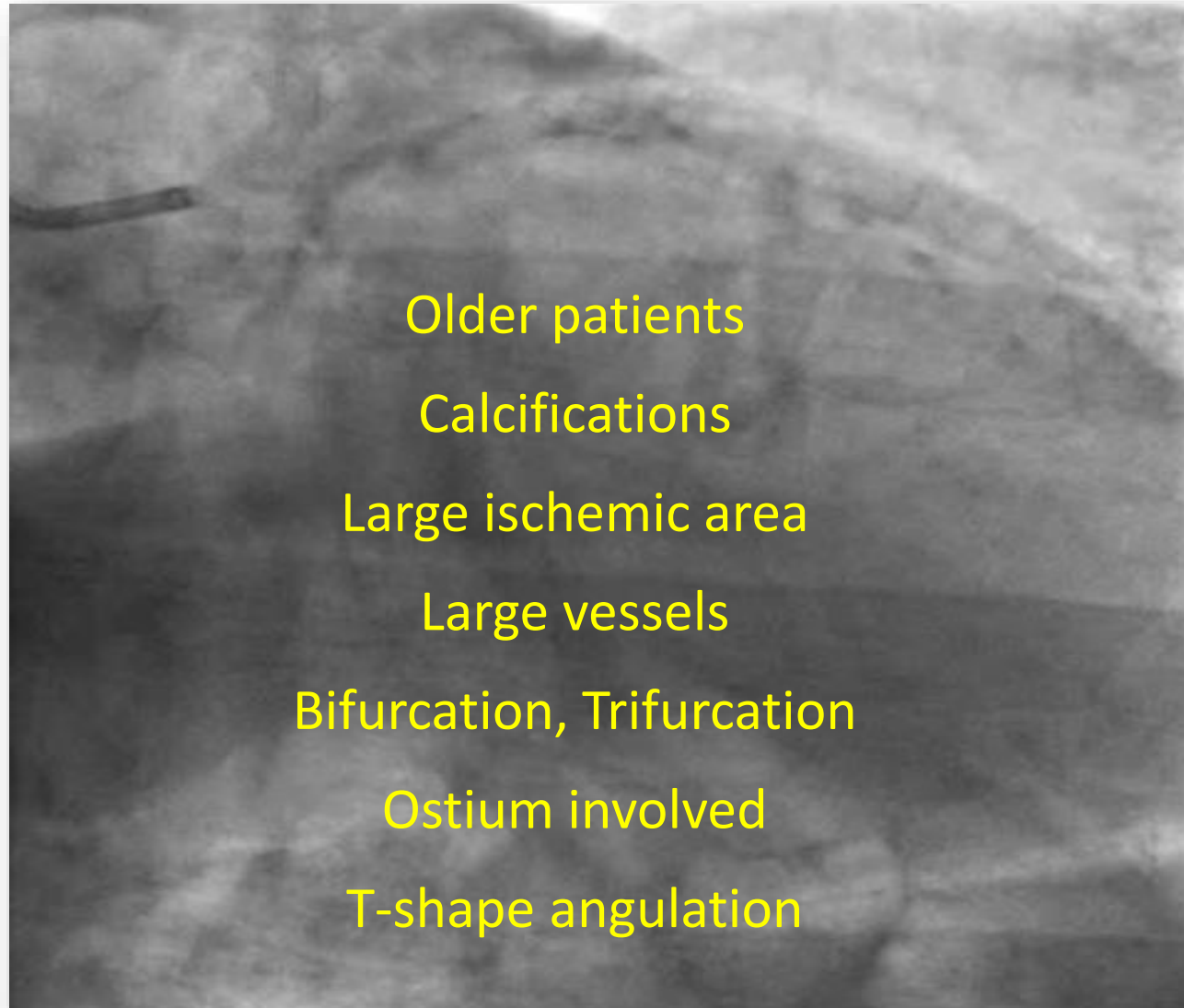
Distal LM Bifurcation PCI

Pioneer's Advisor

Thierry Lefèvre



What is special with the LM ?

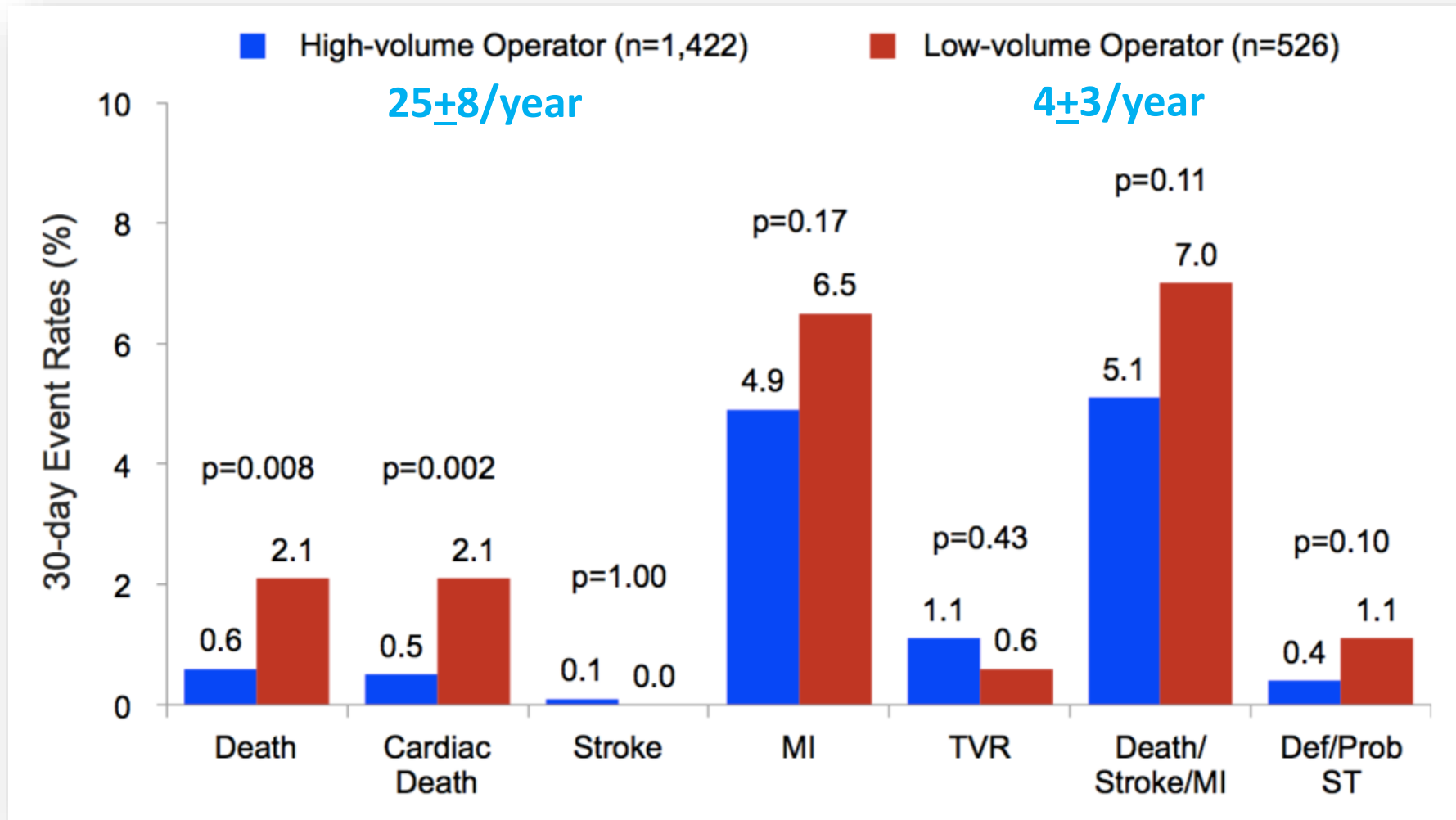


1. Learn with experienced friends

Predictors of 3 years cardiac death after LM PCI

	Adjusted Hazard Ratio (95% Confidence Interval)	p Value
Experienced operator	0.49 (0.29, 0.83)	0.009
Left ventricular ejection fraction	0.47 (0.35, 0.62)	<0.0001
SYNTAX score	1.03 (1.00, 1.07)	0.057
Previous myocardial infarction	1.79 (1.00, 3.22)	0.051
Age (per 10 years)	1.19 (0.84, 1.67)	0.33
Creatinine clearance (per 10 units)	0.95 (0.83, 1.09)	0.48
Intravascular ultrasound use	0.62 (0.34, 1.14)	0.13
Second-generation DES*	0.45 (0.18, 1.14)	0.09

1. Learn with experienced friends



2. Intracoronary imaging

EBC Consensus

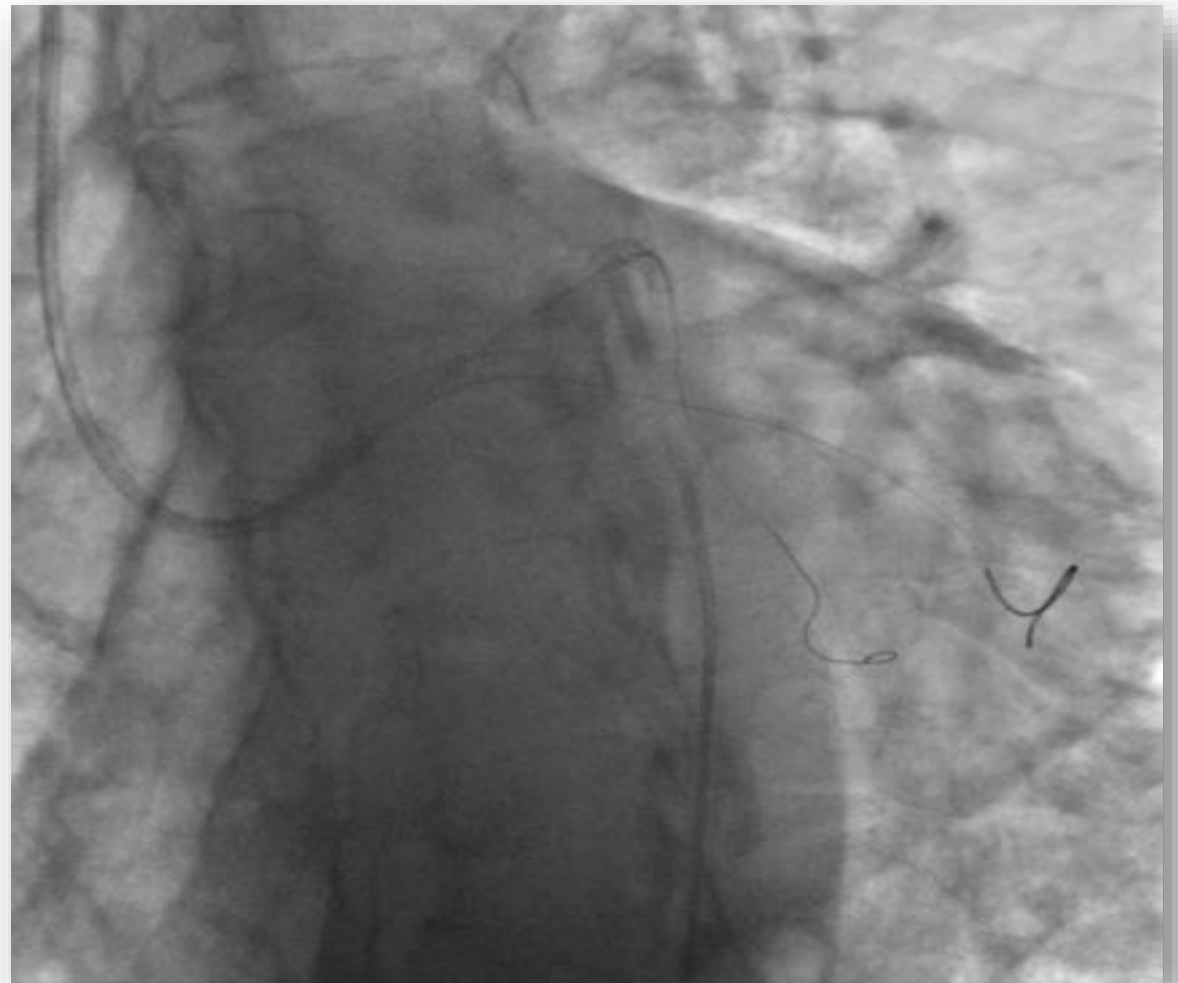
1. Should be available in the cathlab when performing LM stenting
2. Can be useful to understand lesion complexity
3. Can be useful after stent implantation

2. Intracoronary imaging

In my opinion

- ✓ Should always be used during the learning phase
- ✓ When something is going wrong
- ✓ When something is not clear

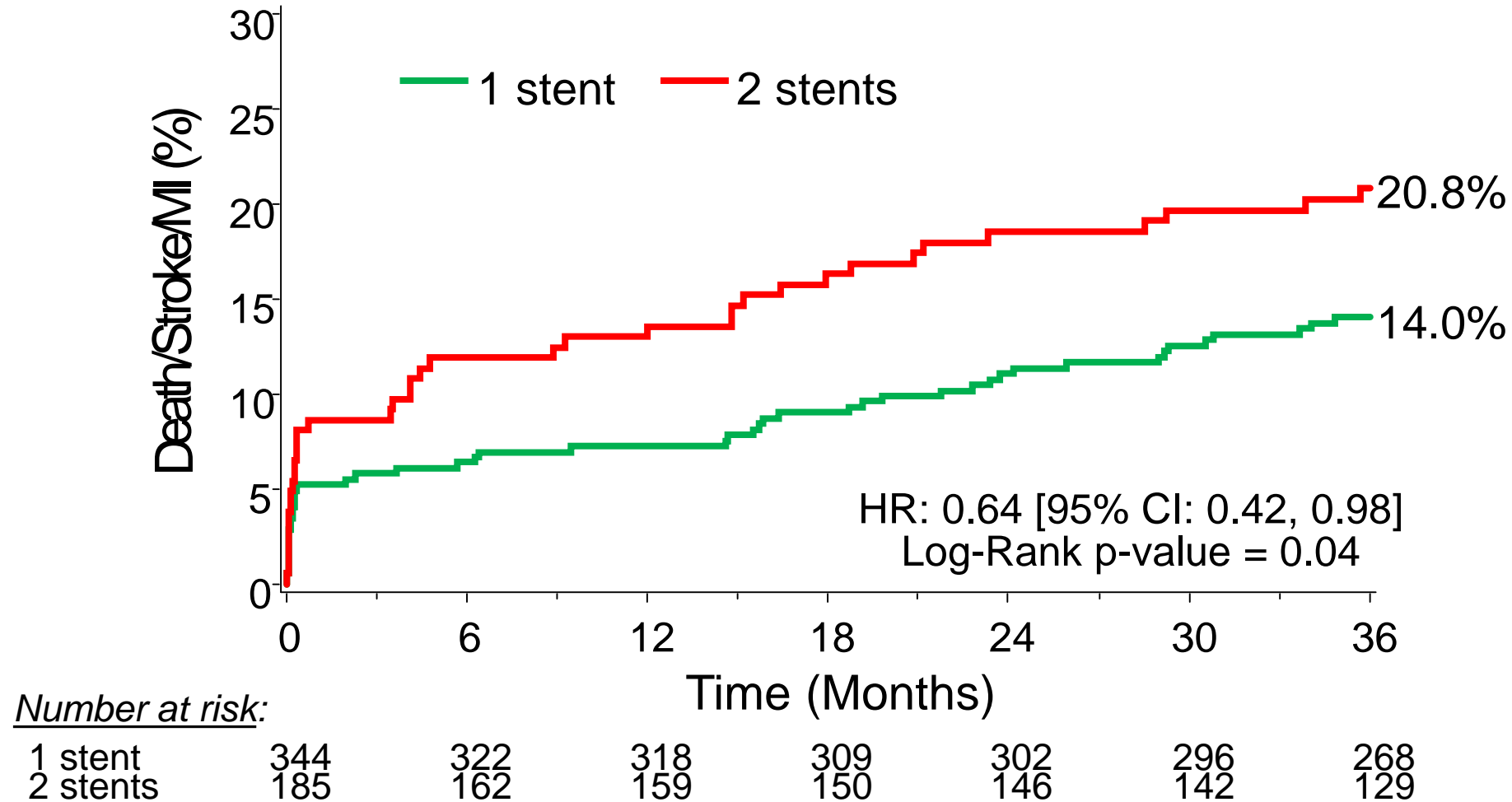
2. Intracoronary imaging



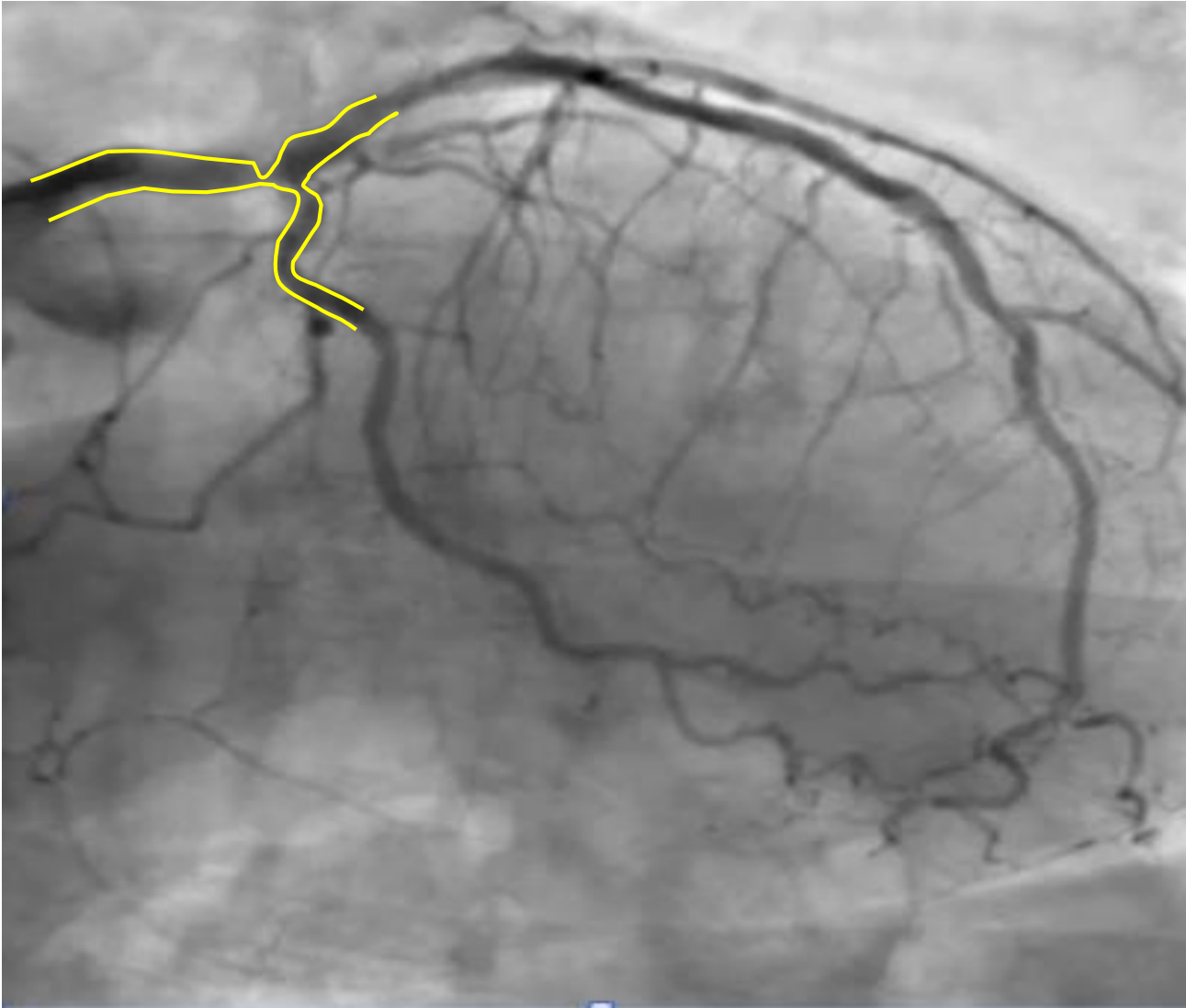
2. Intracoronary imaging



3. Take time to analyse the lesion and « think provisional »

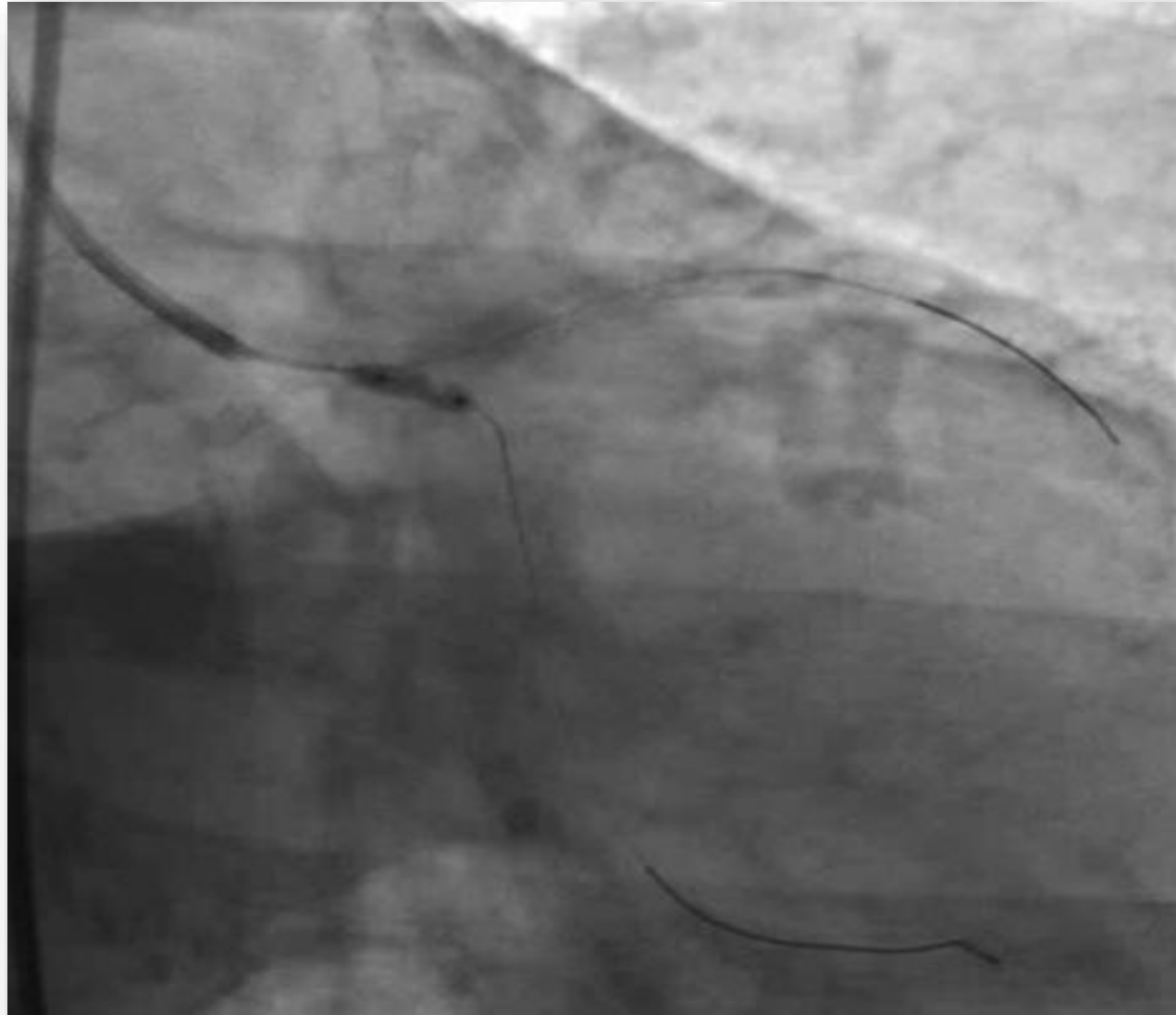


3. Take time to analyse the lesion and « think provisional »



- ✓ Good support
- ✓ IABP ?
- ✓ Rotablator ?
- ✓ 2 GW
- ✓ Provisional ?
- ✓ Stent towards LAD or LCx ?
- ✓ Stent diameter
- ✓ Were are the difficulties

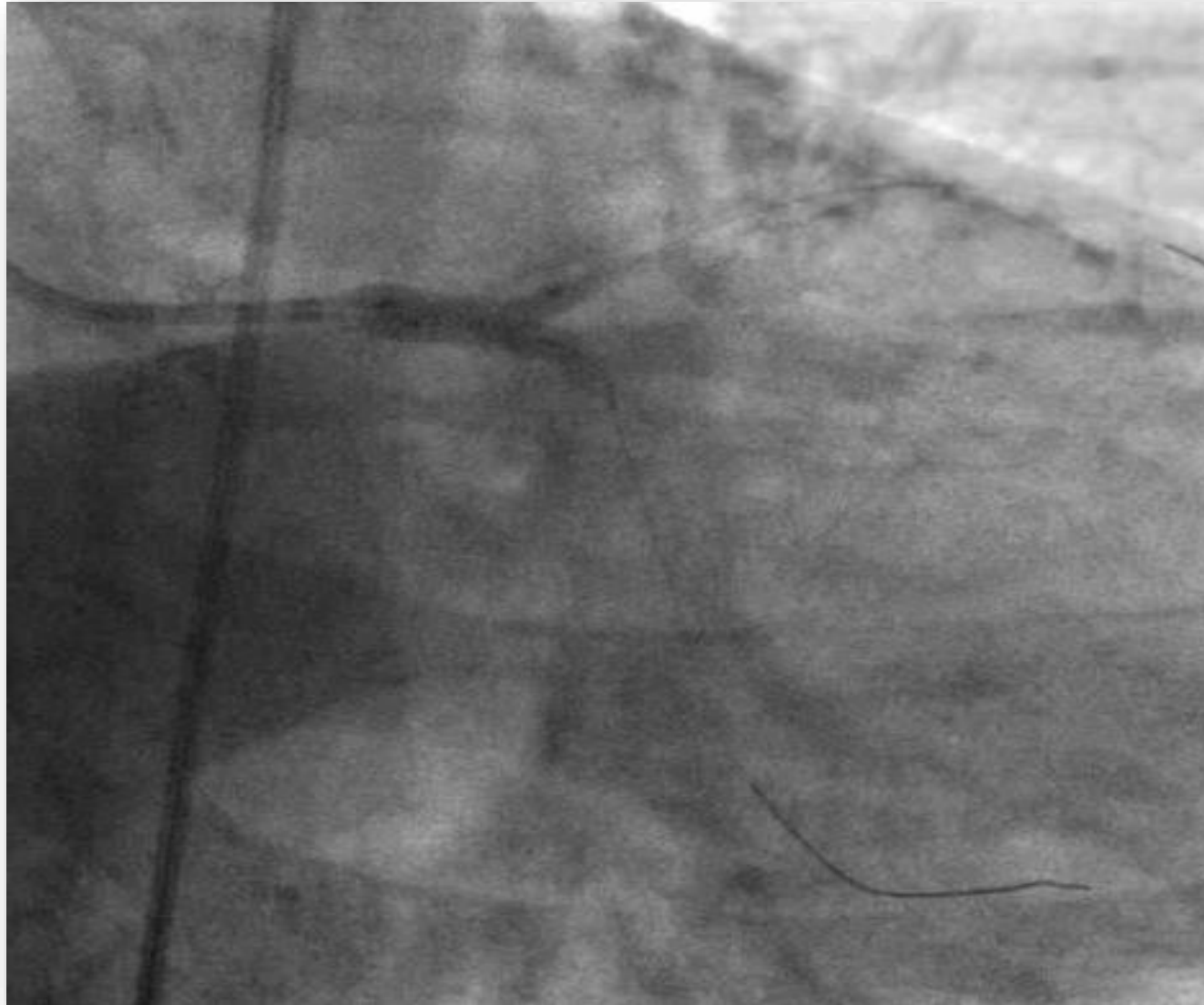
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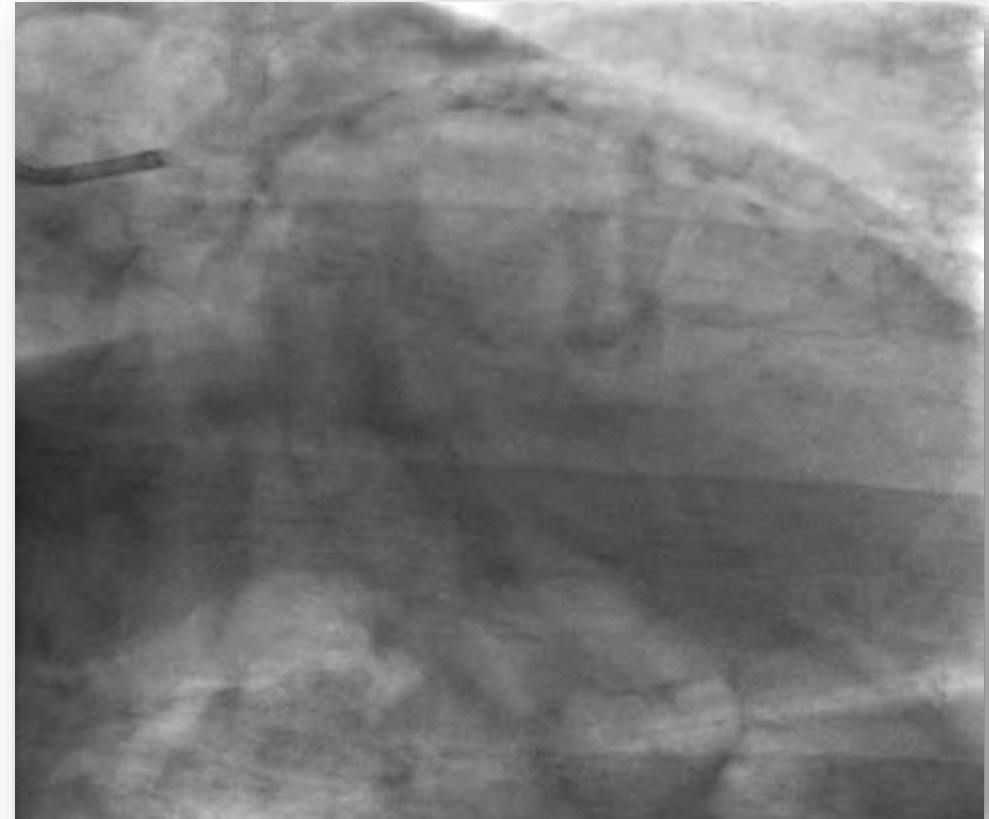
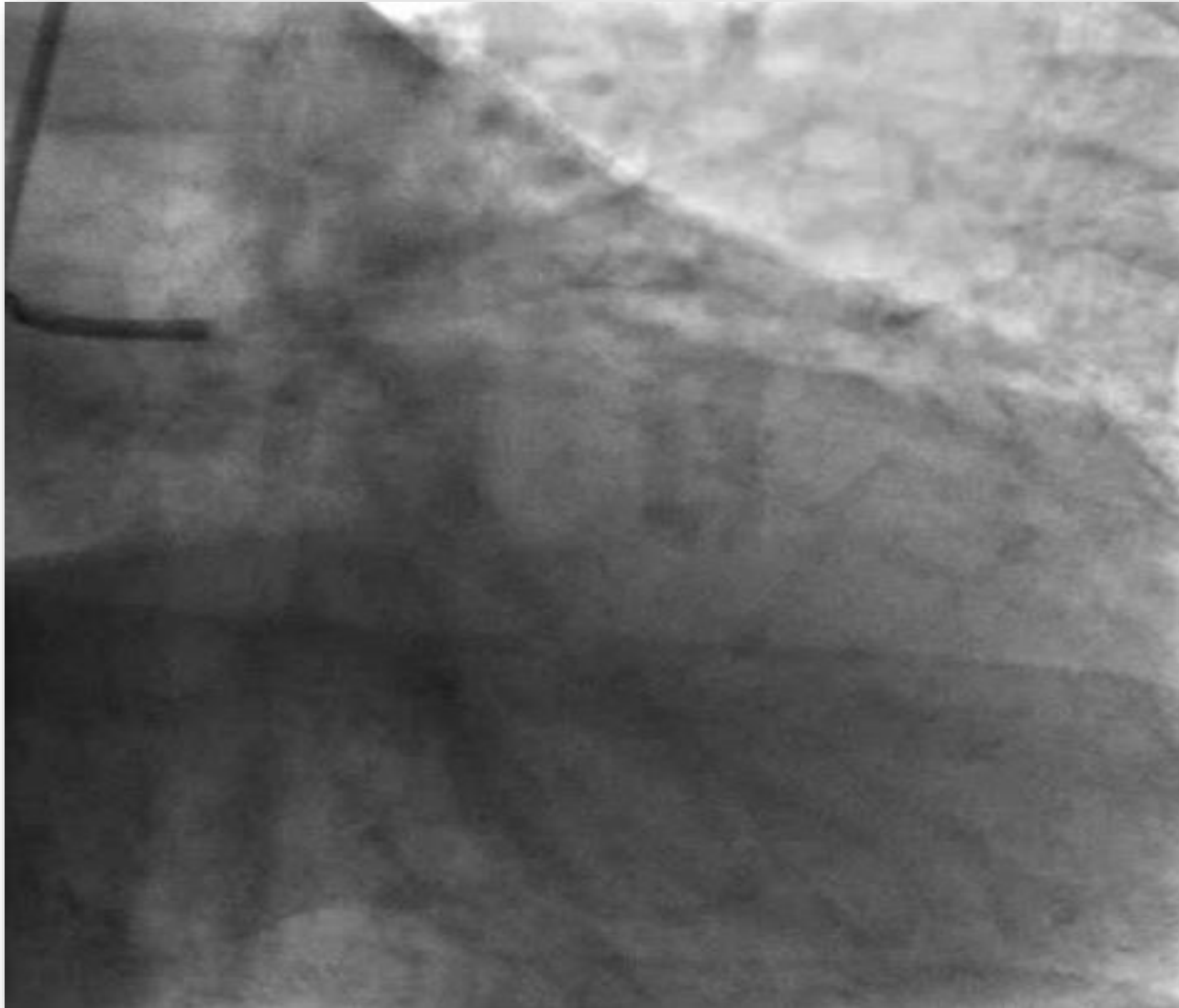
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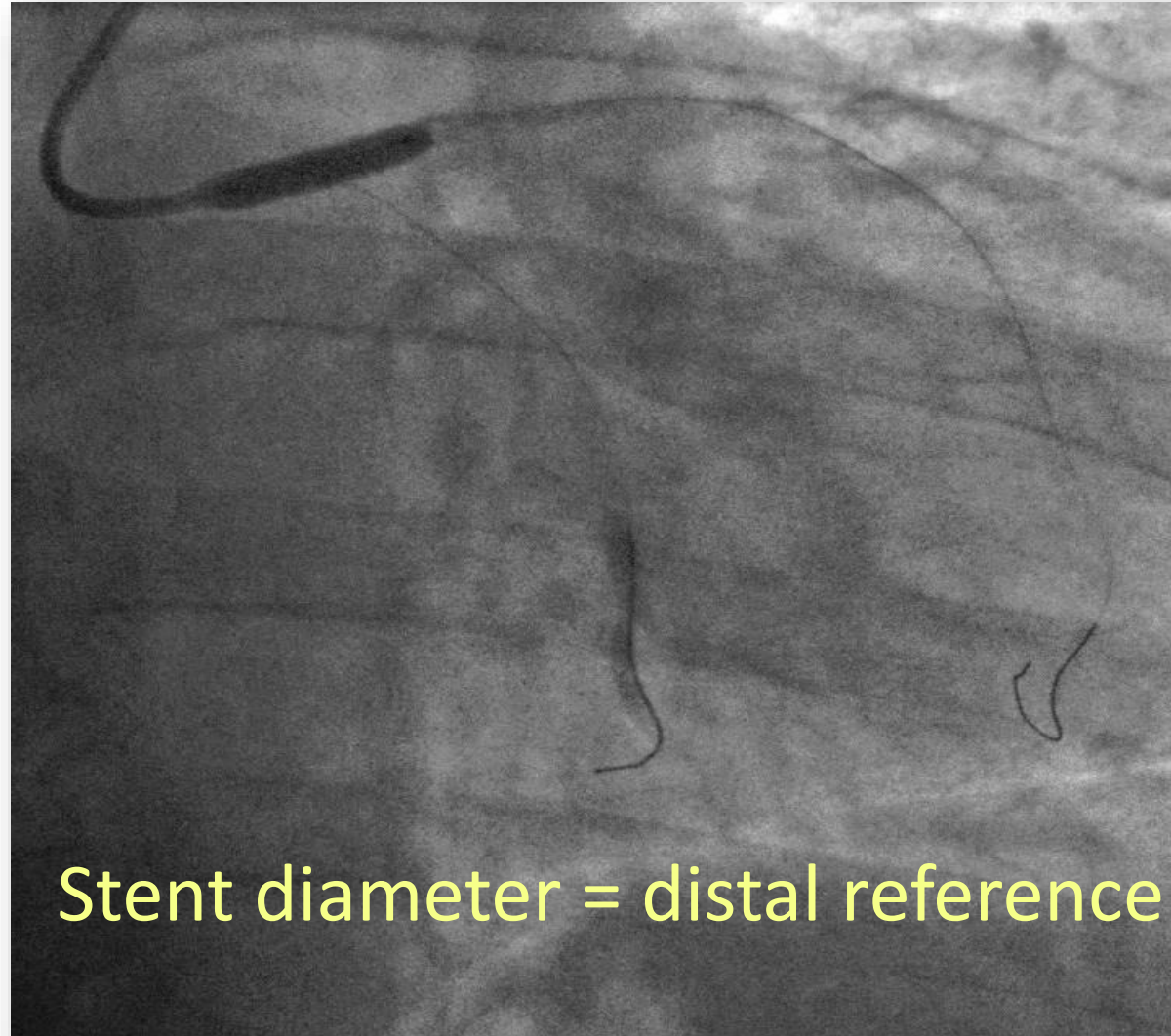


4. Select an optimal working view and respect the anatomy

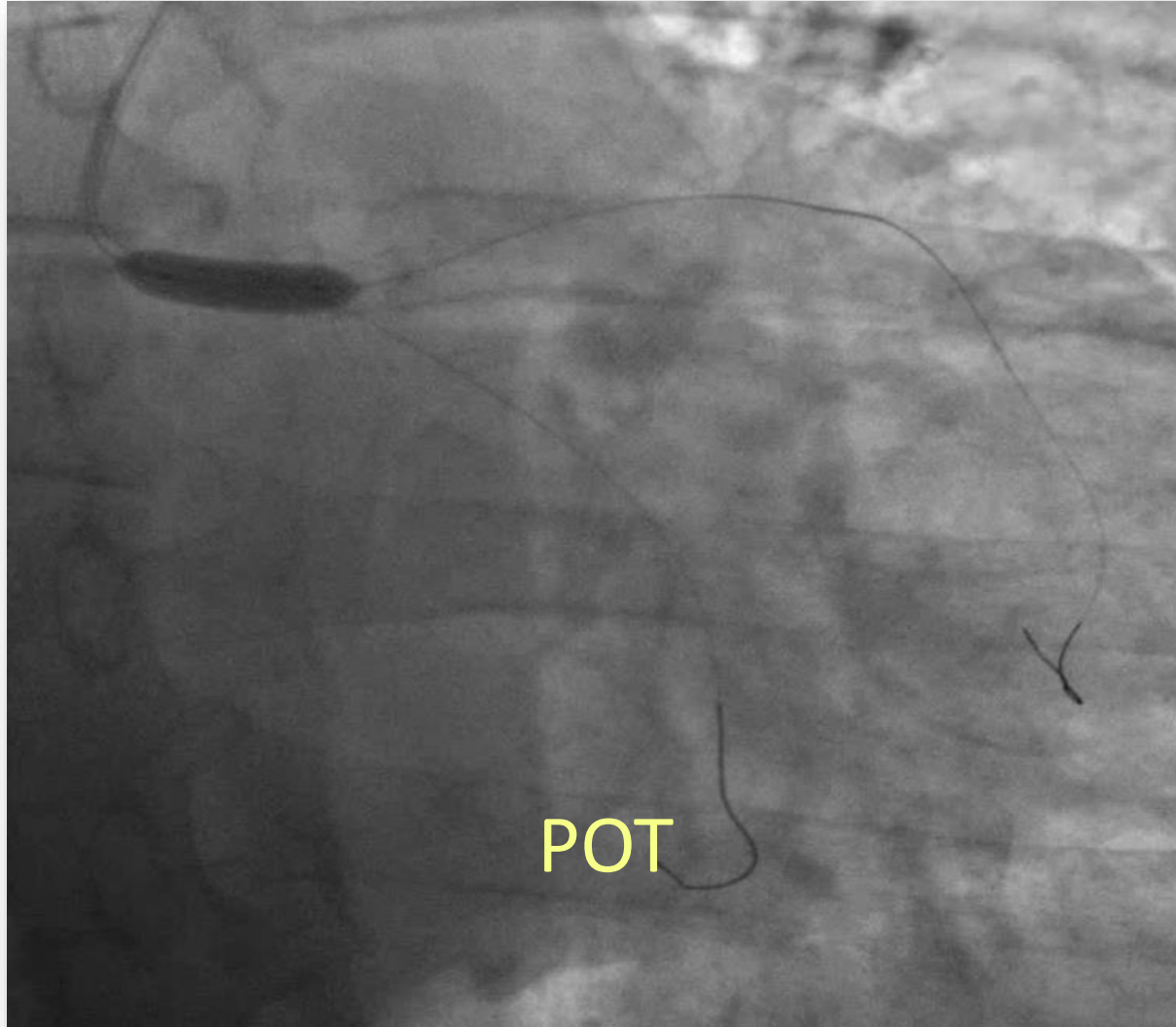


- ✓ Stability and safety
- ✓ 2 GW
- ✓ Proximal reference ?
- ✓ Stent towards LAD or Lcx ?
- ✓ Ostium scaffolding

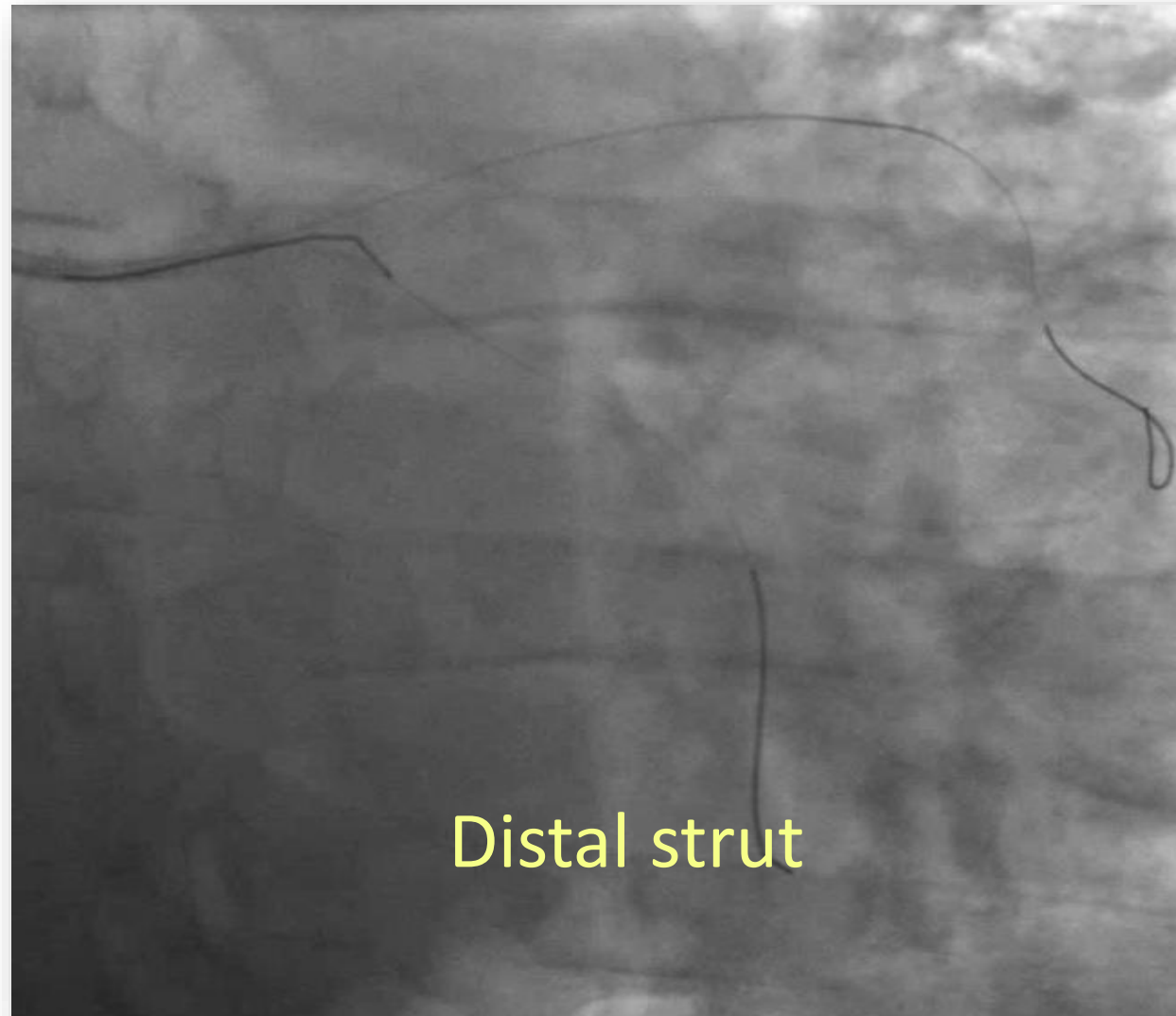
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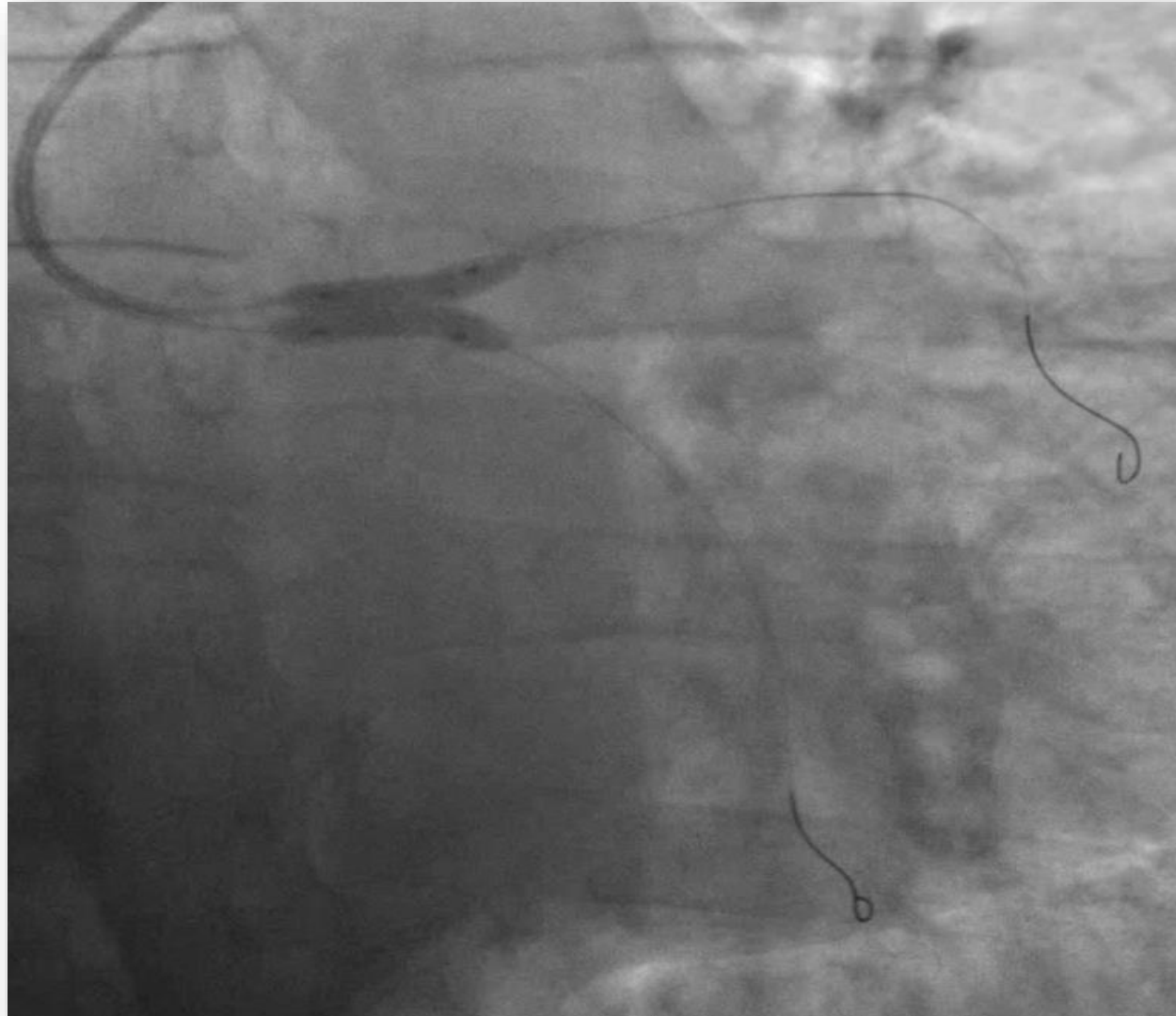
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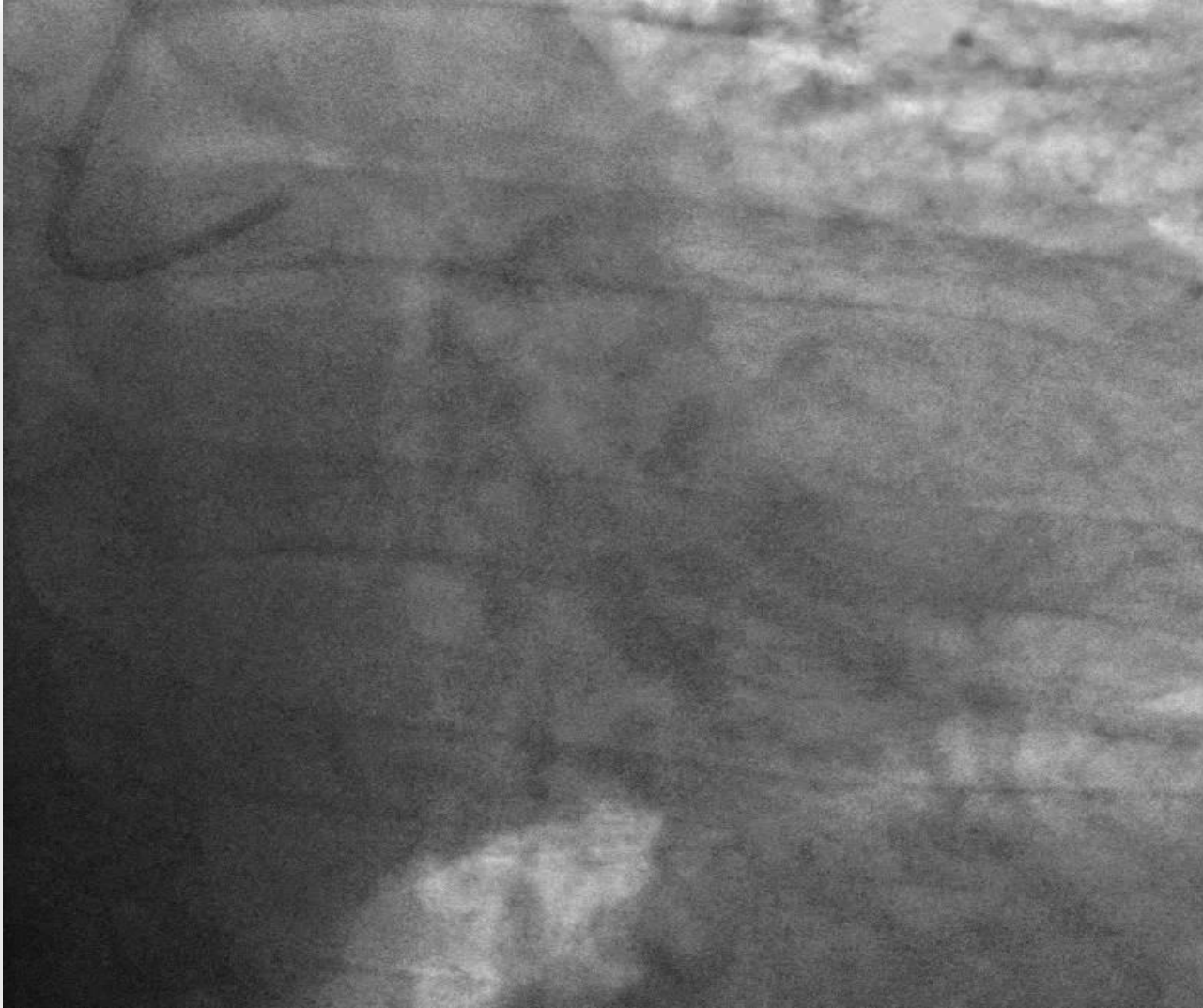
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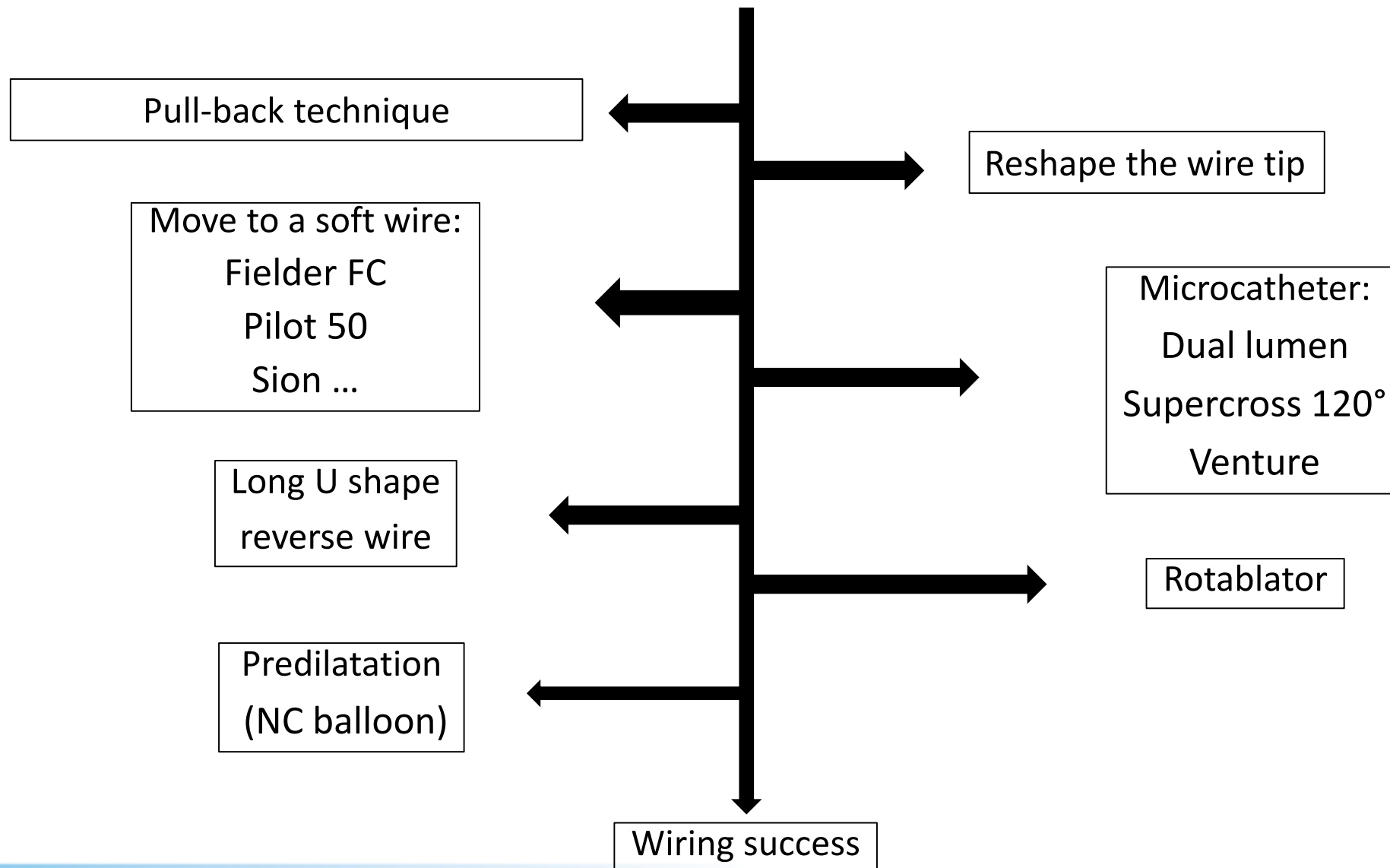
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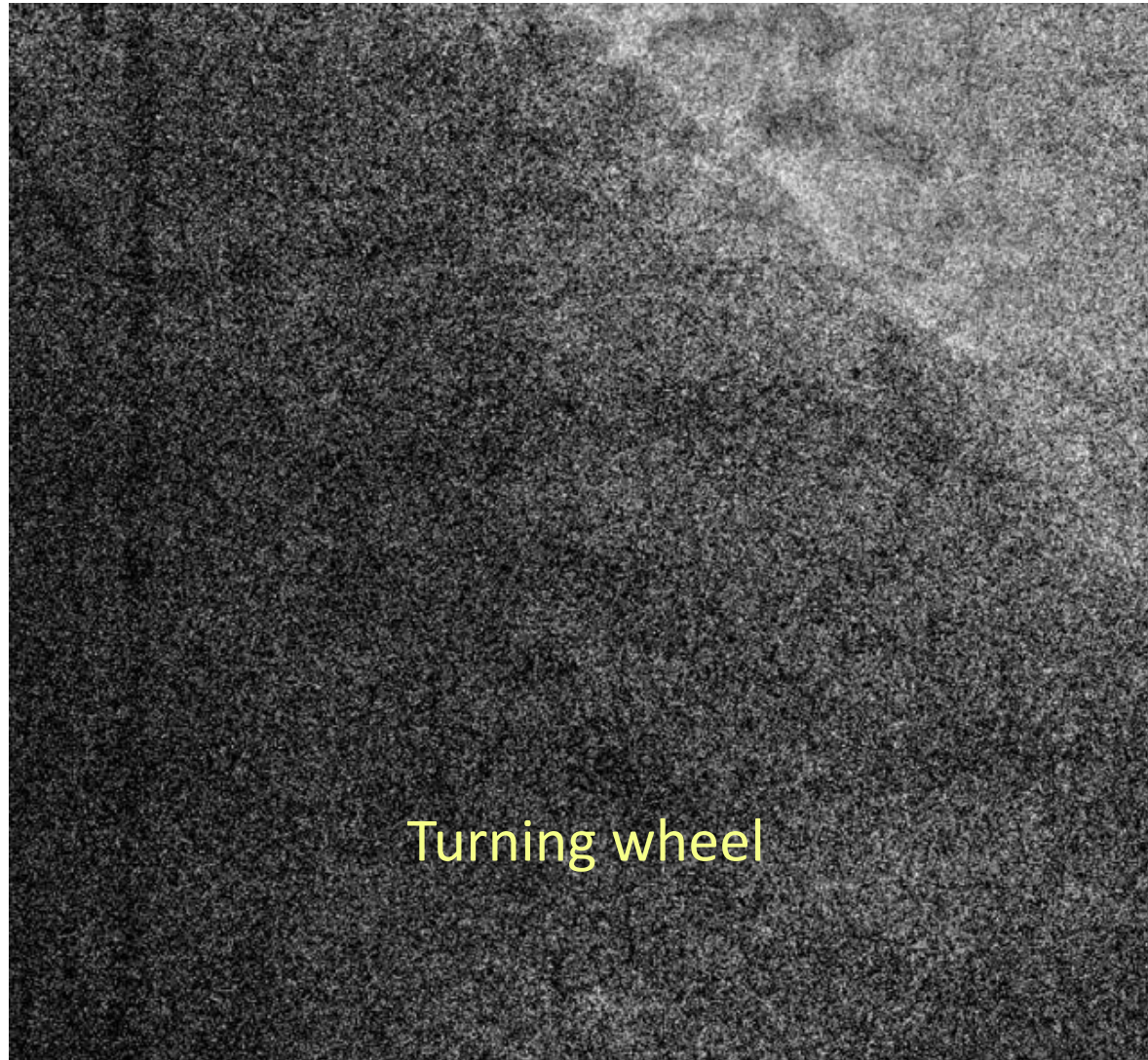
5. Know how to solve difficult side branch access



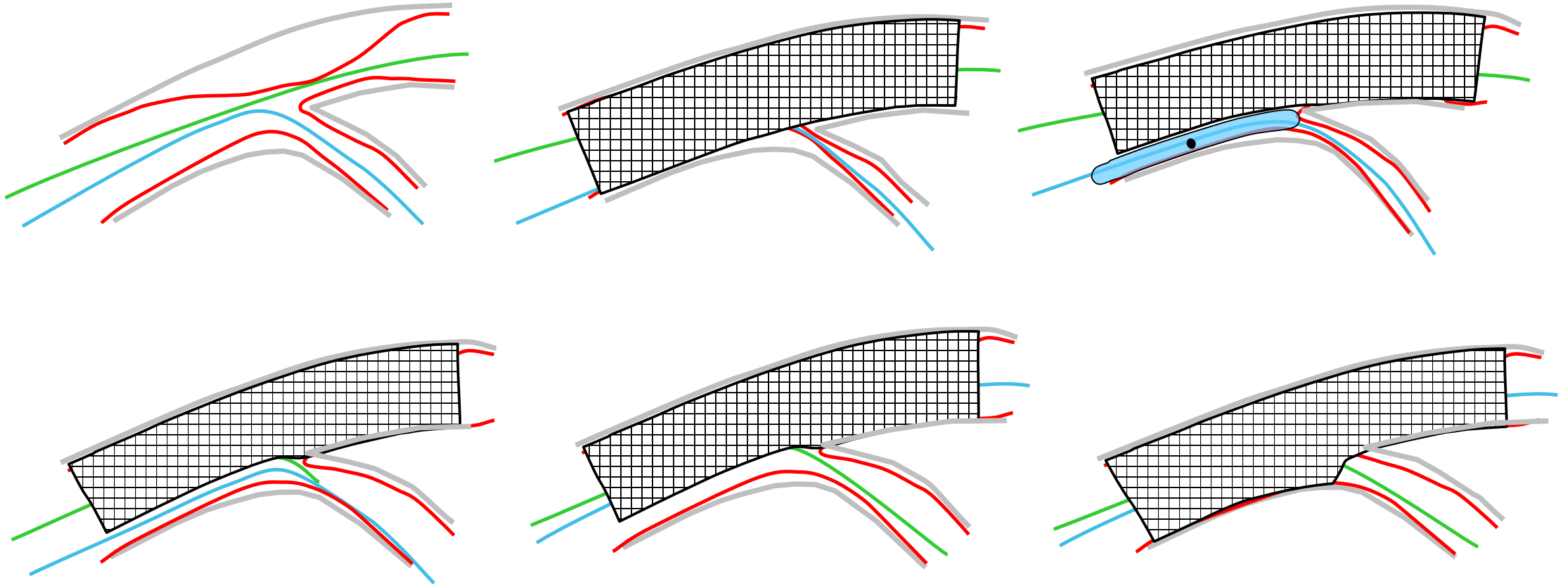
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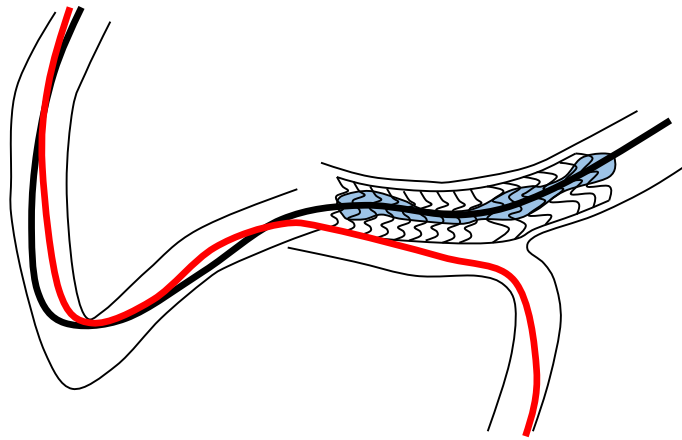
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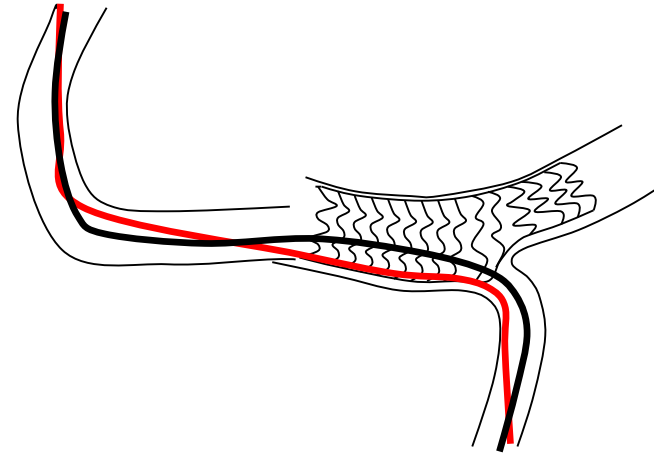
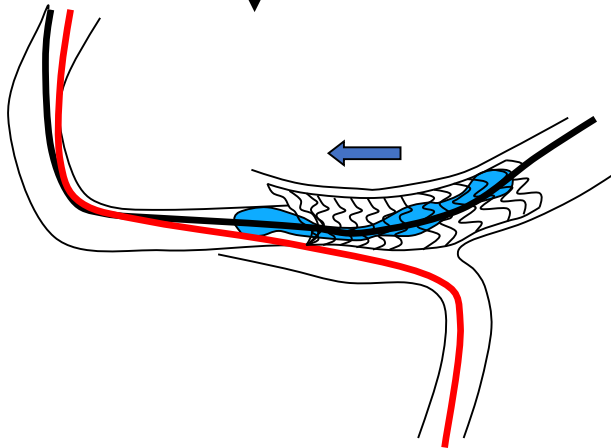
6. Respect the anatomy, know how to save the branch



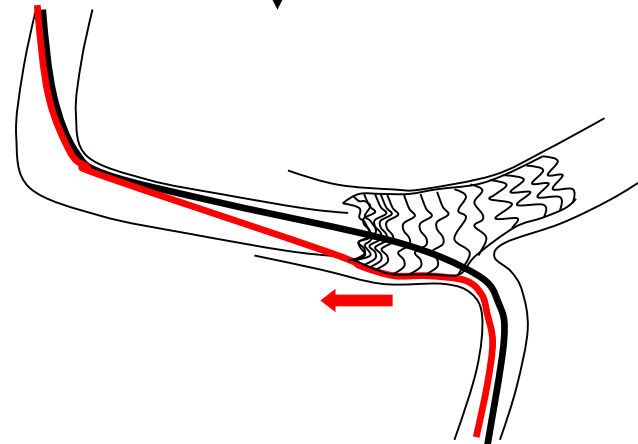
7. Be careful with longitudinal compression



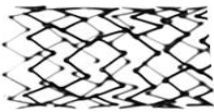





Balloon pull back



Jailed wire pull back



8. Know your stents

Balloon Max Size							
		Synergy	Xpedition	Res. Onyx	Ultimaster	BioMatrix A	Orsiro
4.0	2.25	Small vessel (8 crowns, 2-4 connectors) <i>Expansion: 3.6mm</i>	Small vessel (6 crowns, 3 connectors) <i>Expansion: 4.1mm</i>	Small vessel workhorse (6.5 crowns, 2 connectors) <i>Expan: 3.3mm</i>	Small vessel (8 crowns, 2 connectors) <i>Expansion: 4.3mm</i>	Small vessel (6 crowns, 2 connectors) <i>Expansion: 4.1mm</i>	Small vessel (6 crowns, 3 connectors) <i>Expansion: 4.0mm</i>
	2.50						
5.0	2.75			Medium vessel workhorse (8.5 crowns, 2 connectors) <i>Expansion: 4.4mm</i>			
	3.00	Workhorse (8 crowns, 2-4 connectors) <i>Expansion: 4.2mm</i>					
	3.50		Large vessel (9 crowns, 3 connectors) <i>Expansion: 5.6mm</i>	Large vessel (9.5 crowns, 2.5 connectors) <i>Expansion: 5.6mm</i>	Large vessel (8 crowns, 2 connectors) <i>Expansion: 5.8mm</i>	Large vessel (9 crowns, 3 connectors) <i>Expansion: 5.9mm</i>	Large vessel (6 crowns, 3 connectors) <i>Expansion: 5.3mm</i>
6.0	4.00	Large vessel (10 crowns, 2-5 connectors) <i>Exp: 5.7mm</i>					
	4.50			Extra-Large vessel (10.5 crowns, 2.5 connectors) <i>Expansion: 6.0mm</i>			
	5.00						

➤ Expansion : inner stent MLD excluding struts

➤ Max balloon size : Maverick 6.0mm at 14 ATM

Foin, Ng, 2016

Conclusion

Like for all bifurcation lesions

1. Identify the difficulties and the risks
2. Wire both branches and learn how to solve difficult SB access
3. Plan a strategy in advance (Plan A, B, C ..)
4. Provisional SB treatment/stenting in most of the cases
5. Limit the number of stents
6. One layer of stent, well apposed/expended
7. Restore the functional anatomy
8. Use ICI if something is not clear
9. Share expertise

Conclusion

Especially for LM bifurcations

1. Know the characteristics of the stent that you are using
2. Do not hesitate to use IABP
3. End the procedure with a Kiss (NC balloon at least for the SB)
4. Stent « apposition » is not enough
5. Distal strut opening decrease the need for side branch stenting
6. POT, POT, POT
7. T stenting is well adapted to T-shape anatomy