Learning From Cases of CCT 2015

Case 3: LAD-CTO (5th Attempt)

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Disclosure

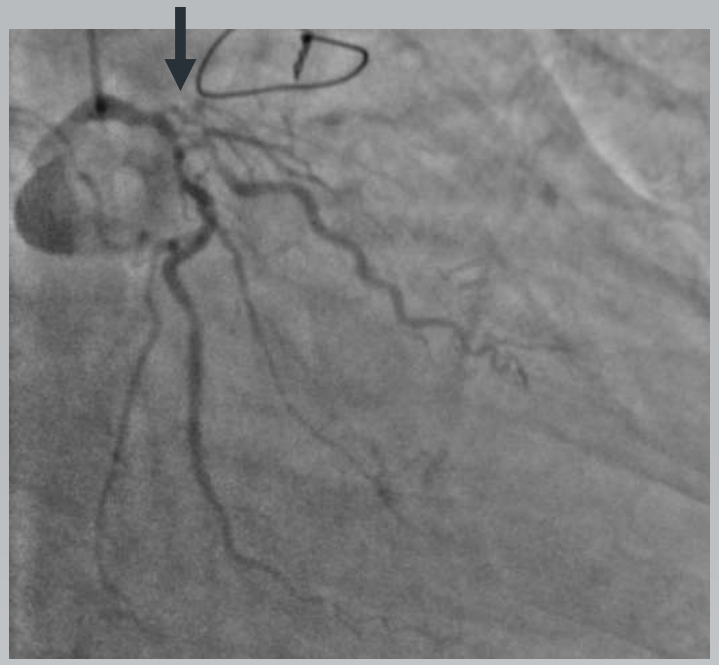
Within the past 12 months, the presenter or their spouse/partner have had a financial interest/arrangement or affiliation with the organizations listed below.

Physician Name	Company/Relationship	
Etsuo Tsuchikane, MD, PhD	Boston Scientific, Japan	Consultant
	Asahi Intecc, Japan	Consultant

Marutamachi Case 1

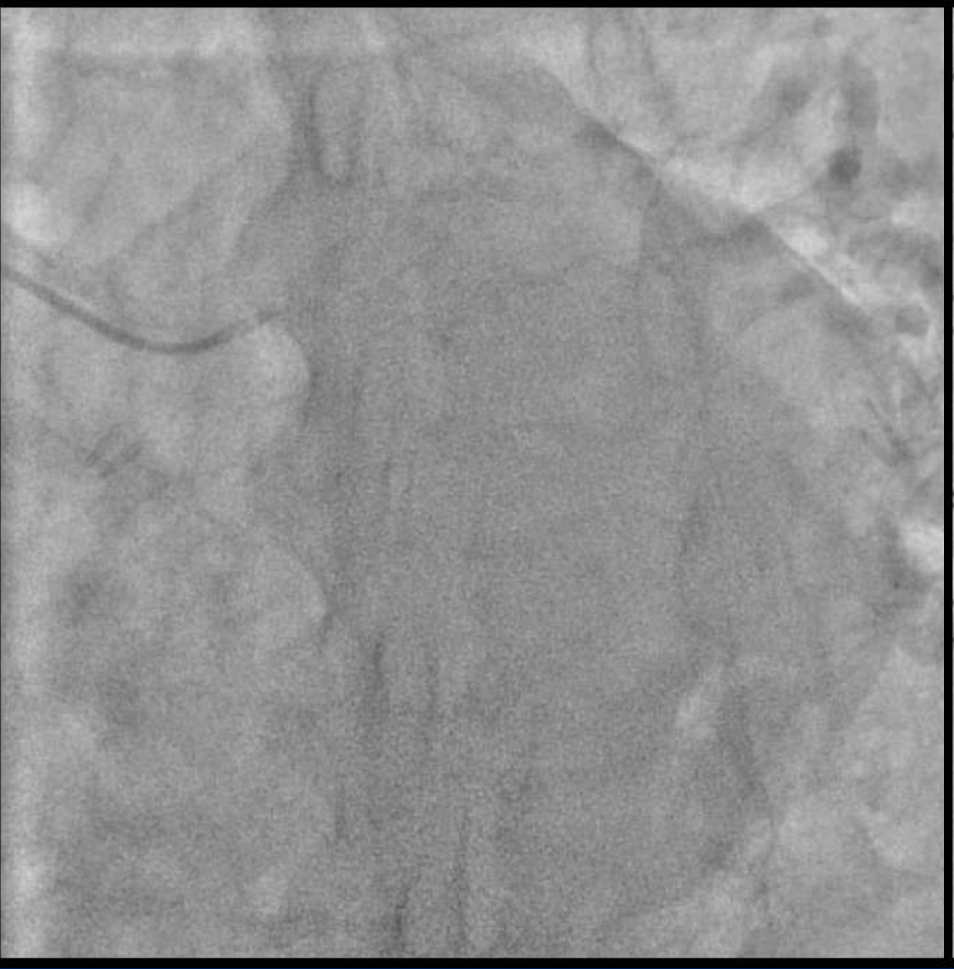
70’s male Target Lesion: Ostial LAD(CTO)

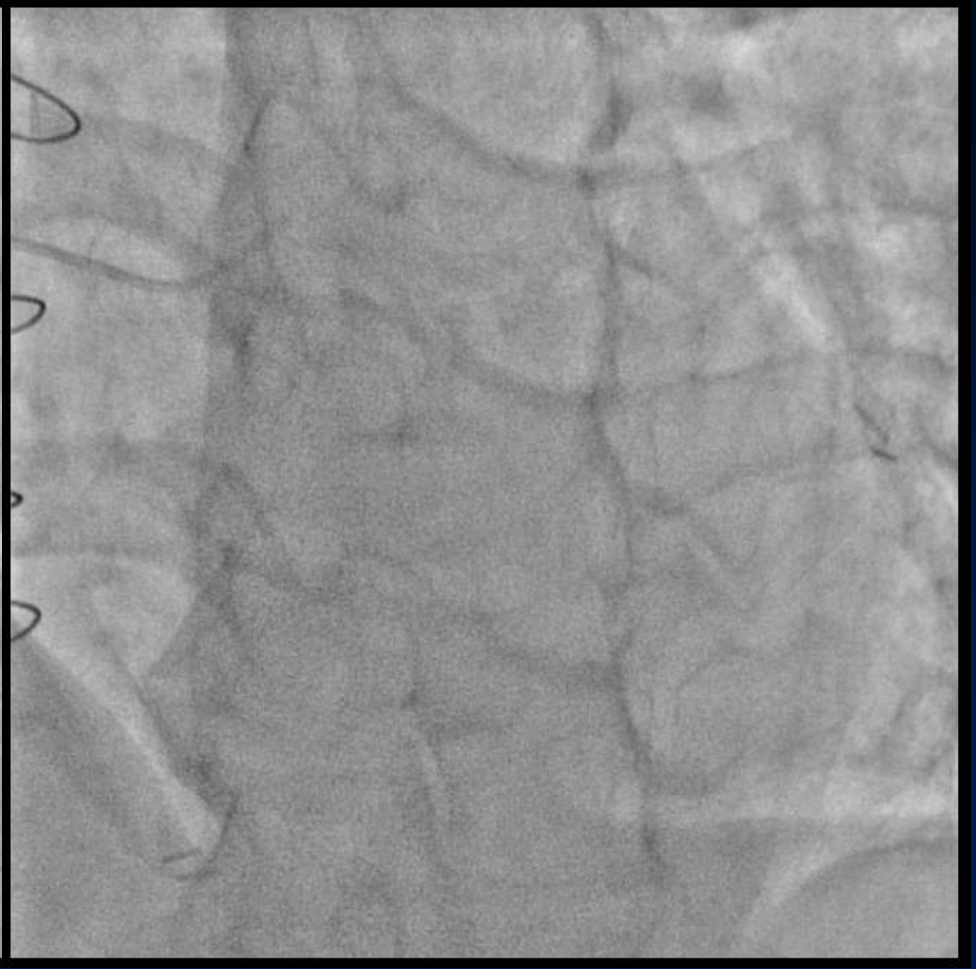
Diagnosis	OMI
Prior intervention	’06 AMI (RCA) ’06.9 CABG (LITA to LAD, Ao-RA-OM) ‘07 LITA occlusion ’11,’12, ’13, ‘14 PCI to LAD (unsuccess)
Coronary risk factor	Dyslipidemia DM, HT
eGFR	53
Syntax score	28.5
Latest CAG findings	‘14.11.10 ostial LAD 100%
LV EF	46%(UCG)
J-CTO score	4



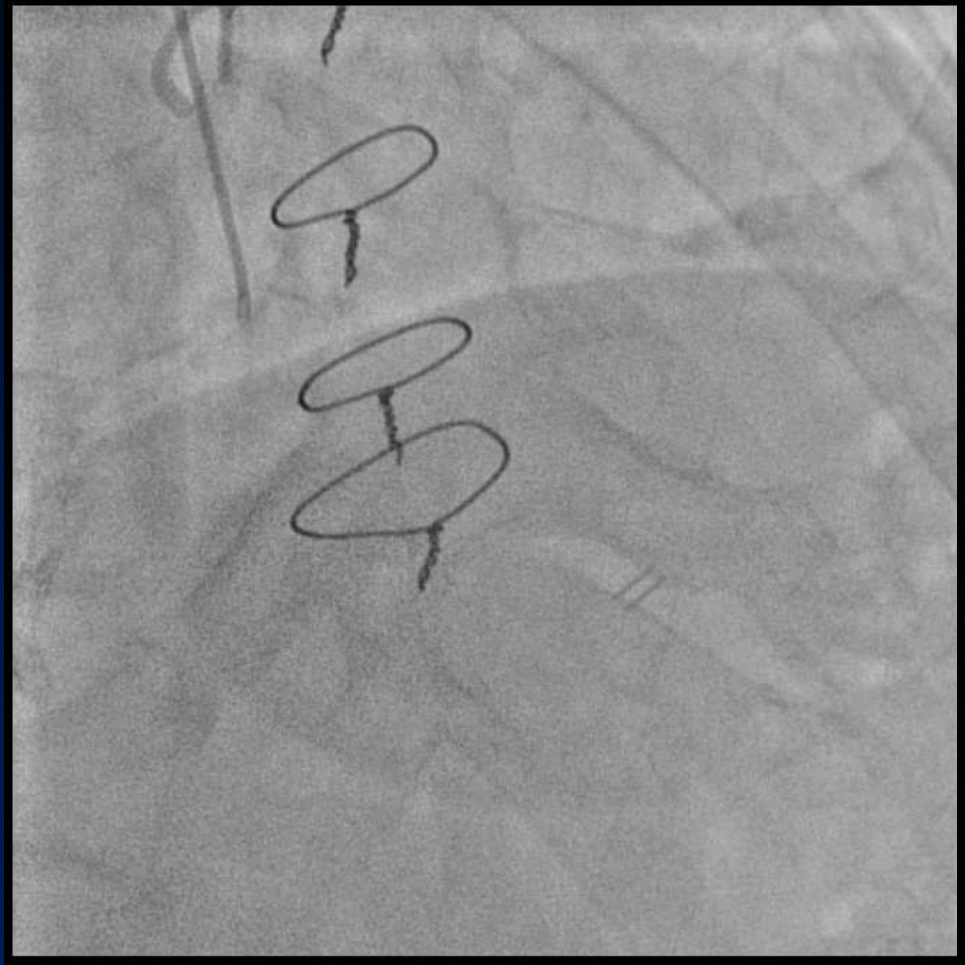
RAO Caudal View

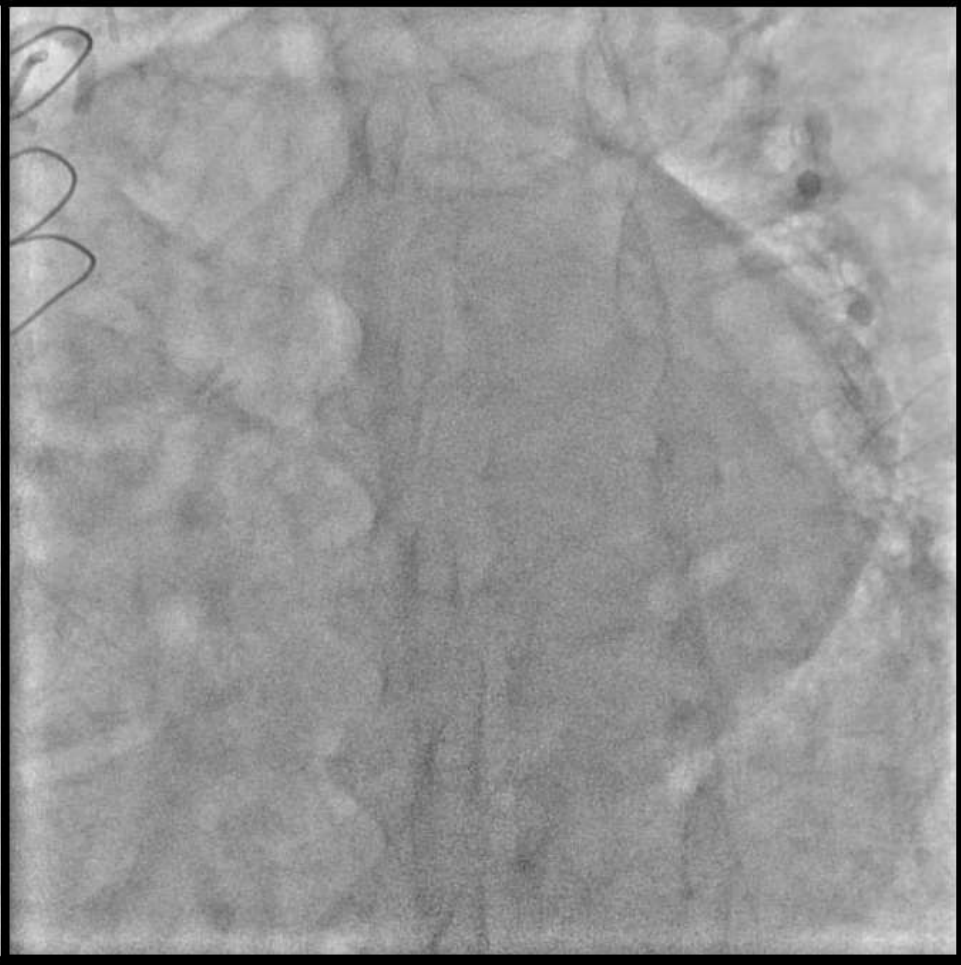
Ostial LAD CTO, 5th Attempt



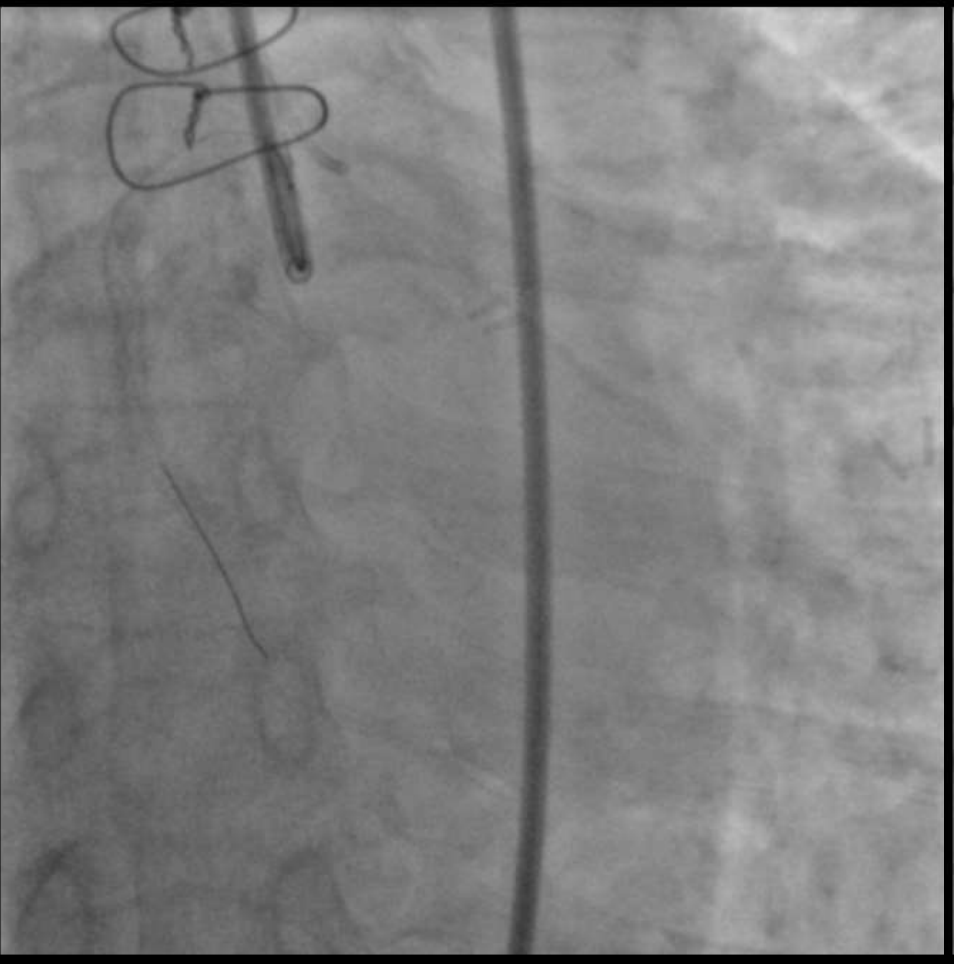


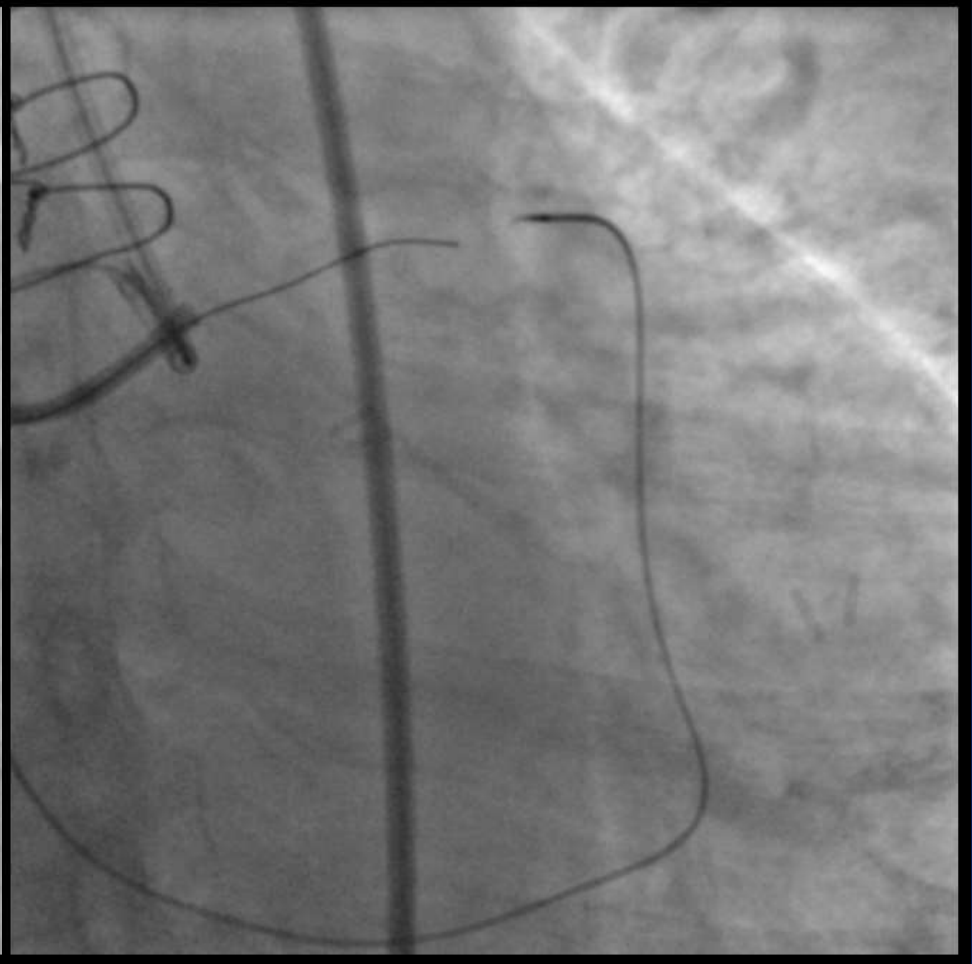
Ostial LAD CTO, 5th Attempt





The 1st Attempt (2011/4/14)





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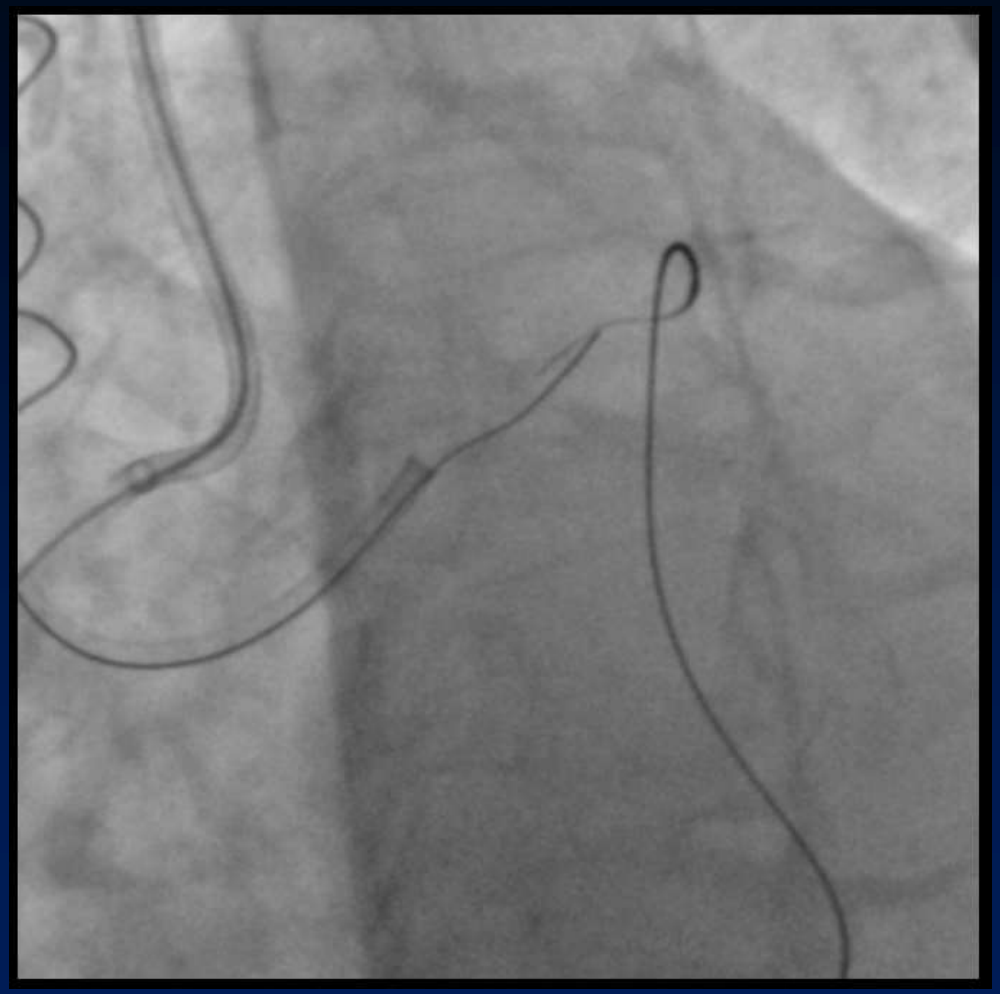
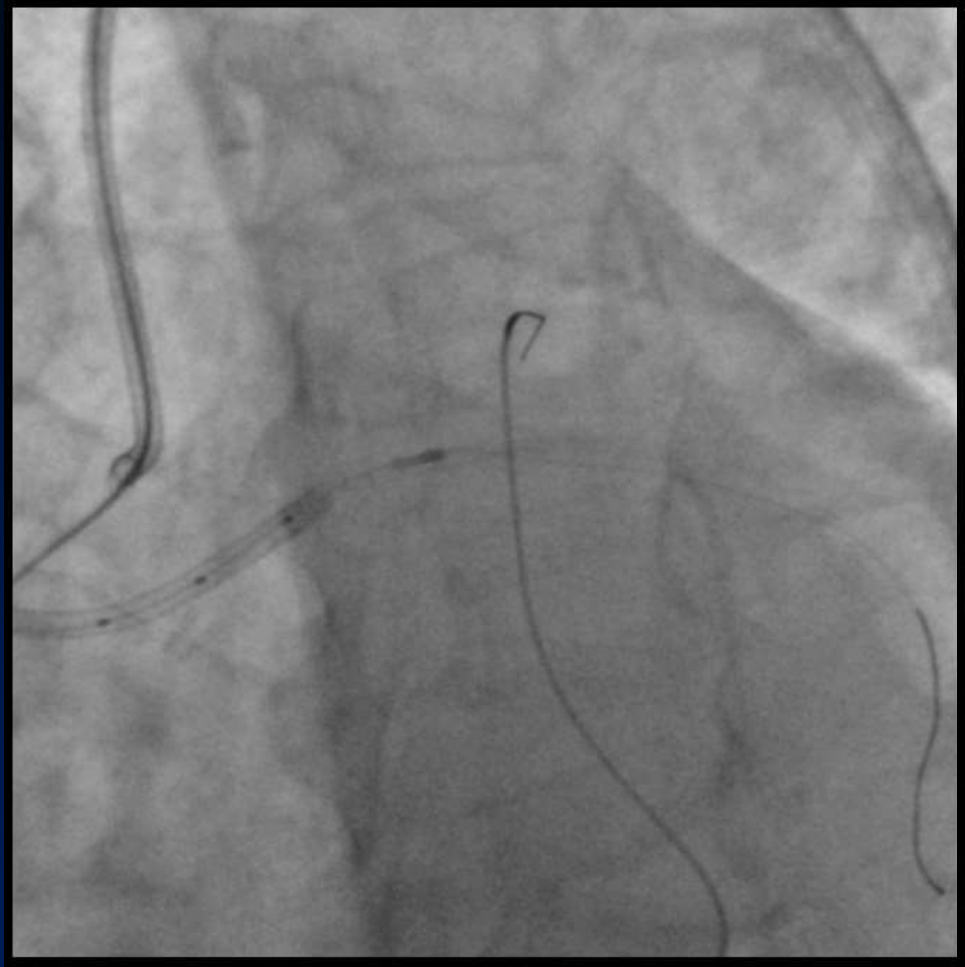
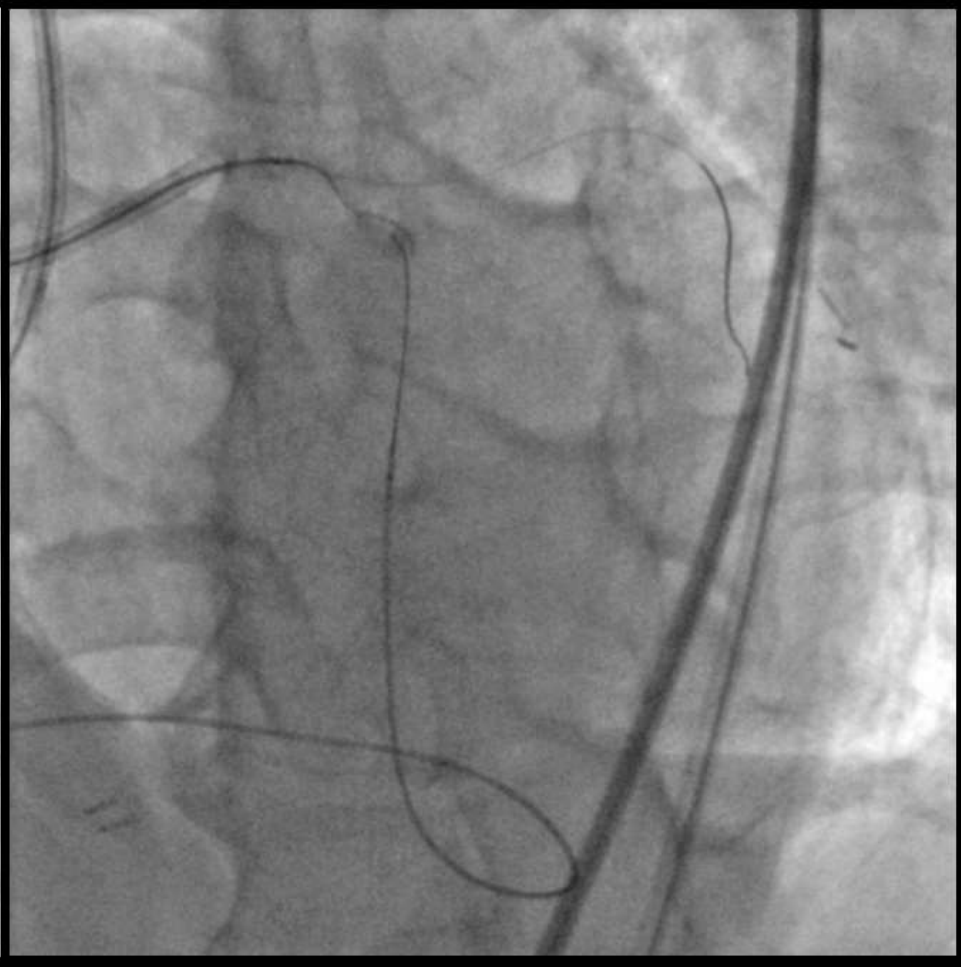
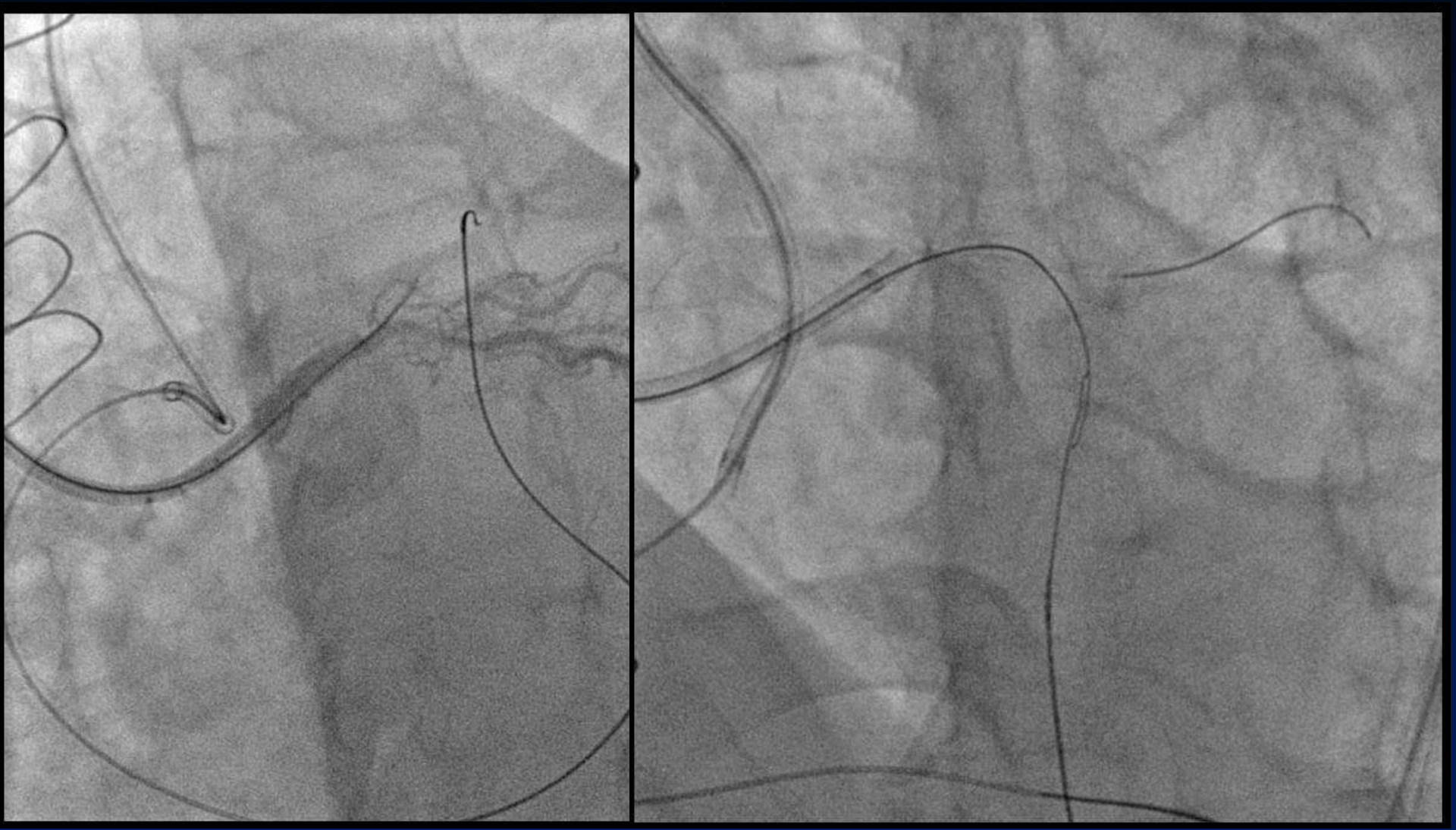


The 2nd Attempt (2012/2/24)

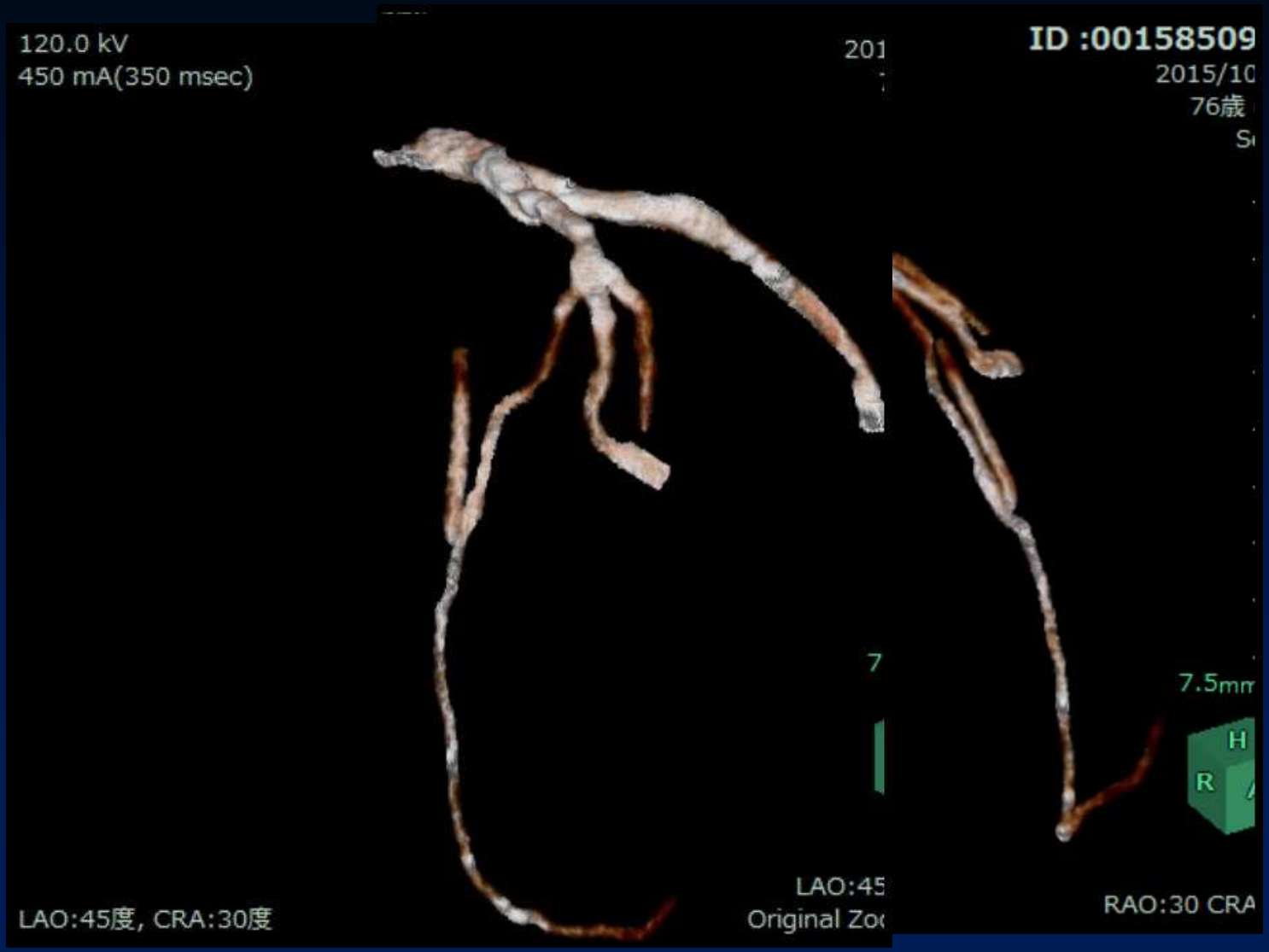




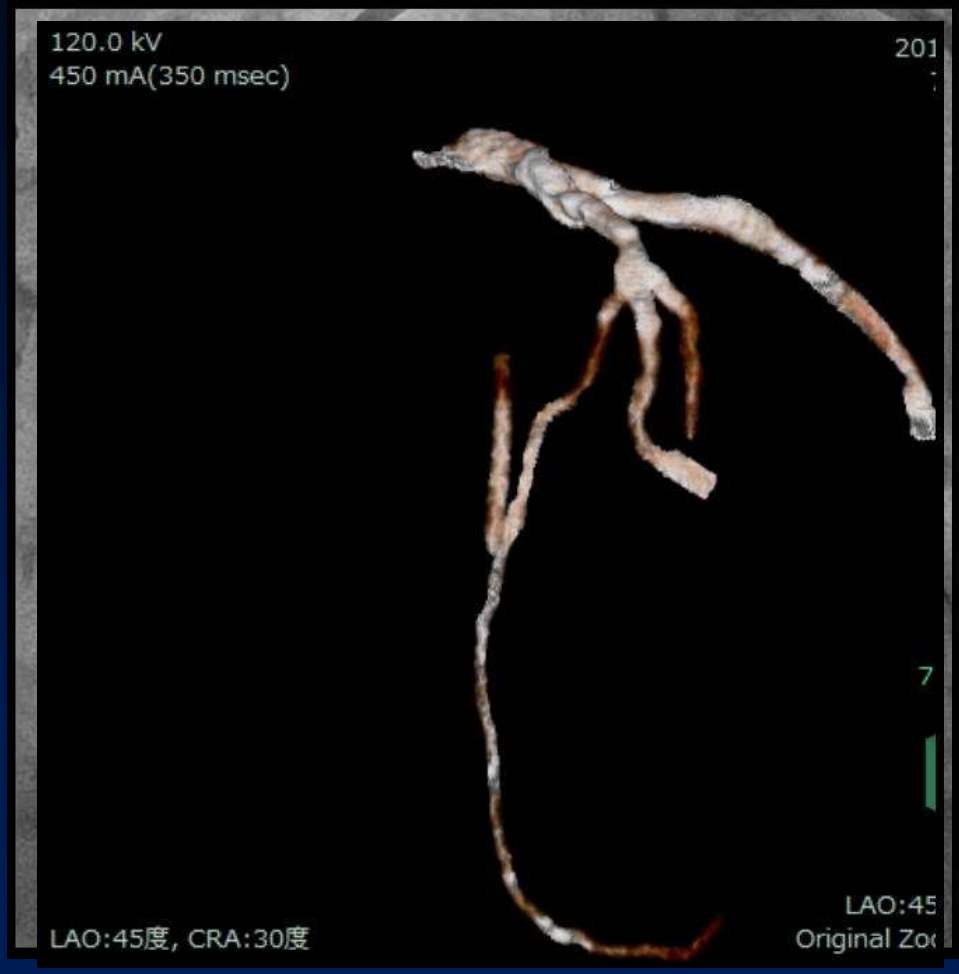
The 4th Attempt (2014/4/11)

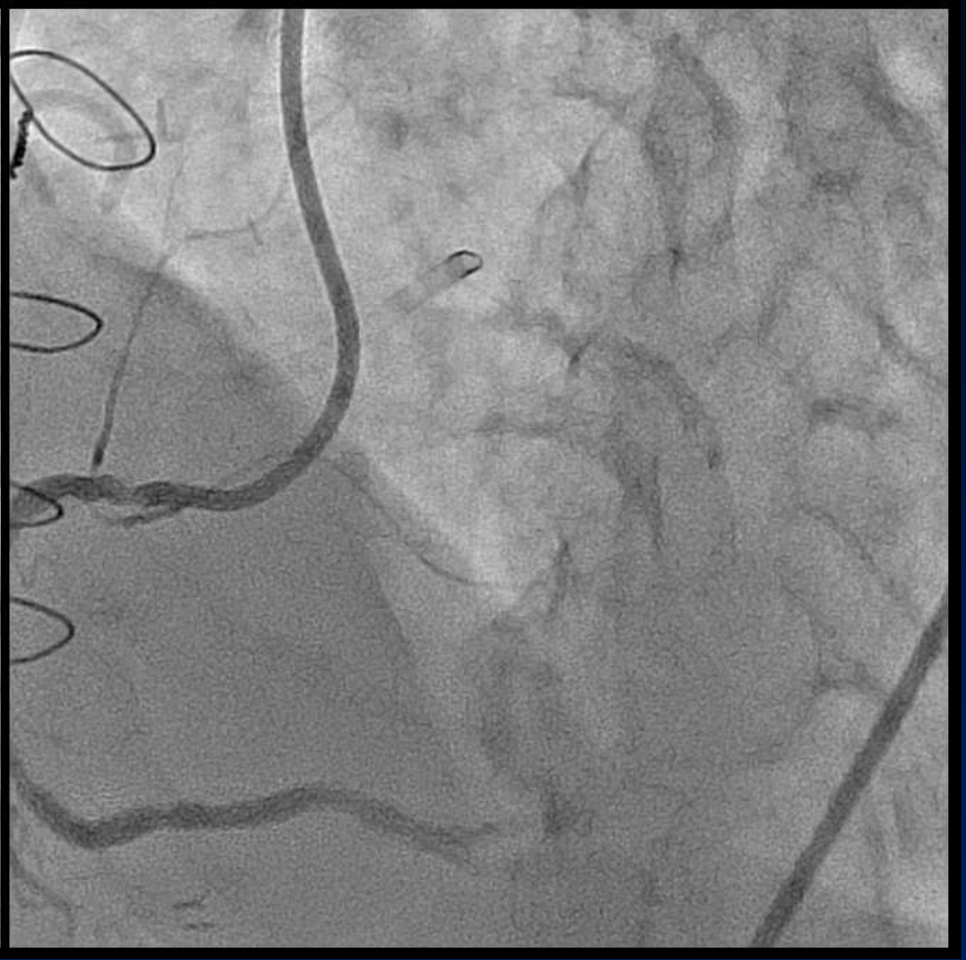


MDCT

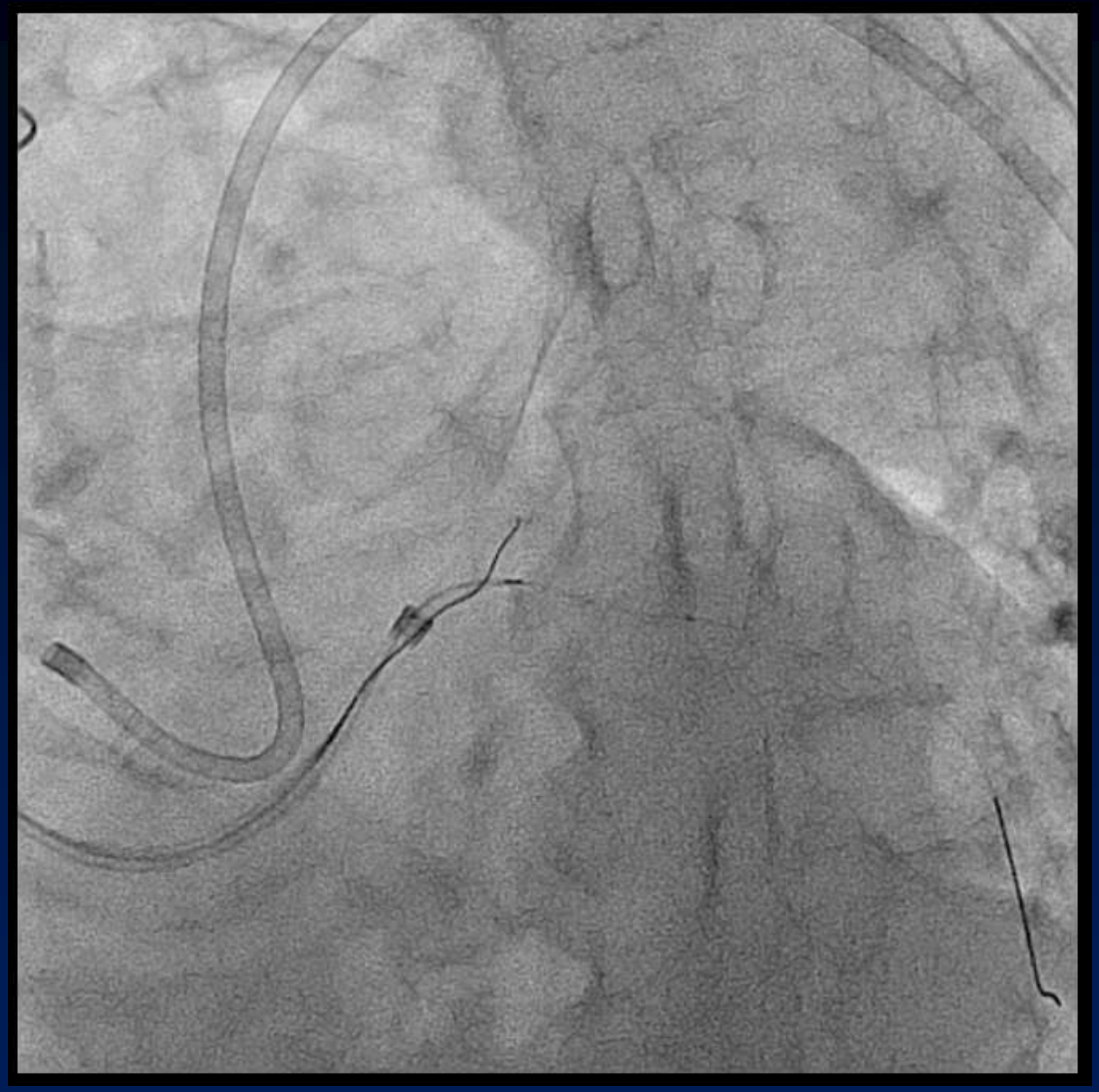


The 5th Attempt (2015/10/29)

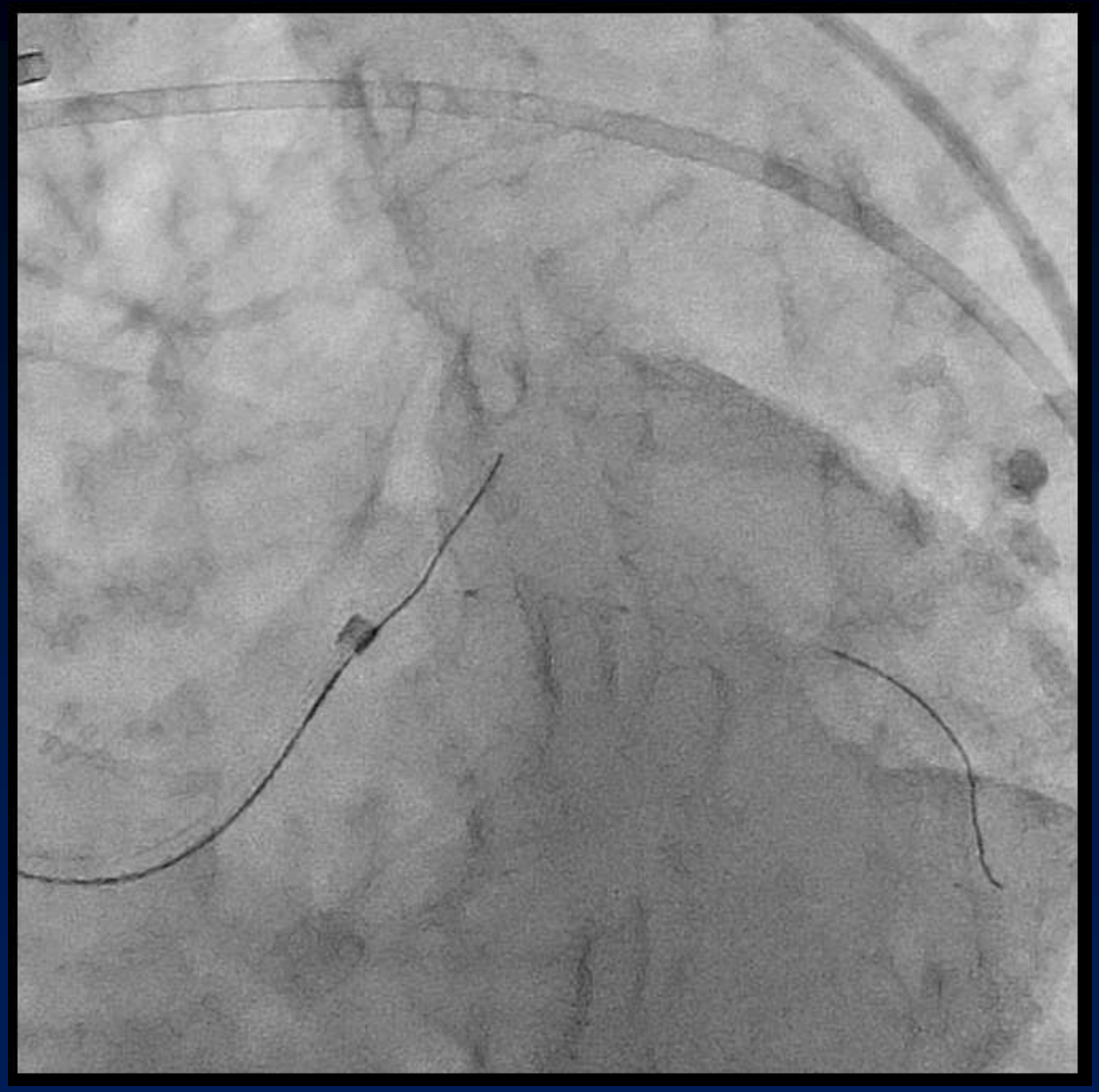




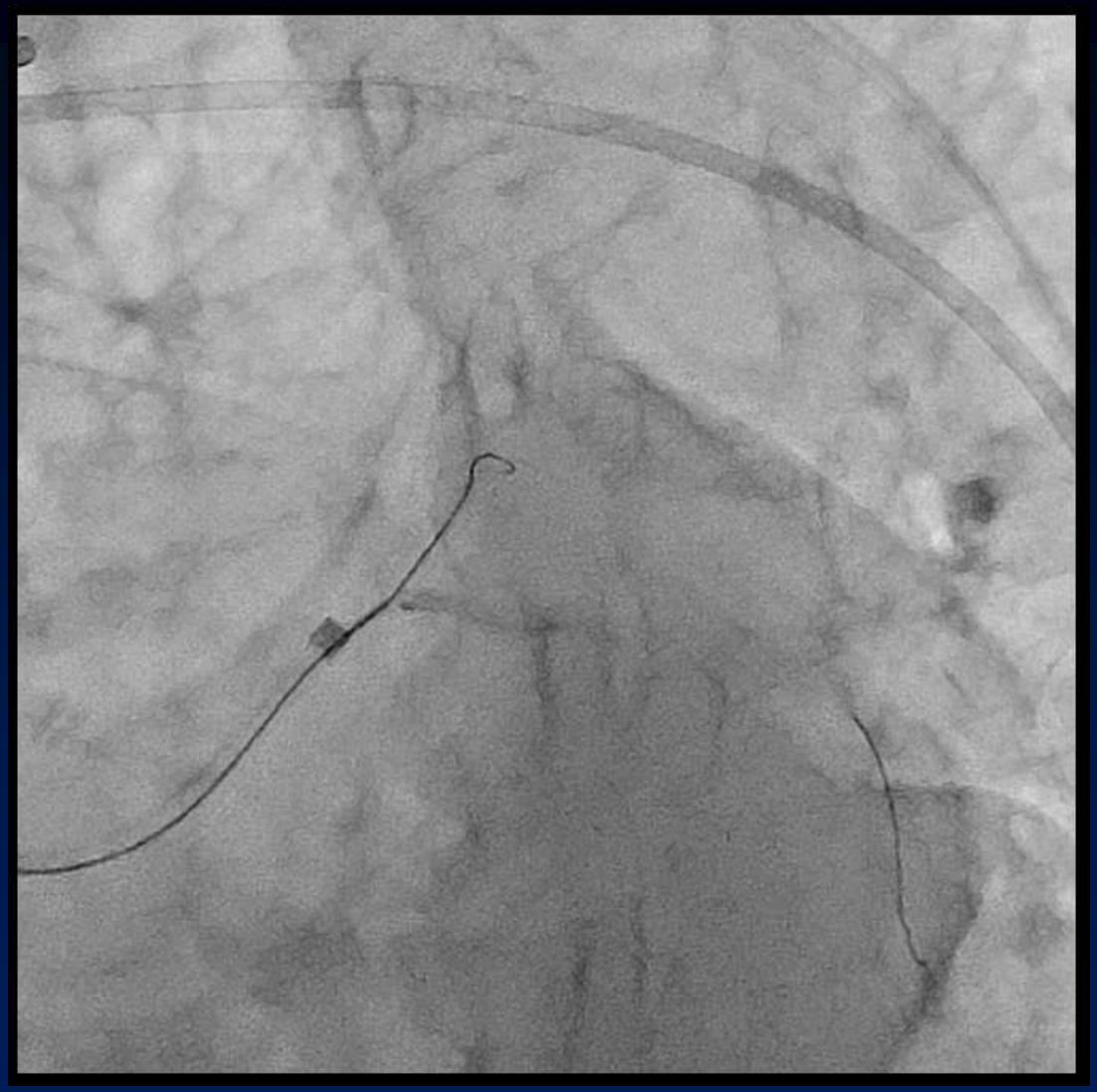
I decided to use IVUS to identify the LAD ostium from Dx.



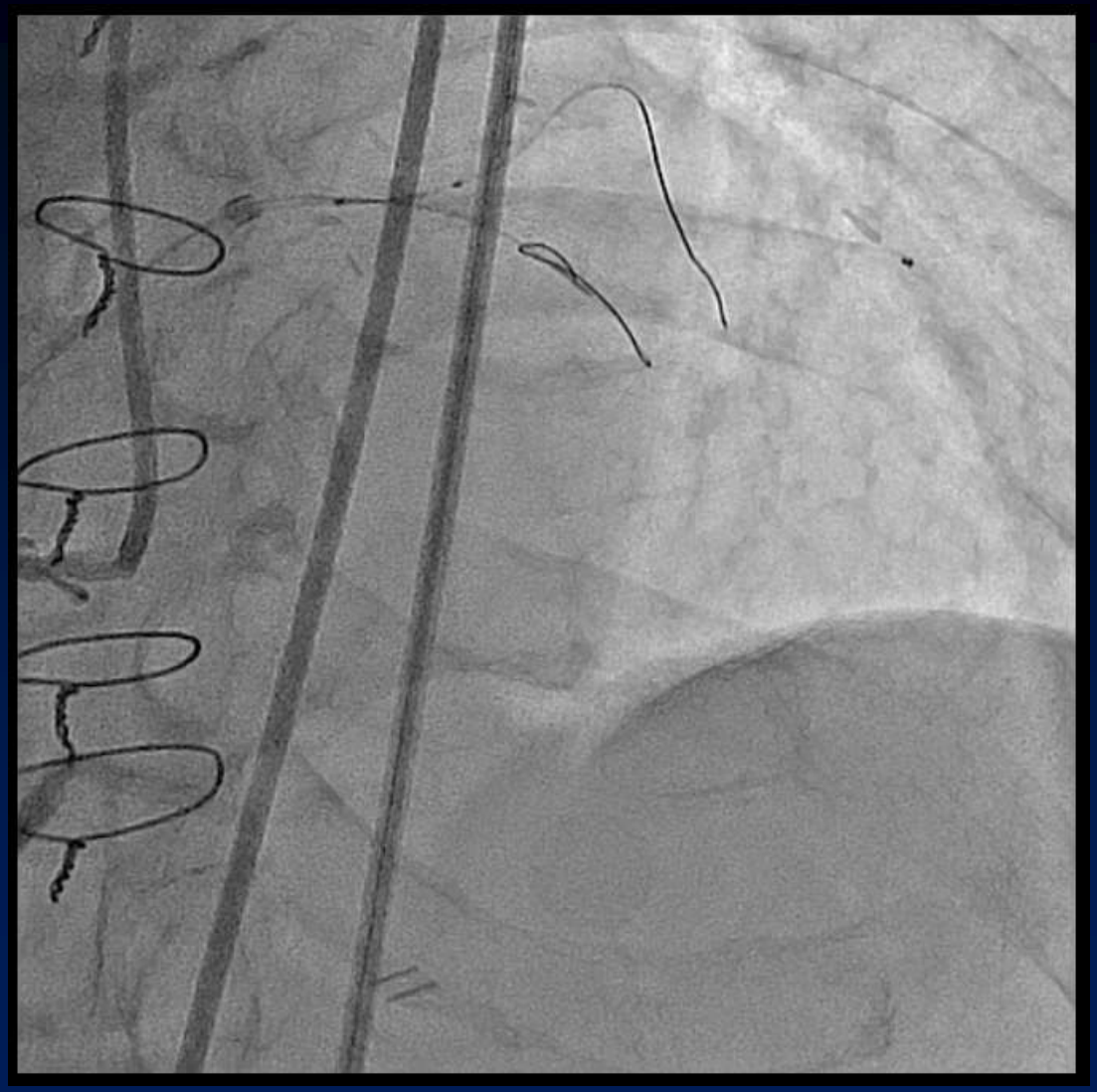
SION Black was stuck…



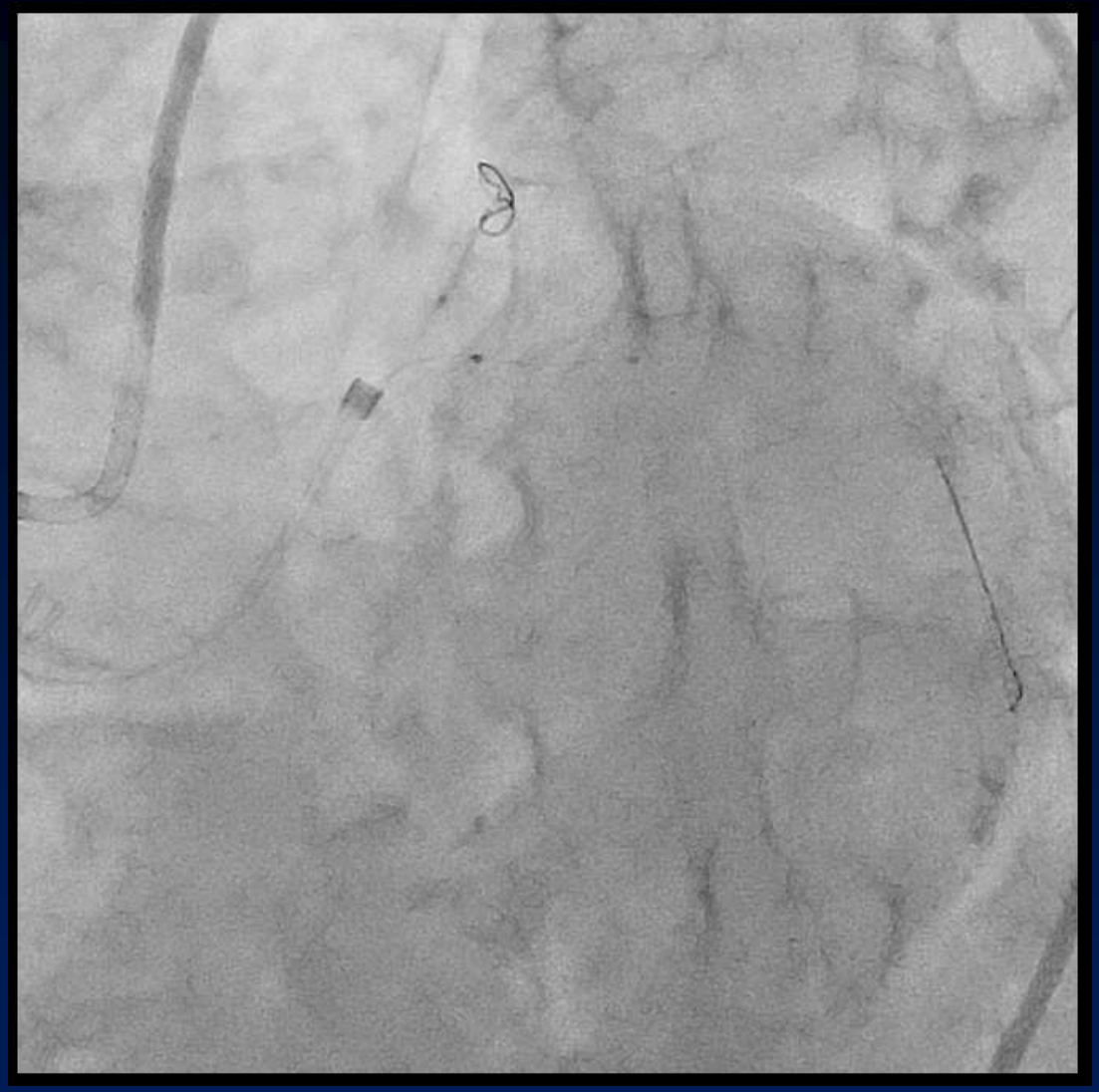
Pilot 200 was advanced towards Dx.



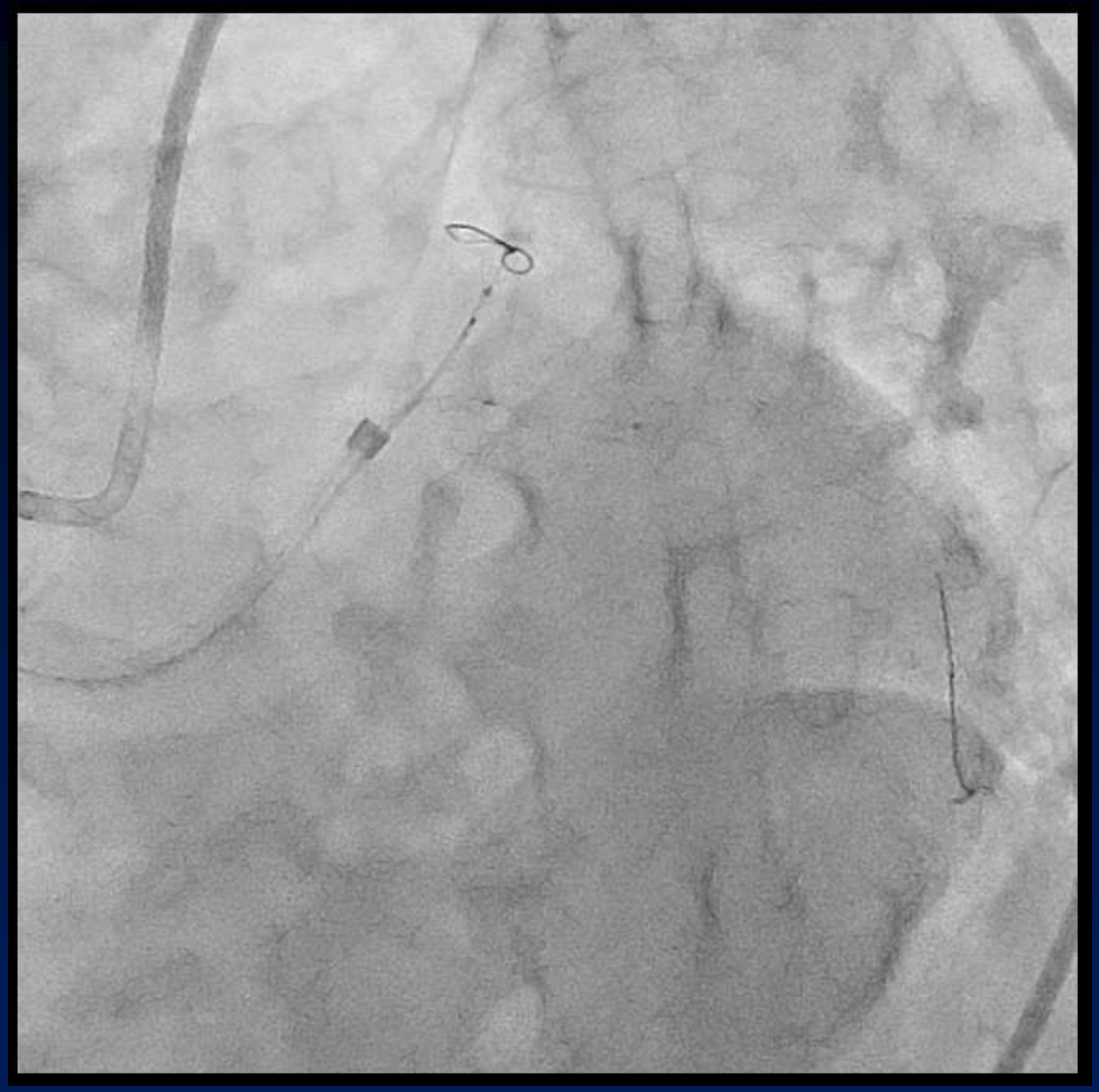
With knuckle formation



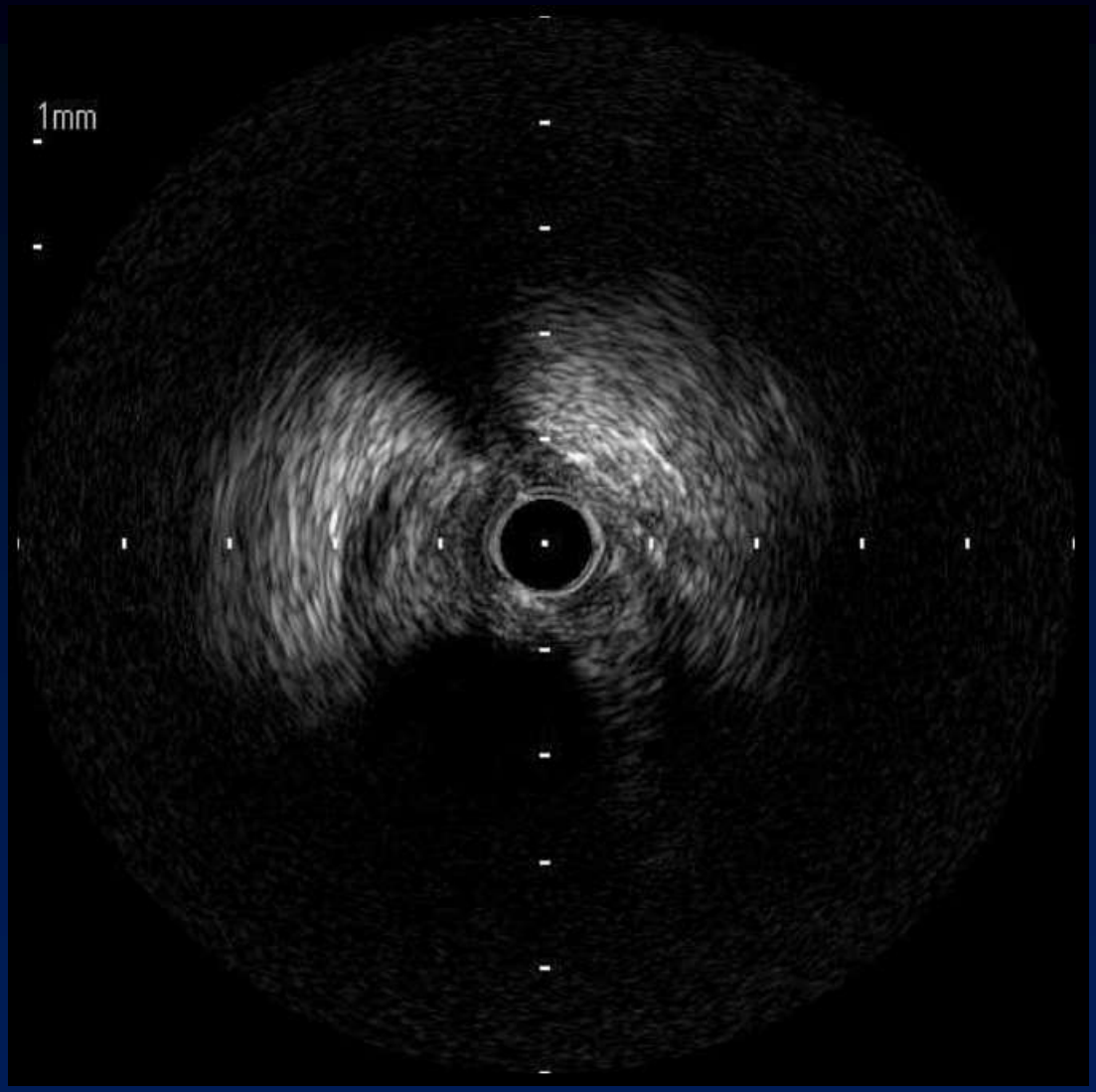
Retrograde injection

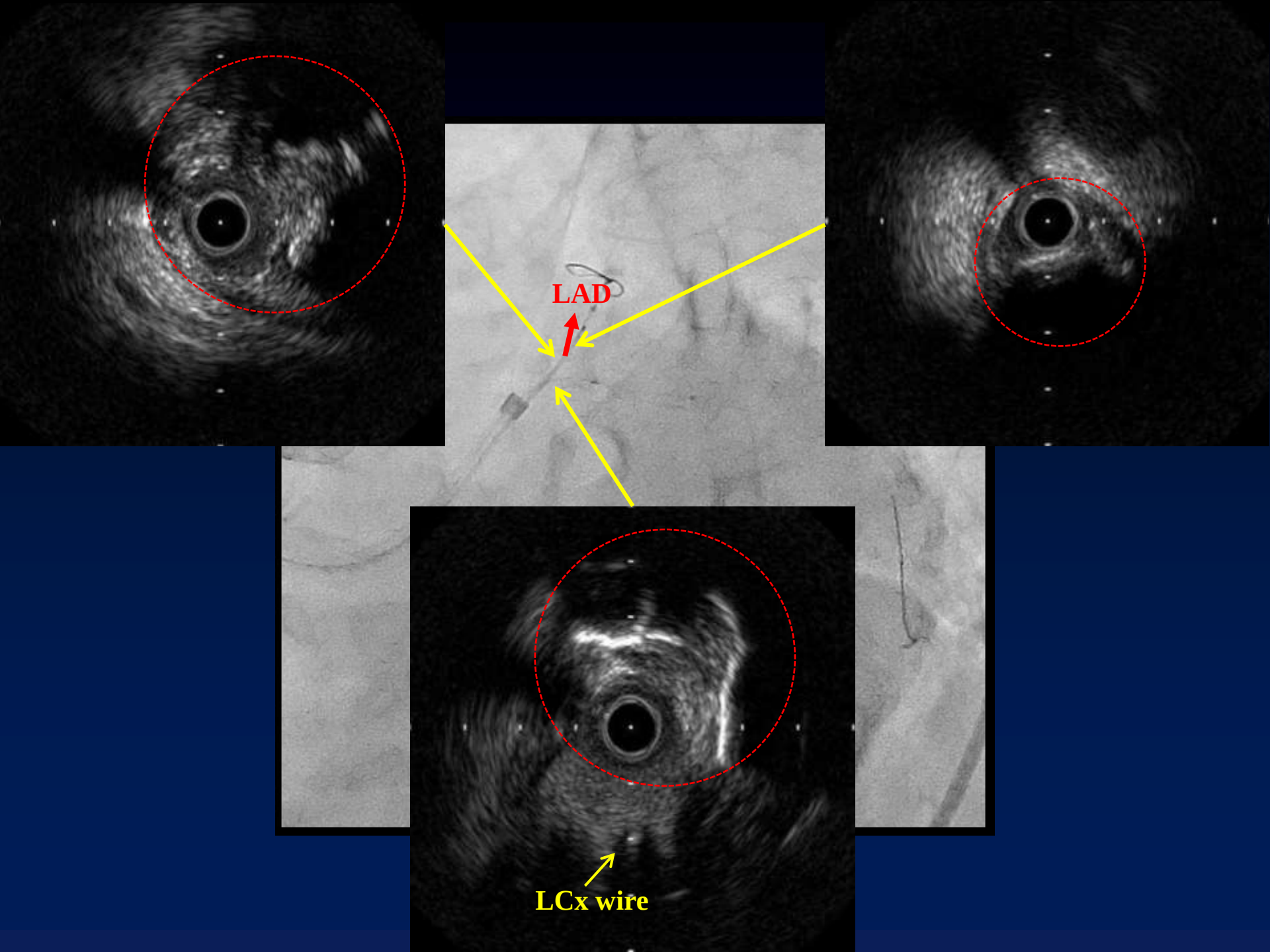


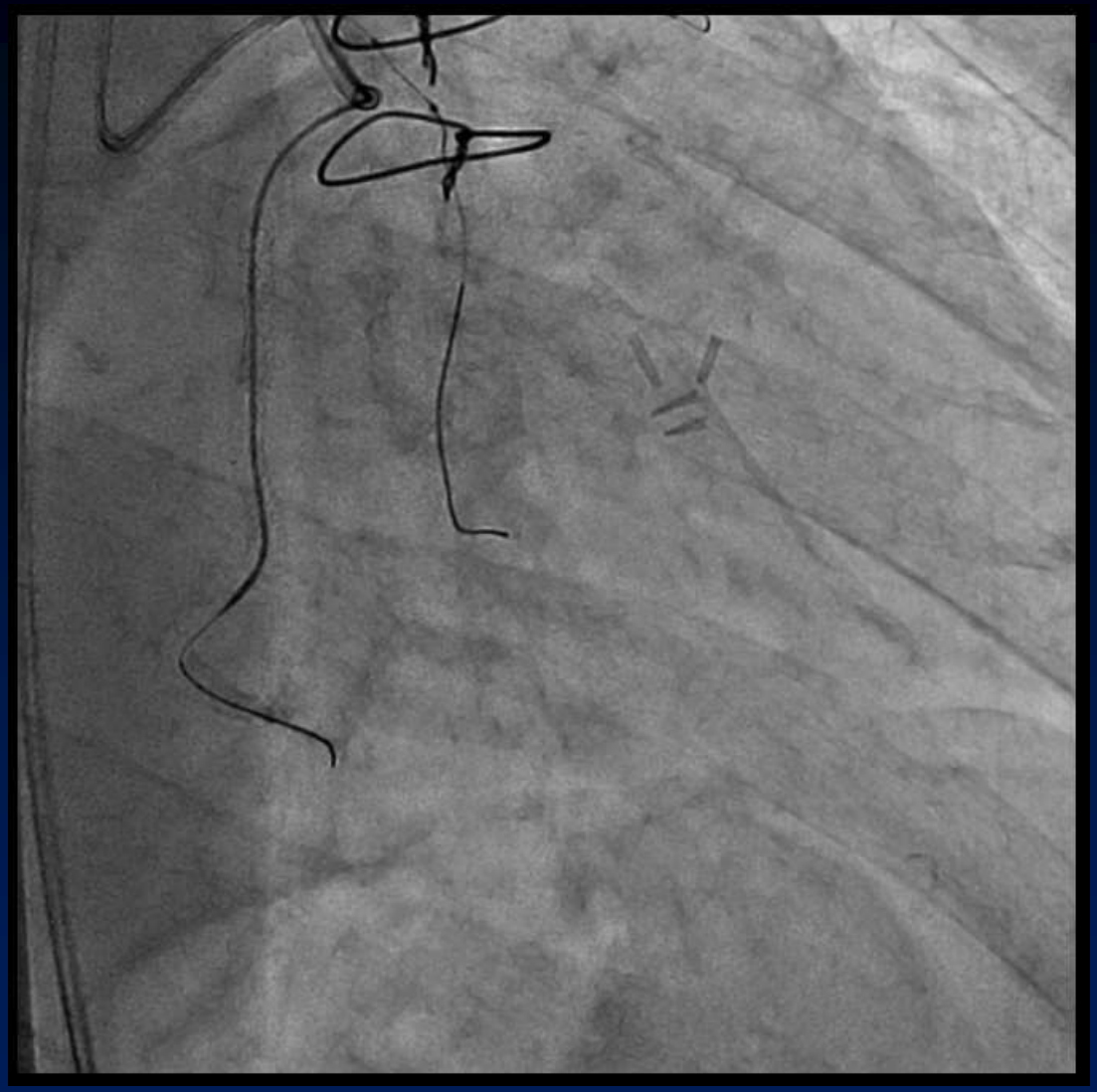
Small balloon dilatation



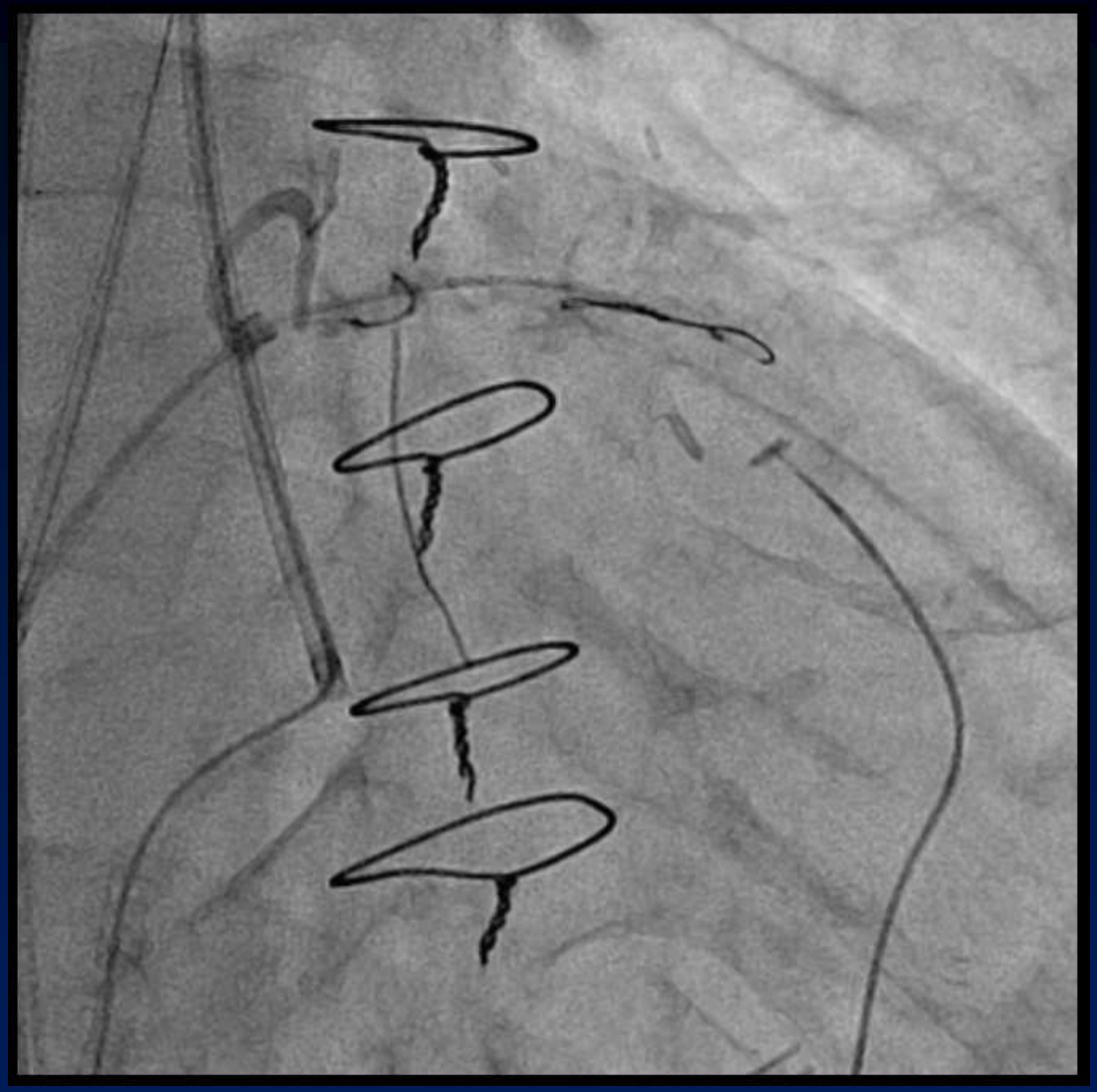
IVUS examination from Dx


1mm

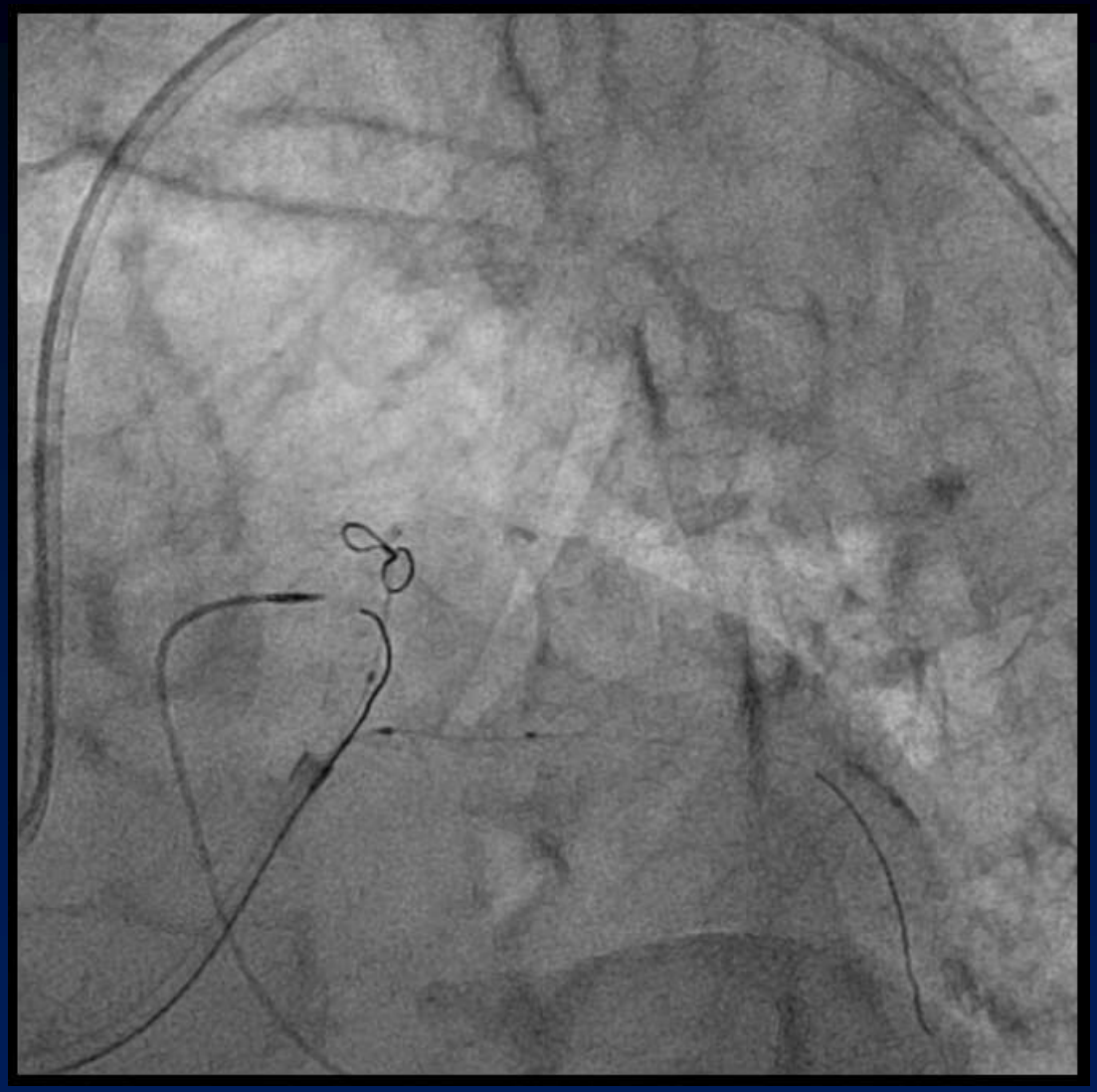

LAD
LCx wire



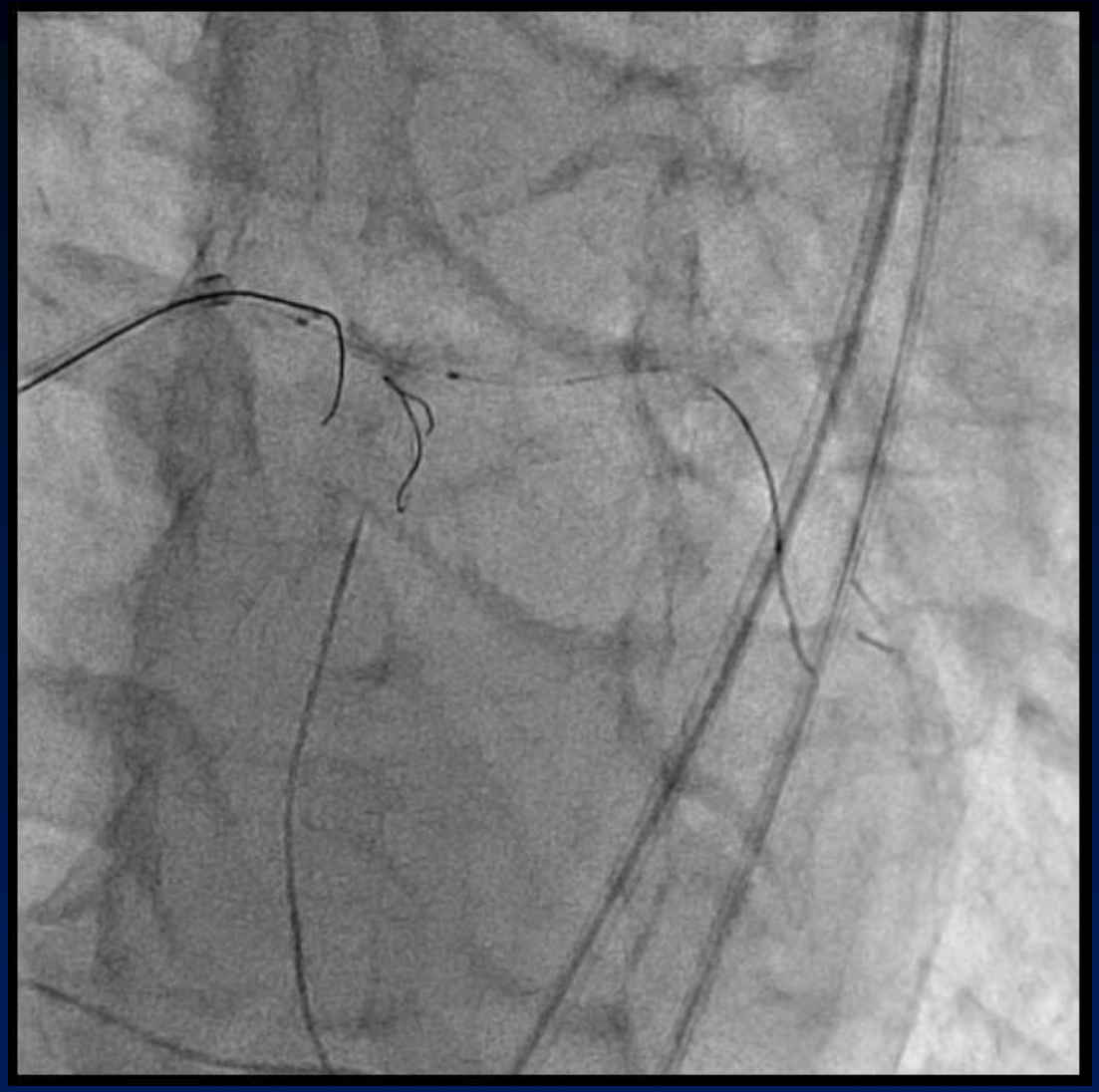
Start retrograde approach



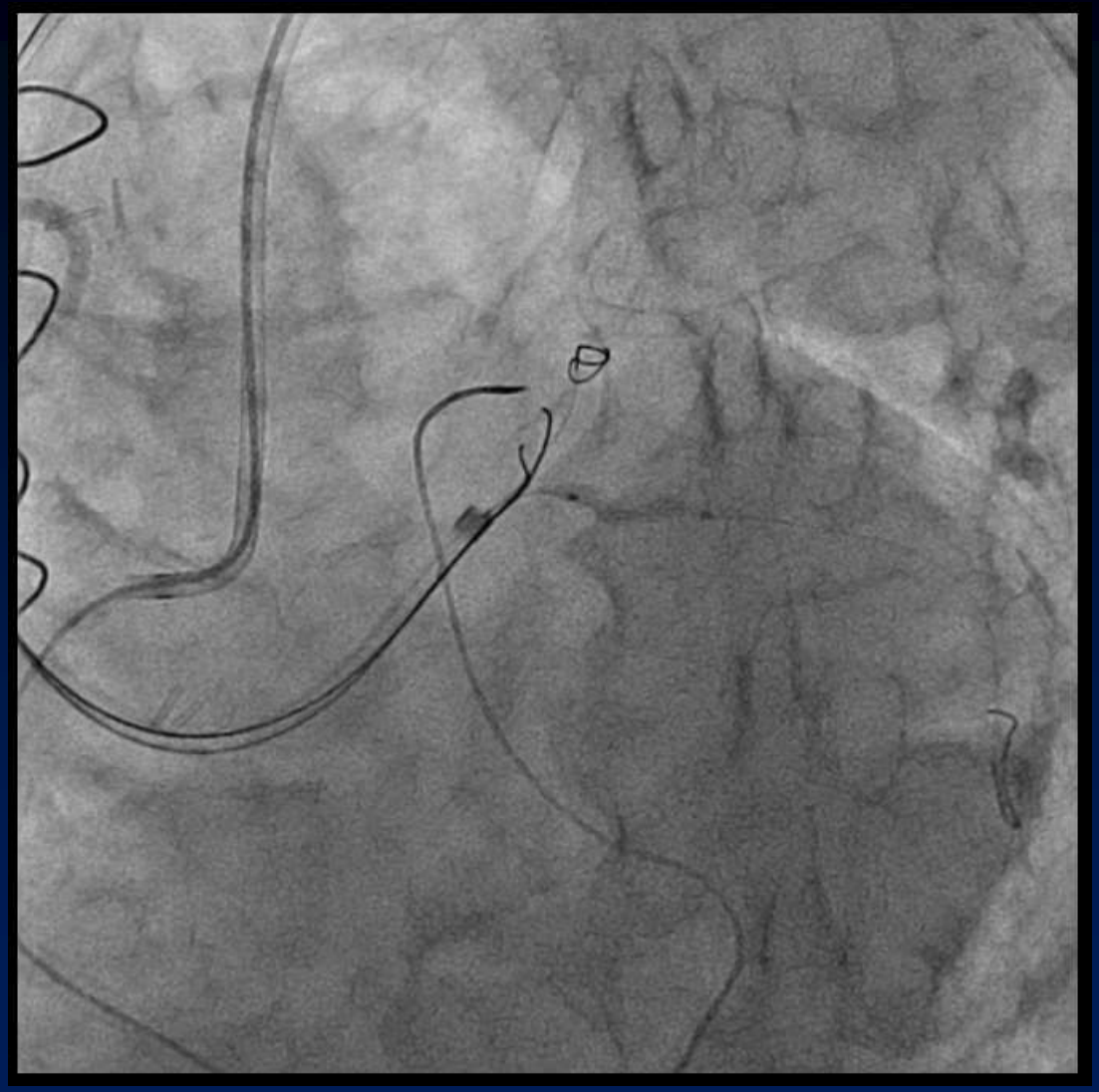
Retrograde tip injection



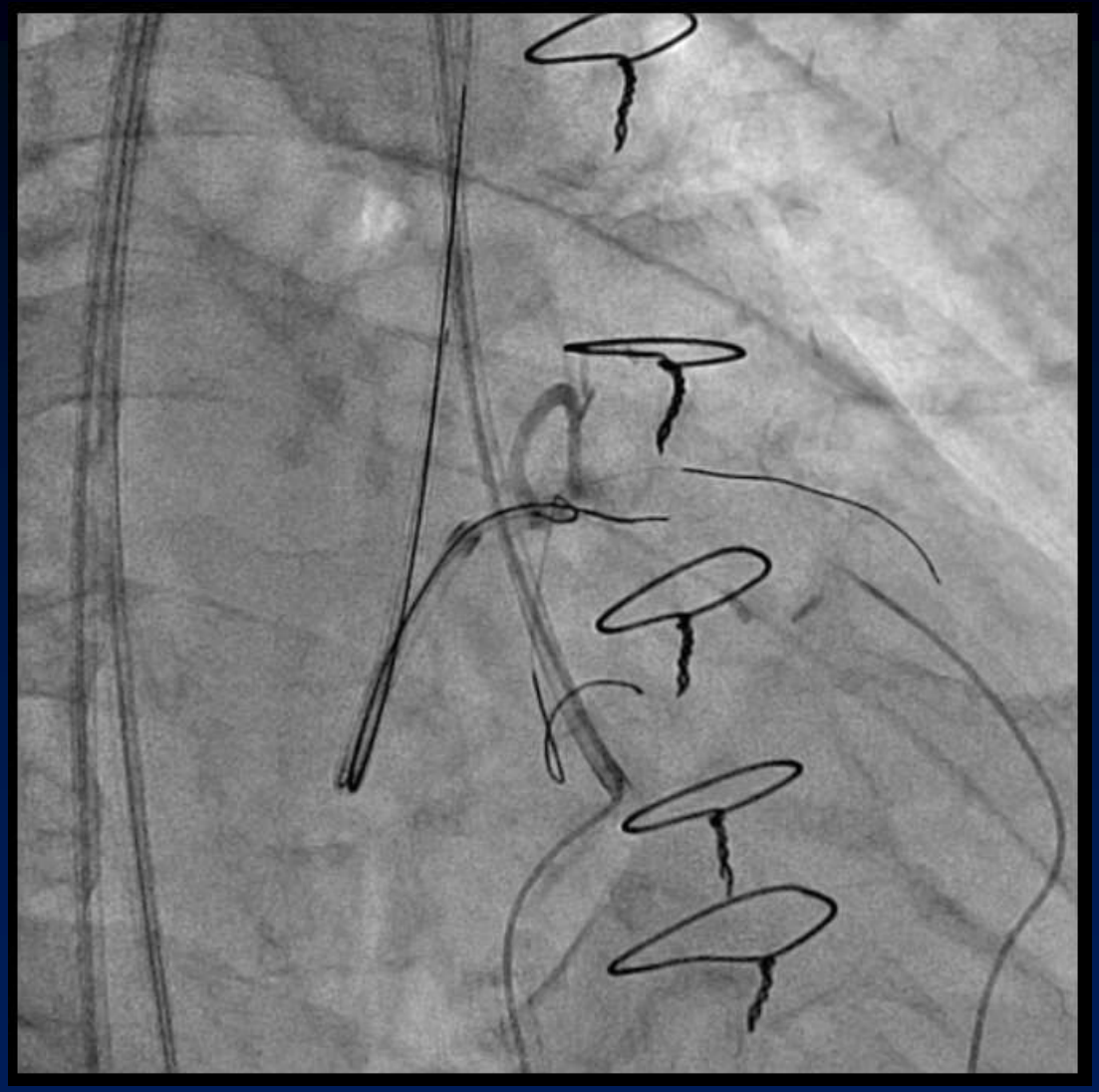
Antegrade wiring



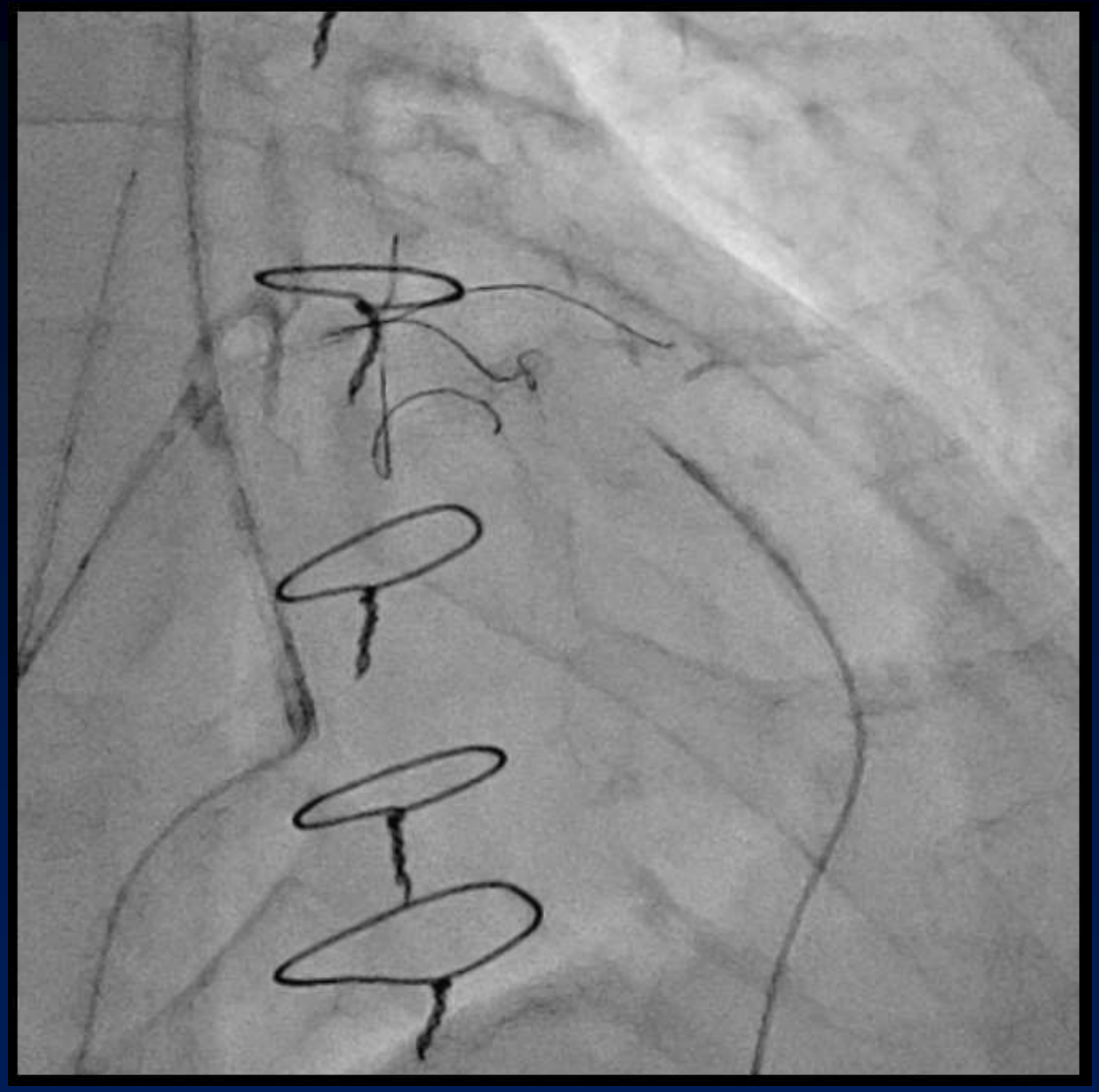
But looks strange…



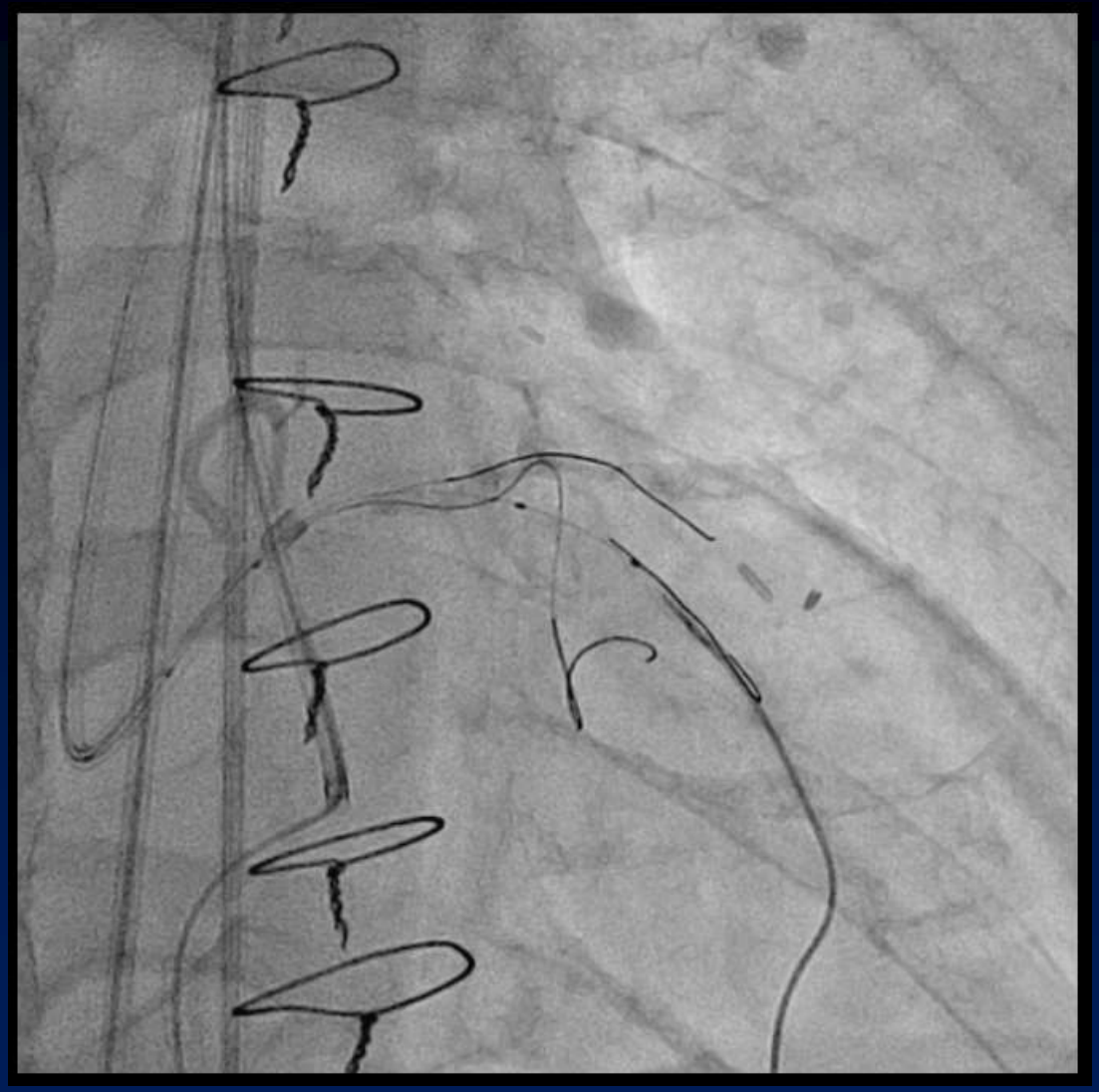
Parallel wiring with GAIA3rd



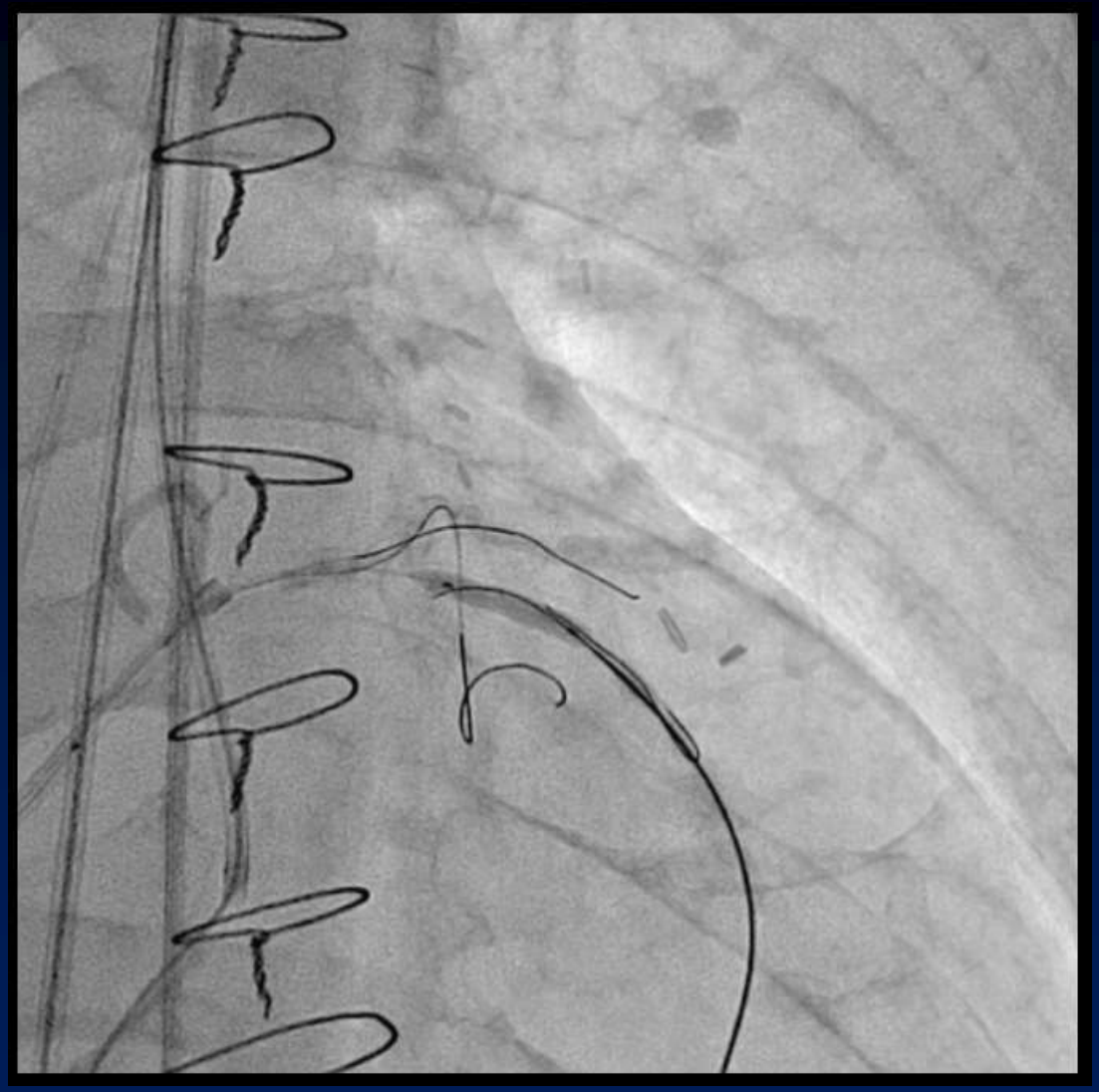
Caravel MC followed the wire!



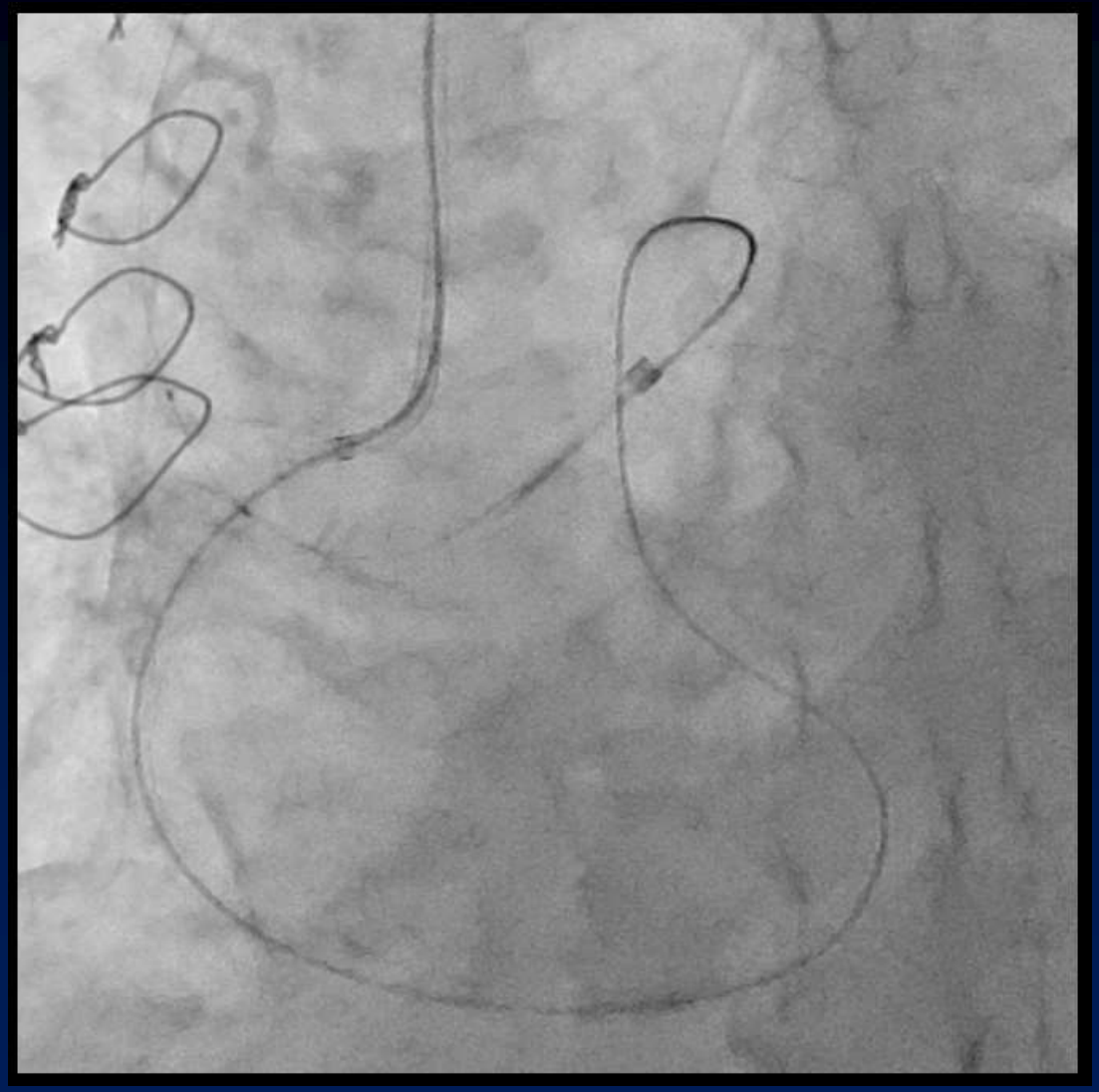
Knuckle wiring with SION Black



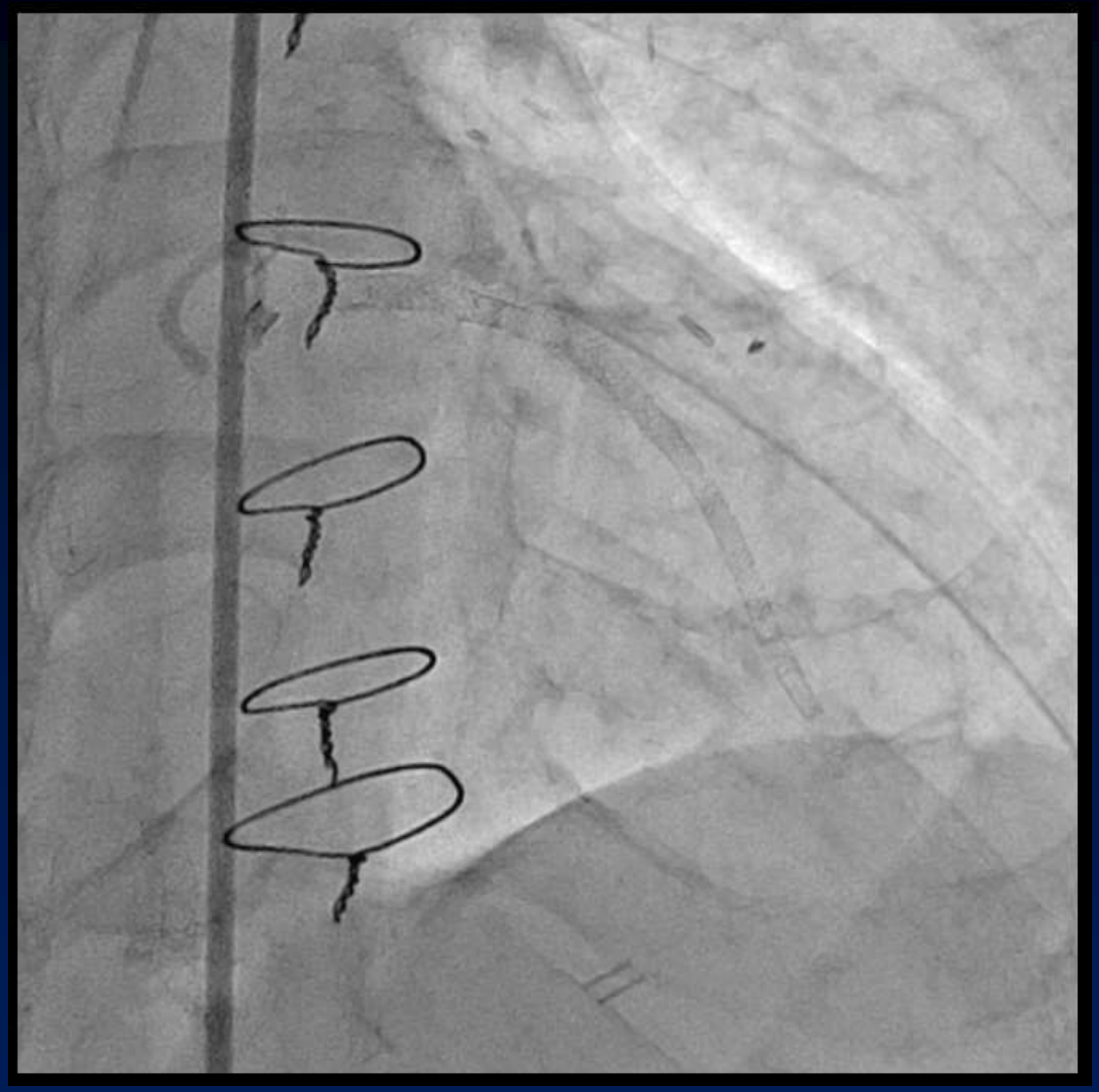
2.5mm antegrade balloon



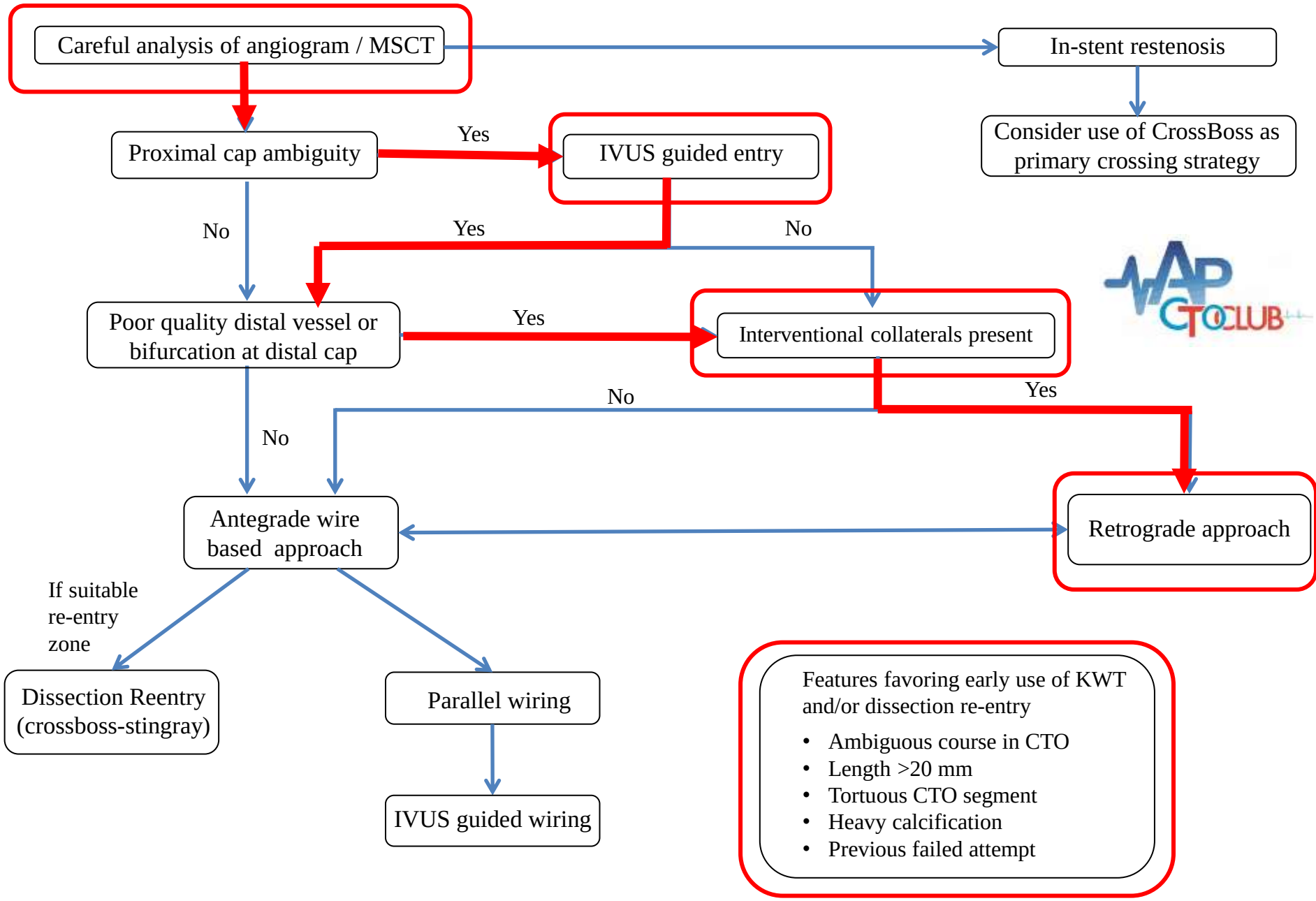
Reverse CART with retrograde SION Black



Successful wire externalization



Final angiogram

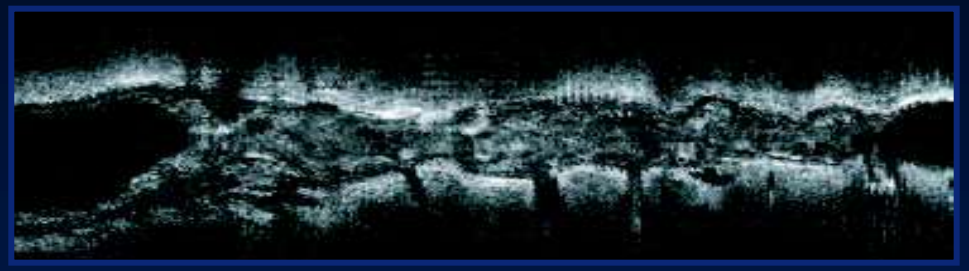


Consider stopping if >3 hours, 3.7 x eGFR ml contrast, Air Kerma > 5 Gy unless procedure well advanced

Take Home Message

- **Pre-procedural MDCT imaging and Procedural IVUS imaging are indispensable for complex CTO cases.**
- **Knuckle wiring is a promising technique to track inside the vessel. But do never over-push!**
- **Please follow the Asian-Pacific CTO-PCI algorithm.**

17th CTO Club



June 17-18, 2016, Nagoya, Japan

www.cct.gr.jp/ctoclub