



When and How to Use GuideLiner



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Complex PCI Need Advanced Techniques (A. B. C. D. E. F.)

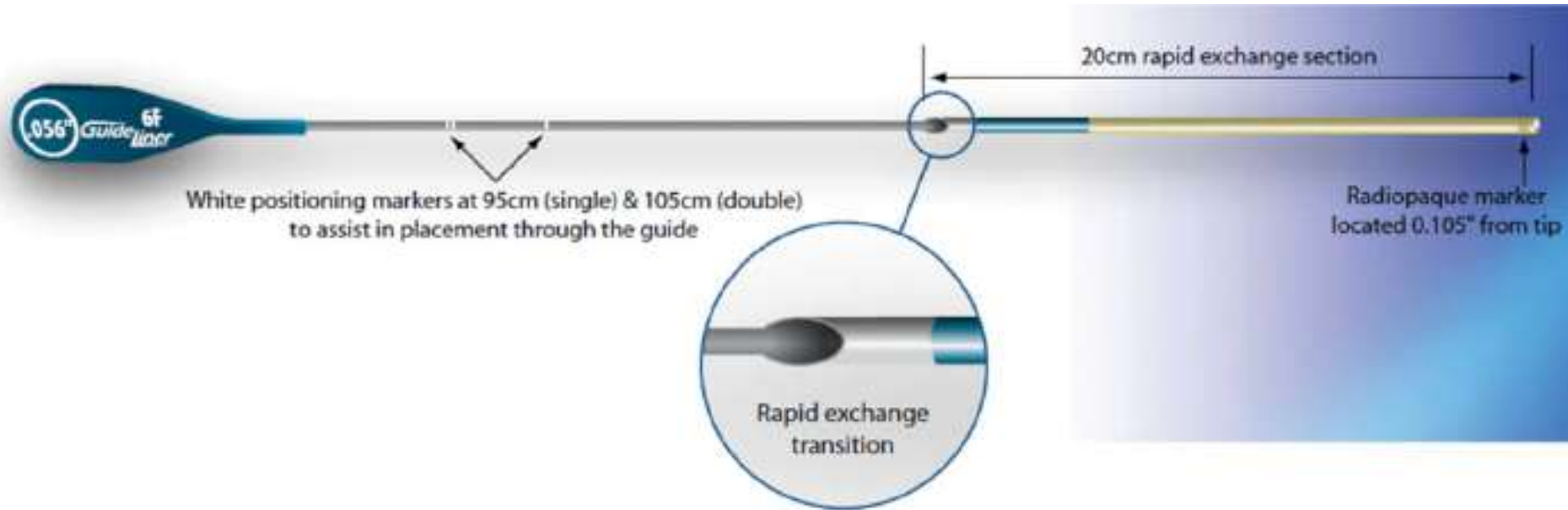


- Anchor technique
 - Wire anchor
 - Balloon anchor
 - coaxial
 - branch
- Buddy wire technique
- Changing guiding catheter.
- Deep seating guiding catheter

To facilitate equipment delivery or vessel engagement allowing deep vessel intubation.

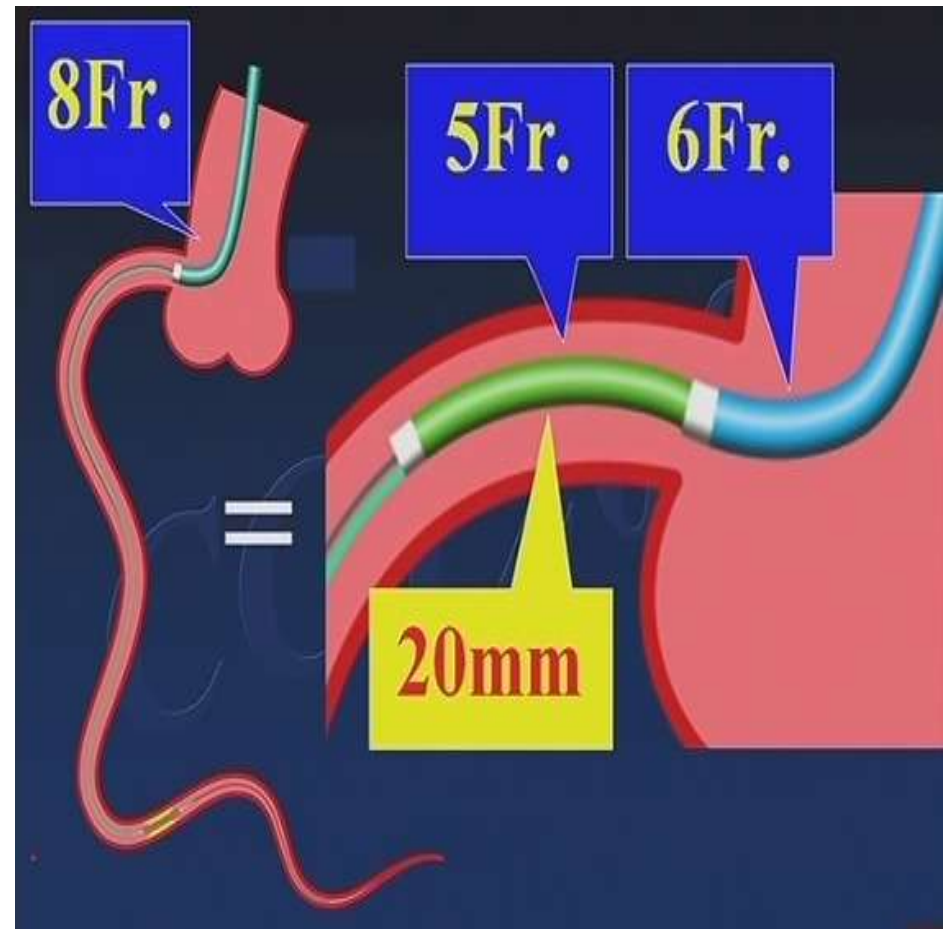
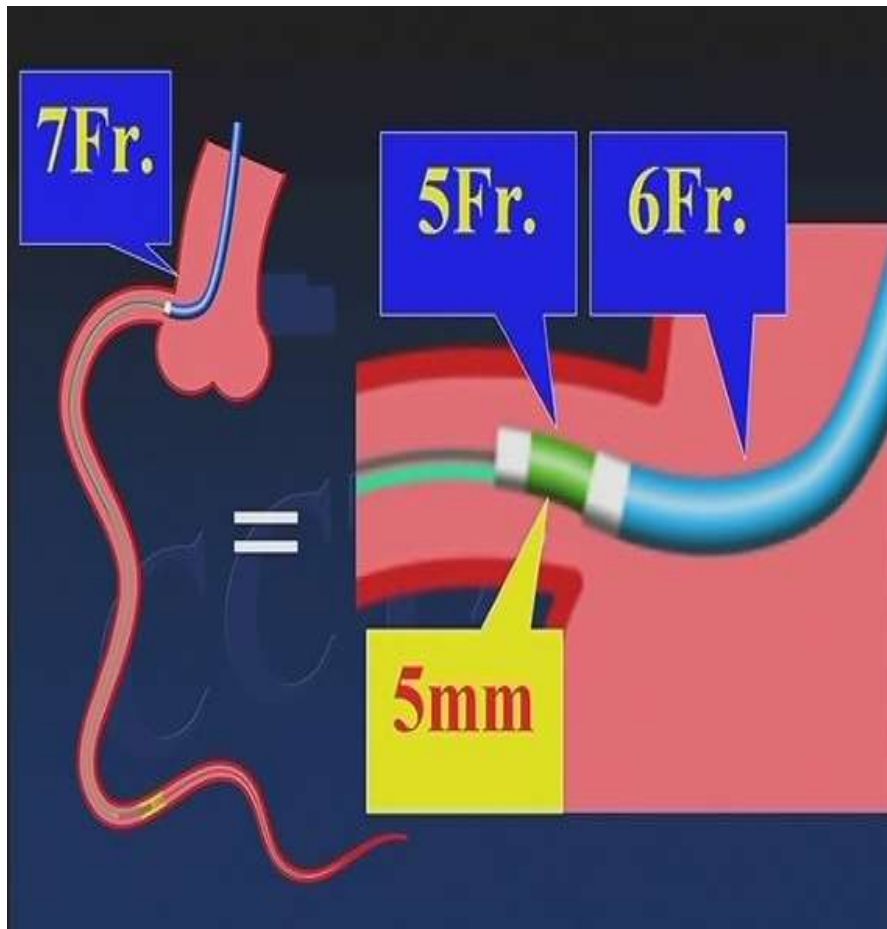
- Five in seven Fr guiding catheter (Child in mother technique)

- Terumo Heartrail ST01 guiding catheter
- GuideLiner catheter



- The GuideLiner catheter is a **rapid-exchange “mother and child” guide extension delivered through the standard guiding catheter on a monorail shaft** that **enables additional support** during complex PCI.
- It is composed of a flexible yellow **20 cm straight extension** with an internal diameter app. **one French size smaller** than the guiding catheter.
- The extension comprises of an **inner PTFE (Teflon) lining**, surrounded by a stainless-steel coil and an outer layer of Pebax polymer.
- The GuideLiner catheter is currently available in three sizes: **5-in-6** French (internal diameter 0.05600), **6-in-7** French (0.06200), and **7-in-8** French (0.07100).

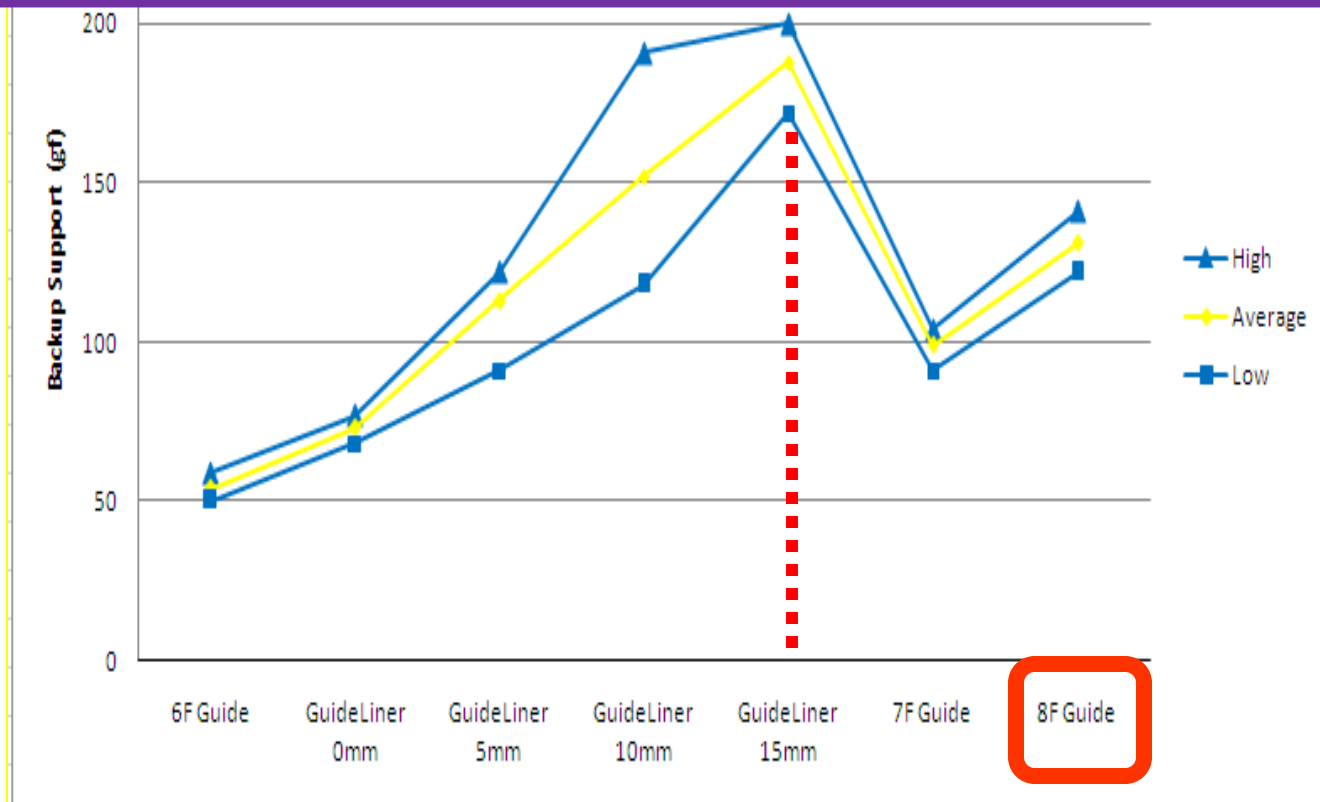
Child in mother technique enables additional support during complex PCI



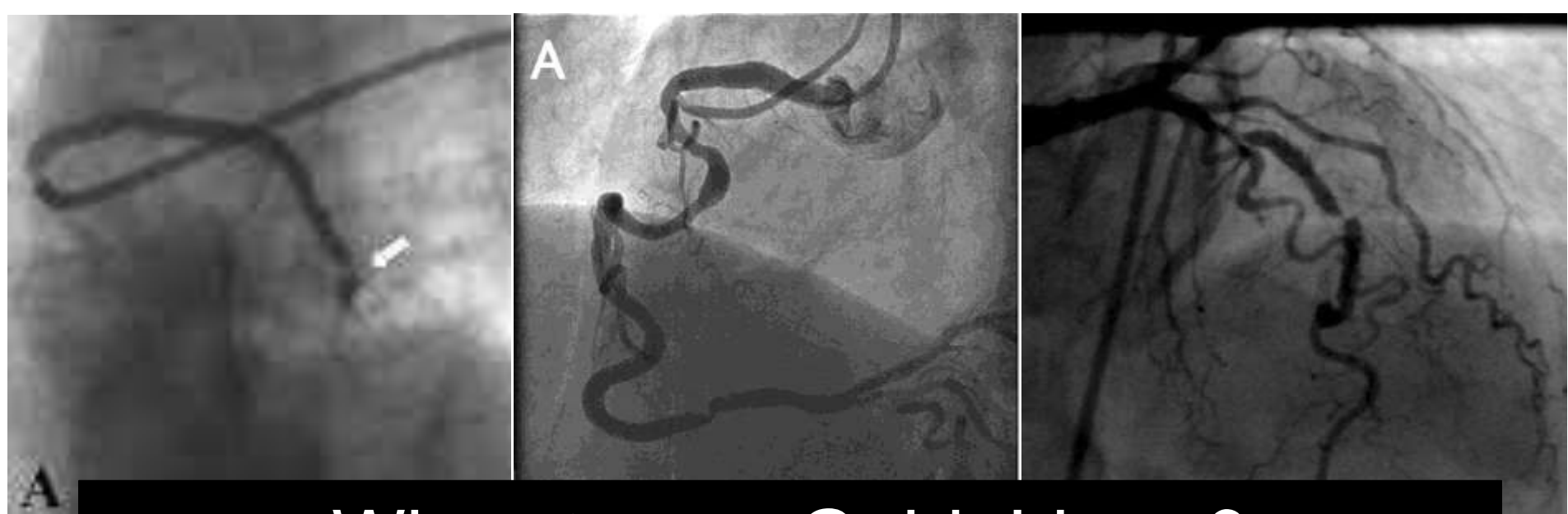


How Much Back-Up Support?

With 15mm extension, 6F GuideLiner provides backup support superior to that of an 8F guide catheter.

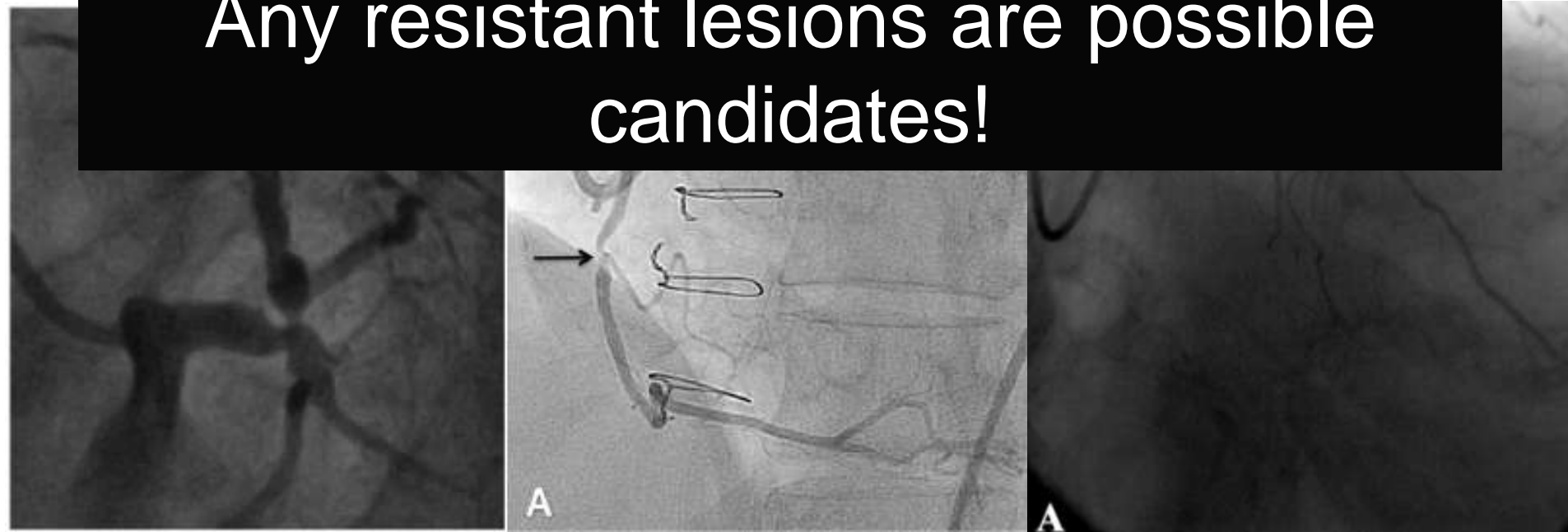


■ This table is included in the GuideLiner brochure and pamphlet



When to use GuideLiner ?

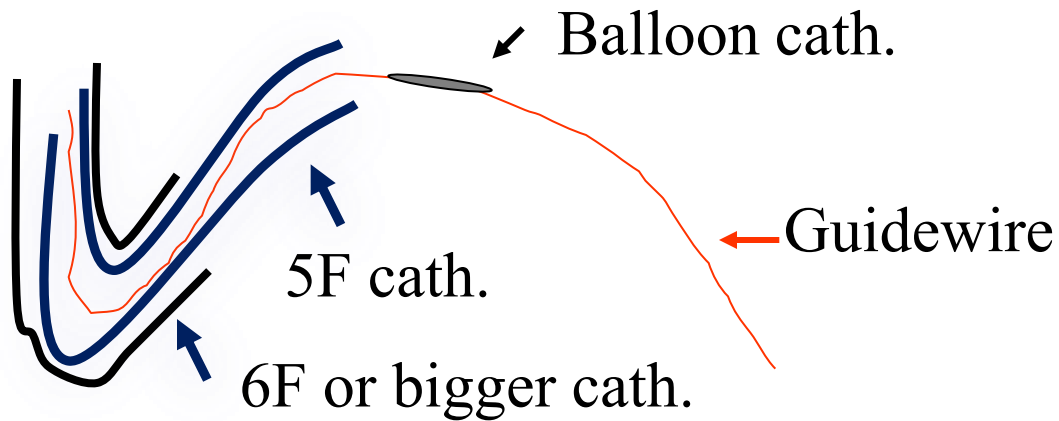
Any resistant lesions are possible candidates!



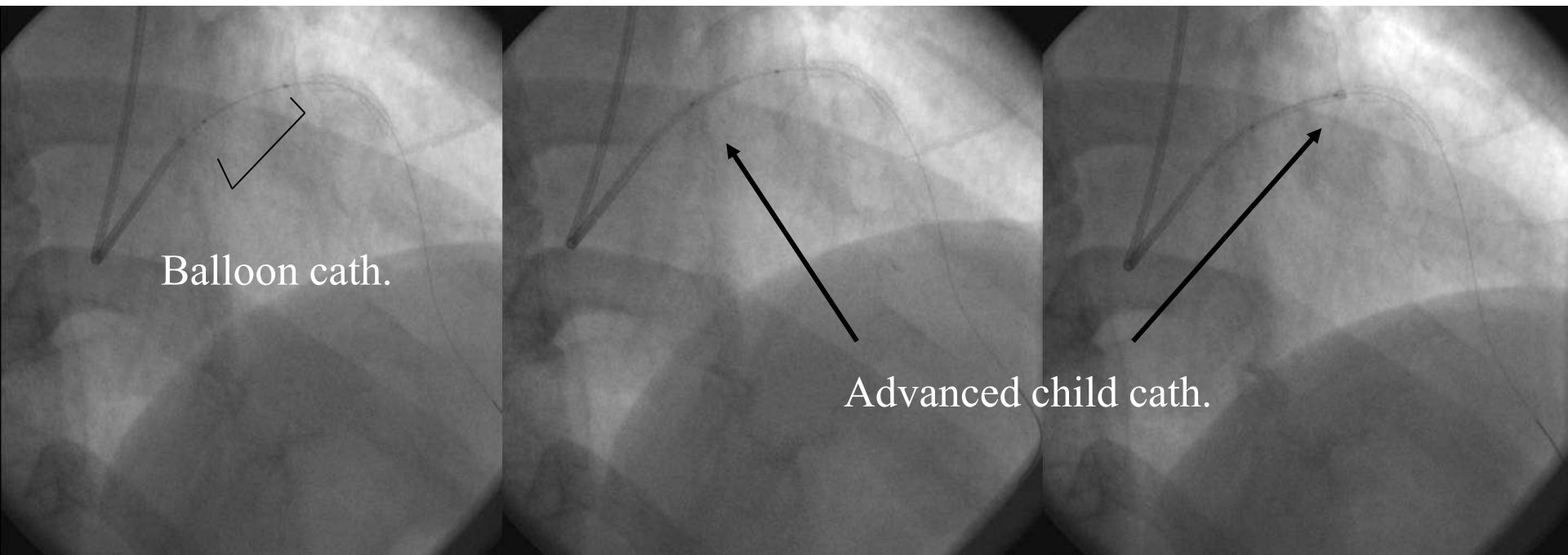
How to Use GuideLiner catheter

- **Child in mother technique**
- **The combination of GuideLiner catheter and balloon anchor technique.**

Original child in mother guiding technique



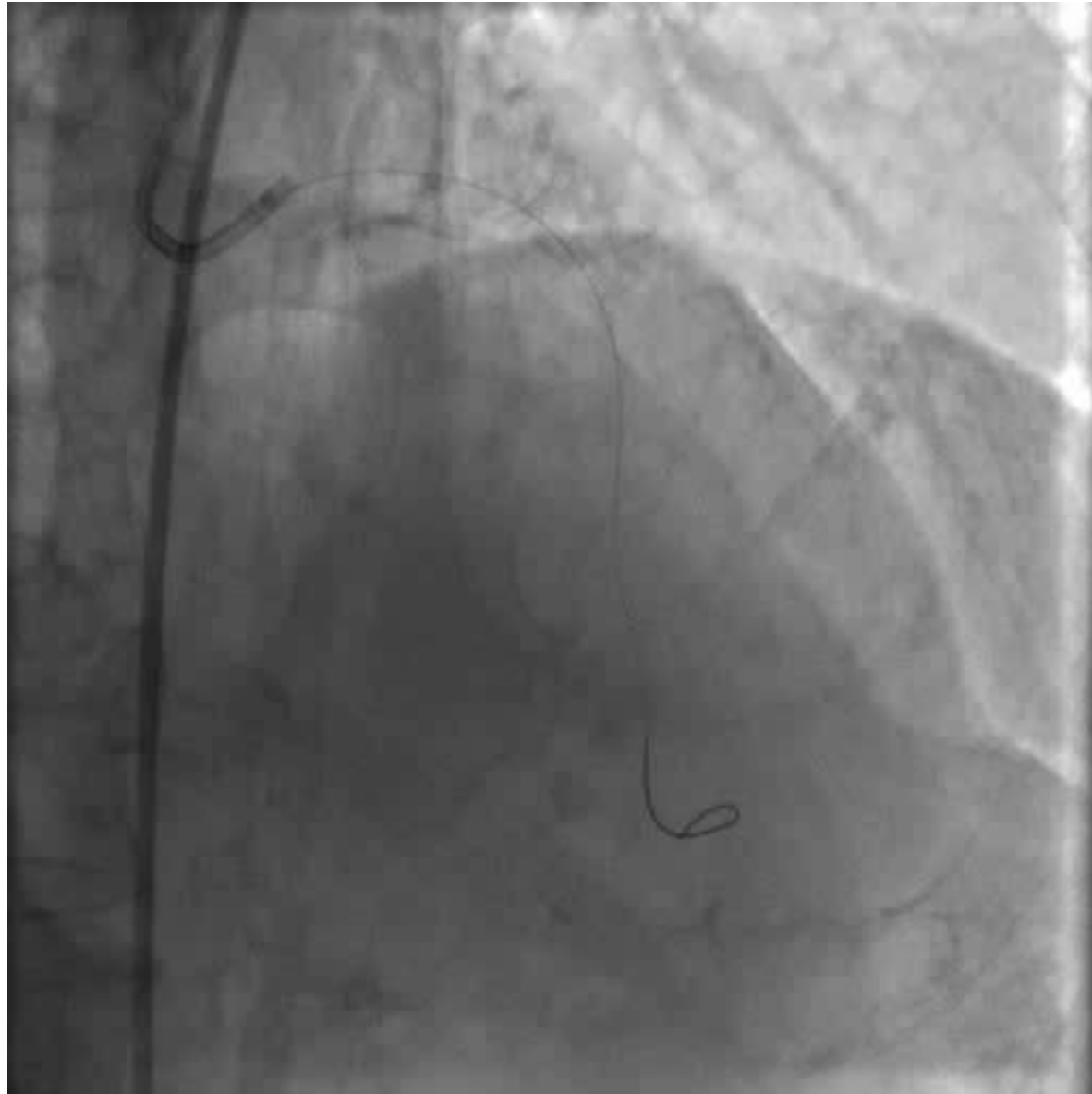
with or w/o
the assistance
of balloon
anchoring



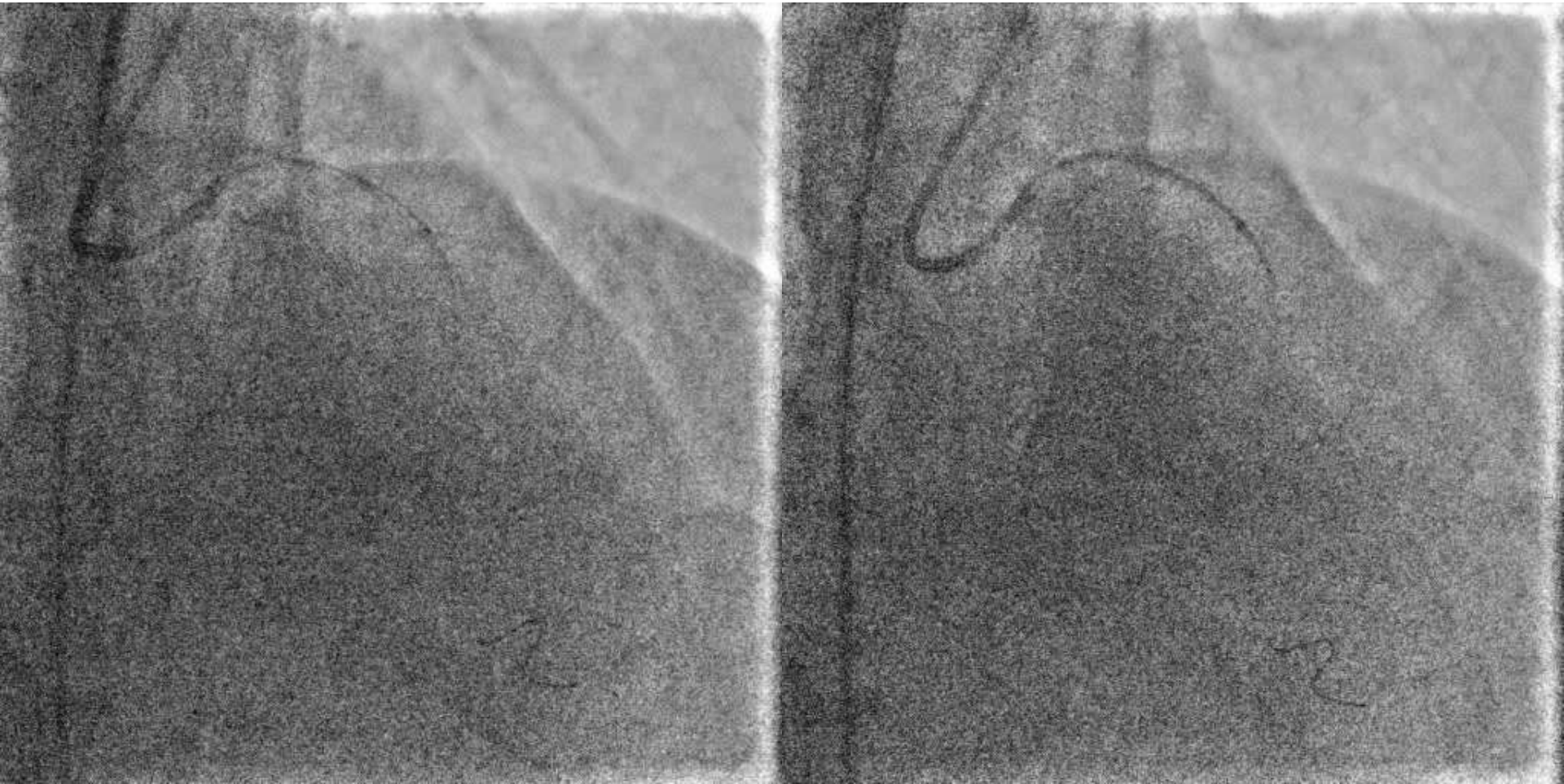
Case 1



After POBA



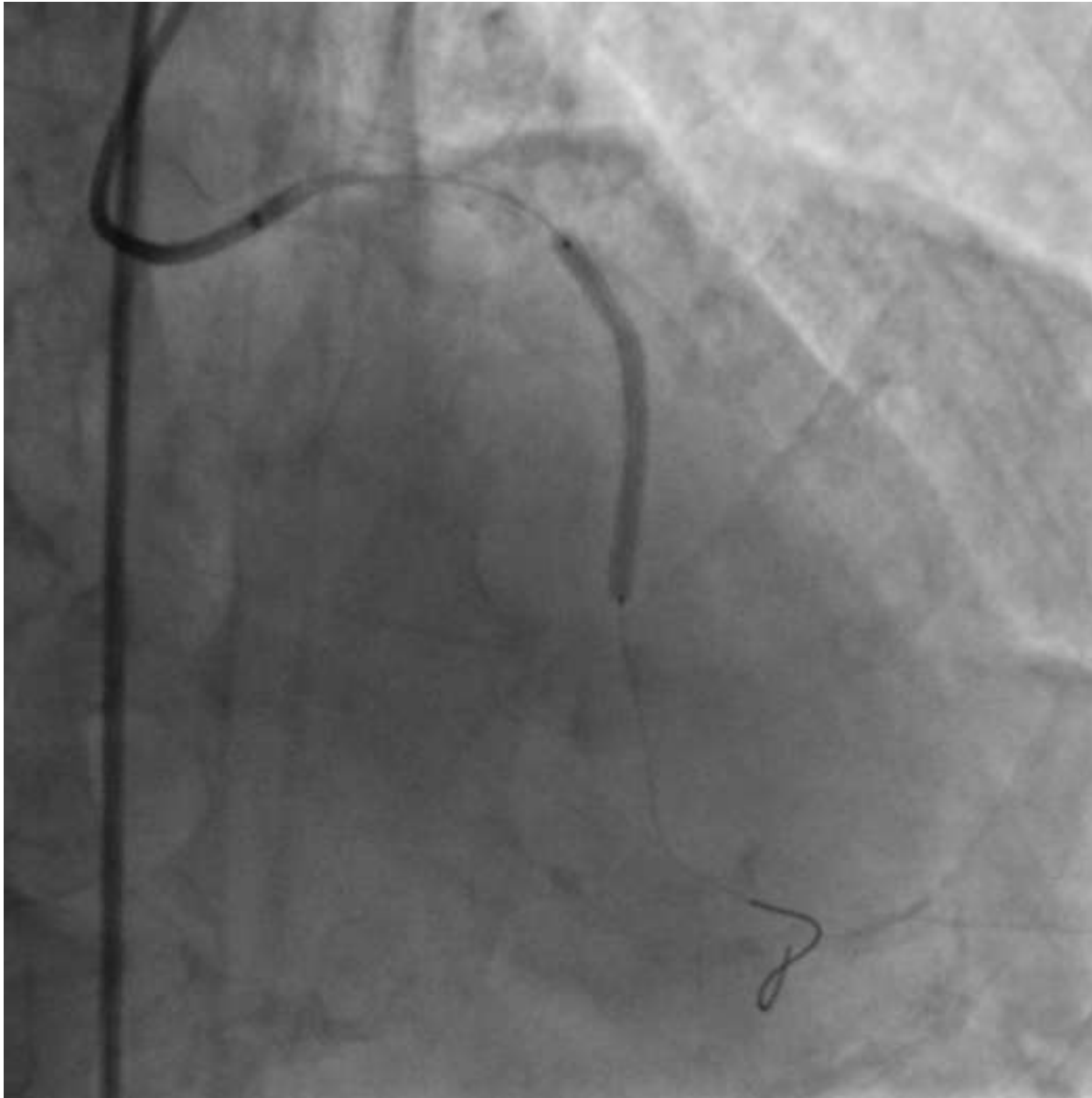
Failed delivery of stent under GuideLiner catheter support



The combination of GuideLiner catheter and balloon anchor technique.



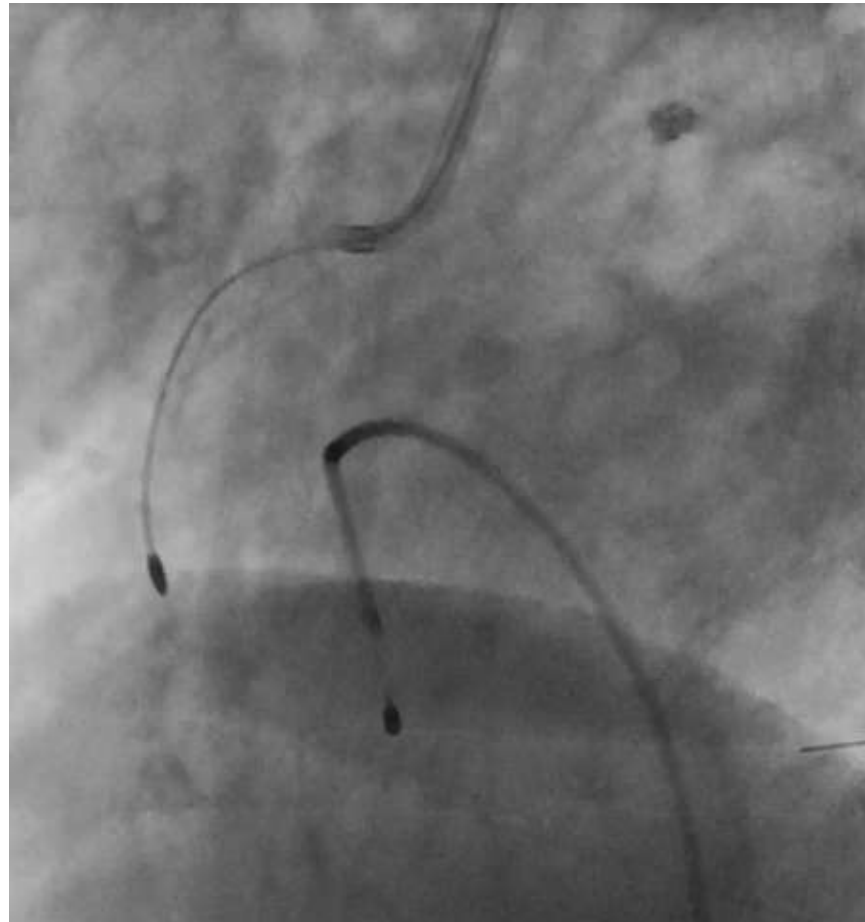
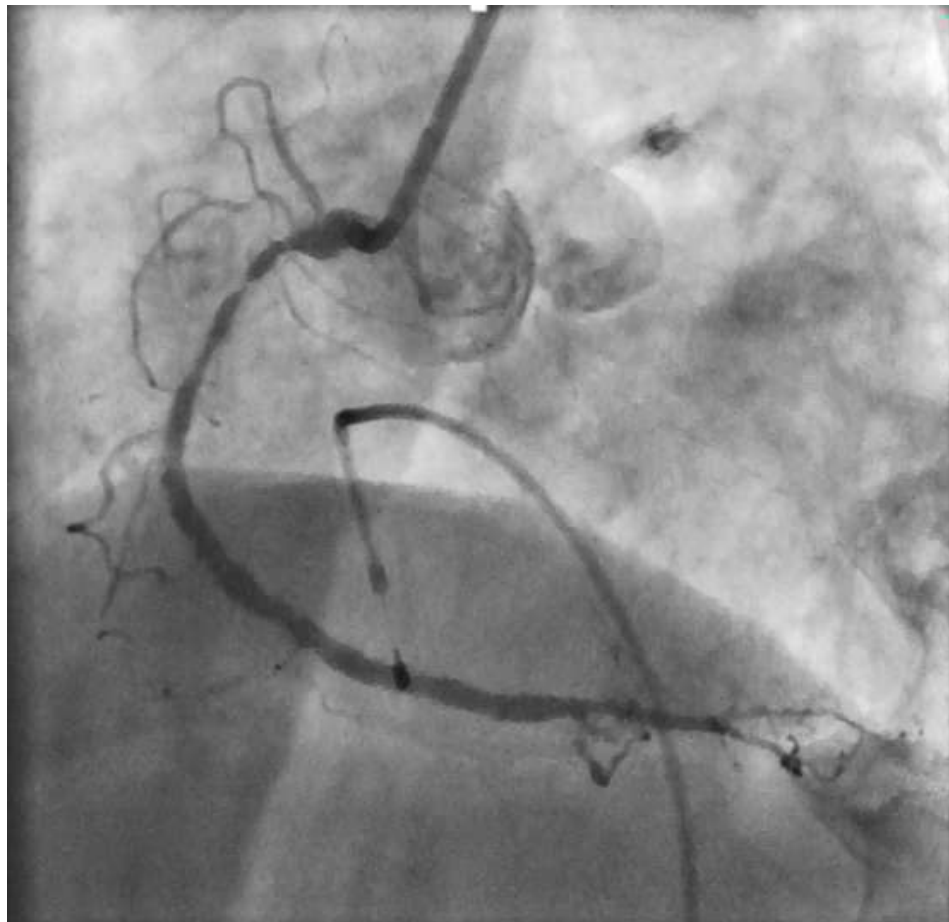
stenting



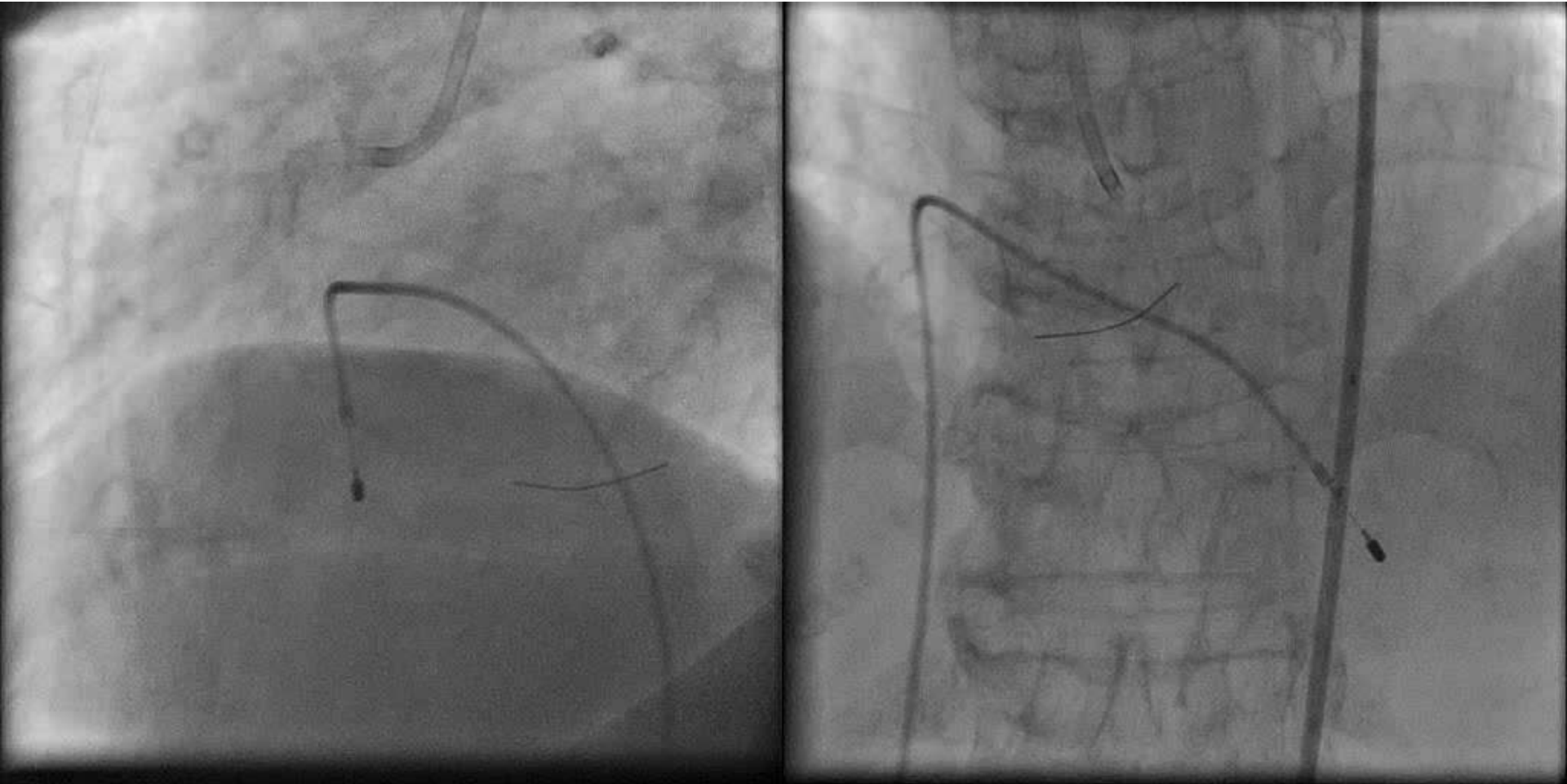
76F, exertional angina, ccs 3

DM on insulin, dyslipidemia, HCVD, Cr: 1.5, eGFR: 48.6

referral for rota-ablation for an undilatable lesion on RCA-M



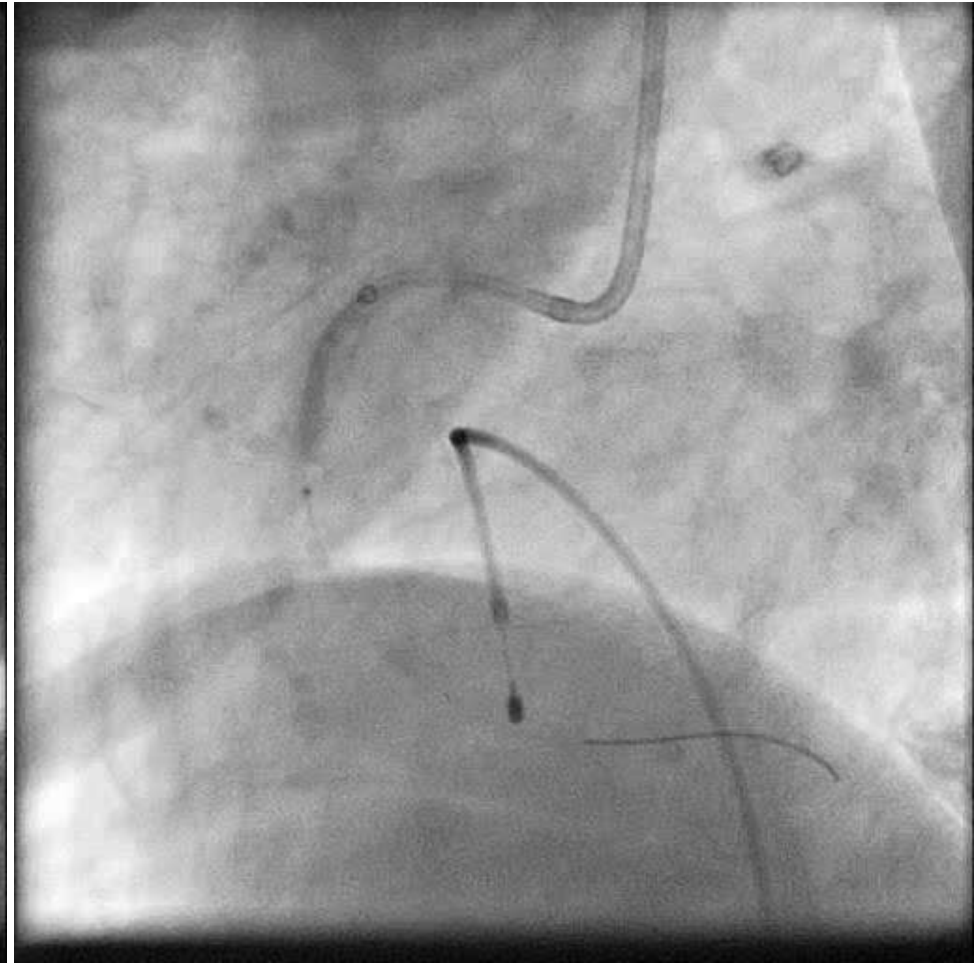
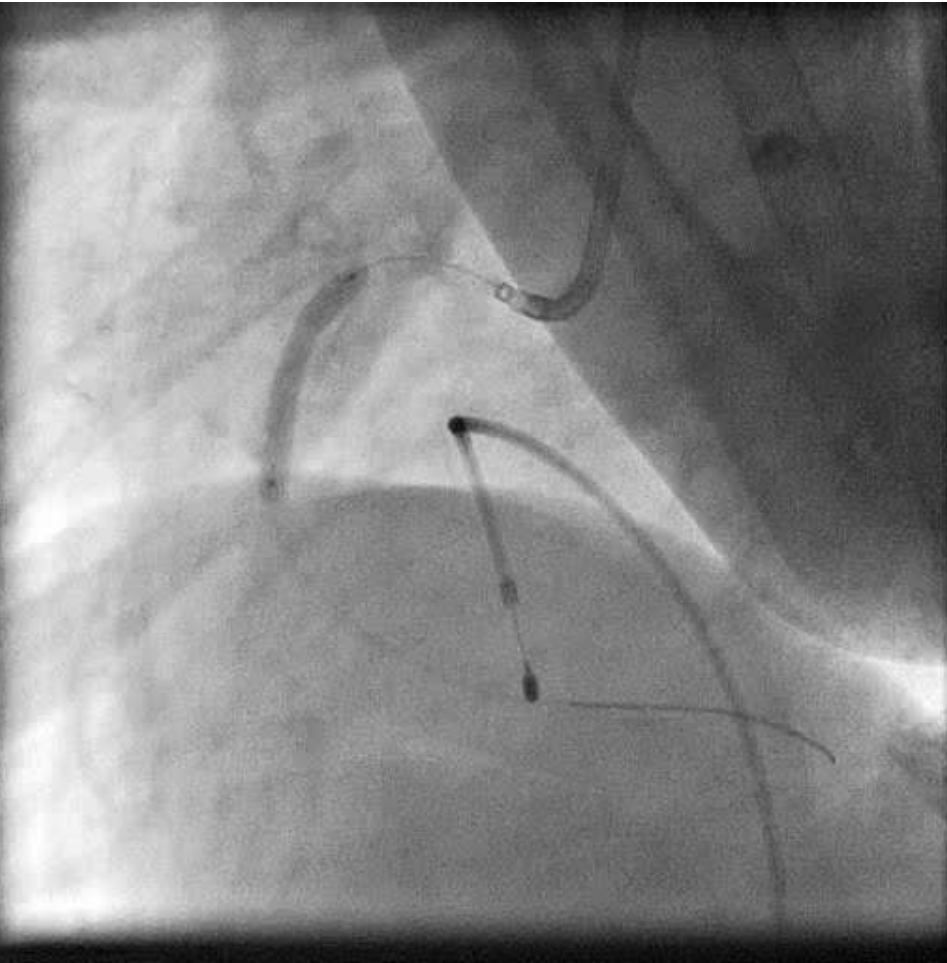
After 3.5mm cutting balloon



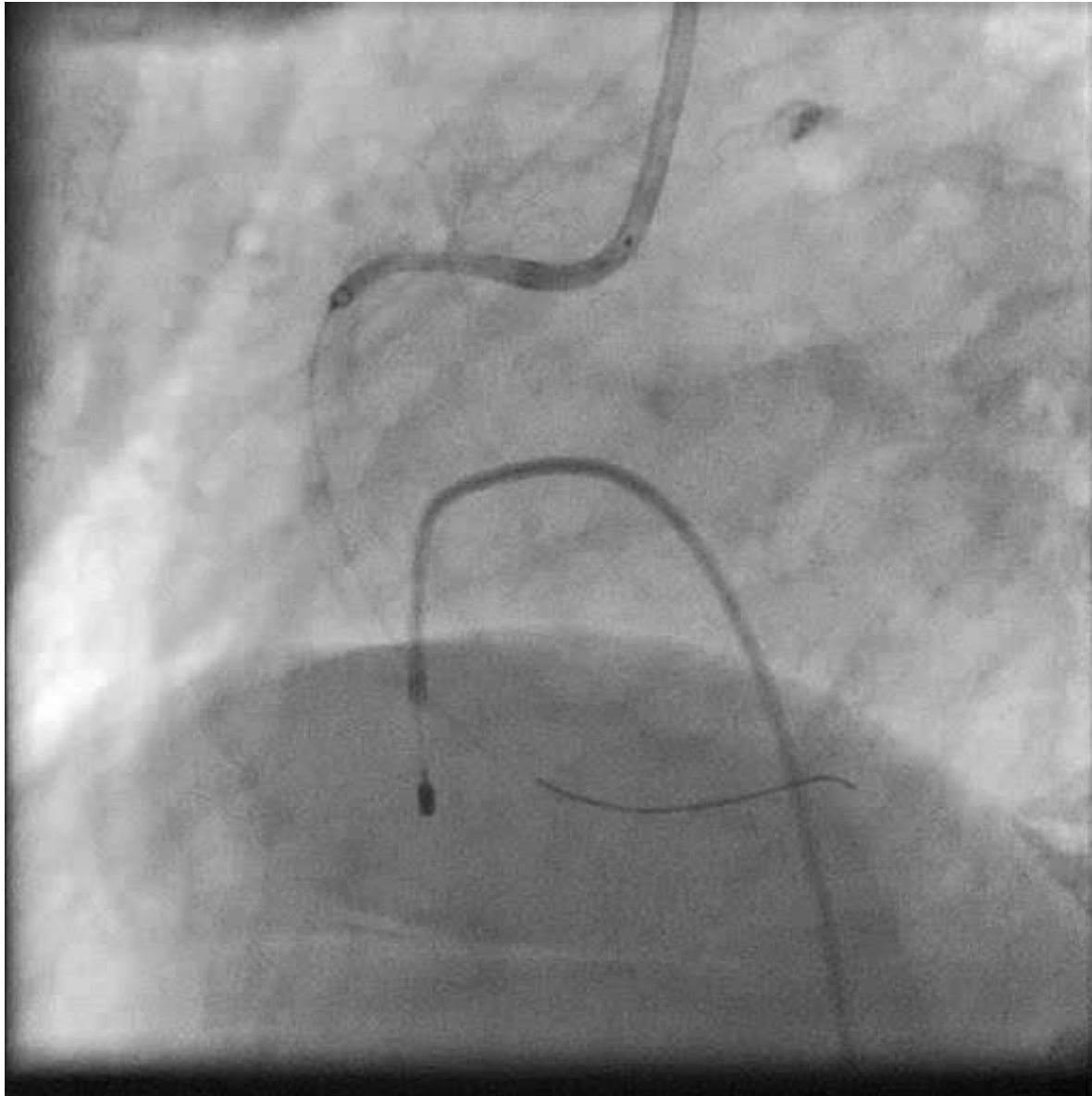
6F, guideLiner catheter in 7F JR4 GC (balloon anchor technique + child in mother technique)



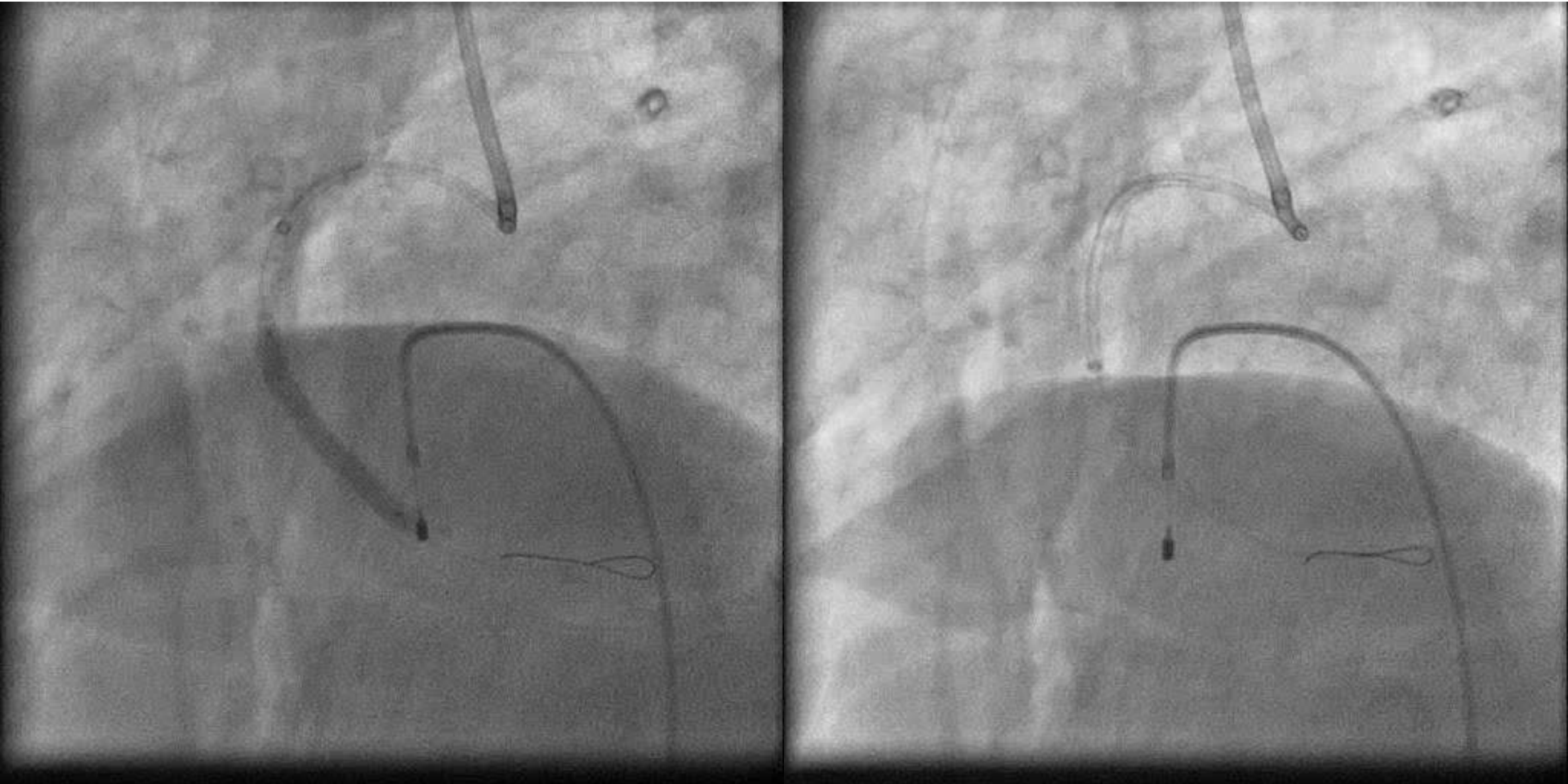
6F, guideLiner catheter in 7F JR4 GC (balloon anchor technique + child in mother technique)



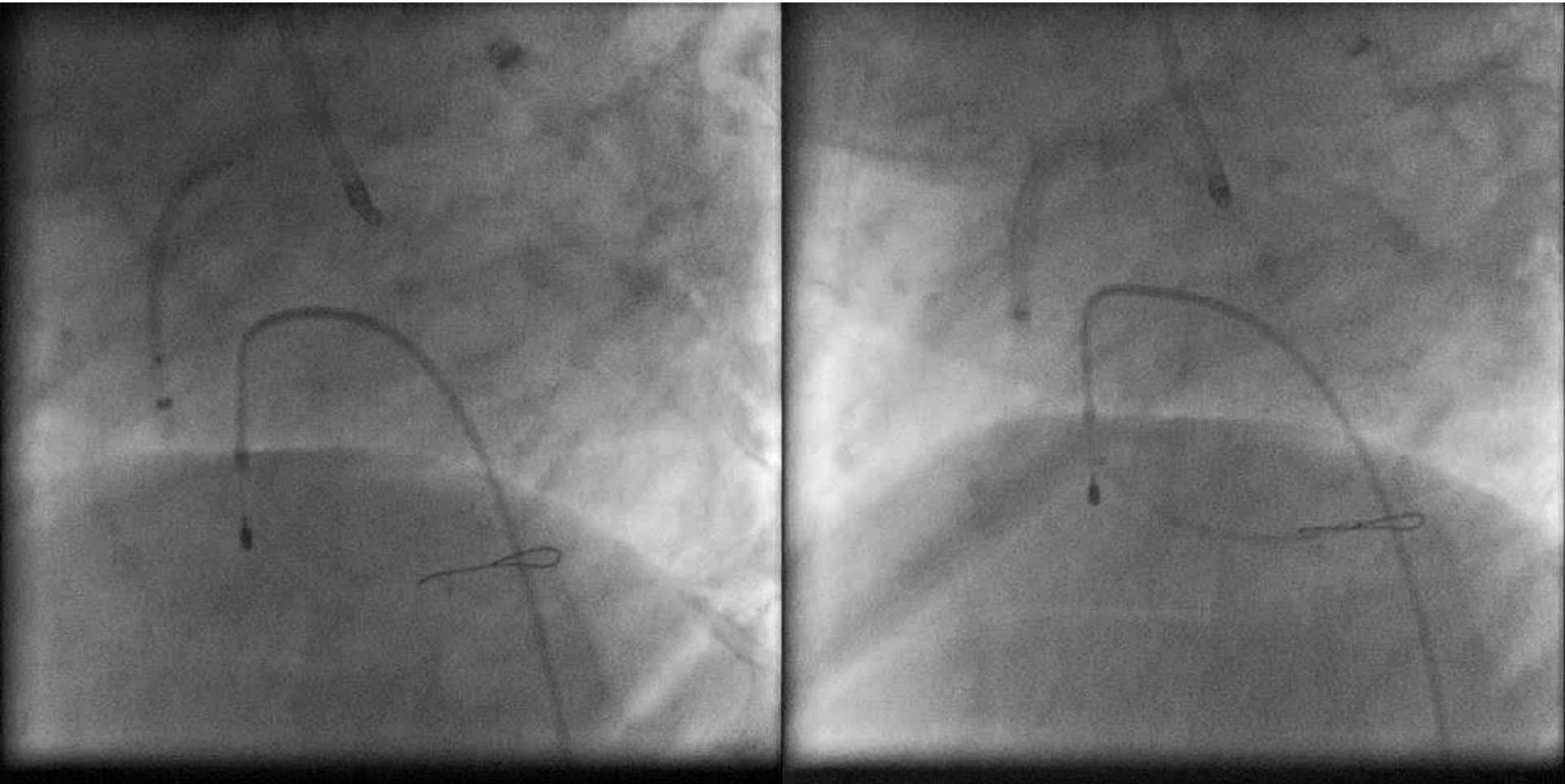
Strong resistance



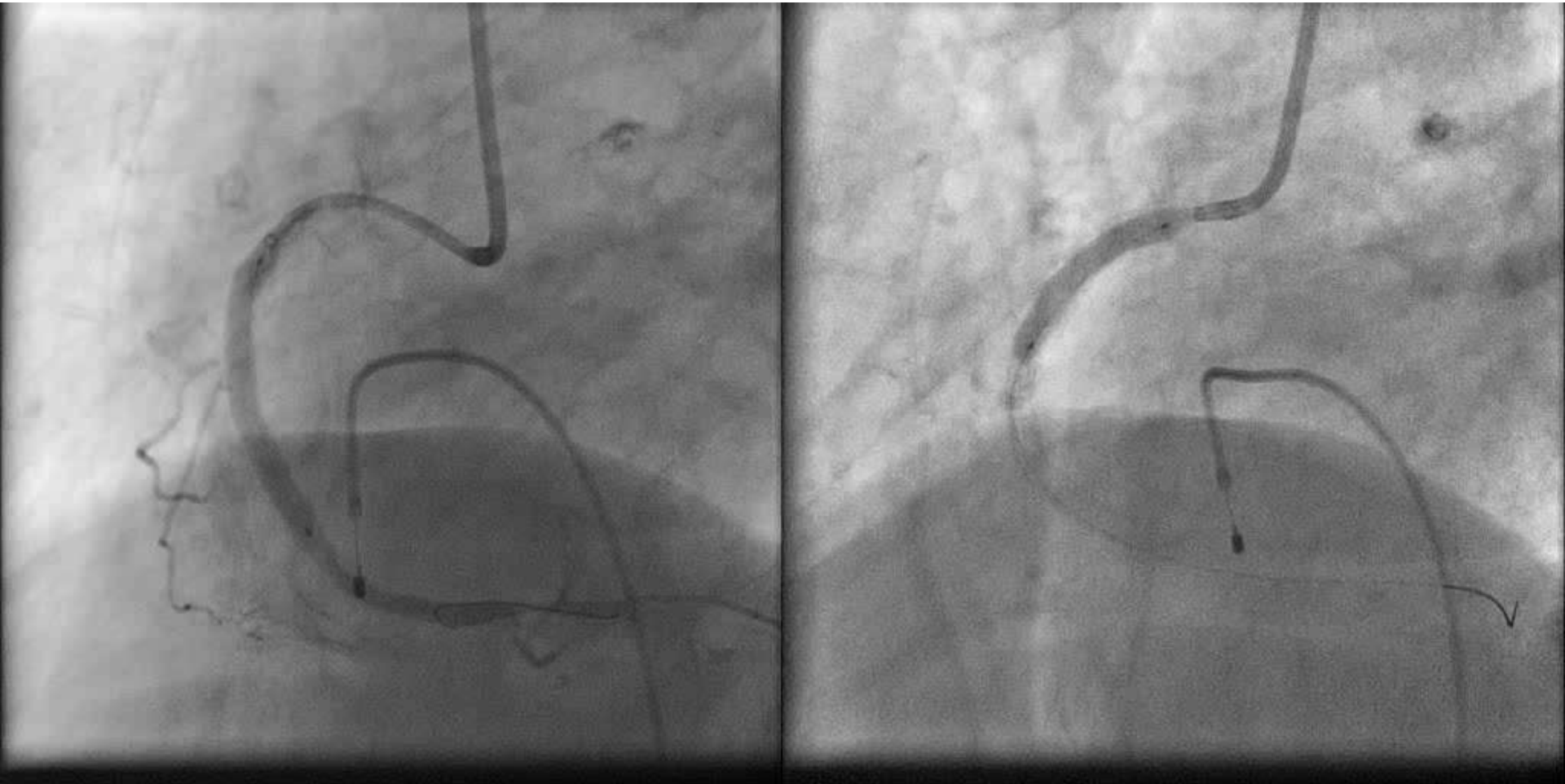
Deeper position of GuideLiner catheter



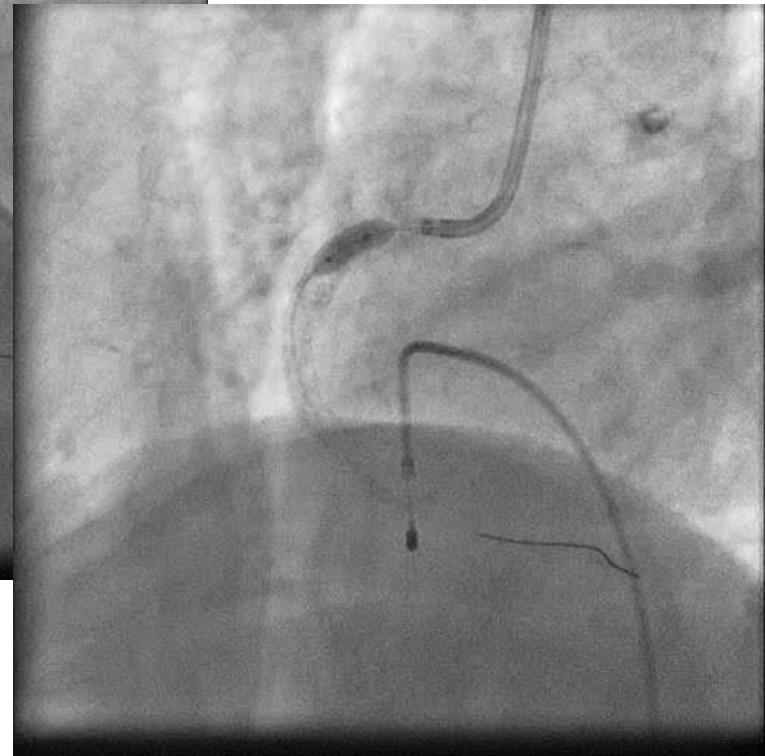
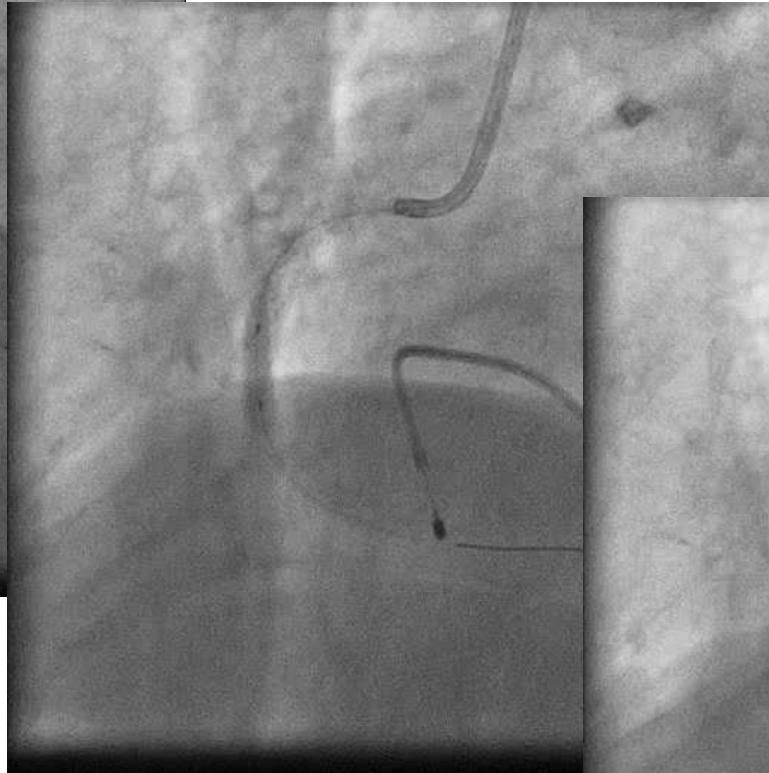
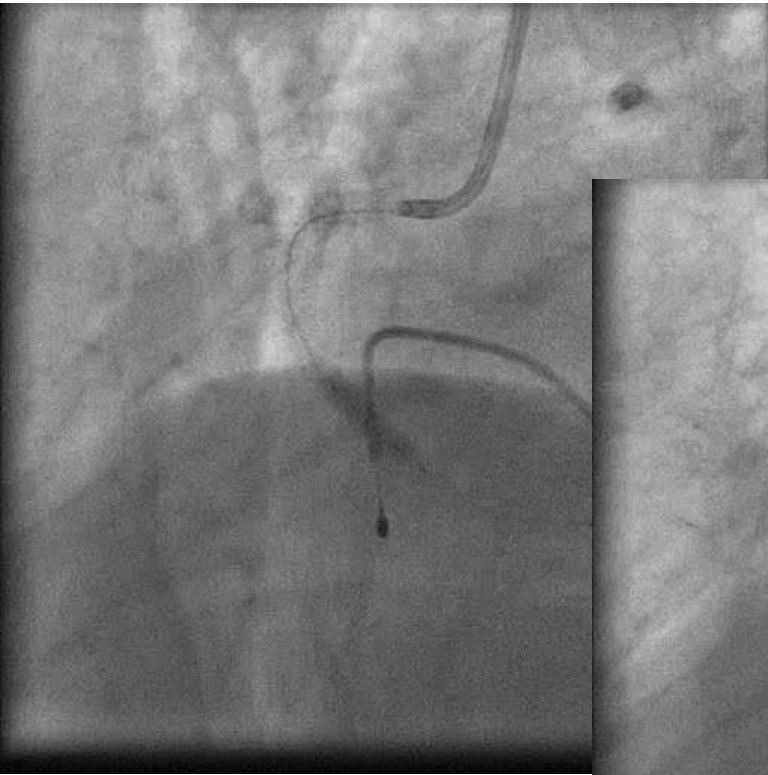
3.5/38 mm DES



Stenting of proximal RCA

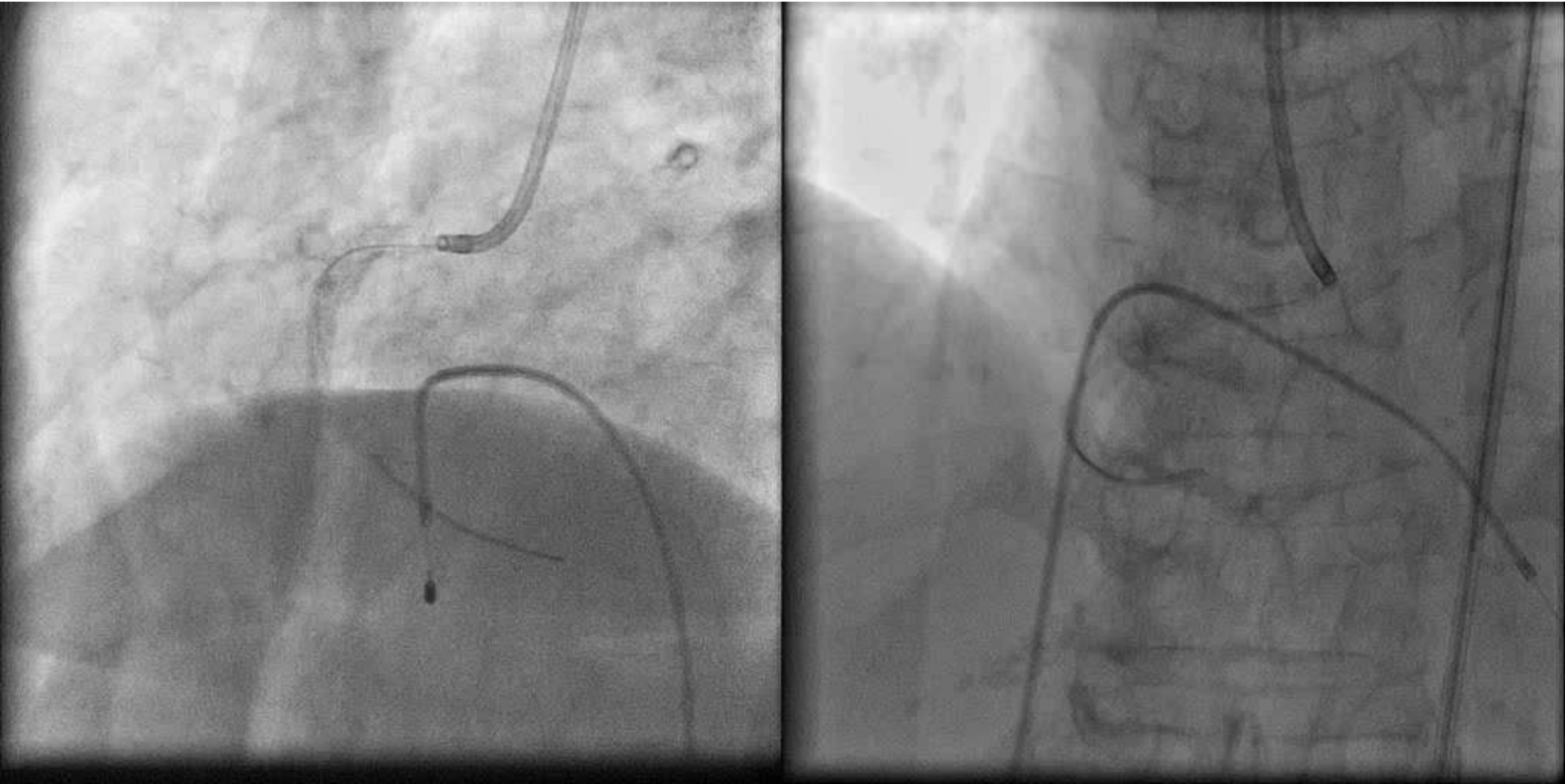


Quantum 4.5/12 mm, 16 atm



Tainan, Taiwan. 2012

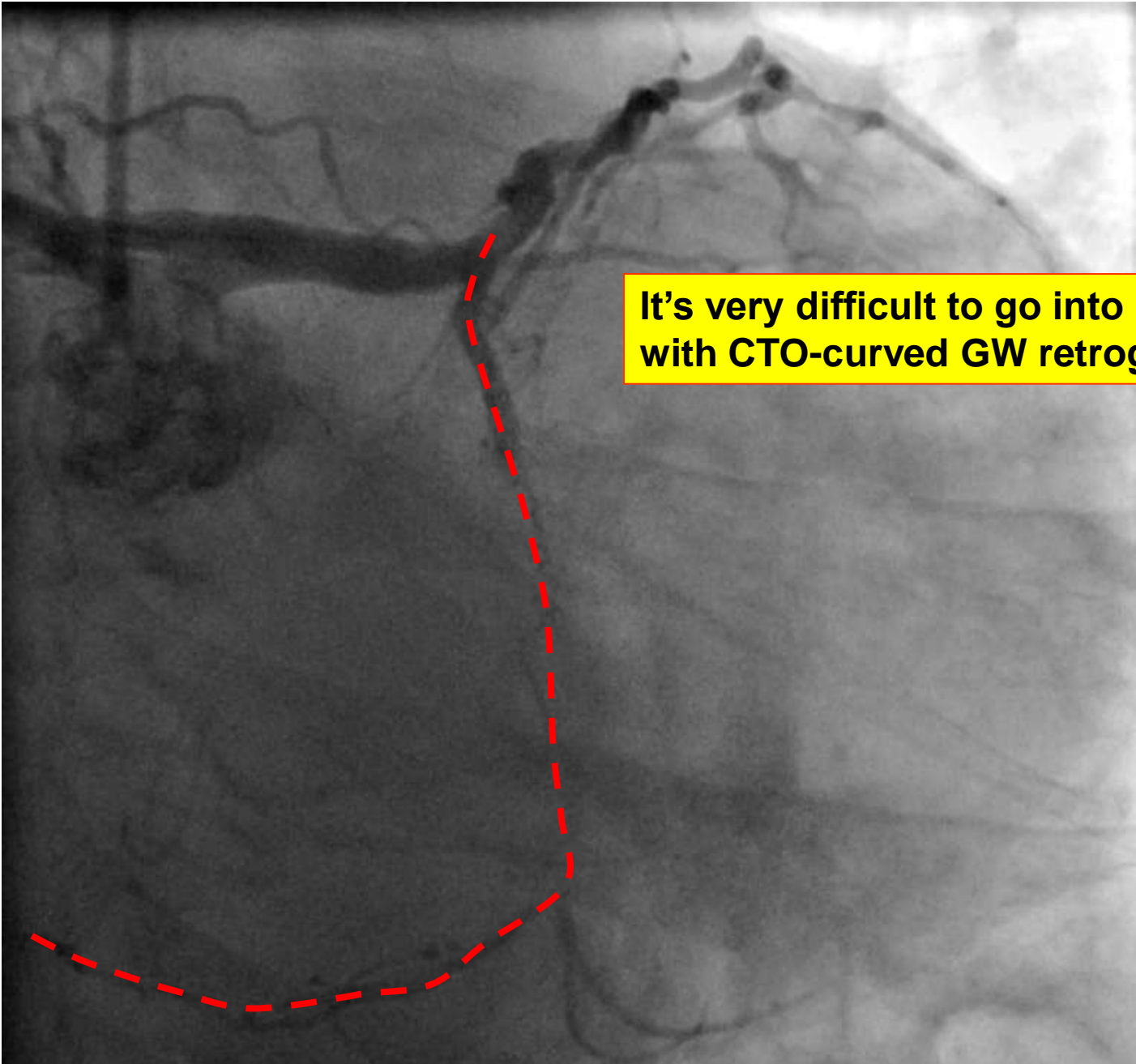
Final



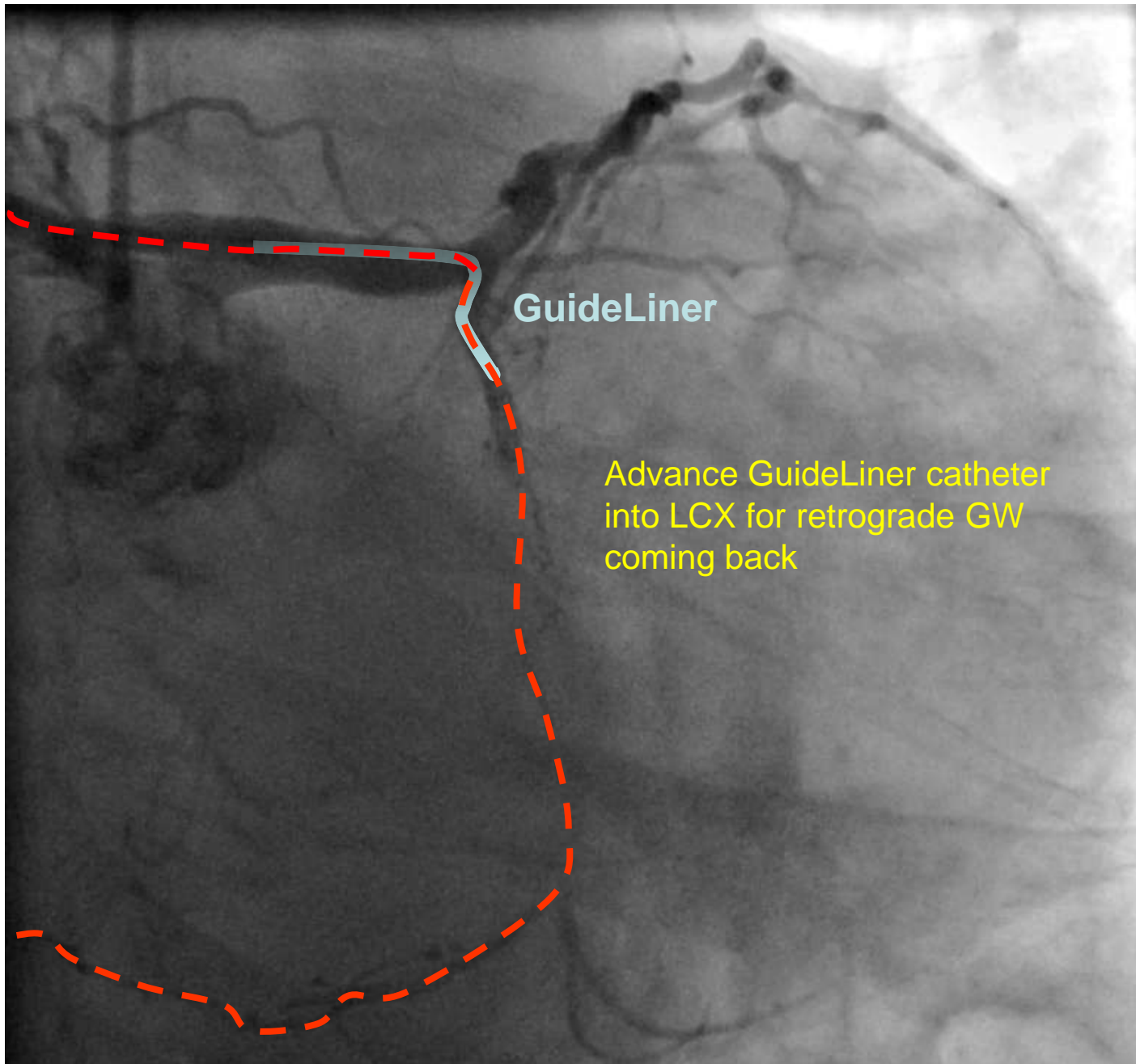
Tainan, Taiwan. 2012

Dr. Ku's Novel Application of GuideLiner catheter

- **Child in mother technique**
- **The combination of GuideLiner catheter and balloon anchor technique.**
- **Extension of antegrade guiding catheter to help the externalization of retrograde wire.**



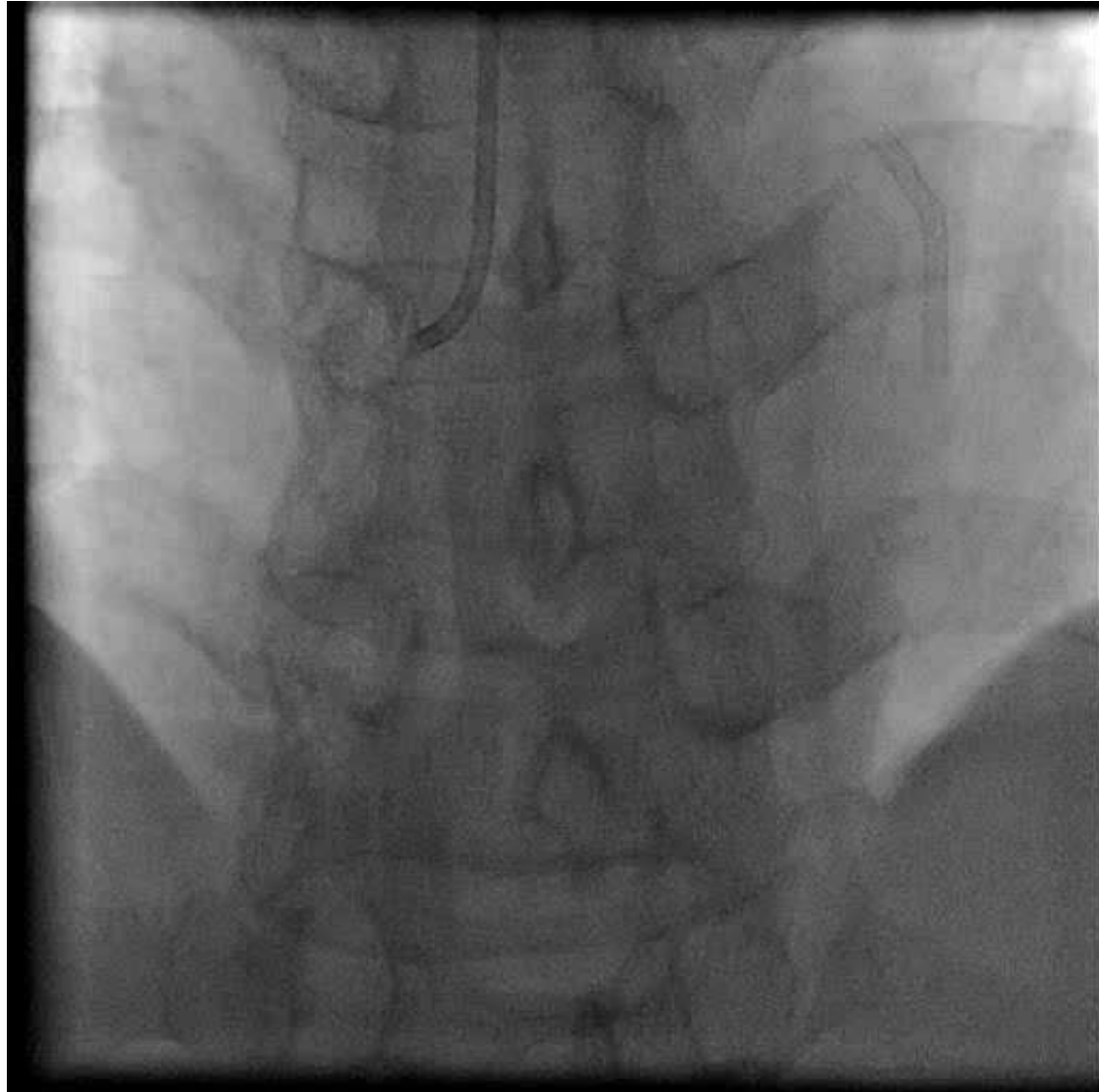
**It's very difficult to go into LM
with CTO-curved GW retrogradely**



GuideLiner

Advance GuideLiner catheter
into LCX for retrograde GW
coming back

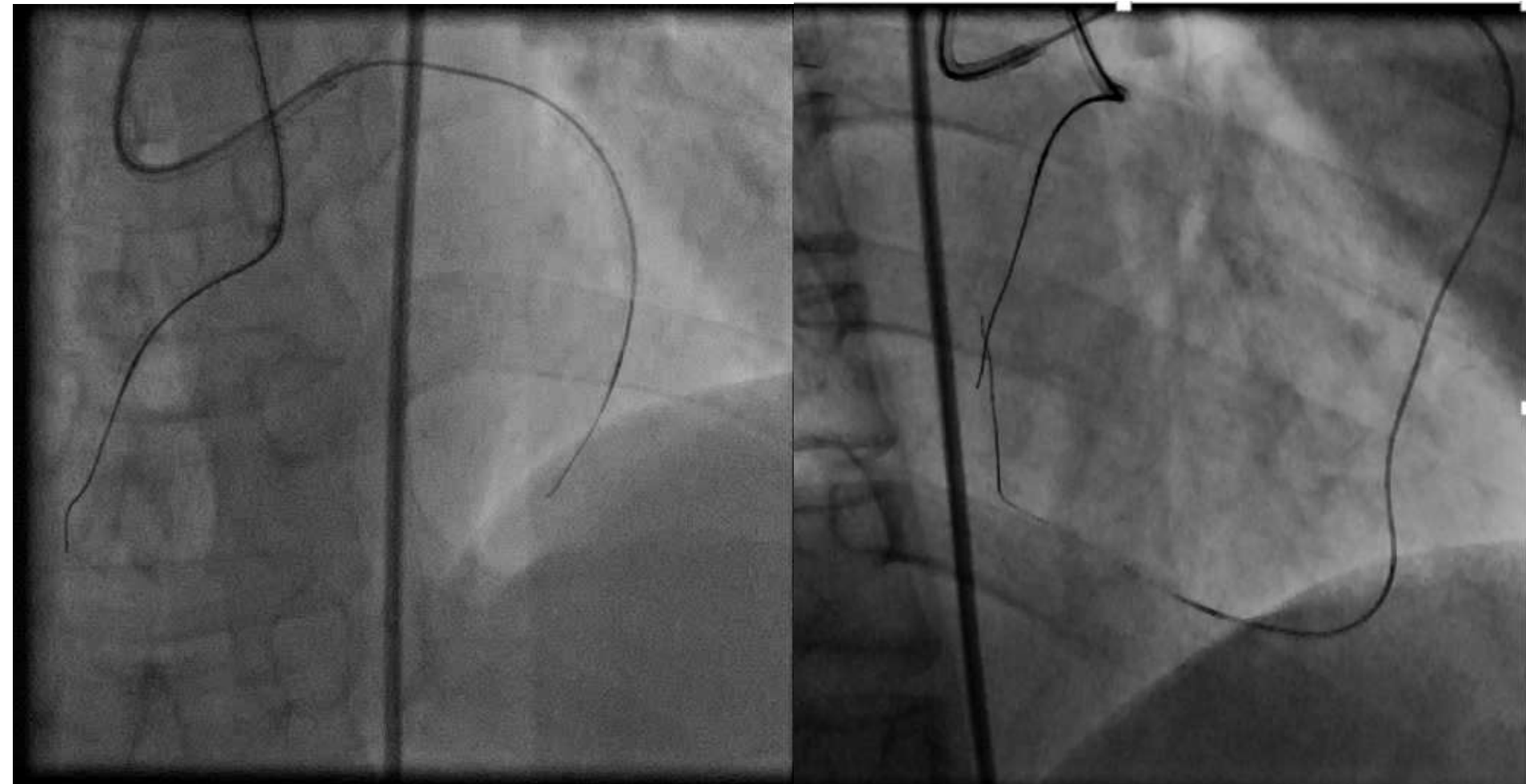
66F, exertional angina, ccs 2
referral for the failed antegrade approach for RCA-CTO



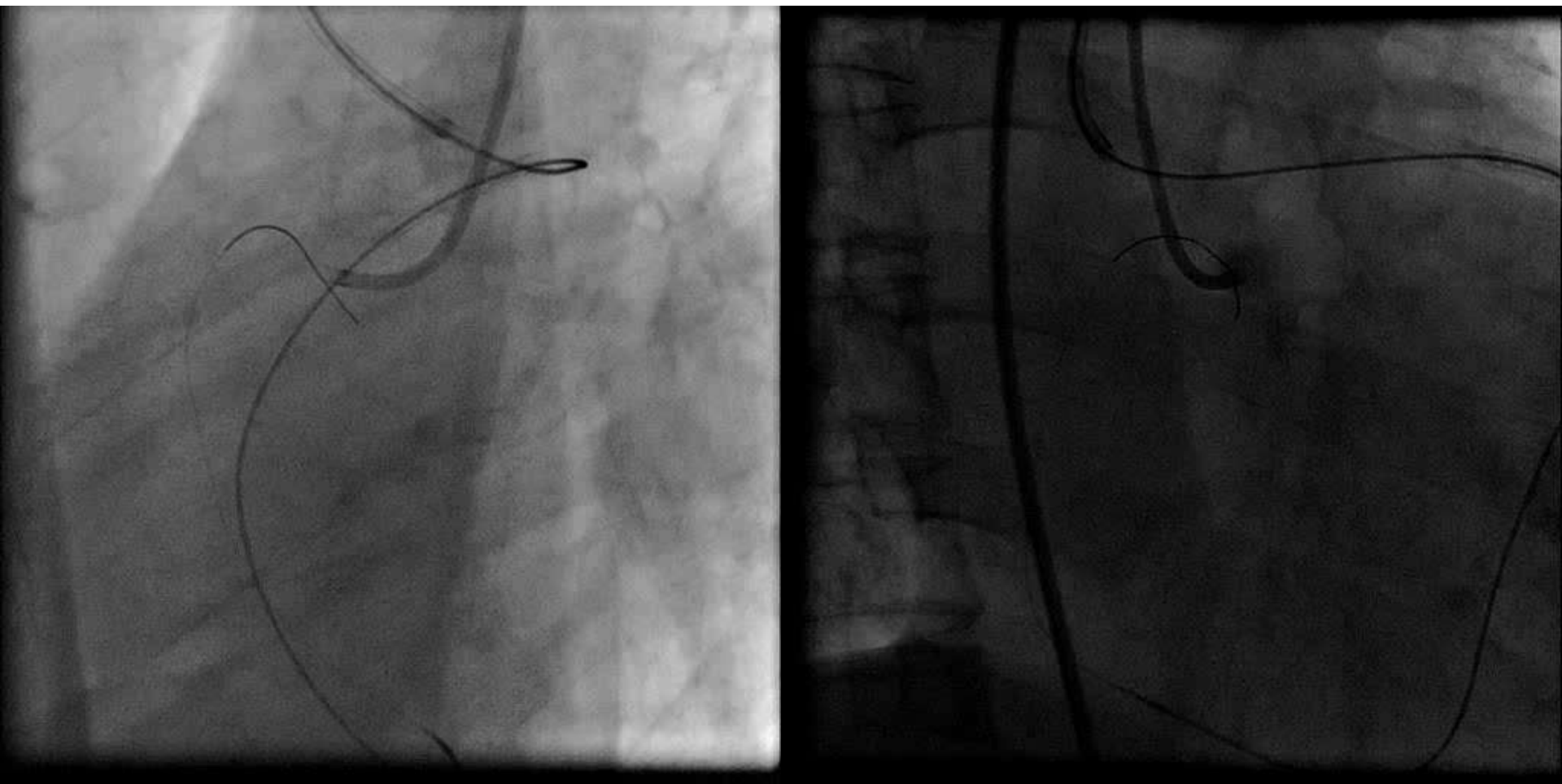
The left coronary system



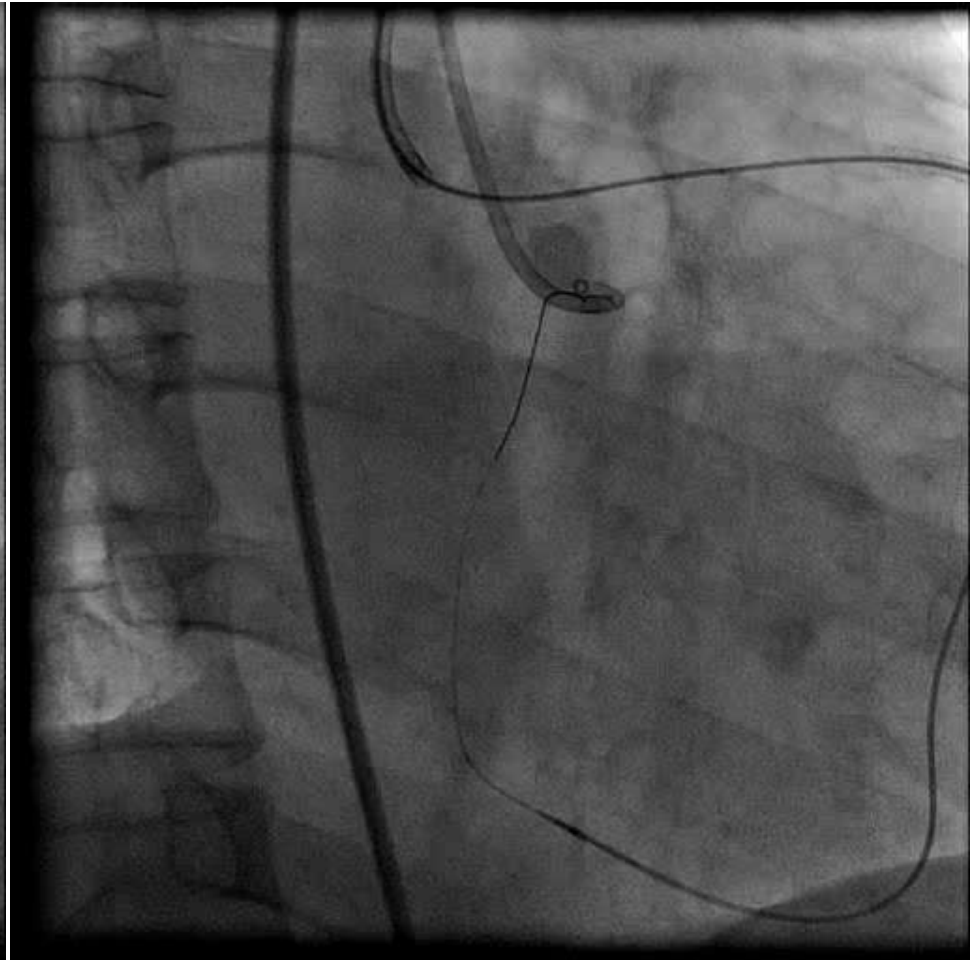
Retrograde by Corsair microcatheter + Fielder FC GW



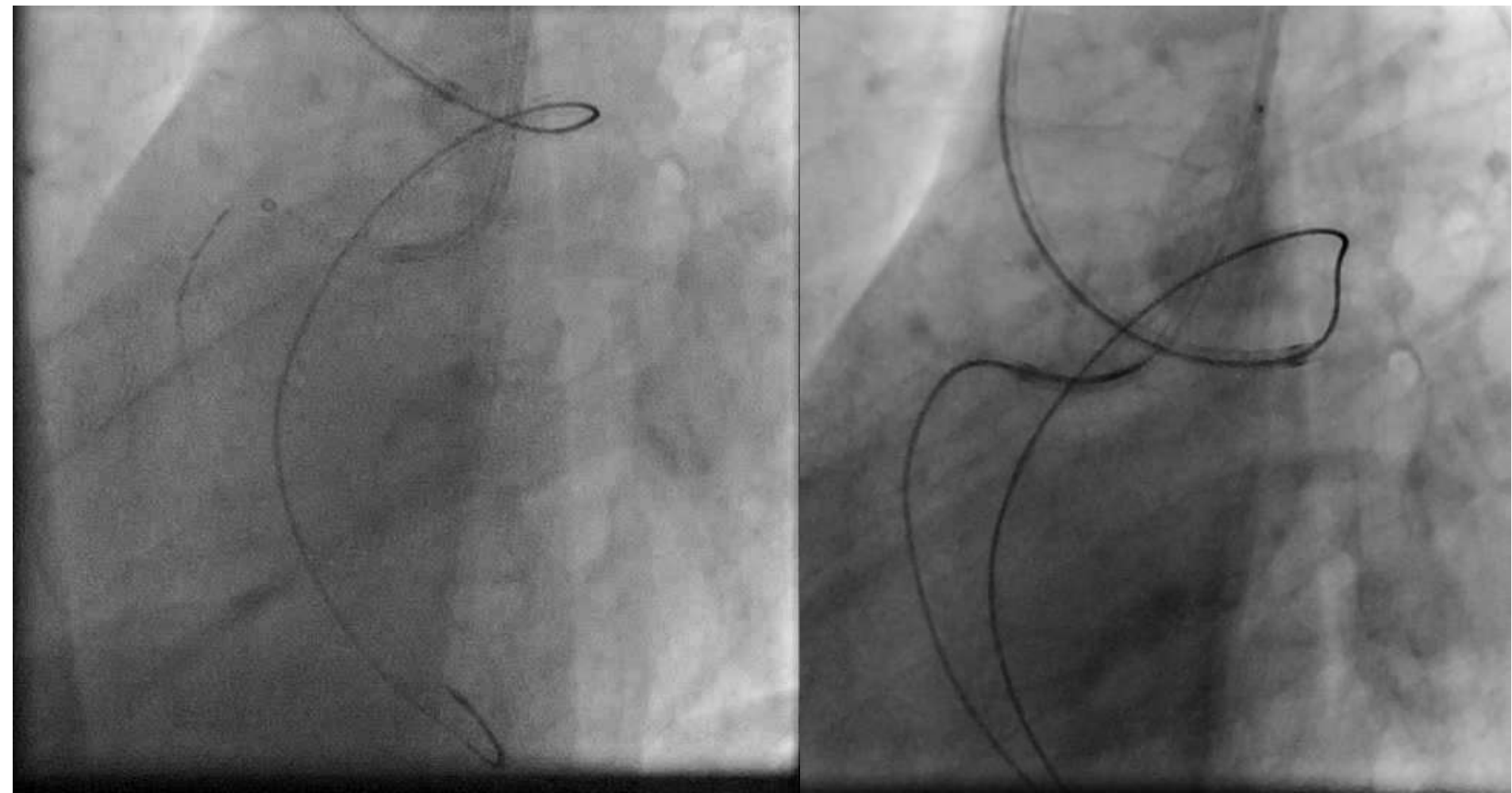
Retrograde GW failed going to JR4 GC due to a big angulation between RCA-P and JR4 GC (RAO view)



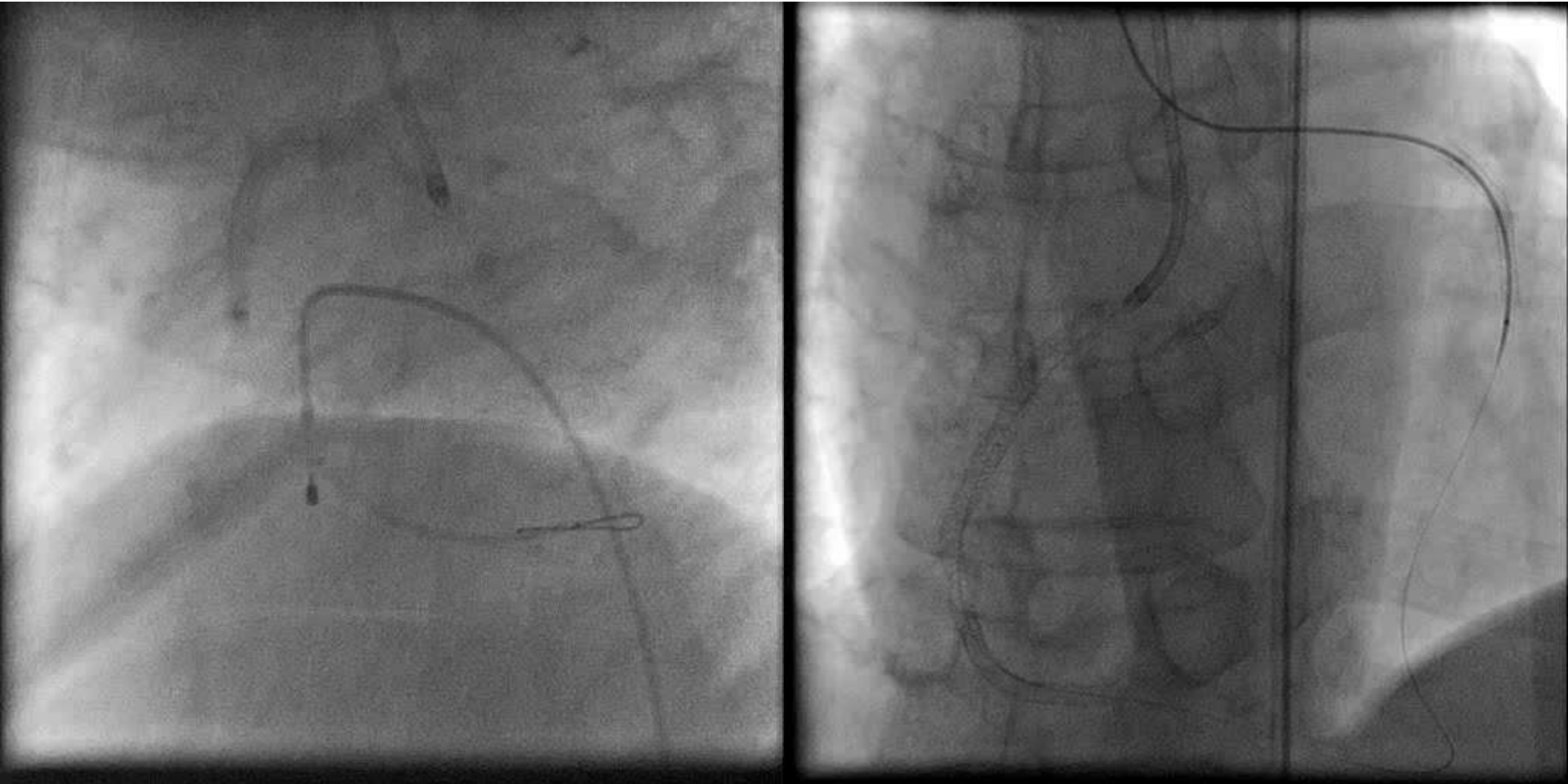
Application of GuideLiner catheter to cross this angulation



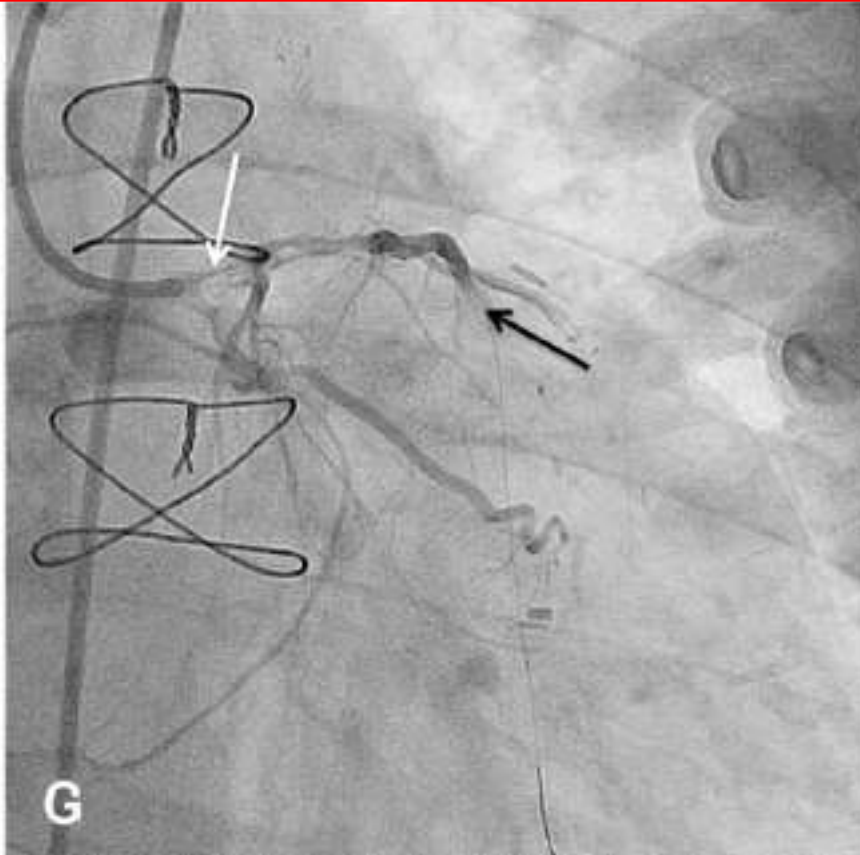
Retrograde GW went into GuideLiner catheter and then JR4 GC easily; thereafter start externalization



IVUS-guided DES implantation



GuideLiner Does Have Complications!



A GuideLiner catheter was advanced causing arterial waveform pressure dampening that subsequently worsened leading to cardiac arrest. Emergent angiography during chest compressions revealed a dissection of the proximal left anterior descending artery with loss of distal flow.

Cathete



Guideliner[®] Catheter—Friend Or Foe?

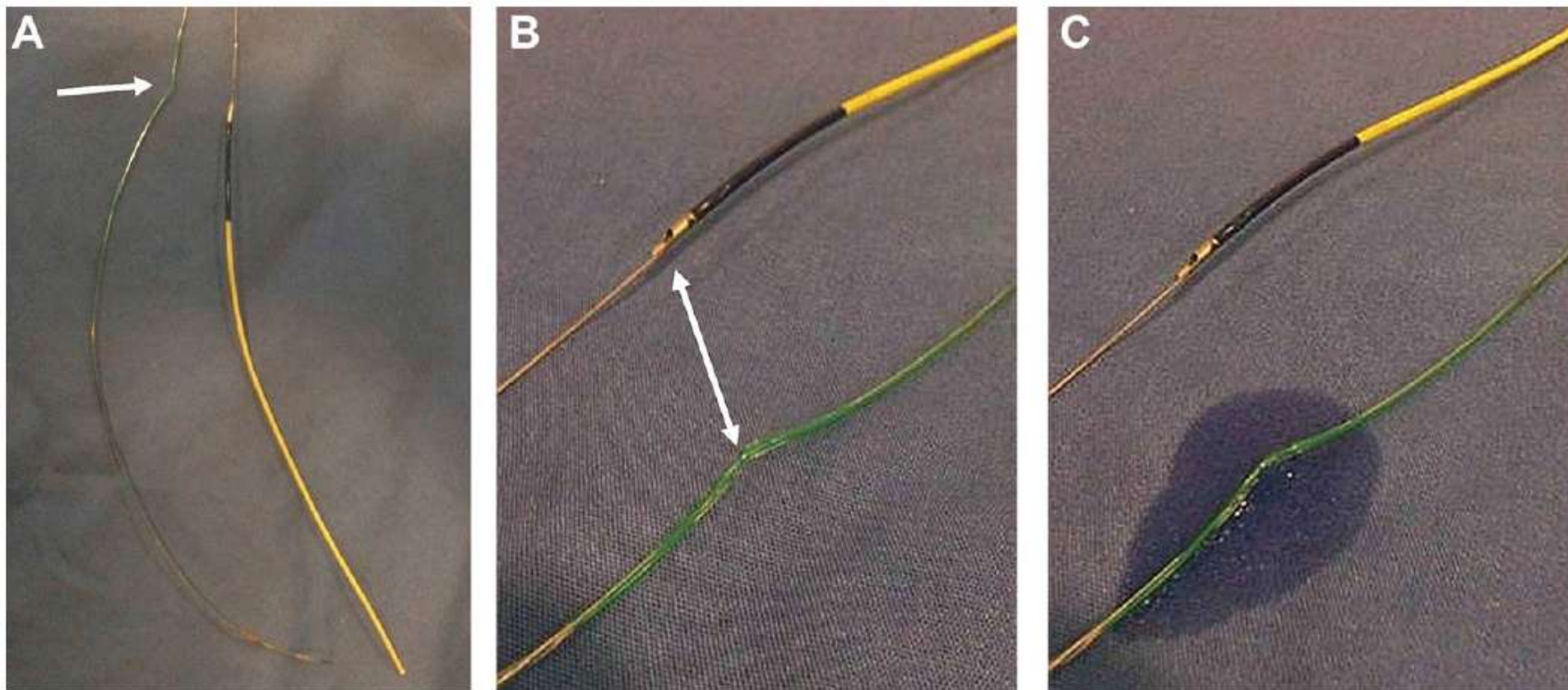


Fig. 4. A: The stent balloon is severely deformed at a site adjacent to the metal “collar” of the Guideliner (arrow). B: The stent balloon is severely deformed at a site adjacent to the metal “collar” of the Guideliner (arrow). C: Injection of fluid into the stent balloon reveals a significant leak at the site of deformation. [Color figure can be viewed in the online issue, which is available at wileyonlinelibrary.com.]

Safety use for child-mother technique

- Gently advancement of child catheter into the coronary artery → in combination with balloon anchoring may be safer.
- Gently manipulation devices inside the GuideLiner.
- Careful monitoring distal coronary pressure because pressure dampening after GuideLiner catheter insertion was observed in around 50% of cases.
- Check the blood back flow from Y-connector just after stent deployment.

In conclusion, the GuideLiner catheter can facilitate complex PCI but should be used with caution to minimize the risk for vessel or device injury.

WHEREVER YOU GO...
MAY THE GOOD LUCK
FOLLOWS!



***THANK YOU FOR YOUR
ATTENTION !!!***