

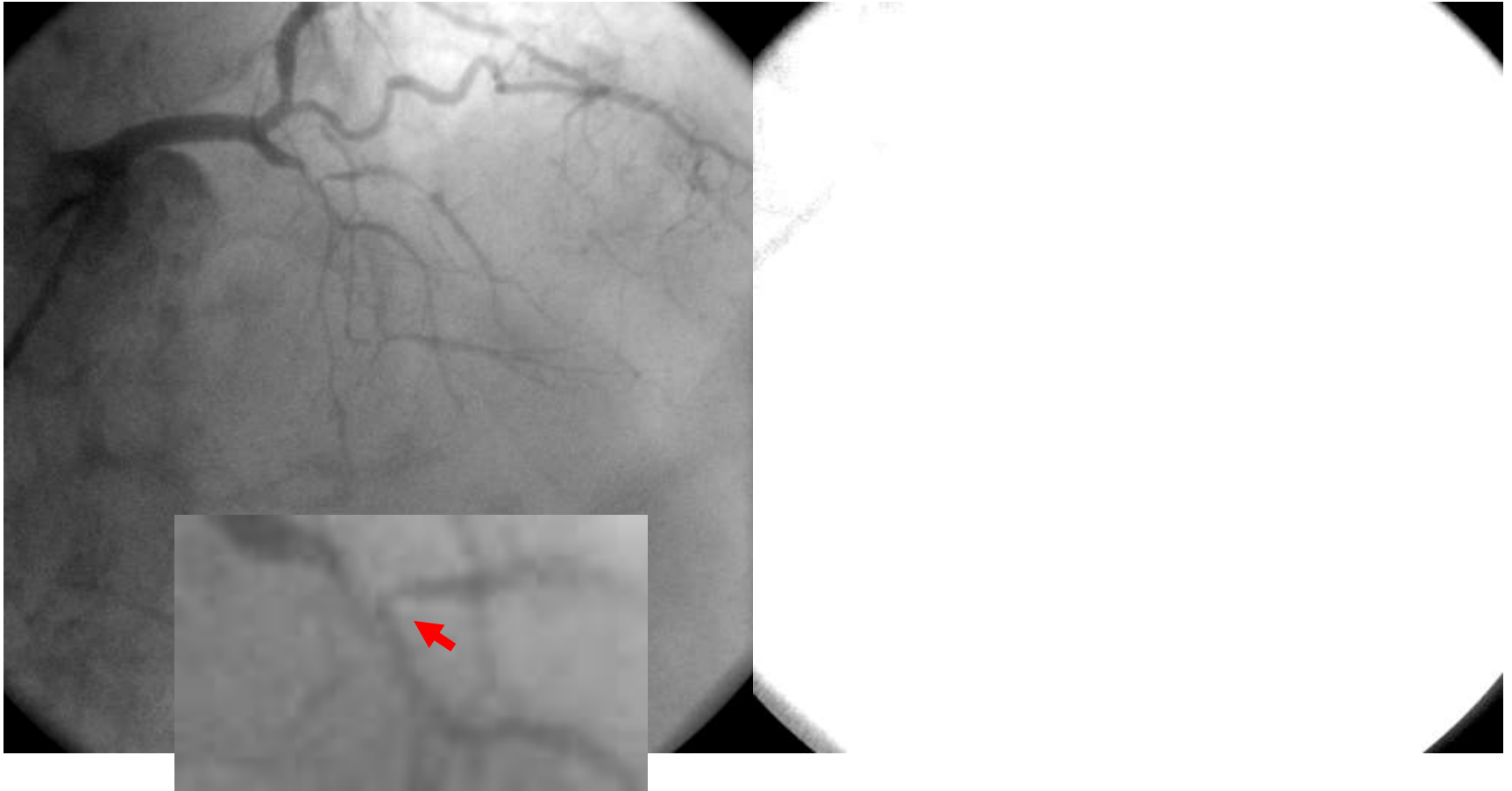
Reverse Wire Techniques for Bifurcation Lesions

Chi-Jen Chang

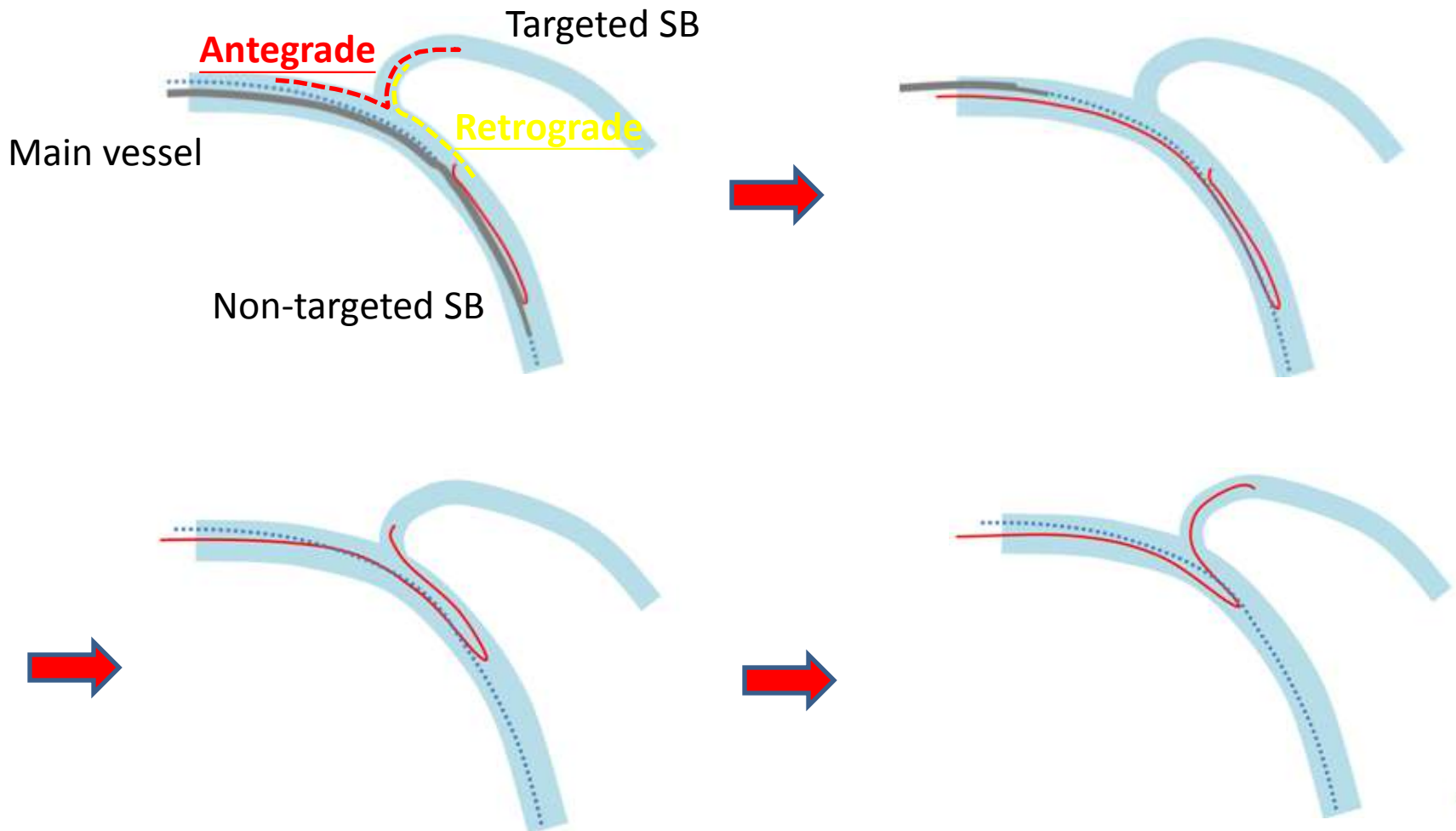
Chang Gung Memorial Hospital

Taipei, Taiwan

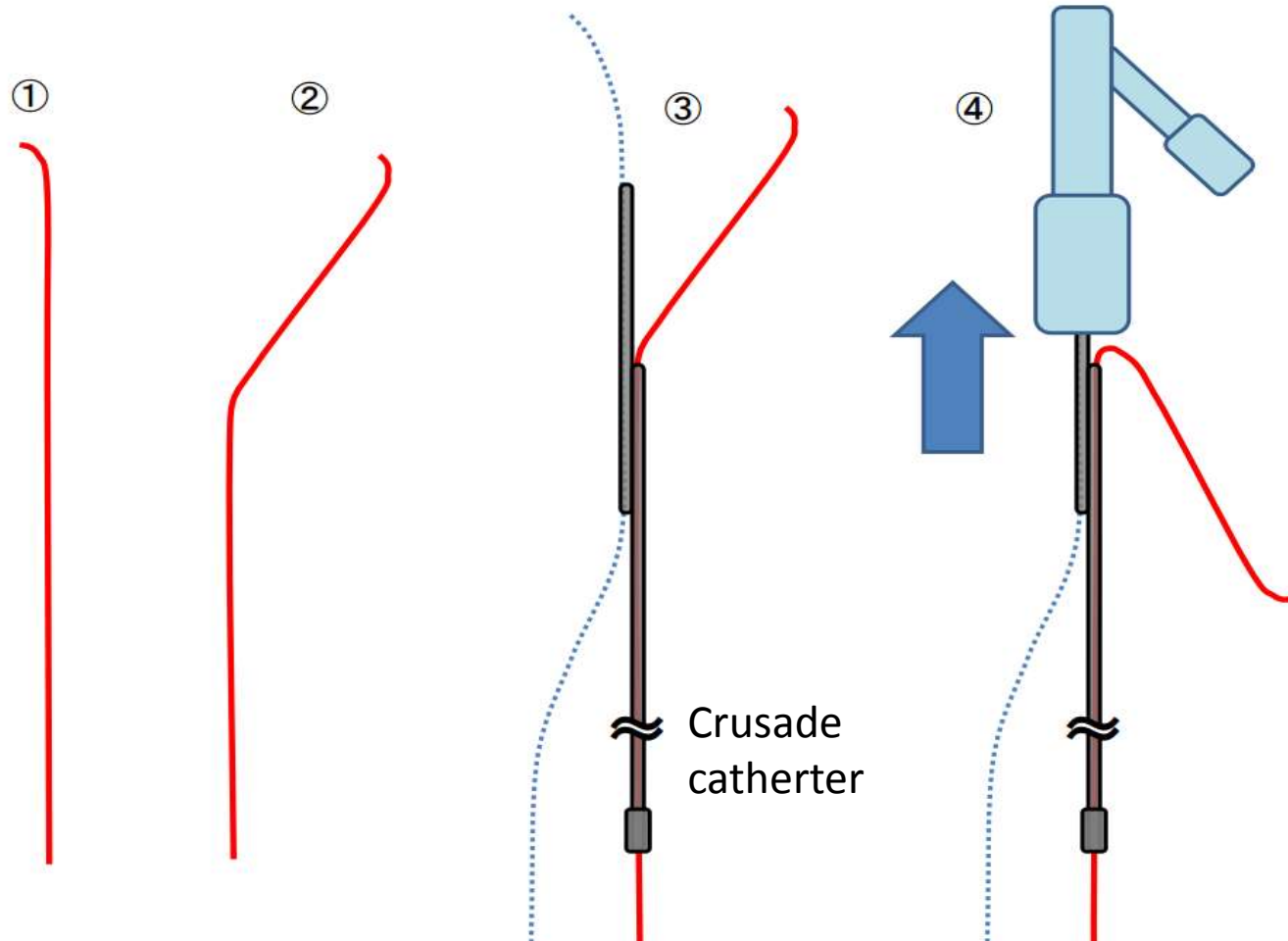
Conventional wiring is hardly possible for this branch with extremely angulated take-off.



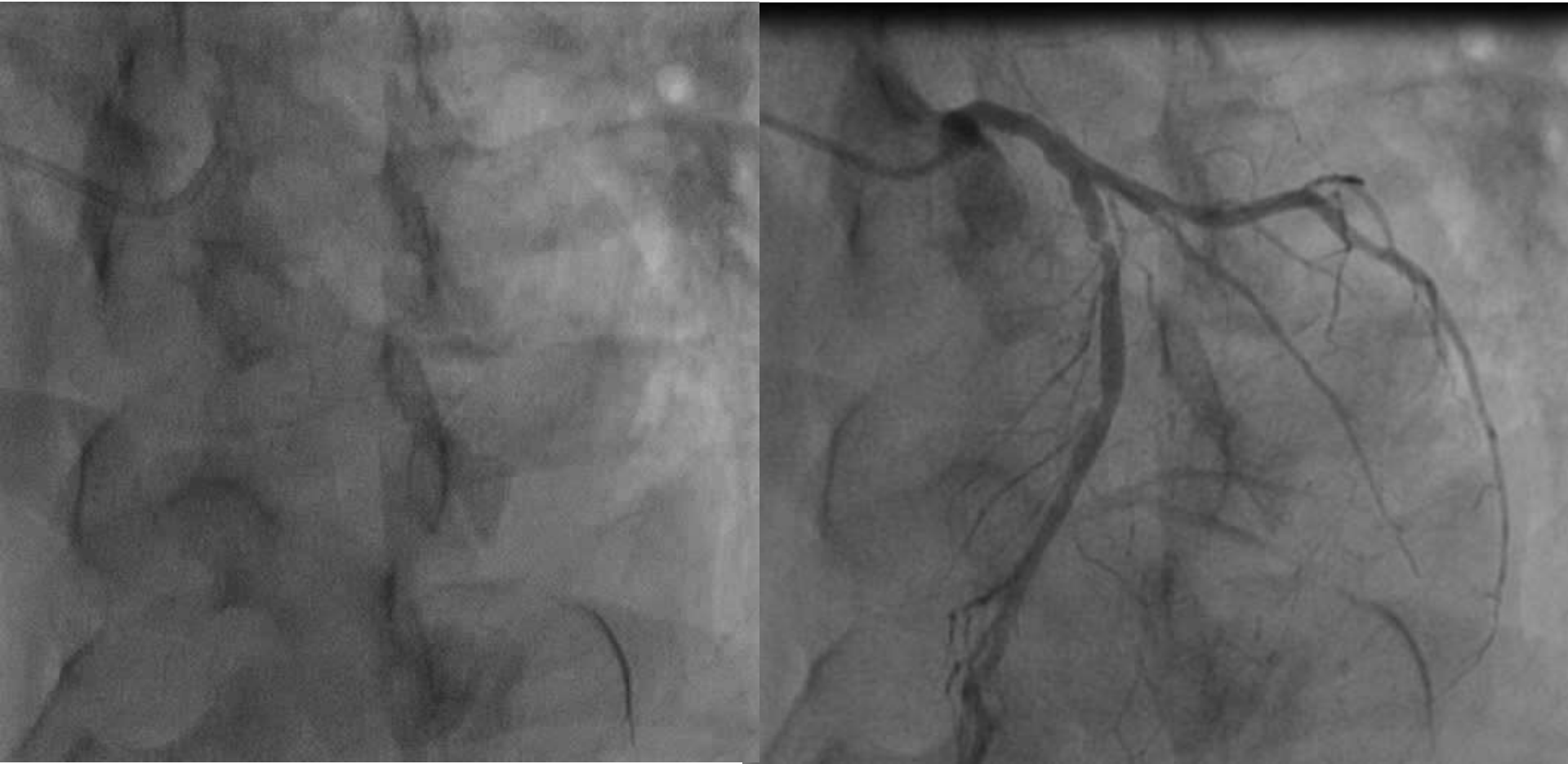
Reverse wire technique



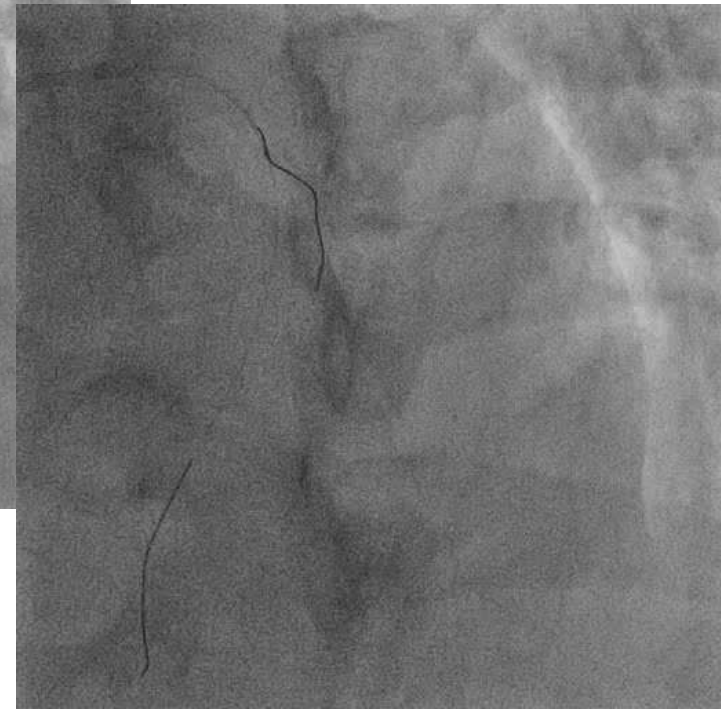
How to prepare the system



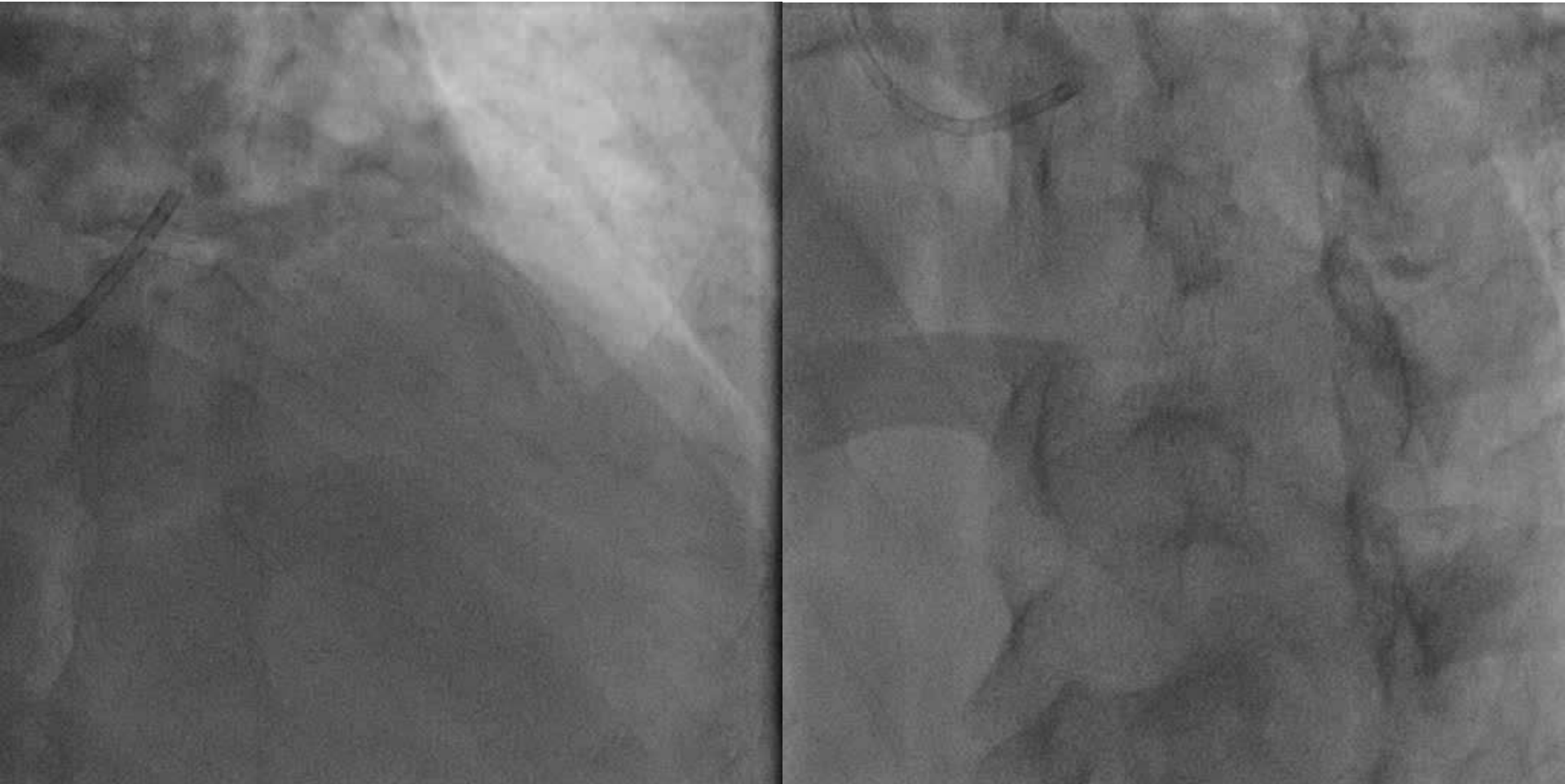
Nearly occluded major DB with acute take-off



Reverse wire to approach the nearly occluded major D1

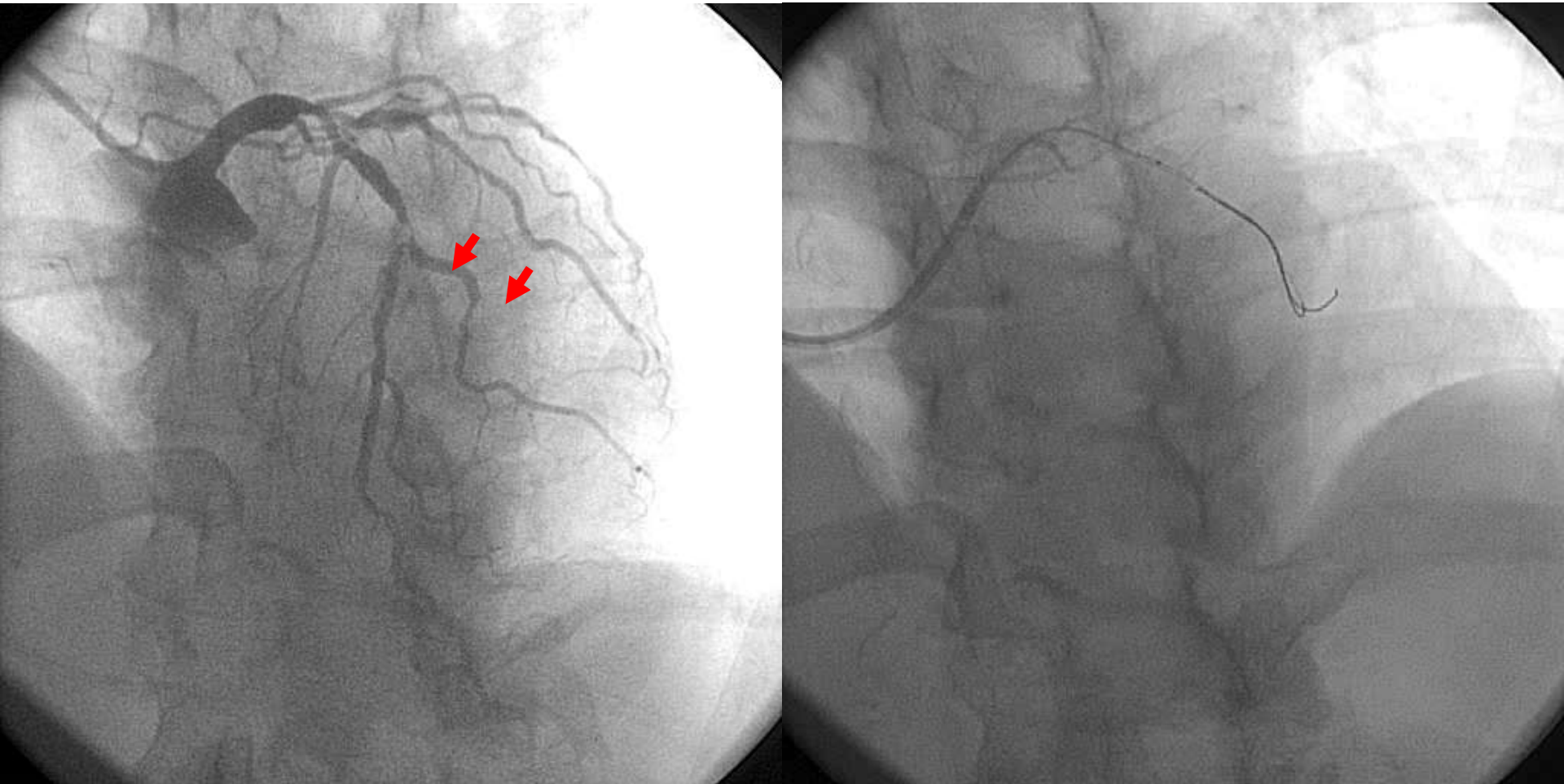


Well preserved major DB



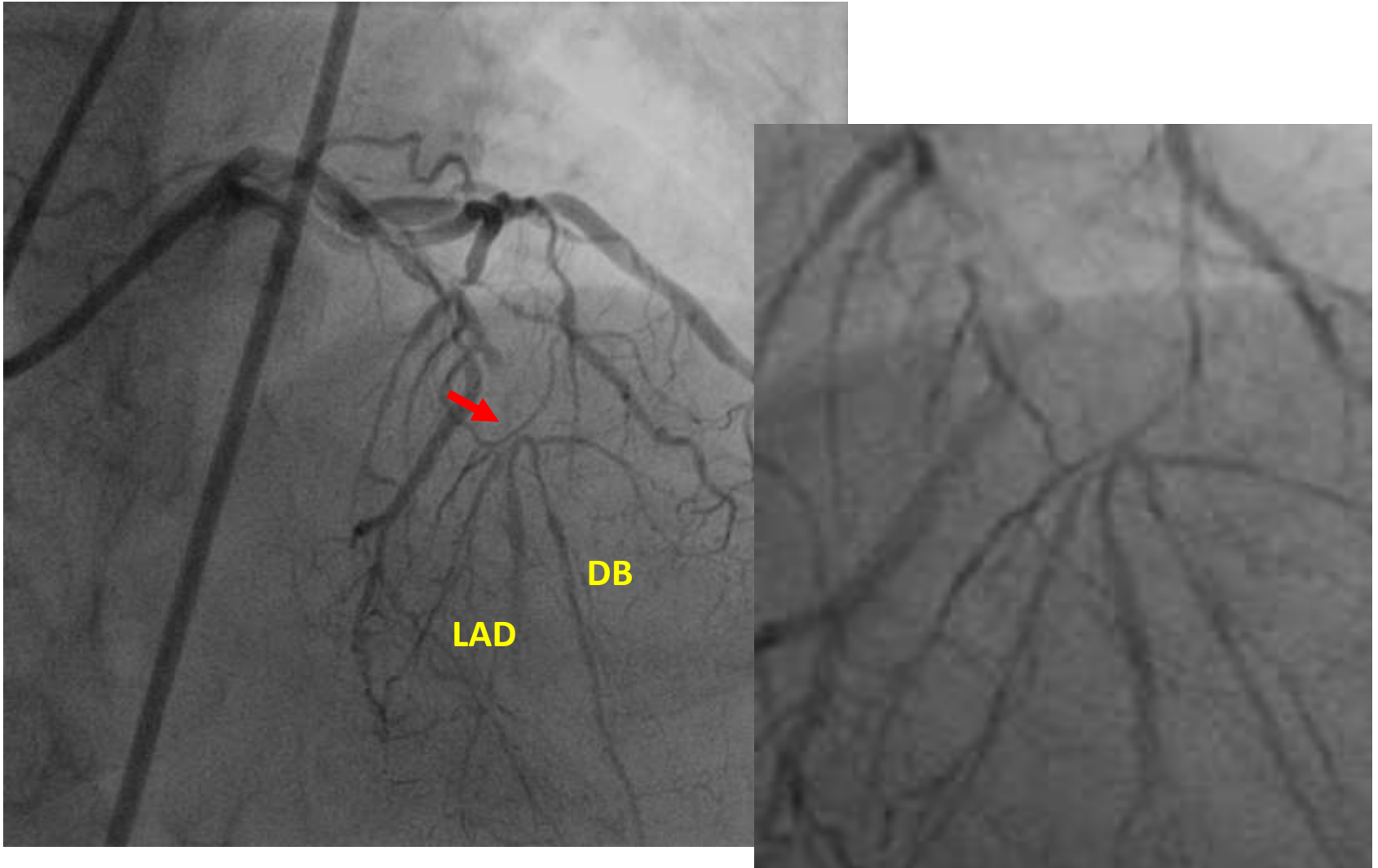
Is the reverse wire system too bulky to be delivered successfully and safely?

Diseased and tortuous DB is suitable for application of reverse wire

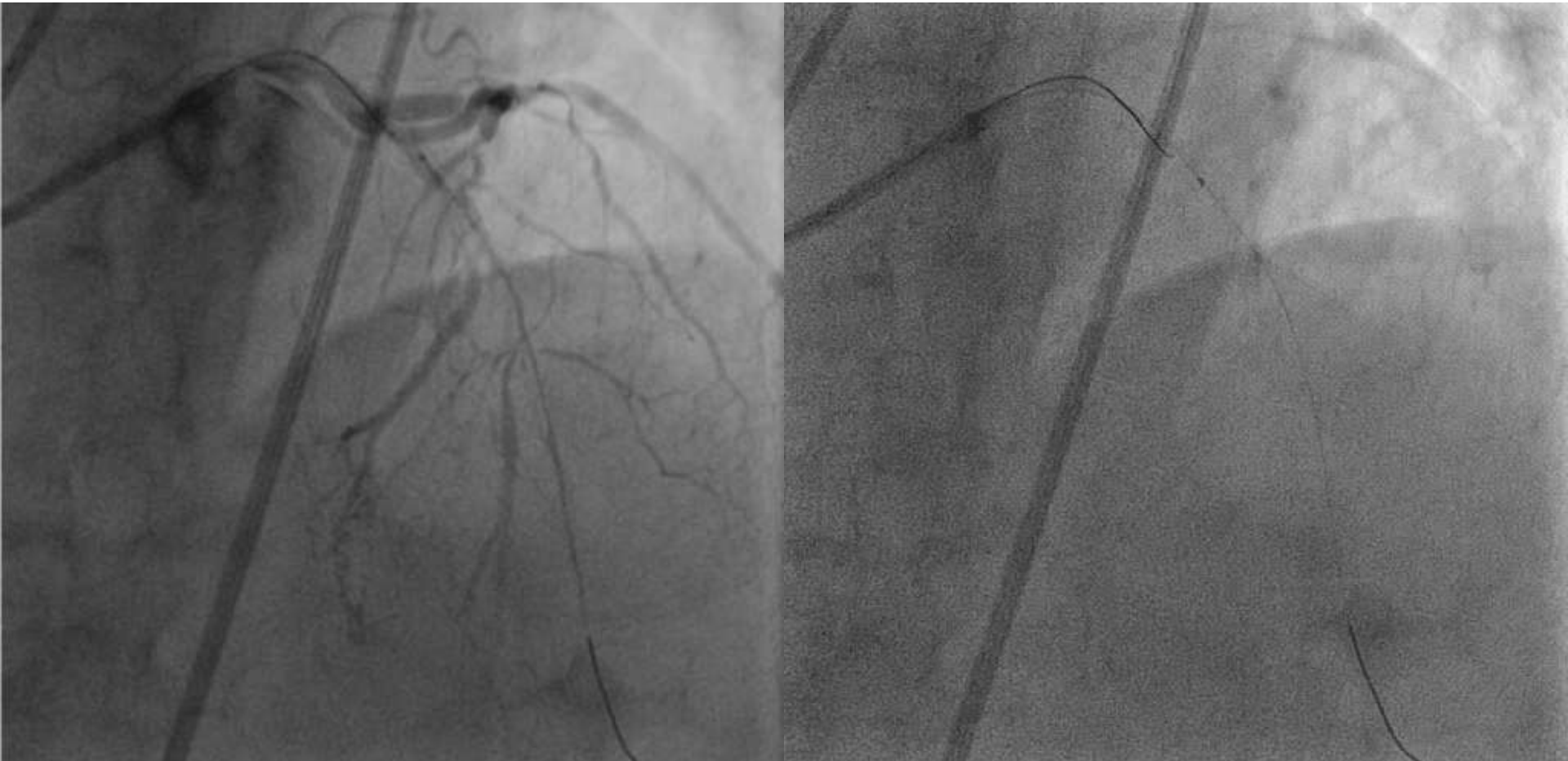


7 Fr EBU4

Diseased SB with small diameter



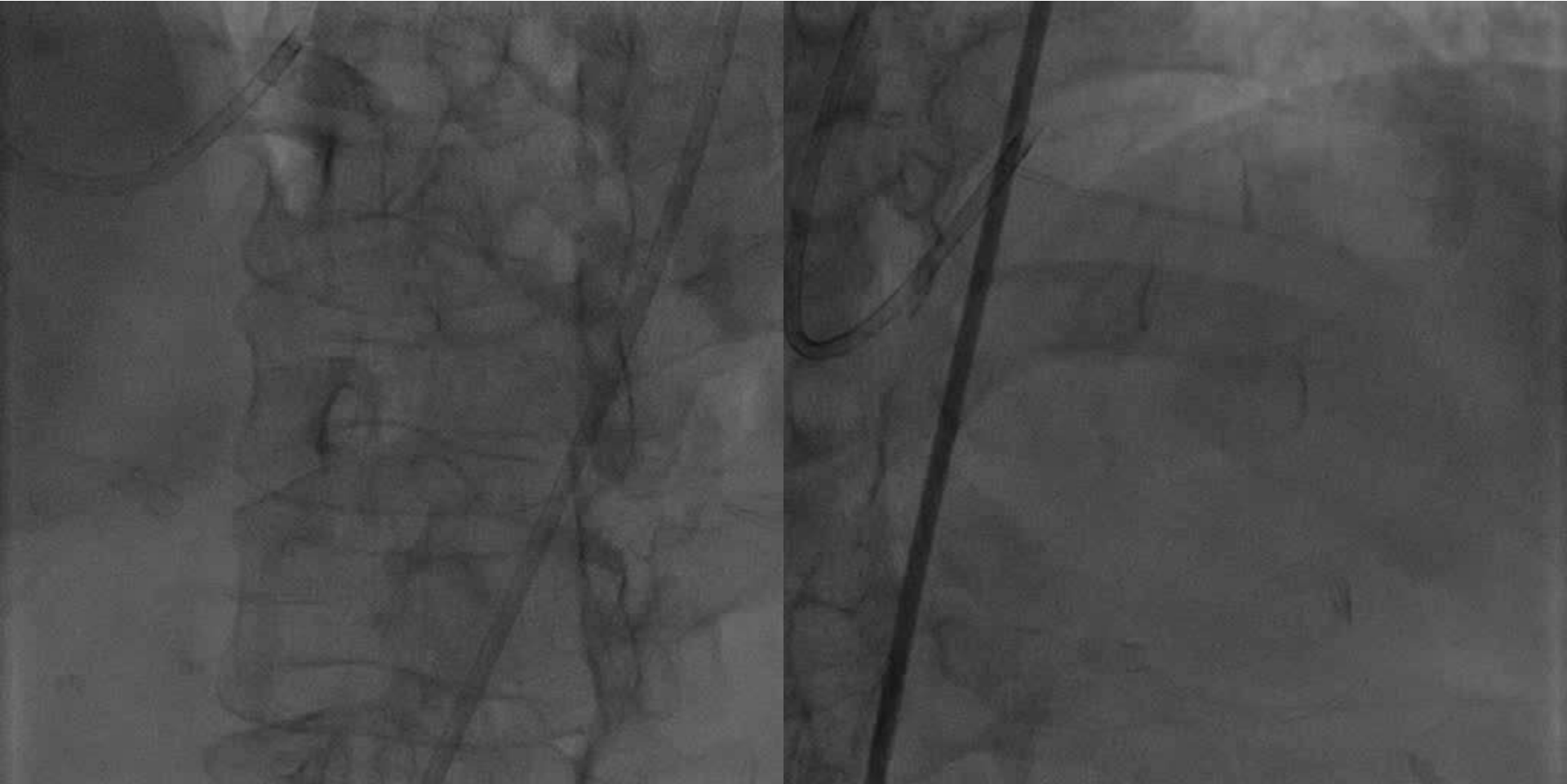
Successful delivery of reverse wire system after 1.2 mm balloon dilation



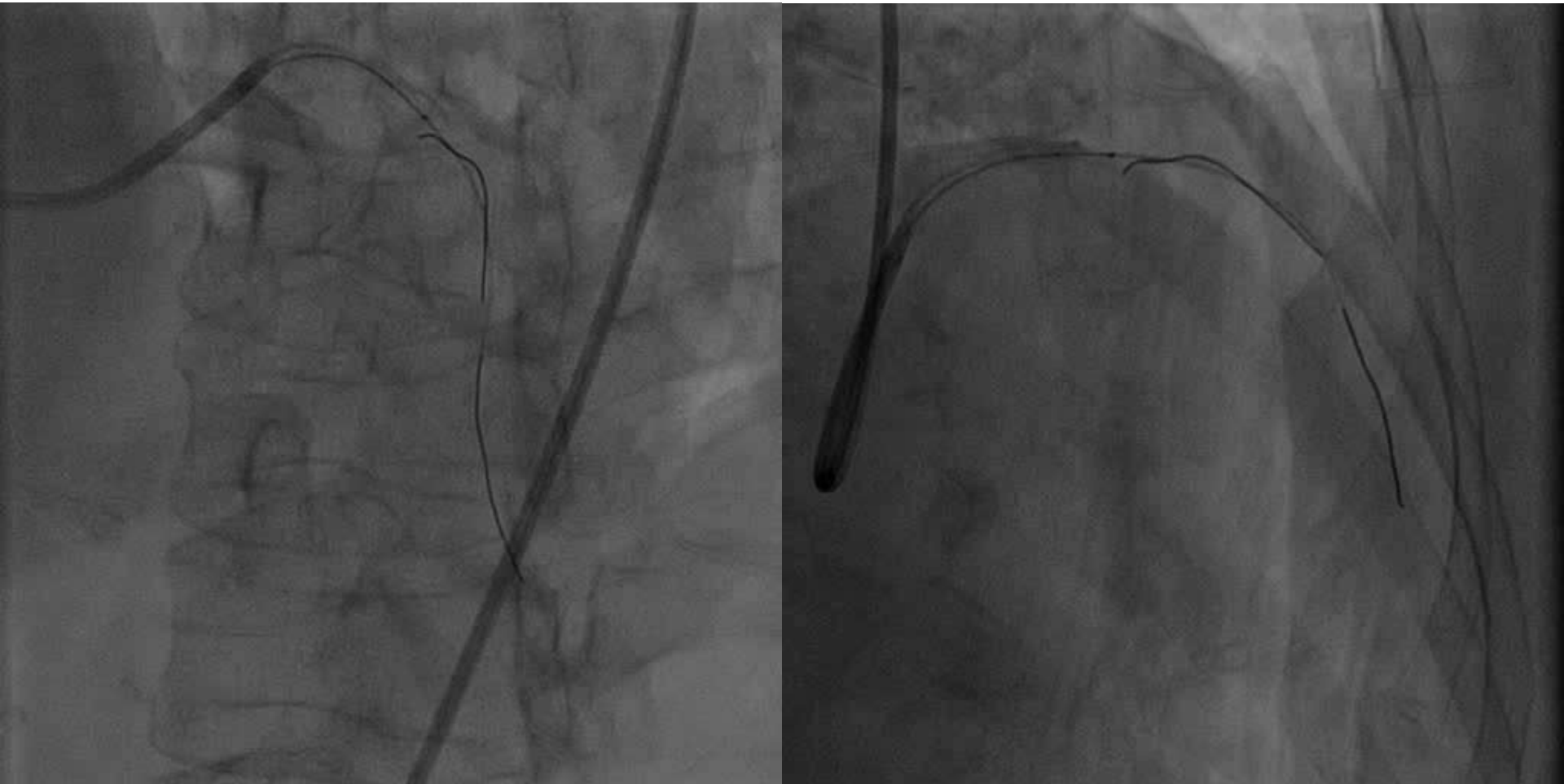
EBU 4 GC

Make a precise tip curve to fit the
anatomy:
sometimes learn through trial and
error

LAD/DB bifurcation lesion



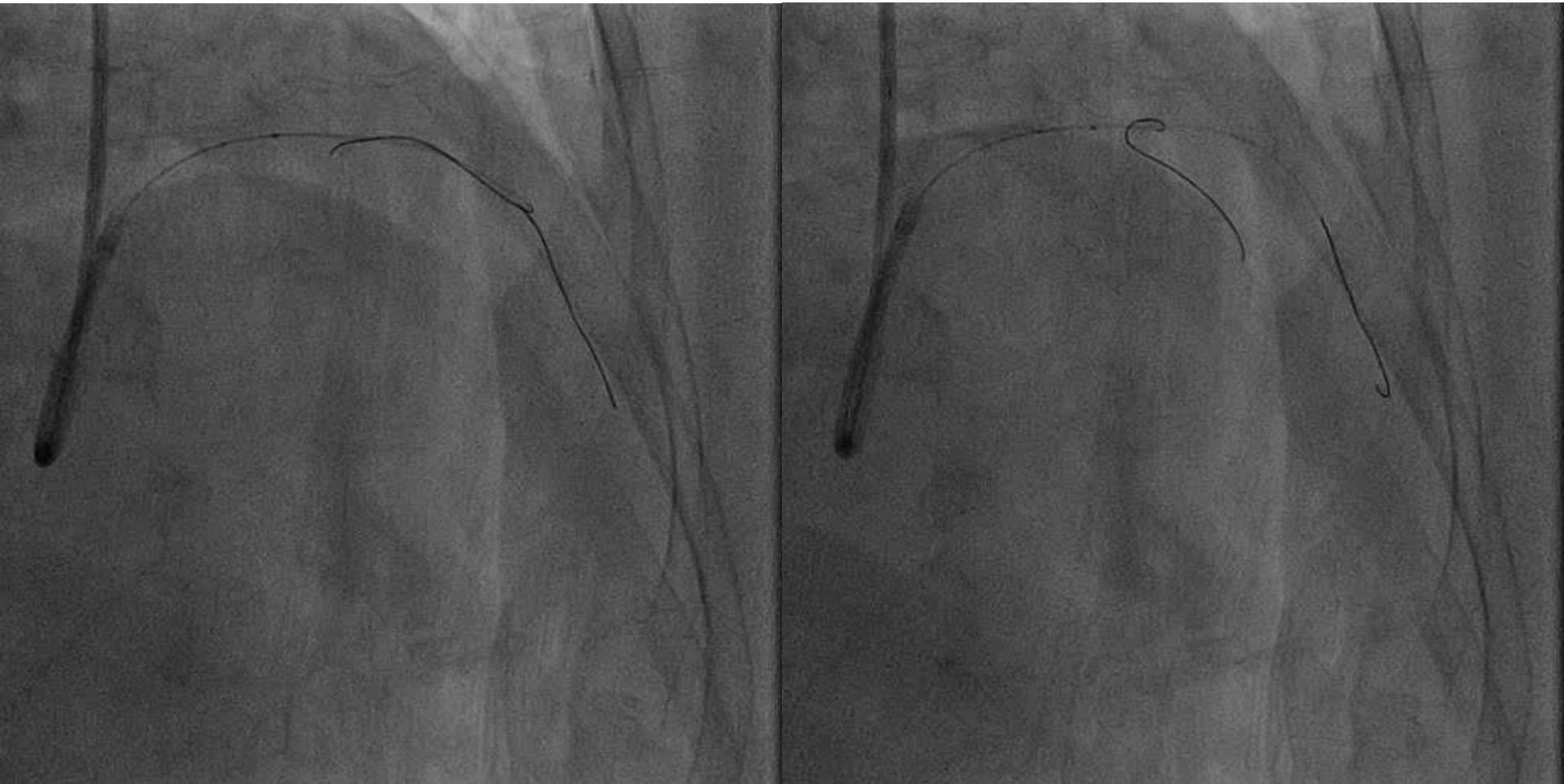
The tip curve is not big enough



An acute tip curve caught the downstream lesion



Made the tip curve less acute

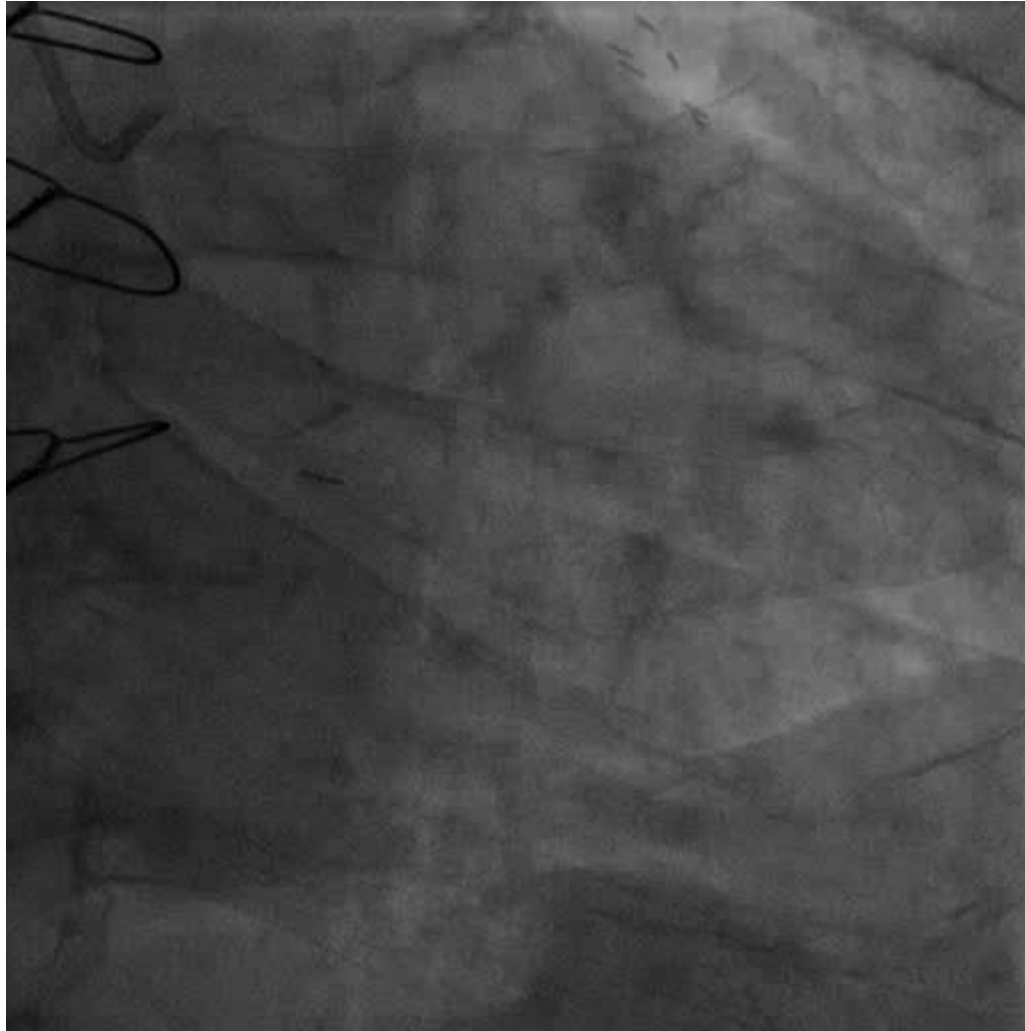


Final CAG

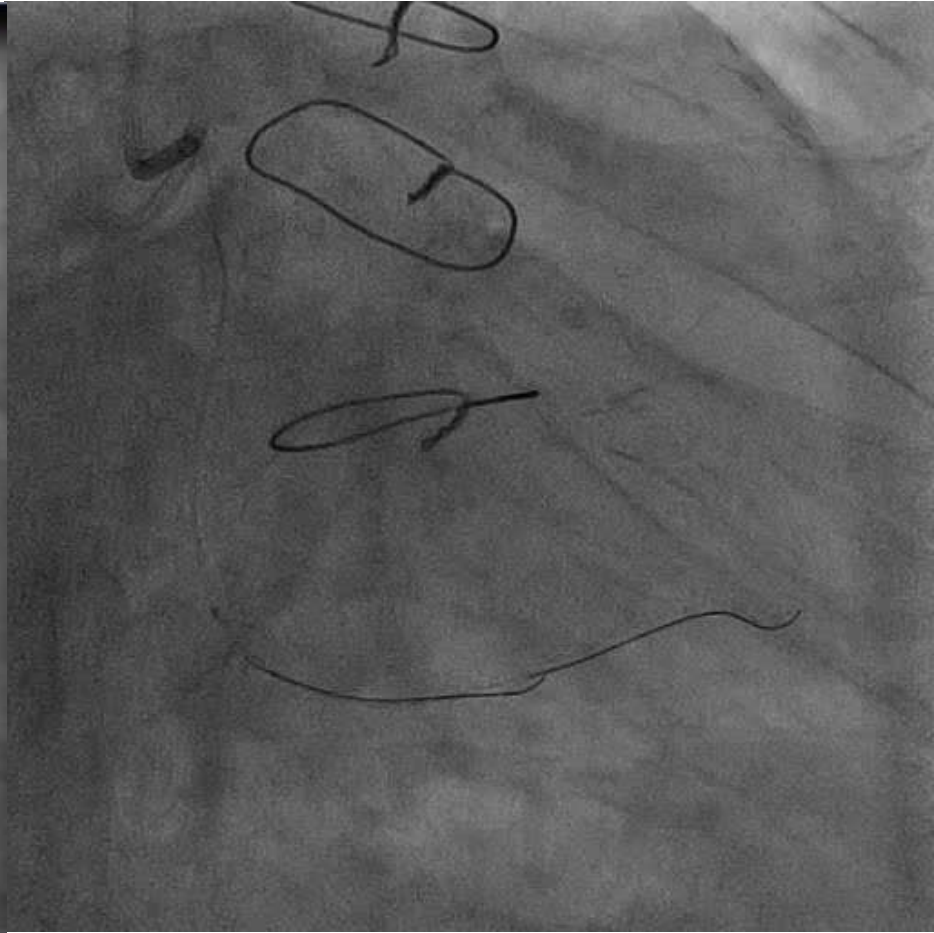
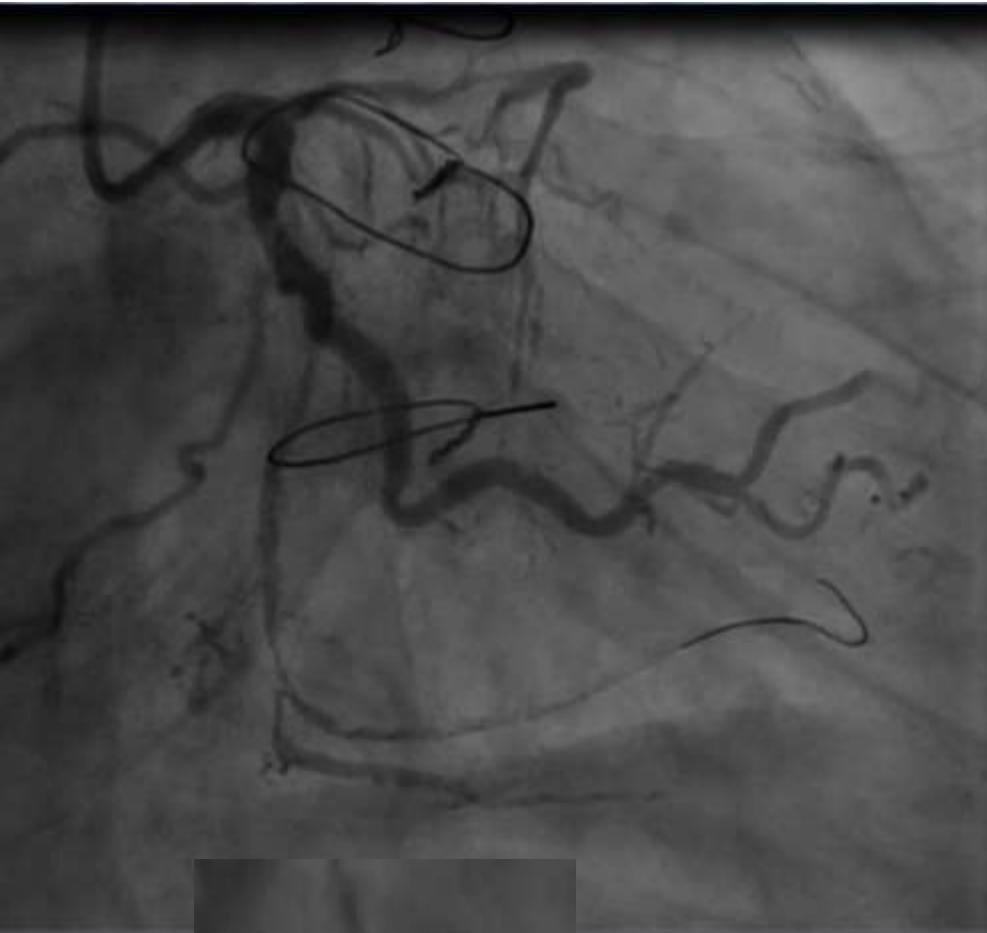


Application of reverse wire technique for CTO lesions

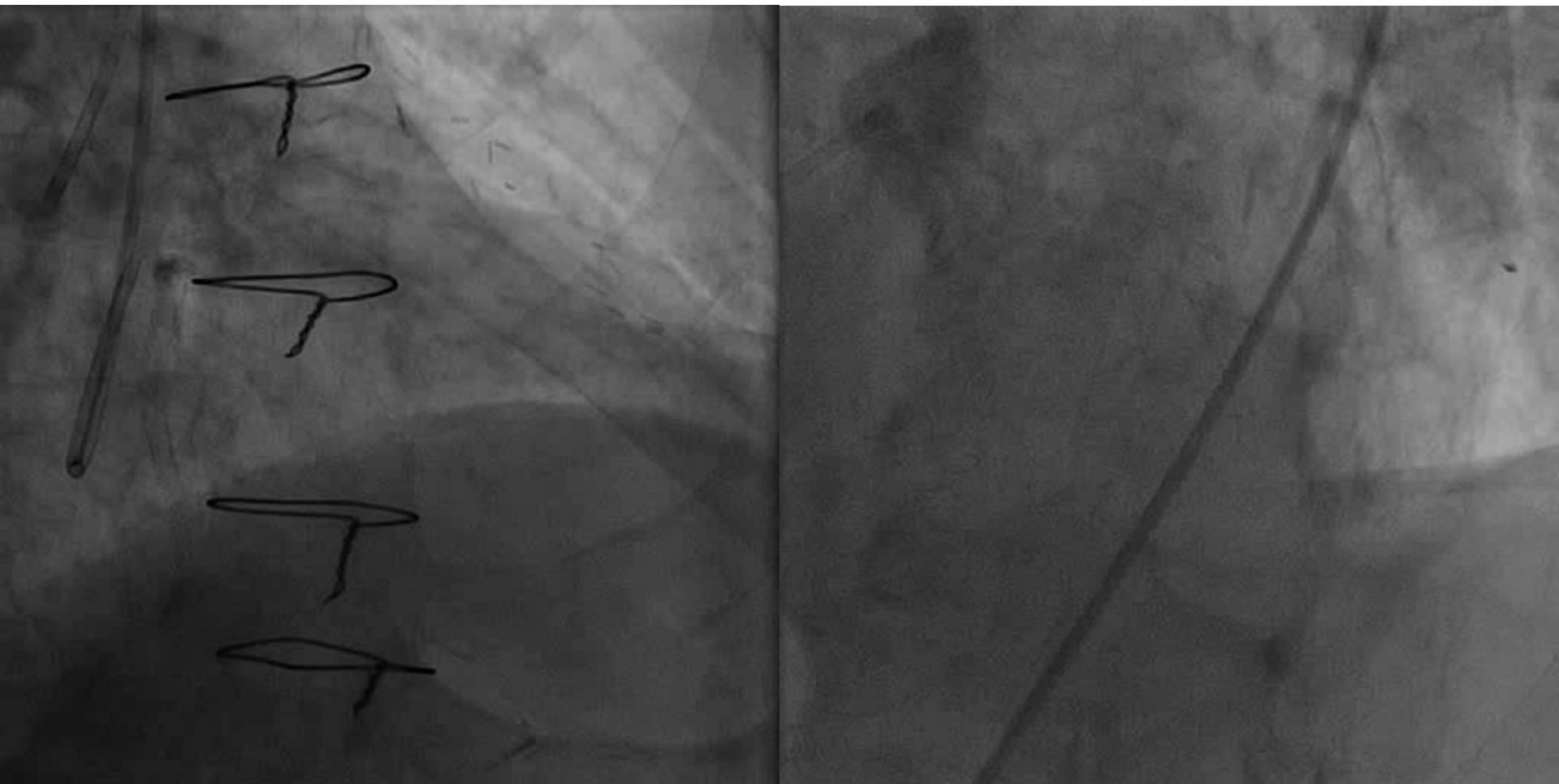
LCX CTO before LCX/OM bifurcation



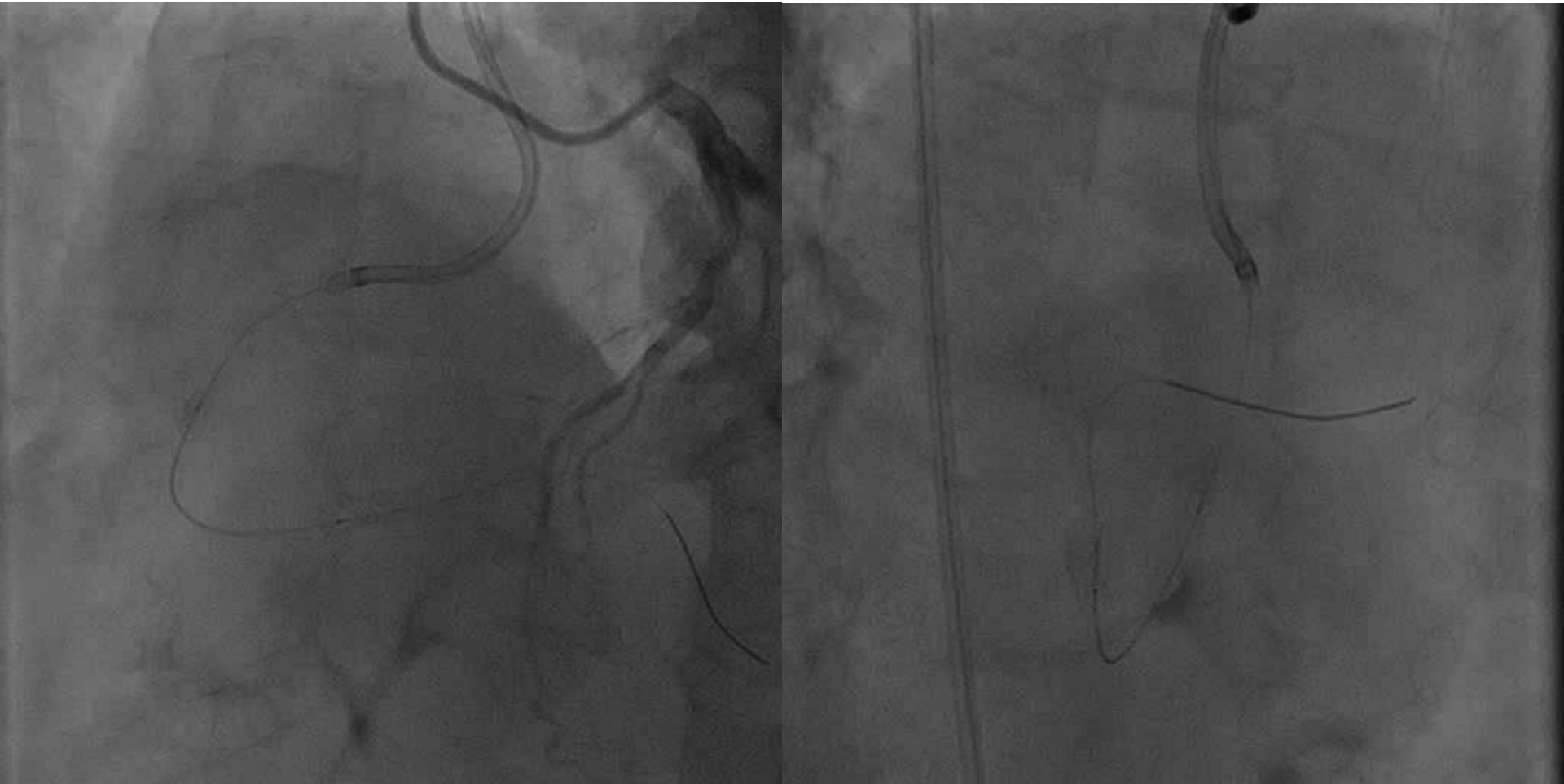
CTO segment was opened



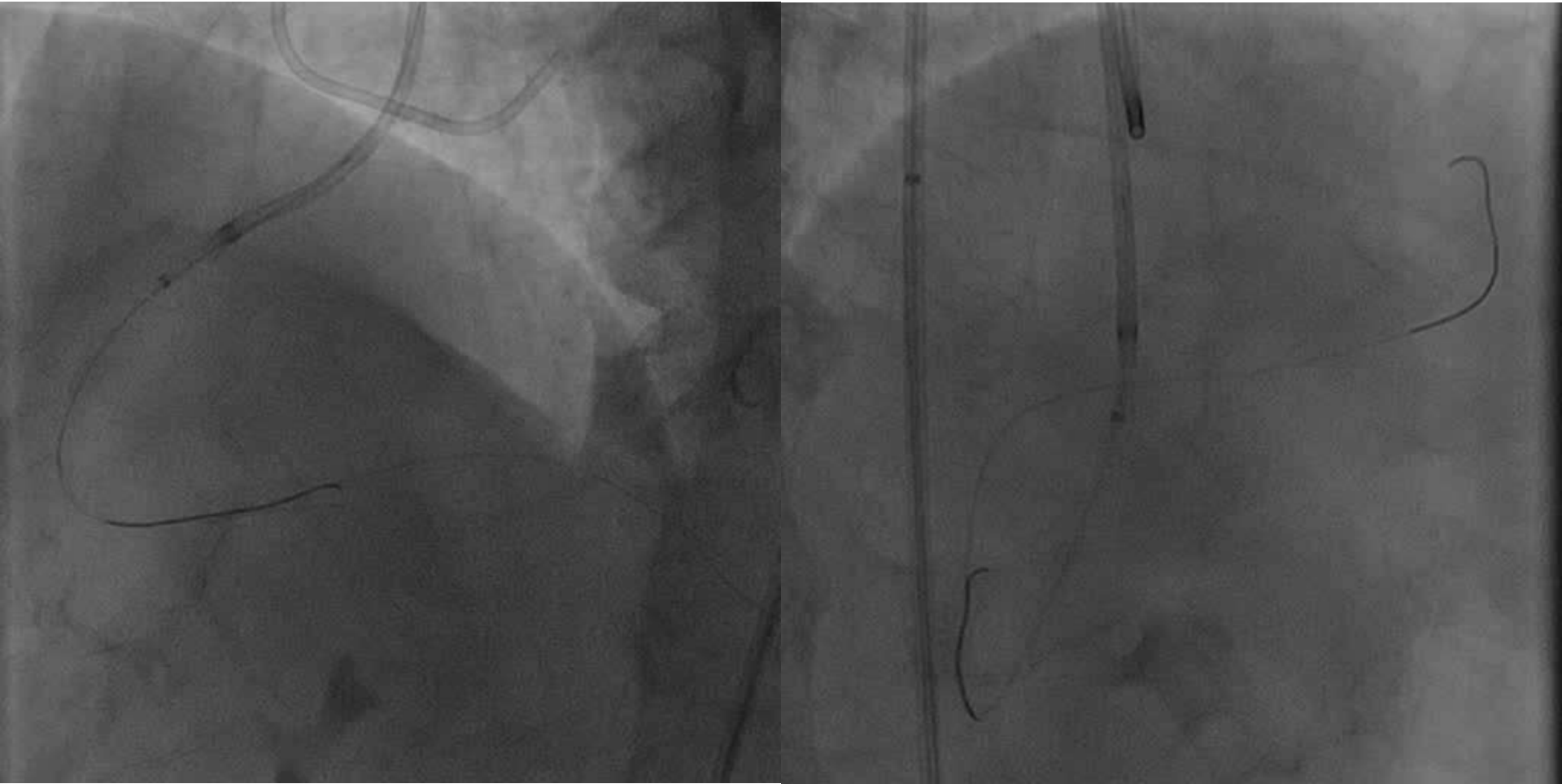
Final CAG



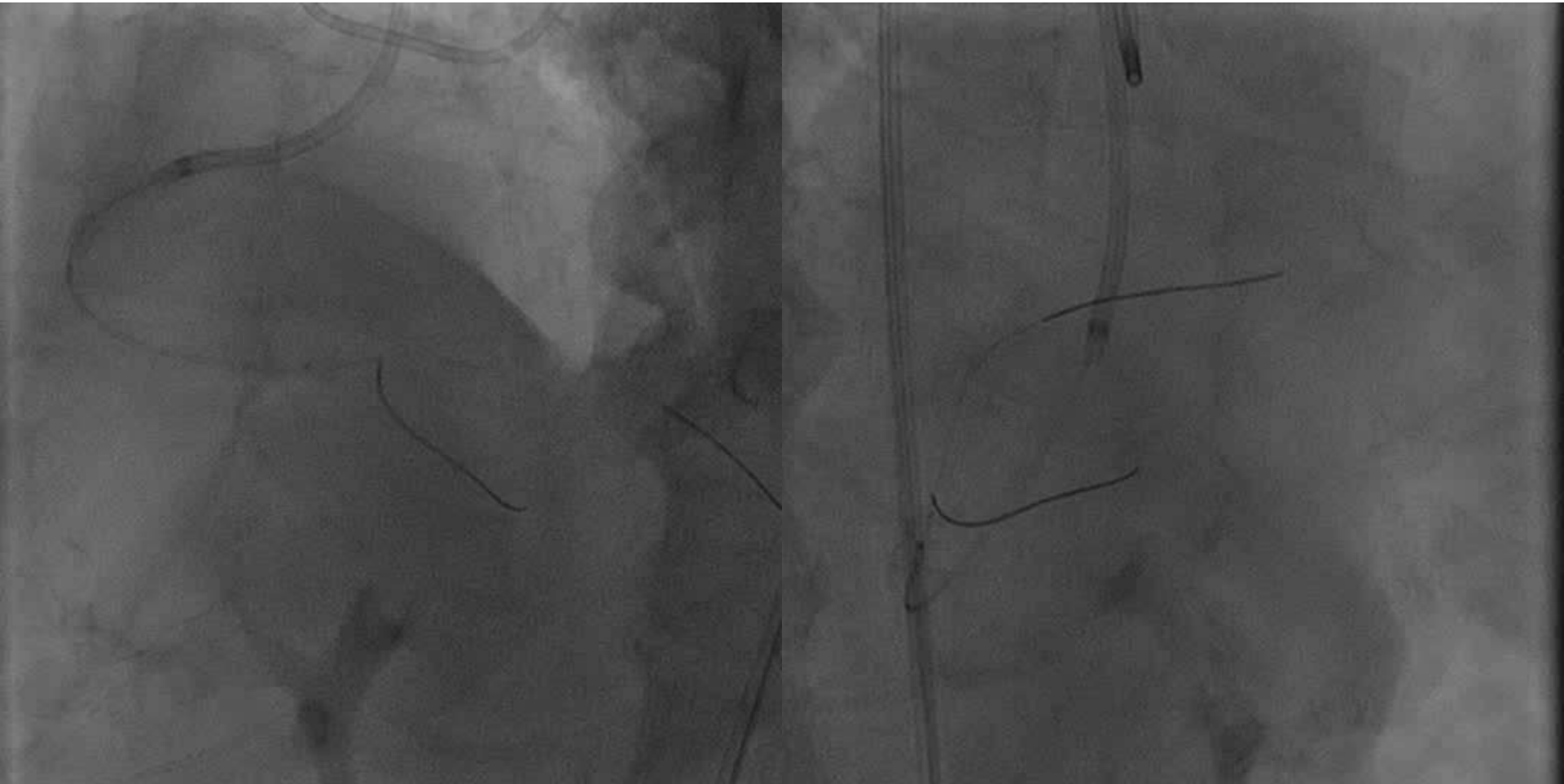
d-RCA CTO



Failed wiring for PDA using a Sion wire under support of a Crusade catheter

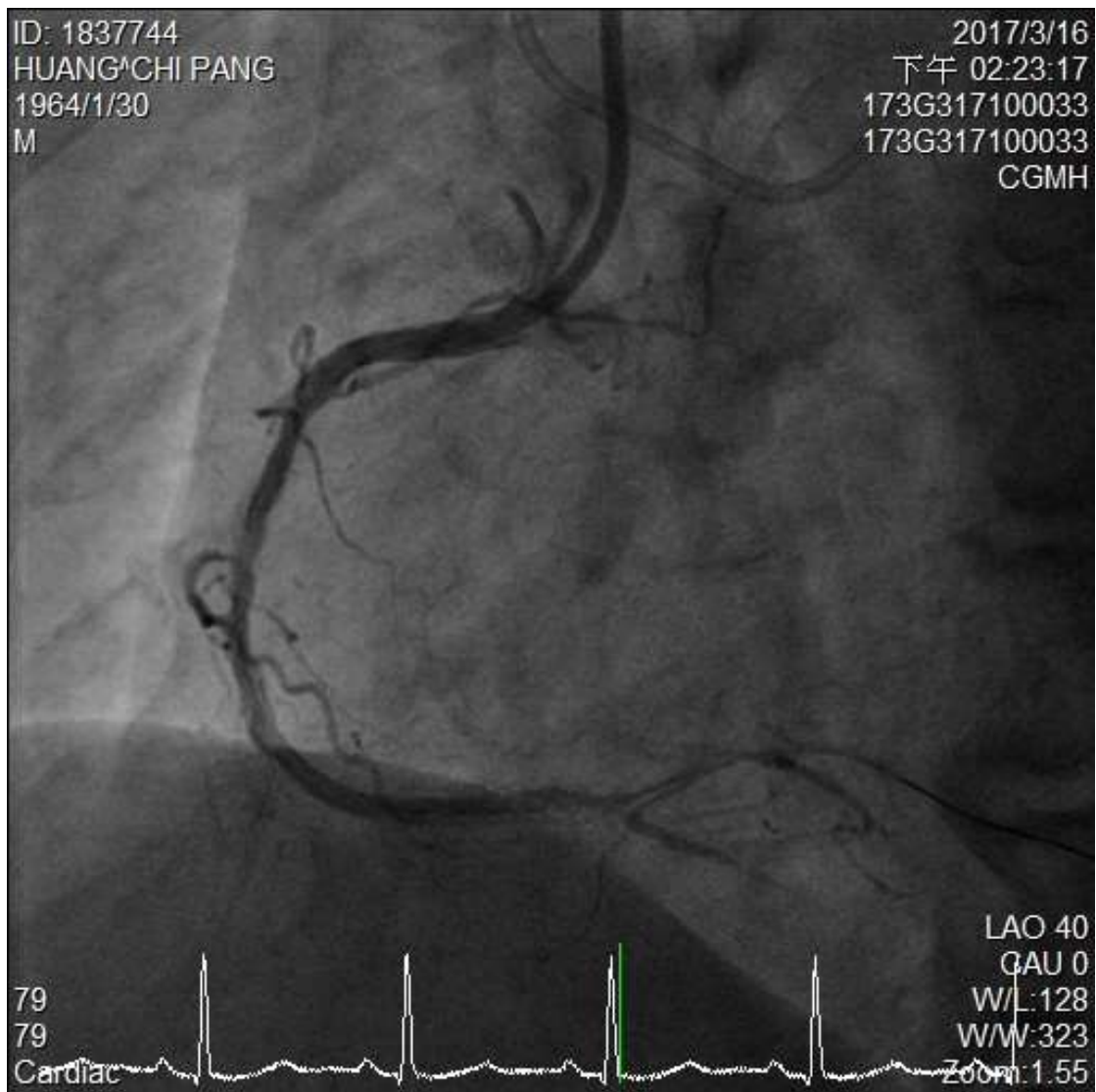


Reverse wire technique was attempted,
but.....



ID: 1837744
HUANG^CHI PANG
1964/1/30
M

2017/3/16
下午 02:23:17
173G317100033
173G317100033
CGMH

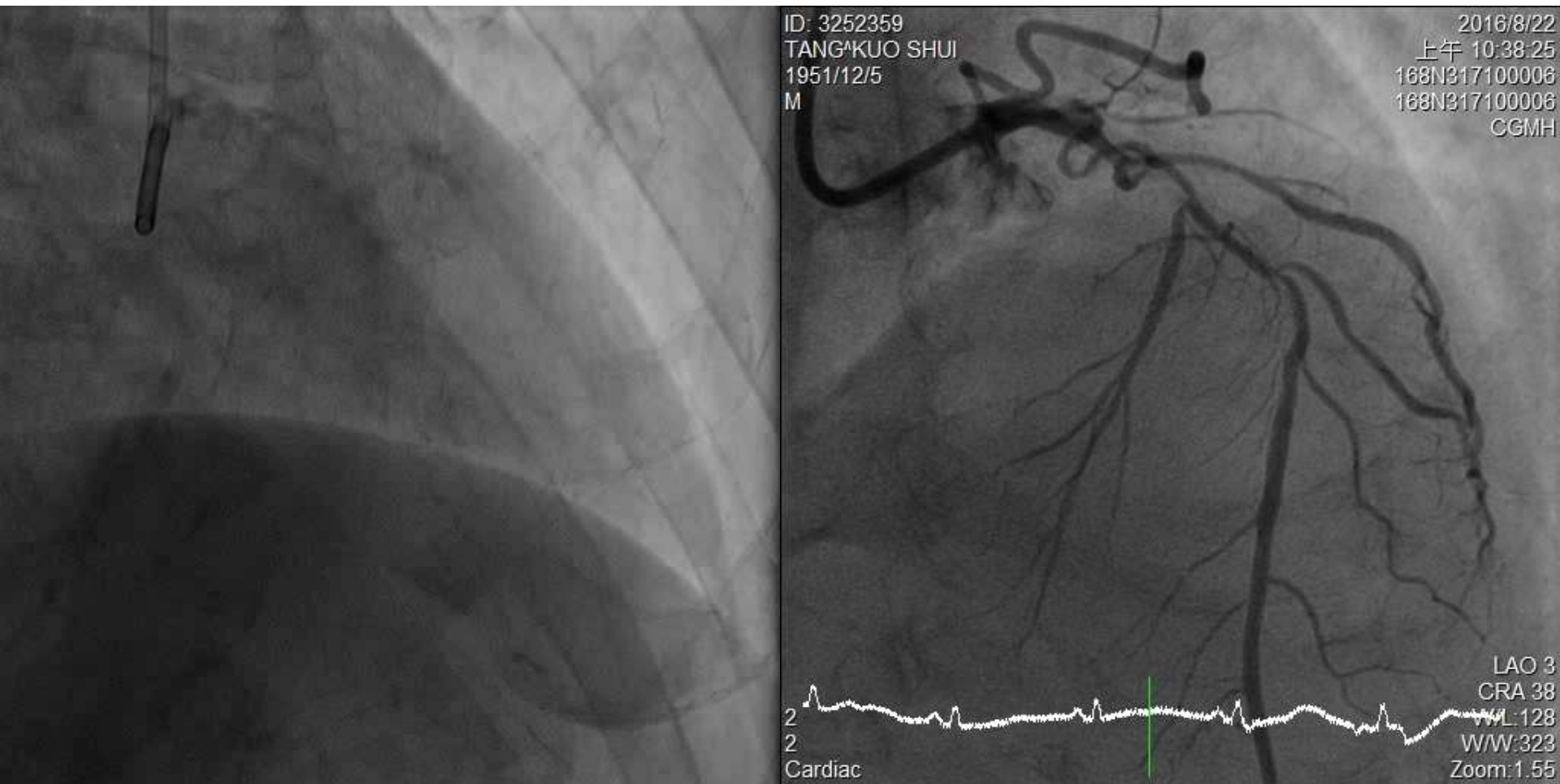


79
79
Cardiac

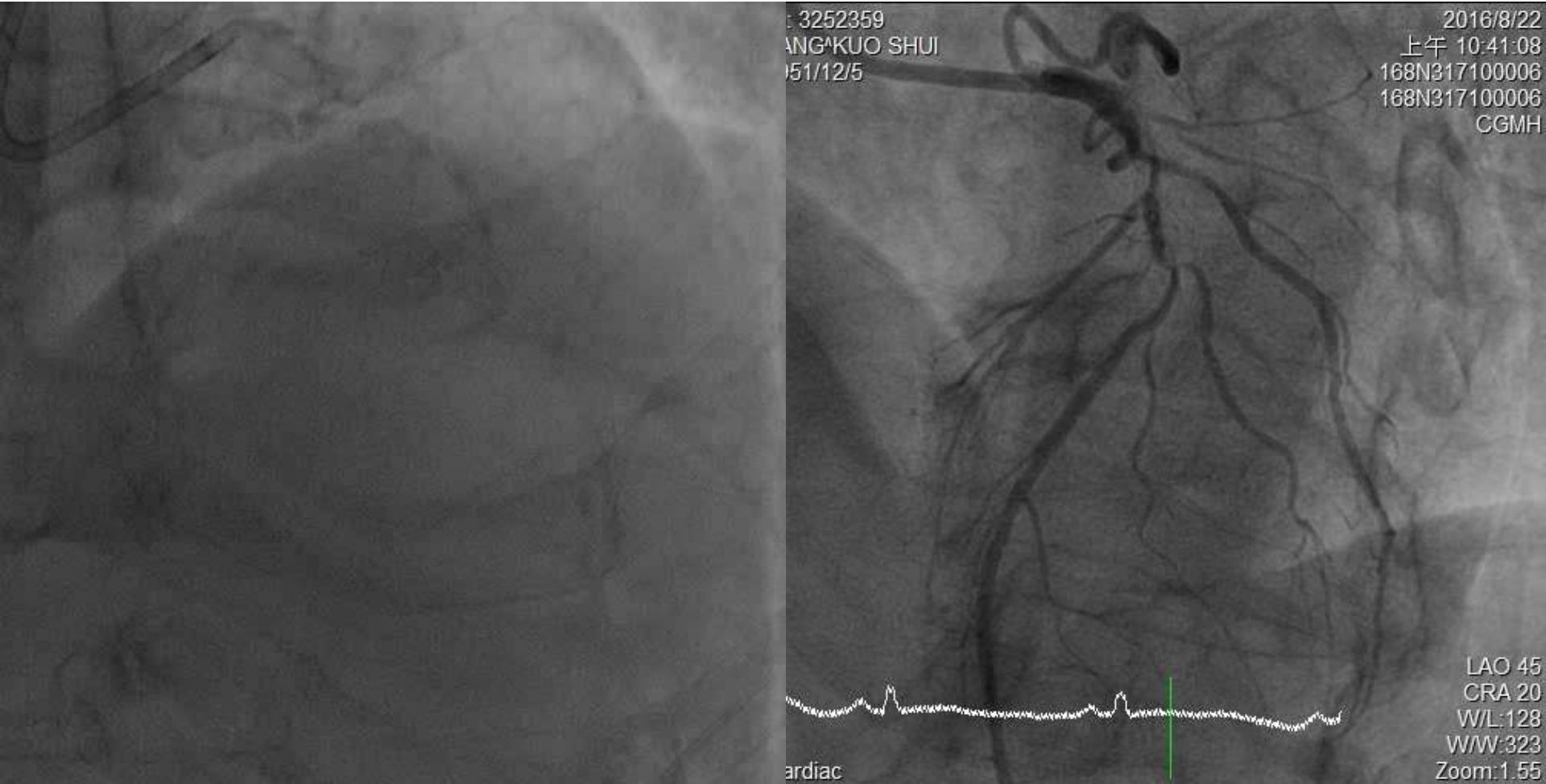
LAO 40
GAU 0
W/L:128
W/W:323
Zoom:1.55

**Reverse wire to rescue the SB blocked
by the dissecting flap**

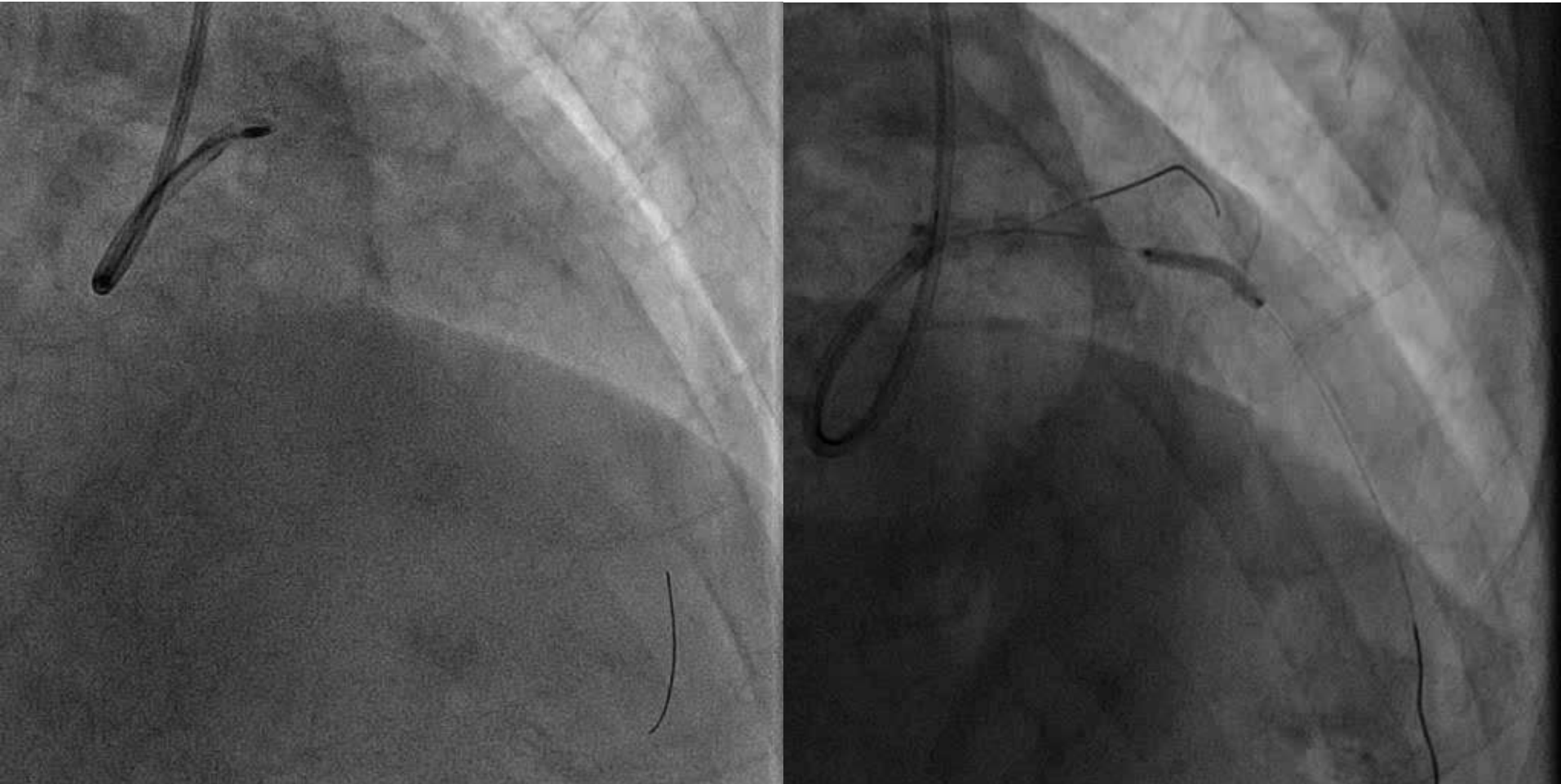
Diffuse heavy calcification @ p- to m-LAD



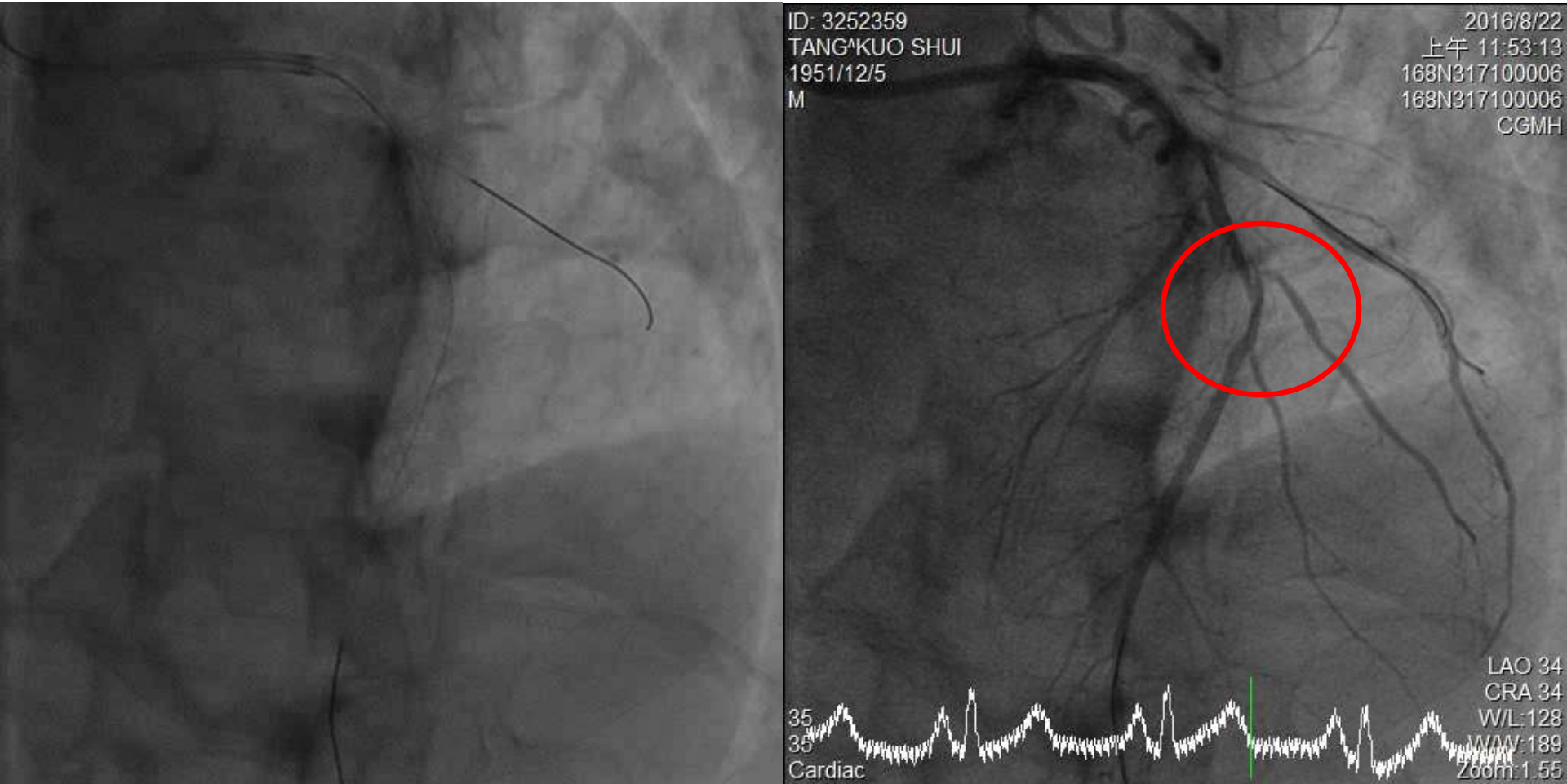
Involving bifurcation



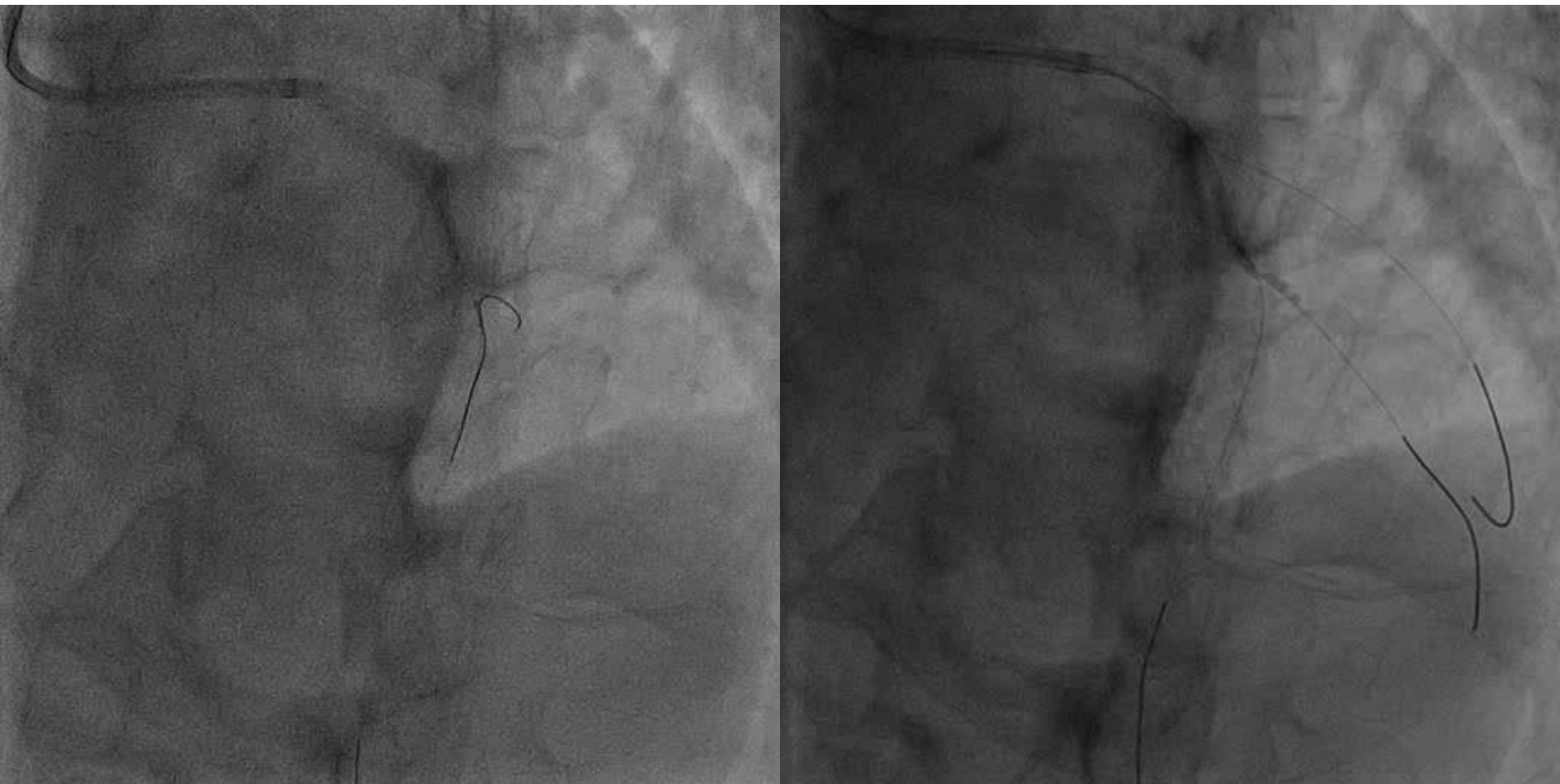
Rotablation using 1.25 mm burr



Dissection right at the LAD/DB bifurcation



Reverse wire technique



Final CAG



Conclusions

- The reverse wire technique may not be often required for bifurcation lesions. However, it could be the only solution in some scenario.
- Adequate support of the guiding catheter and precise tip shaping of the wire are the keys to succeeding in this procedure.