Case report

Combined retrograde-antegrade Guidewire approach for a CTO lesion

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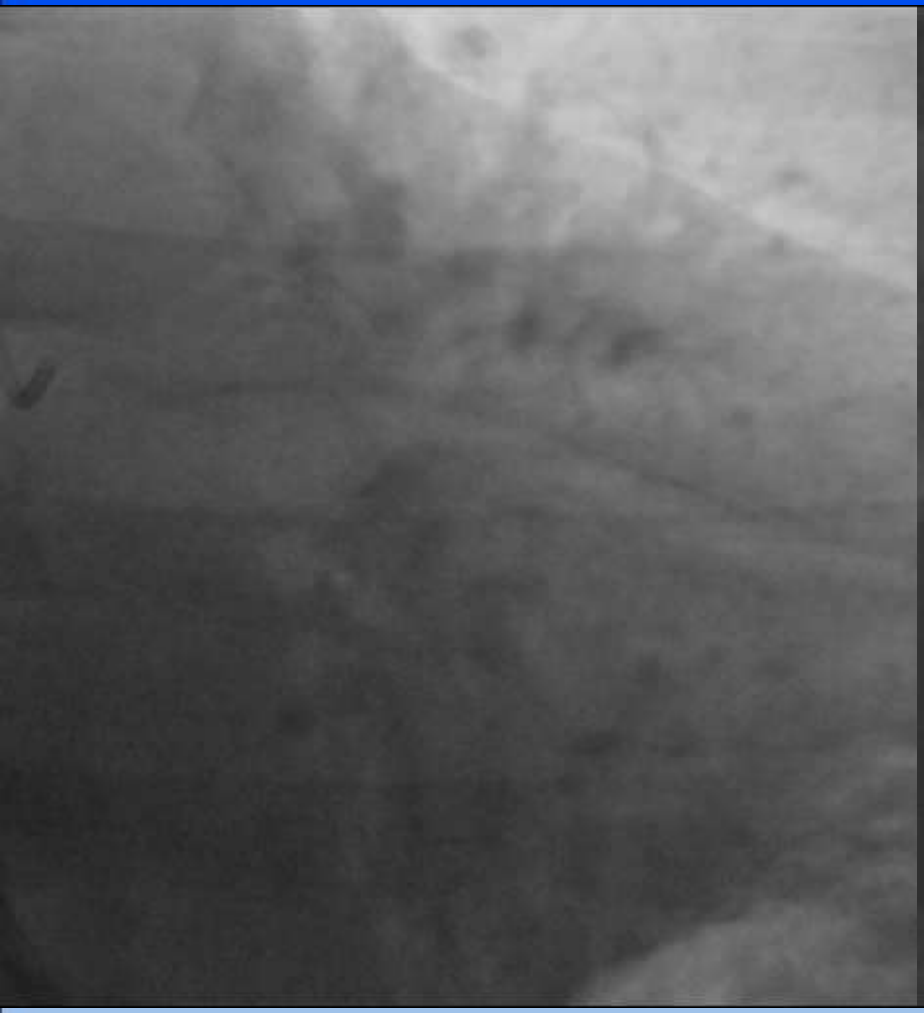
Case

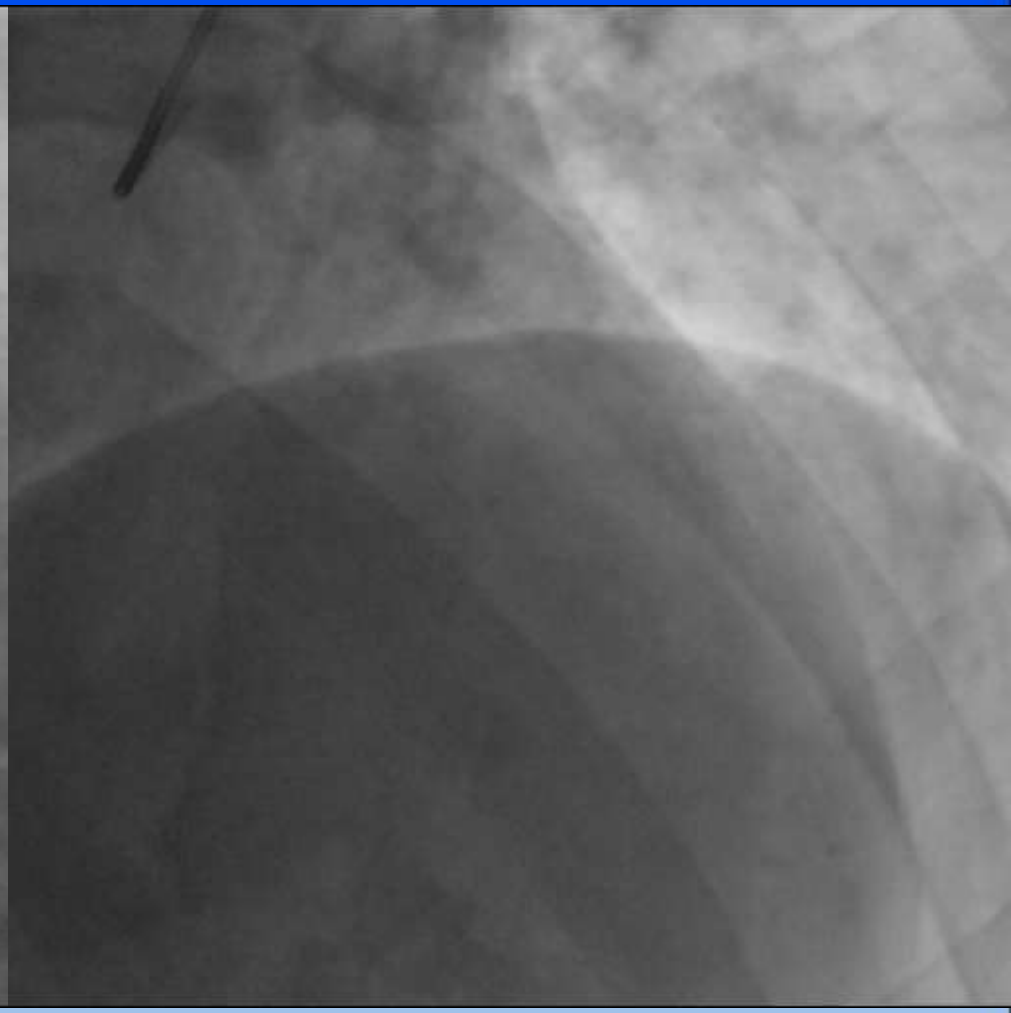
- male， 45ys
- Substernal chest pain 6 ms ago, confirmed as acute myocardial infarction.
- angiography shows total occlusion in proximal LAD. And collateral vessels from RCA to LAD.
- Exertional angina in recent 6 ms.

History

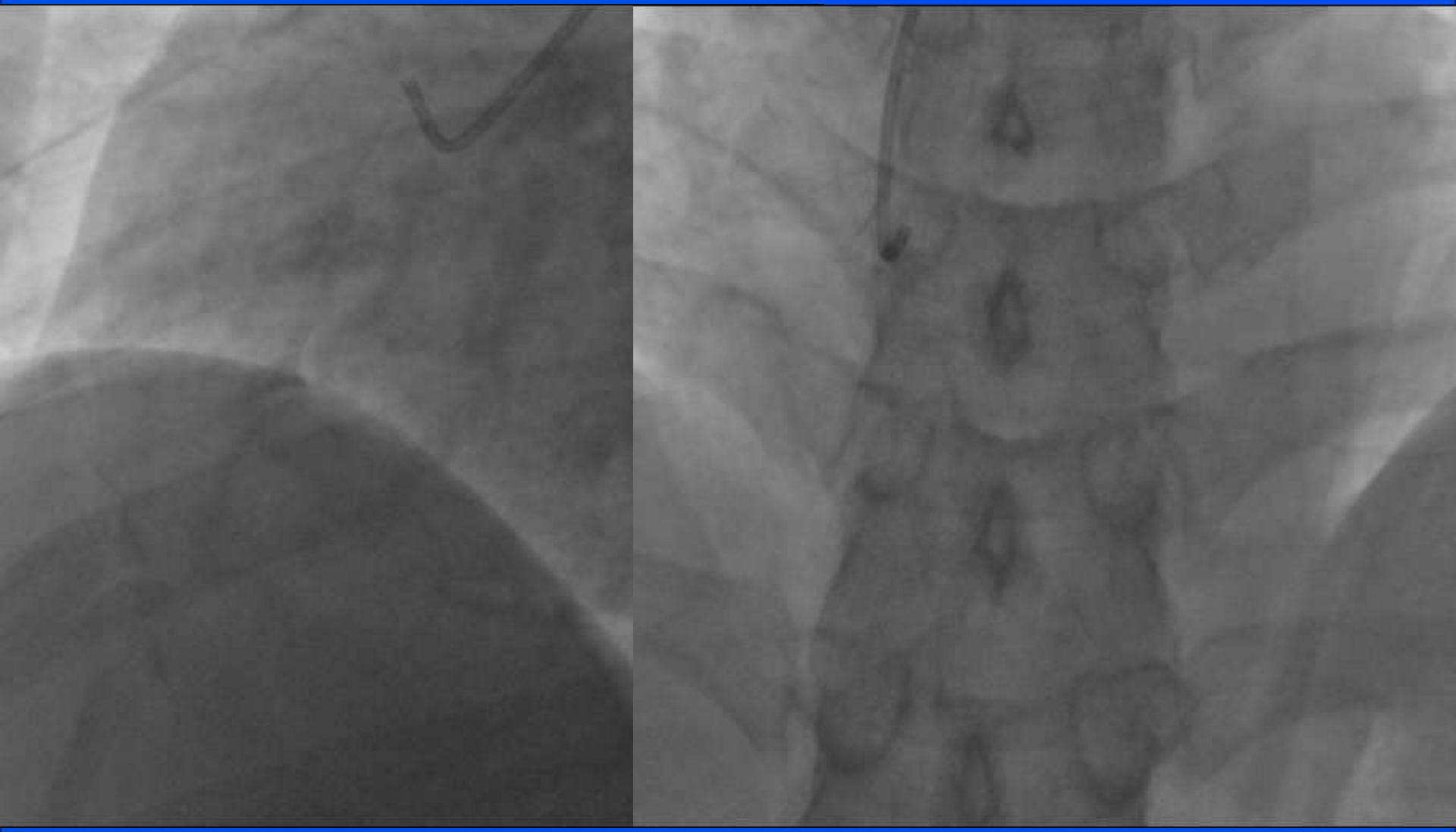
- No Diabetes
- TG 4.23， LDL 1.45mmol/L, HDL 0.77mmol/L
- aTnI 0.03 ng/ml
- echo: LVEF 66%， LVDd 50mm， hypodynamic in anterior wall.

Angiography

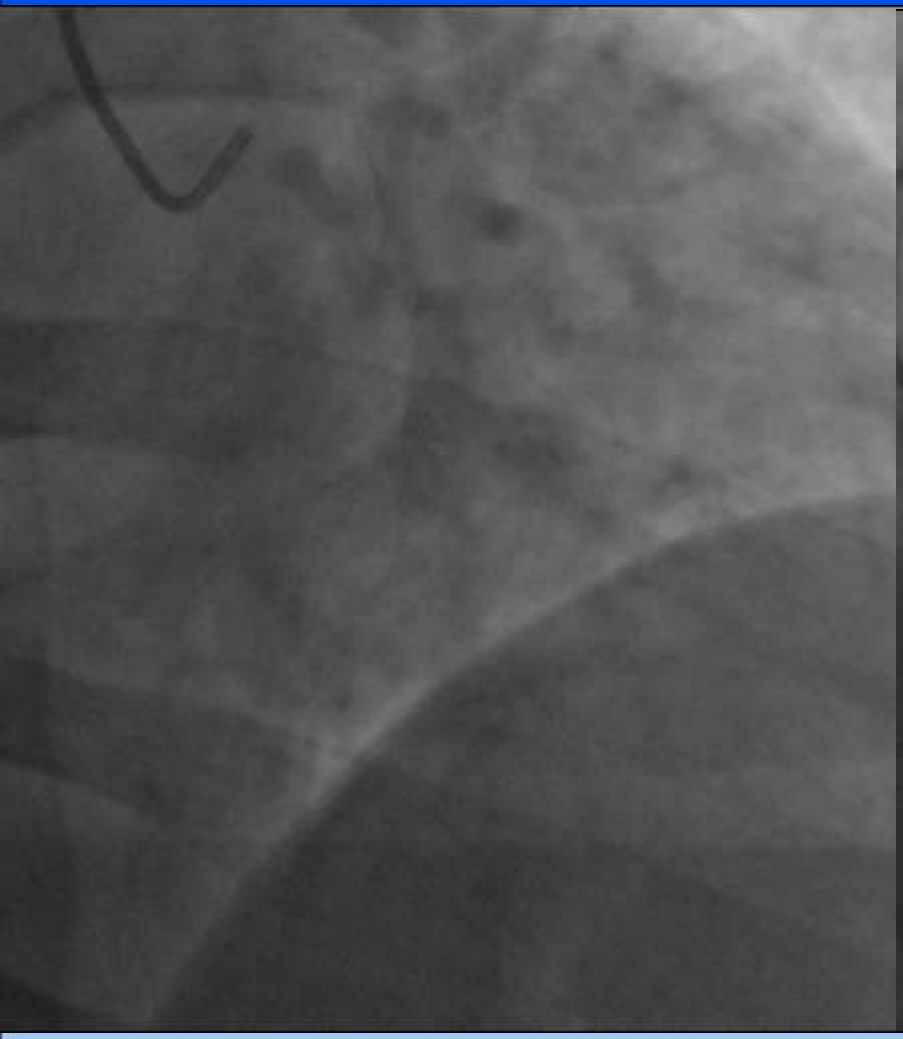


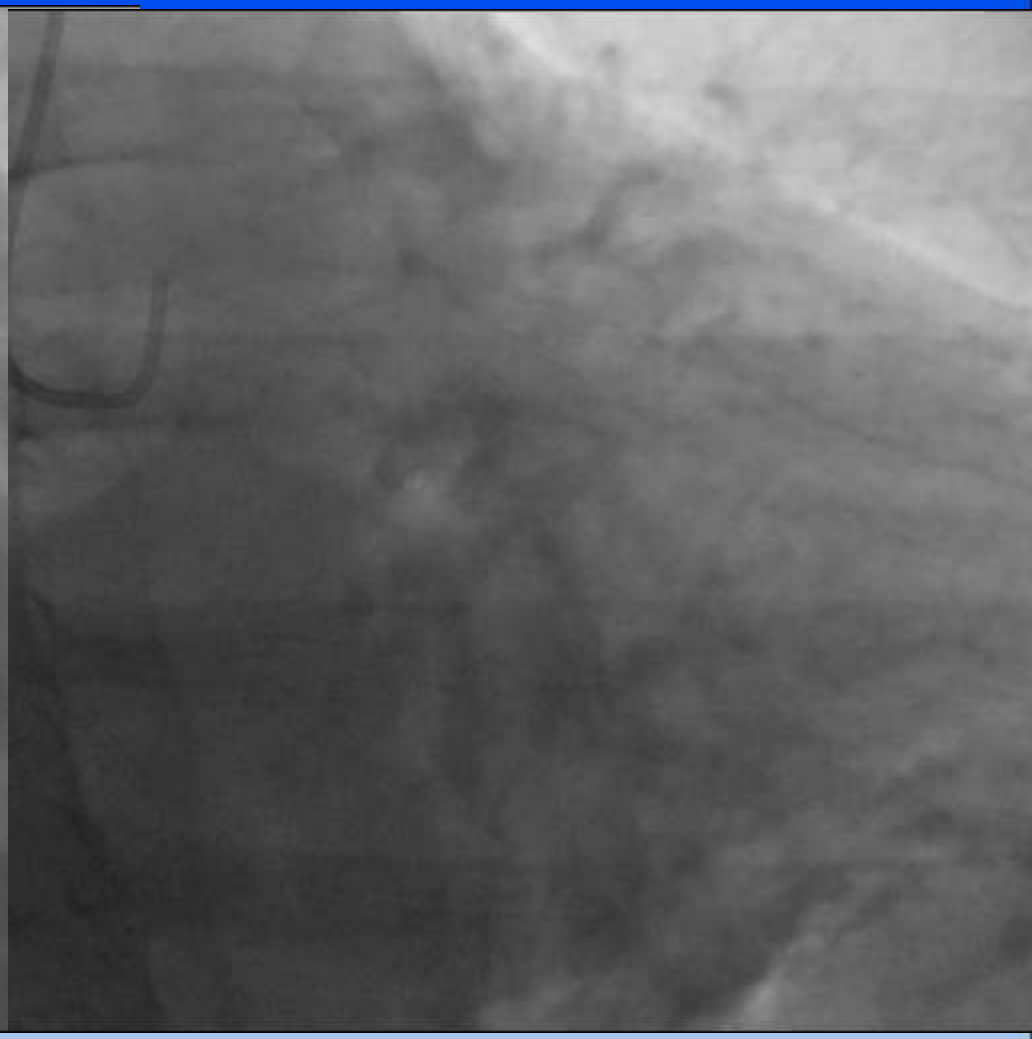


Collateral vessels from RCA to LAD

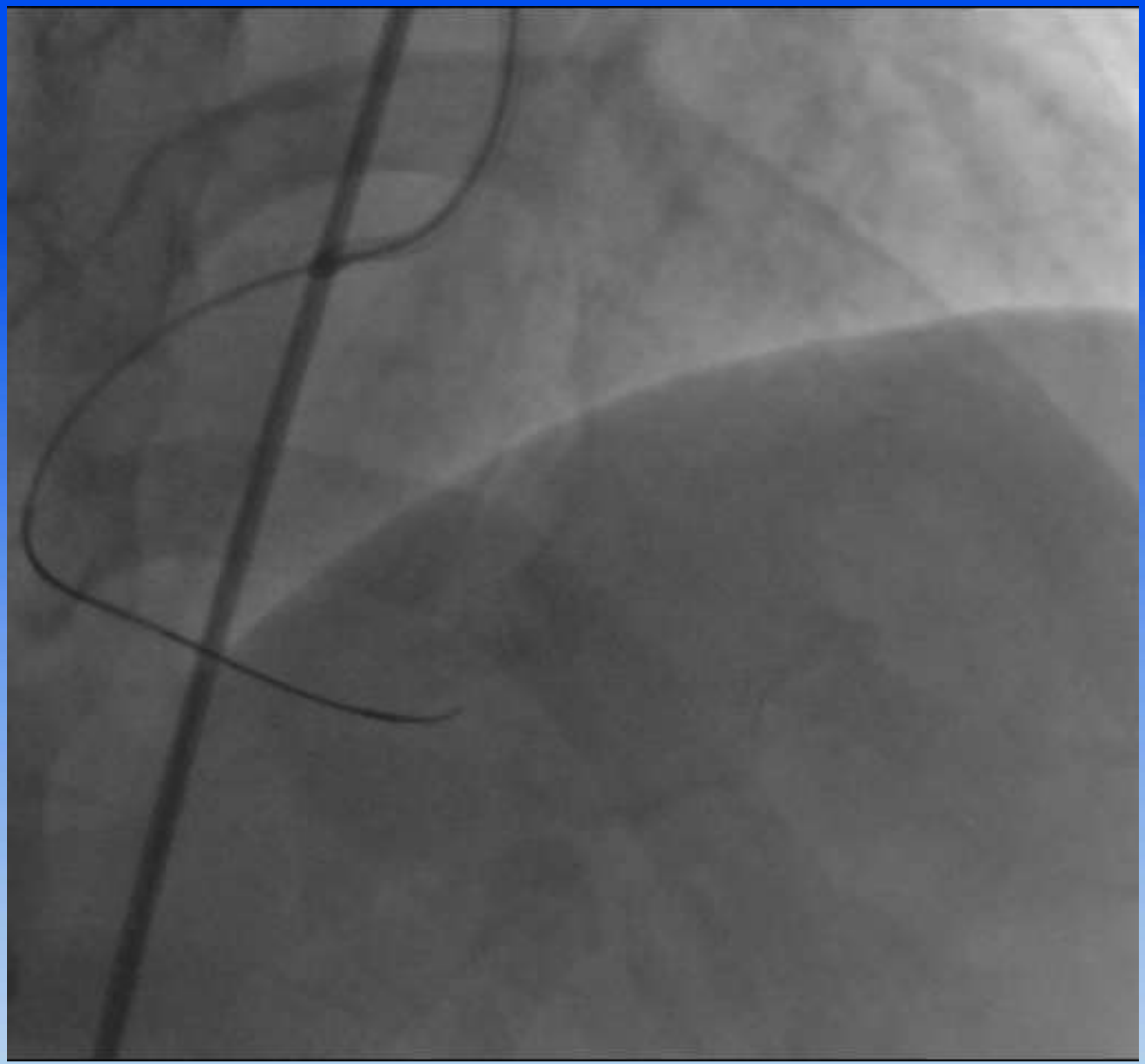


Antegrade or retrograde approach?

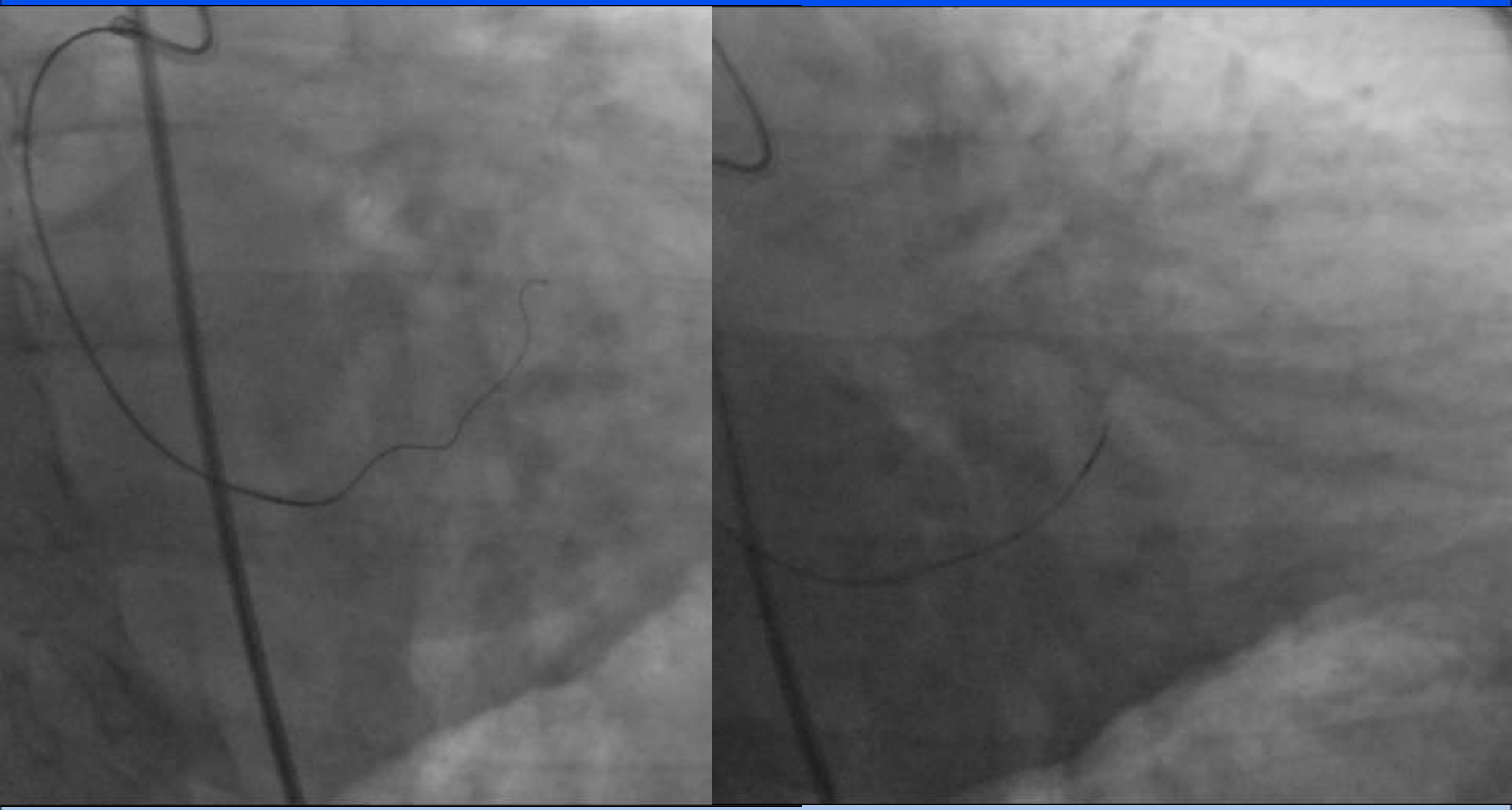




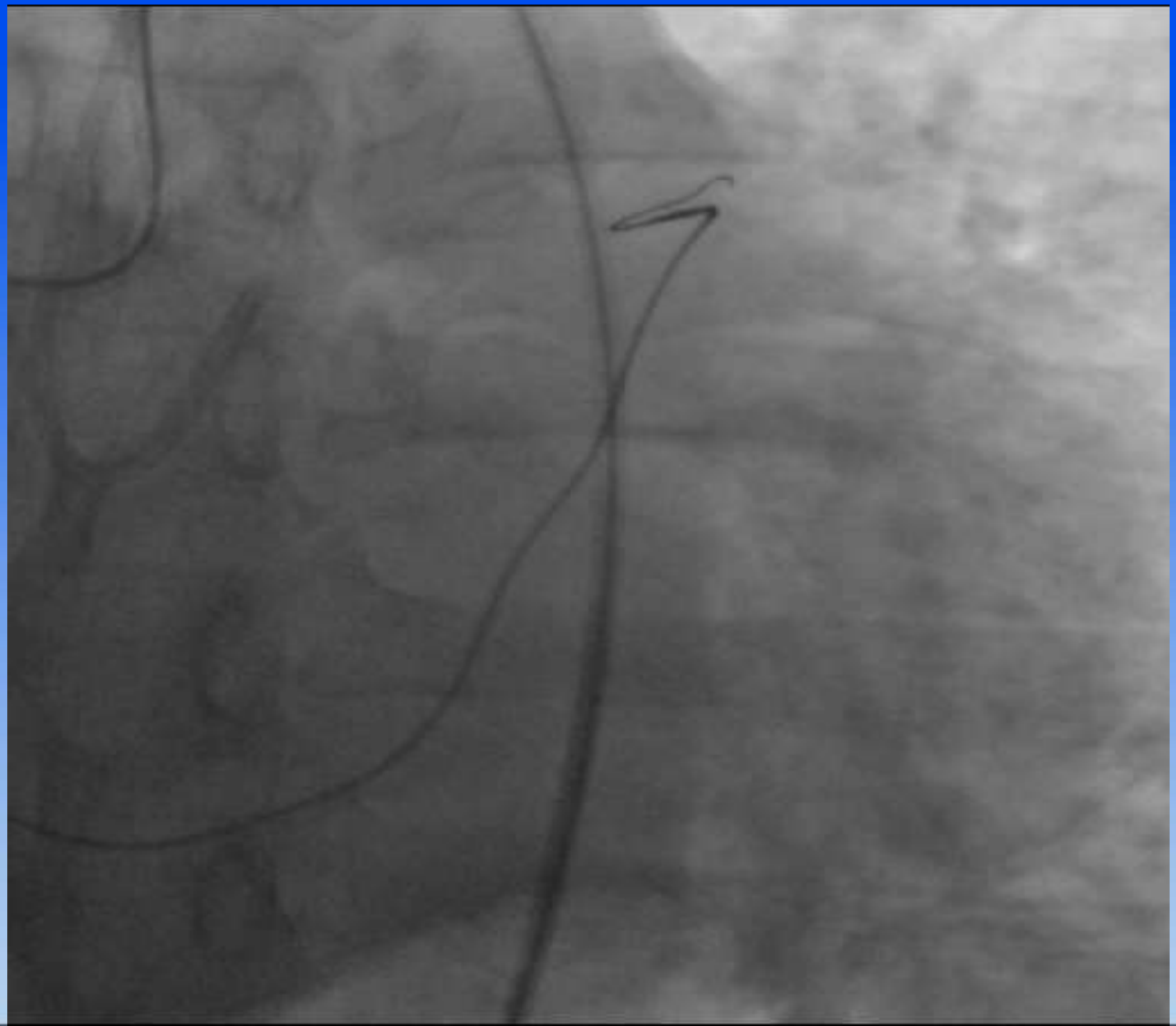
RCA 7F AL1.0 Guide with runthrough guidewire in Corsair microcatheter



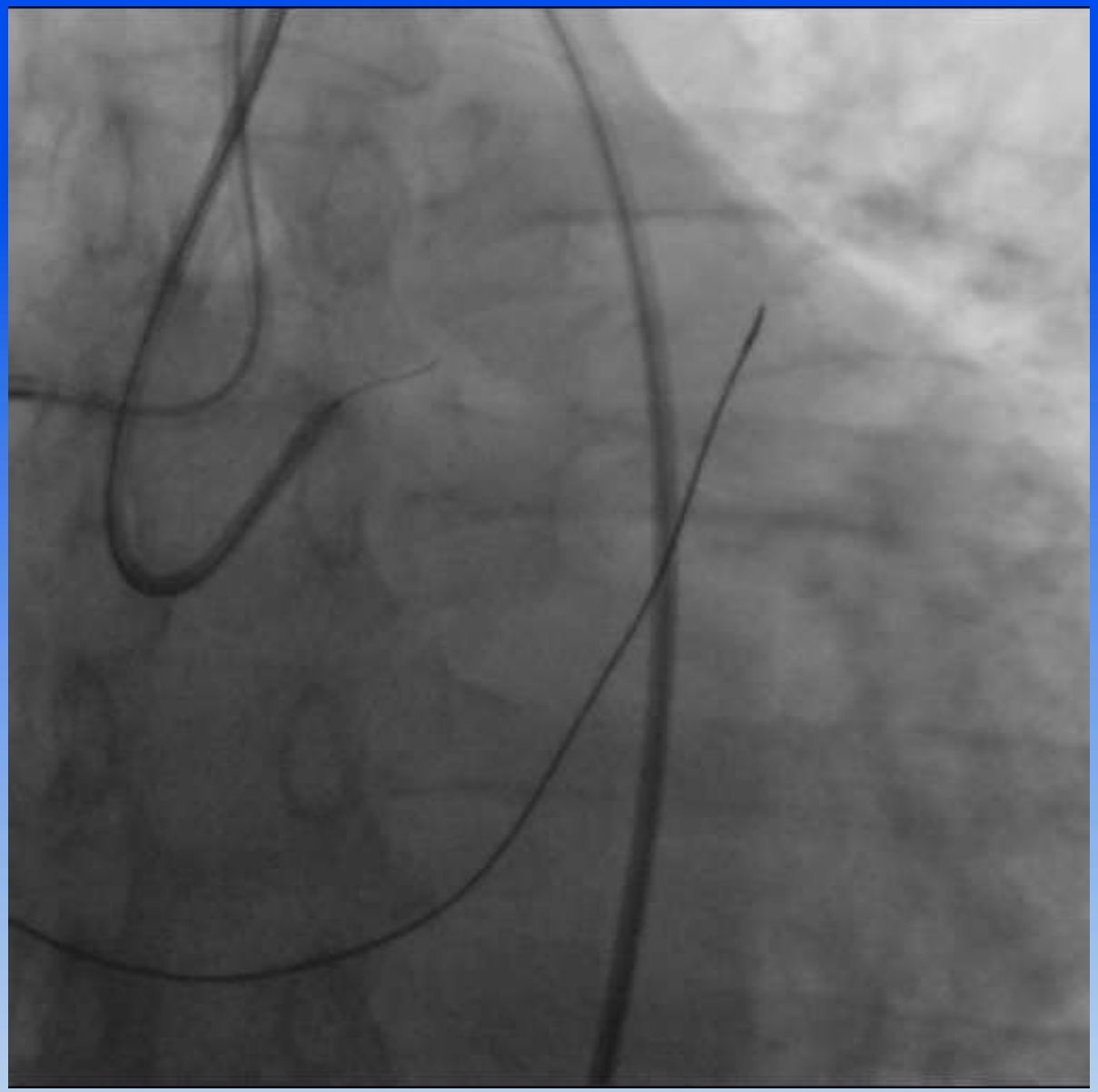
Advance of Field XT guidewire to the collaterals



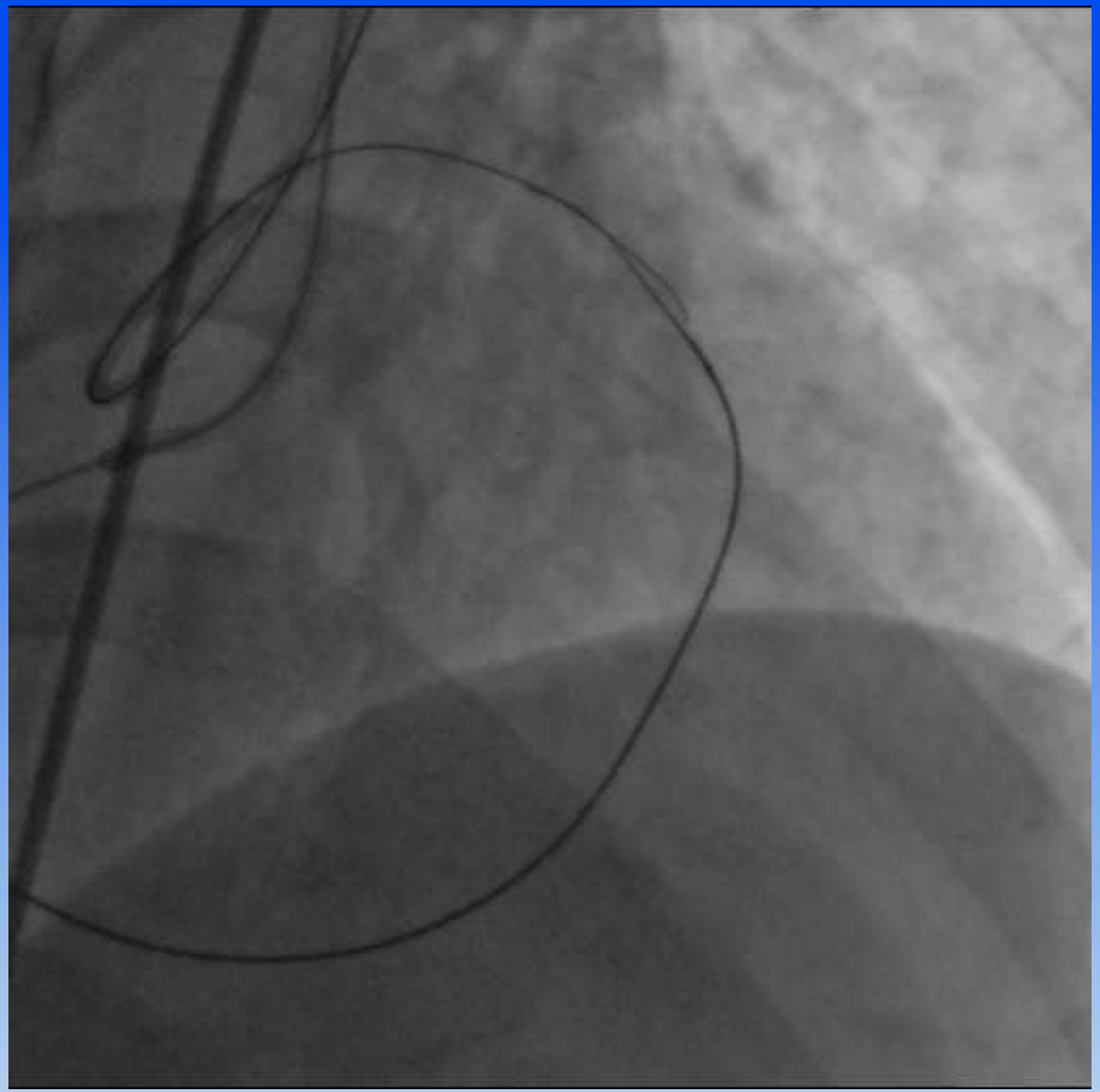
Combination of antegrade and retrograde approaches



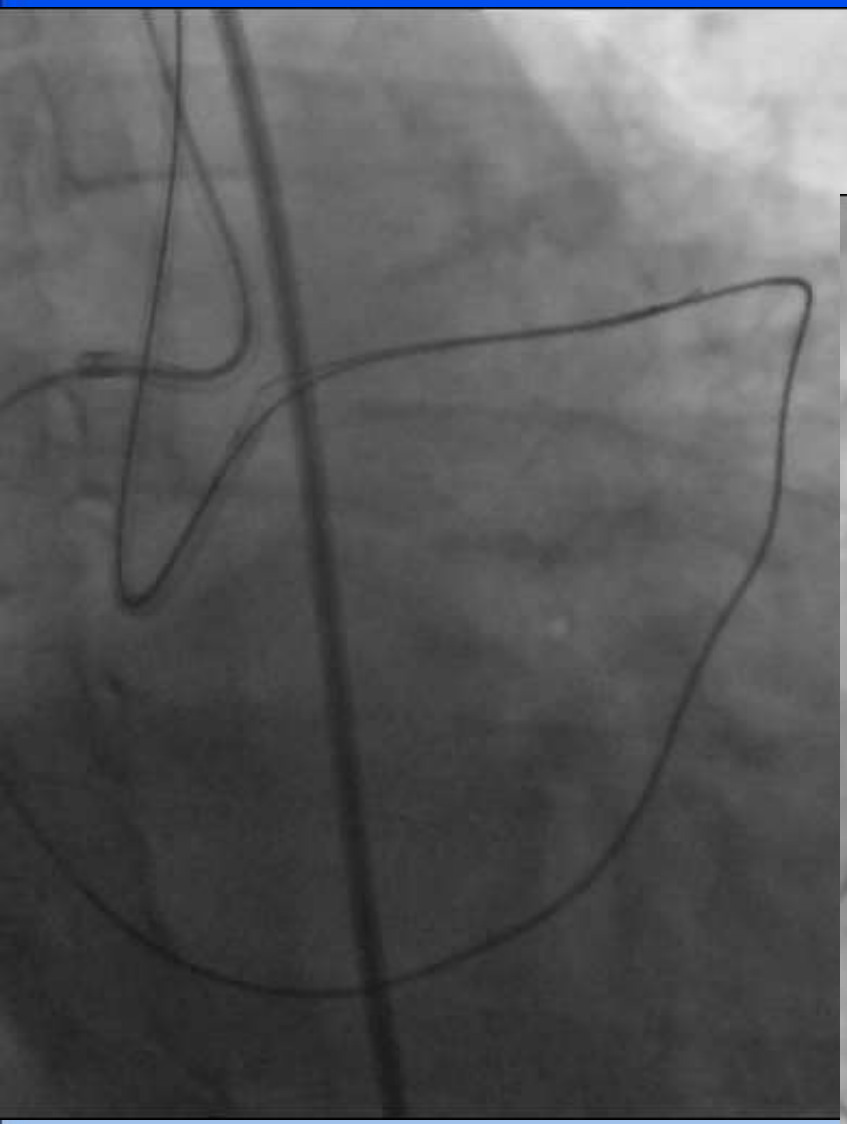
Conquest Pro with Progreat by antegrade, and Field XT to M3 by retrograde.

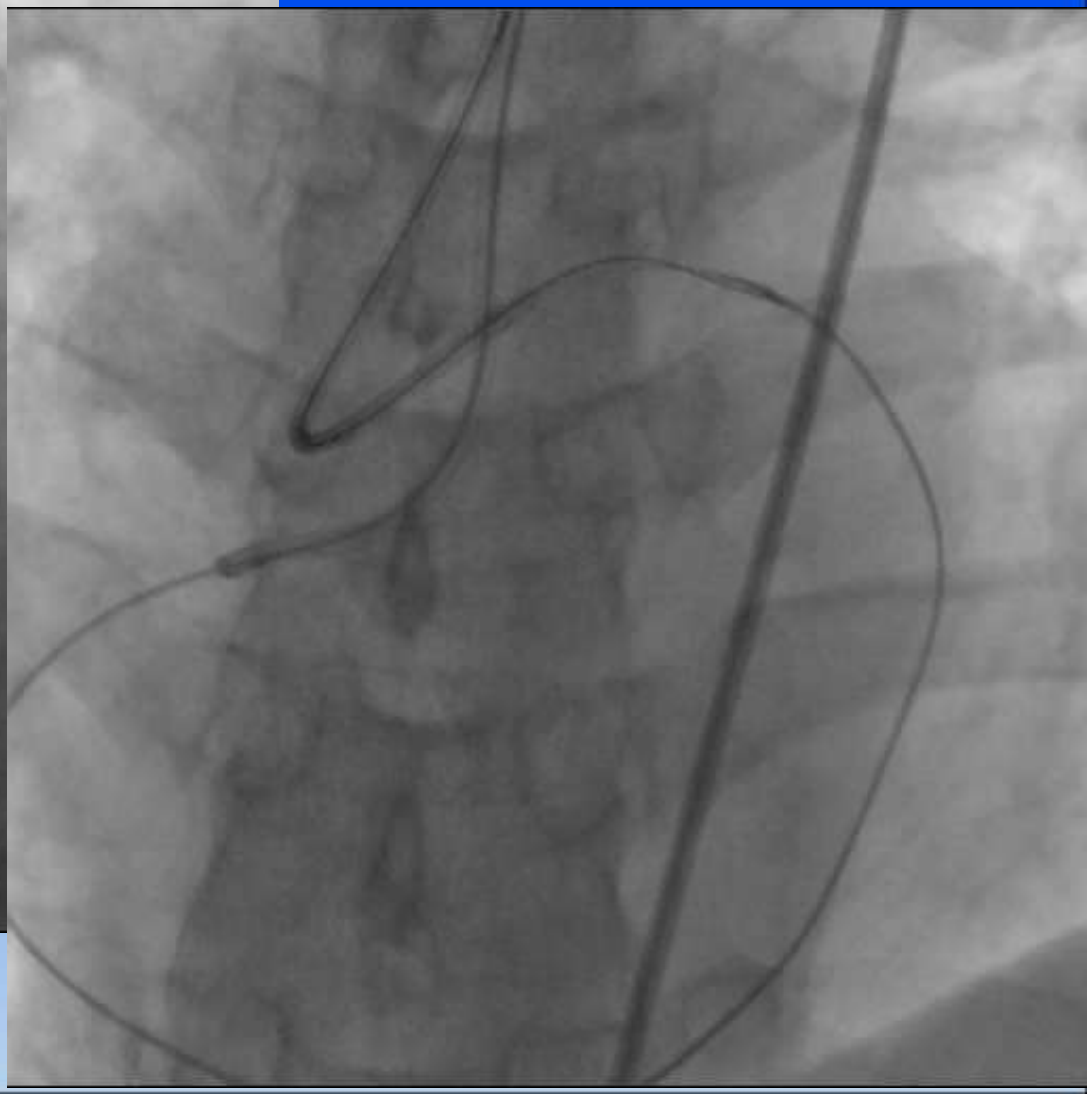


Antegrade Conquest pro enter false lumen of distal lesion, then Conquest pro 12 by retrograde— Kissing wire?

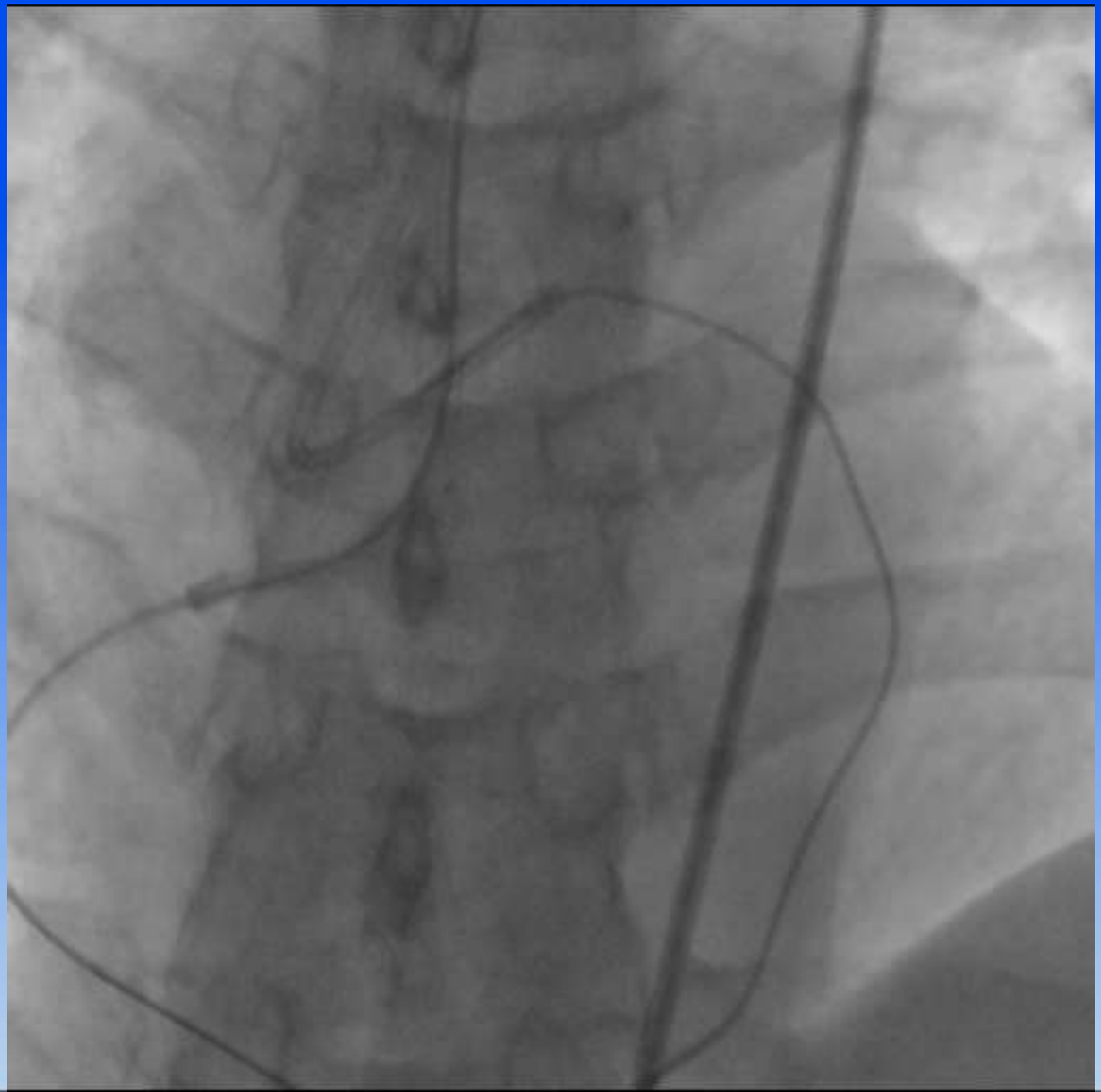


Retrograde wire was advanced to antegrade Guide

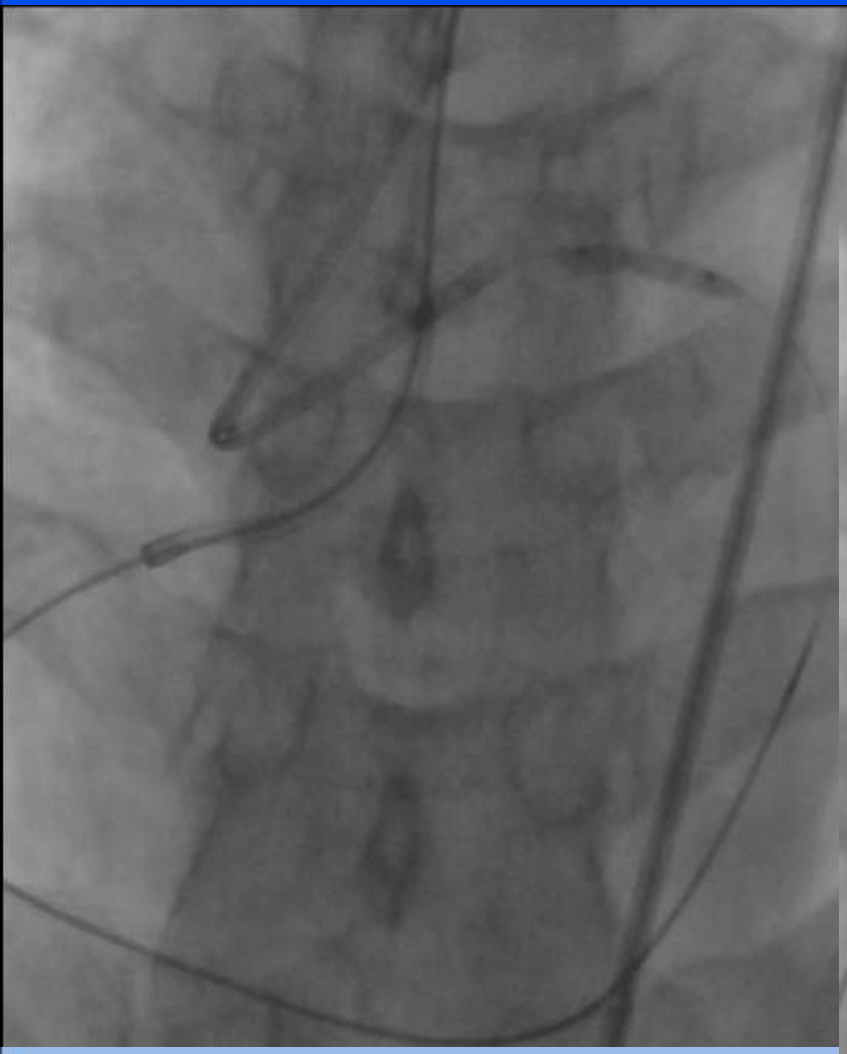


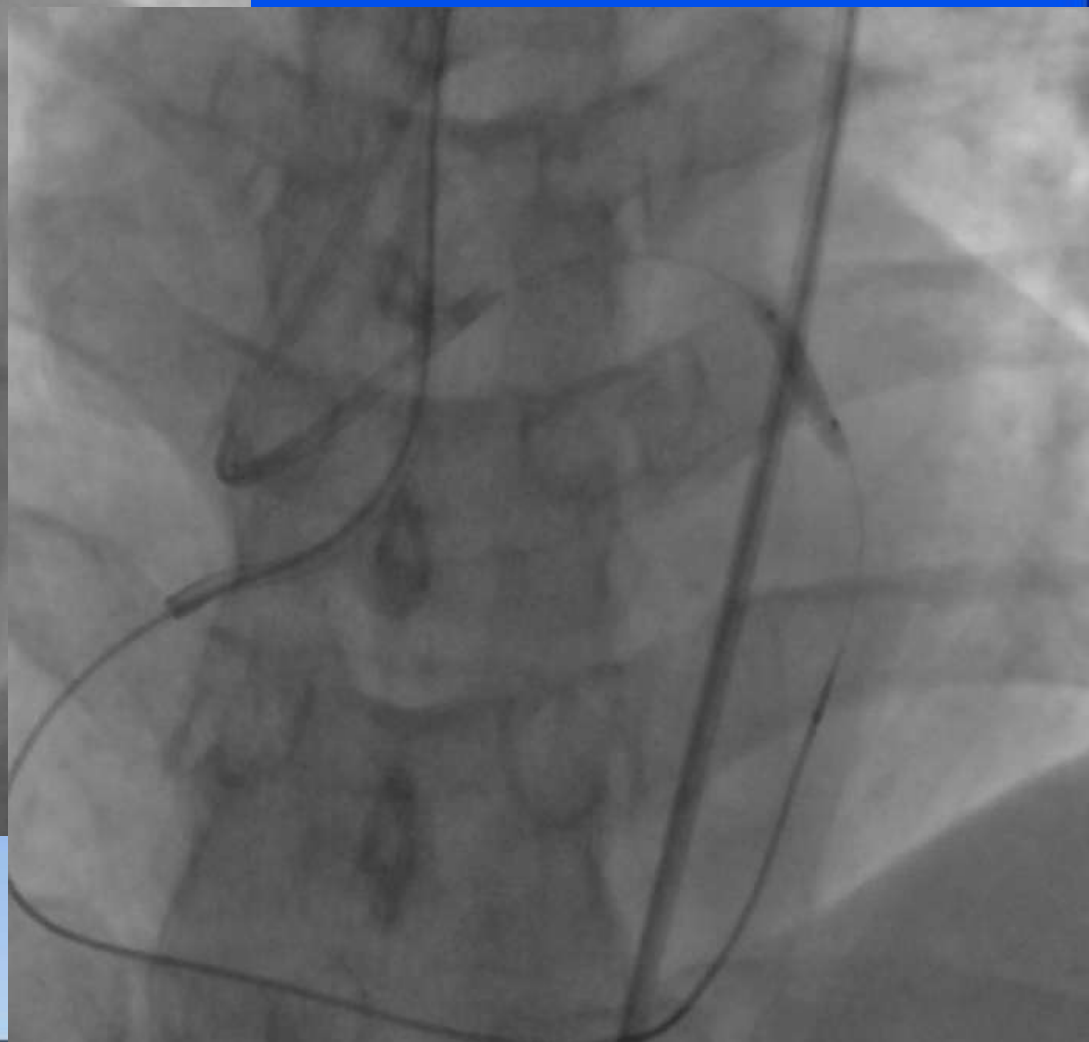


Hold the retrograde wire by Rujin 3.0*15 in EBU guide, and push Corsair, then exchange for RG3 wire by retrograde.

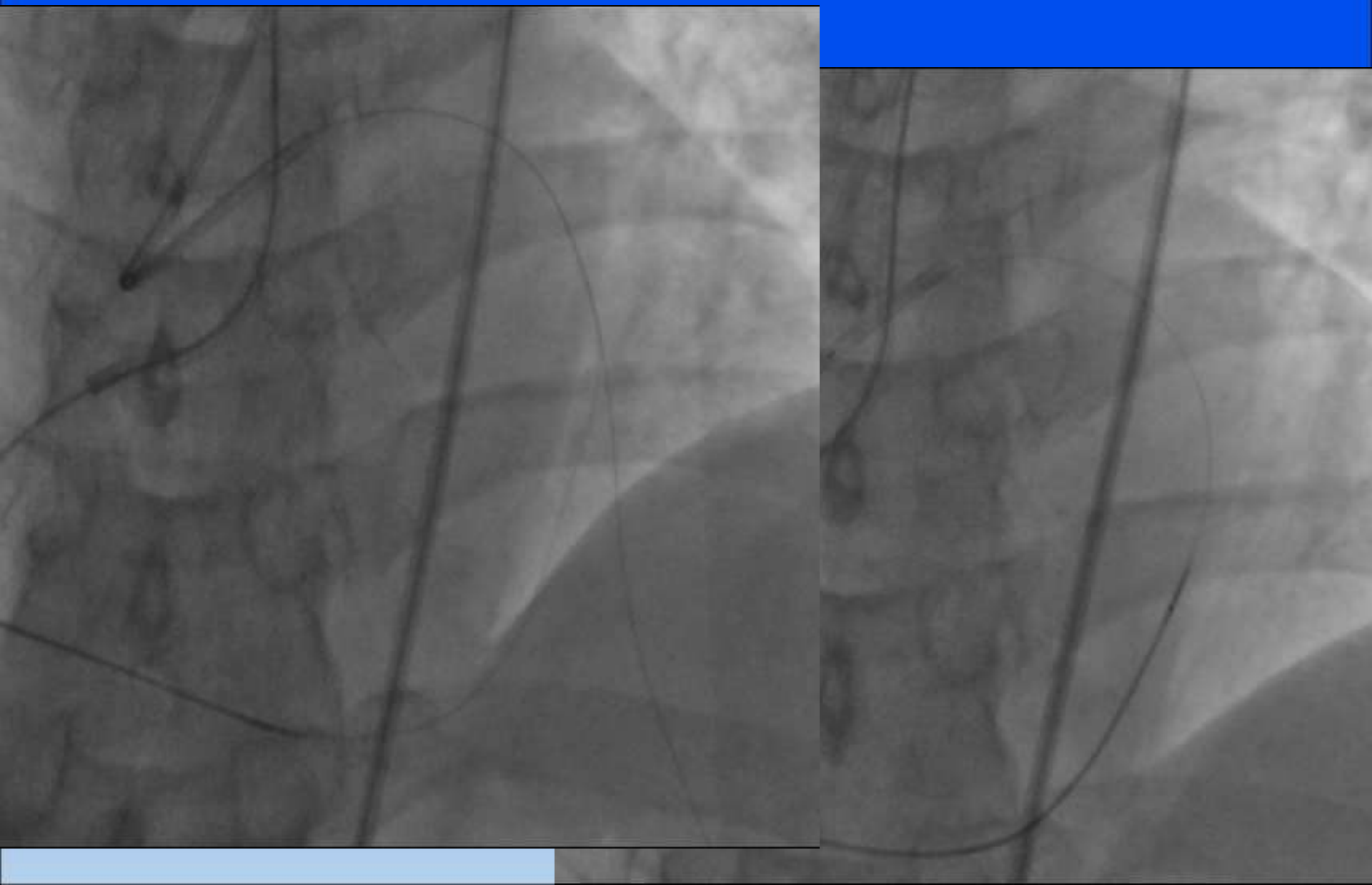


Dilate lesion with Rujin 3.0*15mm through RG3 wire

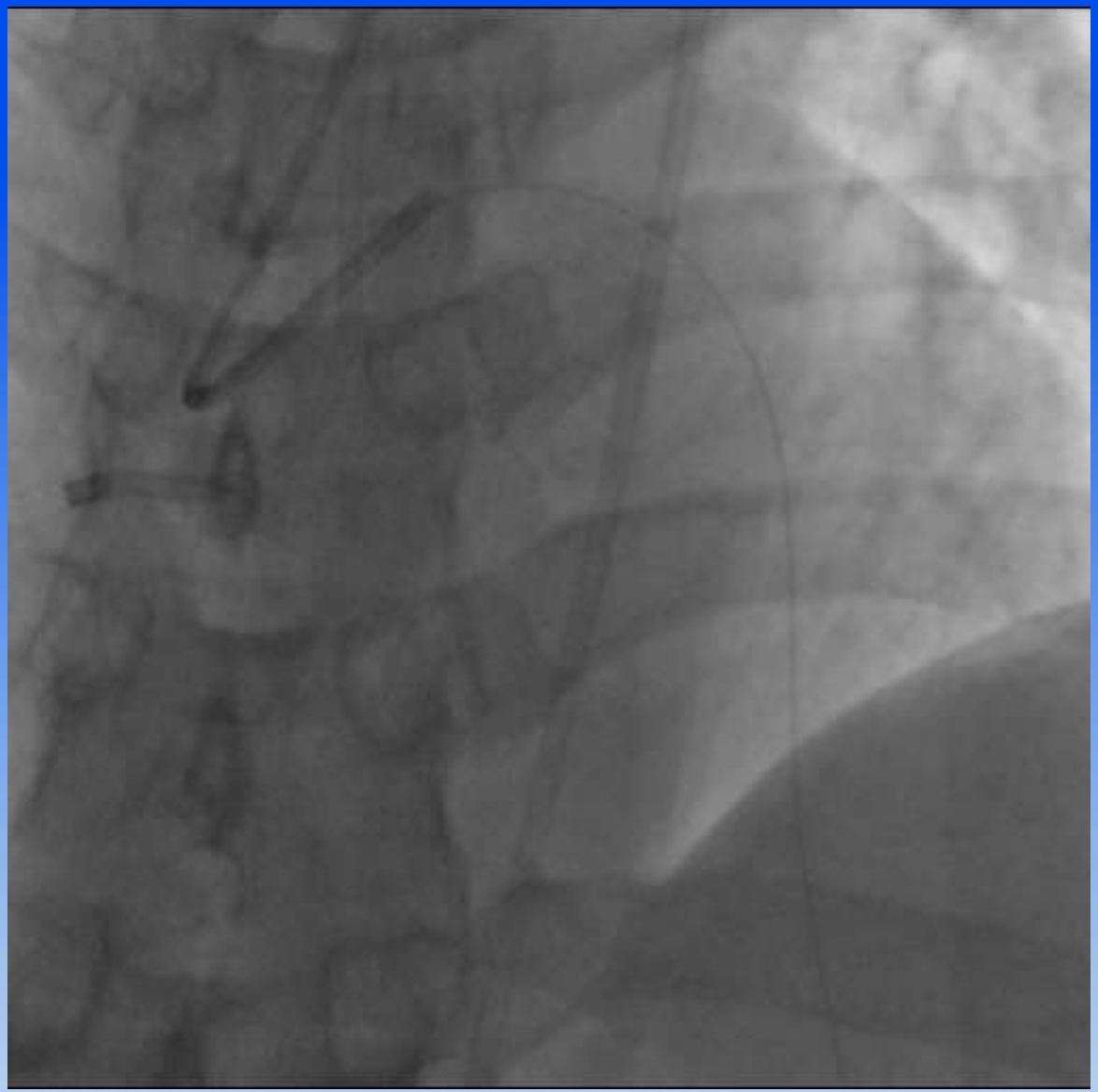




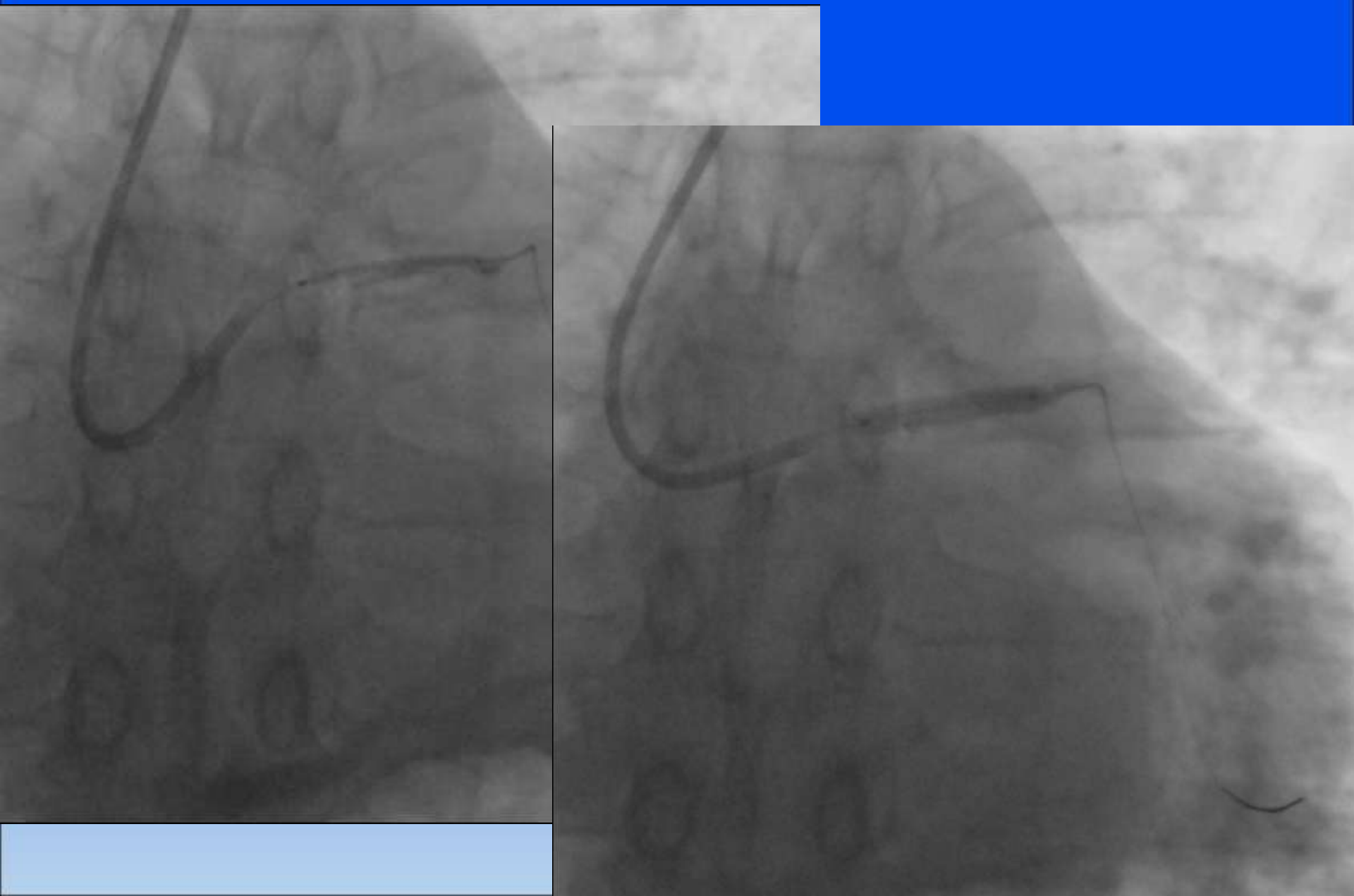
Recanalization of CTO



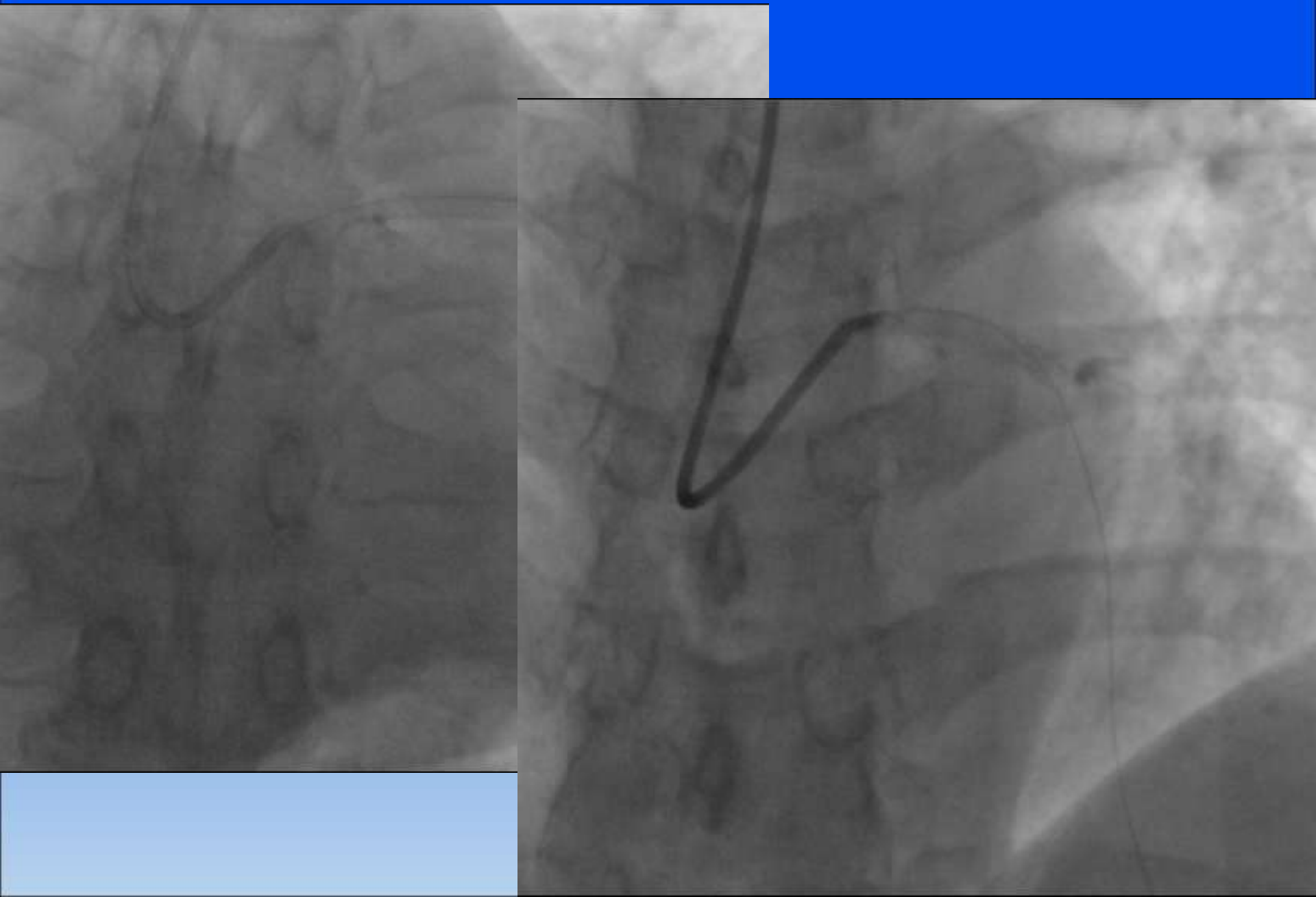
Fully recovery of antegrade blood flow without injury for septal vessel



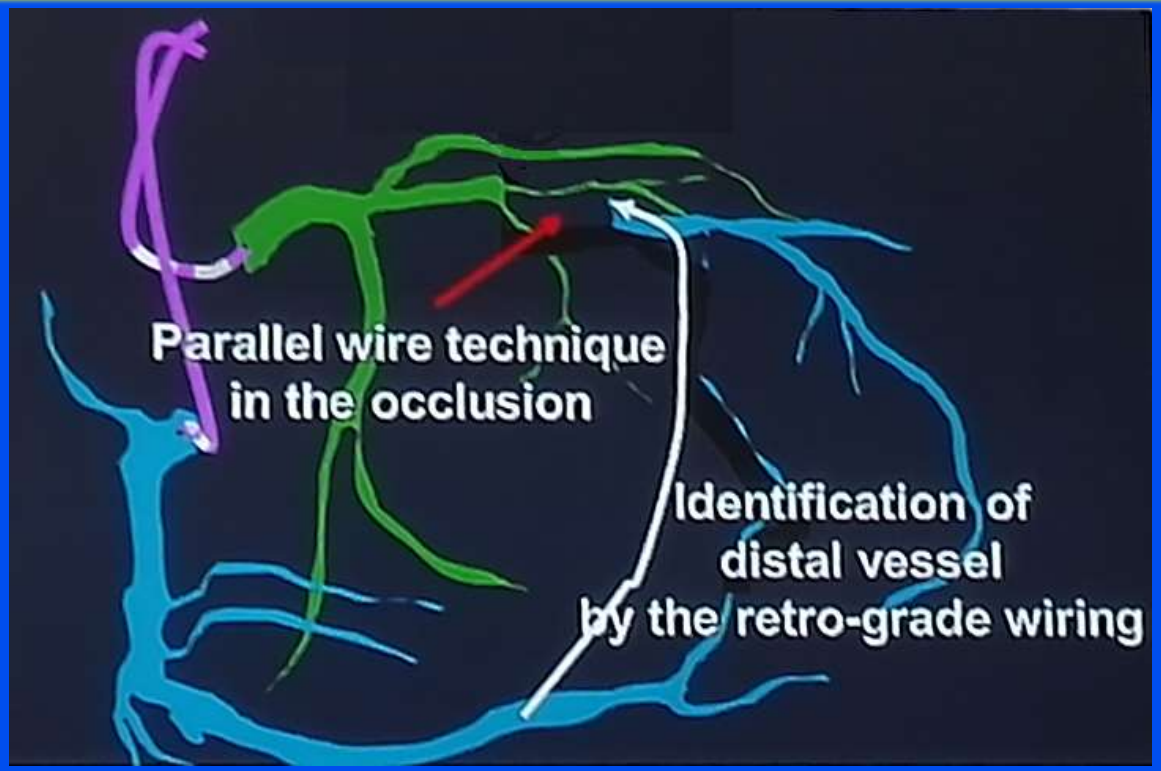
LAD stent 3.5*24mm



Final result



Summary



Especially for the long CTO lesions and unknown vessel trajectory, combination of antegrade and retrograde approach may greatly contribute to enhance the probability of success for CTO recanalization.

Thanks for your attention !