

A Man With Left Main Stenting For Percutaneous Intervention To Right Coronary Artery Chronic Total Occlusion

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History

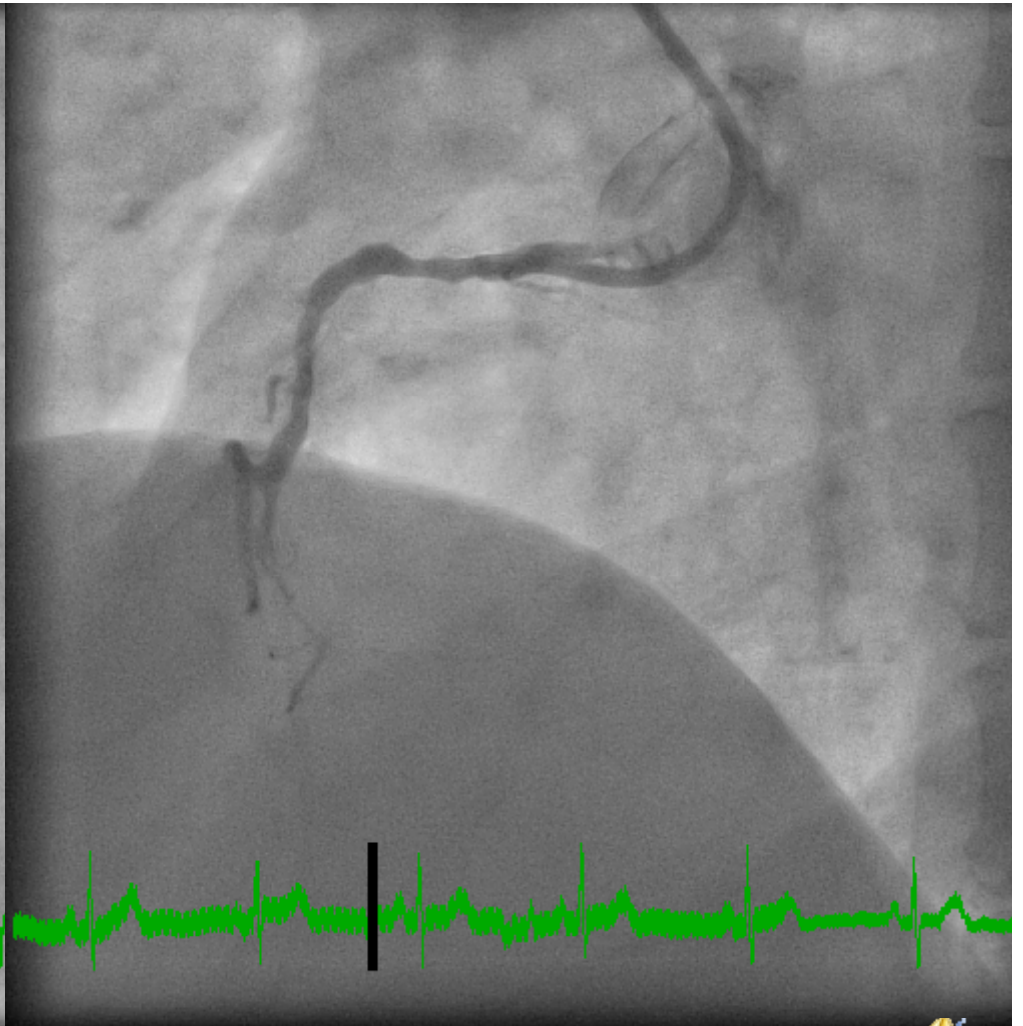
- Hau CH
- 62 years old man
- History of hypertension and hyperlipidaemia
- Present with chest discomfort in 2009
- PCI 6/2009: Triple vessel diseases
- dLM-pLAD Taxus 2.75/28 and mLCX Taxus 2.75/20.



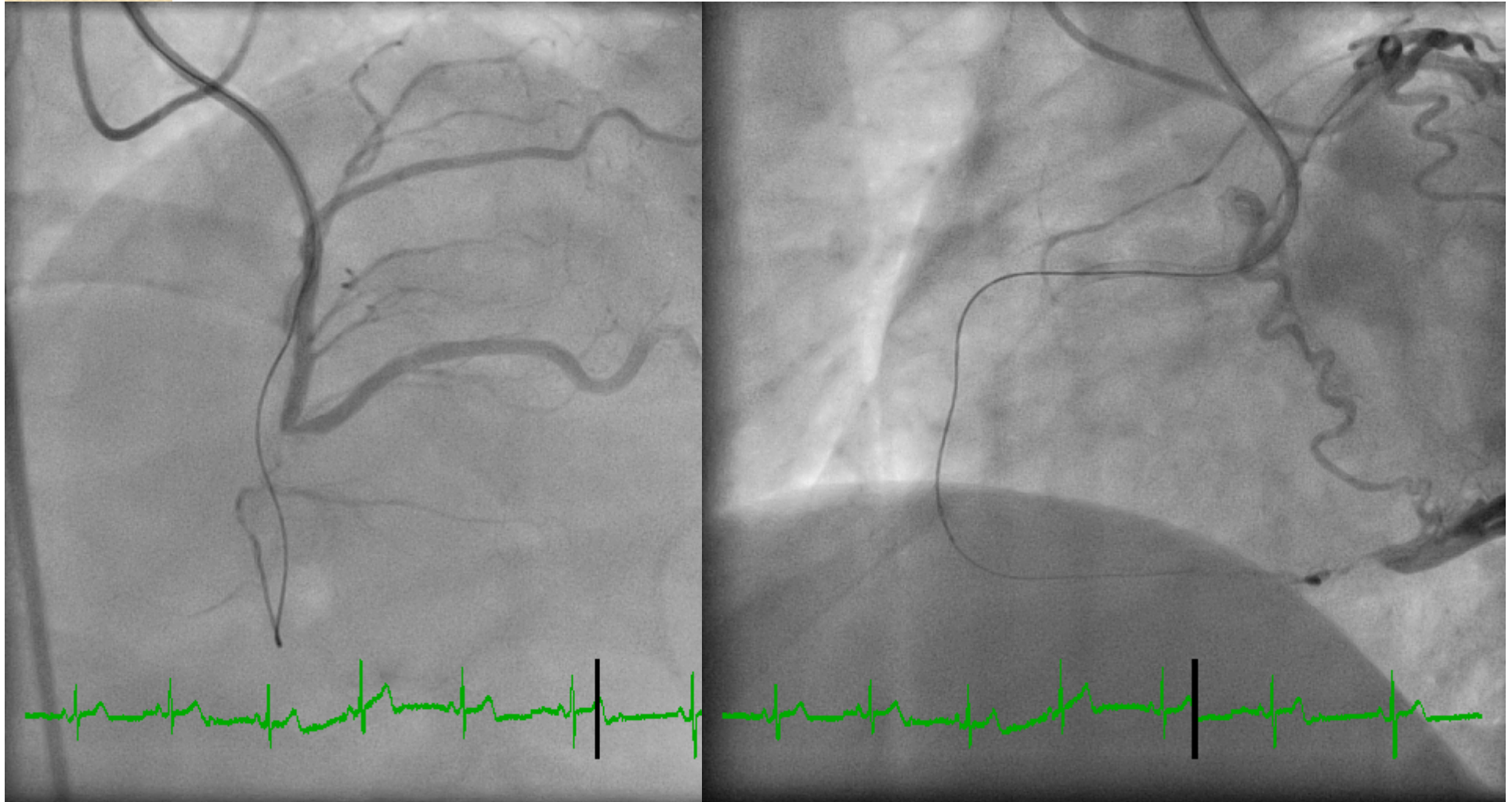
Case

- Complaint of on and off chest discomfort
- Plan for PCI to RCA CTO
- Try antegrade approach

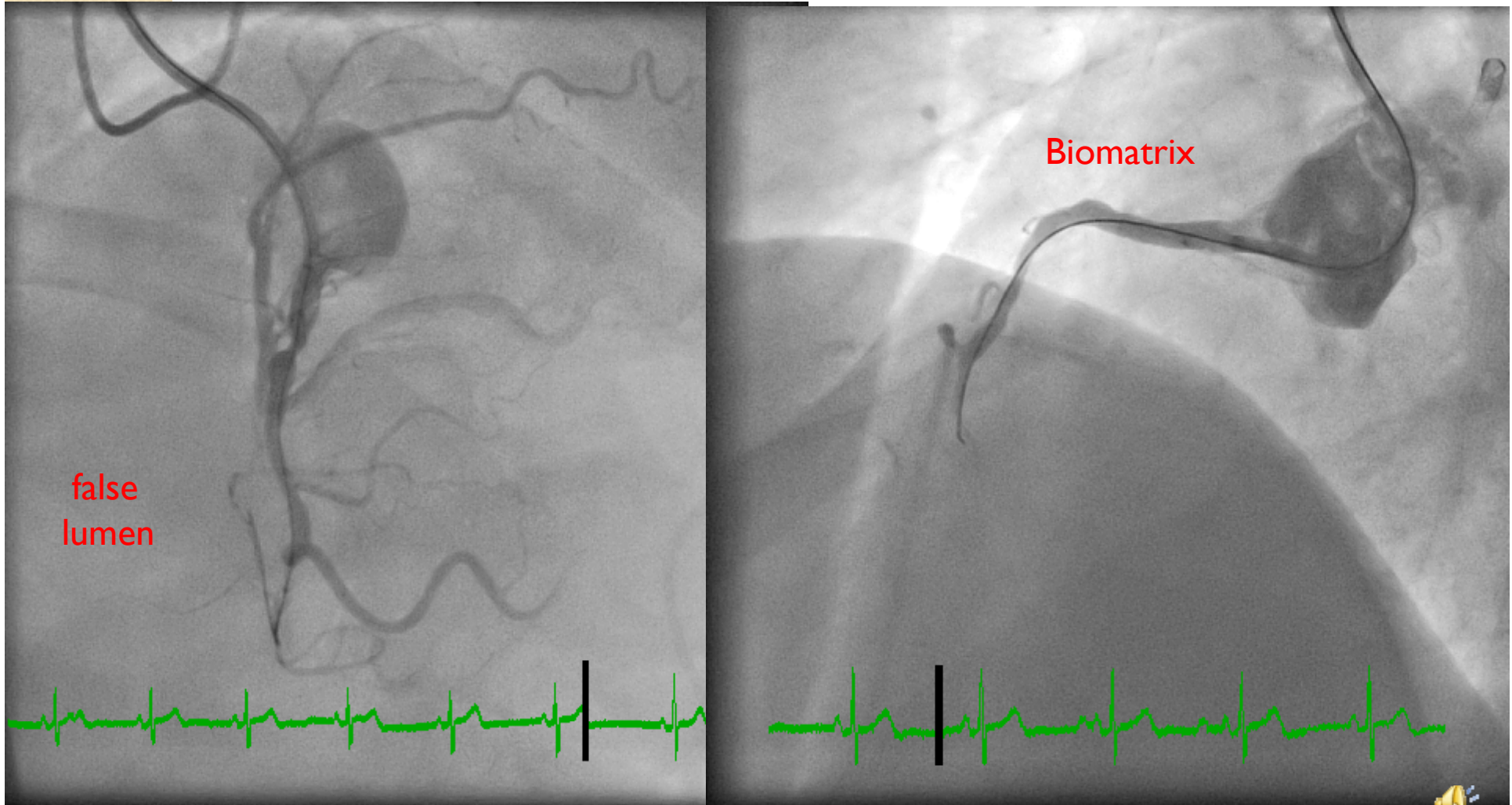




Try wiring with Fielder XT and Miracle 3 with
Finecross support



Miracle 3 wire went into false lumen. Procedure aborted because of prolonged procedure time. Ostial RCA stented with Biomatrix 3.5/18 for later try with 7Fr guiding catheter

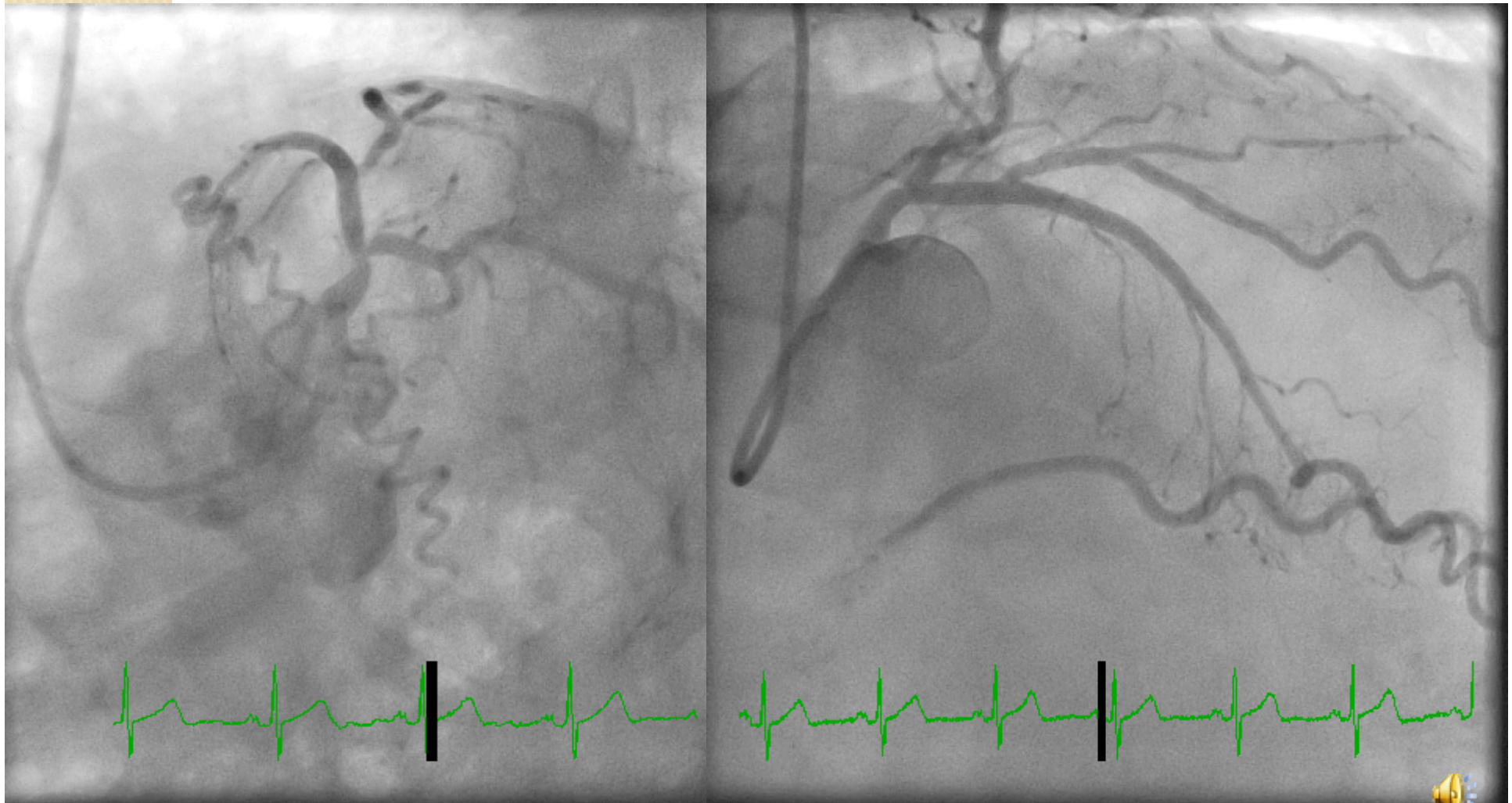


Case

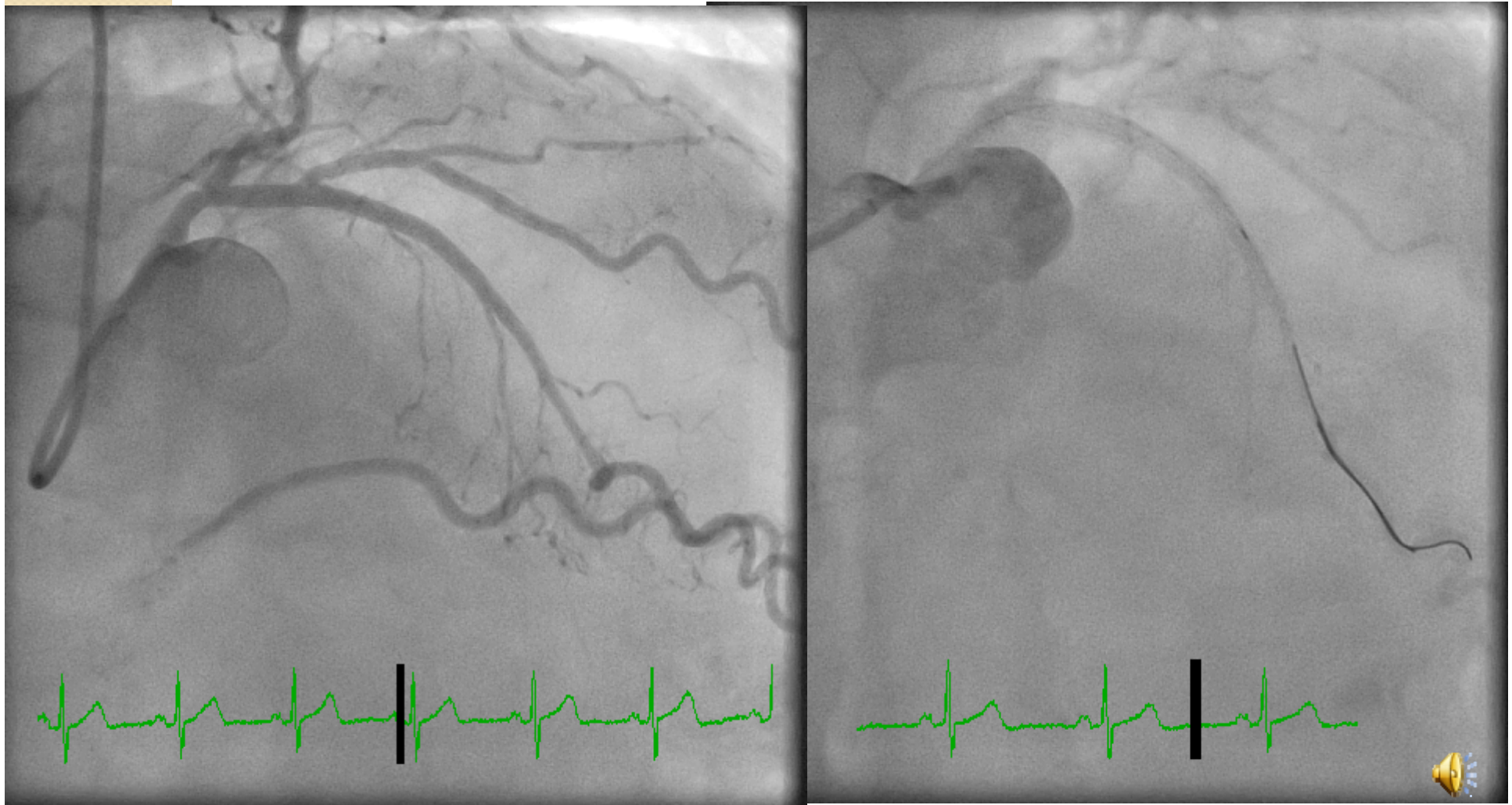
- Tapering and calcification in dLM instent segment
- Plan for FFR to LM/LAD
- Then PCI to RCA CTO via epicardial collateral from LAD



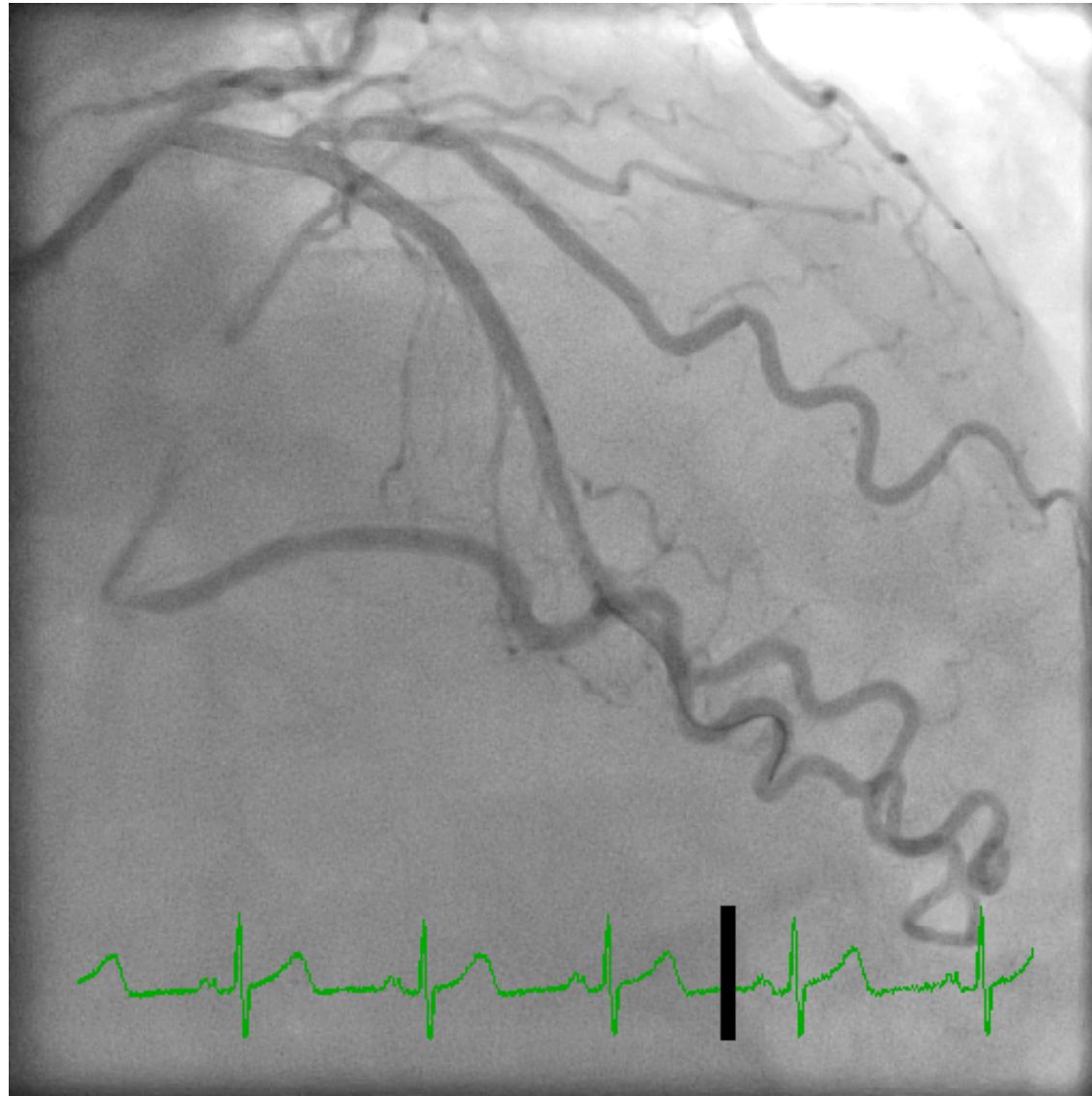
IL4.0 engagement to LCA showed dLM hazy and calcified.
dLAD 60% stenosis



FFR wire to dLAD (before tortuous bend)
IV ATP use and guiding catheter disengaged
FFR 0.72

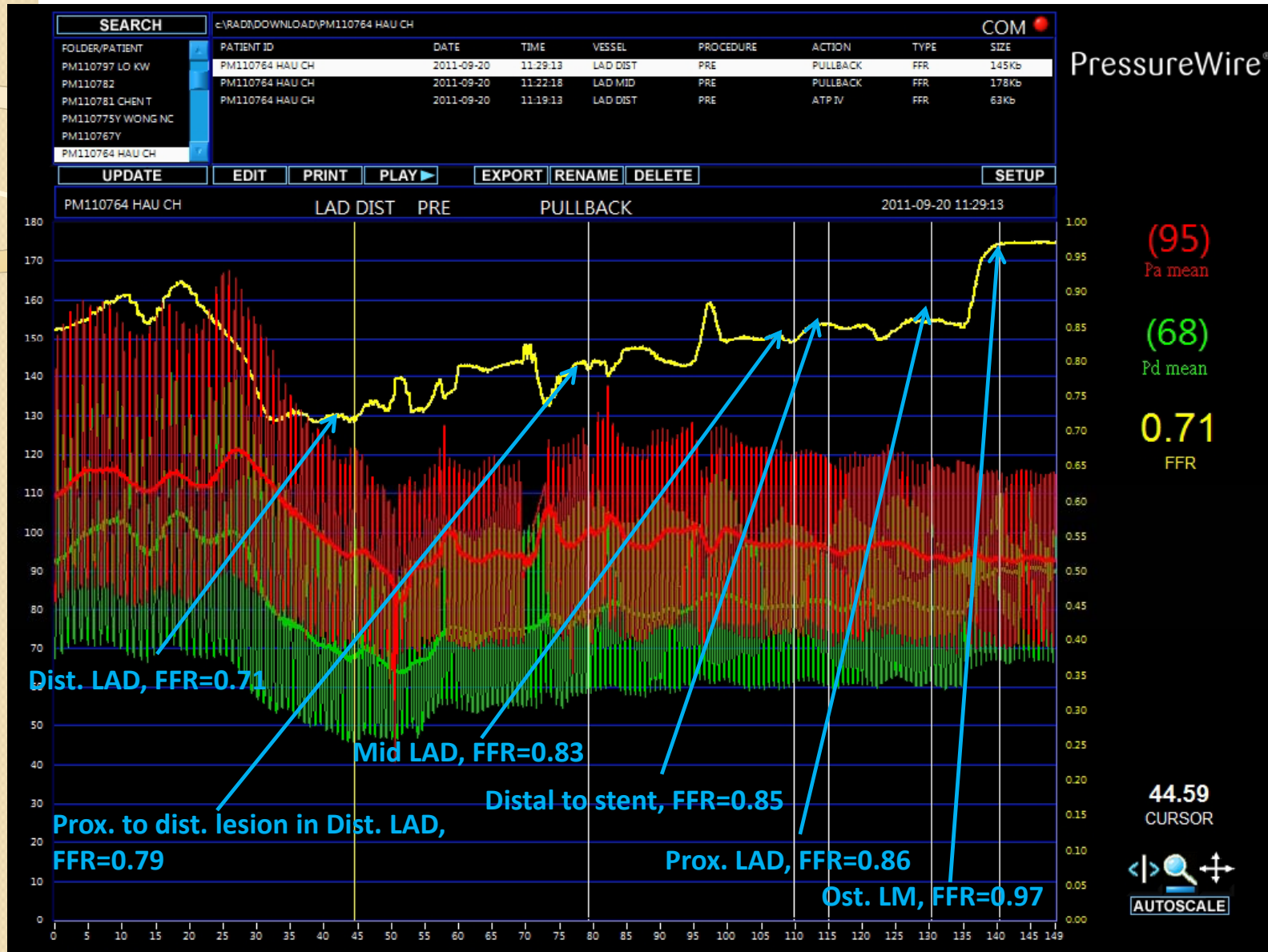


dLAD stented with Promus Element 2.25/28 with post dilatation. Post procedure FFR dLAD 0.85 with IV ATP

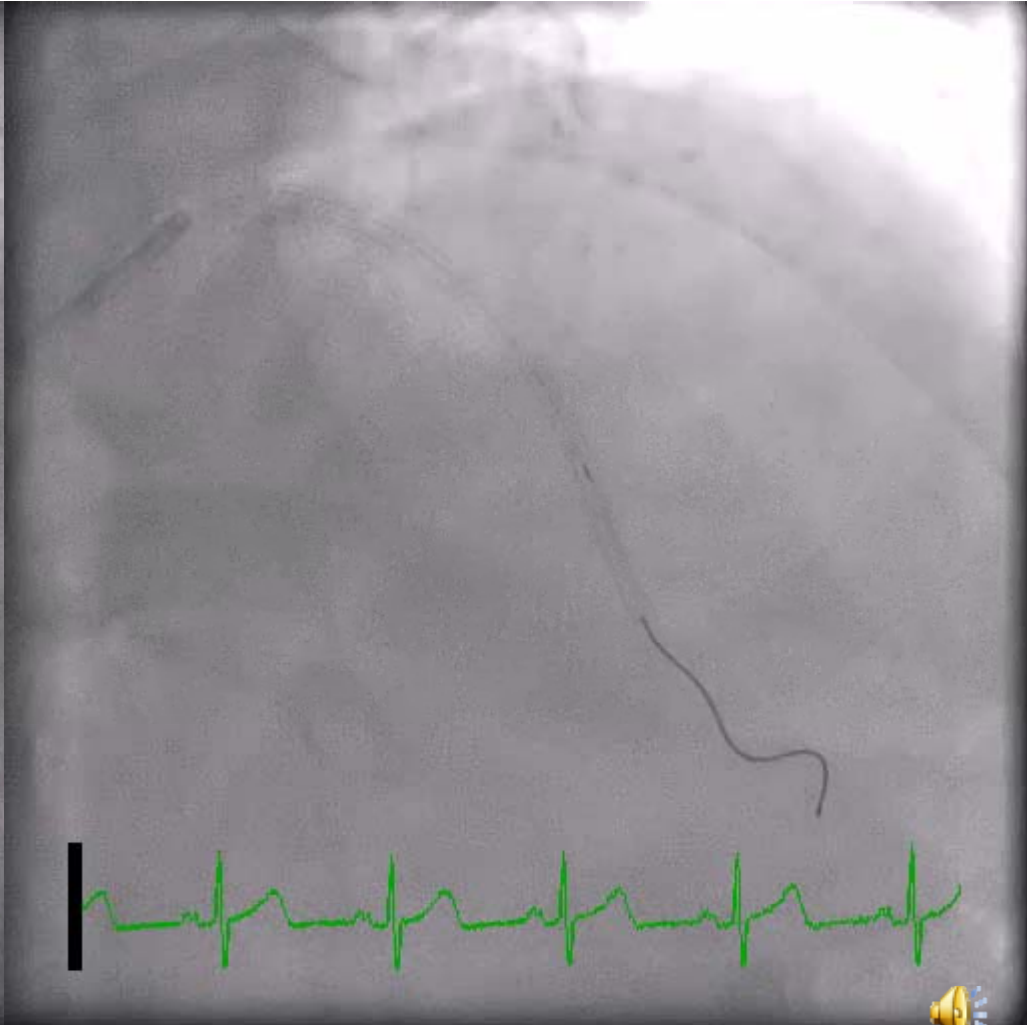


Patient: Hau CH (PM110764)

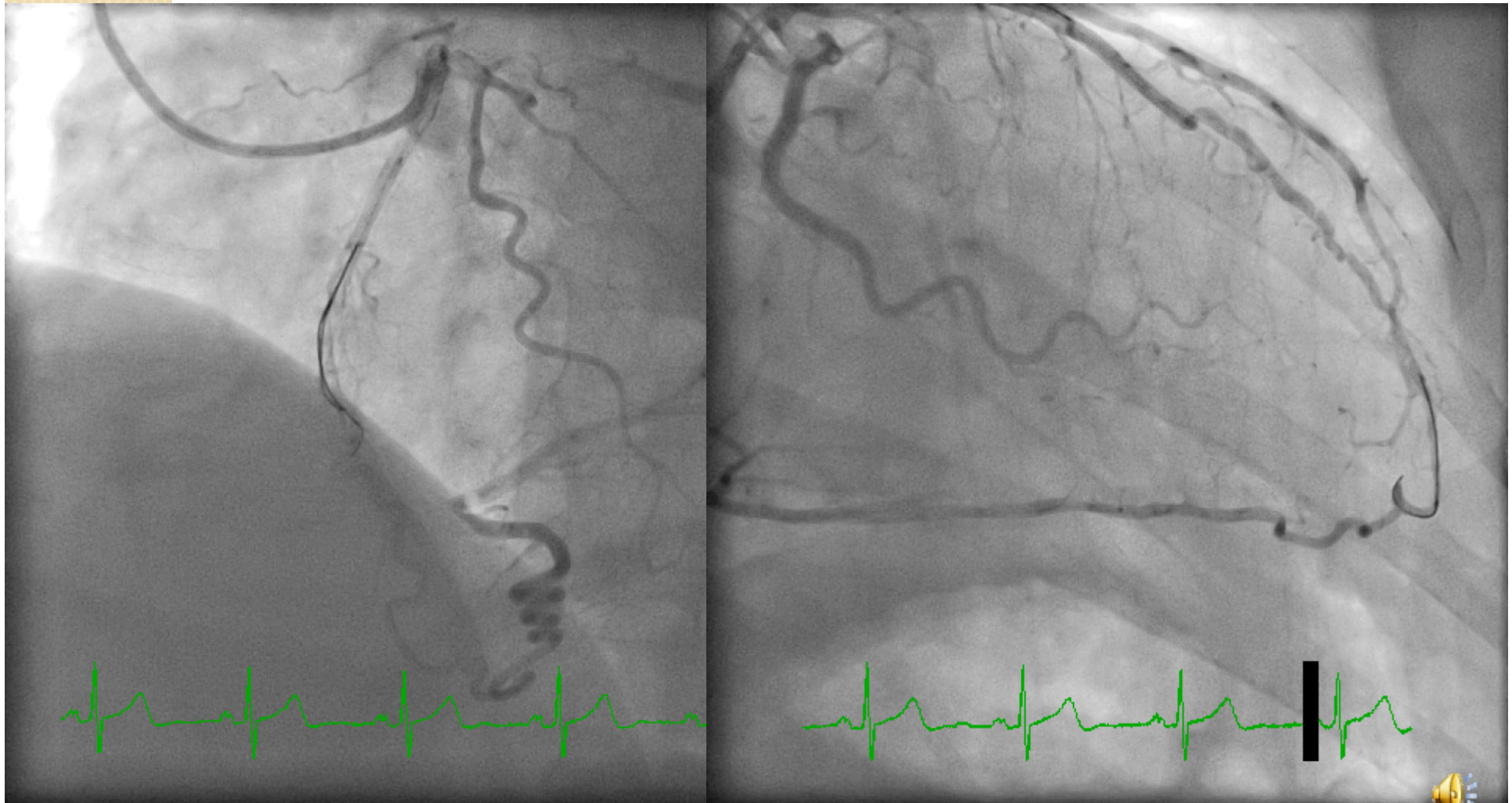
Date: 20 Sep 2011



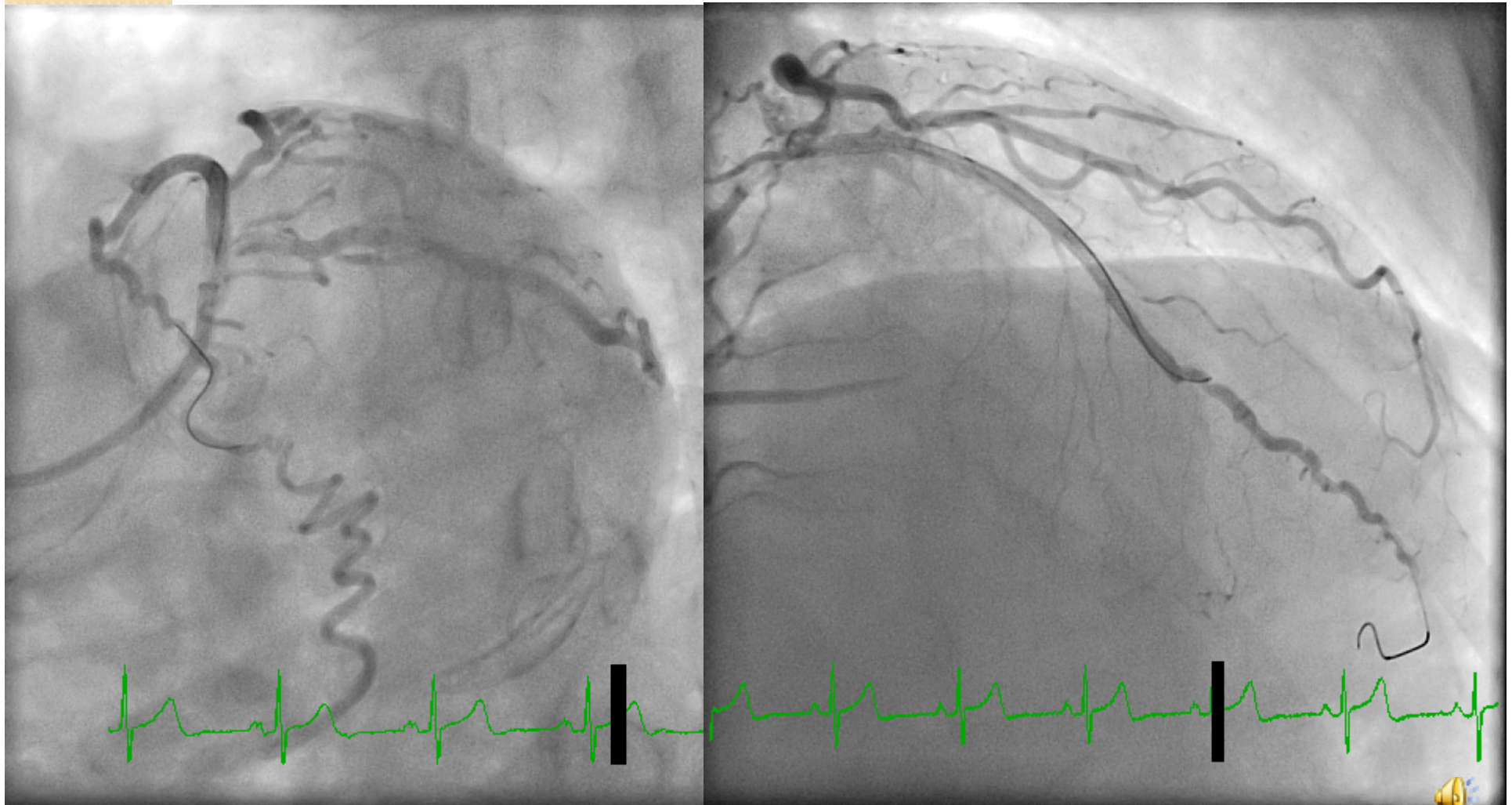
3rd FFR measurement , pull back from Distal LAD to Ostial Left Main, ATP IV infusion (180microgram/kg/min), Lowest FFR=0.71

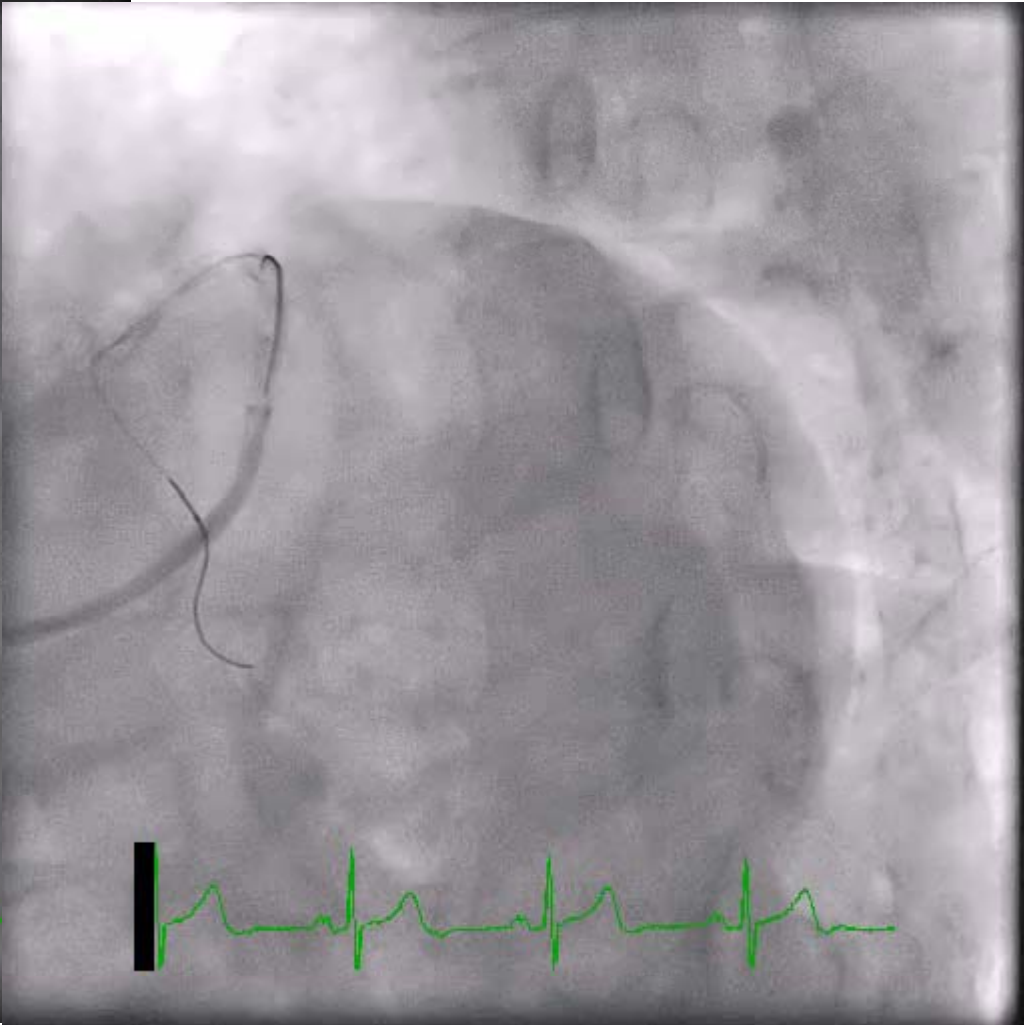
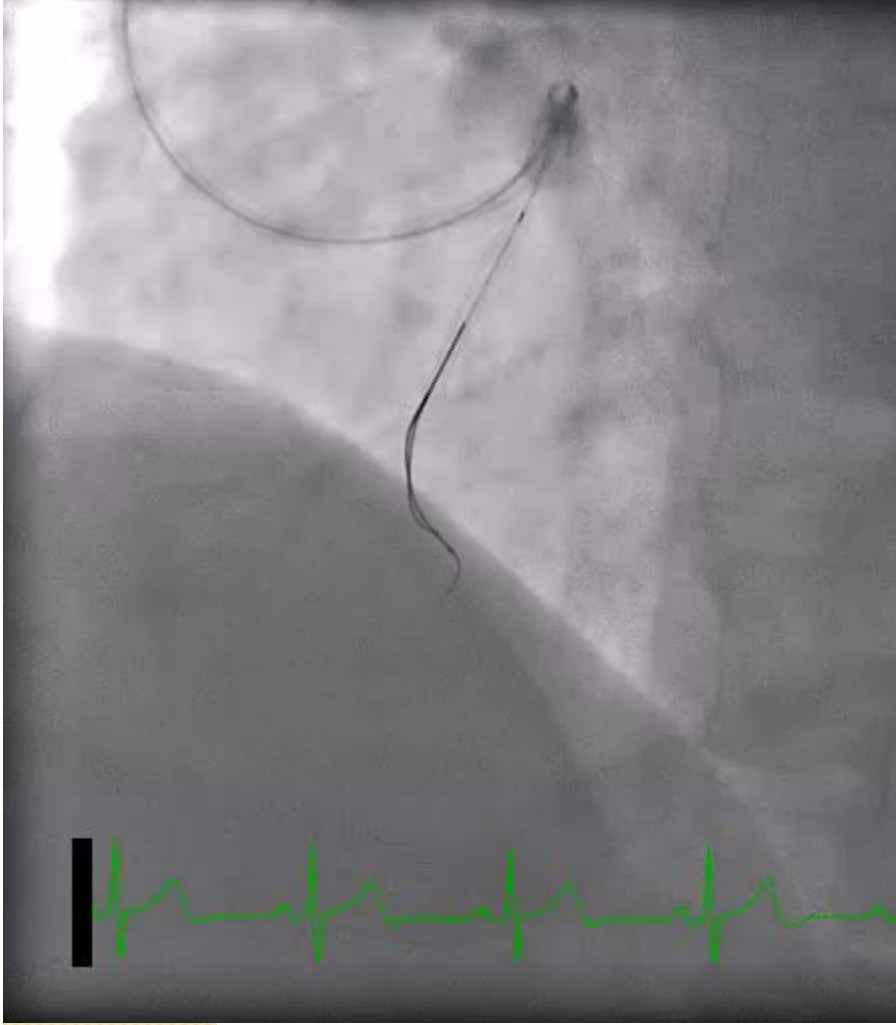


Tortuous epicardial collateral to PDA in different views

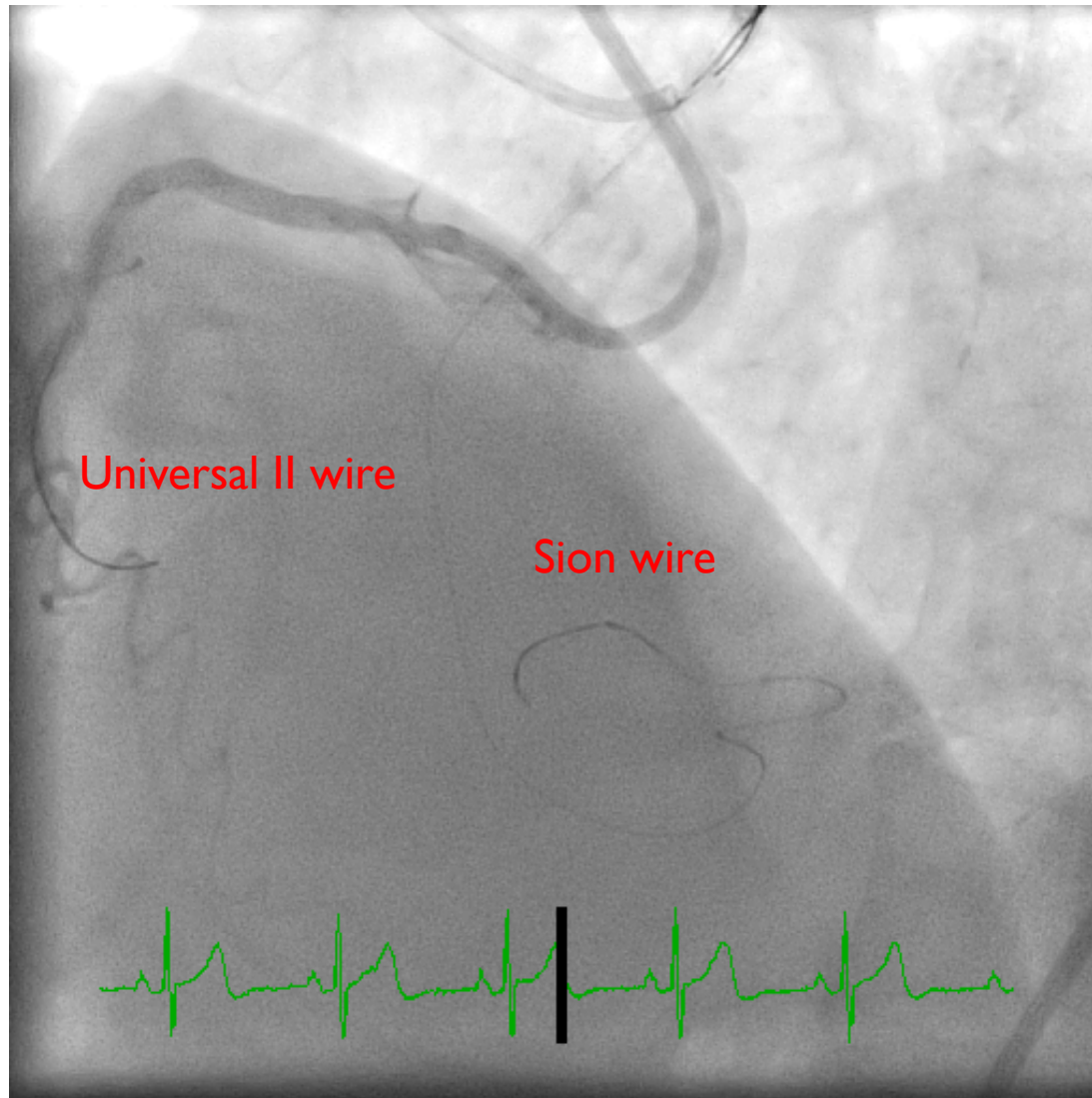


Tortuous epicardial collateral to PDA in different views

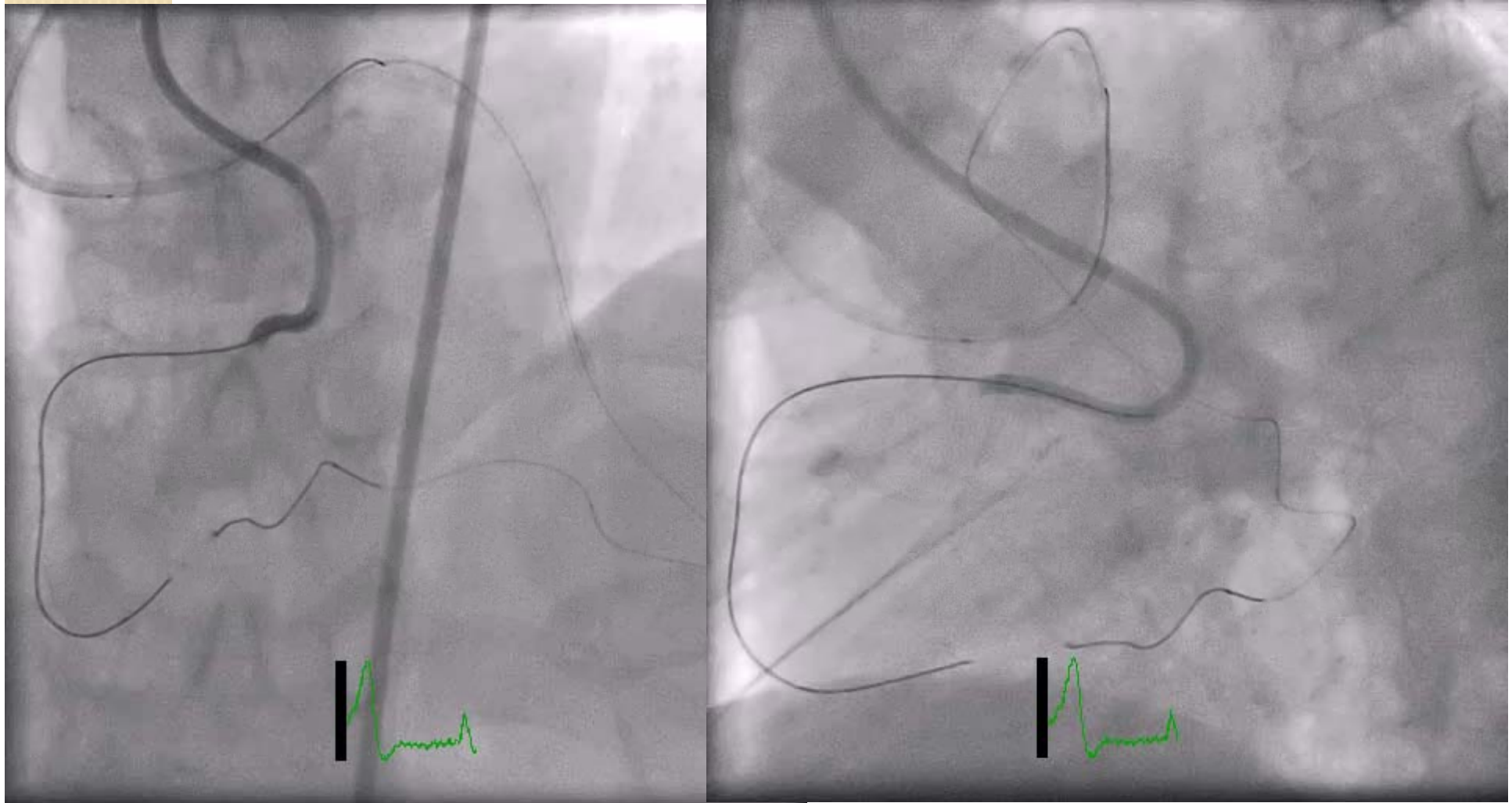




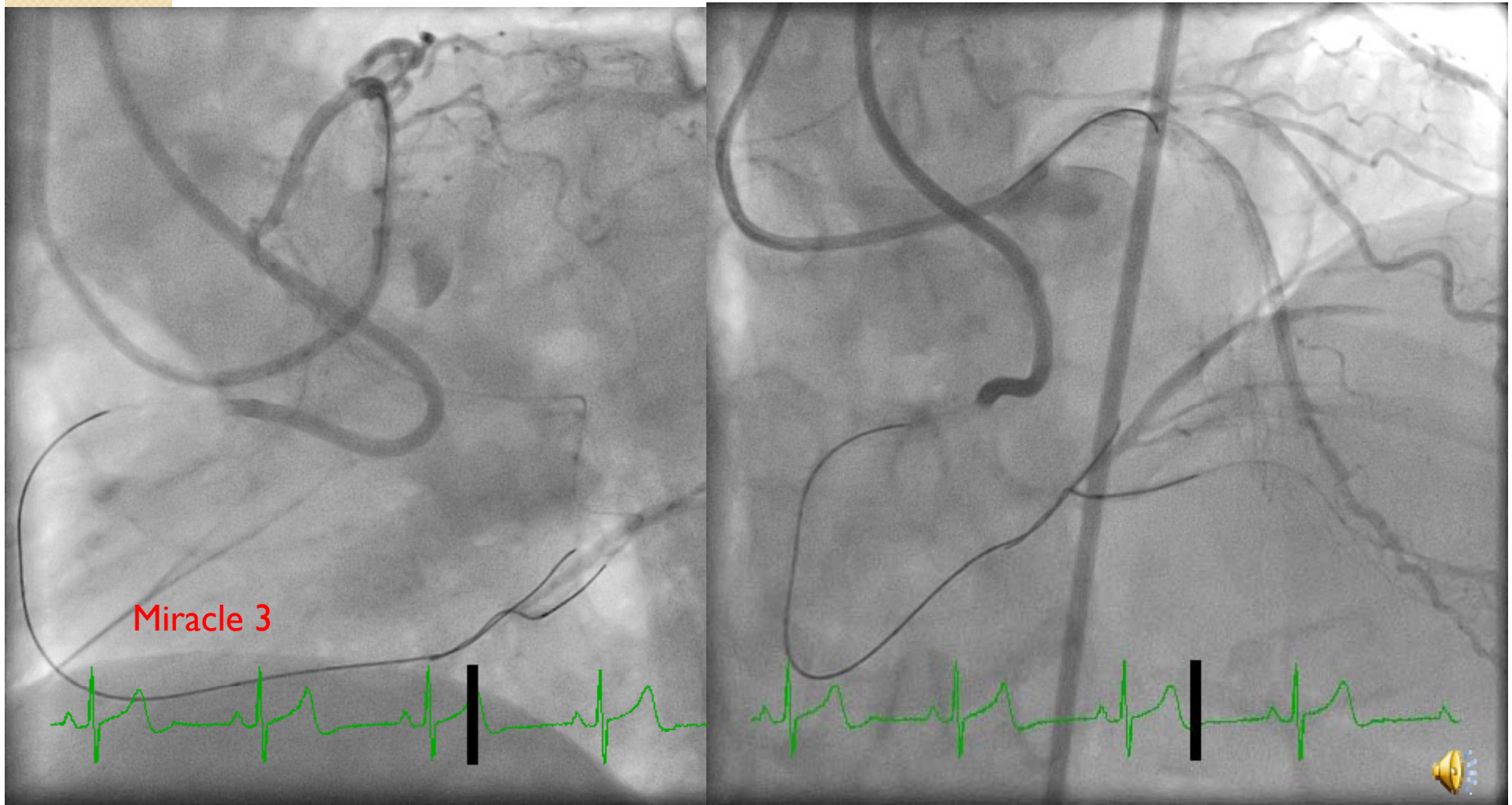
Retrograde Sion wire could not further advance
~10mm after PD and PL bifurcation



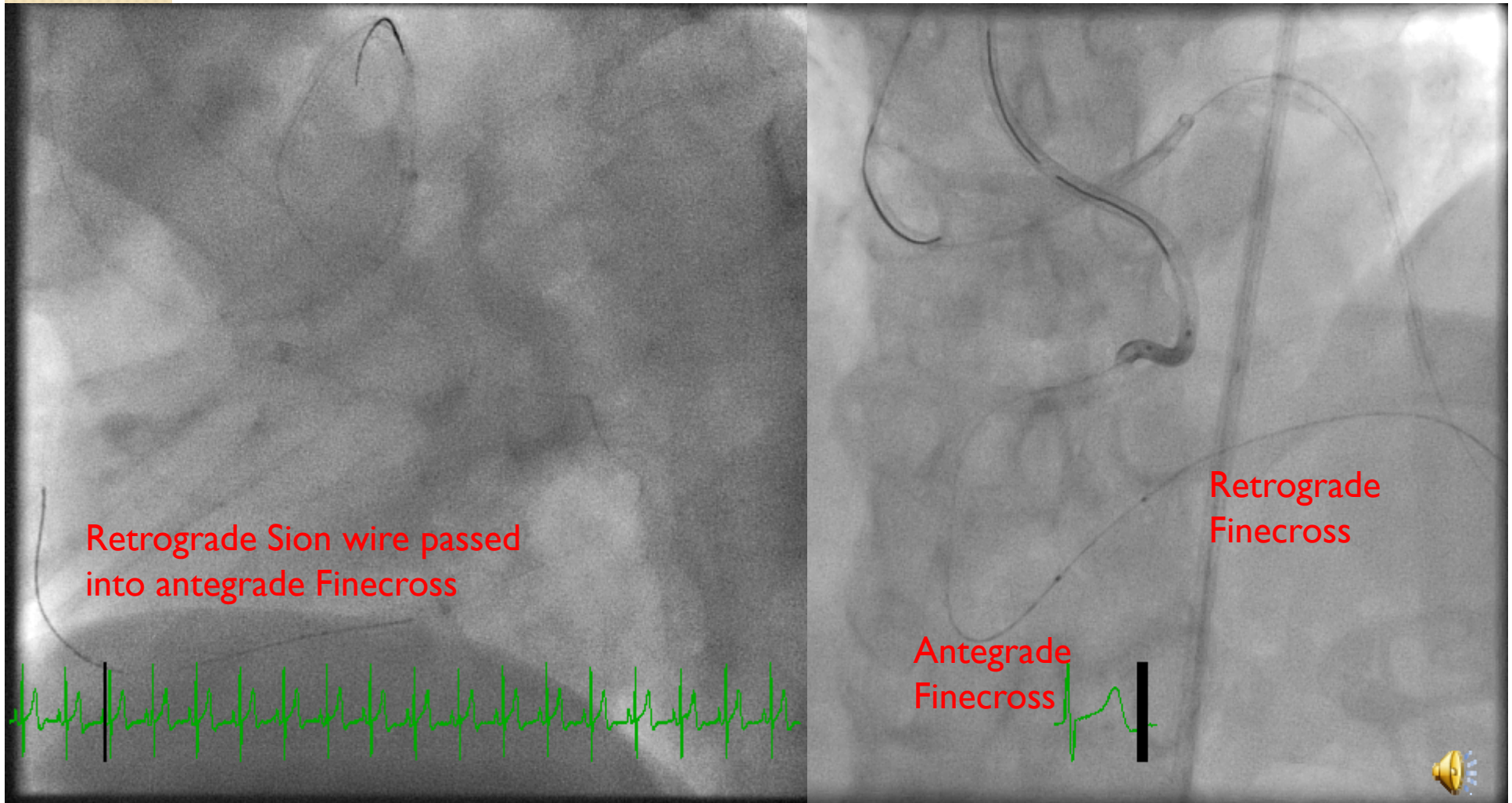
Try kissing wire technique with antegrade Miracle 3



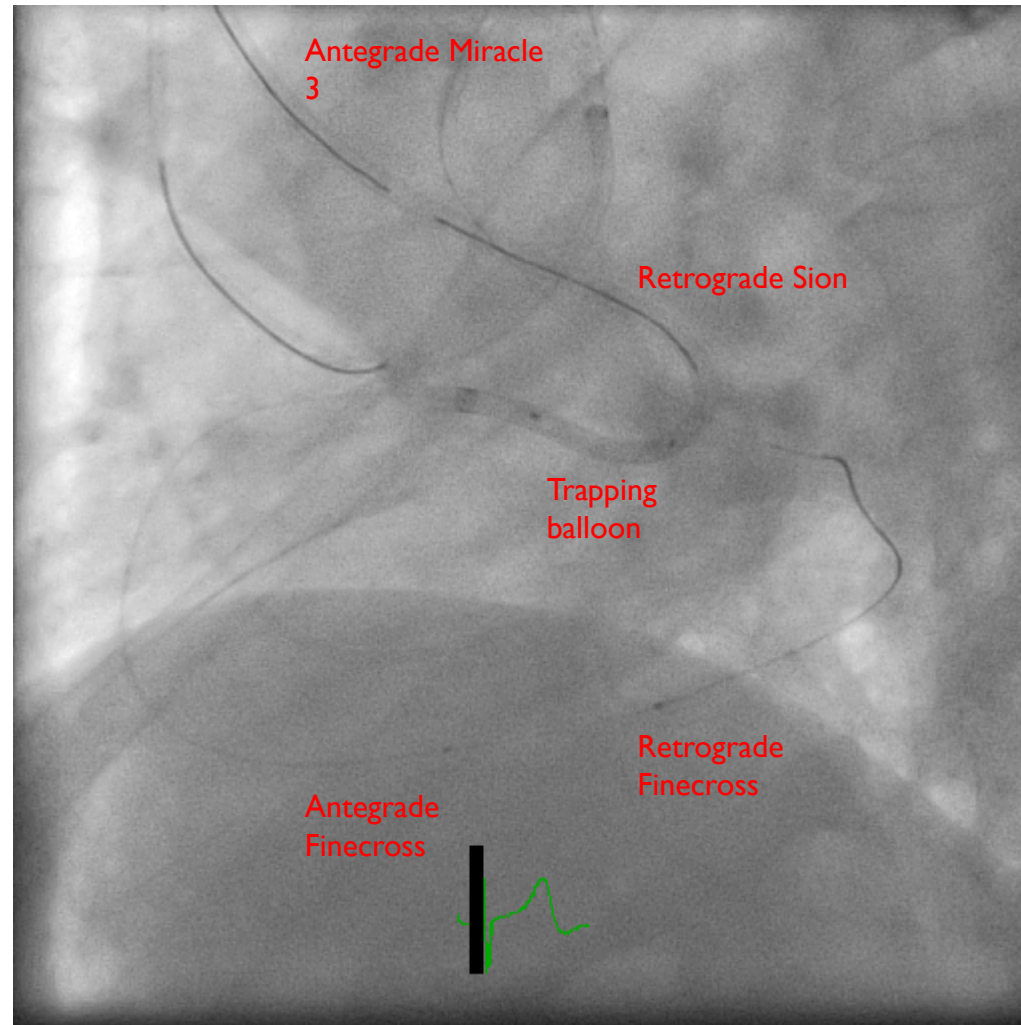
Antegrade Miracle 3 wire went into false lumen.
Failed kissing wire technique



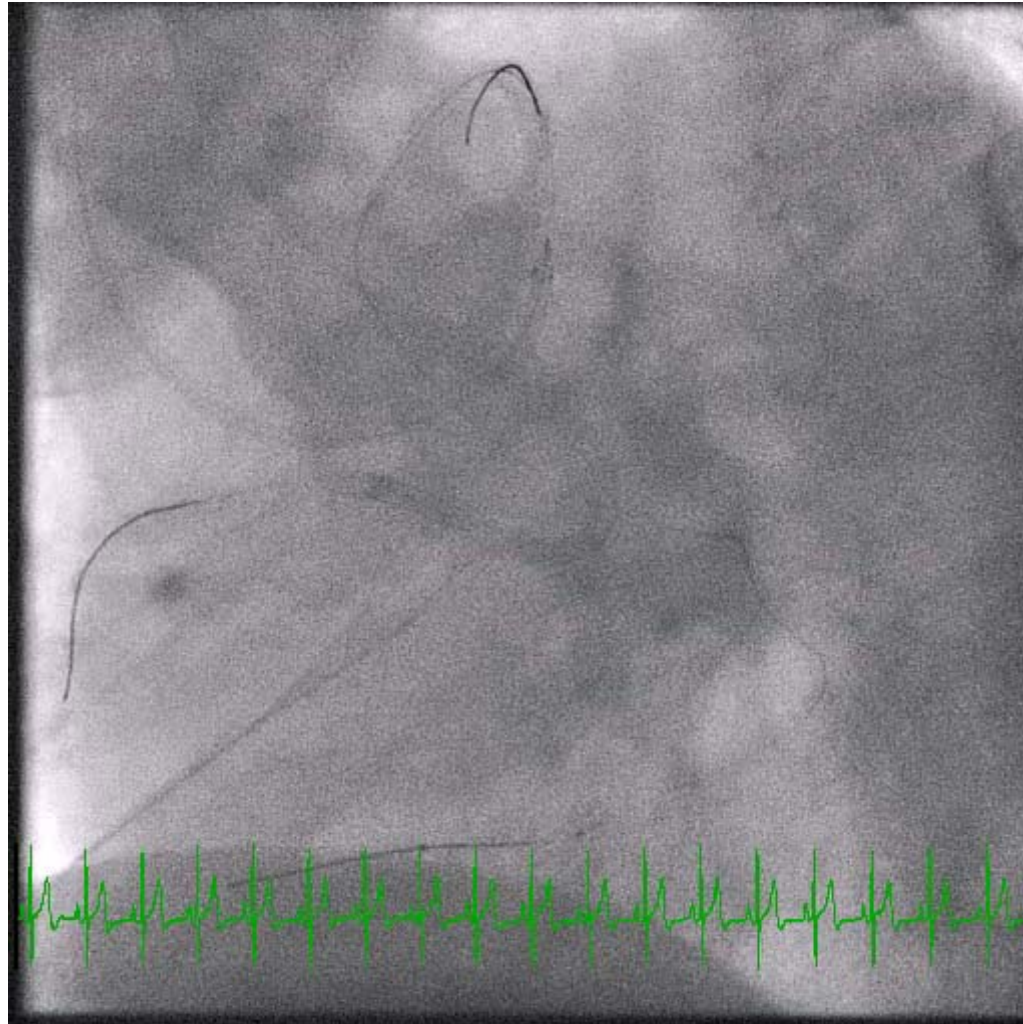
Retrograde Sion wire left the retrograde Finecross and pass through dRCA CTO segment, then entered into antegrade Finecross catheter



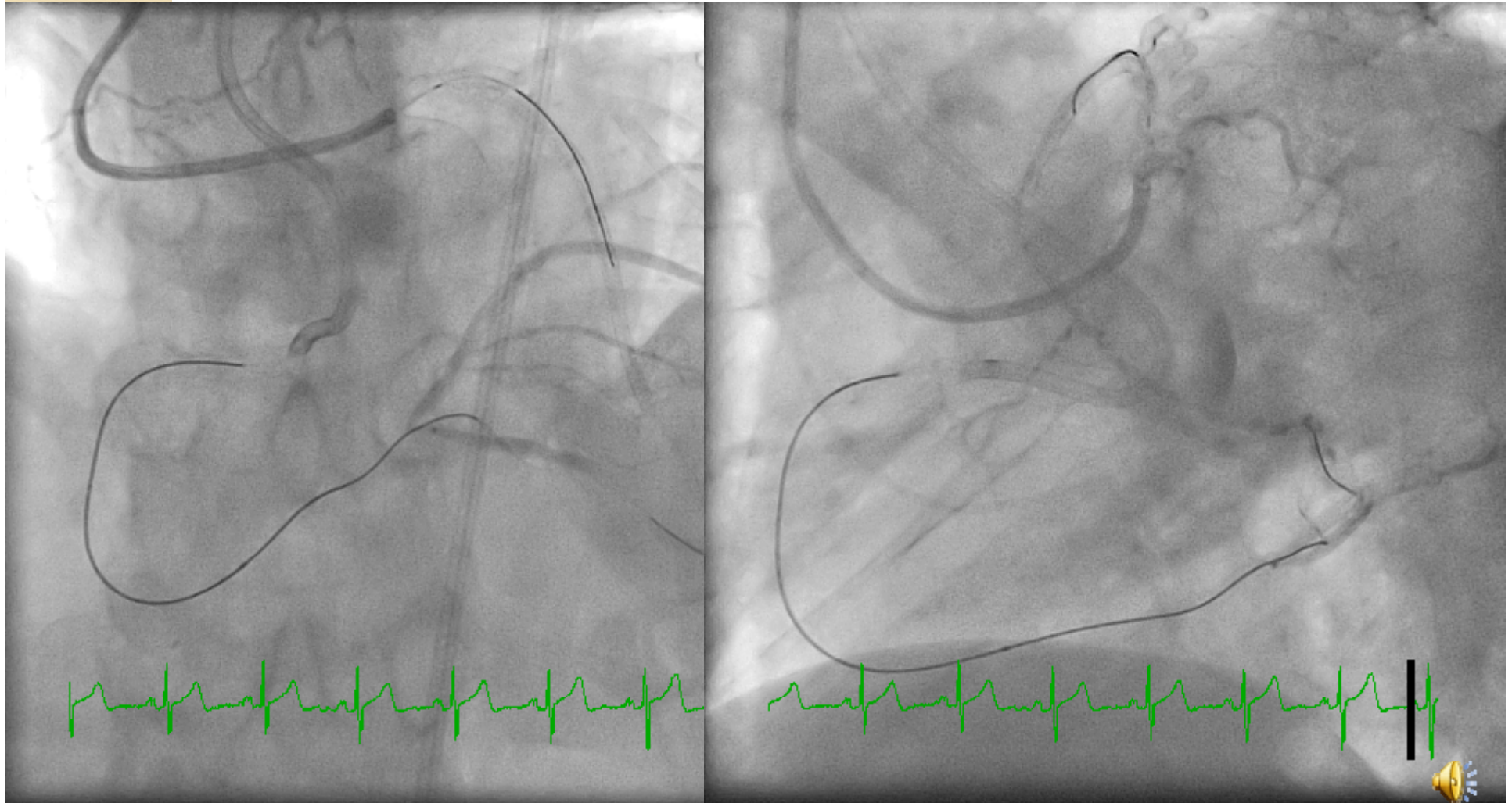
Retrograde Finewire failed to advance to kiss antegrade Finewire despite of trapping balloon technique. Failed externalization with Fielder FC 300 or RG3 because of backoff of retrograde 6Fr IL4.0 guiding catheter. (deep engagement showed slight pressure damping)



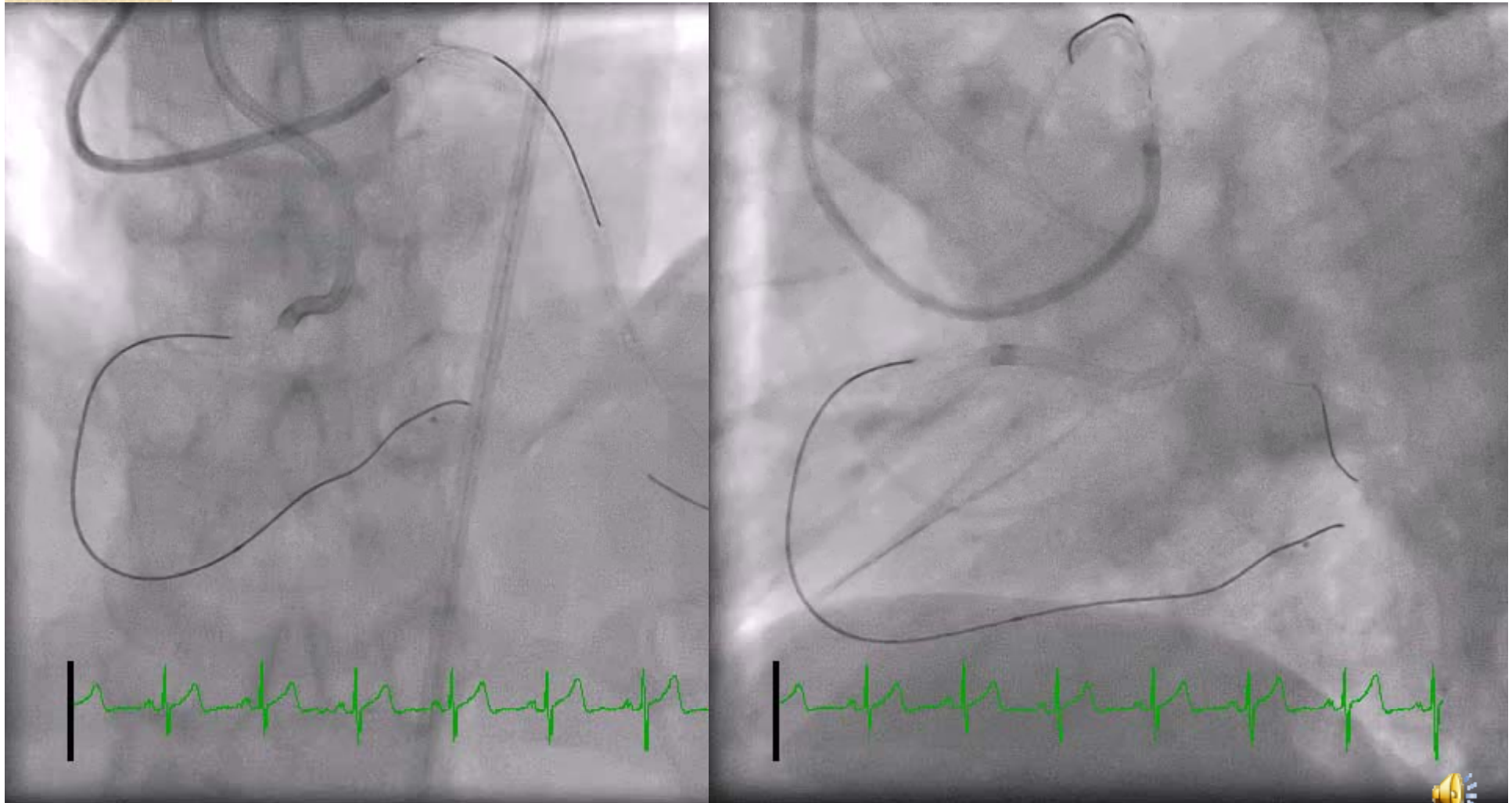
Try antegrade wiring with Sion via antegrade Finecross with gradual withdrawal of retrograde Fielder FC



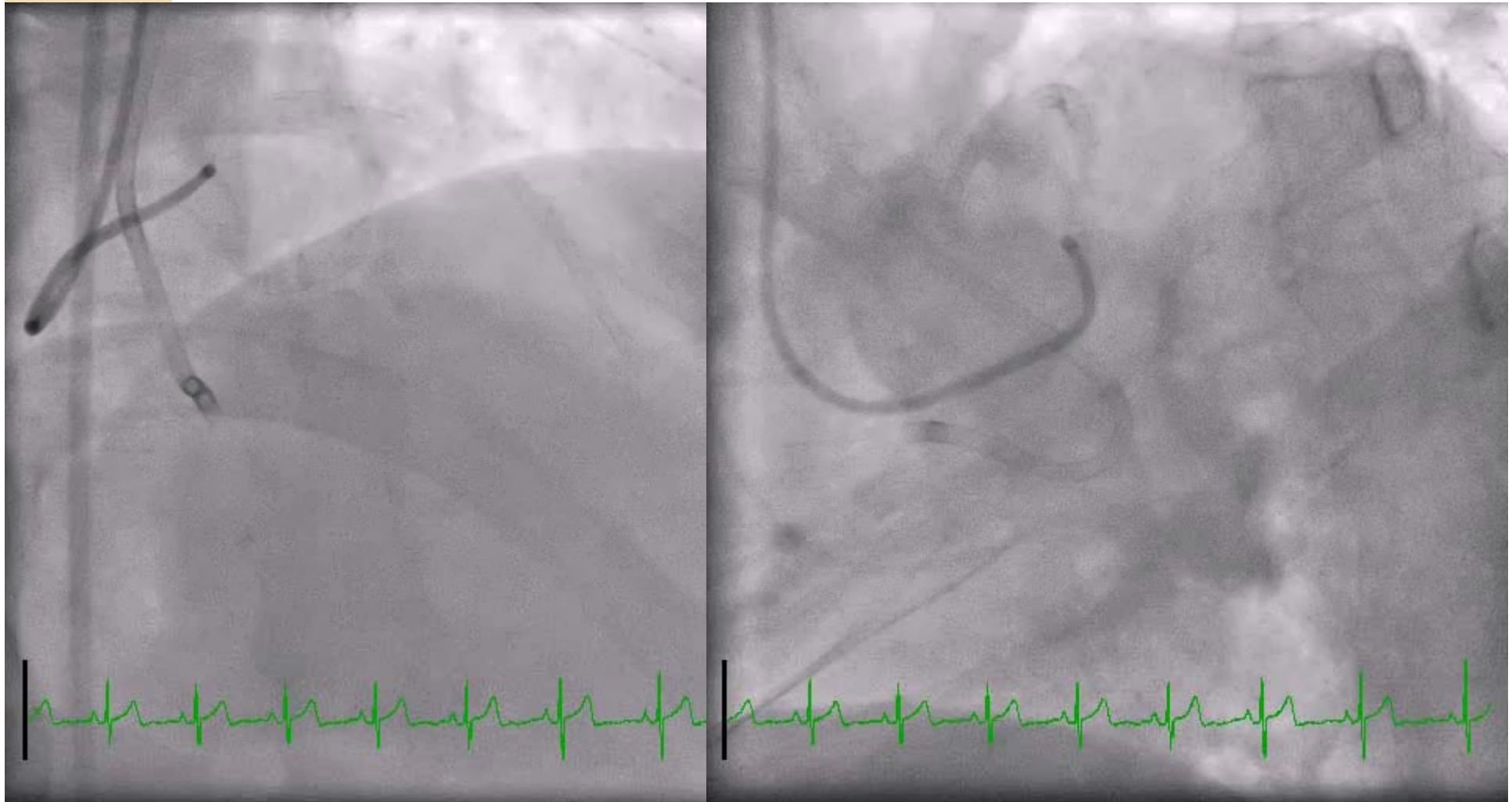
Antegrade Miracle 3 wire failed to enter into retrograde Finecross.
Further advancement showed Miracle 3 tip at small branch between PD
and PL.



Procedure stopped because of prolonged time, contrast use and radiation



Final angiogram showed no injury to the epicardial channel or any perforation



Discussion:

- FFR for LM and CTO donor artery
 - Which value is regarded as cutoff? Any evidence based?
- Wire selection and microcatheter or channel dilator for tortuous epicardial collateral.
- Which are the strategies to improved retrograde guiding support in patients with dLM disease (but FFR not significant)?
 - Sidehole 7Fr catheter?, Anchor balloon in LCX stent?
- Snare wire for externalization
- Risk of reverse CARTS technique? Close to PD/PL bifurcation.
- CARTS? No extra long balloon in my lab. No short 6Fr guiding catheter. ?self cutting the 6Fr guiding catheter?
- Any limit on the procedure (time, contrast, radiation) despite of progress

