ASIAN INTERVENTIONAL CARDIOVASCULAR THERAPEUTICS
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CHIP: An Old Patient of LM bifurcation lesion with large heavily-calcified eccentric plaque and near occlusion of a dominant LCX ostium taking acute angulation from LM. How to treat?

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6’

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Conflicts of Interest

Speaker's name : Wen-Lieng, LEE, Taichung

- ☑ I have NO potential conflicts of interest to report

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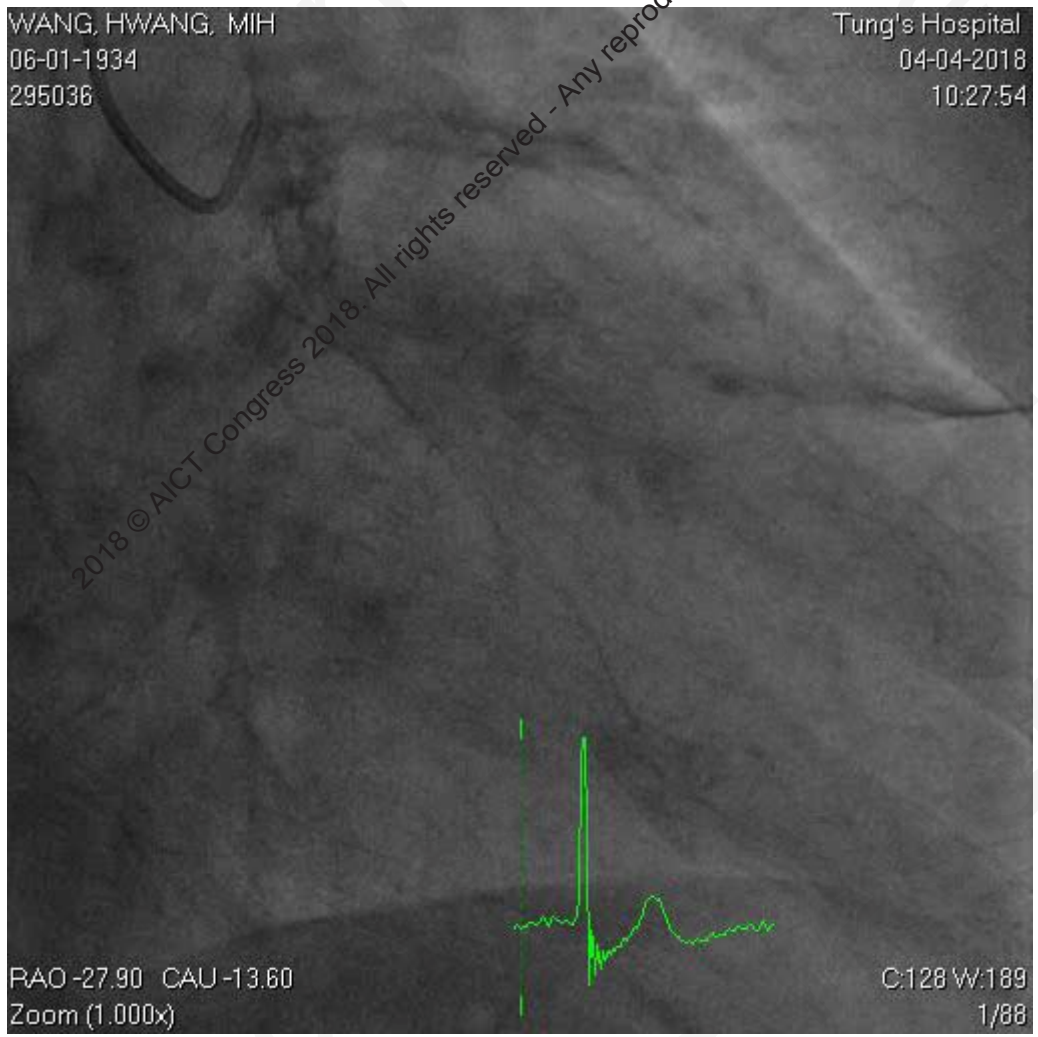
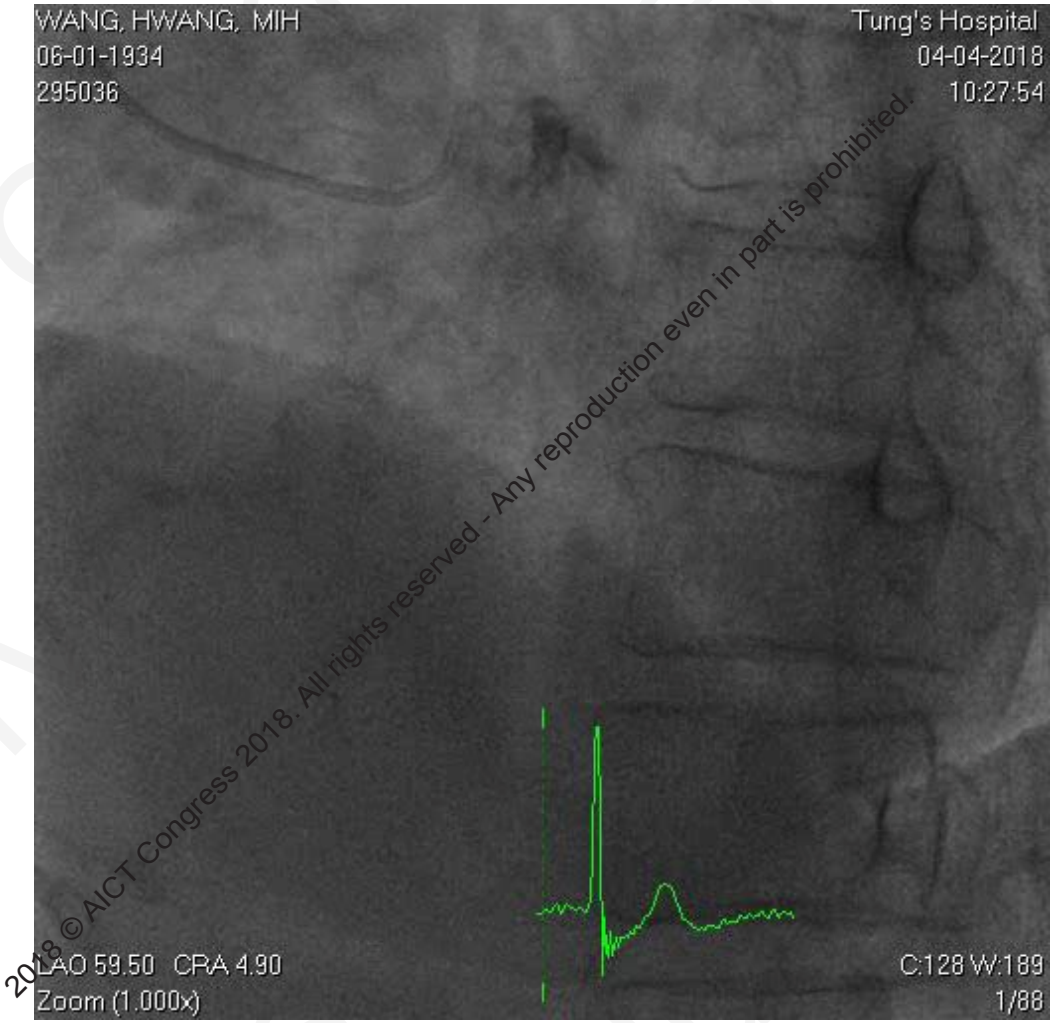
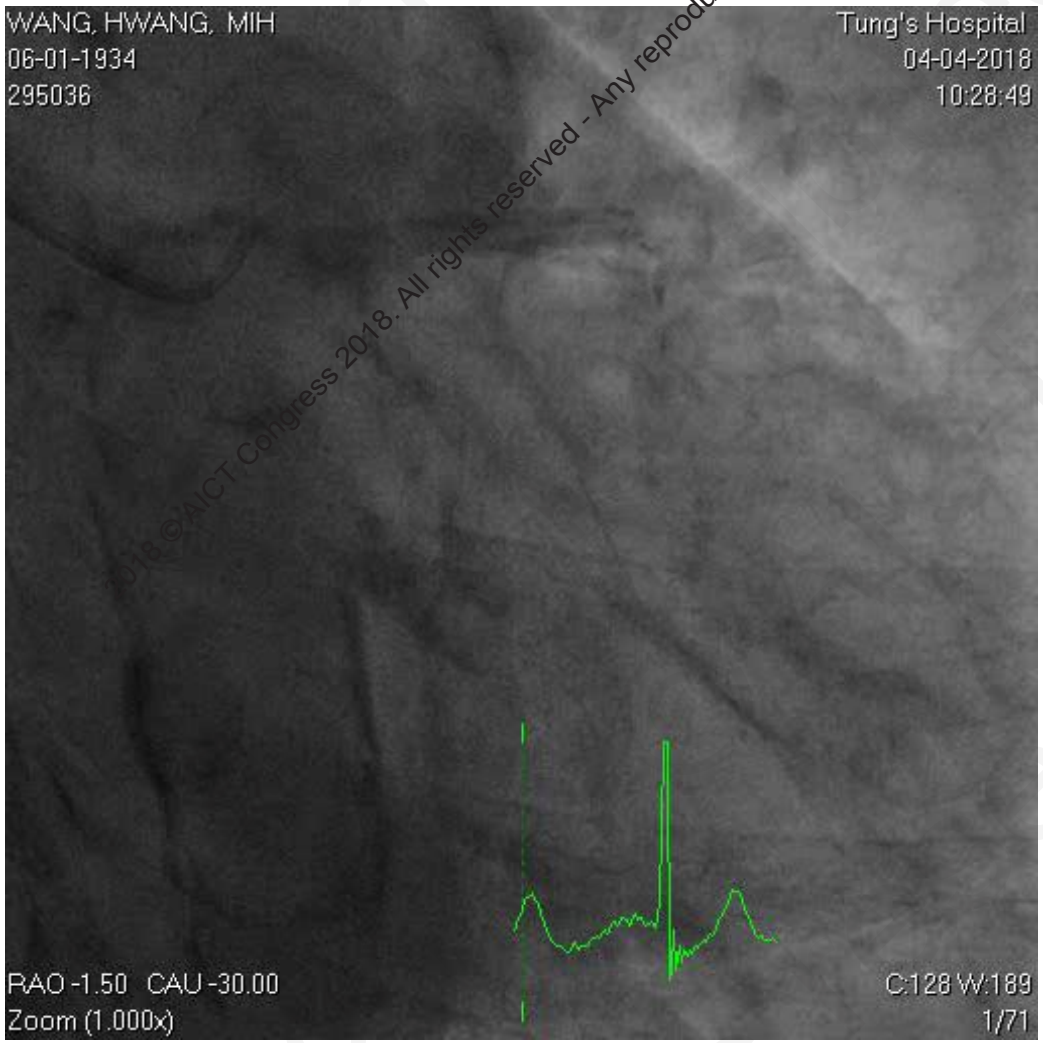
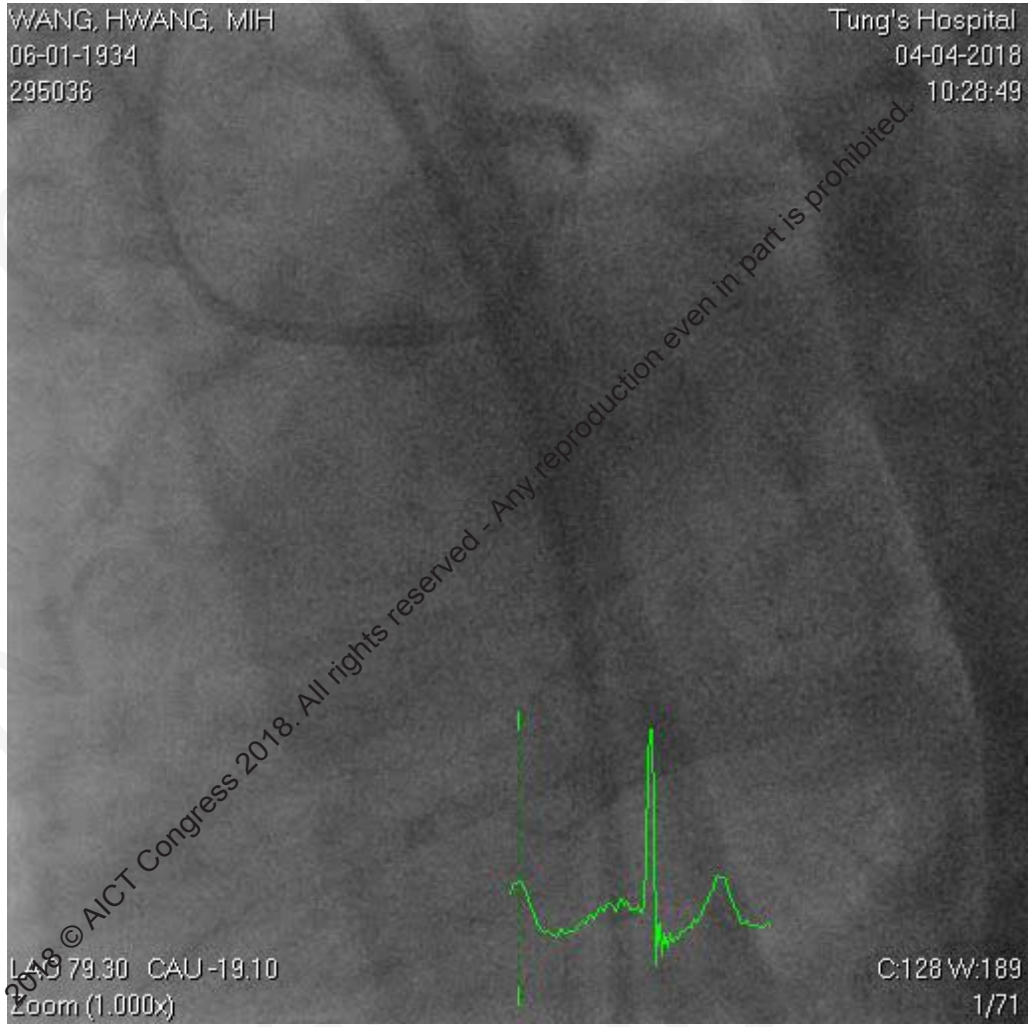
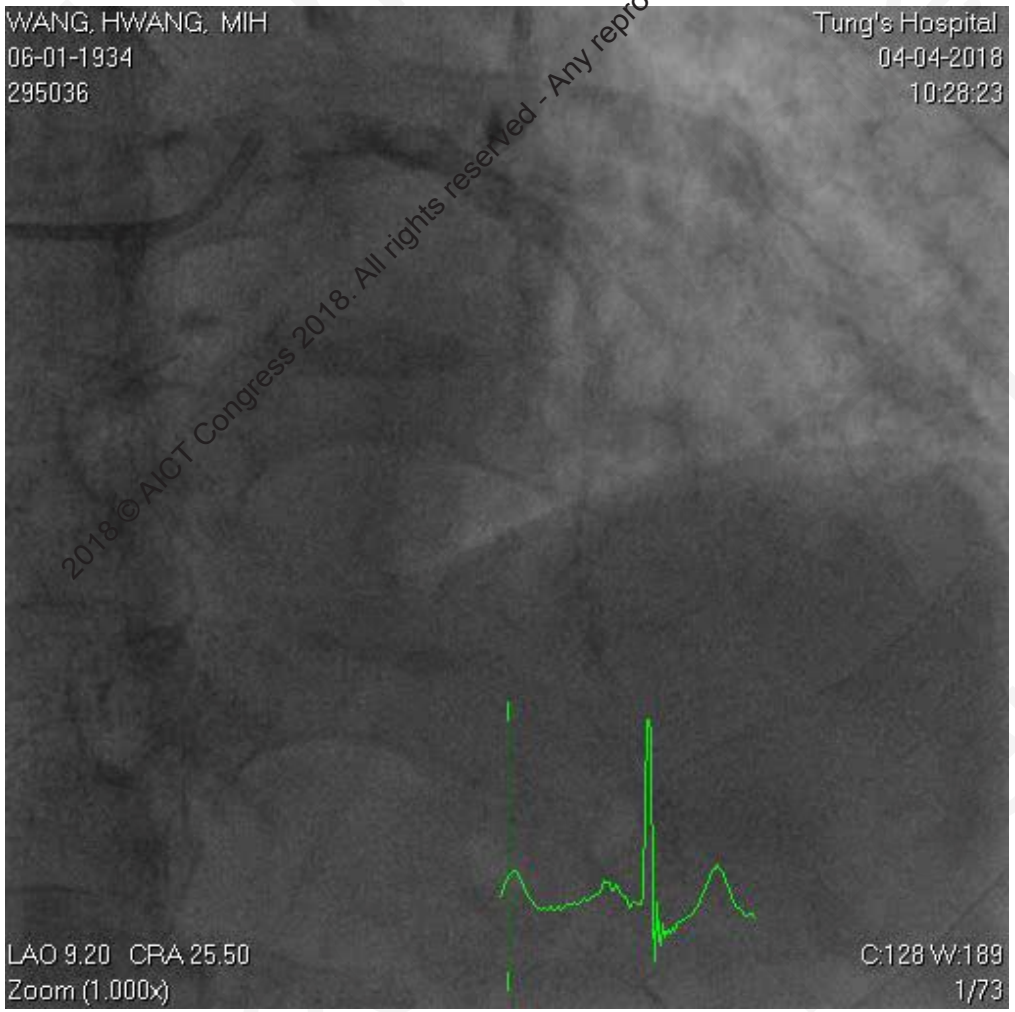
Original CAG from local hospital
Wang xx, 84/F, hypertension for 10 years, no DM
Admitted to local hospital due to progressive DOE and exertional chest tightness

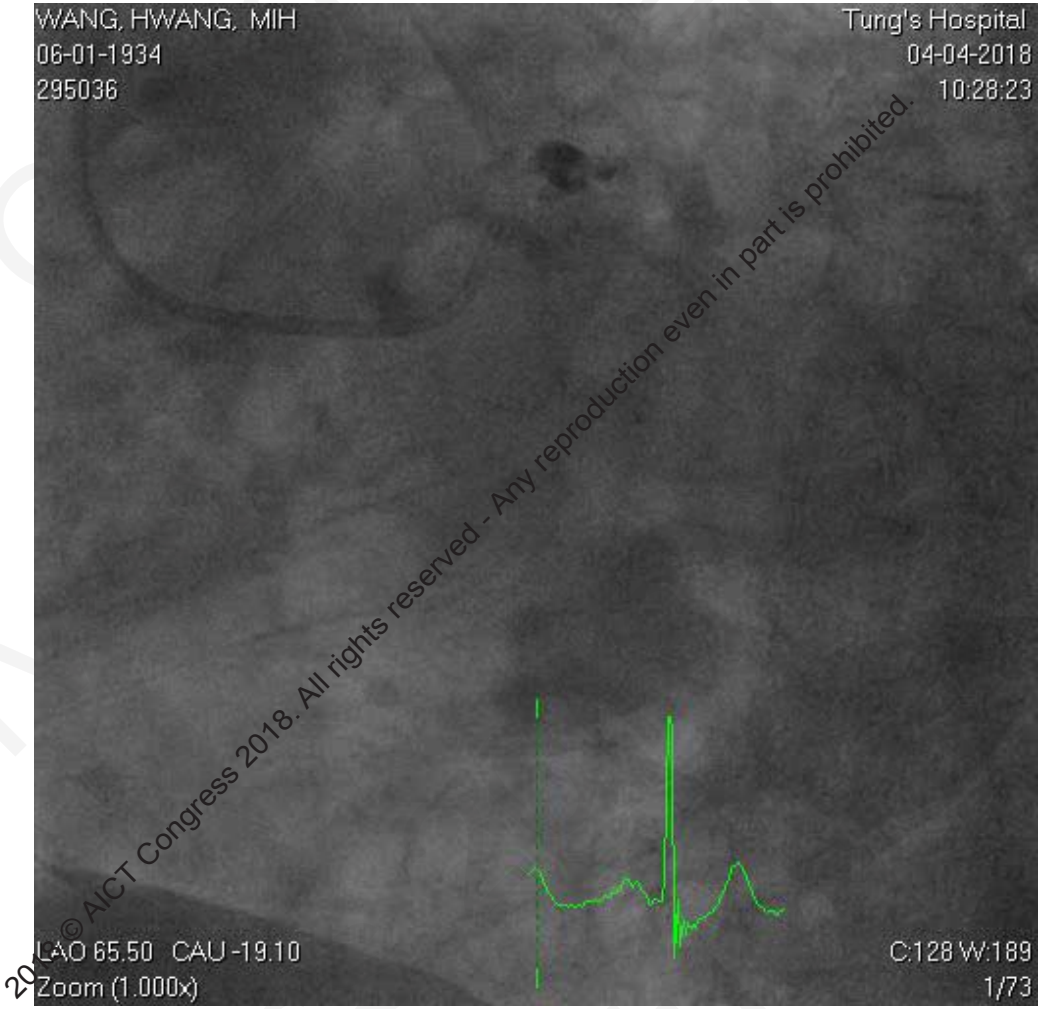




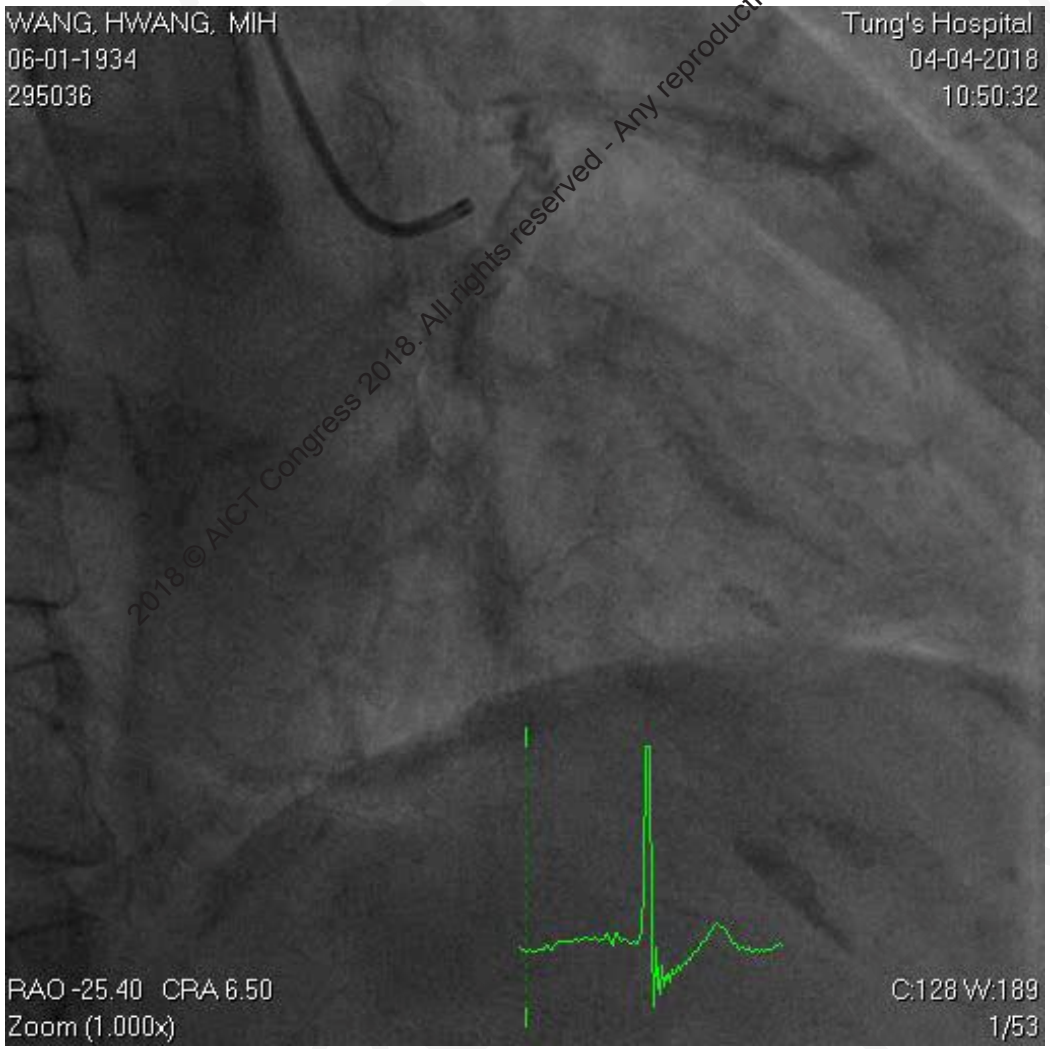


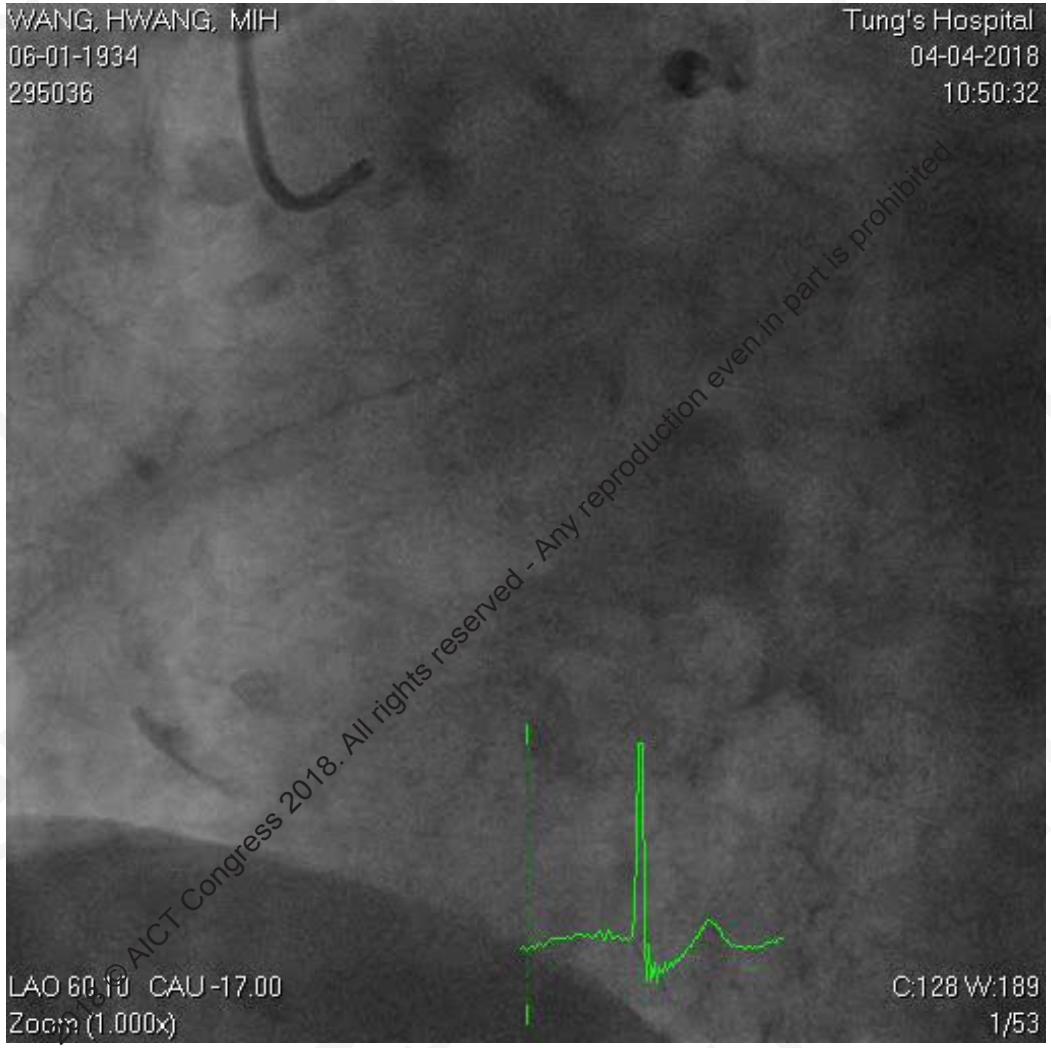






Could not engage RCA





CABG suggested at the original hospital. Patient declined it due to old age and came to our hospital for help

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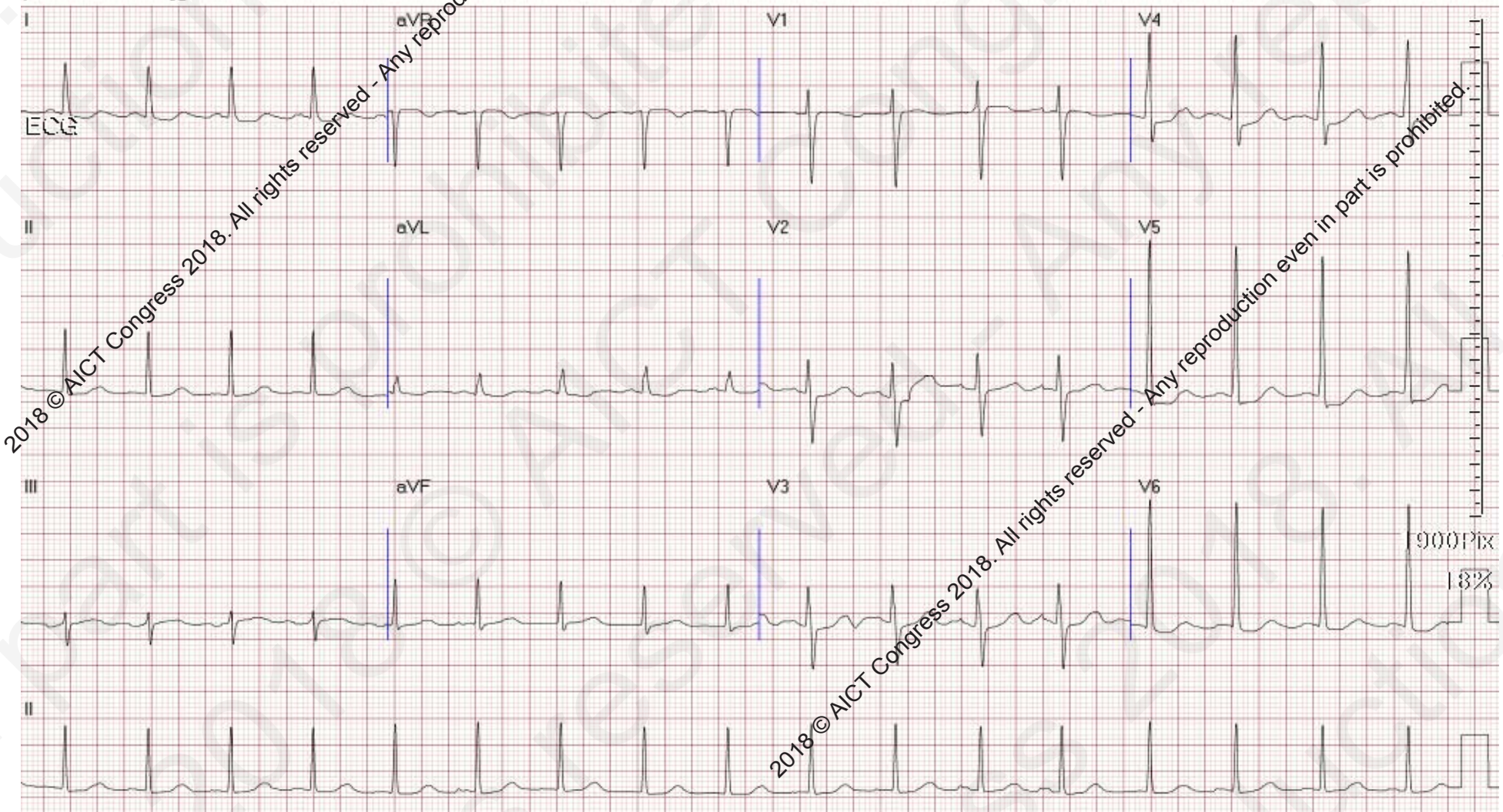
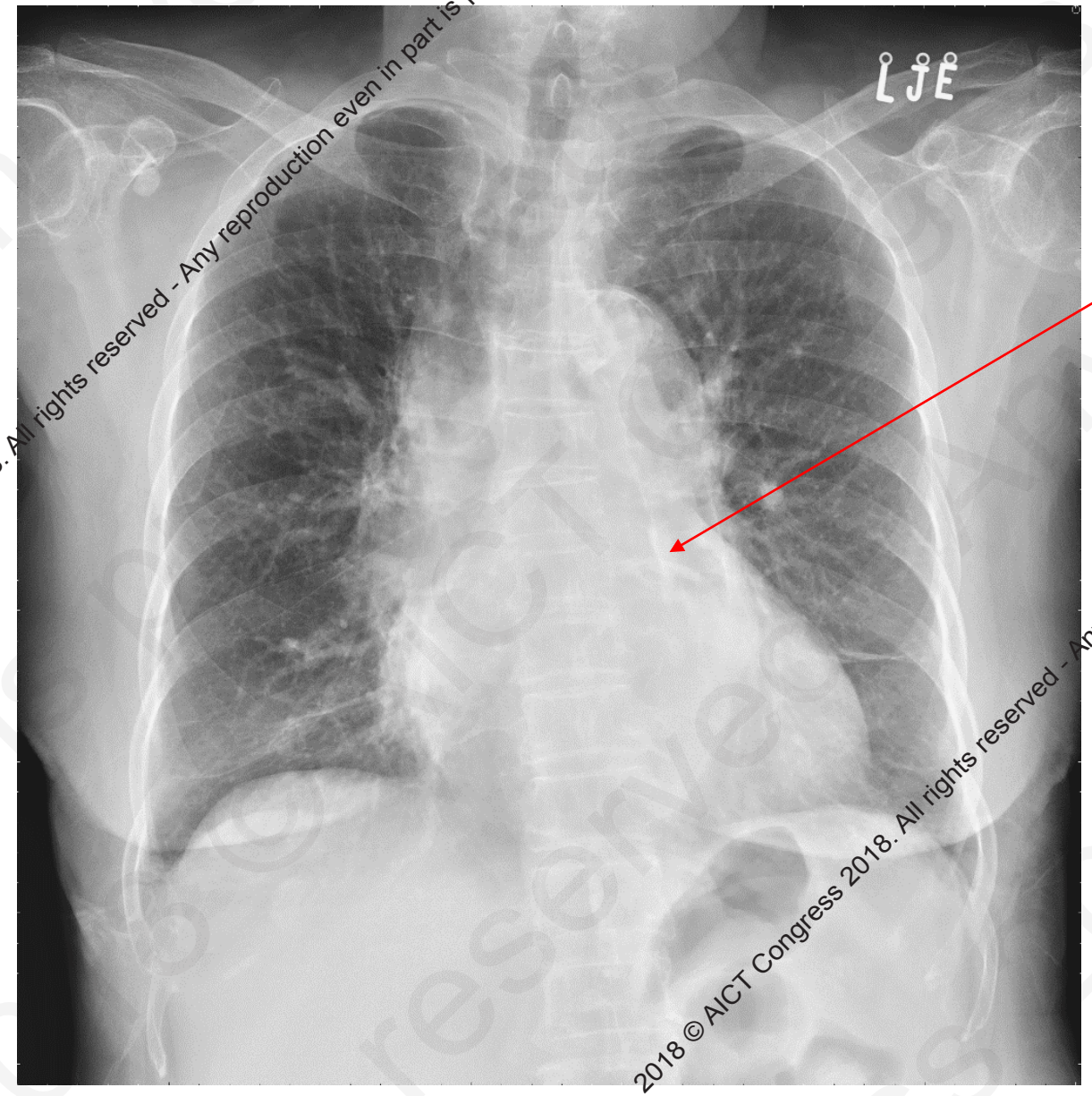
001859644G 2018/4/10 11:09:20 TCVGH

84Y F

Rate	97	Age not entered, assumed to be 50 years old for purpose of ECG interpretation
PR	125	Sinus rhythm
QRSd	86	LVH with secondary repolarization abnormality
QT	371	Baseline wander in lead(s) V4,V5,V6
QTc	472	
– Axes –		
P	-10	
QRS	34	
T	82	



CXR



Heavily calcified LAD
And LCX

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Biochemistry

- Lab: LDL 89 mg/dl
- Cr 0.8 mg/dl

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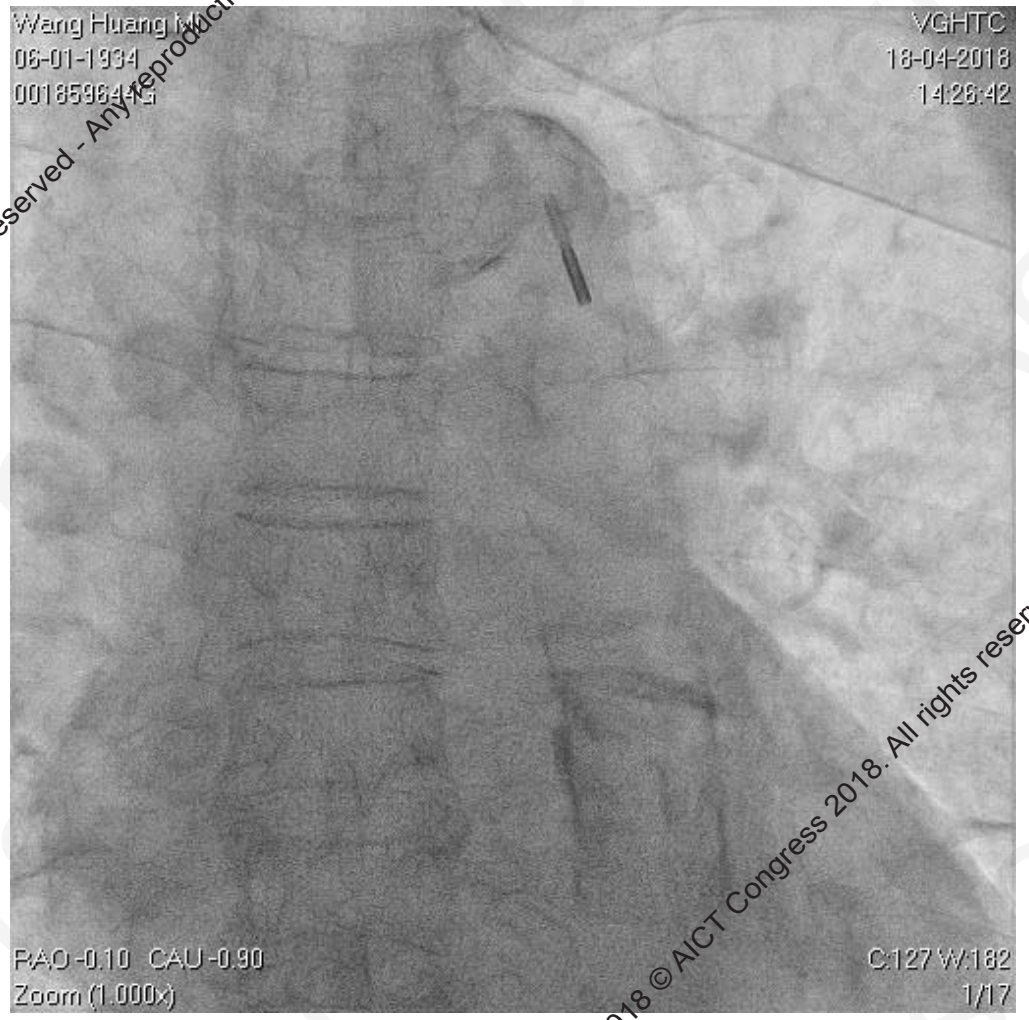
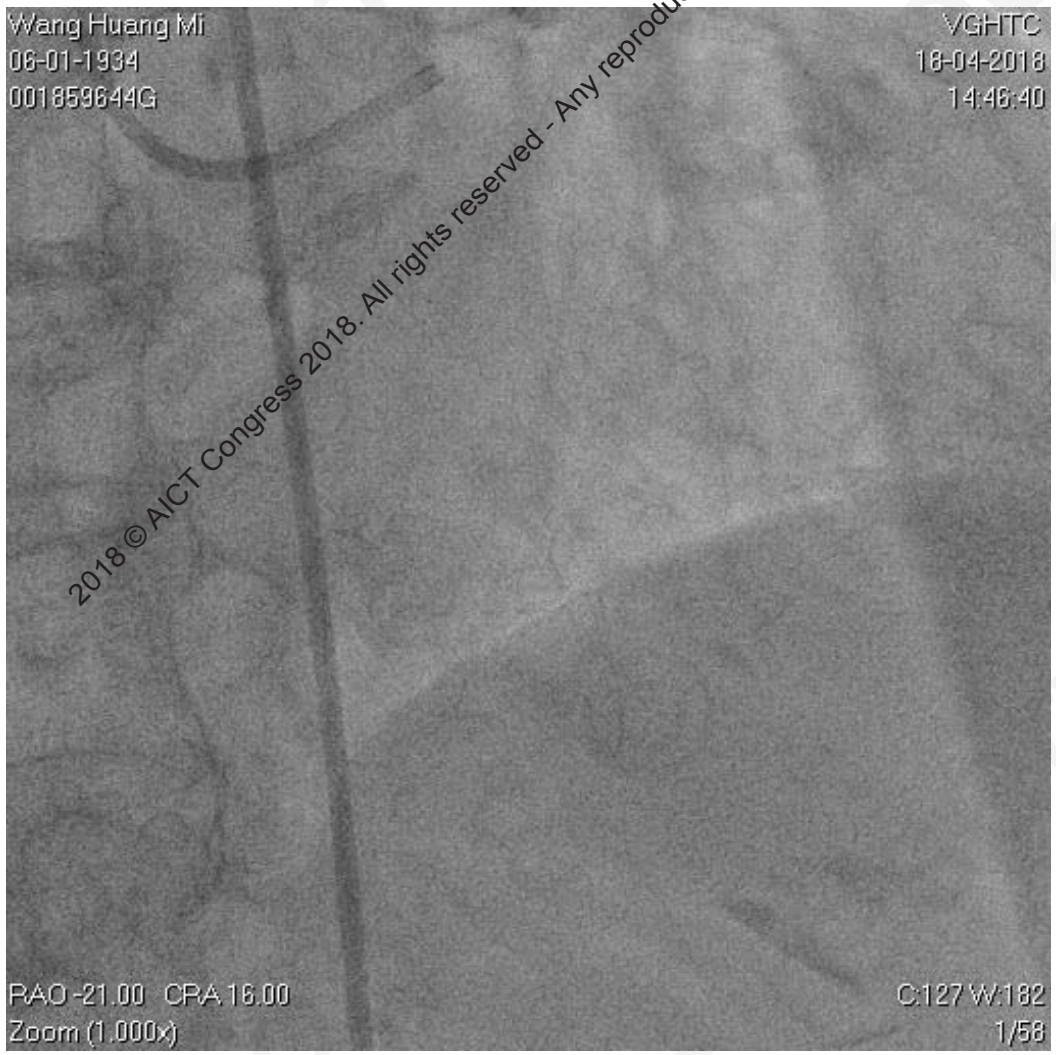
Our thoughts

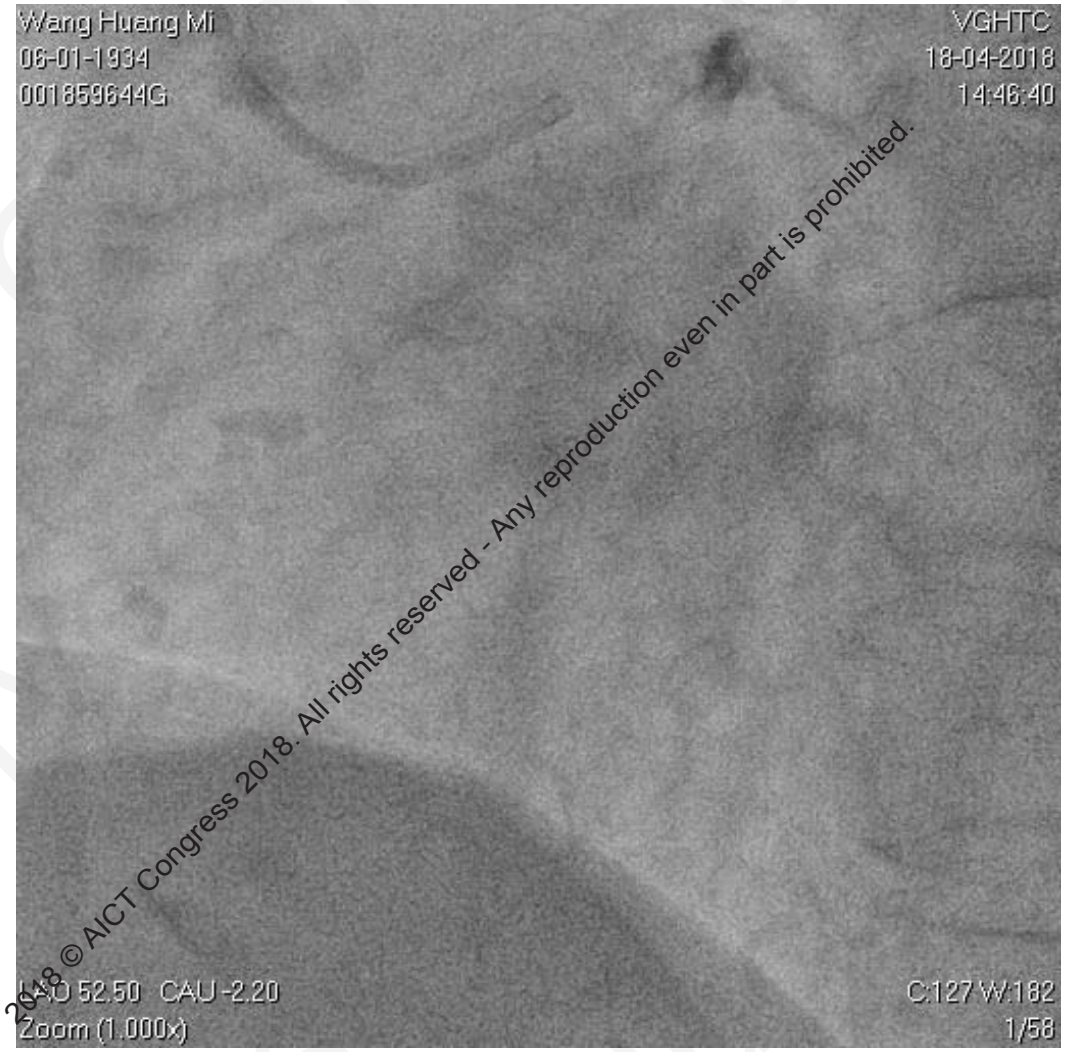
- Syntax score 56 (including the RCA lesions identified later on)
- Treat LAD first? No!
  - If slow or no flow in LAD, patient will die in view of the dominant and nearly occluded LCX
  - If LCX fully jailed in after LM-LAD stenting, the LCX territory will be doomed long-term ischemic
- Treat LCX first, Yes!
  - Complete RCA angio first
  - Try our best to wire LCX
  - Rotablate the LCX ostium if wiring successful, IABP supported
  - Rotablate LAD next
  - Finish LM with culotte stenting
  - Remove sheath and bilateral angioseaing
  - If LCX PCI fails, may refer patient to surgeon

IABP backup at start of procedure

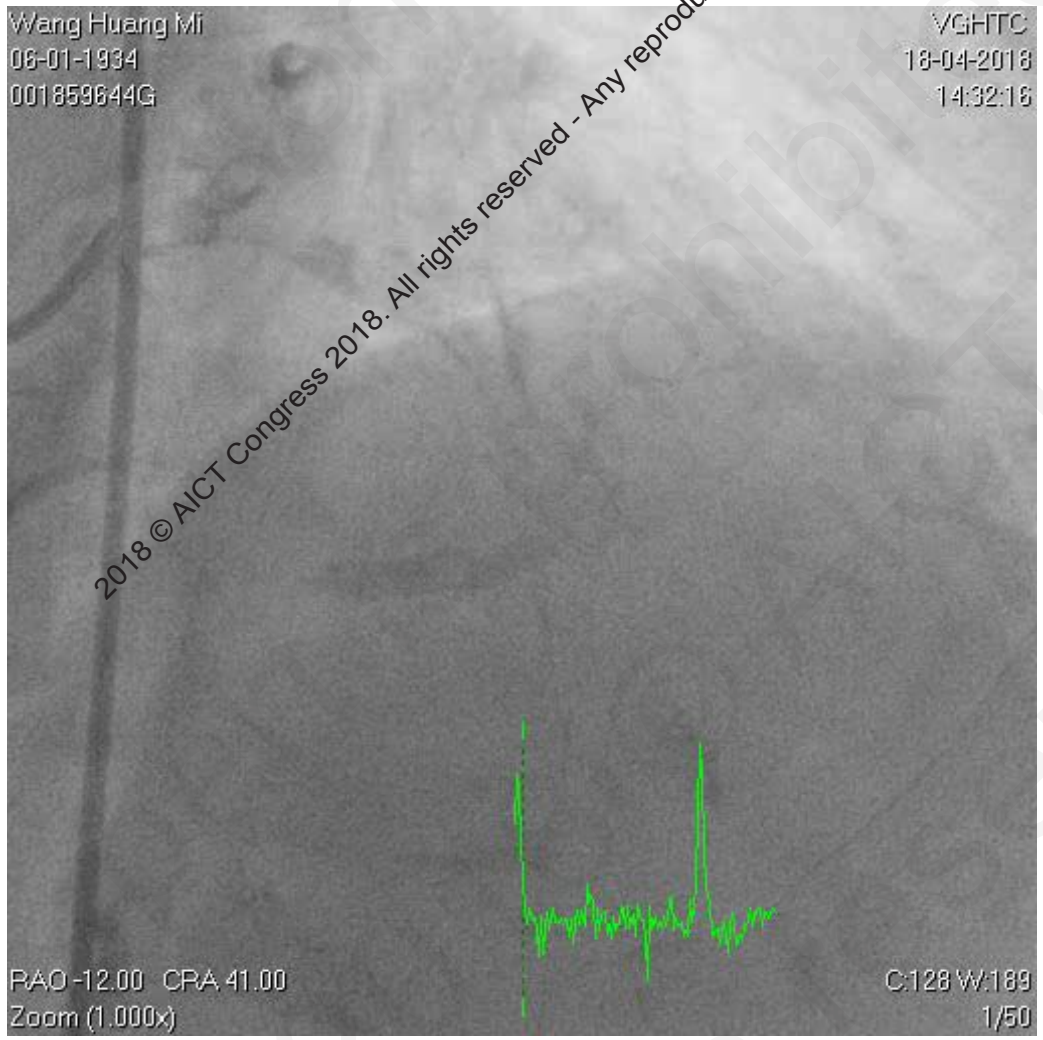


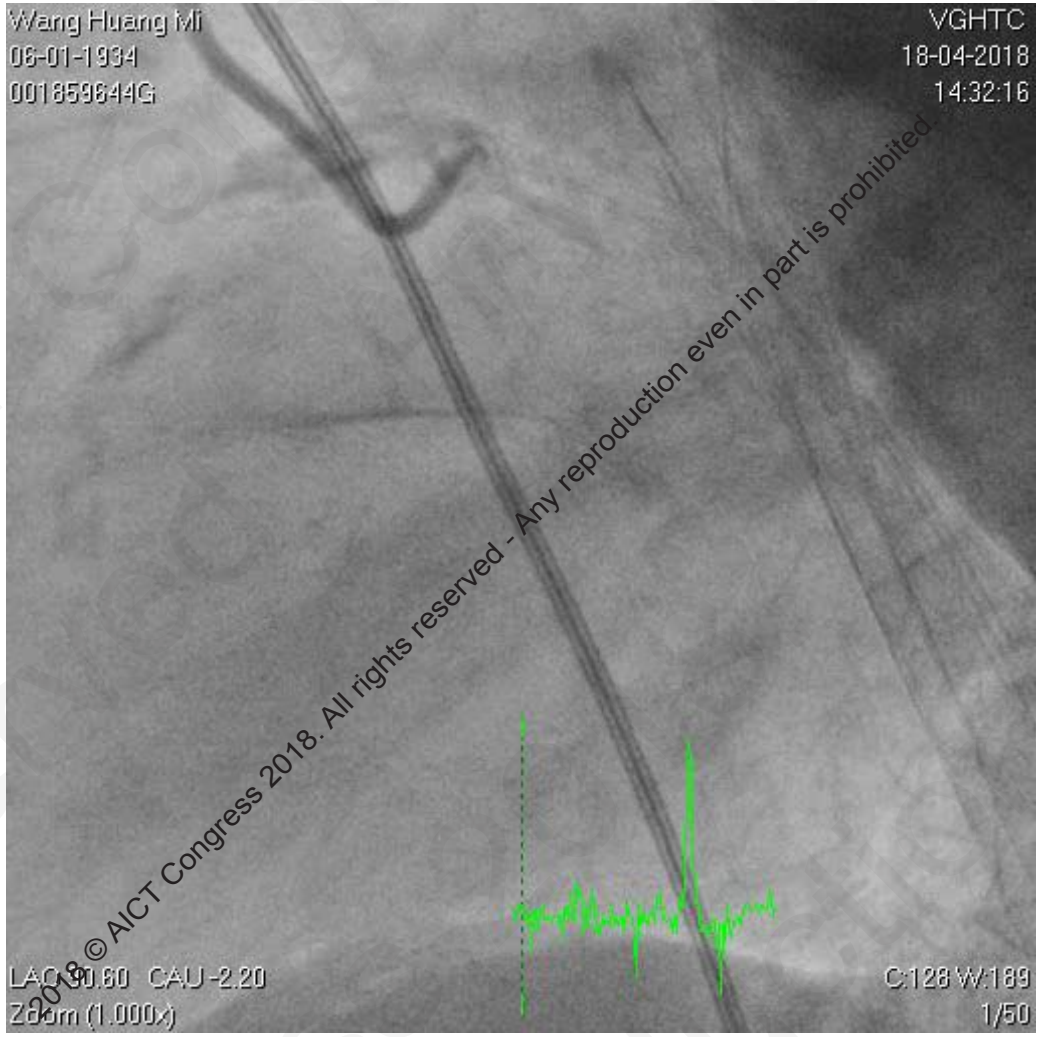
Left origin, easily made with XB 3x6F guide

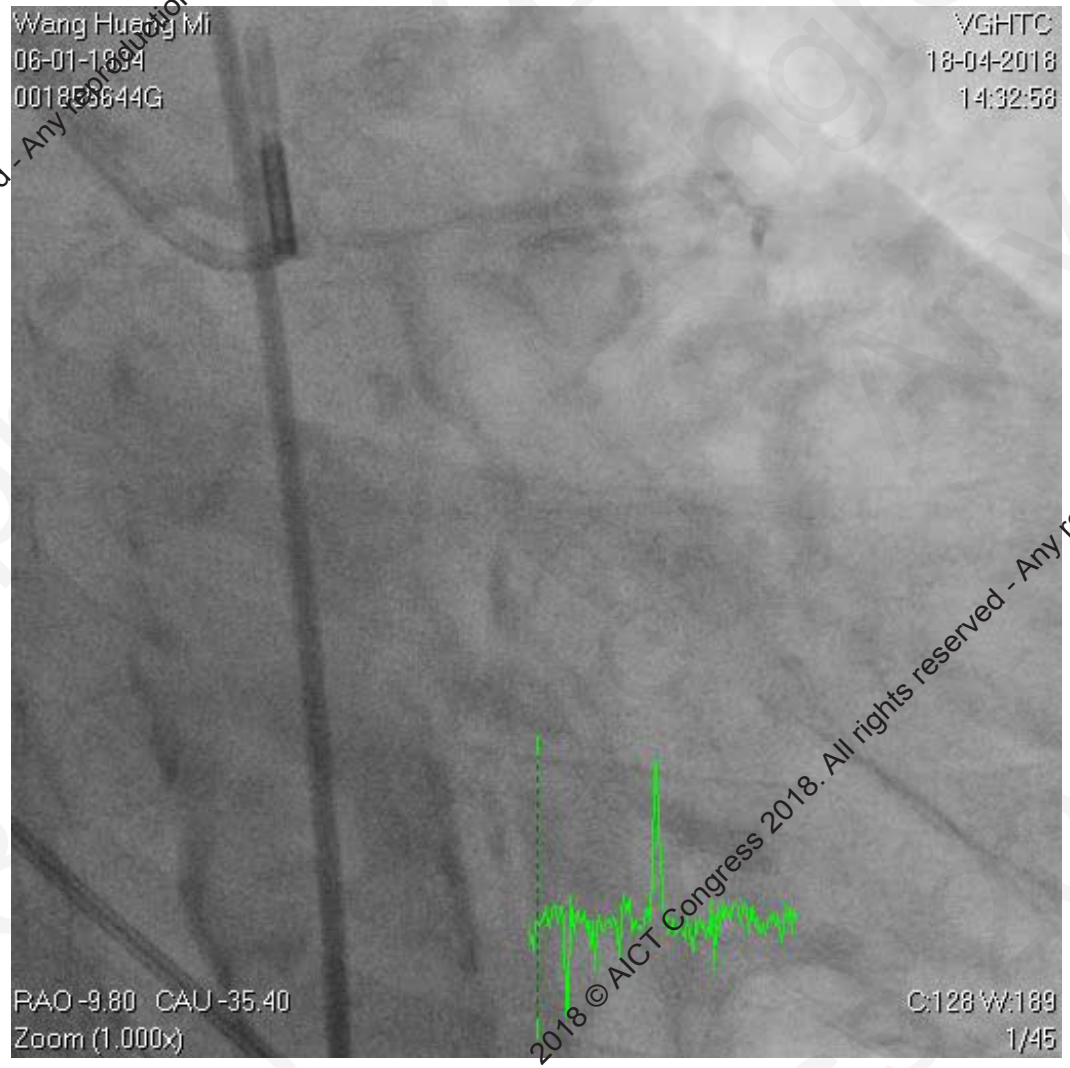




Diagnostic CAG at our institute







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Start with direct LCX wiring, every wire fails !

Sion, Sion Blue, Sion Black, Fielder FC, Fielder XT-A

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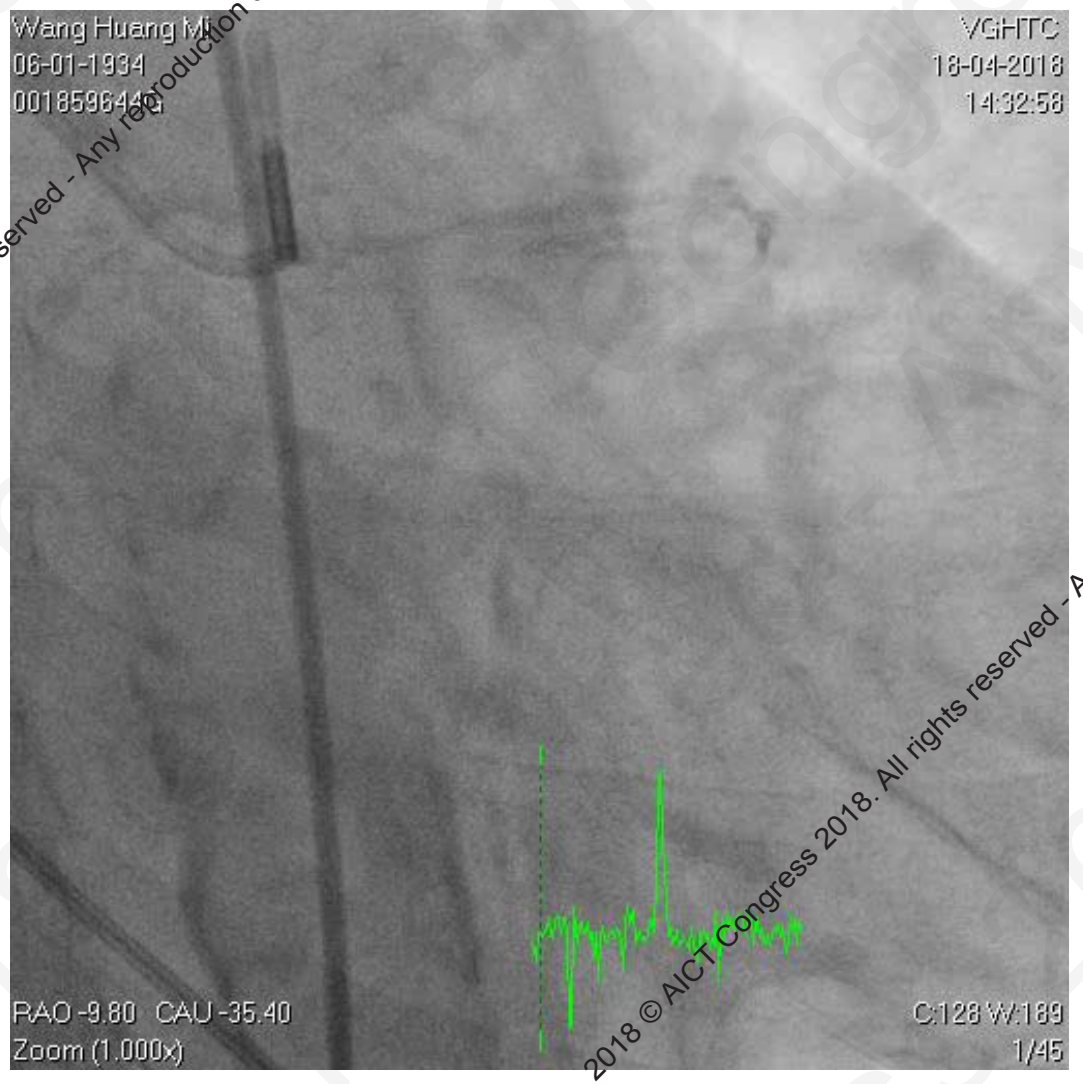
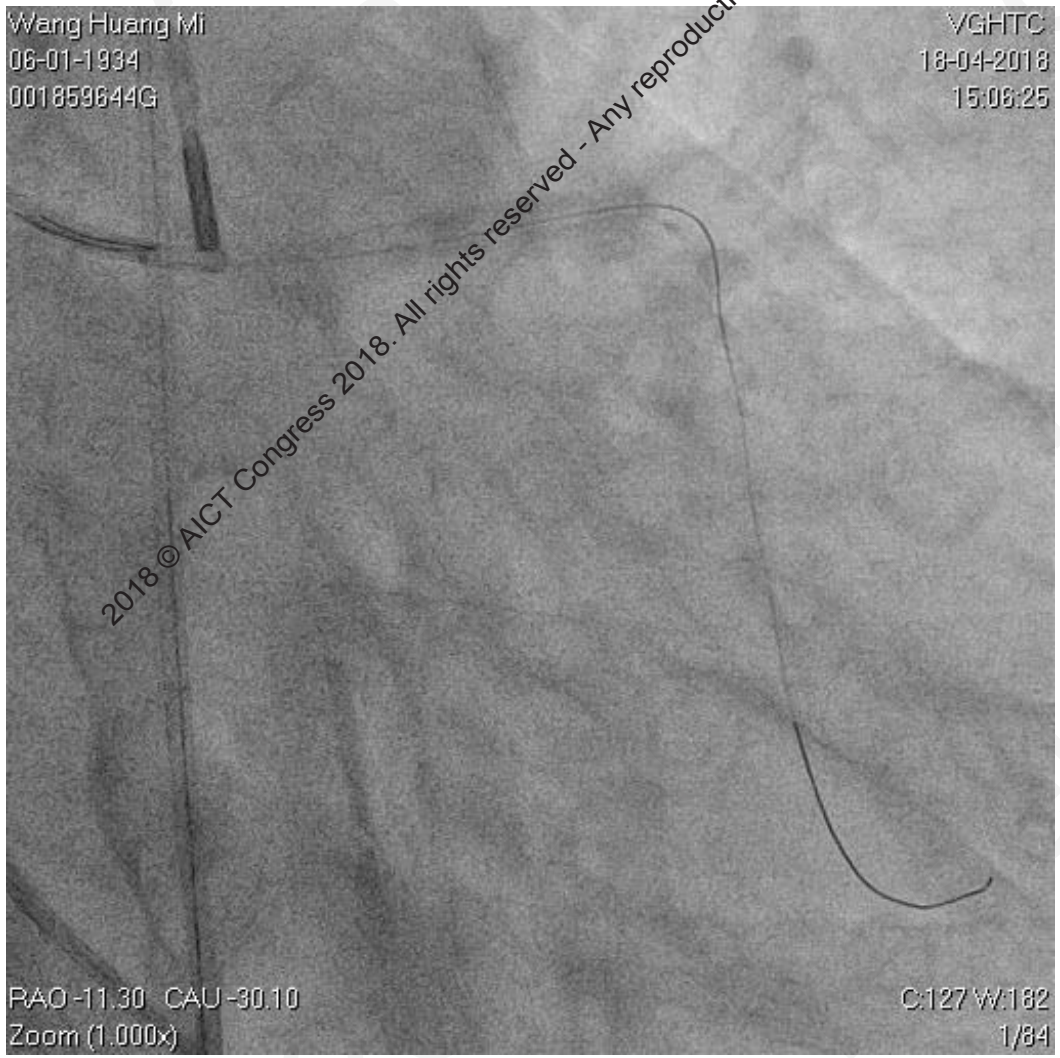
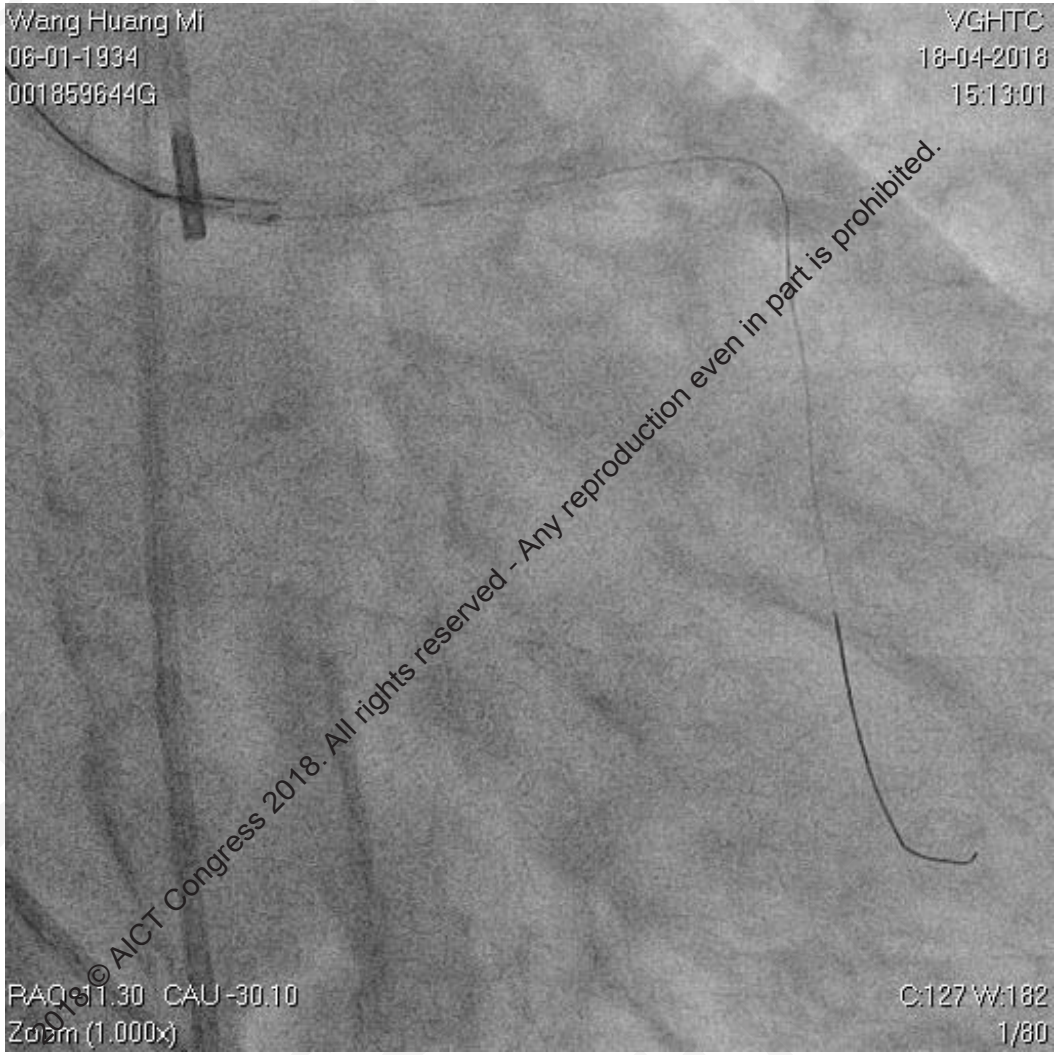
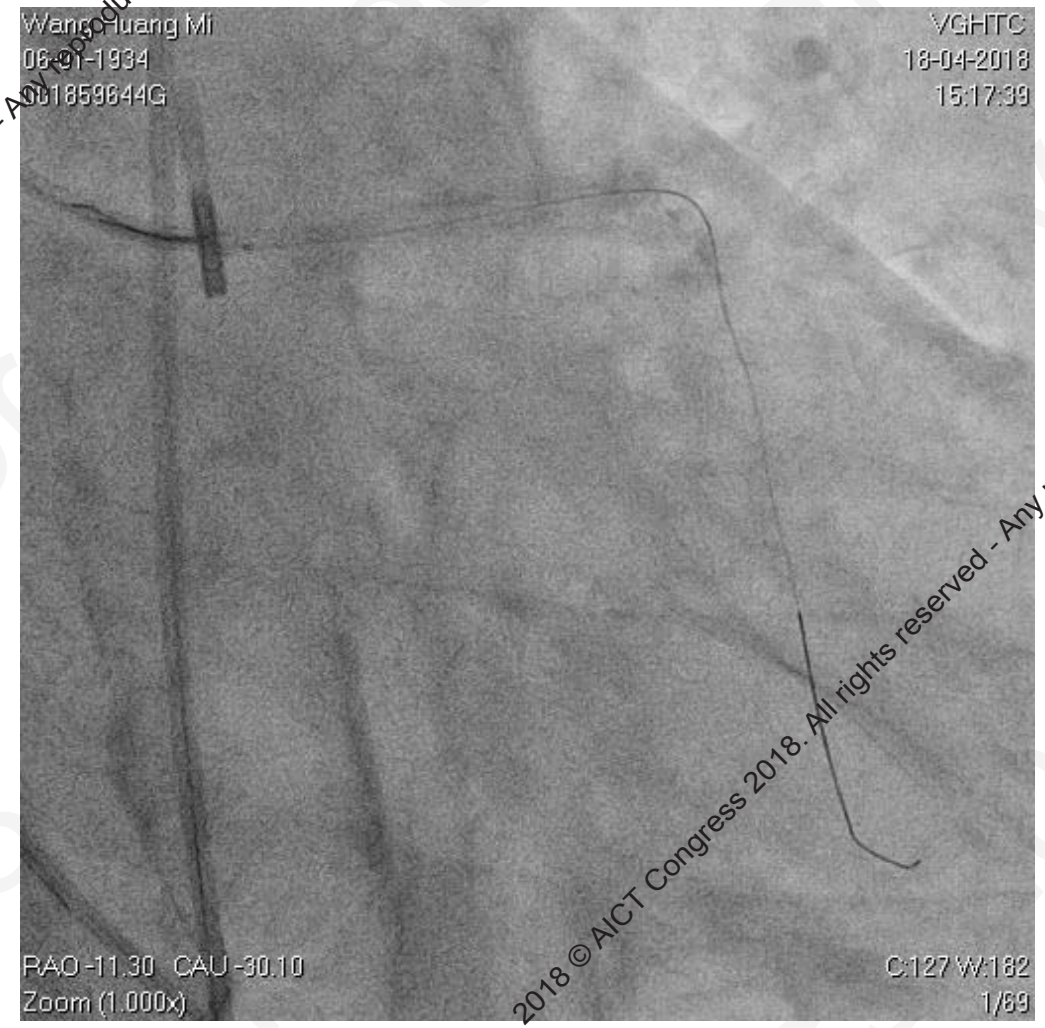
Review of LCX ostium again; maybe reverse wiring will work



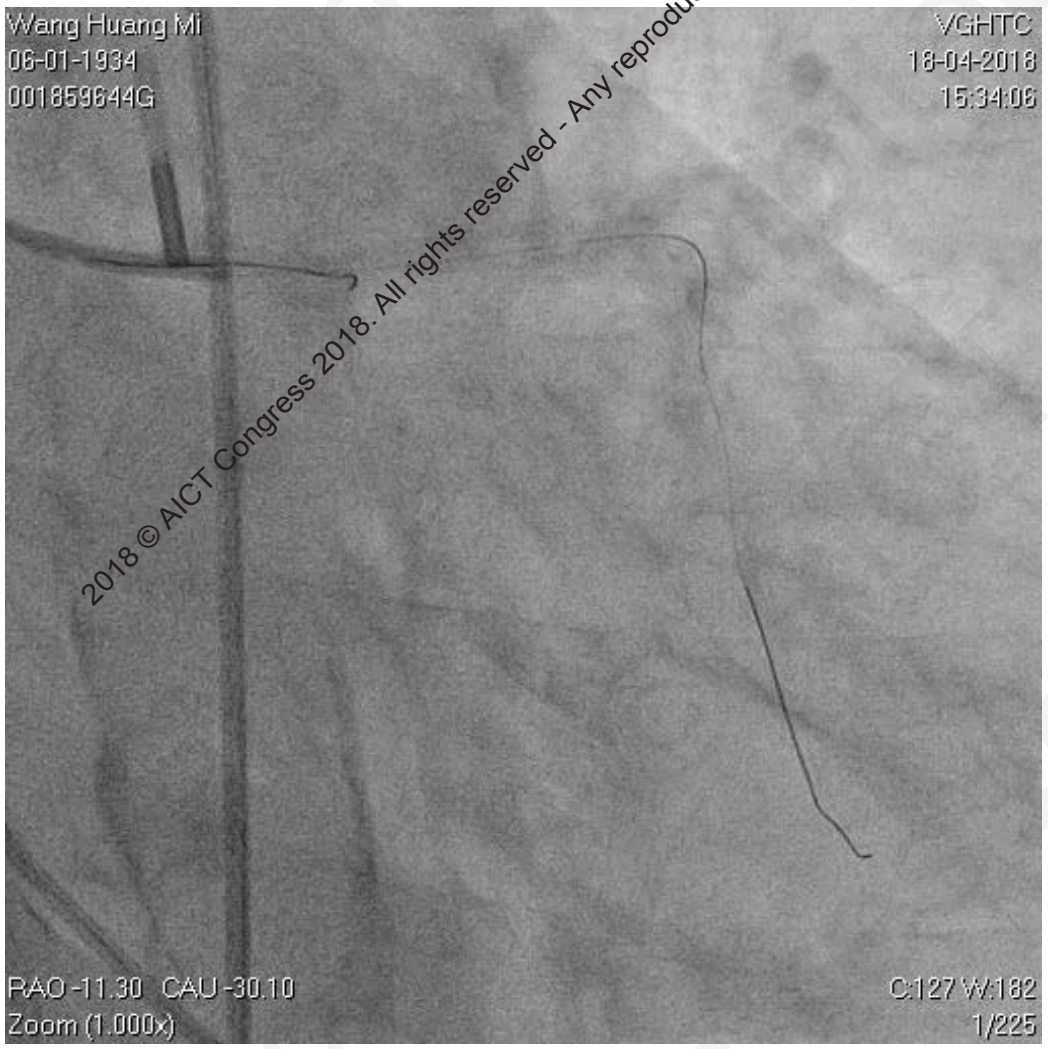


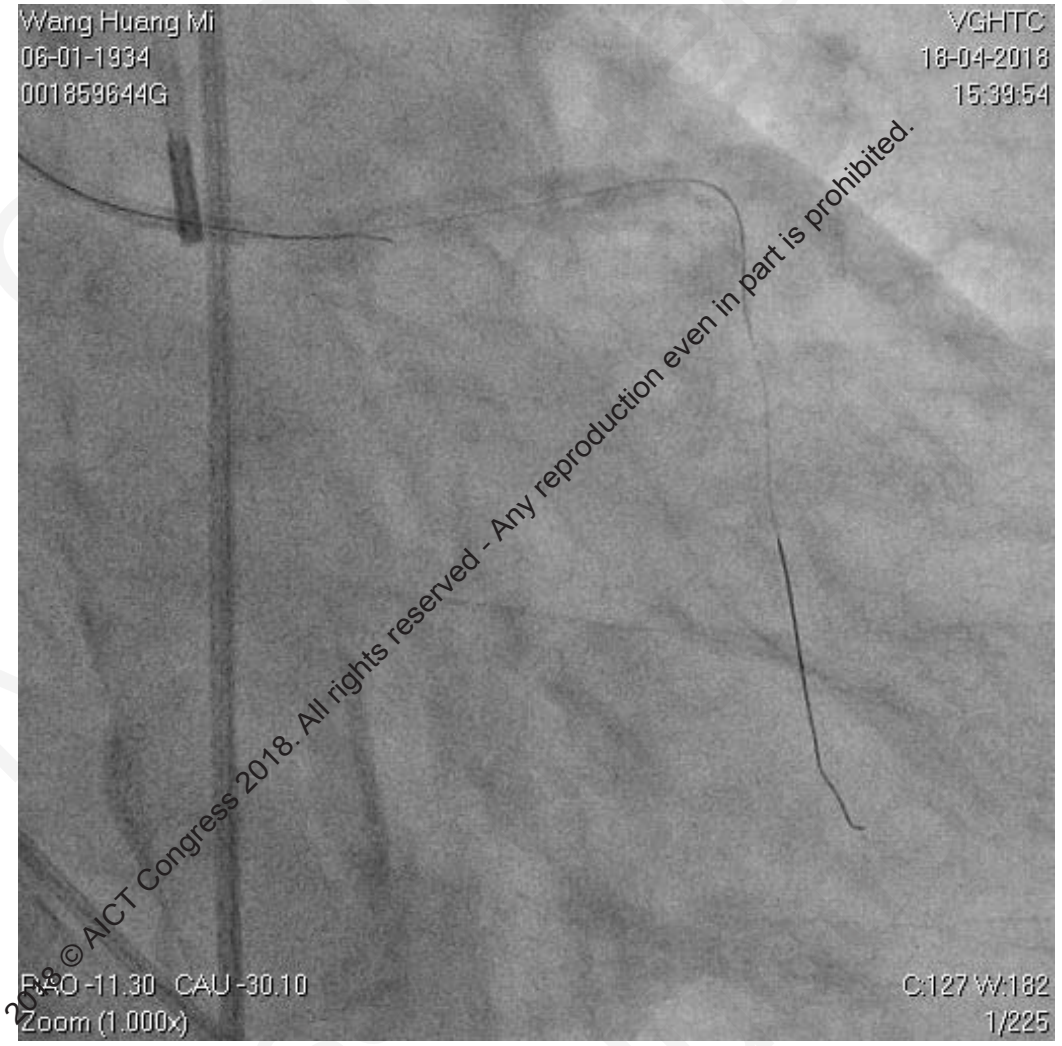


Fielder FC, repeat each with different curve lengths→ all fails



Direct wiring agin
Broken tip Sion, Fielder XT-A





Takes almost an hour to wire, prepared to give up……

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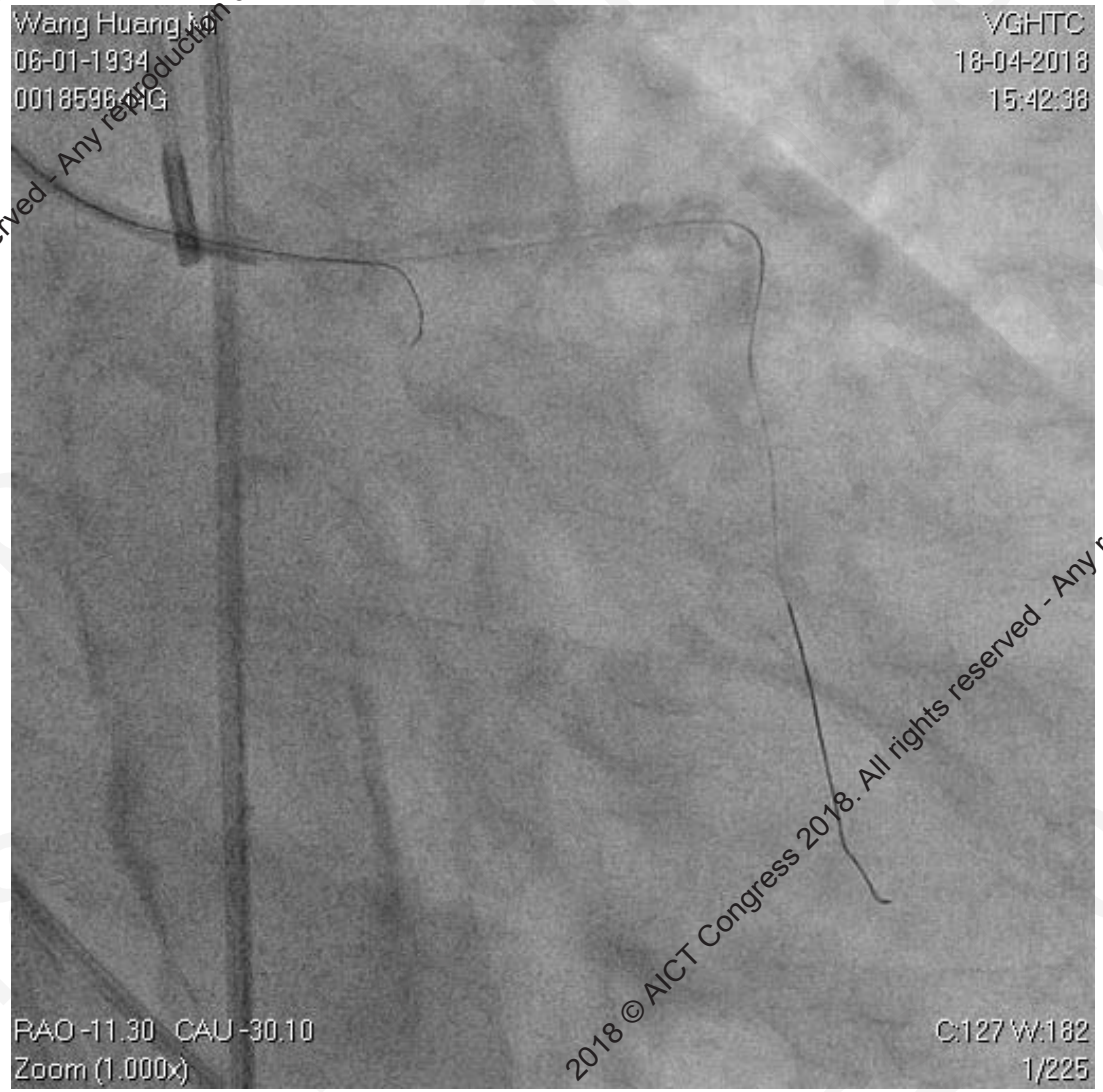
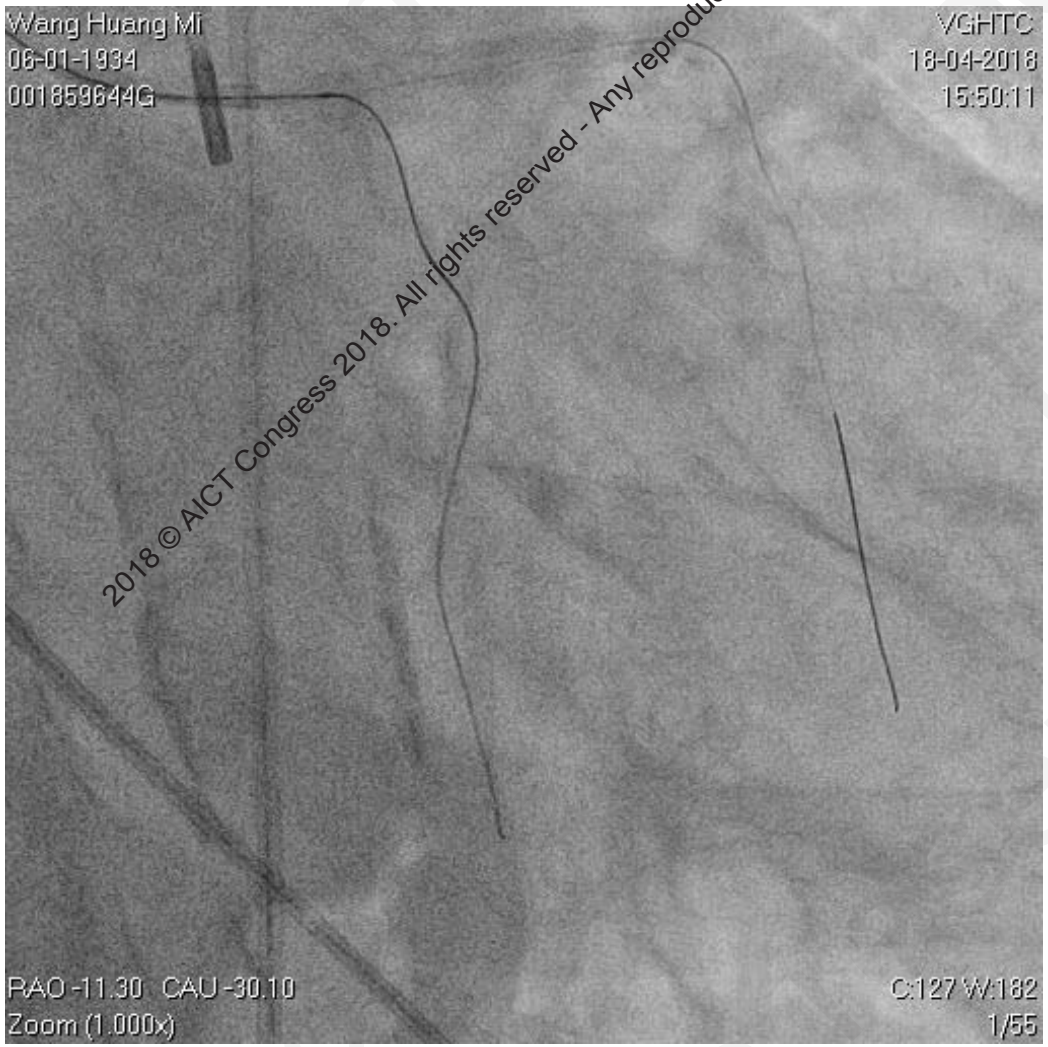
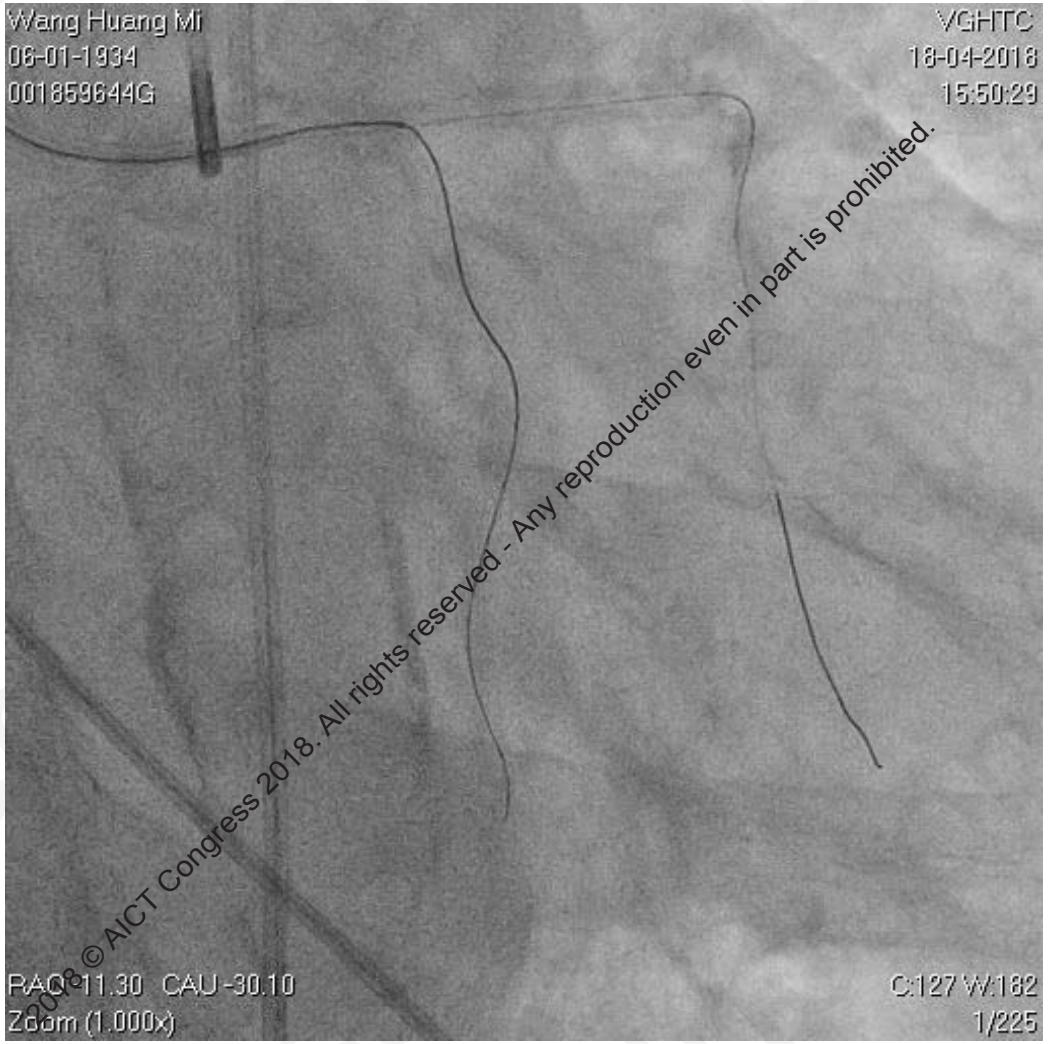
Suddenly.....

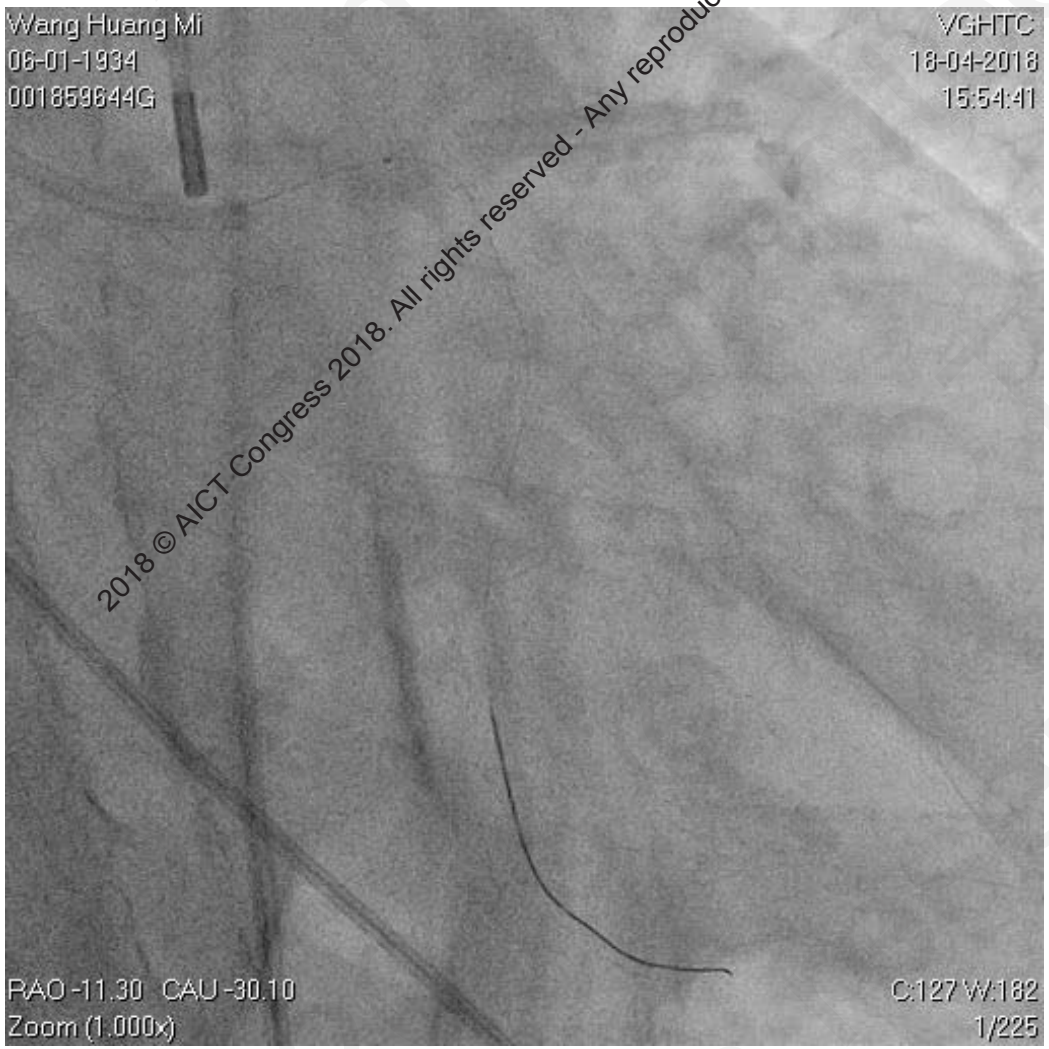


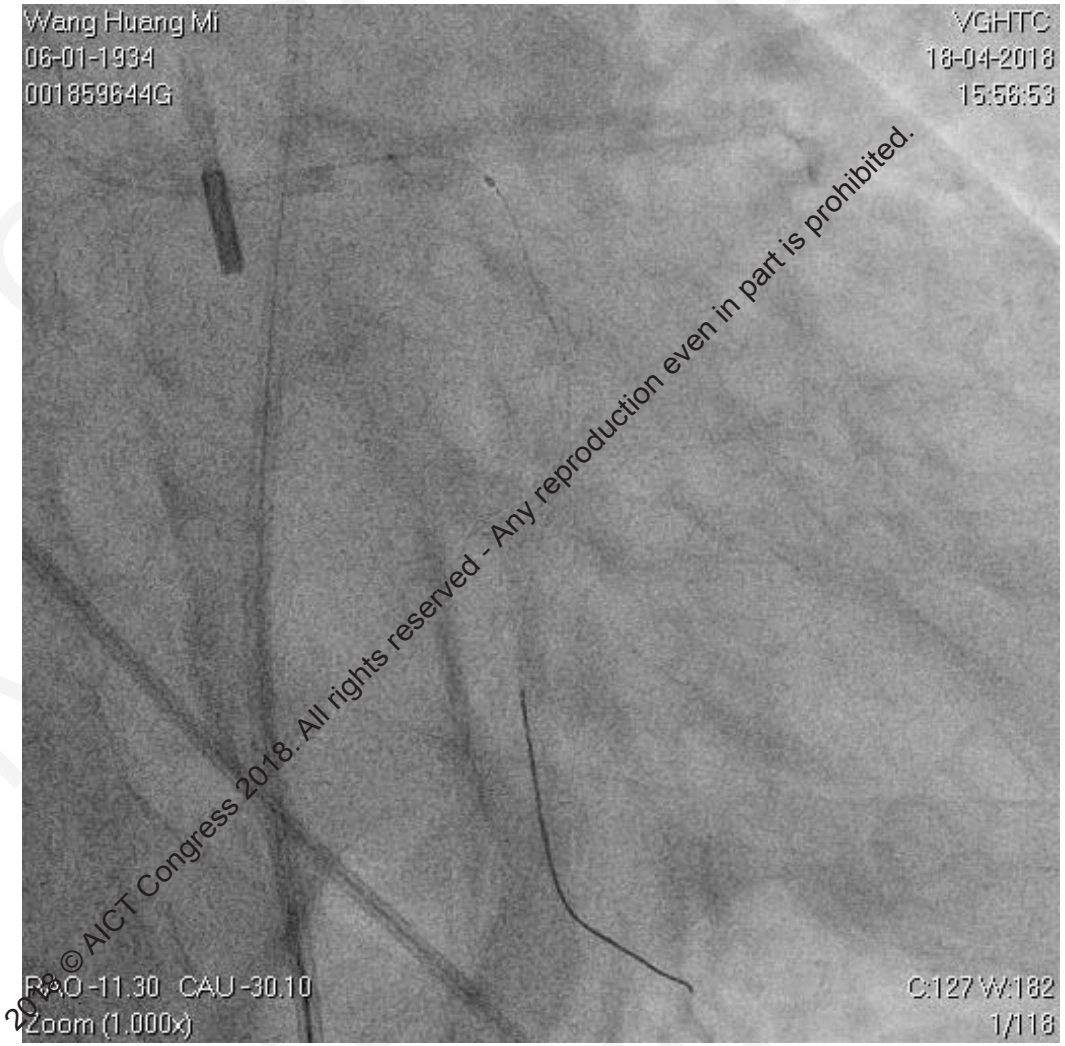
Finecross hard to go over LCX ostium



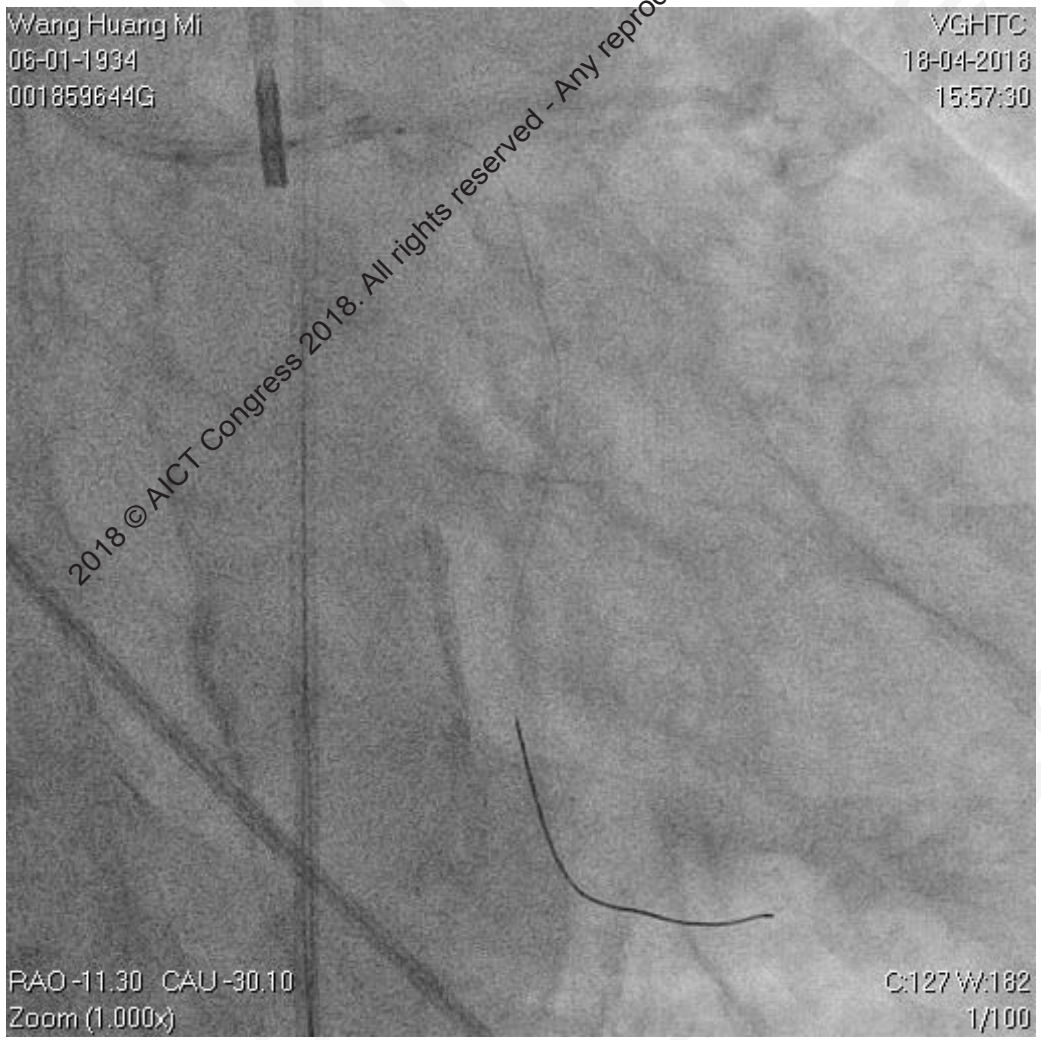


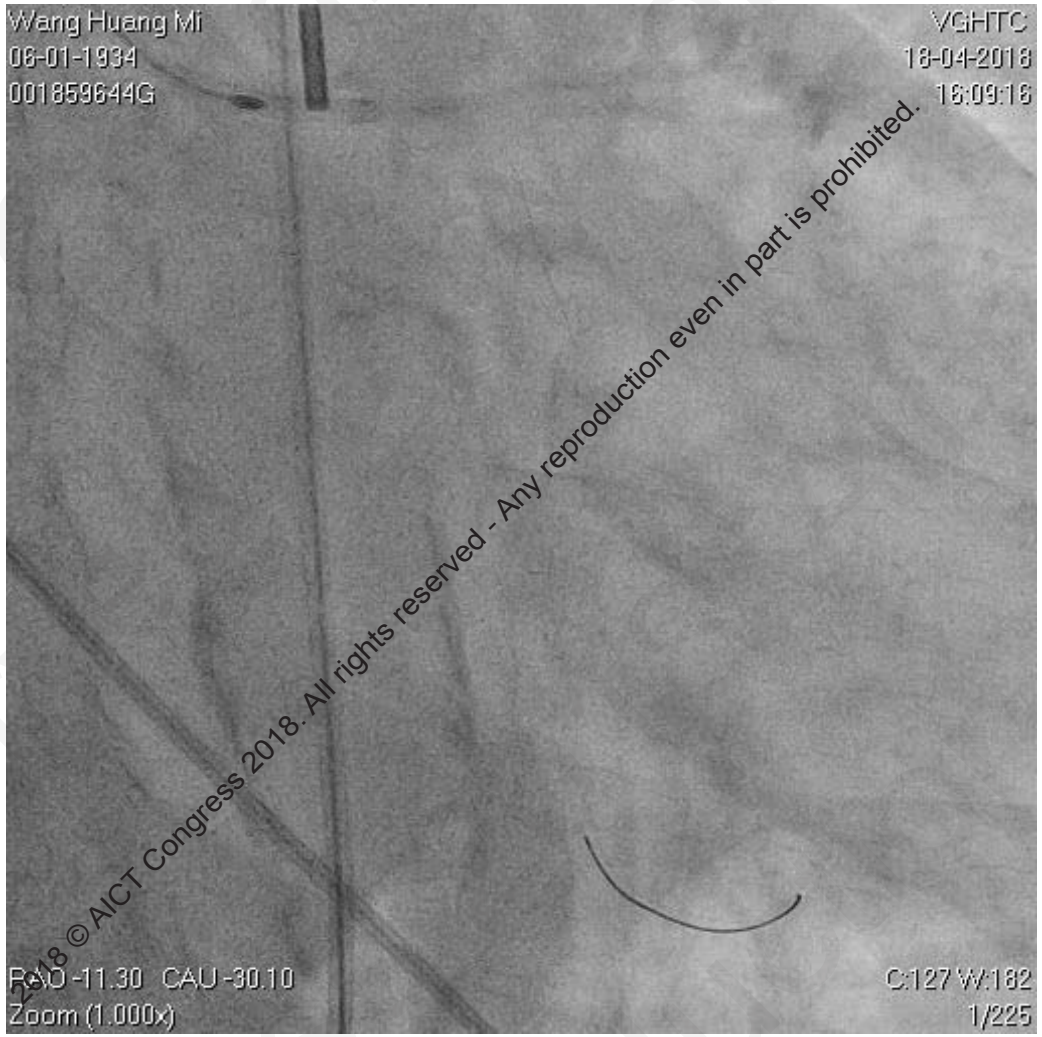
Grandslam and 1.5x20mm BC





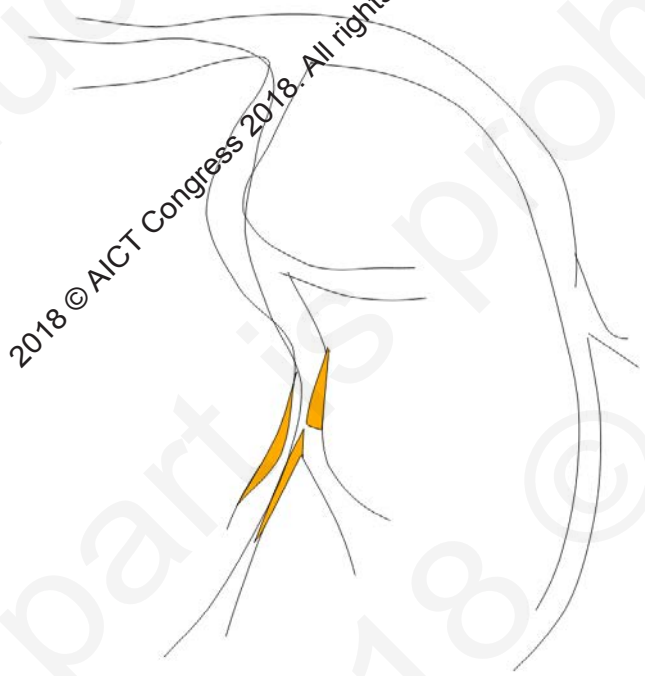
Grandslam → rota extra-support for burr to track and bias cutting



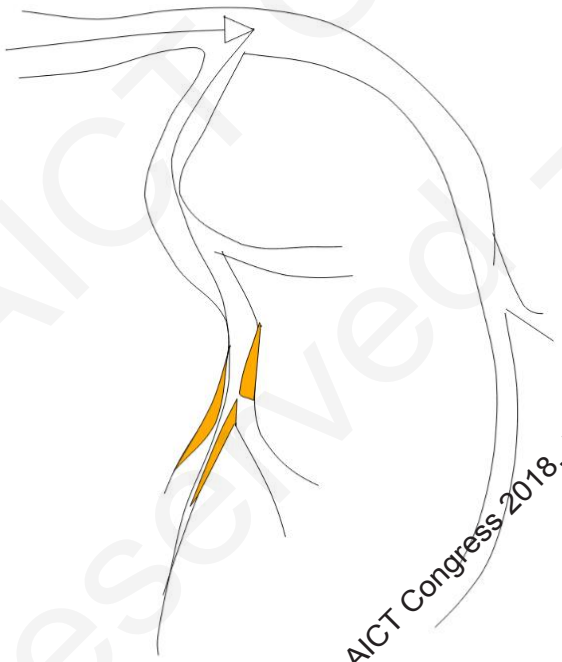


Contraindicated: burr need to track acute > 90 degrees angulation when rota-extra-support unavailable

anatomy

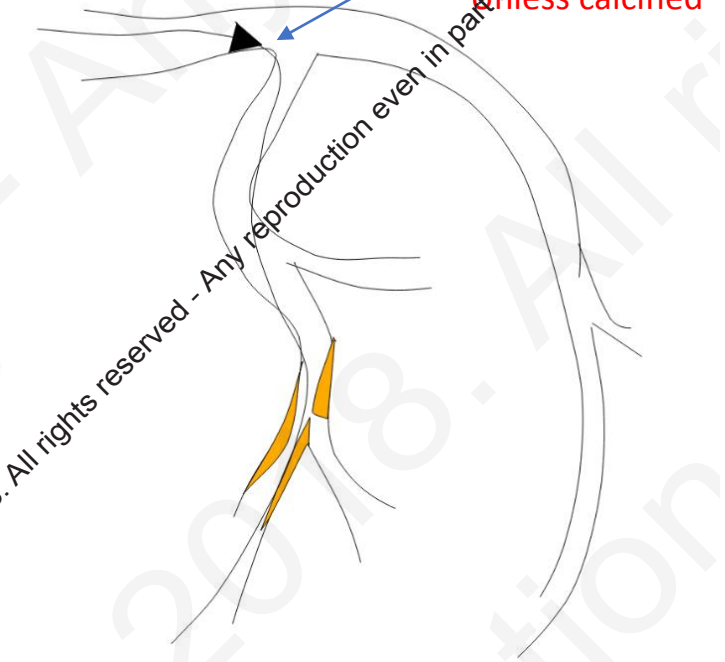


Floppy wire, poor support
→ Wire transection

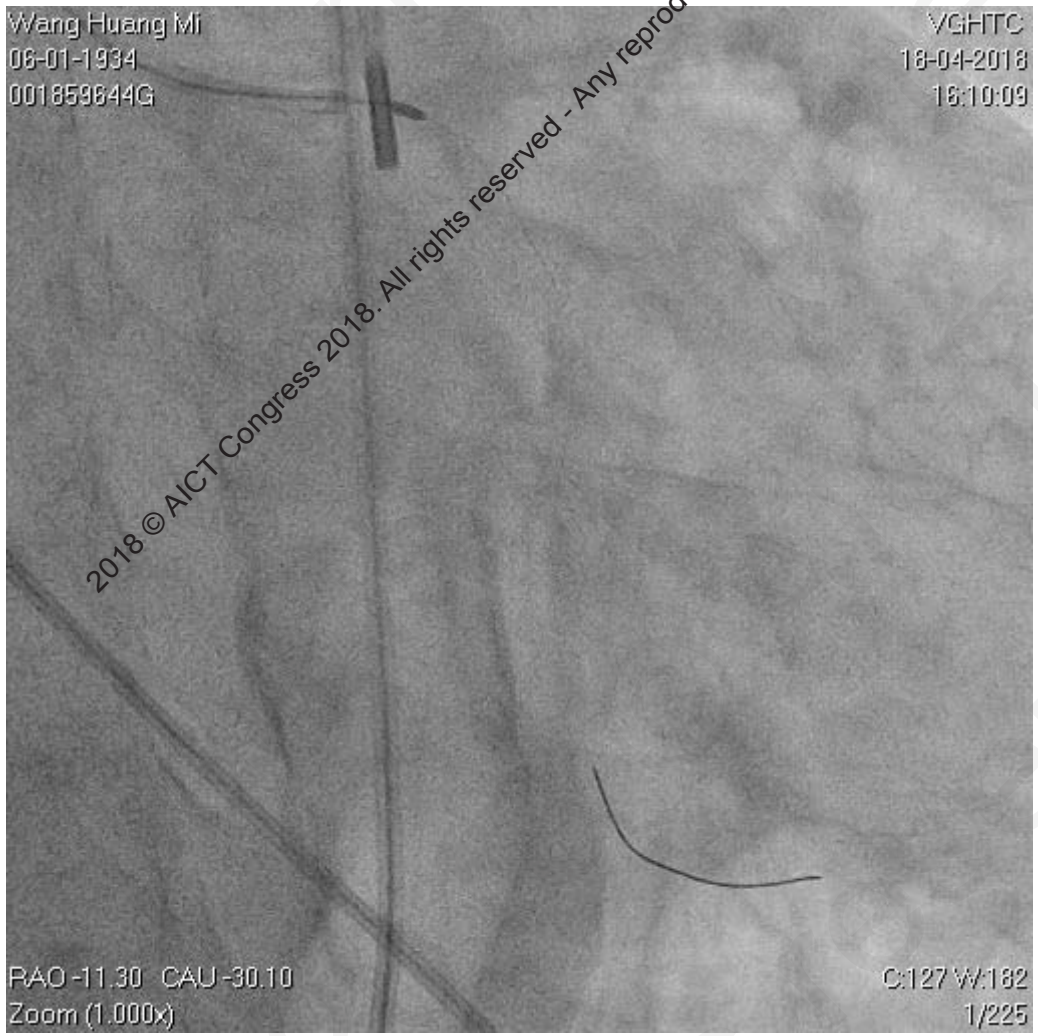


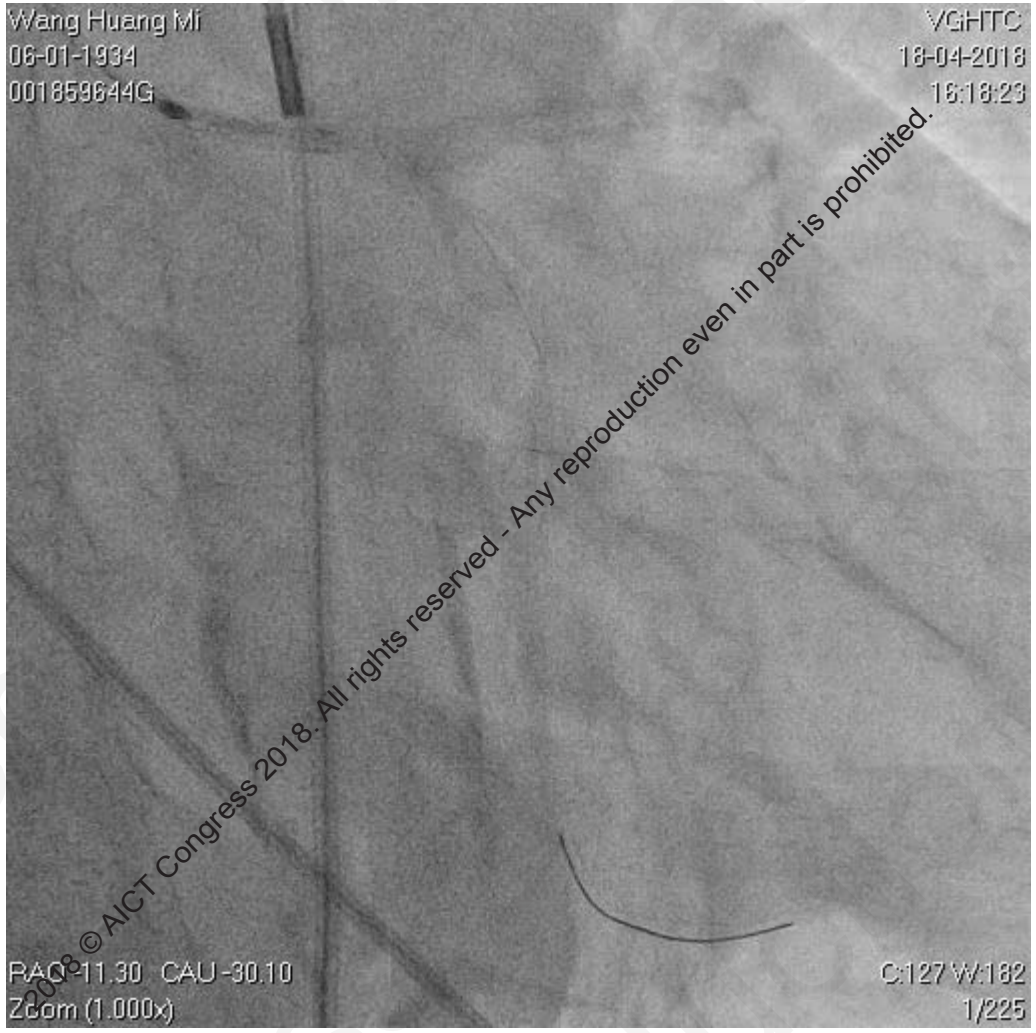
Extra-support wire
Burr could track

Cutting bias and
Cause dissection
Unless calcified

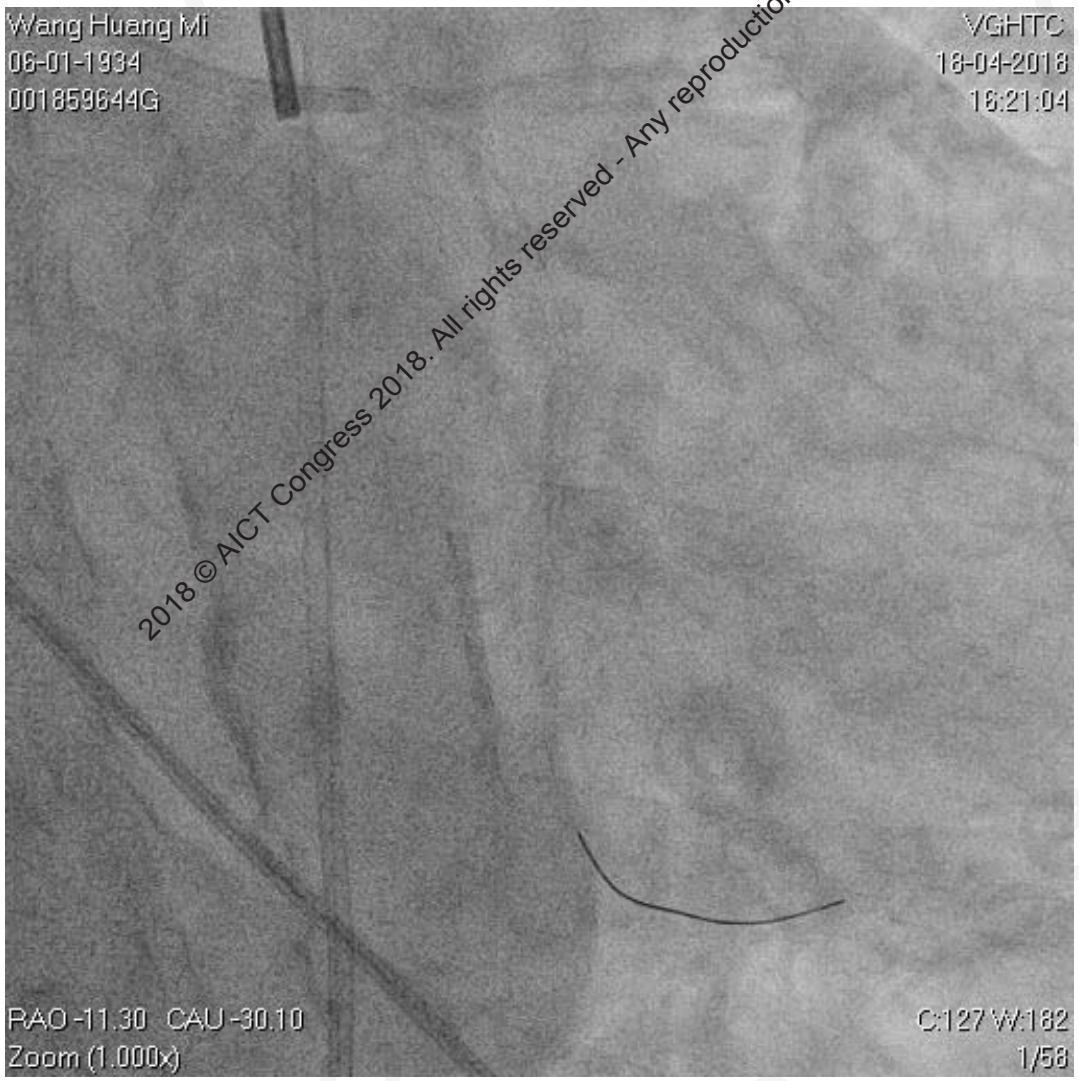


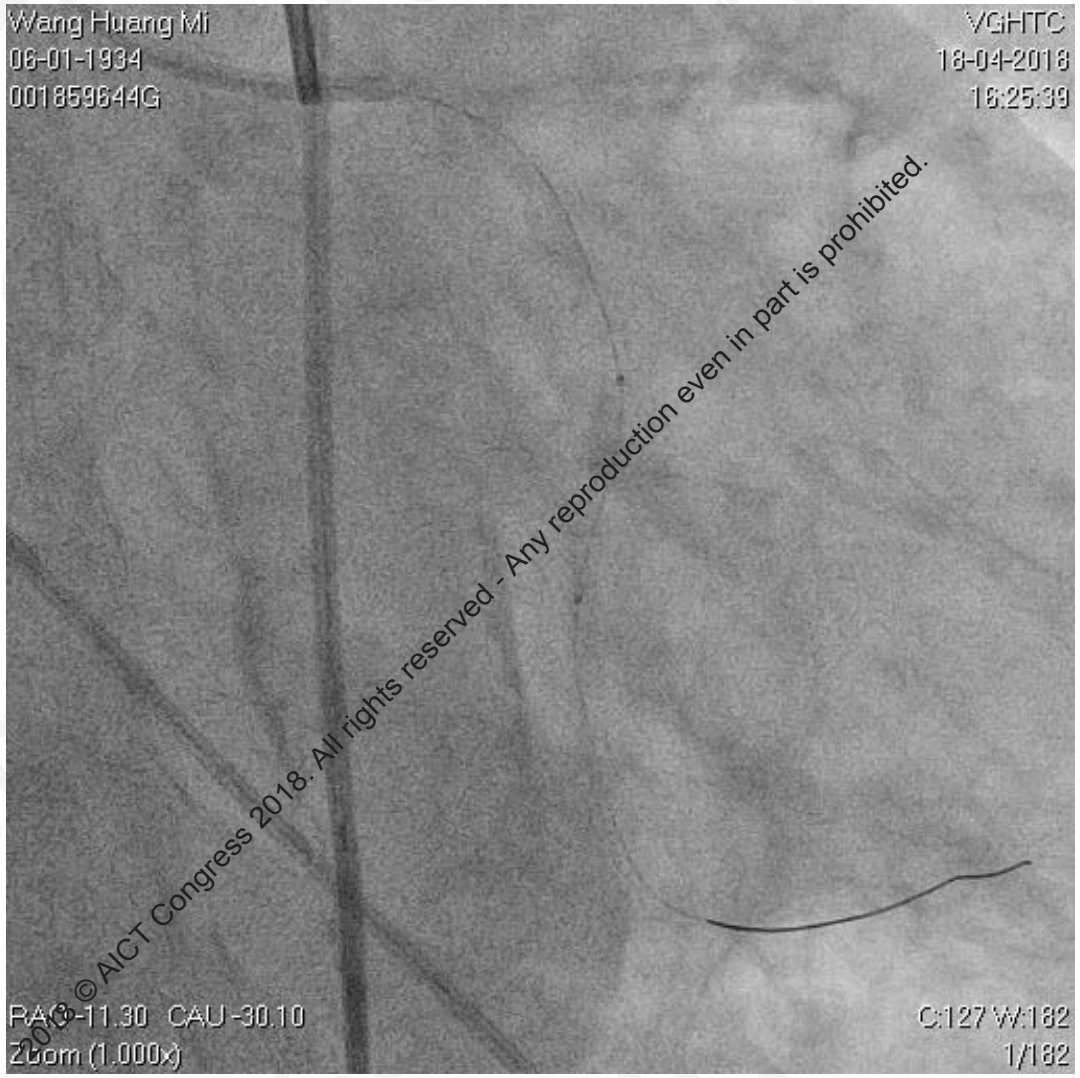
1.25mm → 1.5mm burr, resistance at LCX-M (burr into plaque)





Post rota, immediately replace rota with Sion Blue, BC occlusion





Echo: no effusion at all!

Anomalous venous drainage

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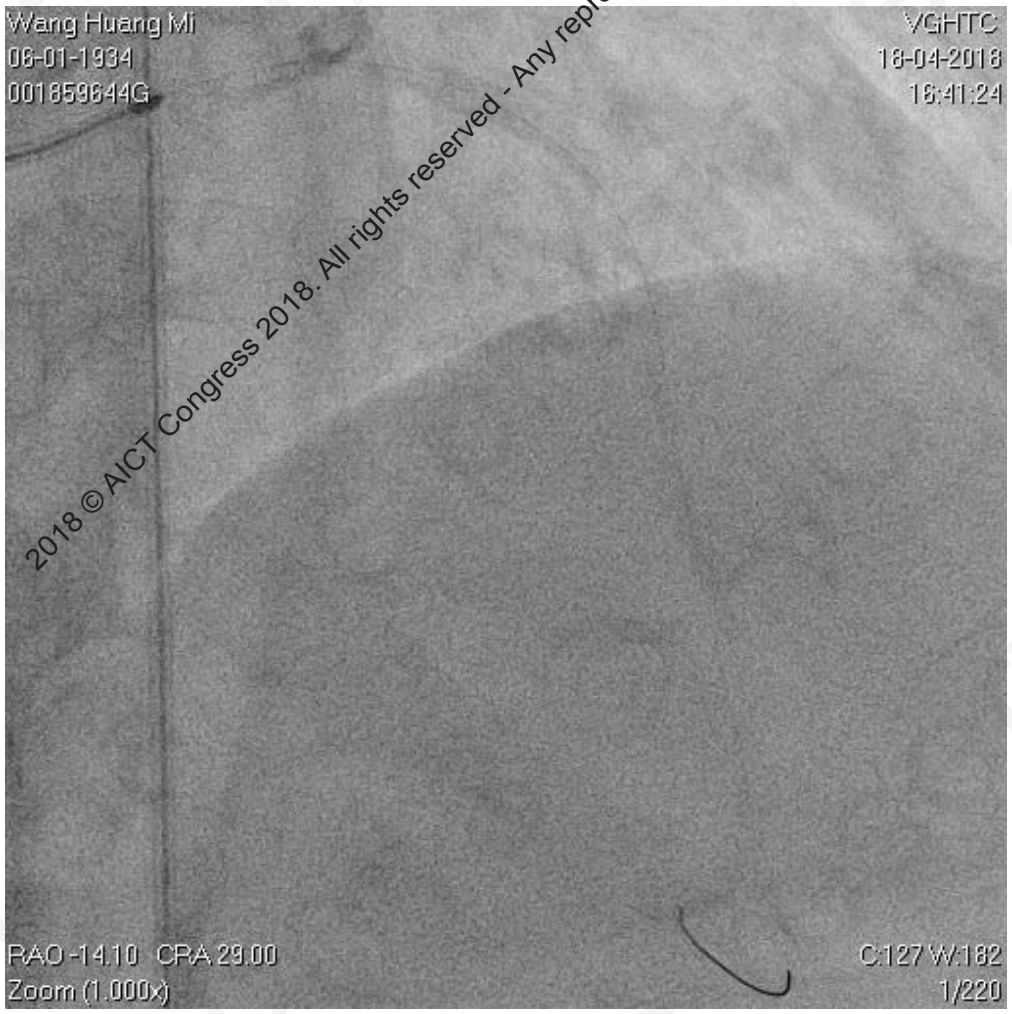
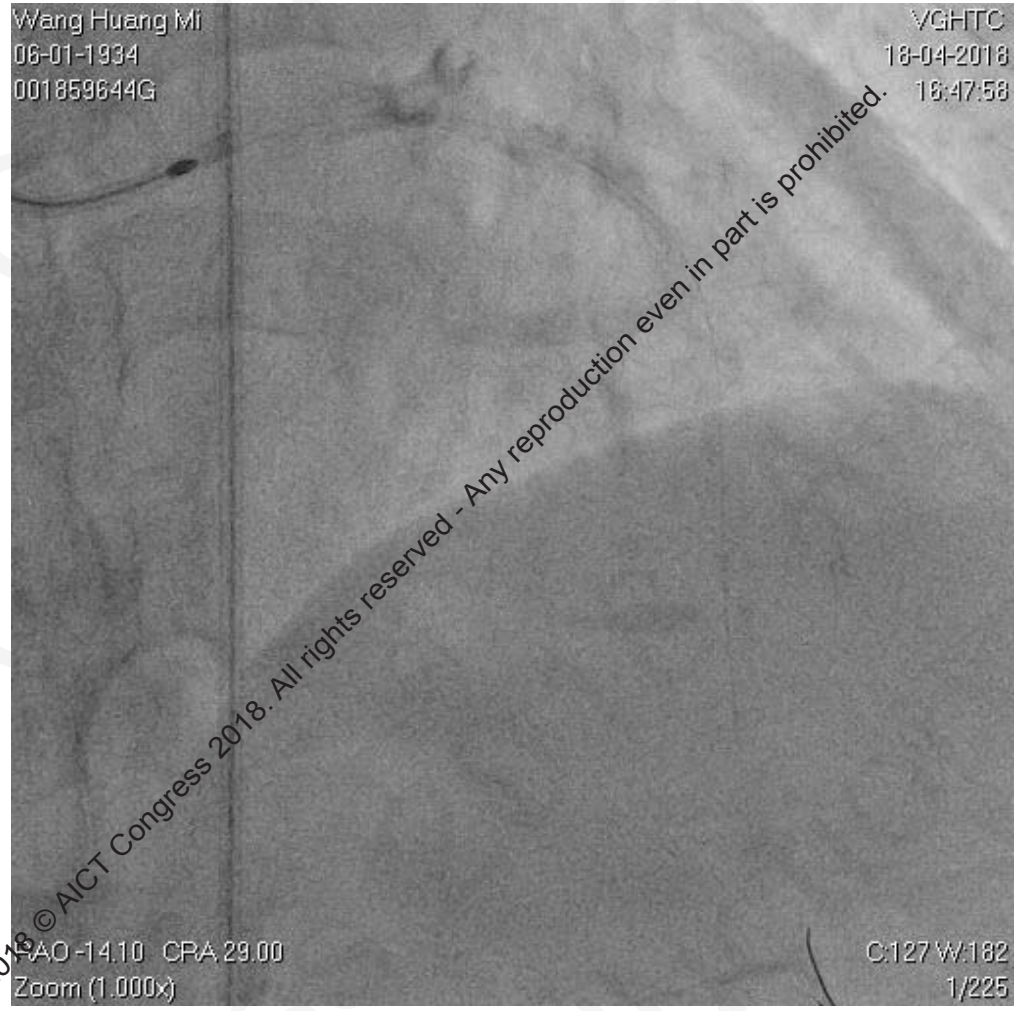
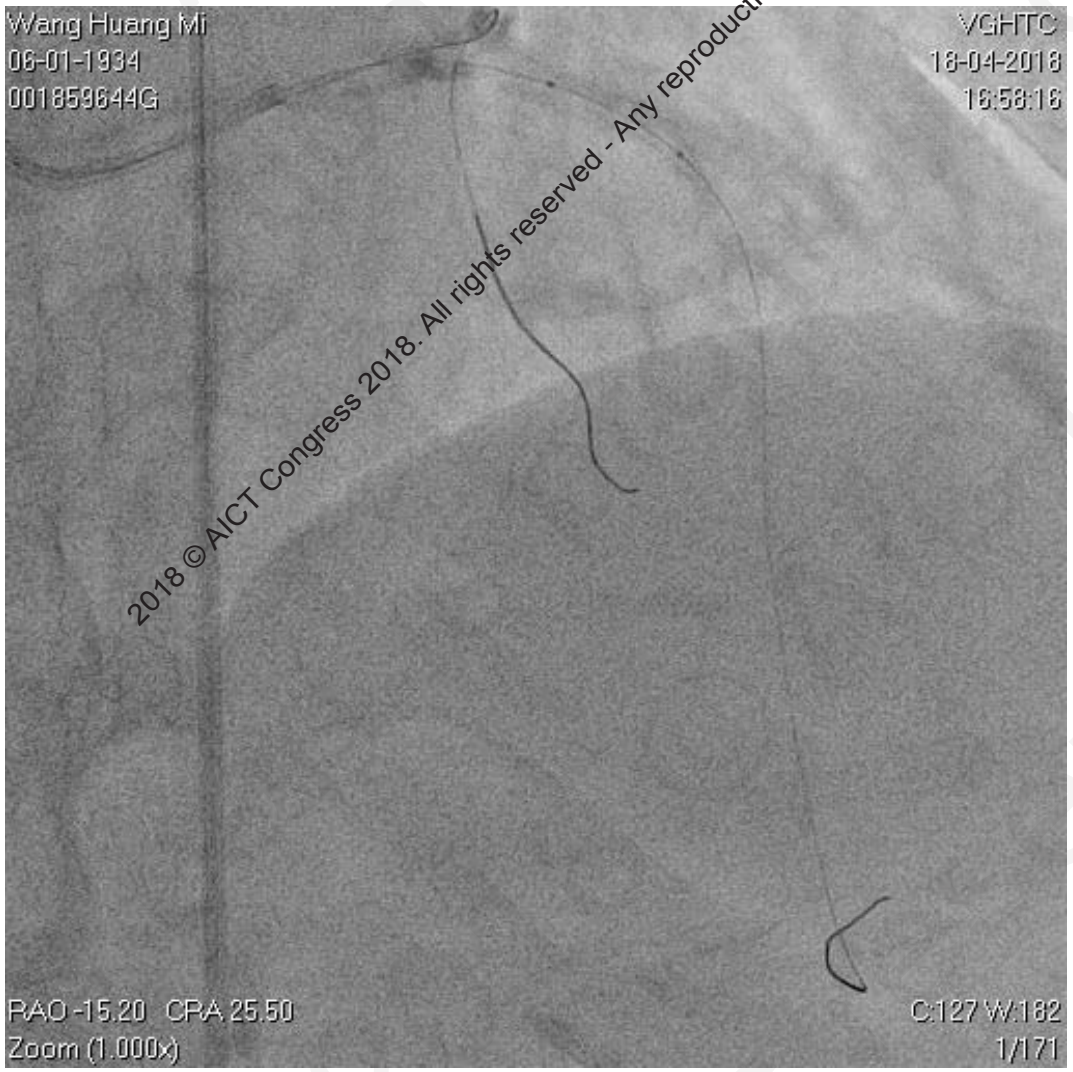
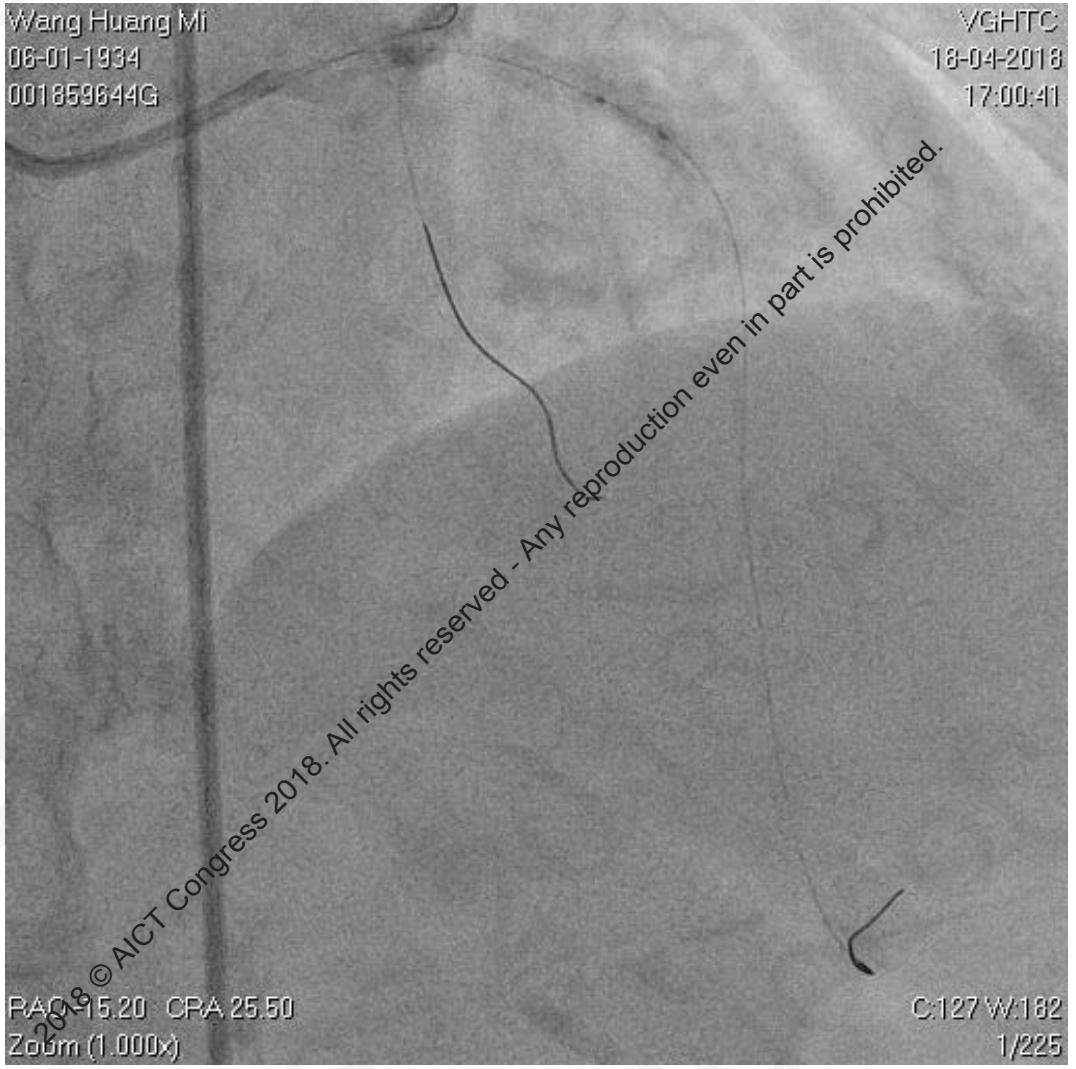
Rota-extrasupport, 1.25mm and 1.5mm burrs



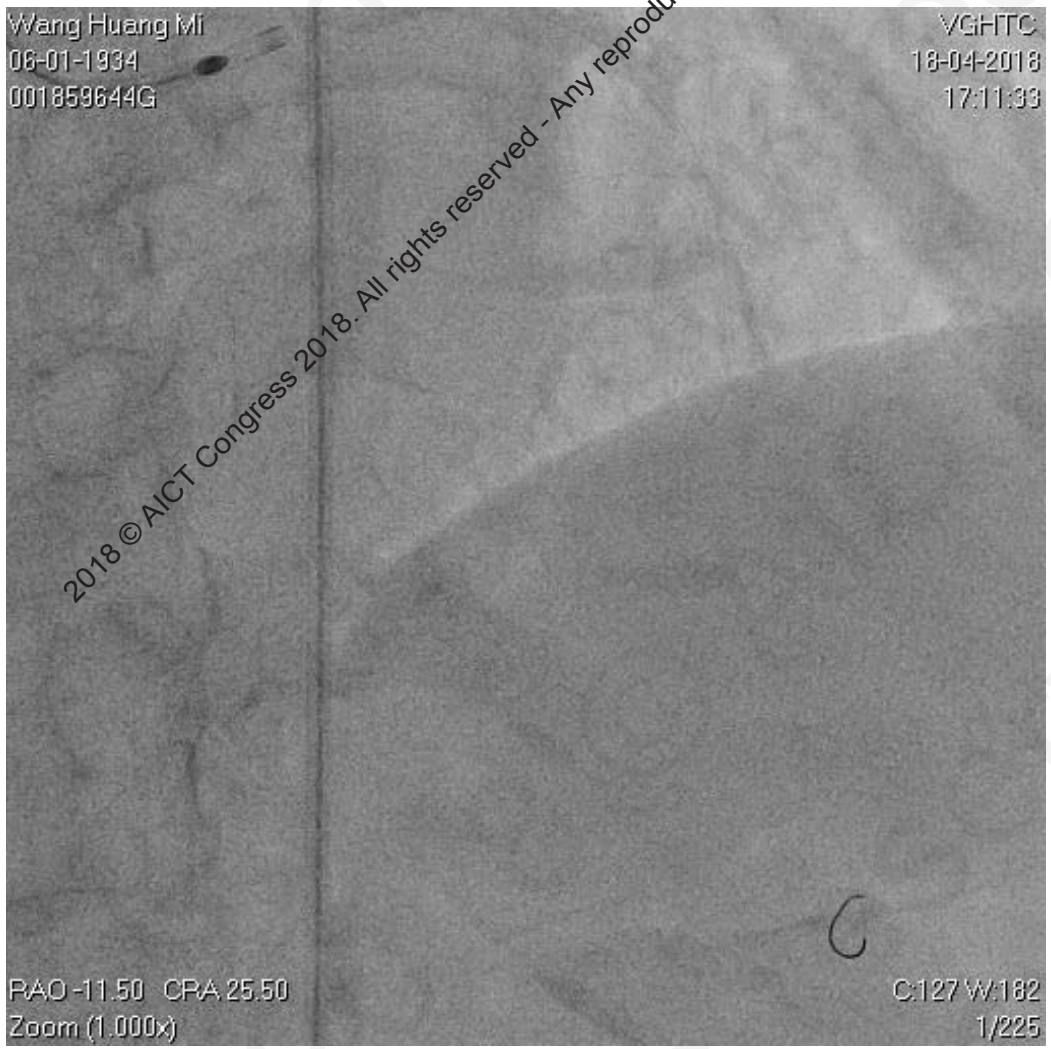


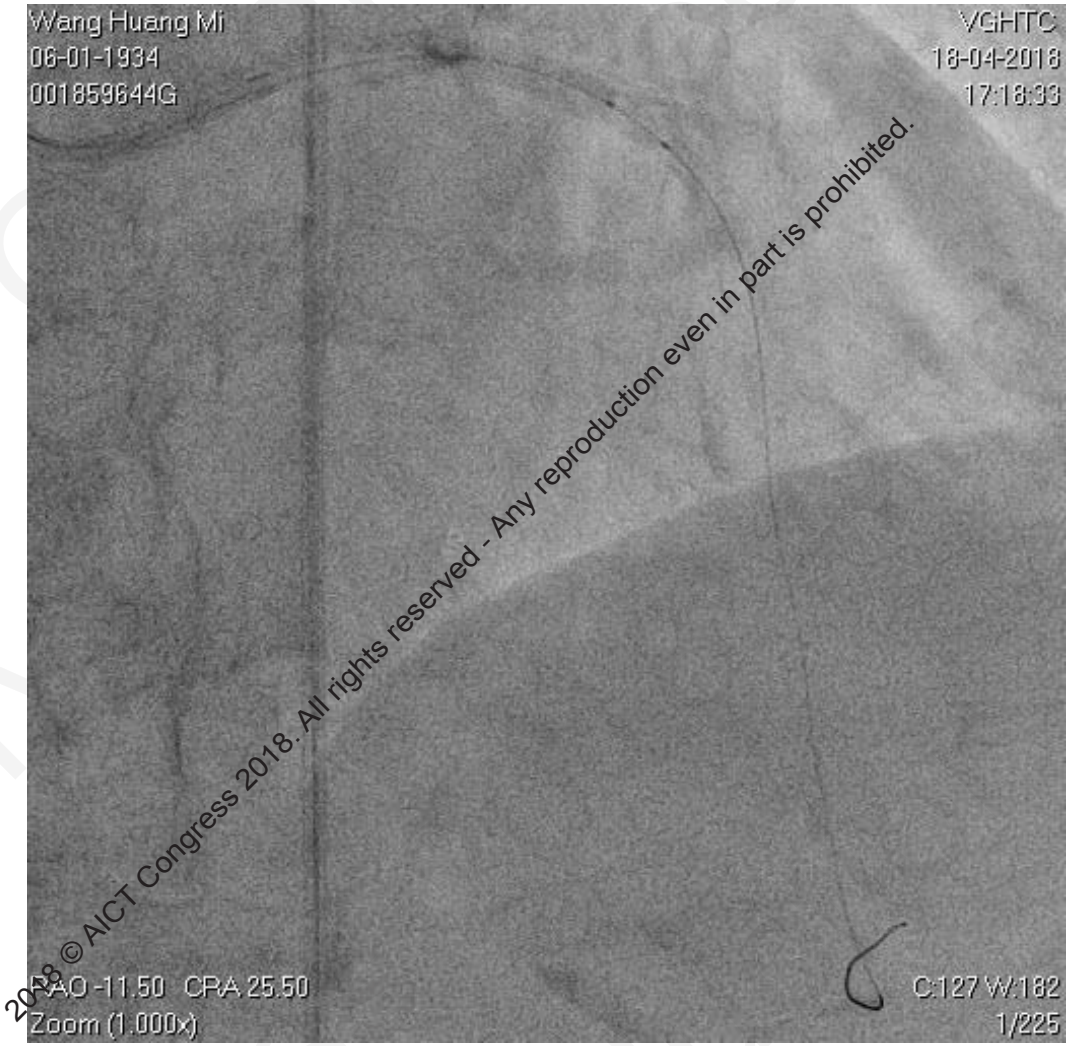
2.5x12mm NC BC, 2.5x8mm NC BC





Go back to rota, 1.75mm burr → Fully dilated





IVUS-guided and Crusade-assisted culotte stenting

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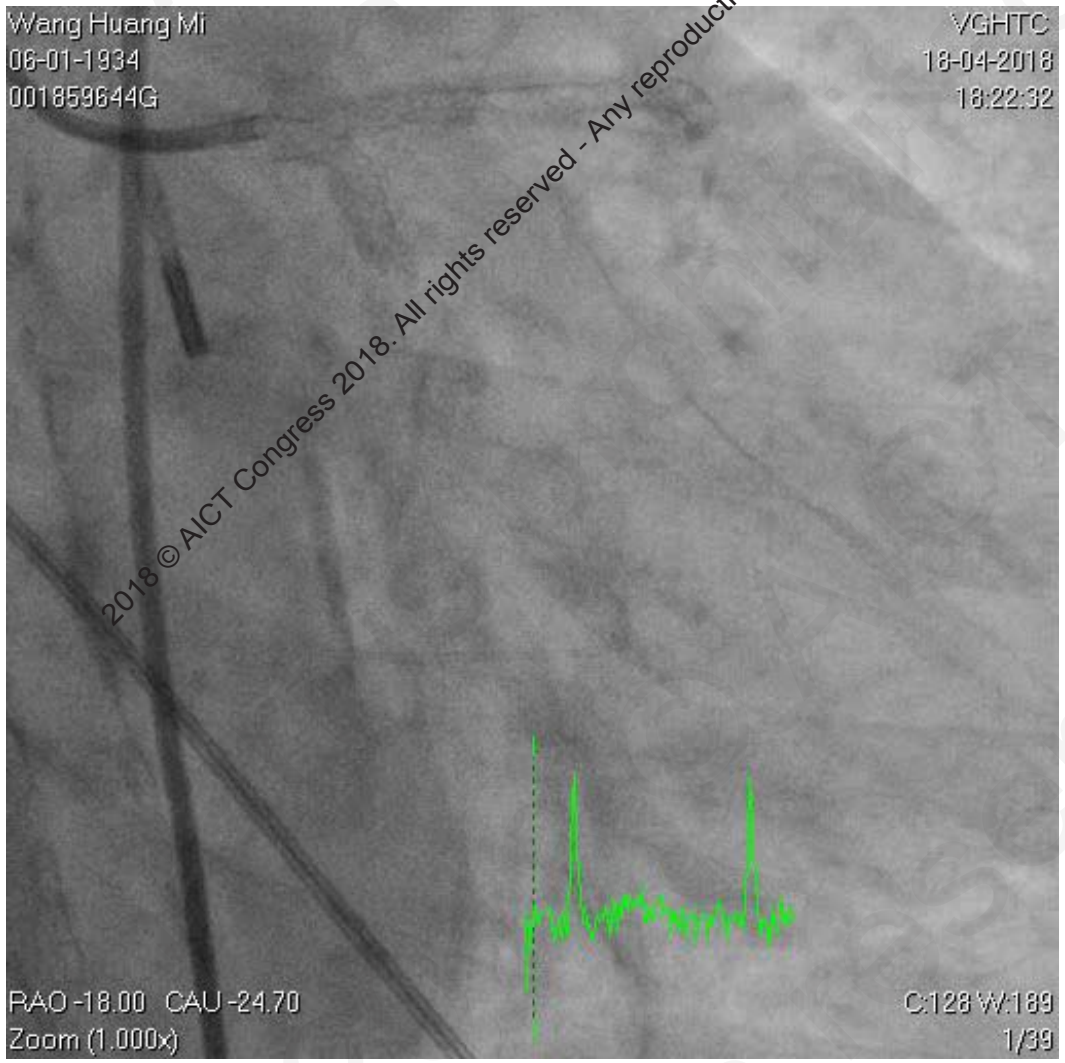
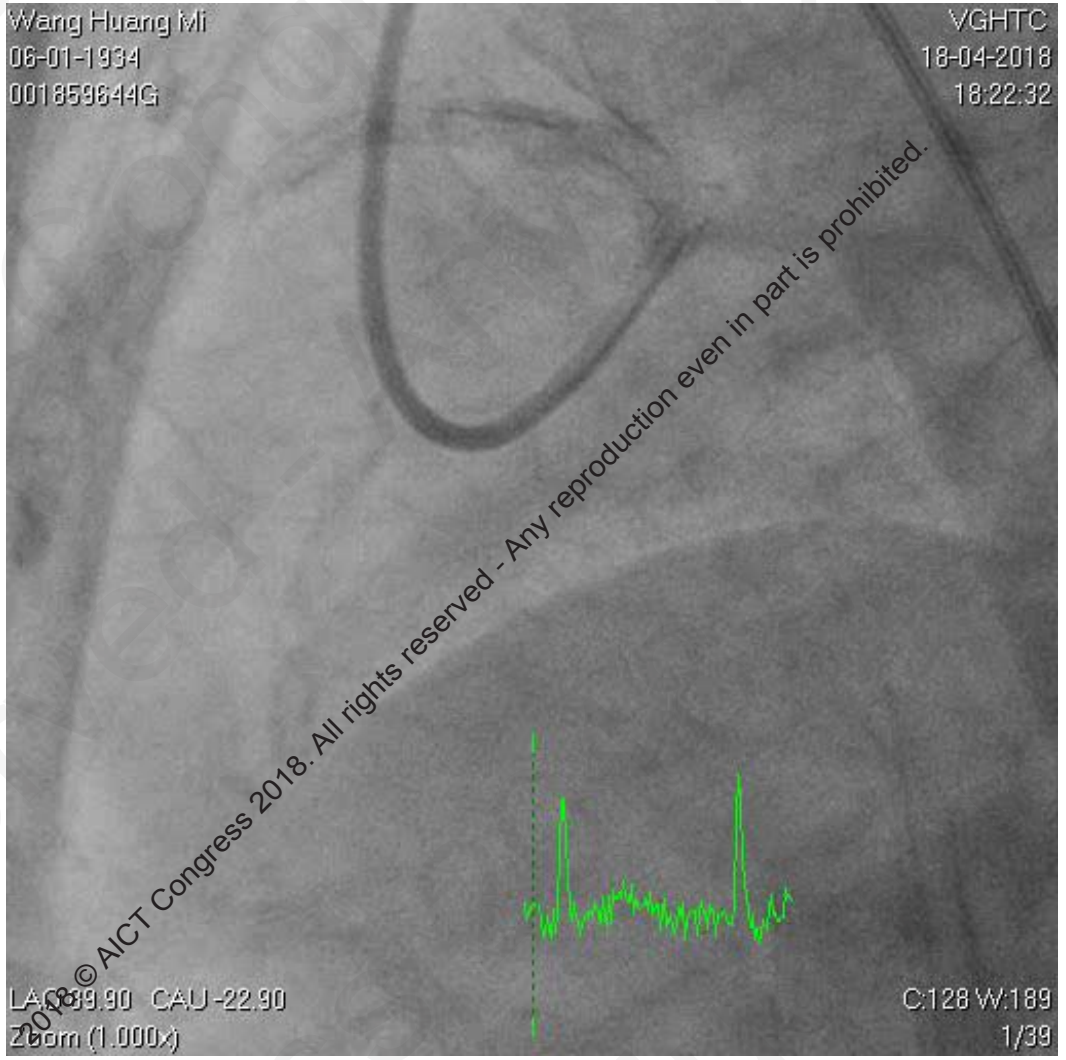
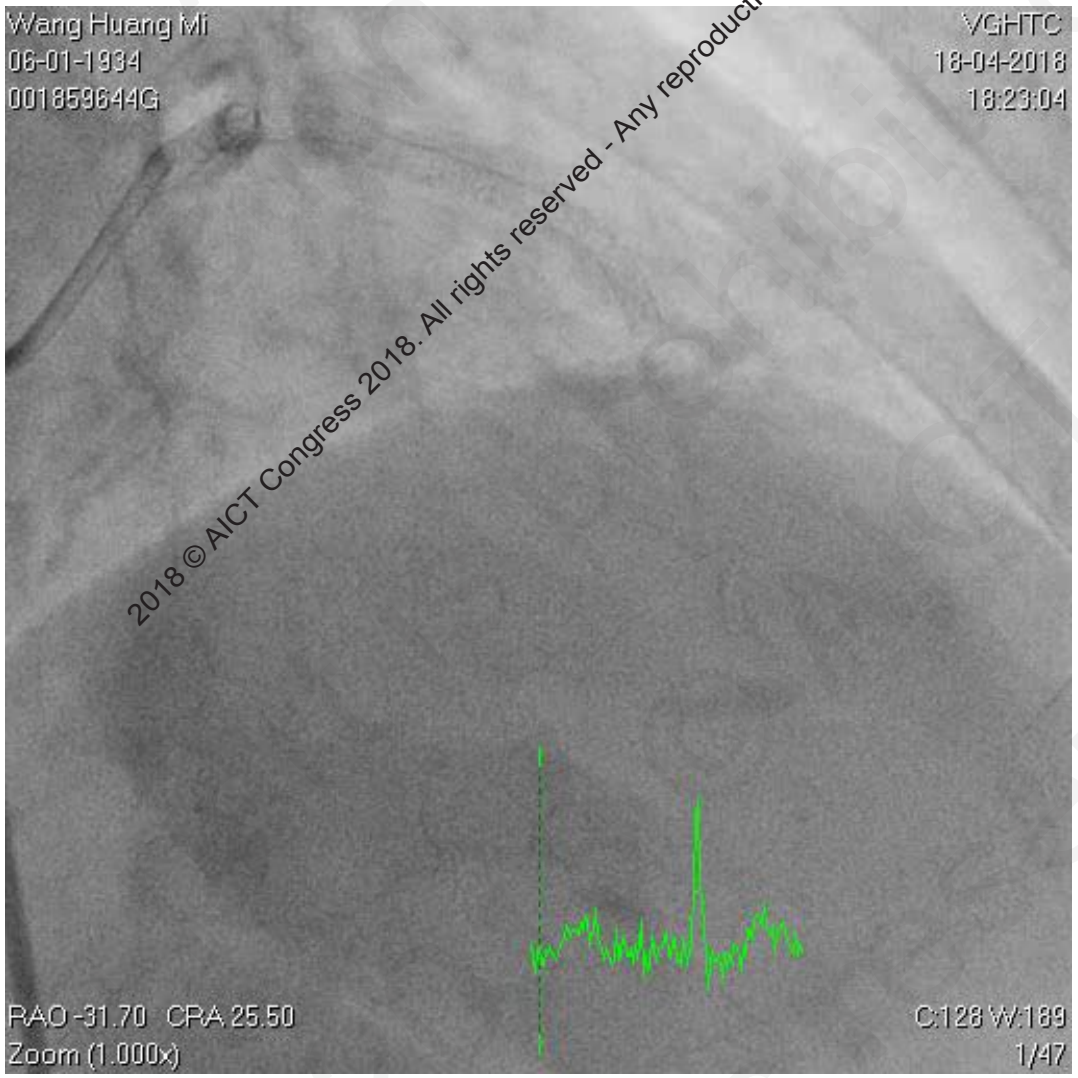
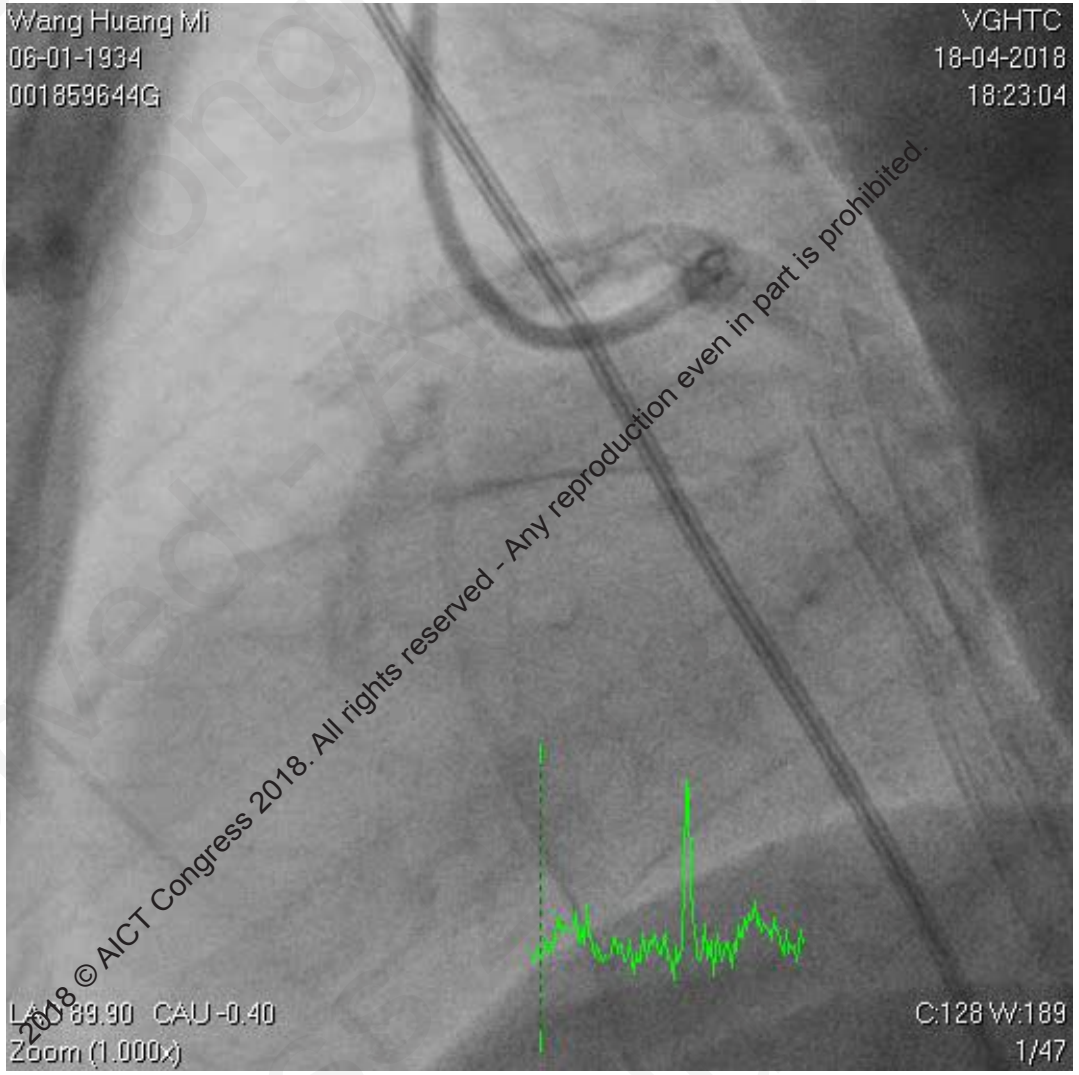
Final angio

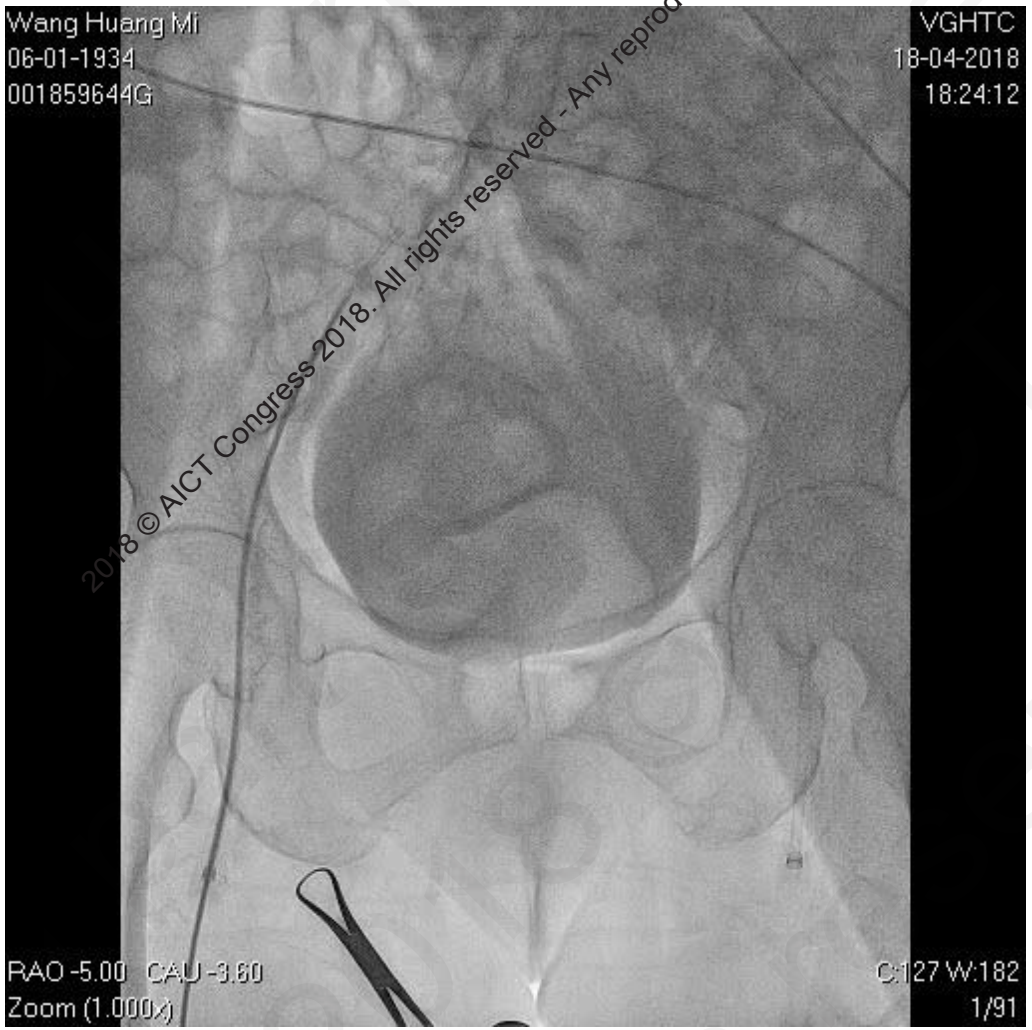


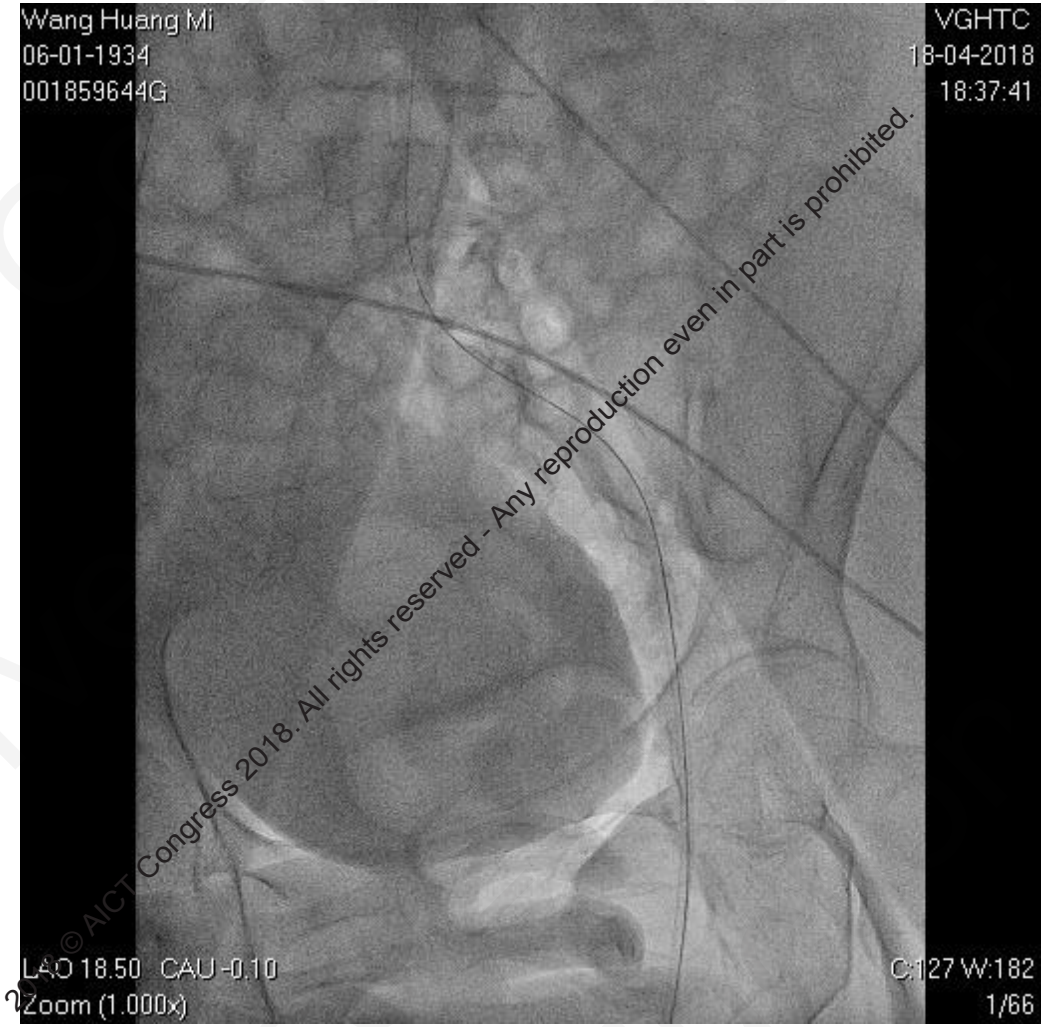






Bil femoral angio and 8F angiosealing





Procedural details

- Procedure time: 4 hours 50 minutes
- Fluoro time: 89 minutes
- Contrast medium: Omnipaque 250ml

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Hospital course

- MBD the next day
- On Bokey + Ticagrelor

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Take-Home Messages

- For CHIP PCI, detailed treatment plan tailored to a single patient is needed
- Patience in wiring could be very rewarding.
- Bias cutting used for debulking the calcified plaque at ostial LCX lesion located at inner curvature of acute angulation
- Rota-extrasupport wire required for burr to track through >90^0 acute angulation to treat LCX lesion
- Excellent culotte stenting result facilitated by two vessel rotablation

Thank you for your attention!

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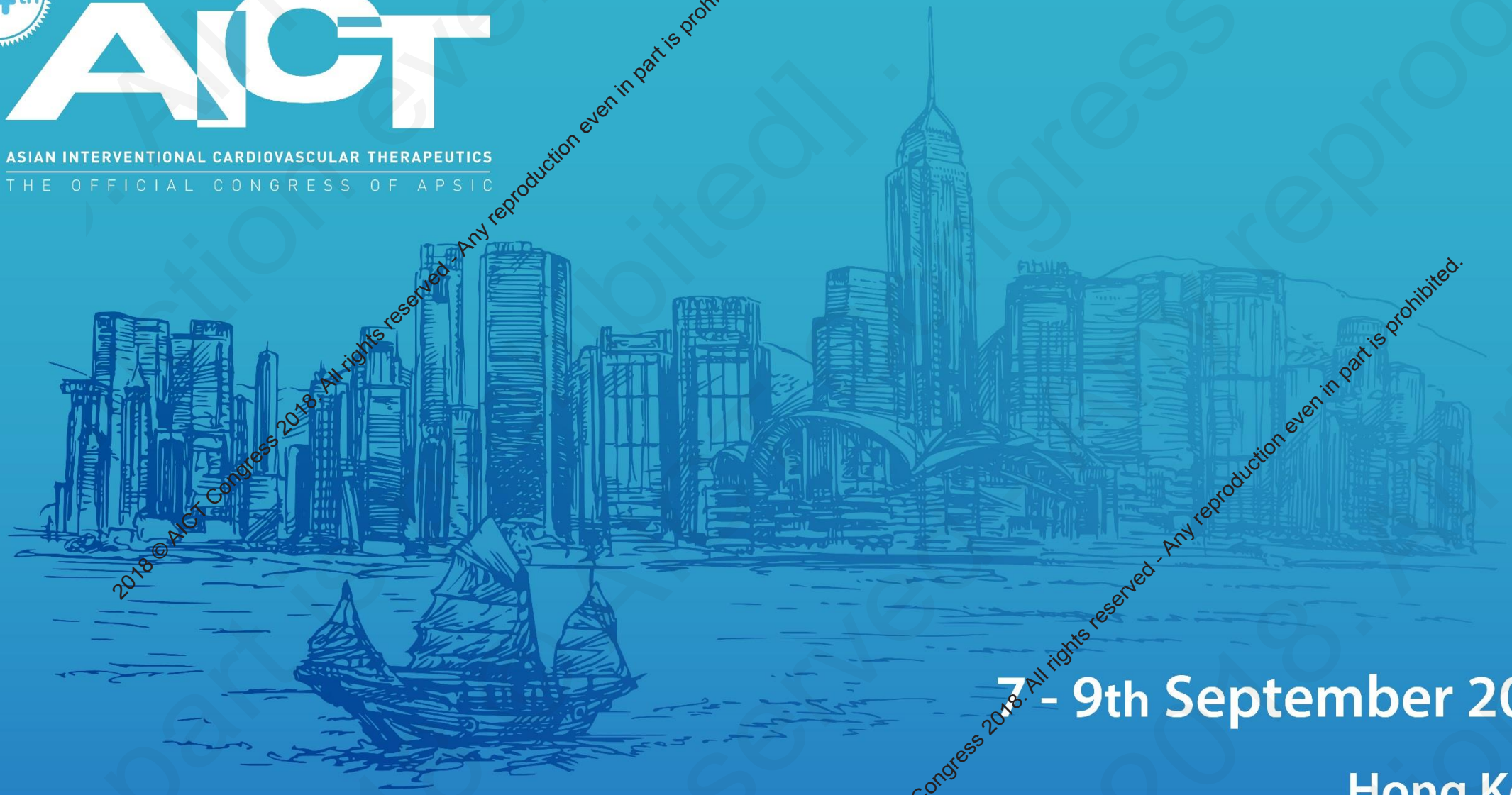

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