



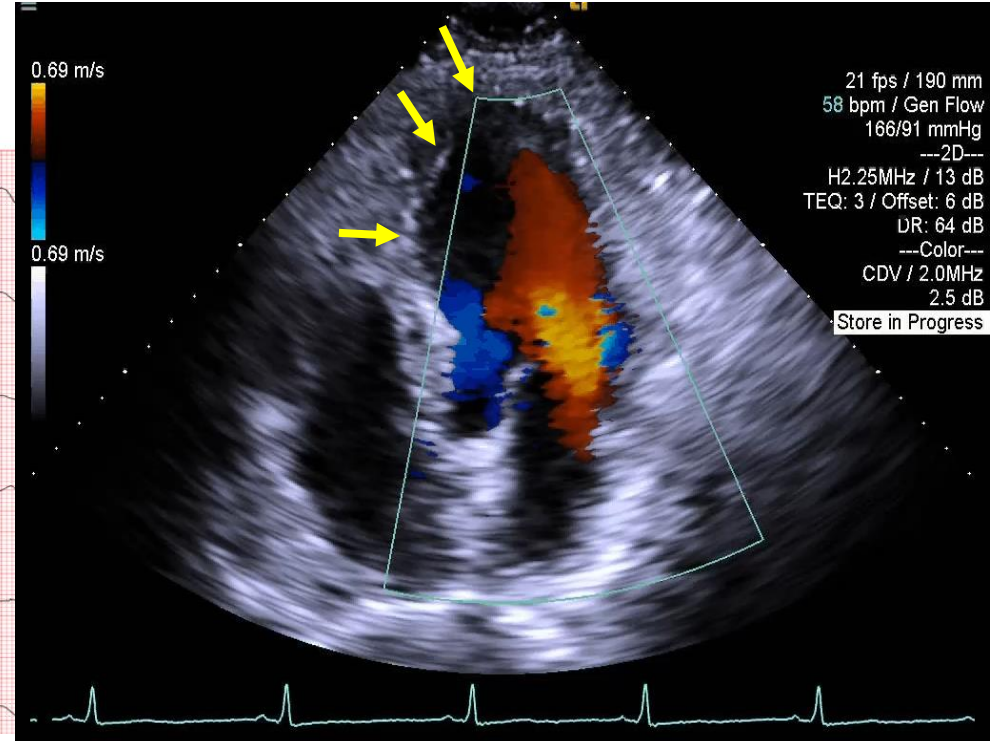
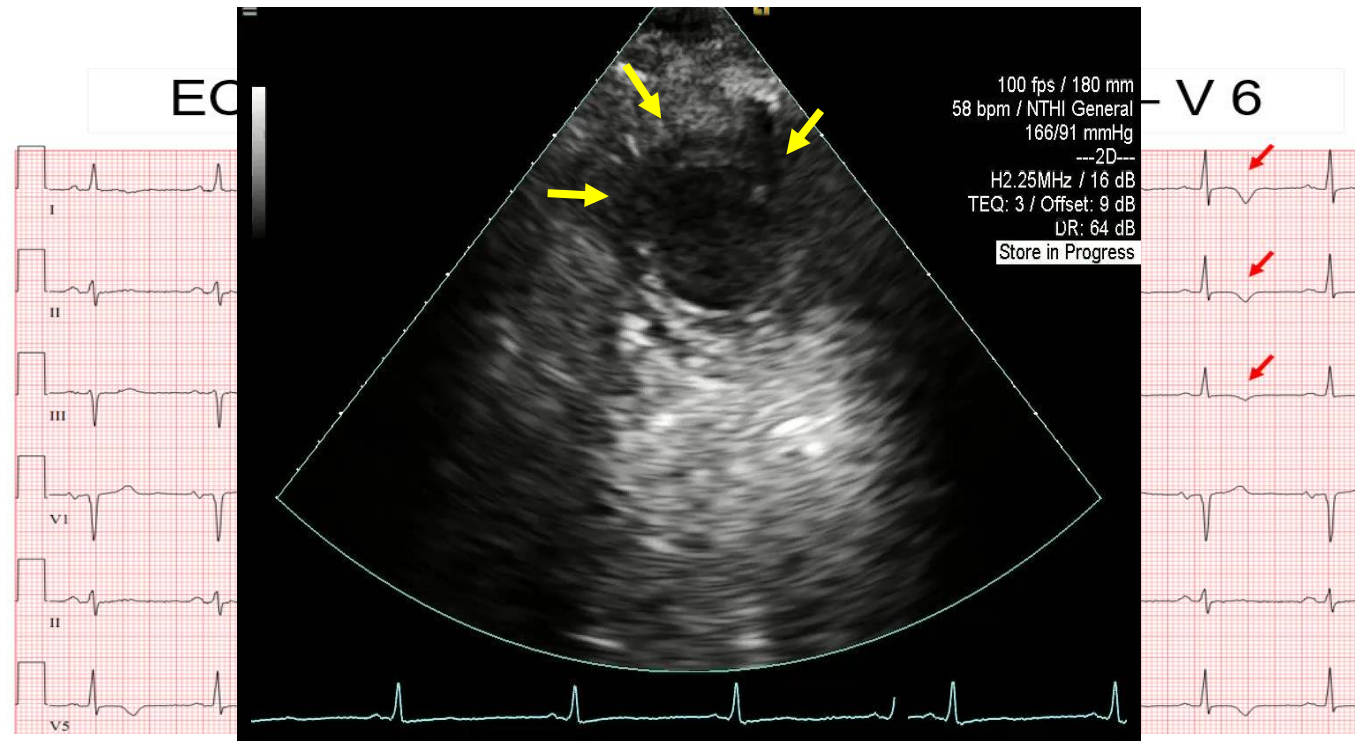
The challenge Antegrade LAD CTO PCI guided by Ipsilateral Collaterals

Case History

- 75 y/o male patient.
- NSTEMI(Palpitation, CP, SOB).
- h/o paroxysmal AF & TIA one year ago.
- CAD risk factors: NIDDM, HTN, Ex-smoker.
- 7 months ago: NSTEMI but he refused coronary Angio.

Echocardiography

- EF 43 % , LV DD grade I , LVH, Sclerosed AV, mild MR,.
- SWMA: hypokinesia of mid-apical segments of infero-septum, anterior wall & apex.



CTO LAD + tight mid-RCA lesion
(2 vessel CAD + Diabetes)

After Heart Team Discussion And Multidisciplinary Meeting With The Family

Patient Refused CABG

Our Strategy

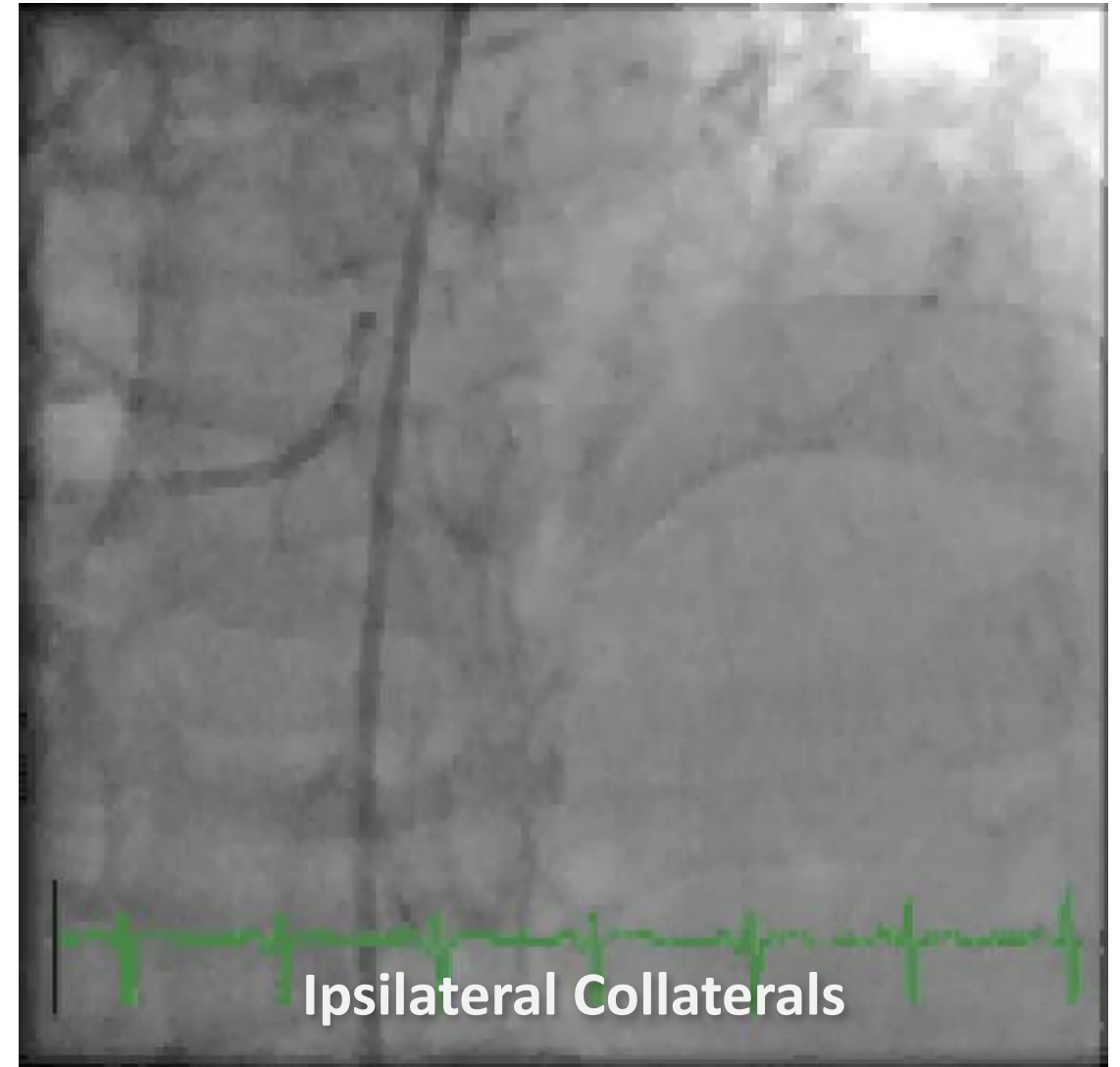
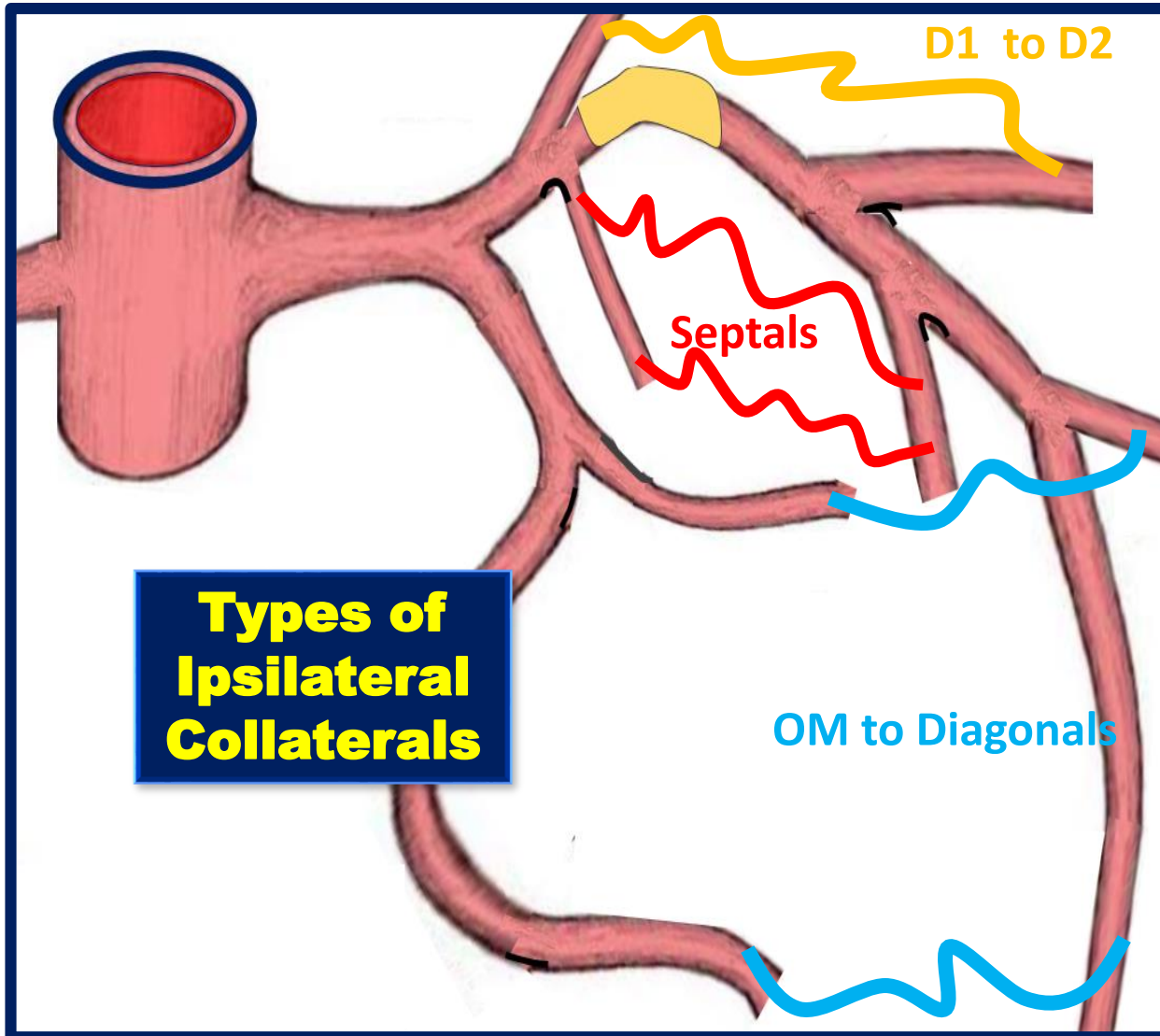
(PCI Road Map)

Single Guiding-Catheter Strategy

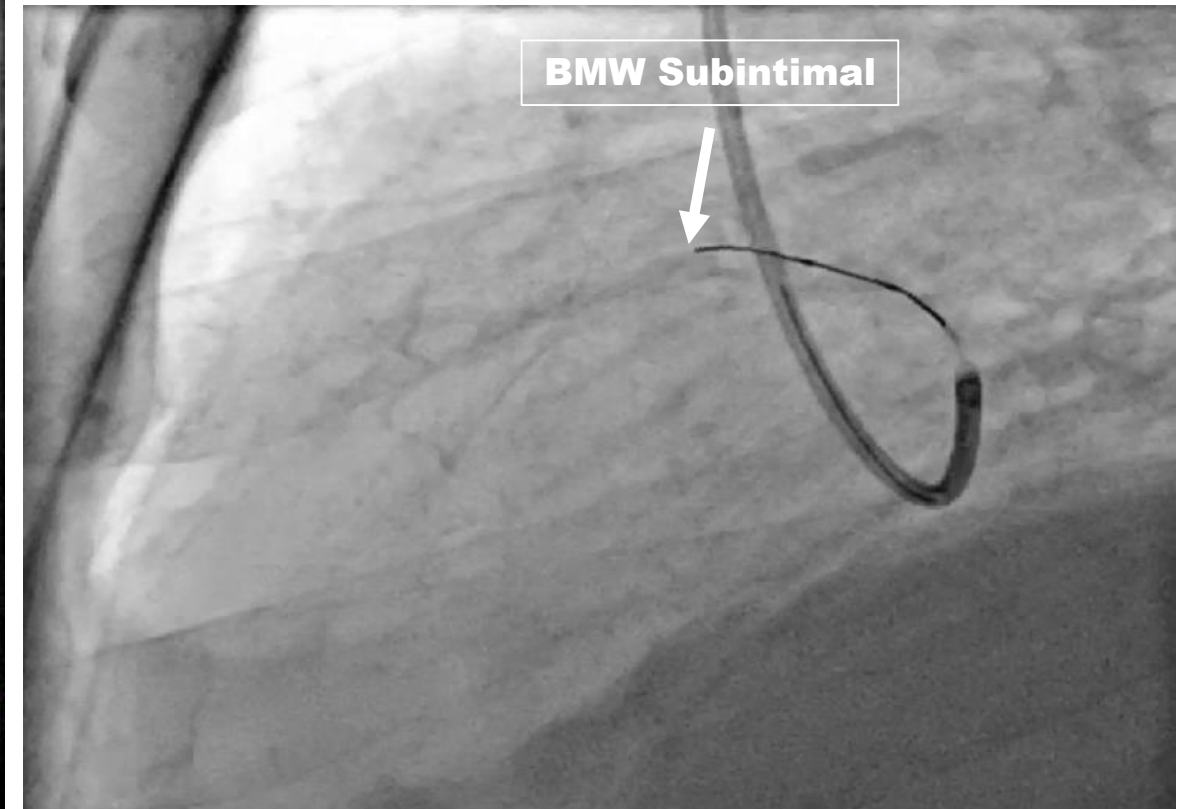
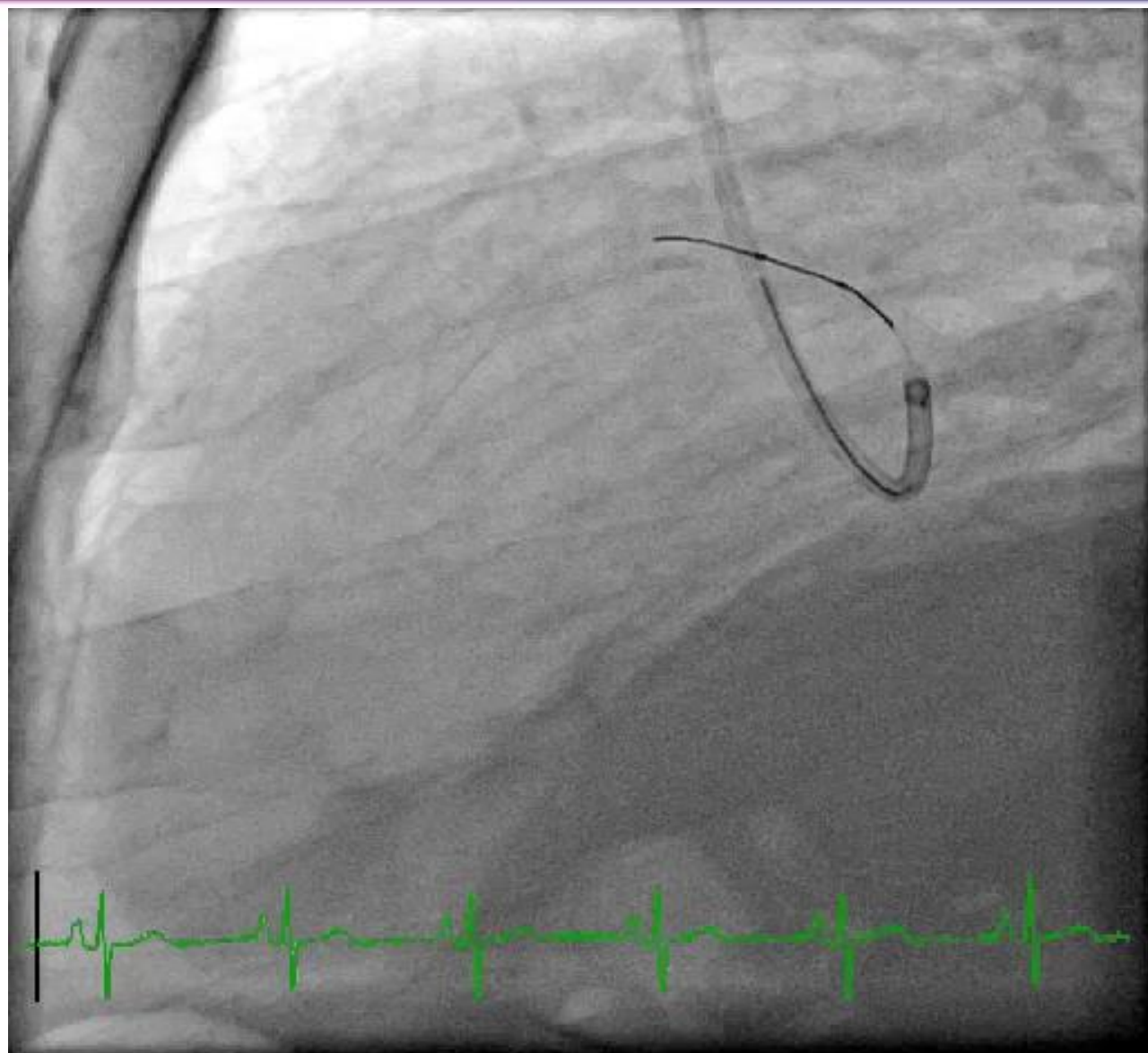
(No Dual Injection)

- Antegrade approach guided by Ipsilateral collaterals.
- Escalating wire strategy (Soft – up to -- **Stiff**).
- Escalating balloon dilatation.
- DES stent.

Ipsilateral Collaterals



Wire In Subintimal Space



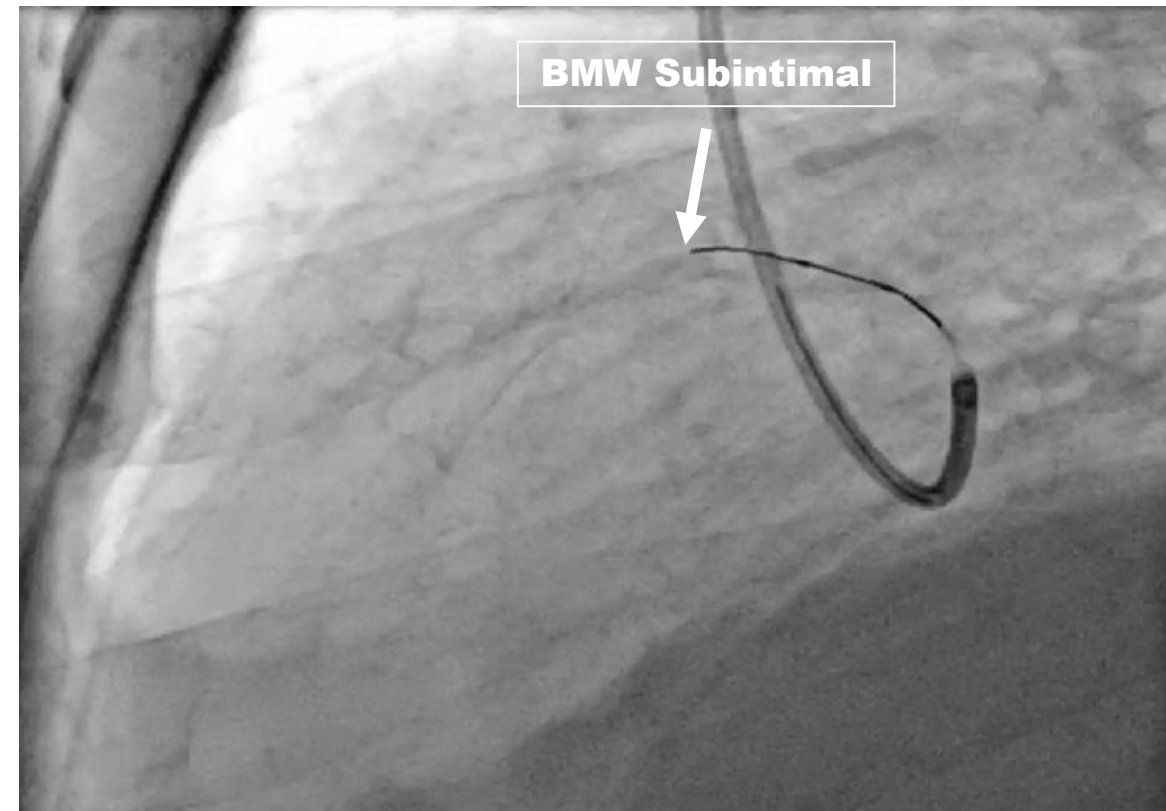
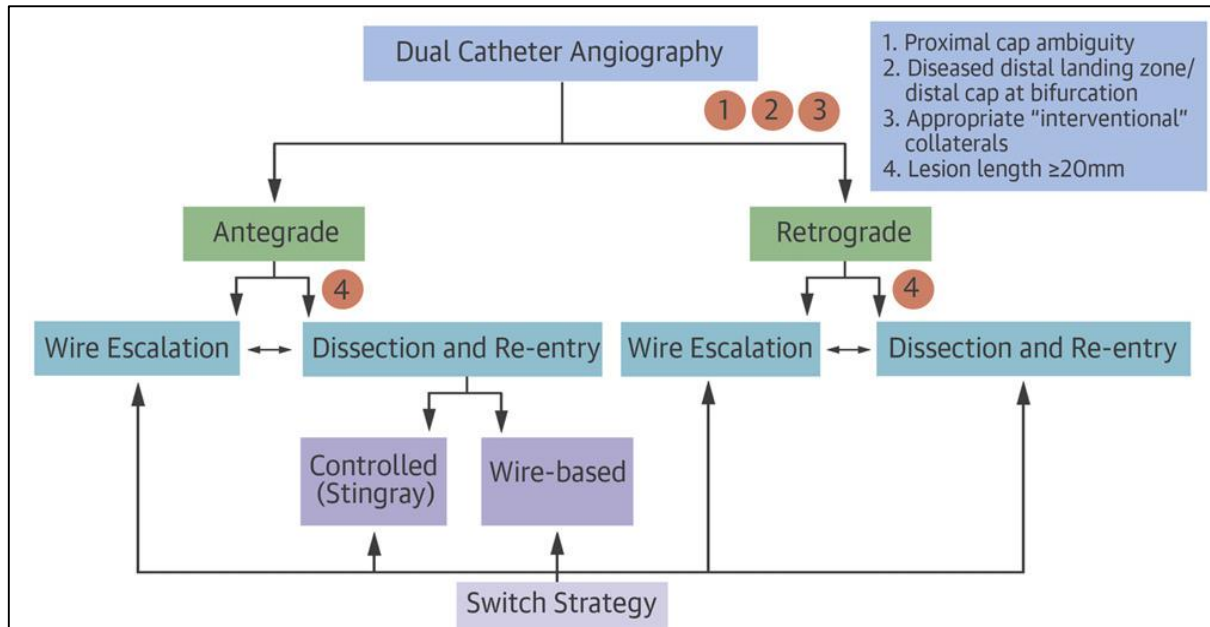
Wire In Subintimal Space ?

If the guidewire goes subintimally, either:

- 1- Parallel wire technique
- 2- See-saw technique

Otherwise, **Antegrade Dissection Reentry** can be attempted.

Hybrid Algorithm



Parallel Wire Technique

2nd wire **Fielder FC wire** with Small Balloon; then
with corsair micro-catheter

Successful Crossed To Distal LAD

Cross-it 200 Wire & *Corsair Micro-catheter*

BMW

Fielder FC

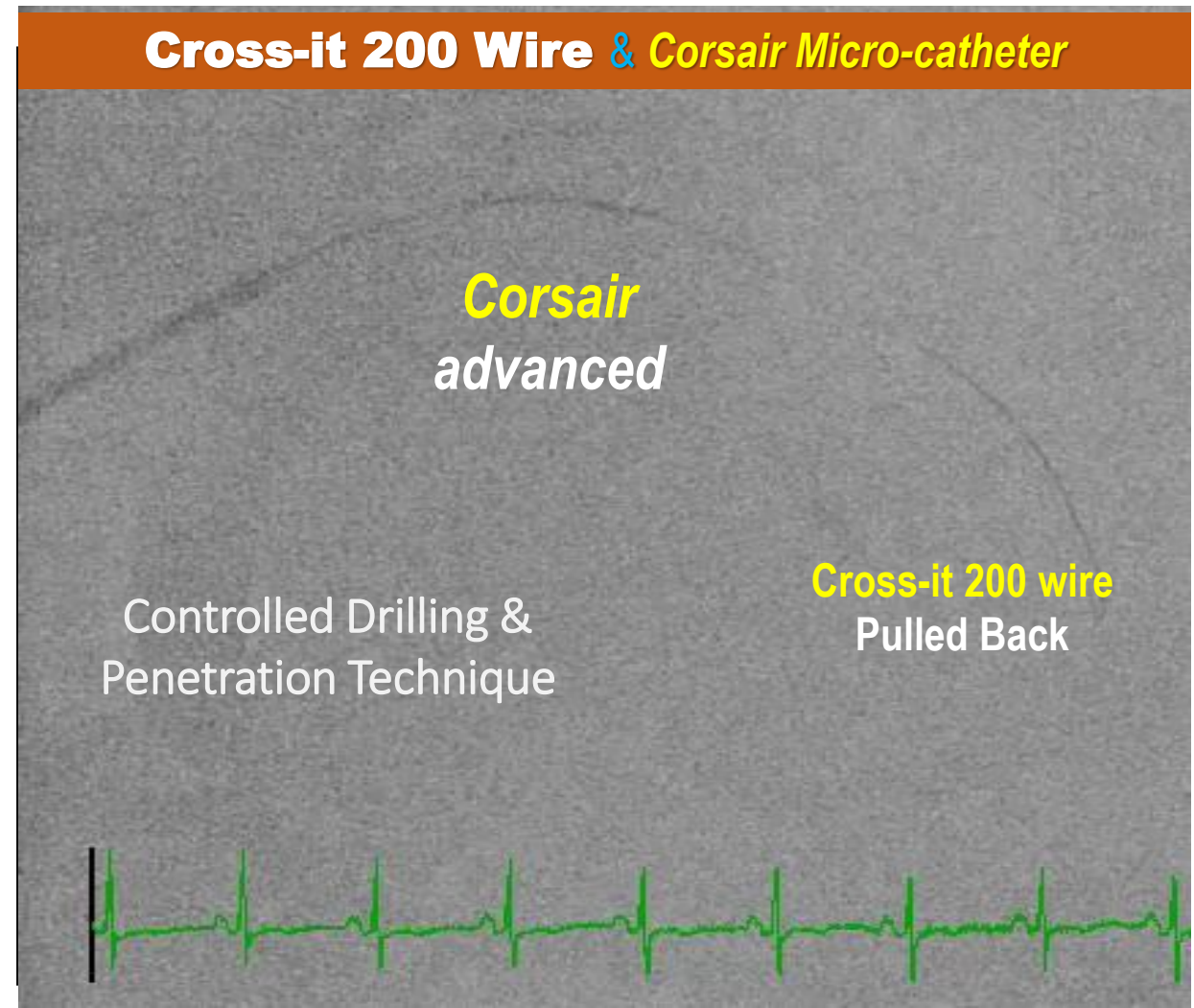
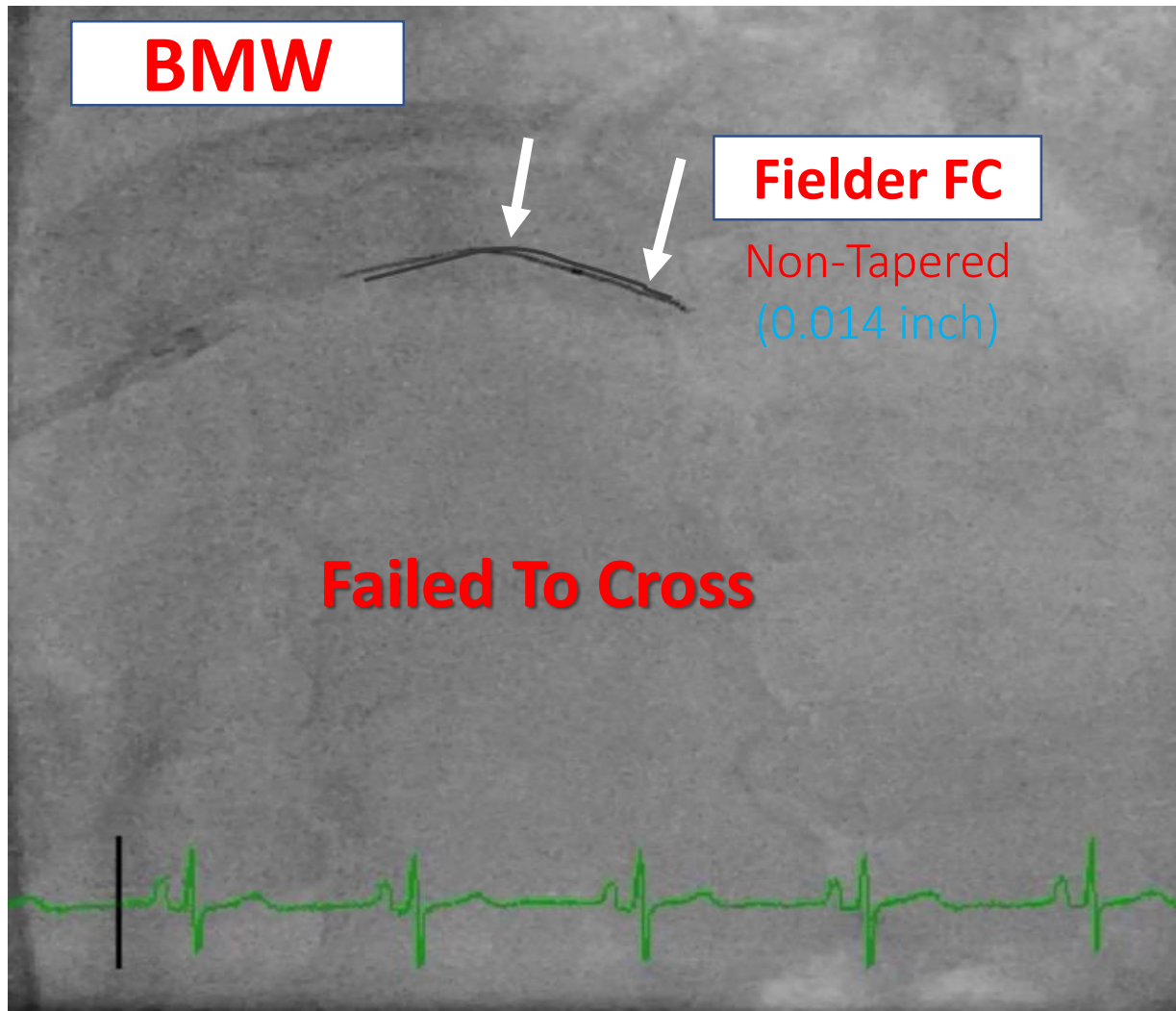
Non-Tapered
(0.014 inch)

Failed To Cross

*Corsair
advanced*

Controlled Drilling &
Penetration Technique

Cross-it 200 wire
Pulled Back



Wire Exchange

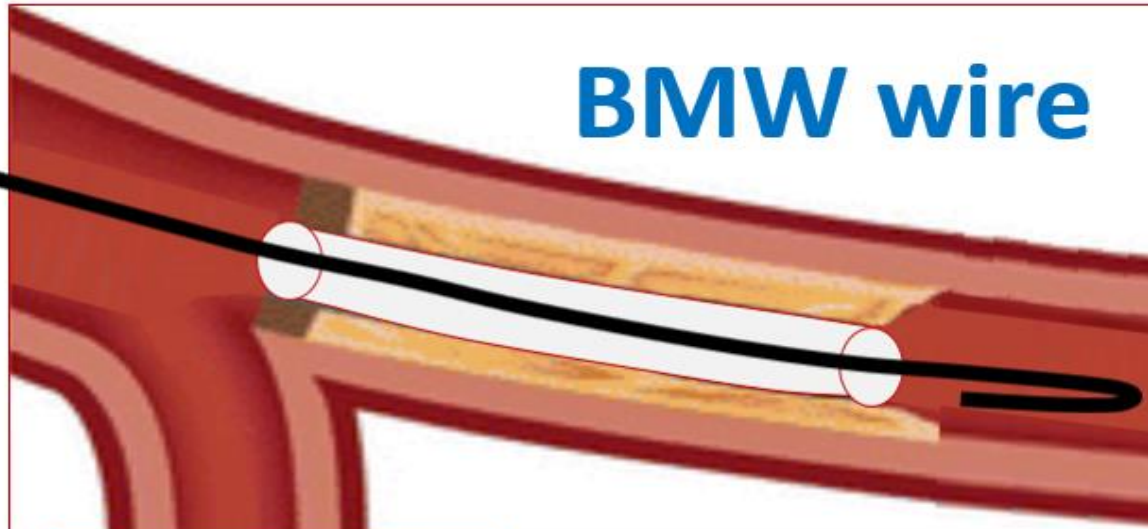
While We Pullback The Corsair



BMW Wire also Pulled With Microcatheter by Assistant?

This what I did ?

Knuckle Wire Technique



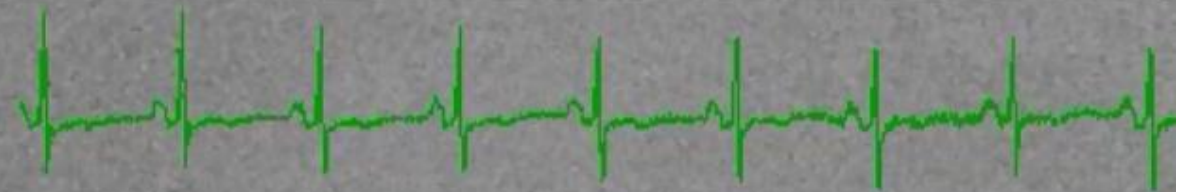
Microcatheter Dilates The Microchannel

Corsair Outer Diameter

- Tip: 0.42 mm.
- Distal: 0.87 mm (2.6 Fr).
- Proximal: 0.93 mm (2.8 Fr).

That the wire Crossed To True Lumen distally

Always Cross with the Microcatheter



Balloon dilatation

Euphoro balloon

2 × 15 mm

12 atm

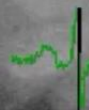
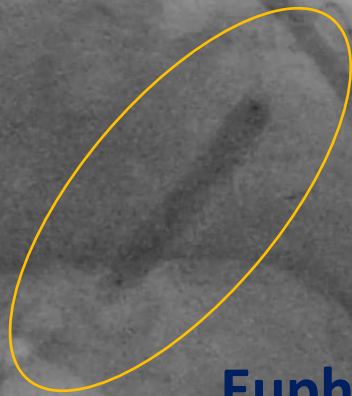


Larger Balloon

Euphoro balloon

2.5 × 20 mm

16atm



After Dilation



Stent Deployment

In Diagonal



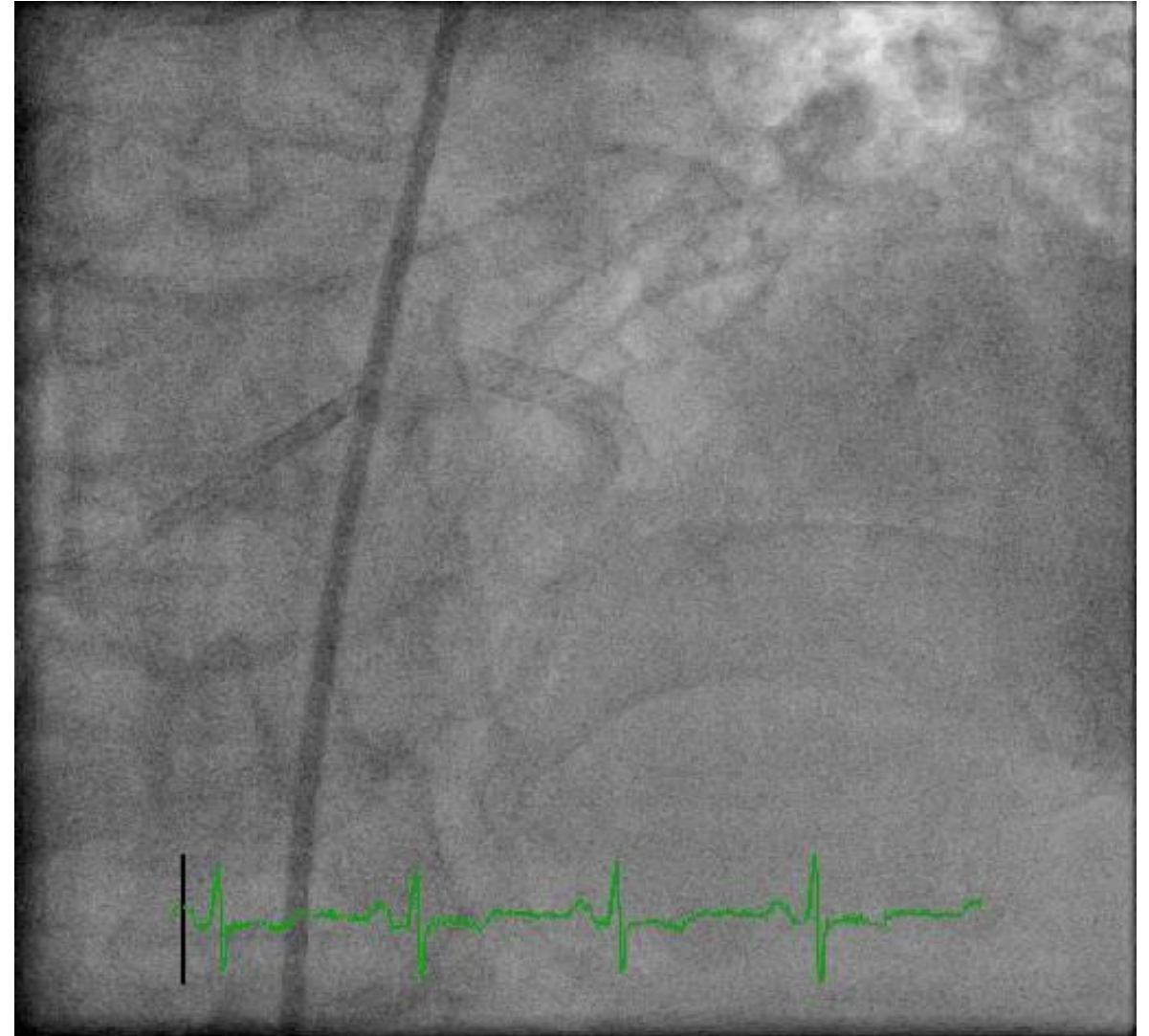
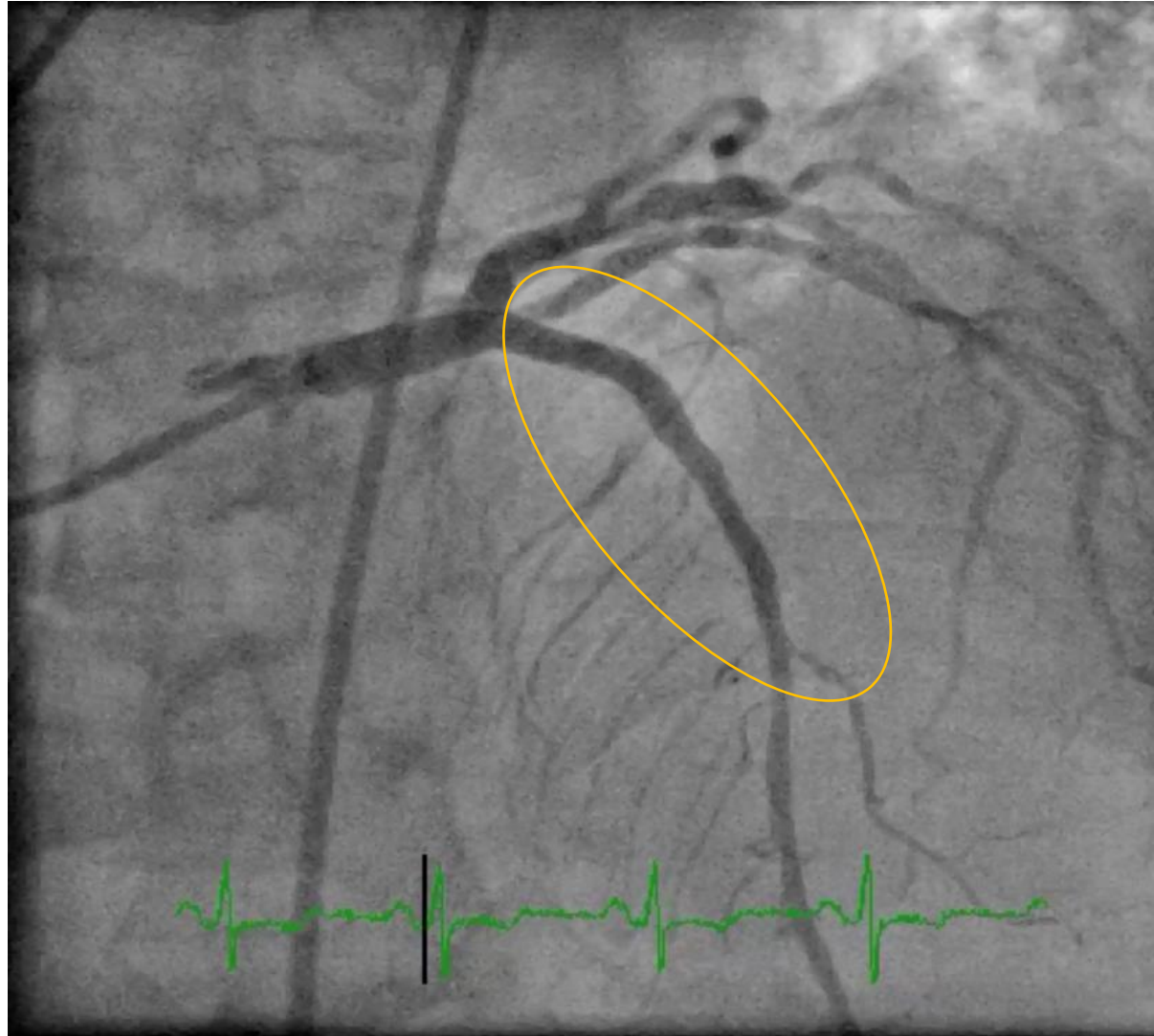
DES 2.75/12 mm

In LAD

DES 3.5 × 26 mm 18 atm



Final Results



Take Home Message

For Your Attention

Dual Injection Is The Standard Of Care For Appropriate and safe CTO Management

