



# Retrograde diagonal branch CTO using homocoronary epicardial branch



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### Patient's presentation



#### Past medical history:

- Ischemic heart disease discovered by stable angina and anteroseptal ischemia 4/17 segments. PCI of LAD with failure to reopen first diagonal branch covered by LAD stent
- Sleep apnea
- Hypertension
- Dyslipidemia

Patient is still symptomatic (chest pain) despite optimal medical therapy Stress myocardial scintigraphy found positive with ischemia on 3/17 segments despite treatment

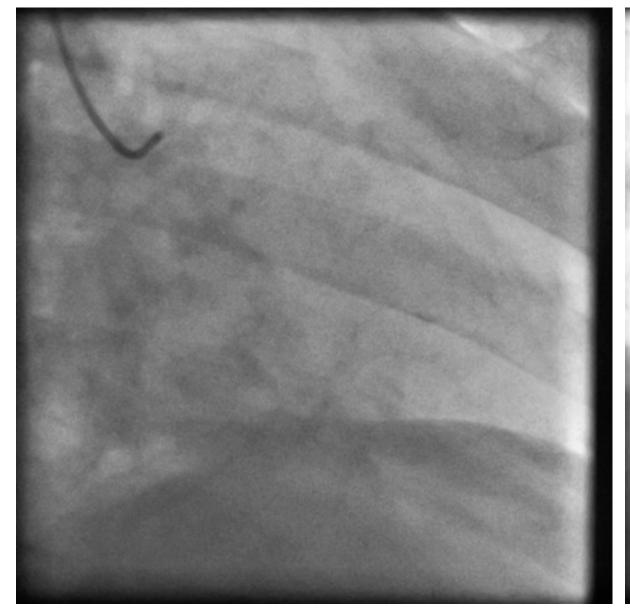
### Traitement

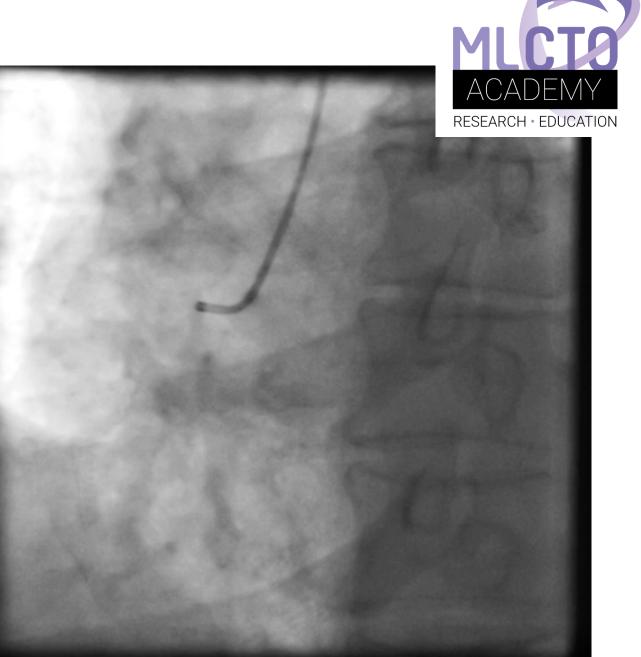
- Calcium blocker
- Molsidomin
- Statin
- Acetyl salicylic acid
- Beta blocker



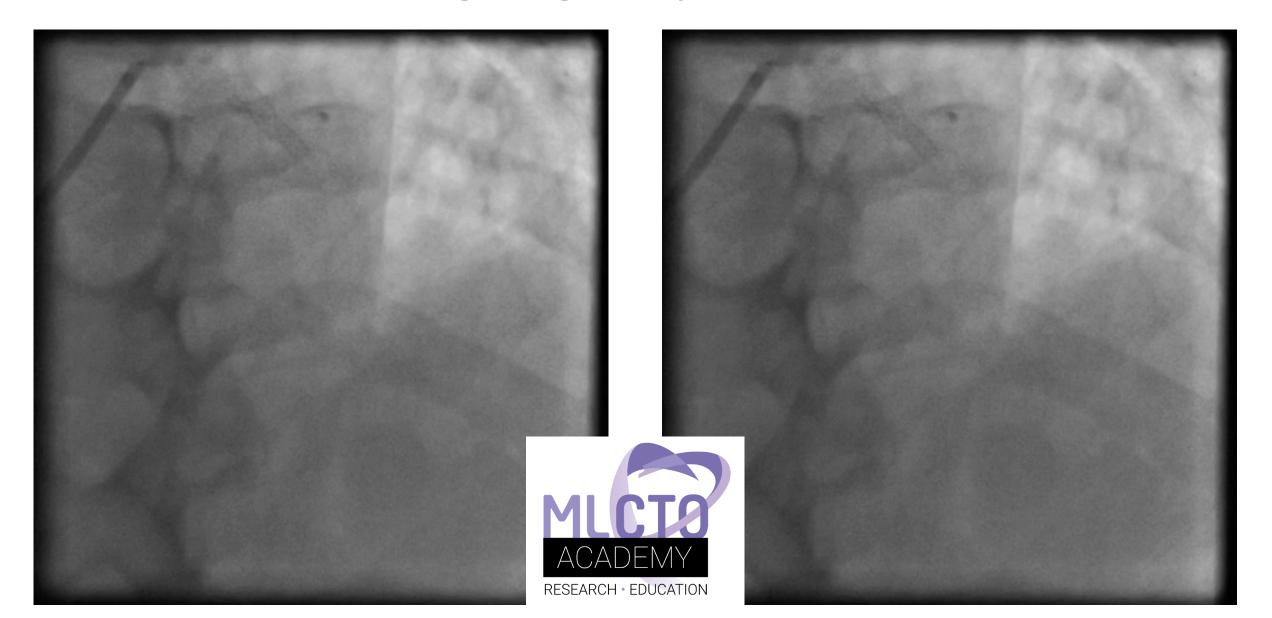


## Right coronary artery

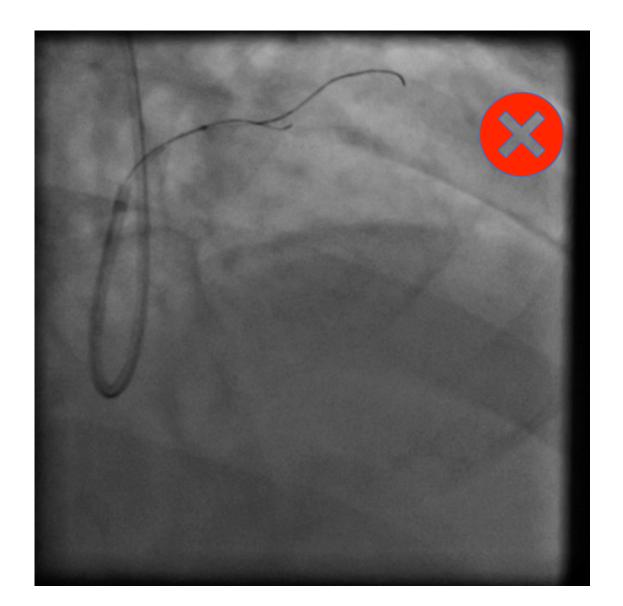




## Short CTO of ostial 2nd diagonal branche with competitive flow Rentrop 2 originating from apical LAD

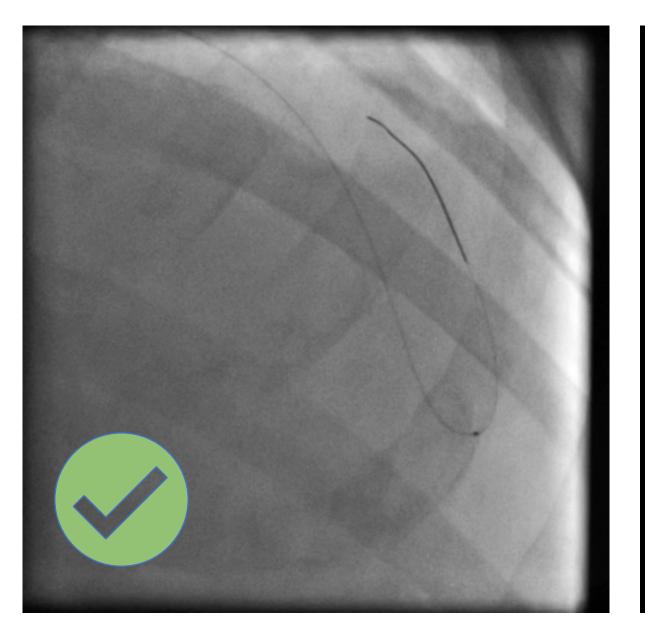


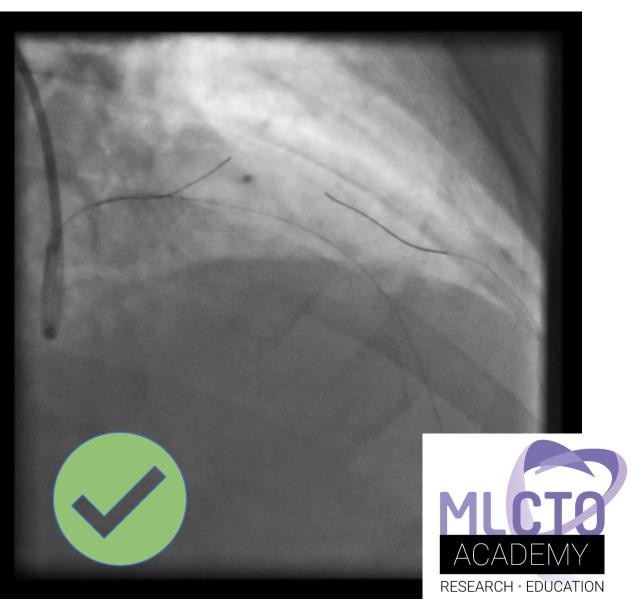
## First try of antegrade wiring with micro catheter finecros and Fielder XT then Progress 140



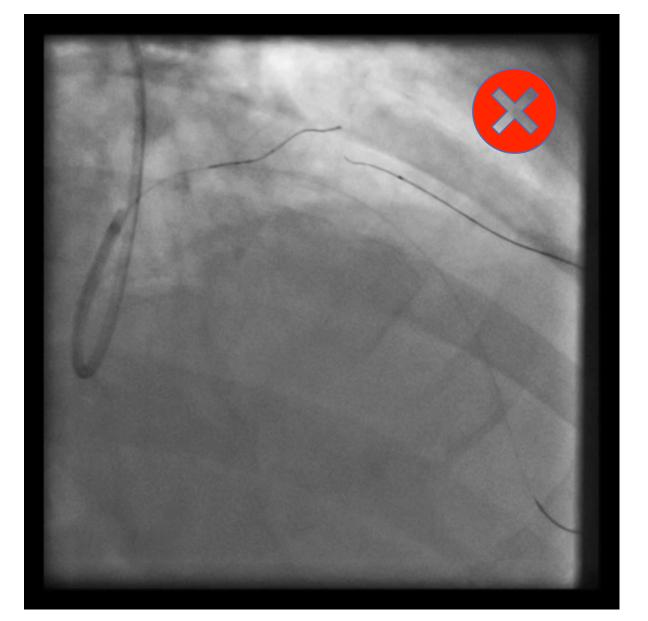


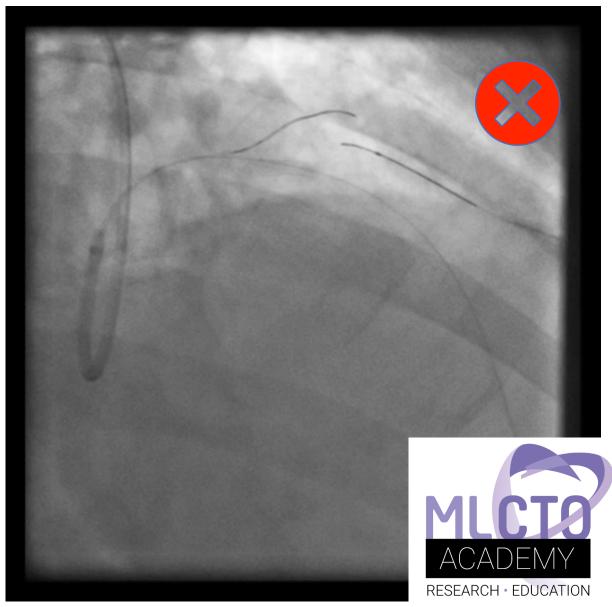
## Decision to change approach with retrograde wiring using epicardial branche from apical LAD with Finecross 150 and Sion



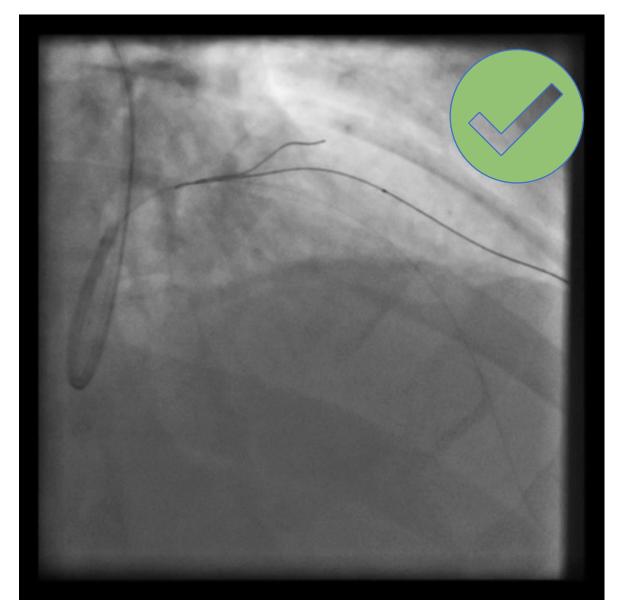


### Crossing failure with Sion and then Gaia 2



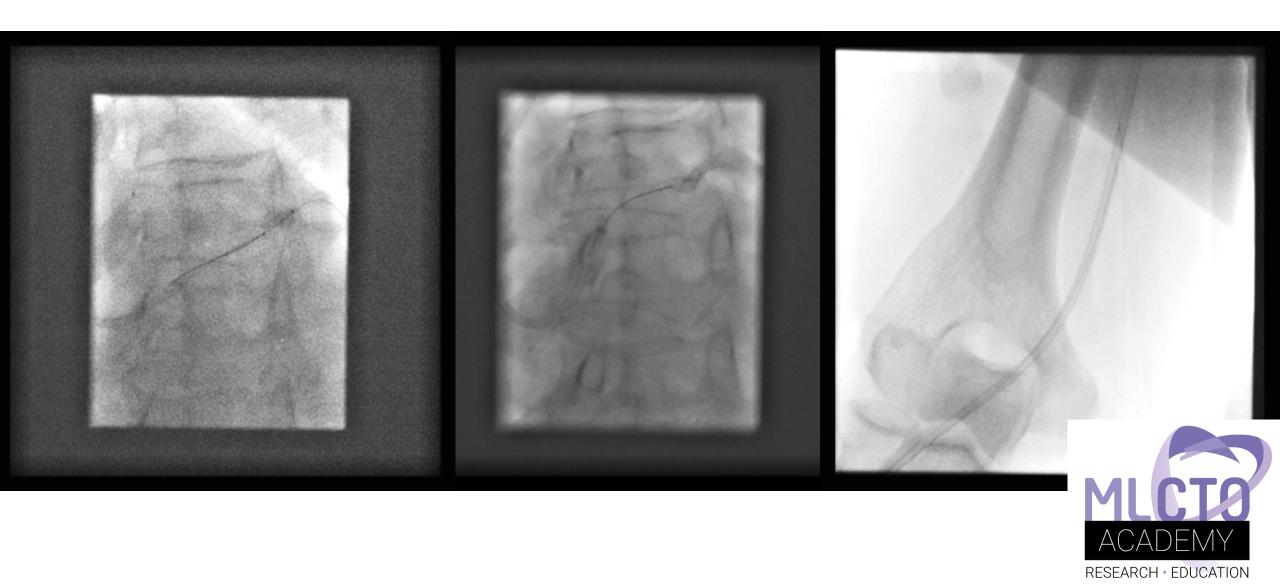


## Wire crossing with Gaia 3 Microcatheter is advanced past the CTO

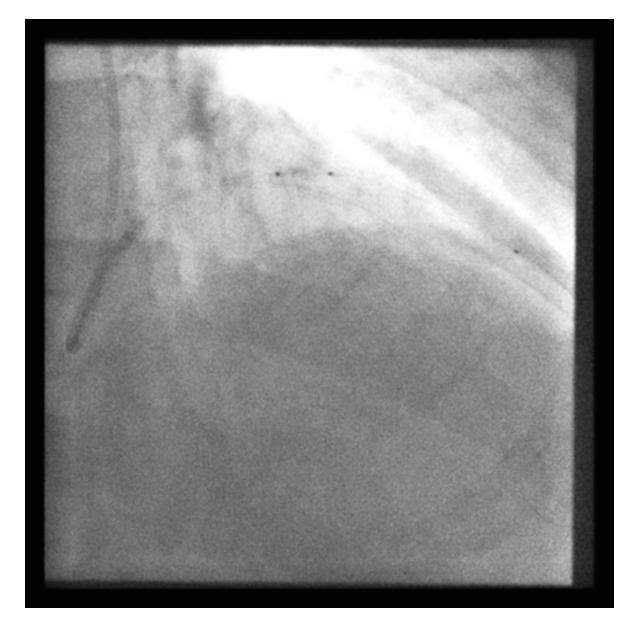


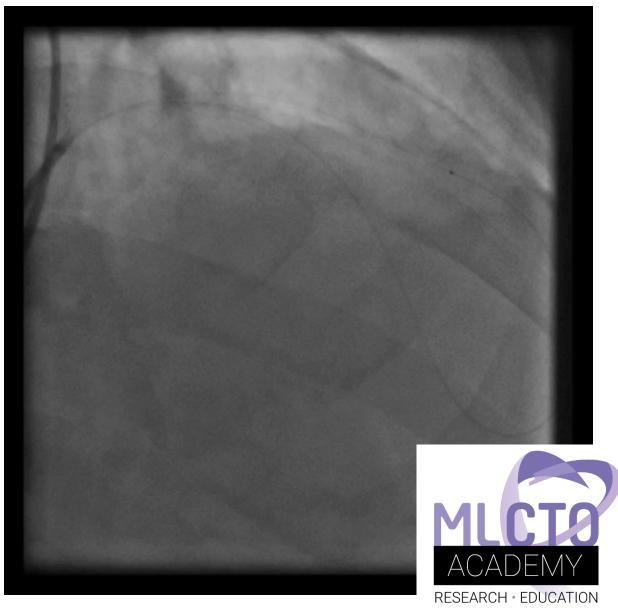


## Microcatheter externalization in EBU 3.75 7french guiding Exchange and introduction of RG3 wire of 330 cm externalized in radial sheath

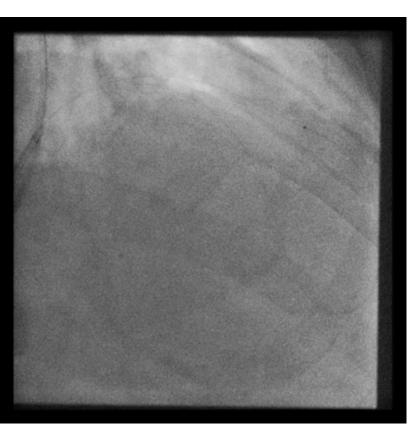


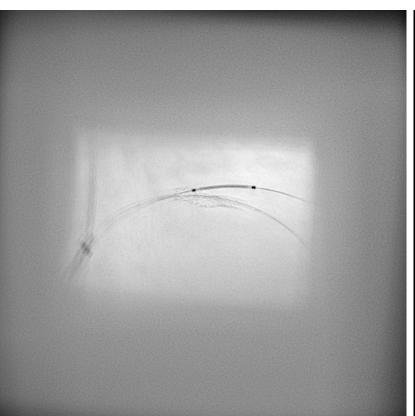
### Antegrade dilatation with 1.0 x 12 mm balloon through LAD stent strut

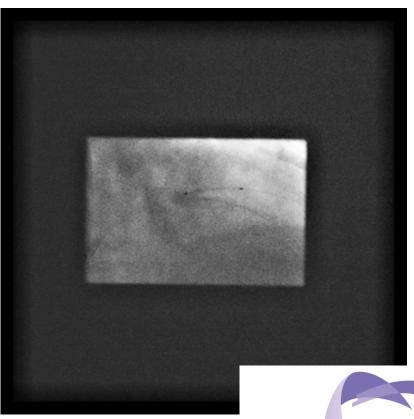




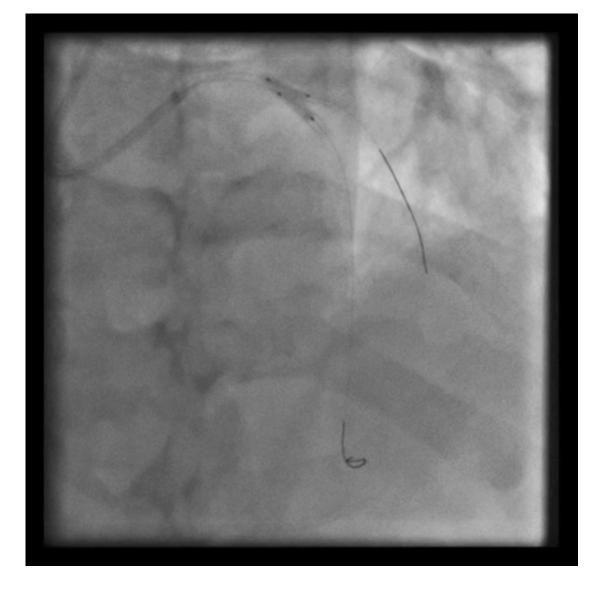
### Successfull implantation of Orsiro 2.5 x 15 mm on 2nd diagonal ostium

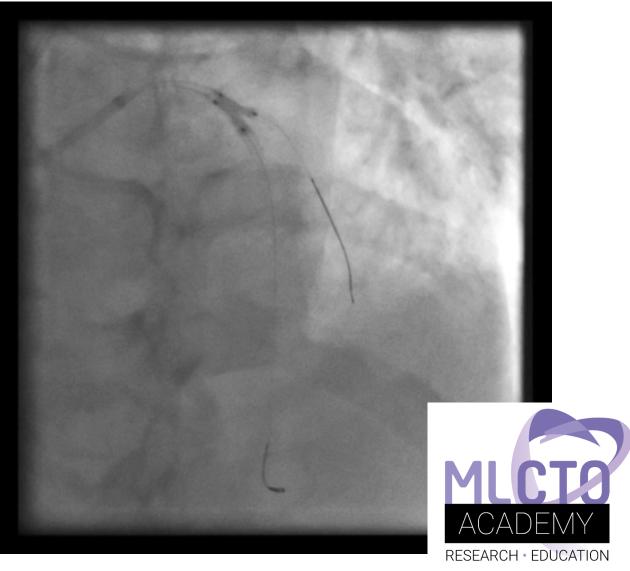




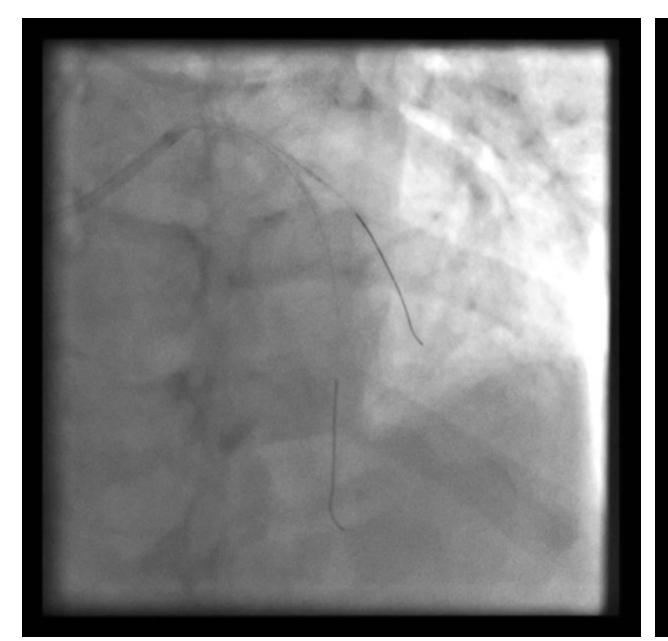


## Final Kissing LAD/Diagonal



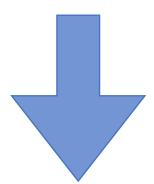


### Final result



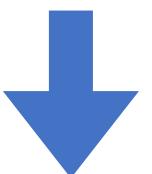


### Complex CTO



Ostial diagonal Stent covered ostia J-CTO score 2

### Mini invasive PCI



Radial
Retrograde with
single access
7F sheathless (6F)

### Most but not least....

At three month follow up, patient remain free of angina

