

DCB-only treatment for left main disease

Hui Lin

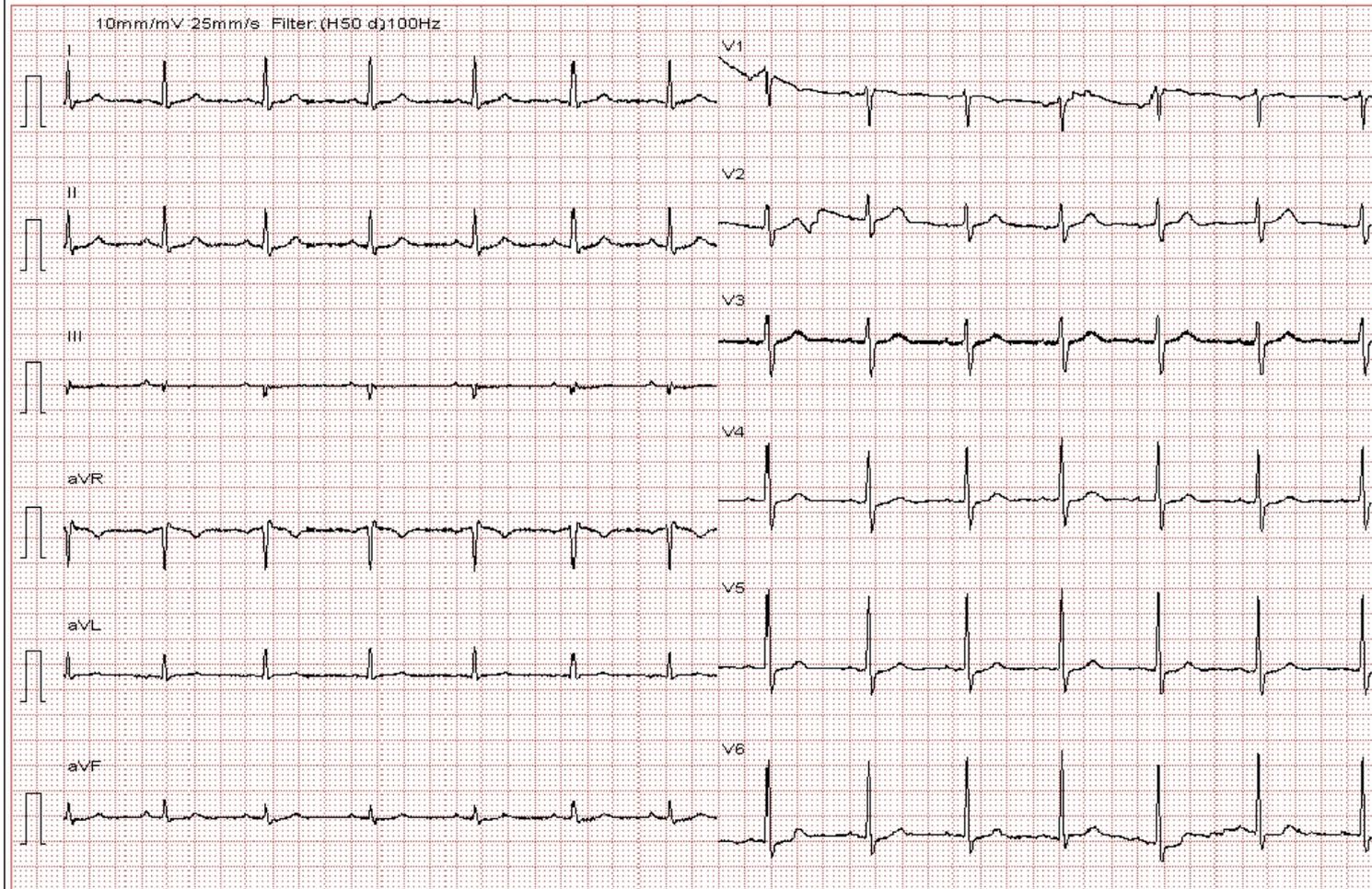
Ulsan Medical Center, Ulsan Hospital, Korea

Dec, 14, 2019

Case 1

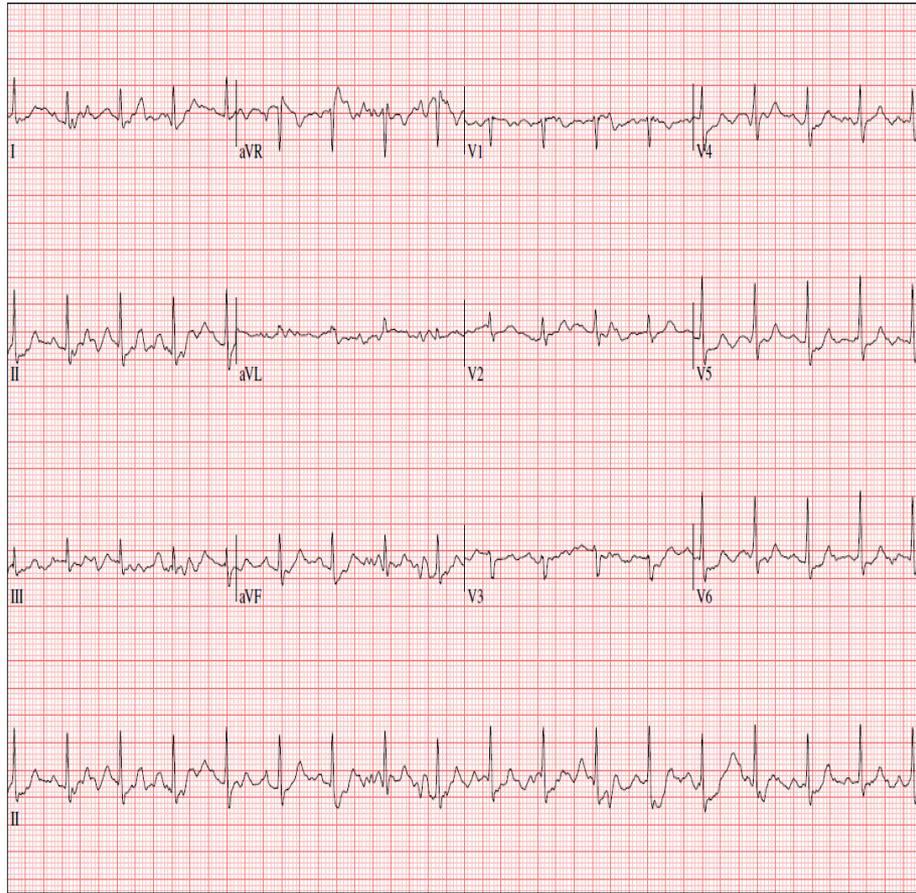
- M/61
- Chief complaint: effort related chest pain for 2 months
- PMH: none
- Risk factors: current smoking
- Lab: T-chol 235/HDLc 43/LDLc 208/TG 138 mg/dl
Hb 15.7 g/dl, Cr 0.84mg/dl, HbA1C 6.0%, TFT: WNL
- EchoCG: EF = 65%, no RWMA

Resting ECG

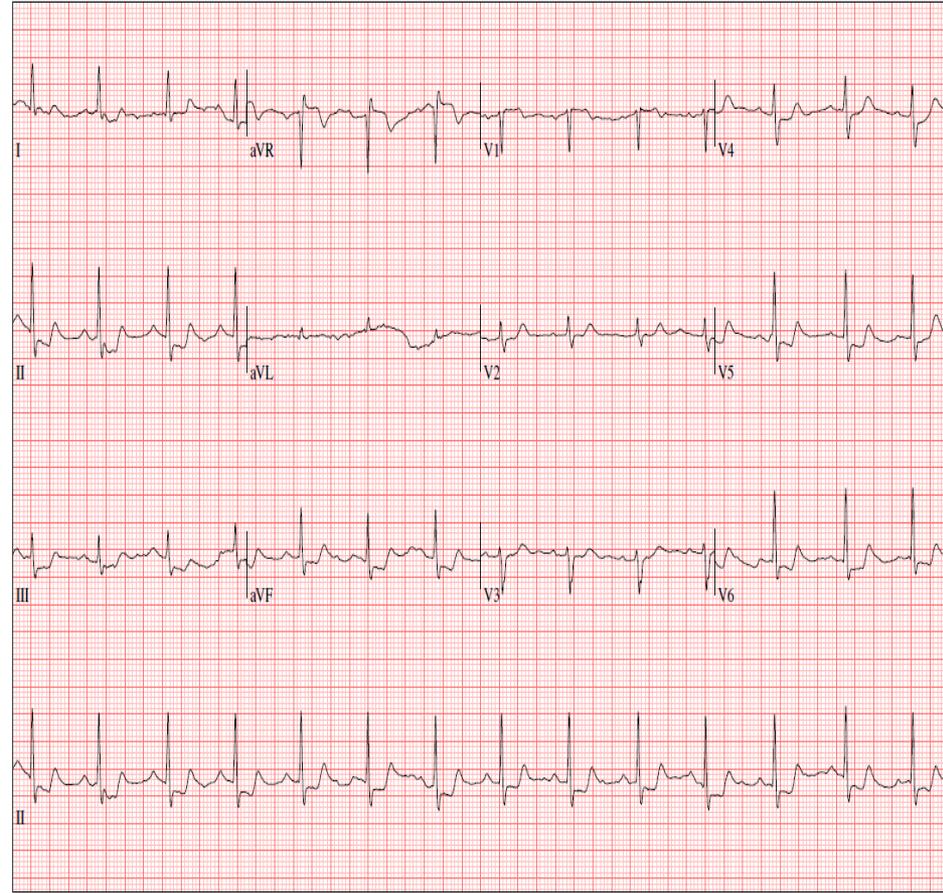


TMT (stage 2)

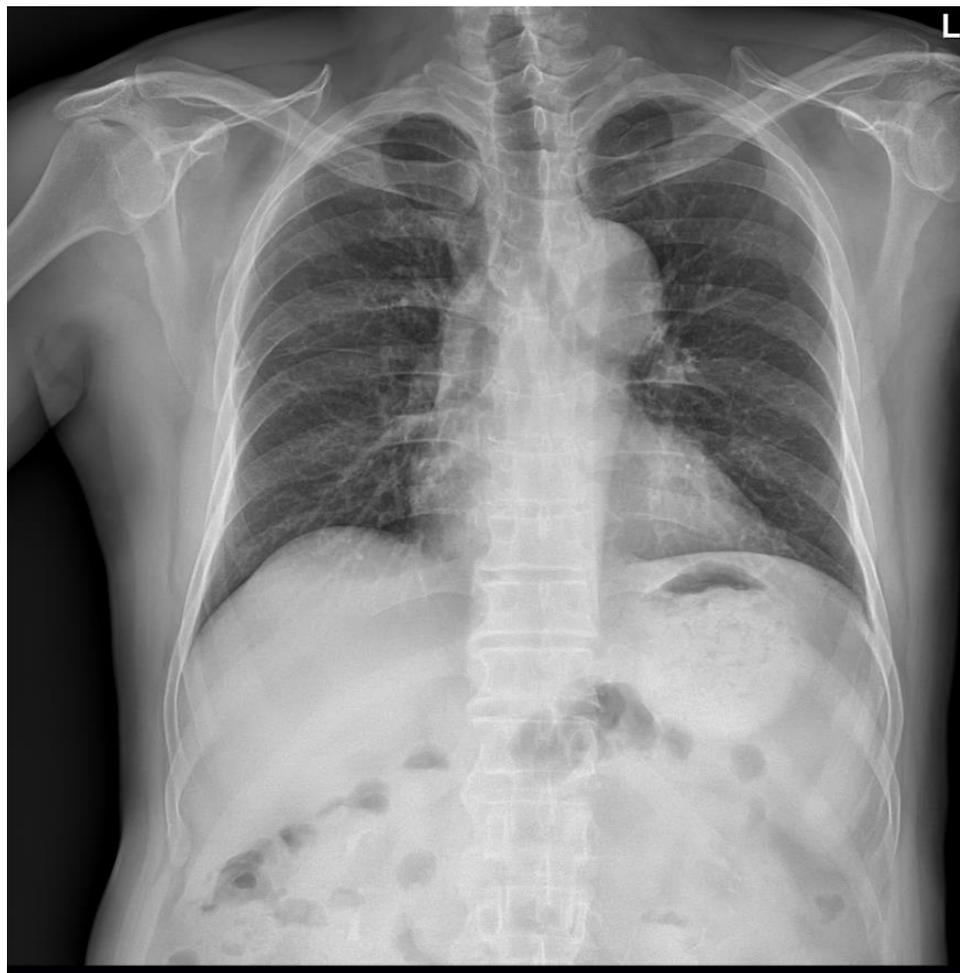
Stage 2



Recovery

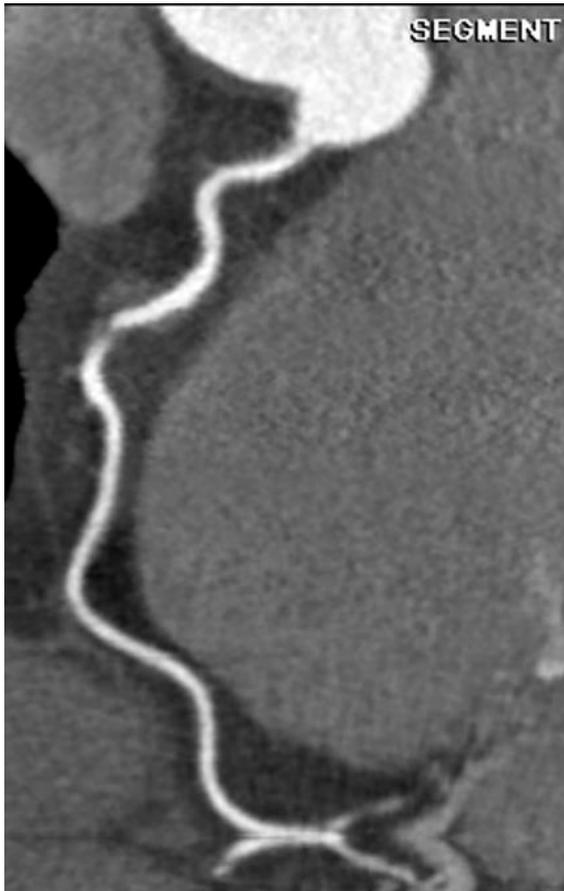


Chest X-ray

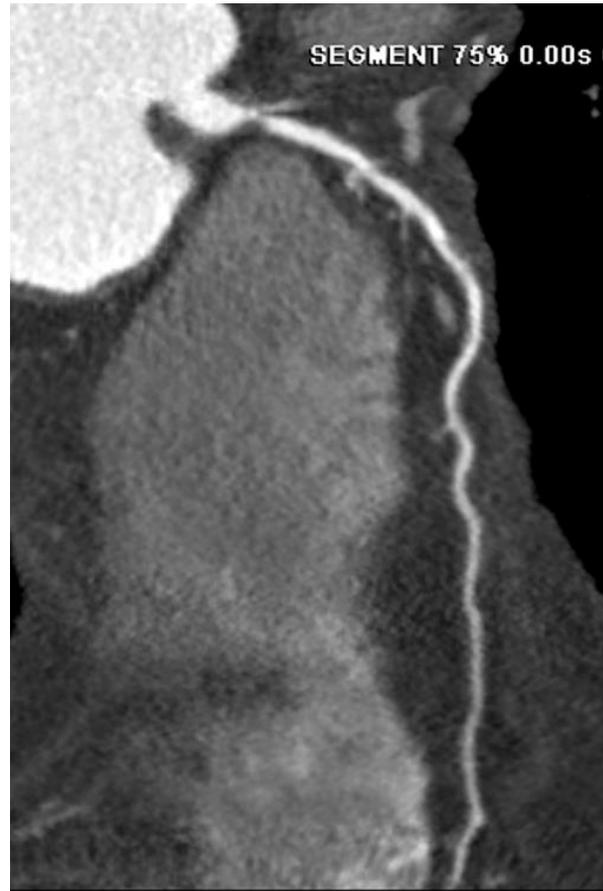


Coronary CT Angiography

RCA



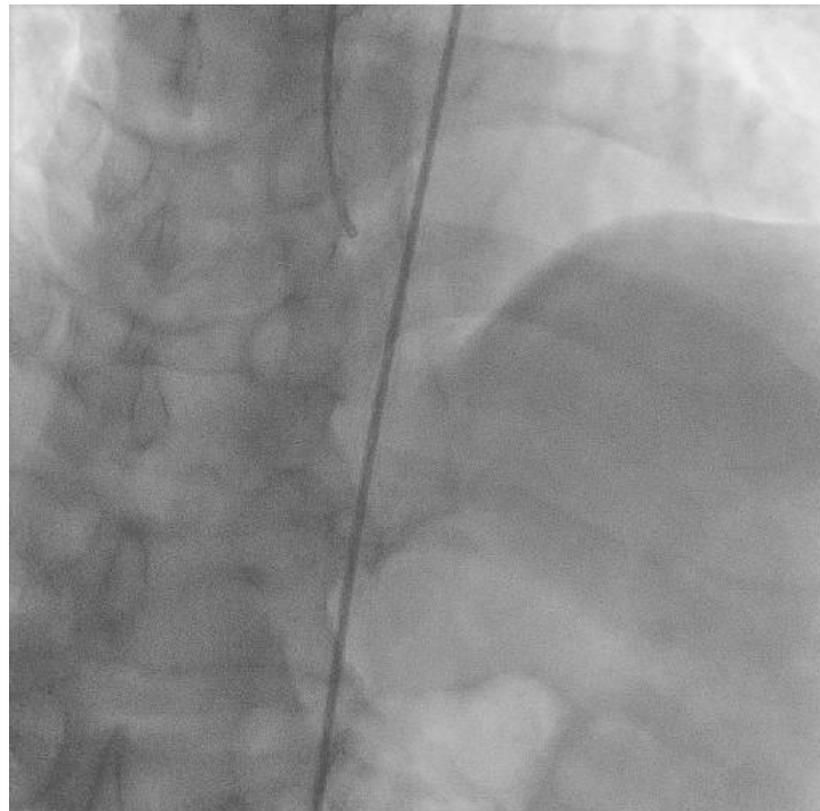
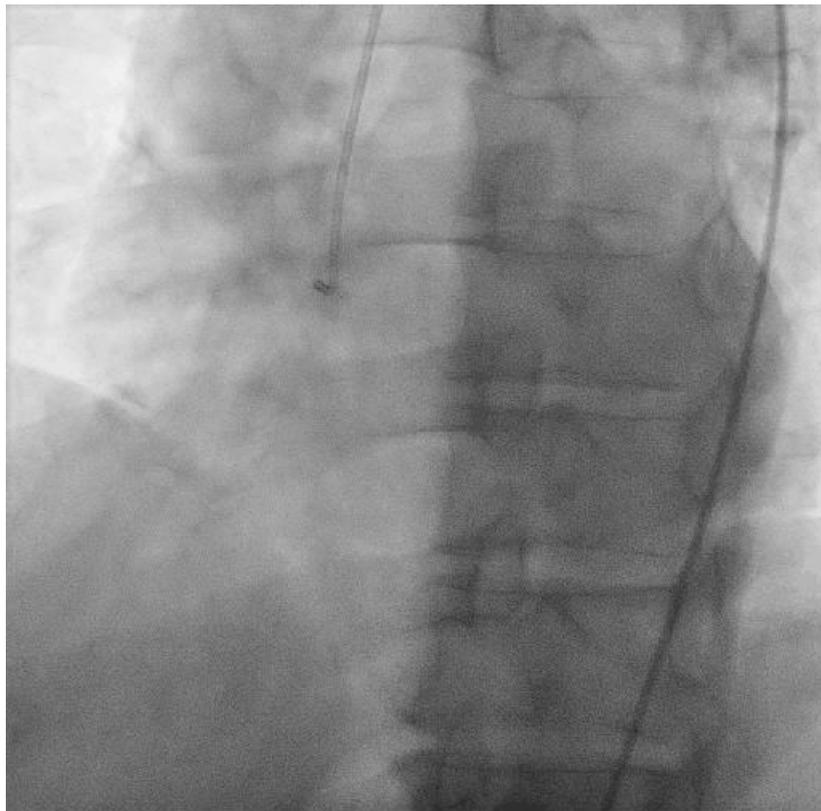
LAD



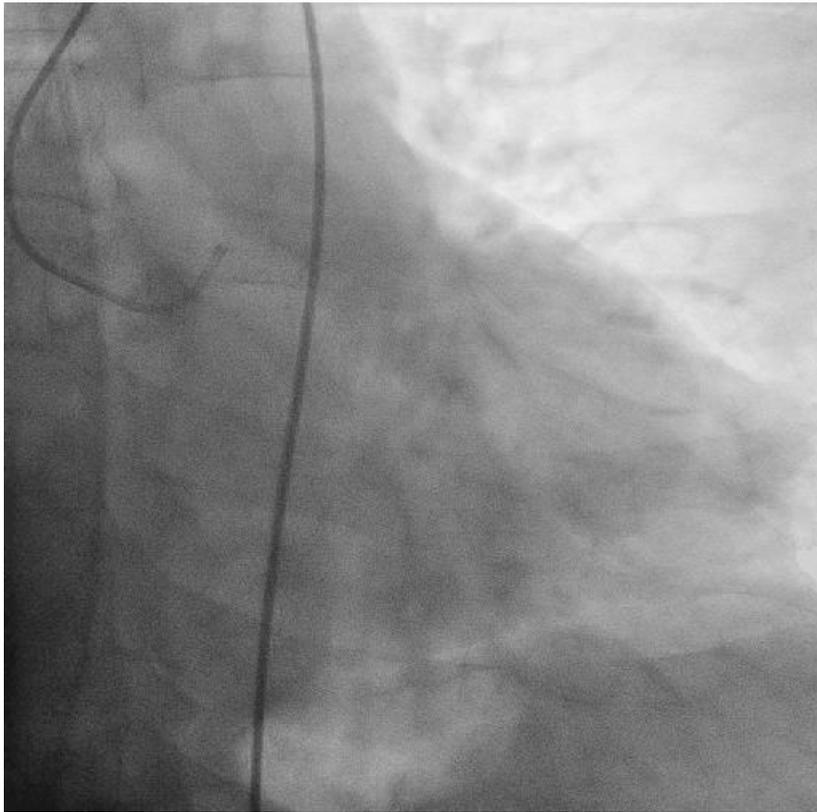
LCX



Baseline CAG

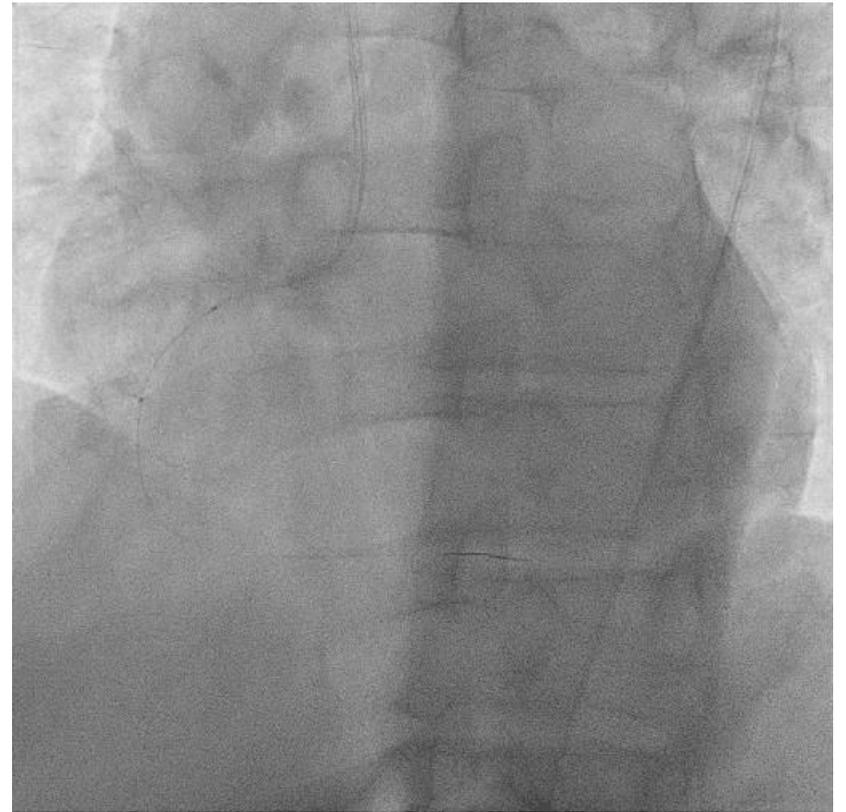


Baseline CAG

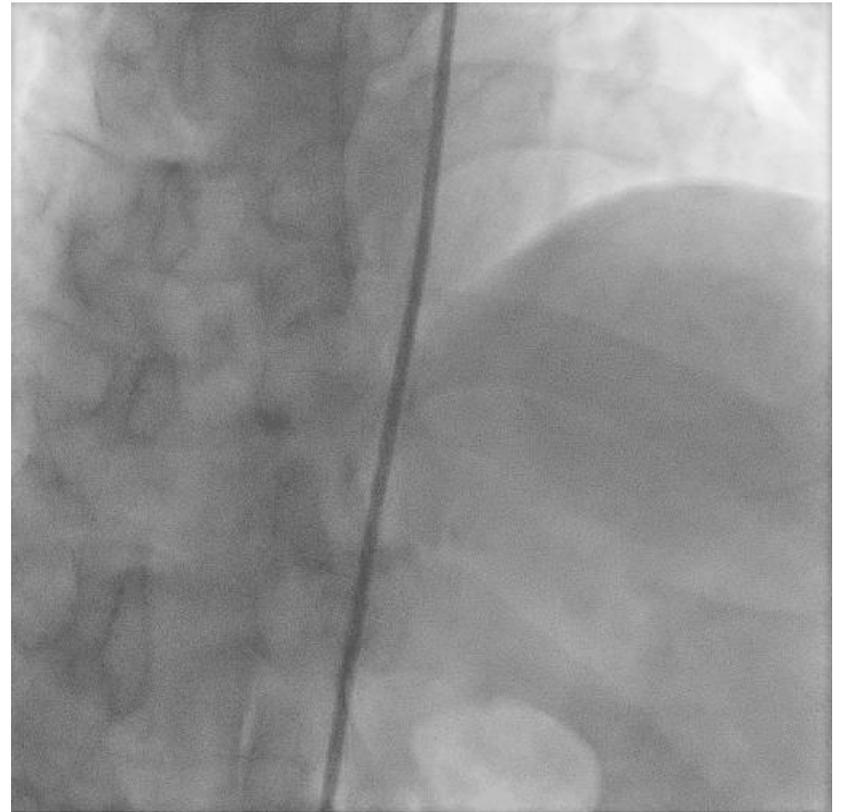
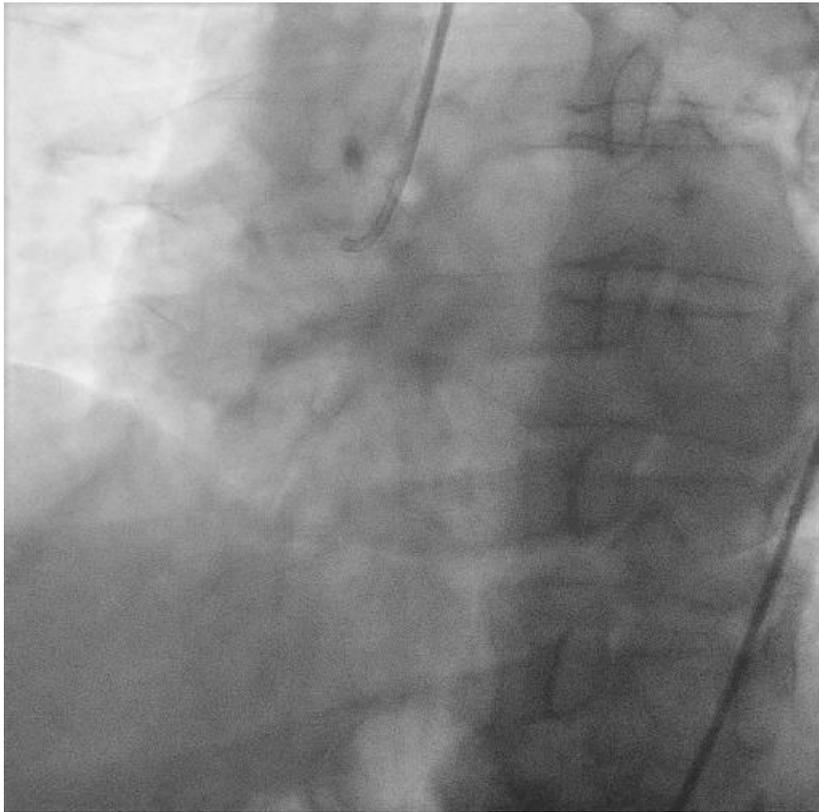


Balloon Angioplasty & DCB treatment

NC balloon 3.0x15mm up to 12atm (3.0mm) SeQuent please 3.0x20mm up to 8atm (3.06mm)



After DCB Treatment

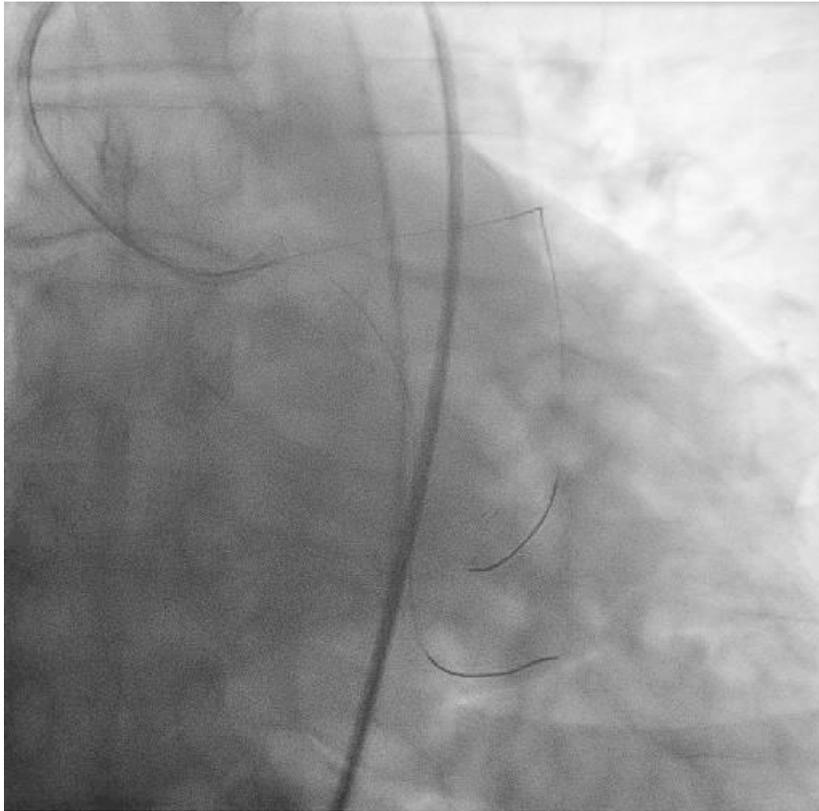


Balloon Angioplasty for LM

NC balloon 3.5x15mm up to 14atm (3.5mm)

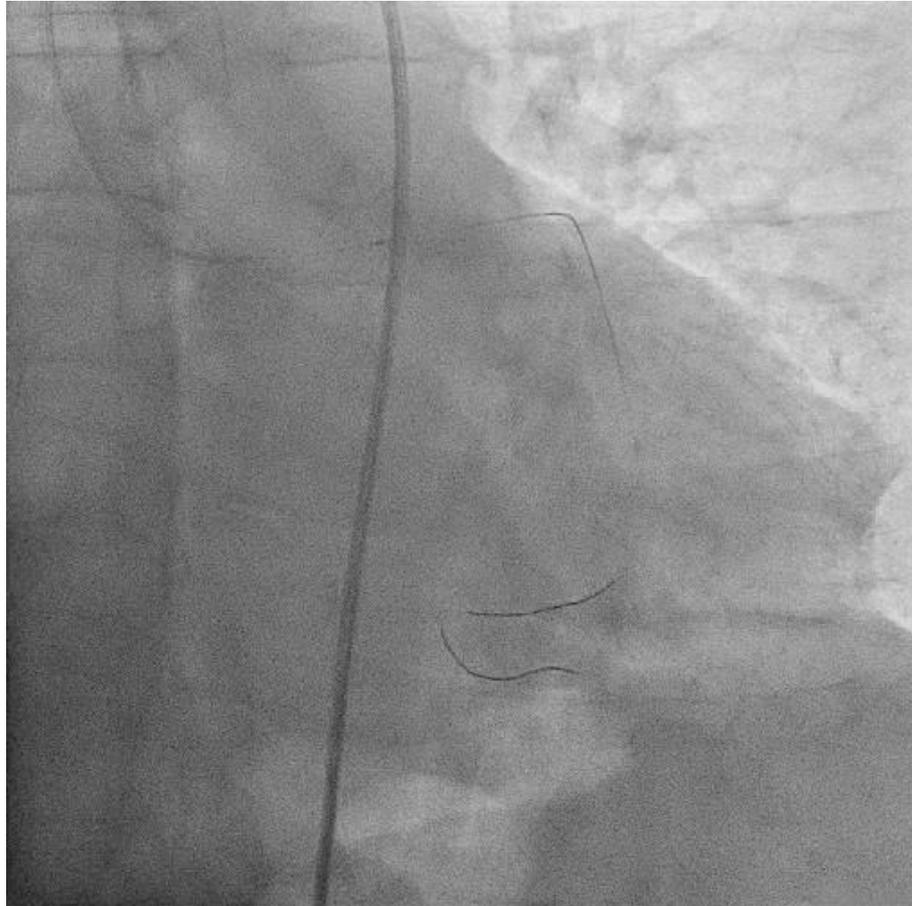


After Balloon Angioplasty

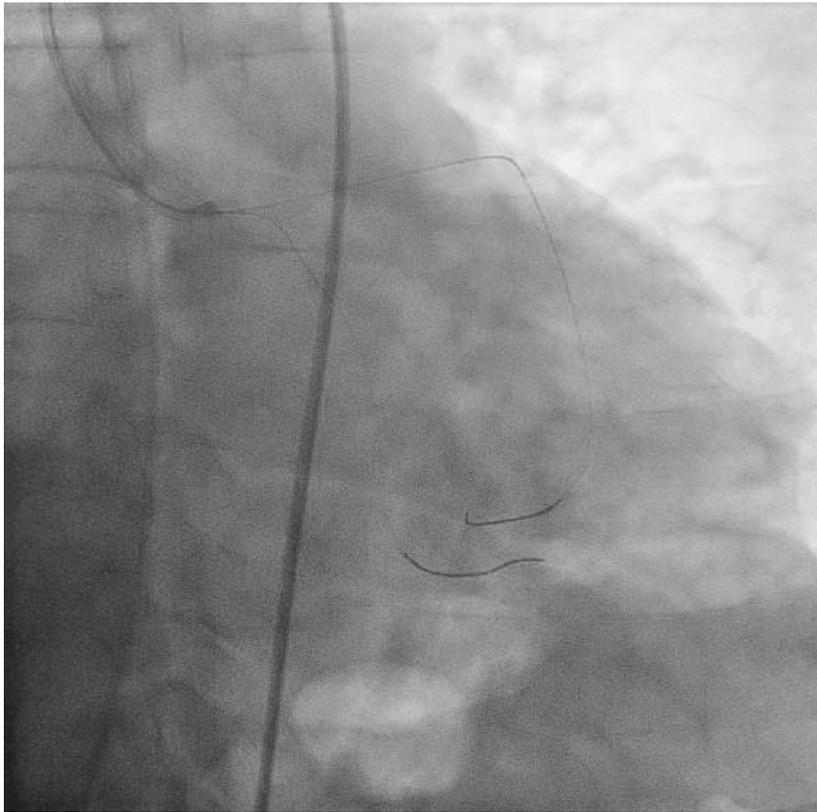


DCB Treatment

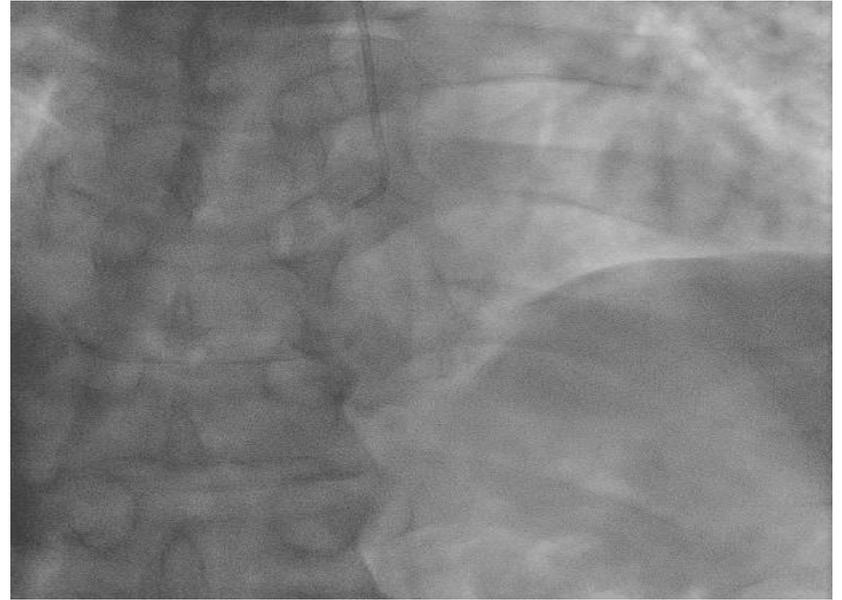
SeQuent please 3.5x20mm up to 12atm (3.75mm) for 60sec



After DCB Treatment



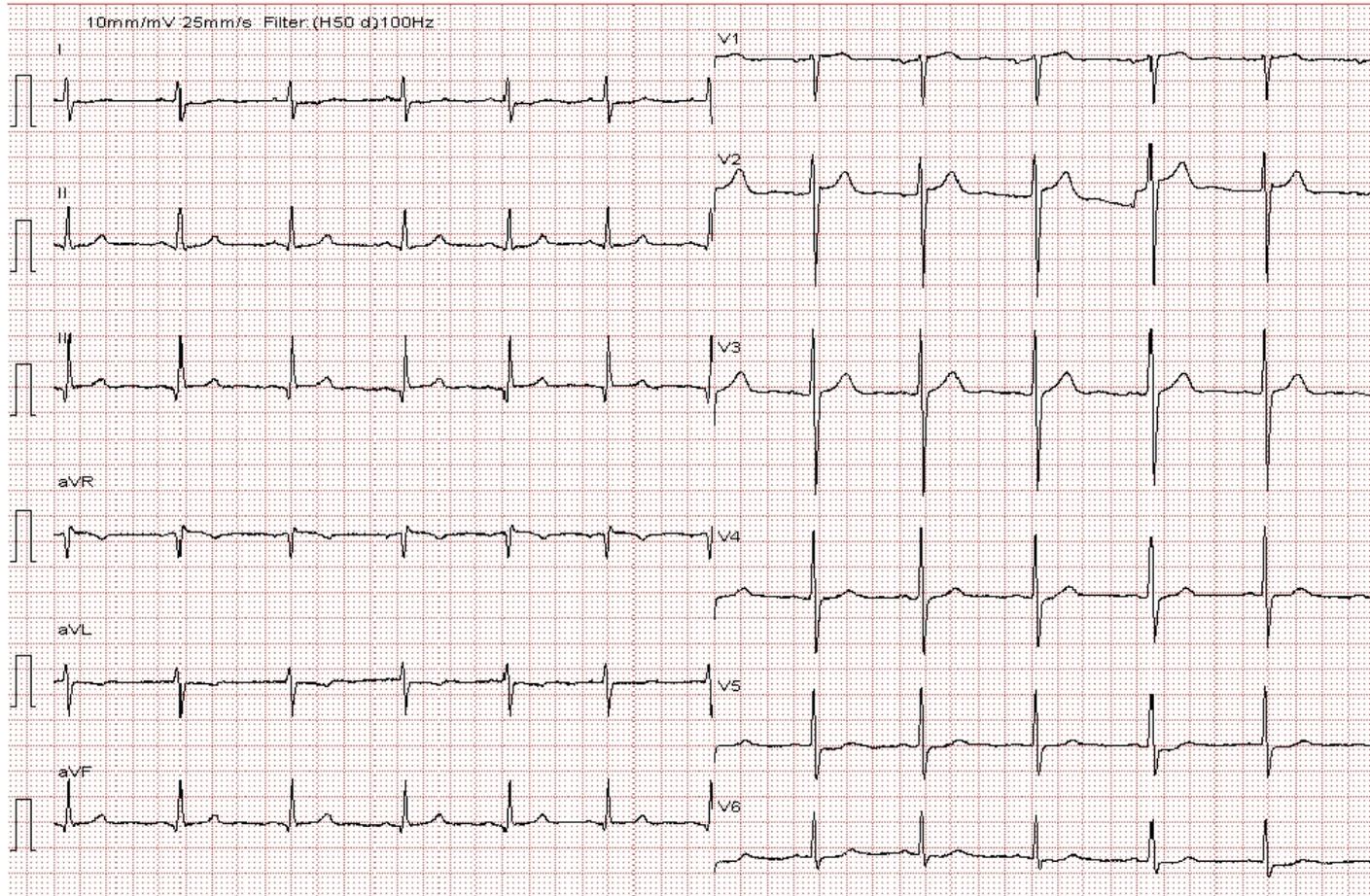
After 6 Months



Case 2

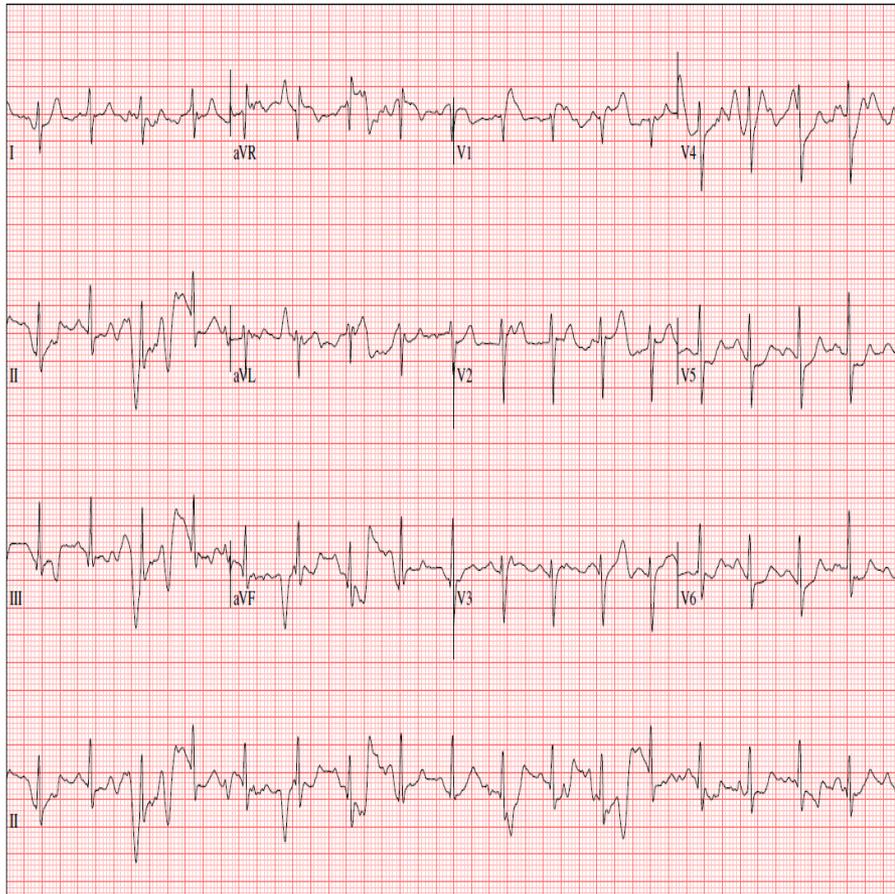
- M/44
- Chief complaint: minimal effort chest pain for 1 week
- PMH: none
- Risk factors: current smoking
- Lab: T-chol 275/HDLc 83/LDLc 199/TG 124 mg/dl
Hb 15.4 g/dl, Cr 0.85mg/dl, HbA1C 5.4%, TFT: WNL
- EchoCG: EF = 61%, no RWMA

Resting ECG

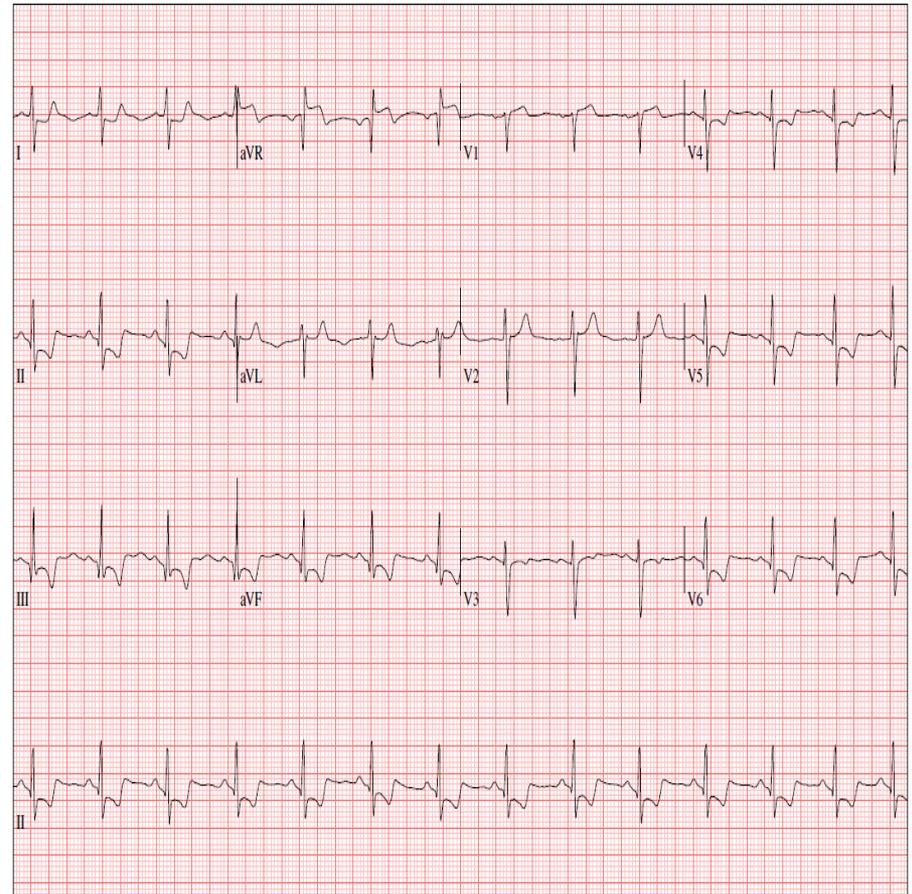


TMT

stage 1



recovery

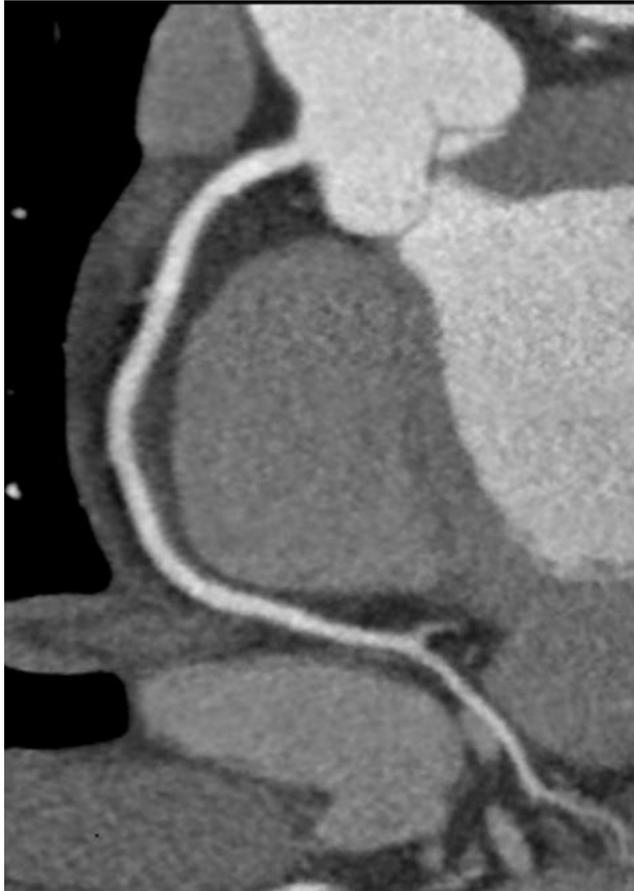


Chest X-ray

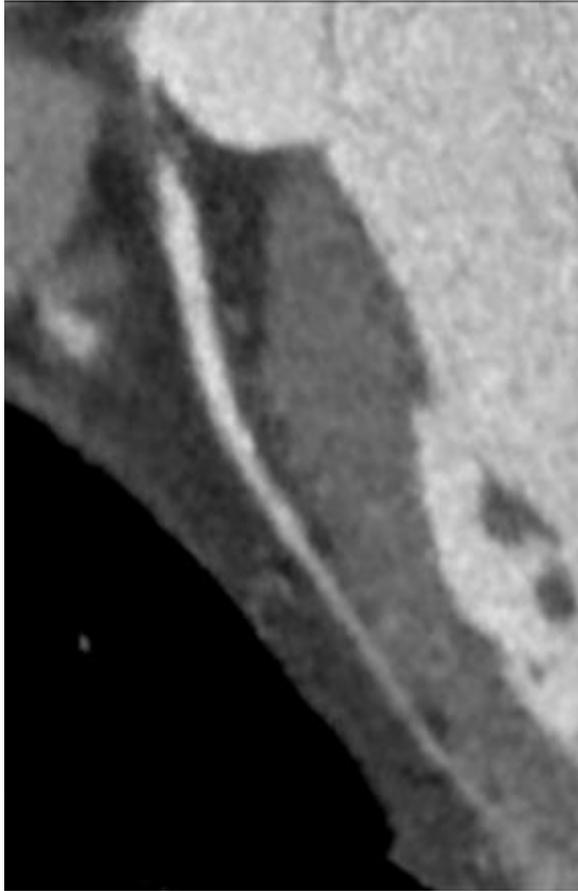


Coronary CT Angiography

RCA



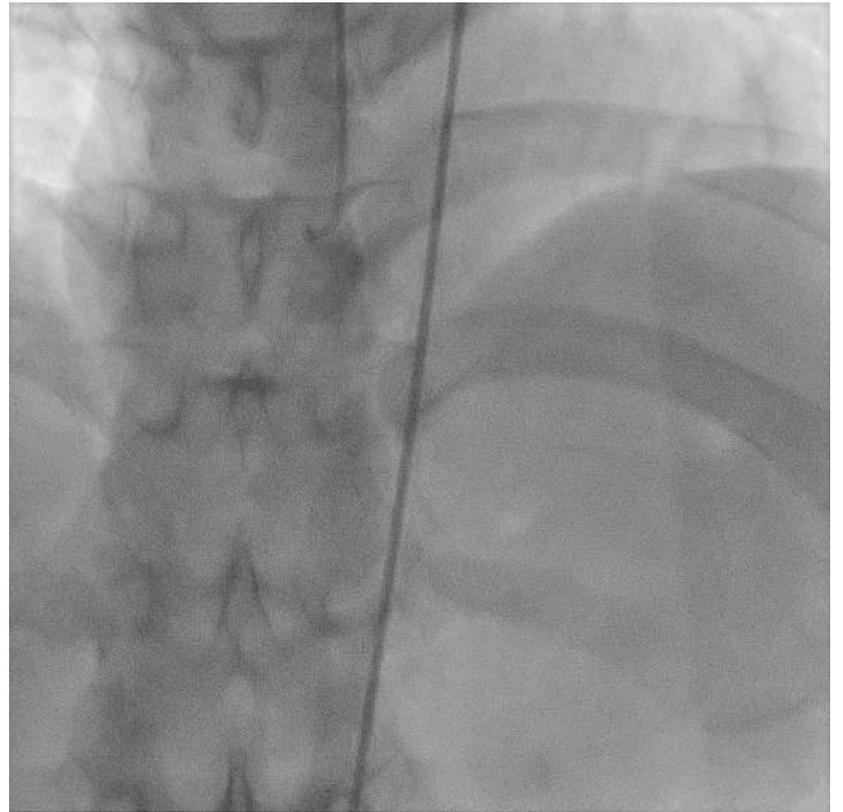
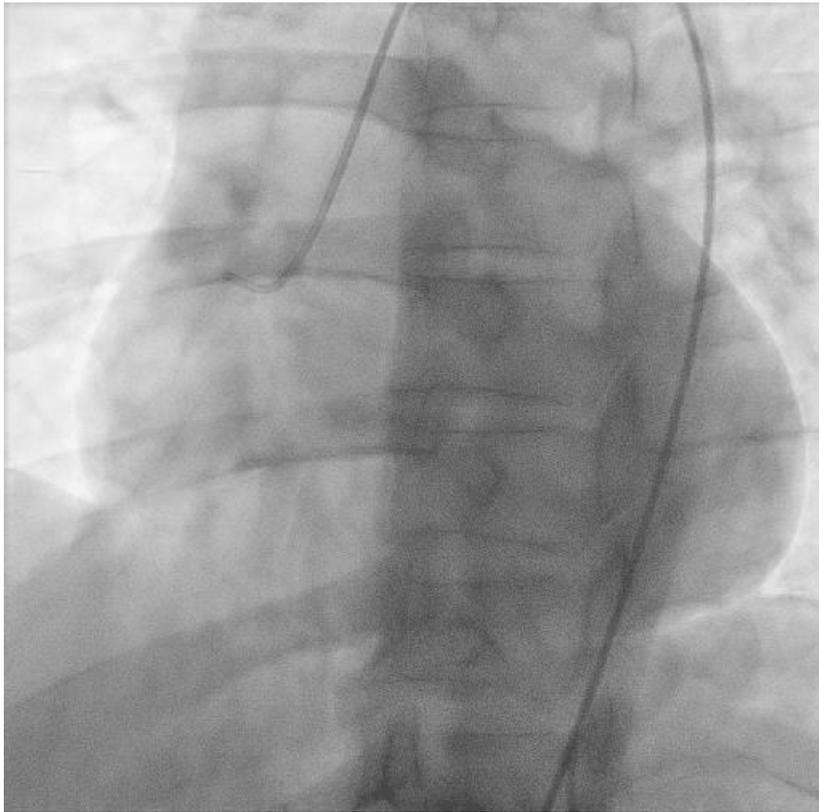
LAD



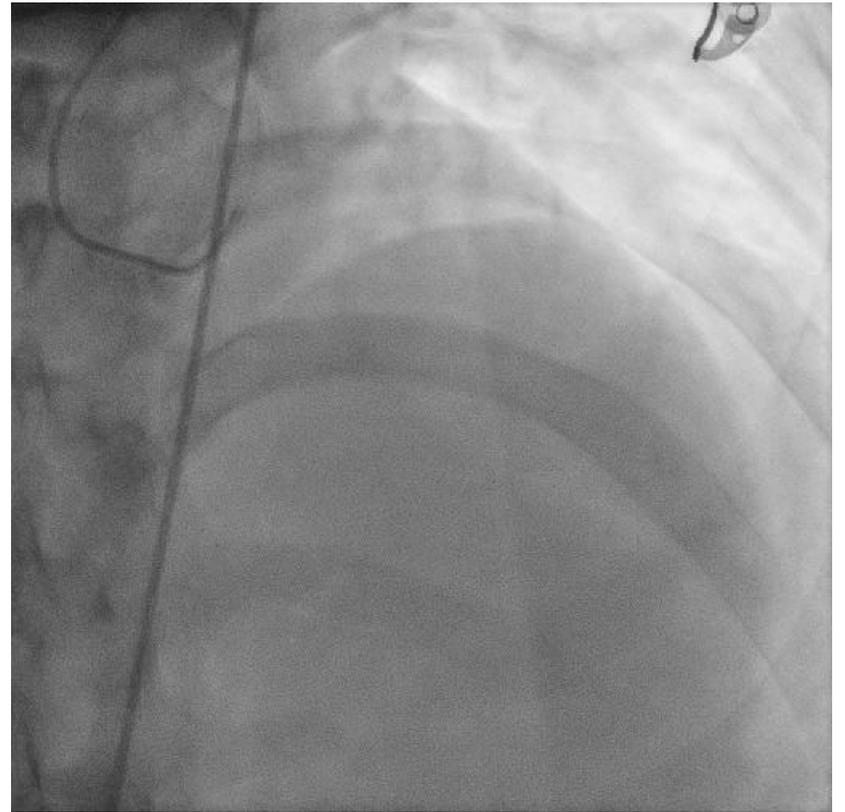
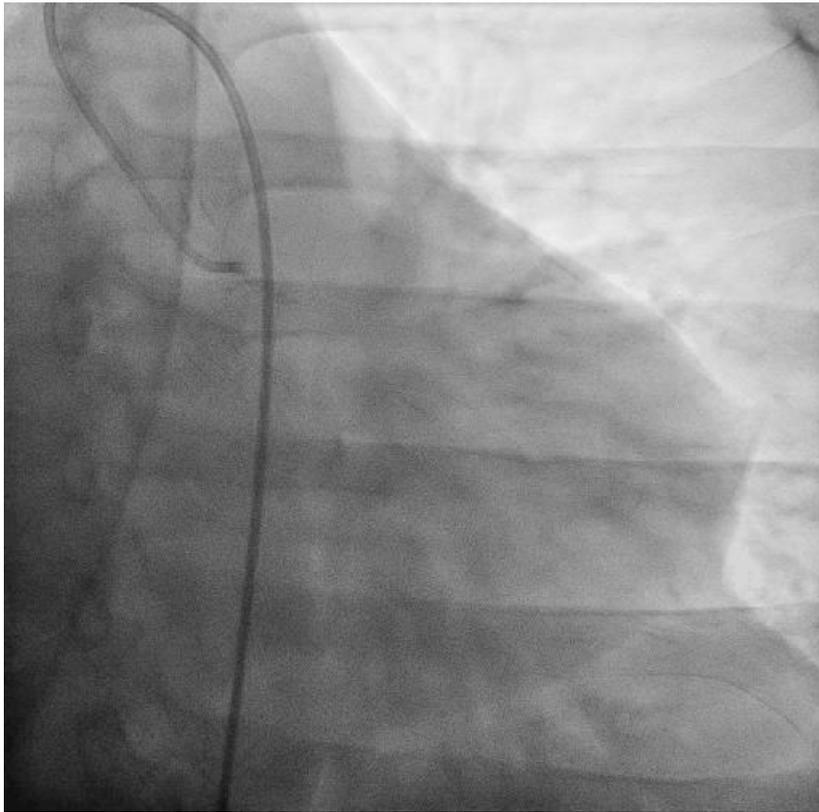
LCX



Baseline CAG

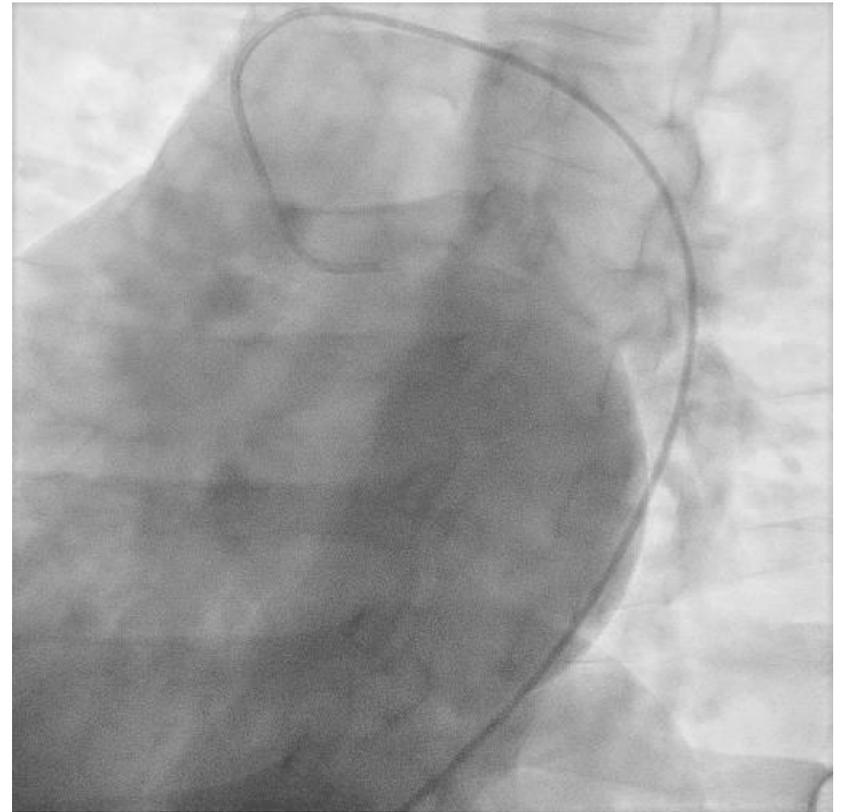
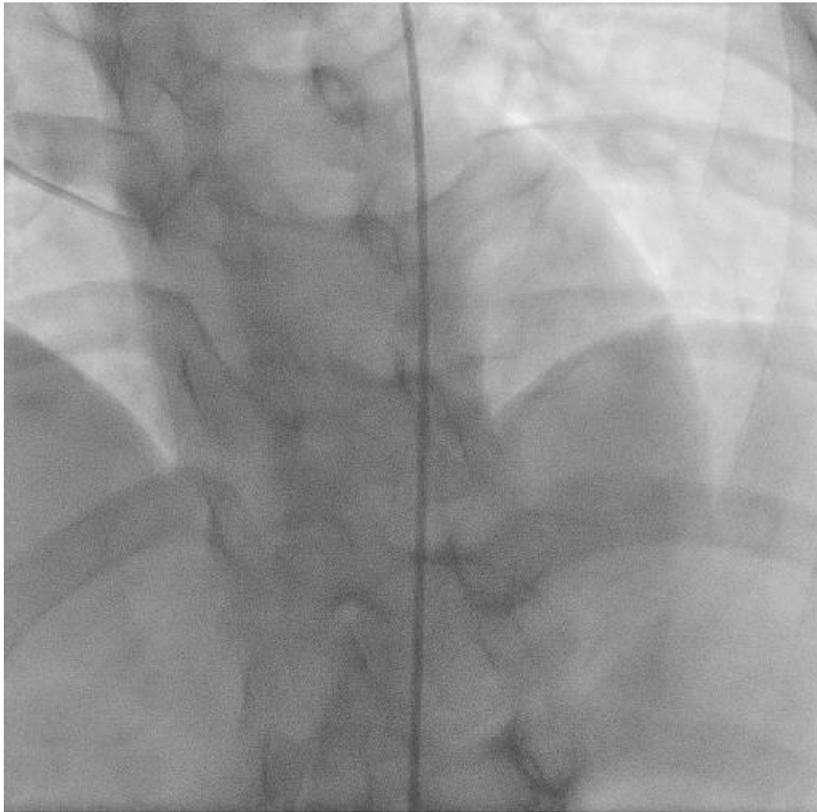


Baseline CAG



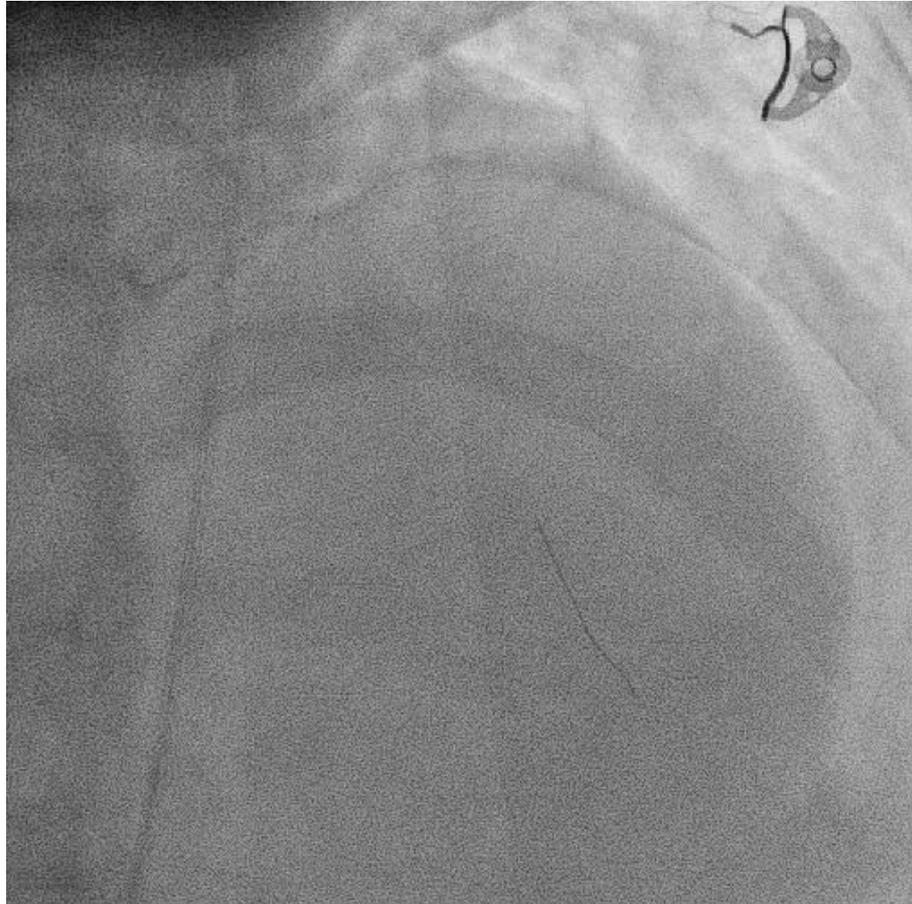
Baseline CAG

FFR = 0.60



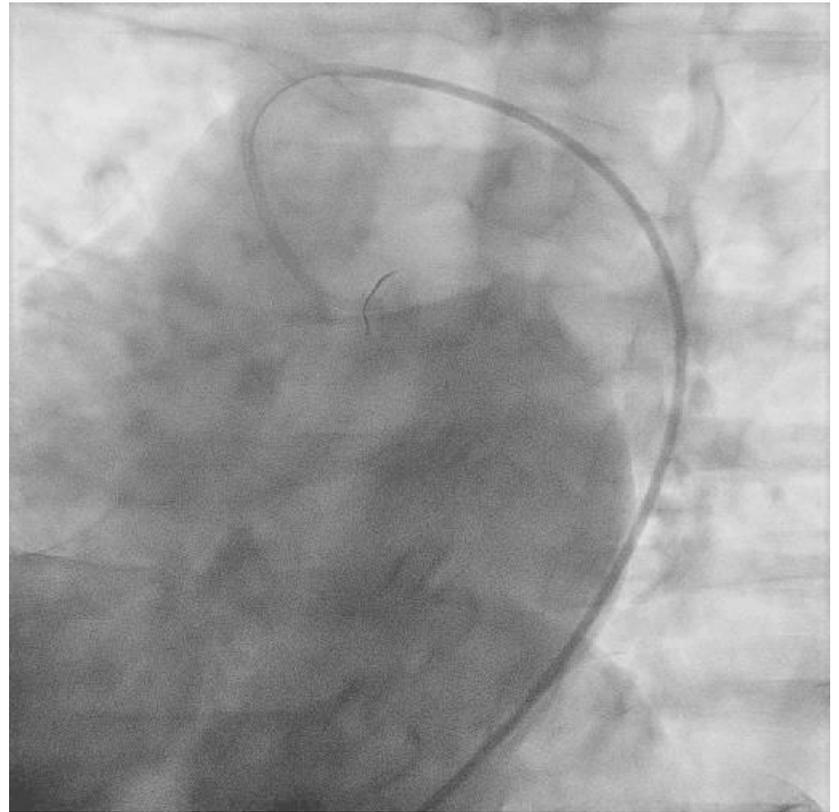
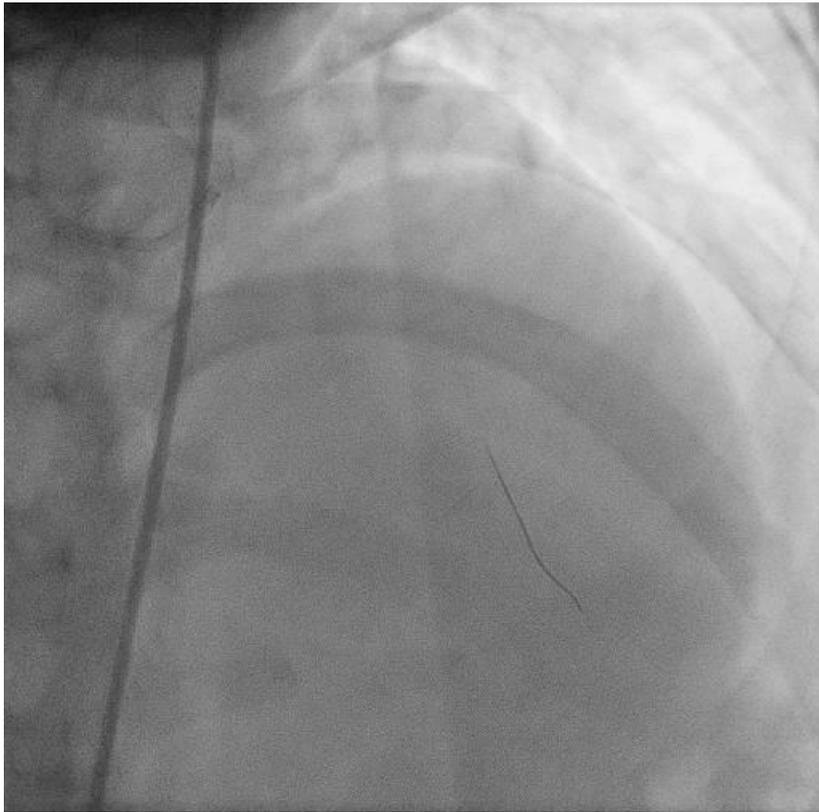
Balloon Angioplasty

AngioSculpt® 3.5x10mm up to 14atm (3.81mm)



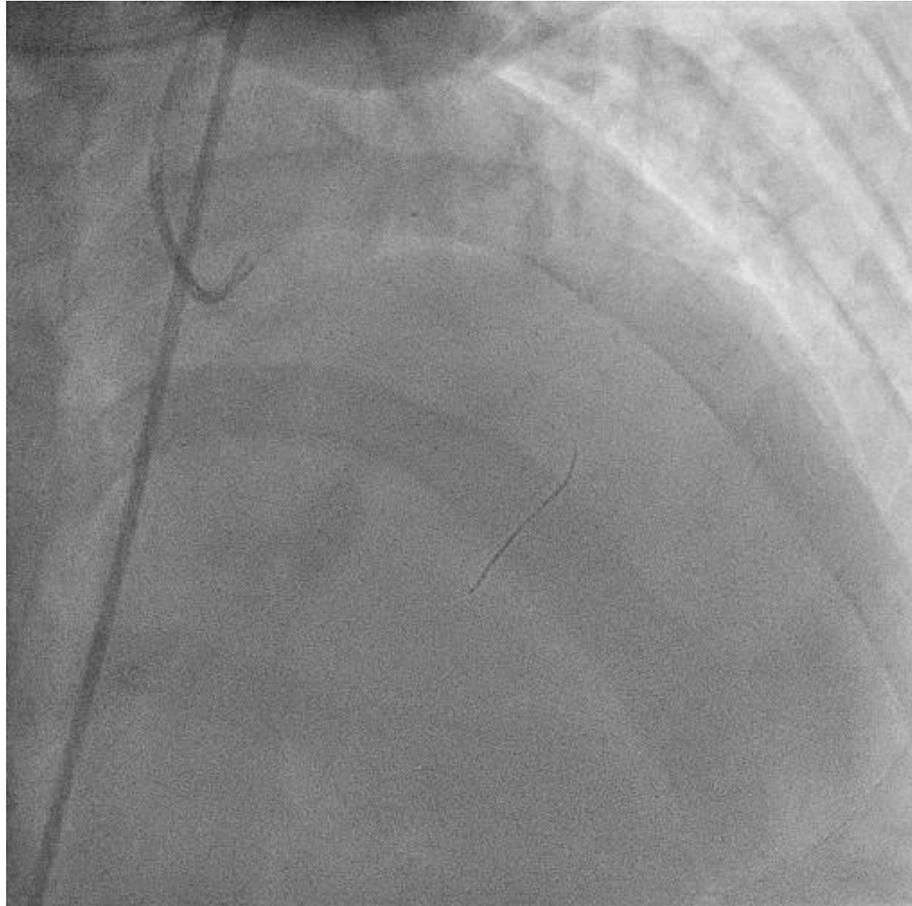
After Balloon Angioplasty

FFR = 0.88

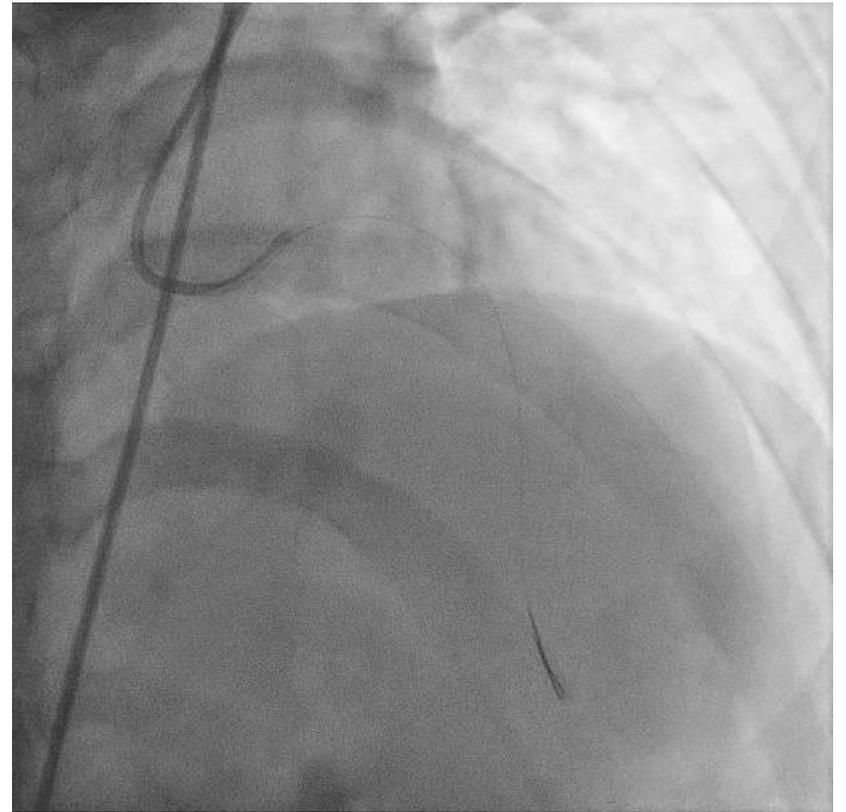
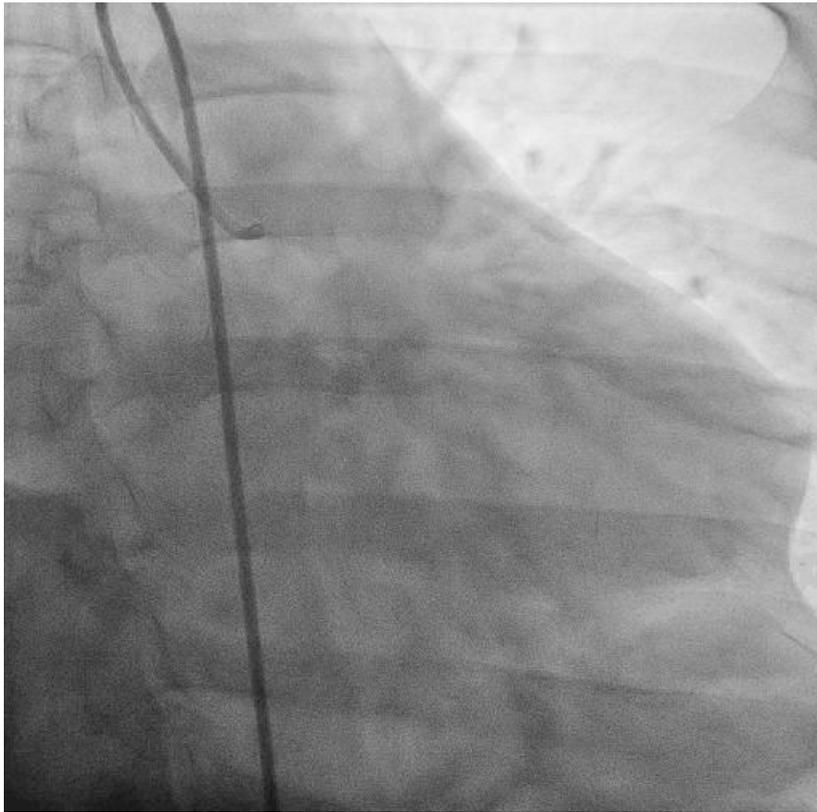


DCB Treatment

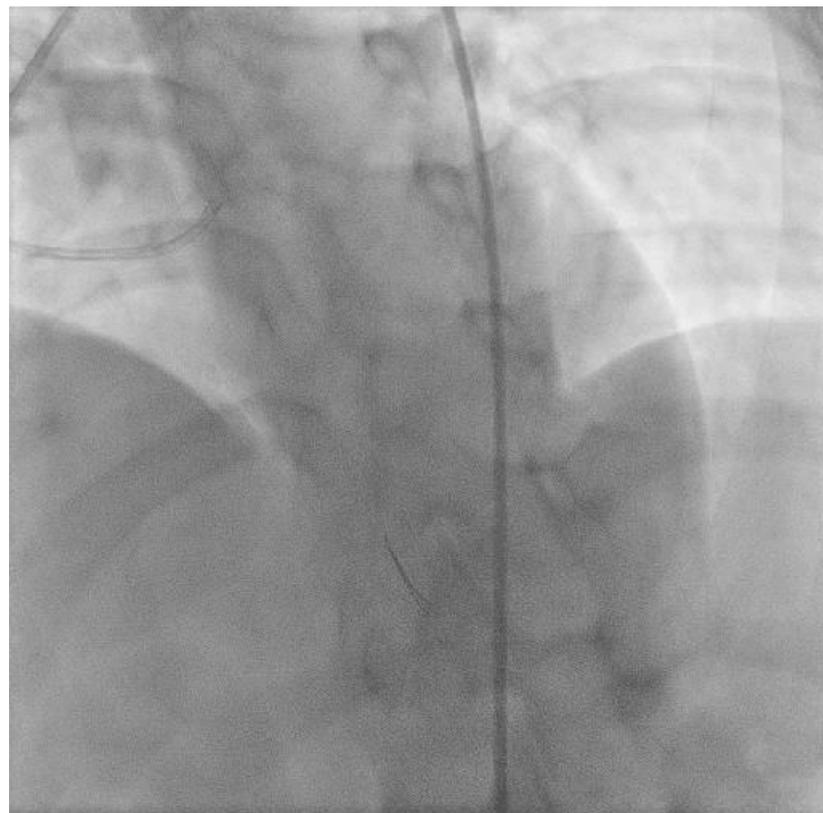
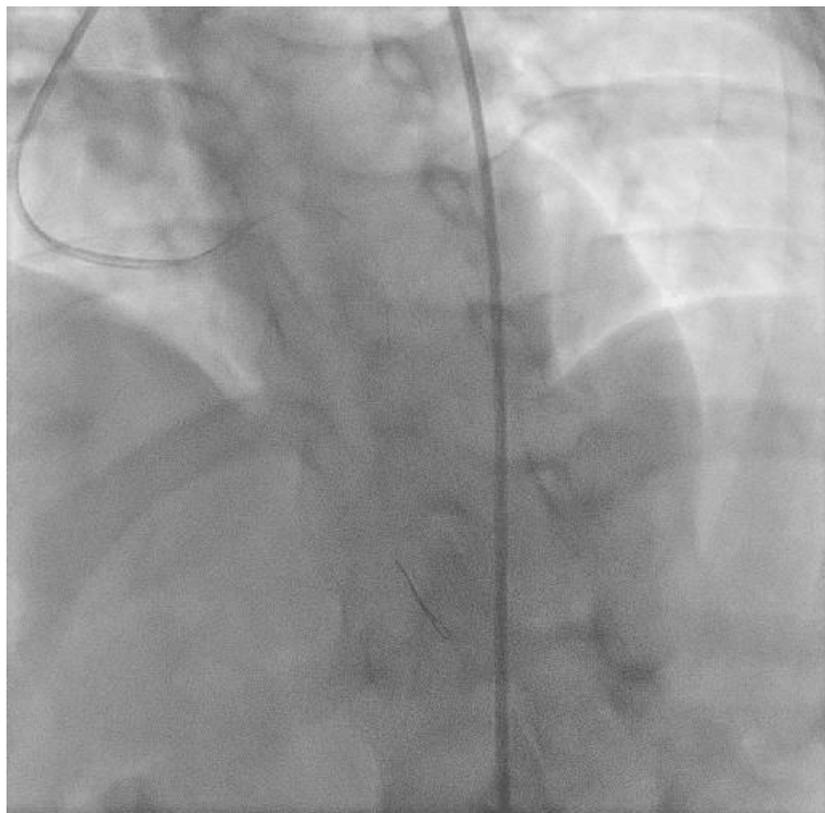
SeQuent please 3.5x20mm upto 14atm (3.83mm) for 60sec



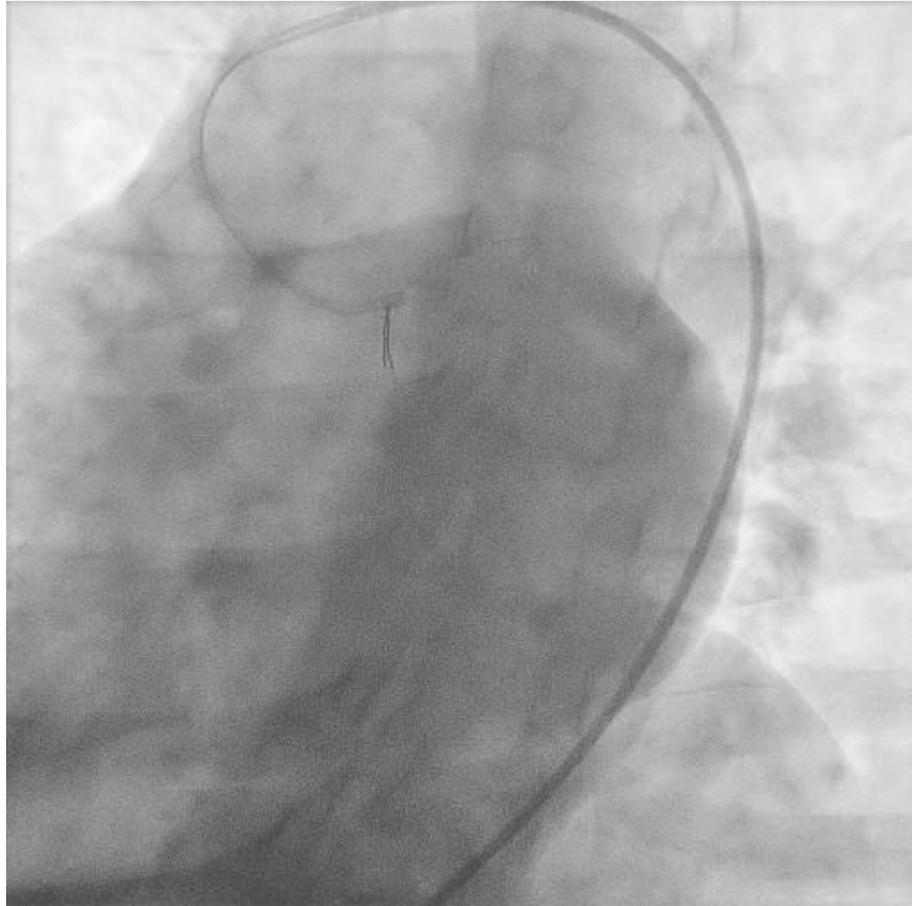
After DCB Treatment



After DCB Treatment



After DCB Treatment

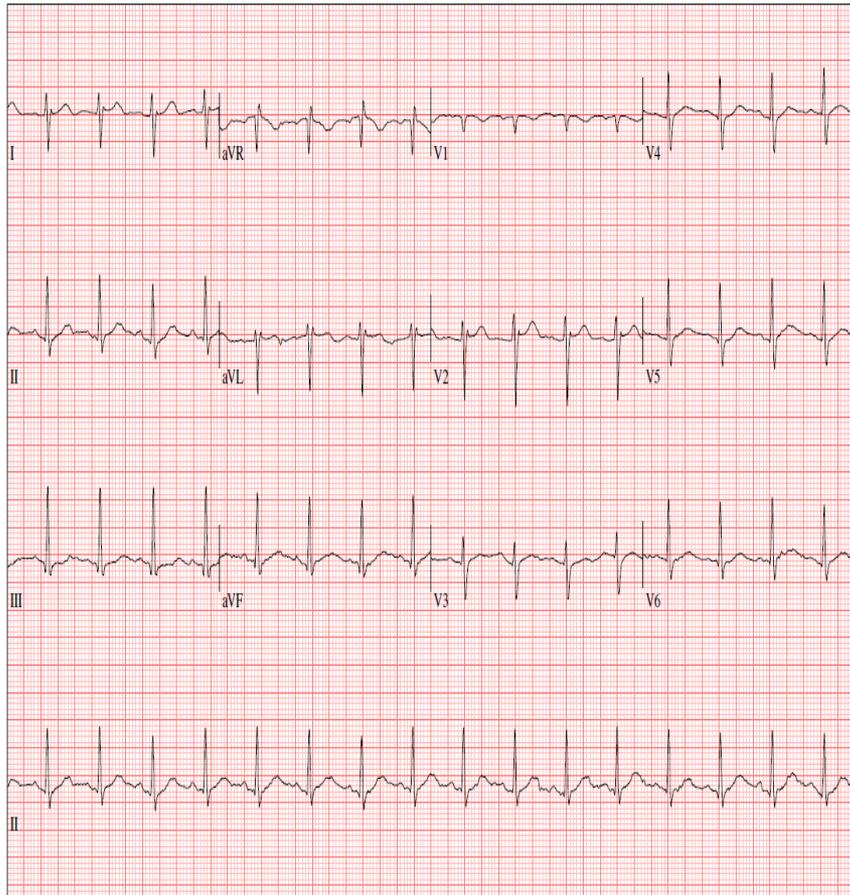


After 4 Months

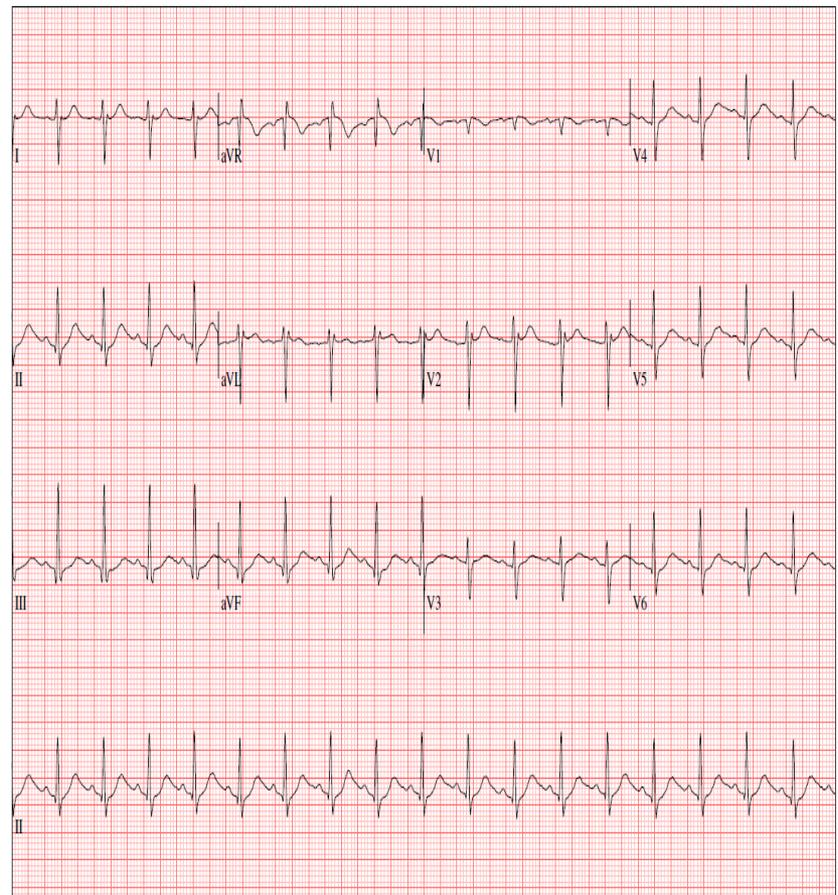
- No chest pain
- Doing well exercise

After 4 Months: TMT

stage 1



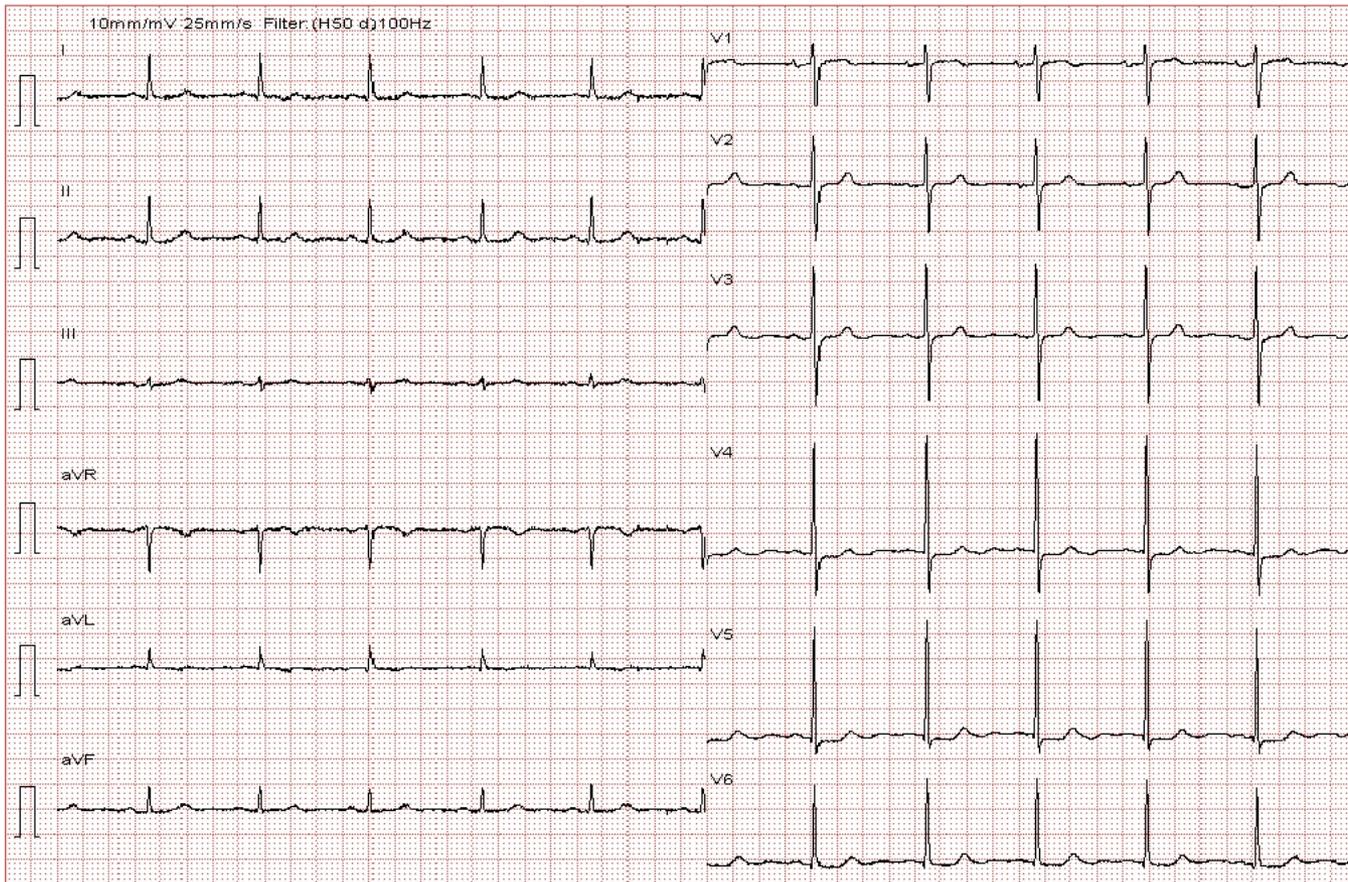
recovery



Case 3

- M/78
- Chief complaint: effort related chest pain for 2 weeks
- PMH: none
- Risk factors: none
- Lab: T-chol 190/HDLc 51/LDLc 151/TG 162 mg/dl
Hb 12.4 g/dl, Cr 0.57mg/dl, HbA1C 6.0%, TFT WNL
- EchoCG: EF = 60%, no RWMA

Resting ECG



Coronary CT Angiography

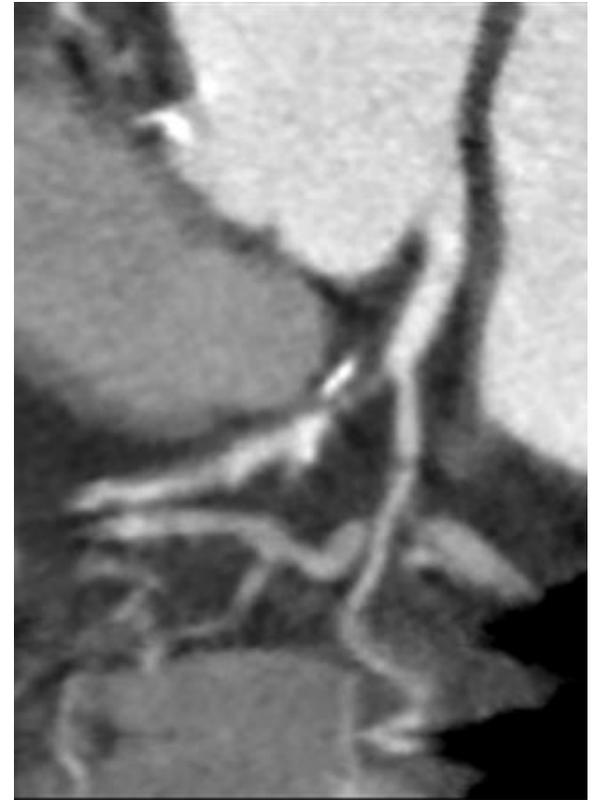
RCA



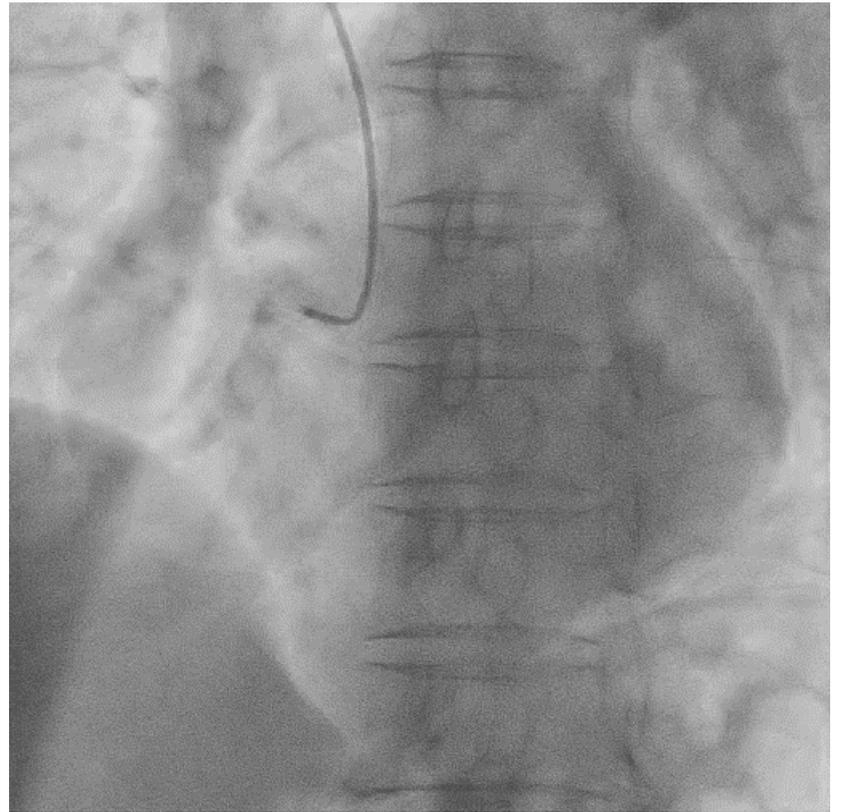
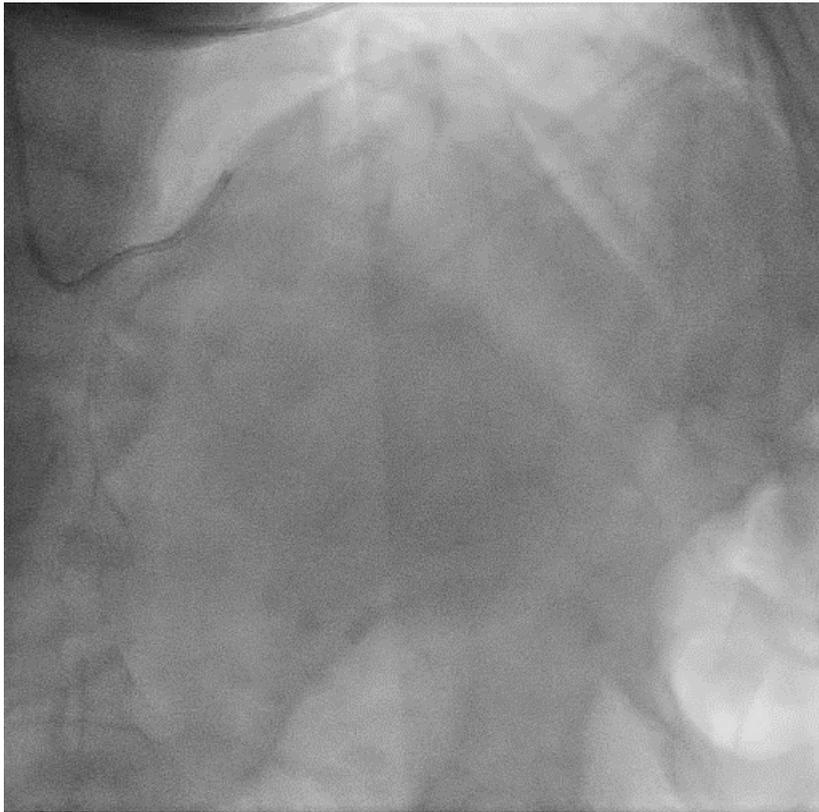
LAD



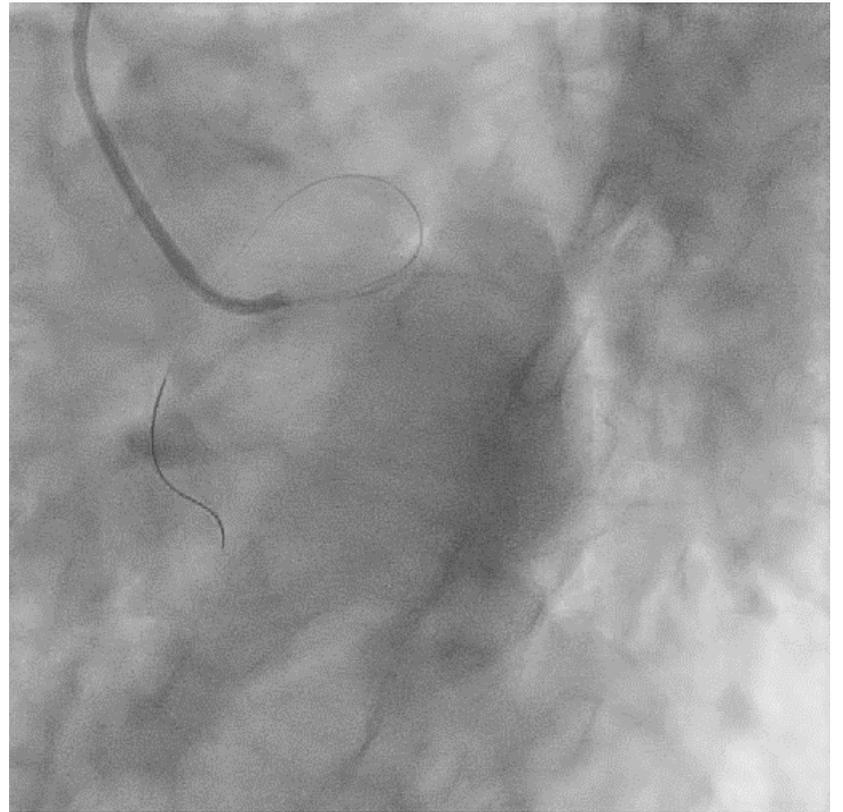
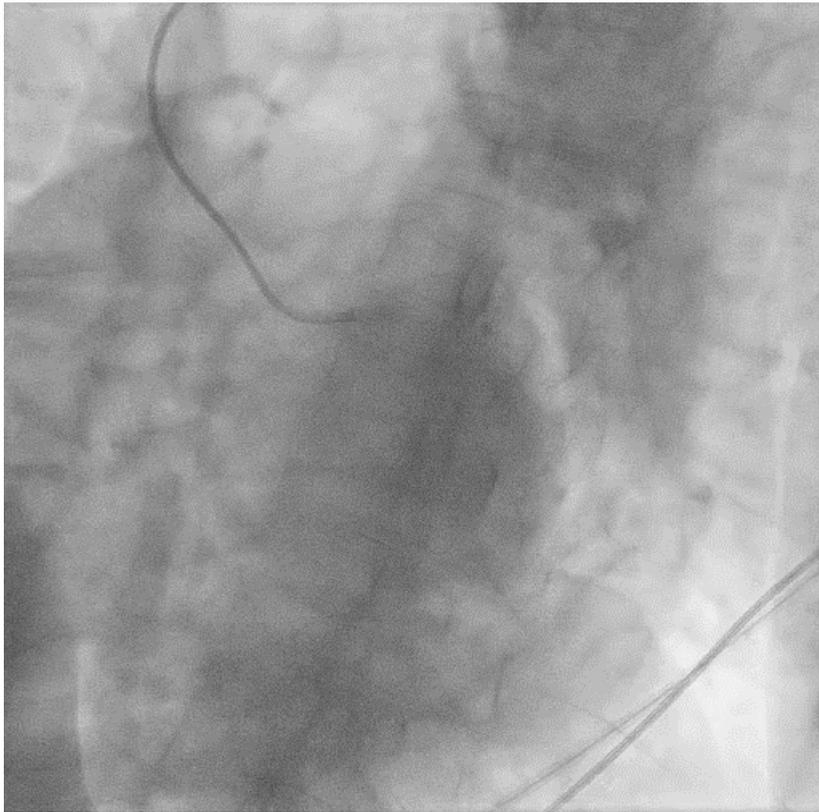
LCX



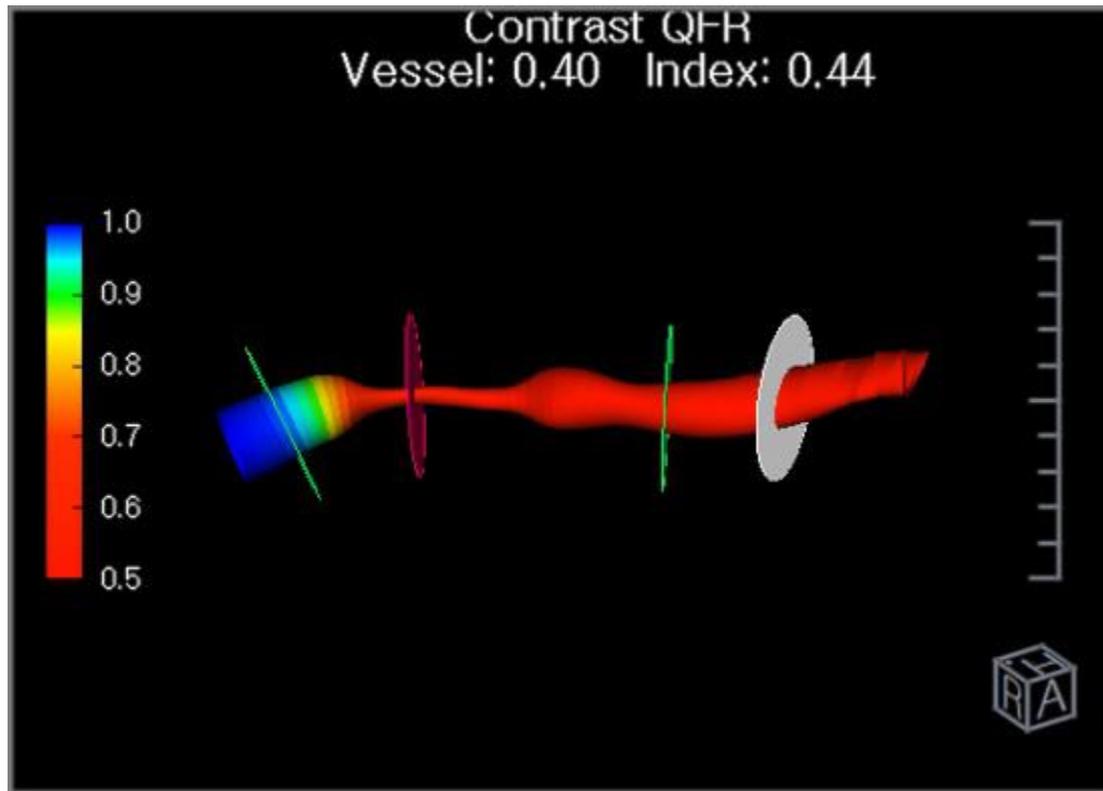
Baseline CAG



Baseline CAG

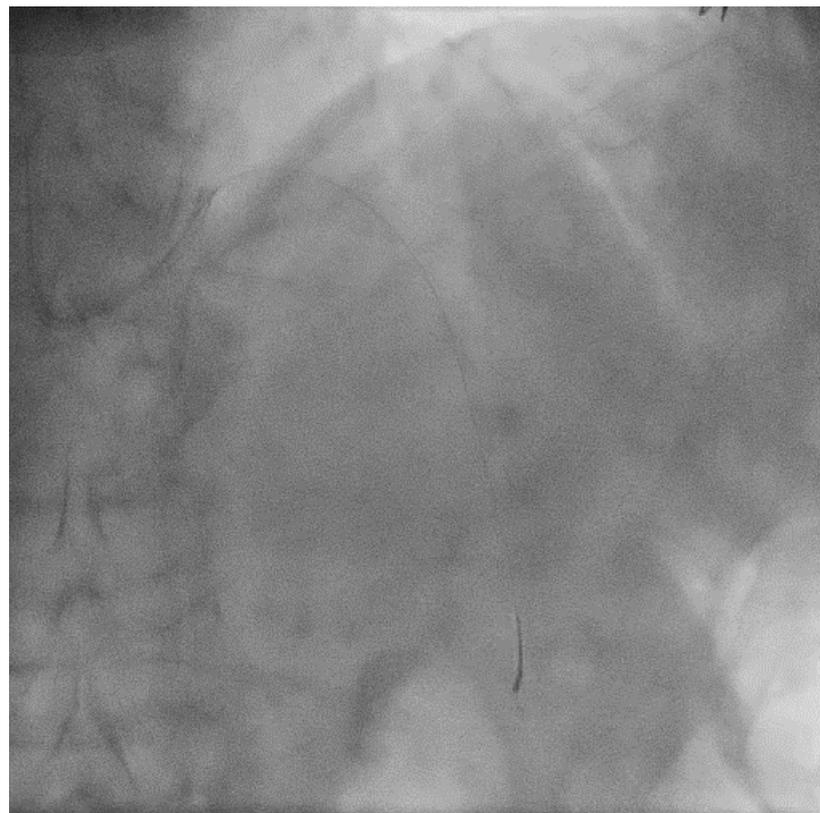
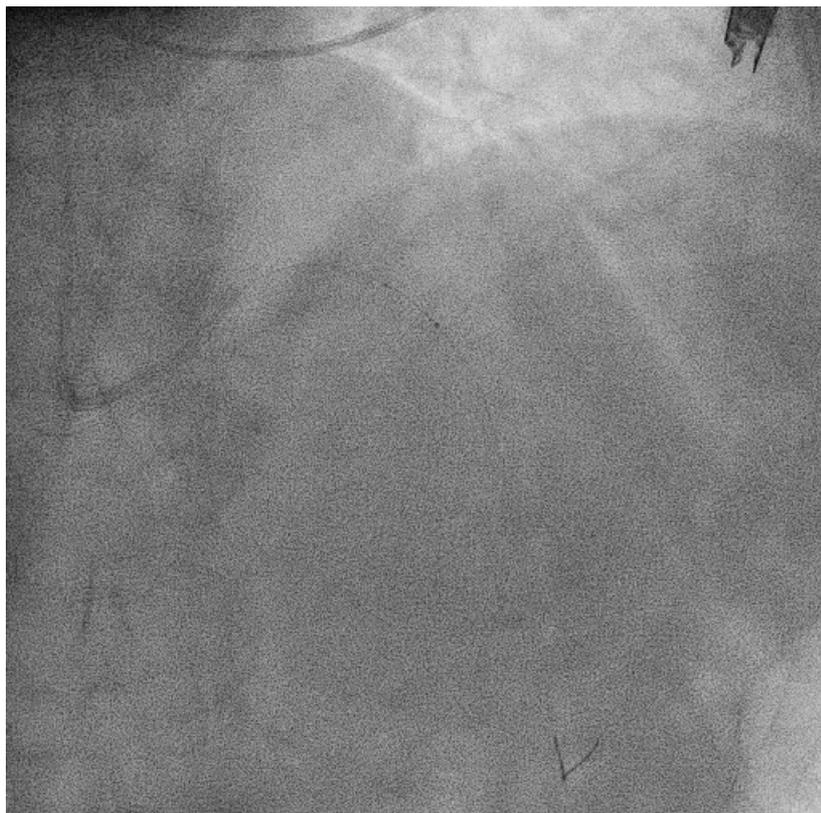


DS = 75.4%, MLD = 0.9mm,
QFR = 0.40

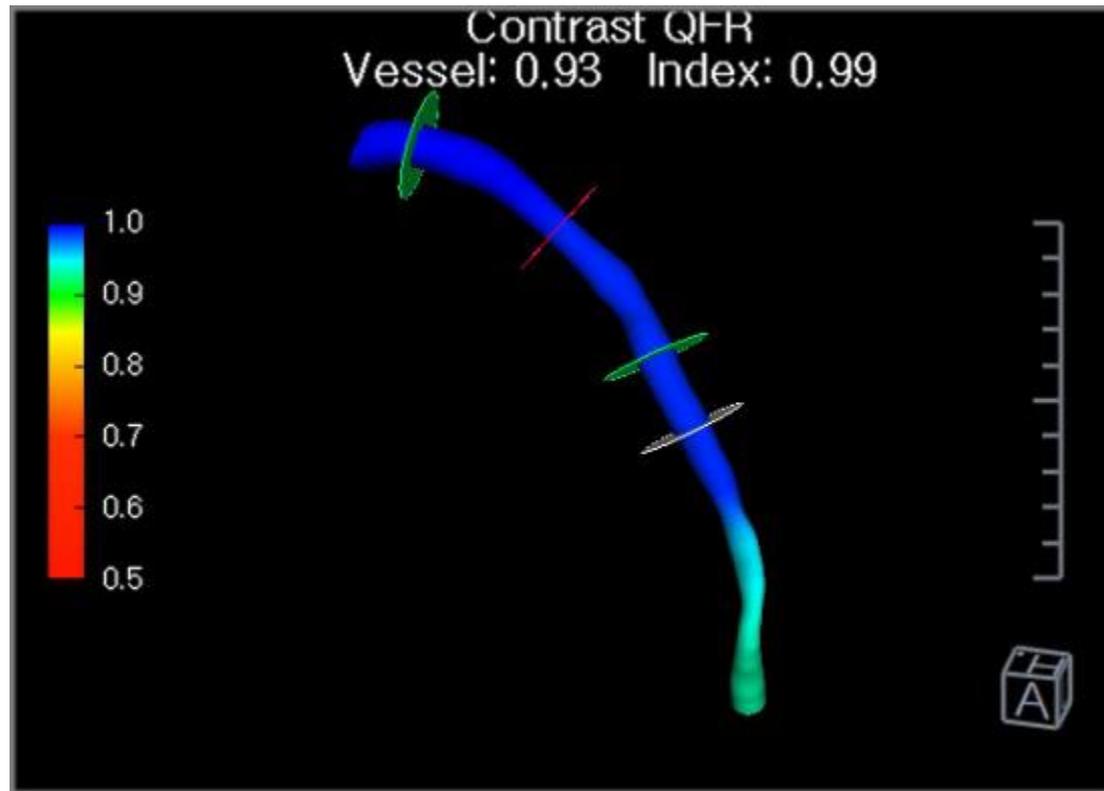


Balloon Angioplasty

AngioSculpt® 3.5x10mm upto 10atm (3.65mm)

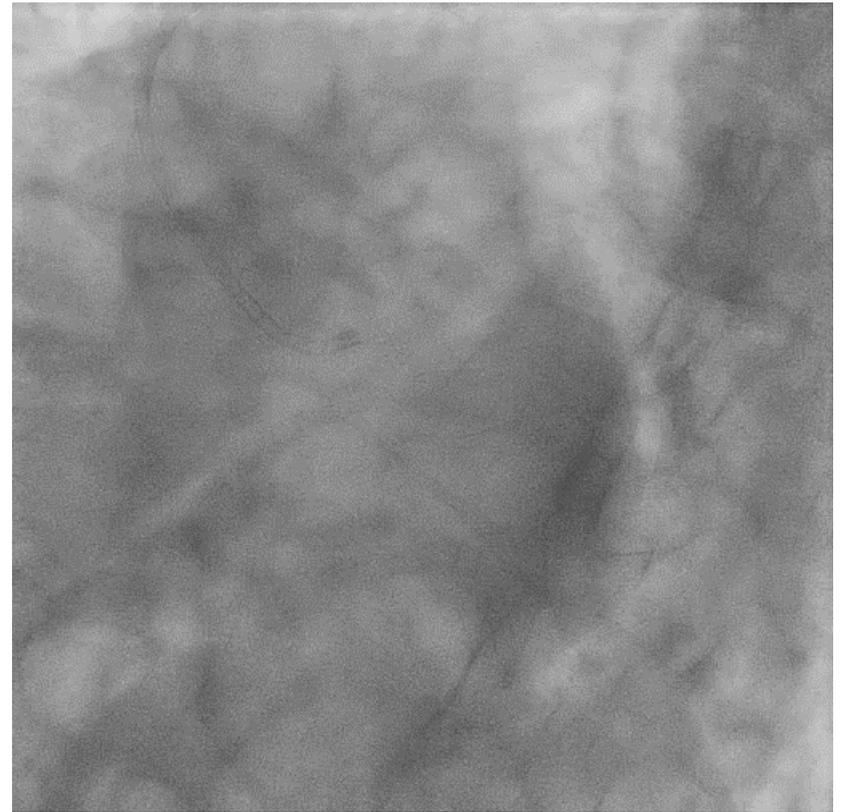
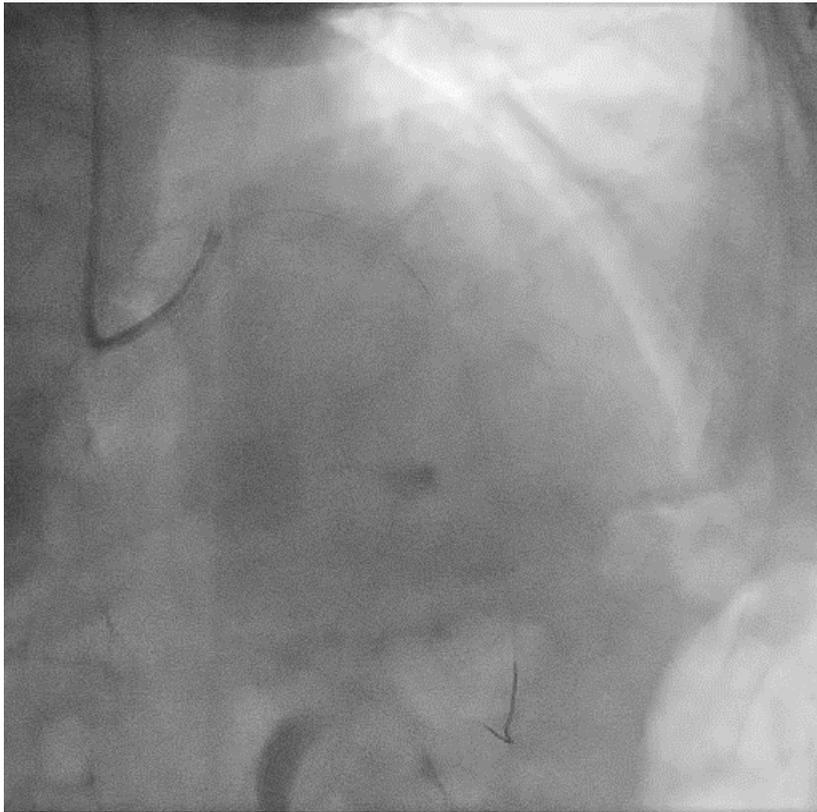


DS = 26.3%, MLD=2.1mm,
QFR = 0.93

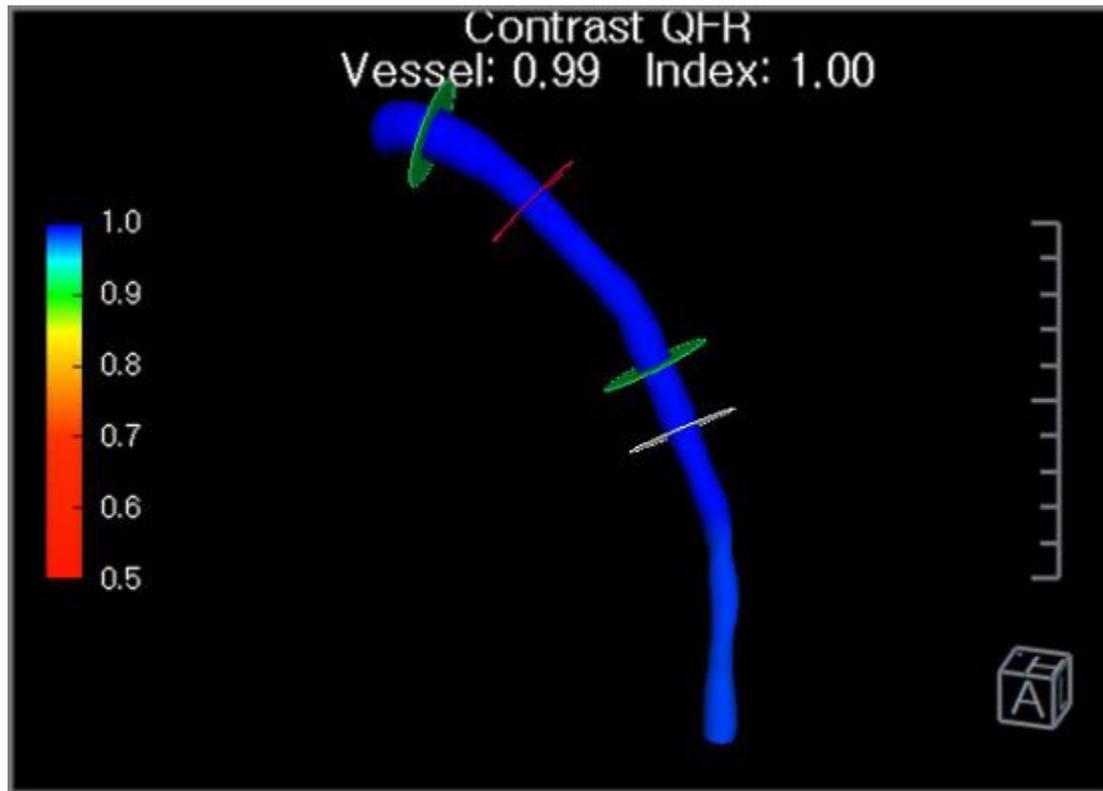


DCB Treatment

SeQuent please 3.5x20mm upto 8atm (3.56mm)



DS = 17.2%, MLD = 2.5mm,
QFR = 0.99



Take Home Messages

- DCB has shown good results in controlling neointimal hyperplasia in de novo coronary arteries.
- However, the role of DCB in treating left main stenosis is still unknown.
- Even though long-term outcome data are absent, this DCB treatment for a left main stenosis is promising.
- Left main stenosis may be a potential new indication for DCB, especially when patients are unsuitable for long-term antiplatelet therapy or unwilling to undergo coronary bypass grafting or stenting.

Thank you
for your attention!