



TCTAP 2019
Apr 28, 2019

My unforgettable CHIP [Complex Higher-Risk (and Indicated) Procedure/Patients]

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Left main bifurcation

Heavy calcified lesion

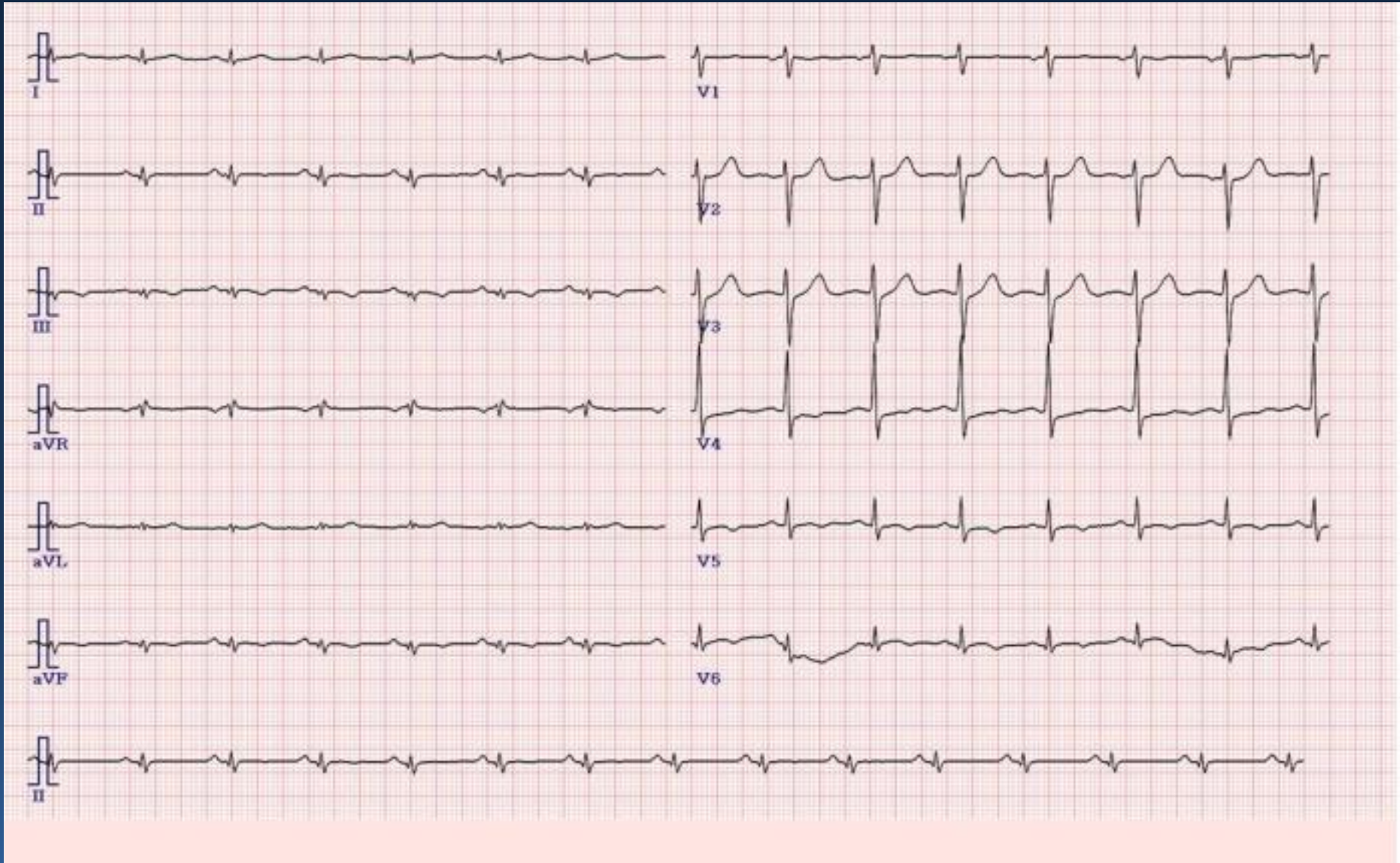
CTO lesion

Related complications

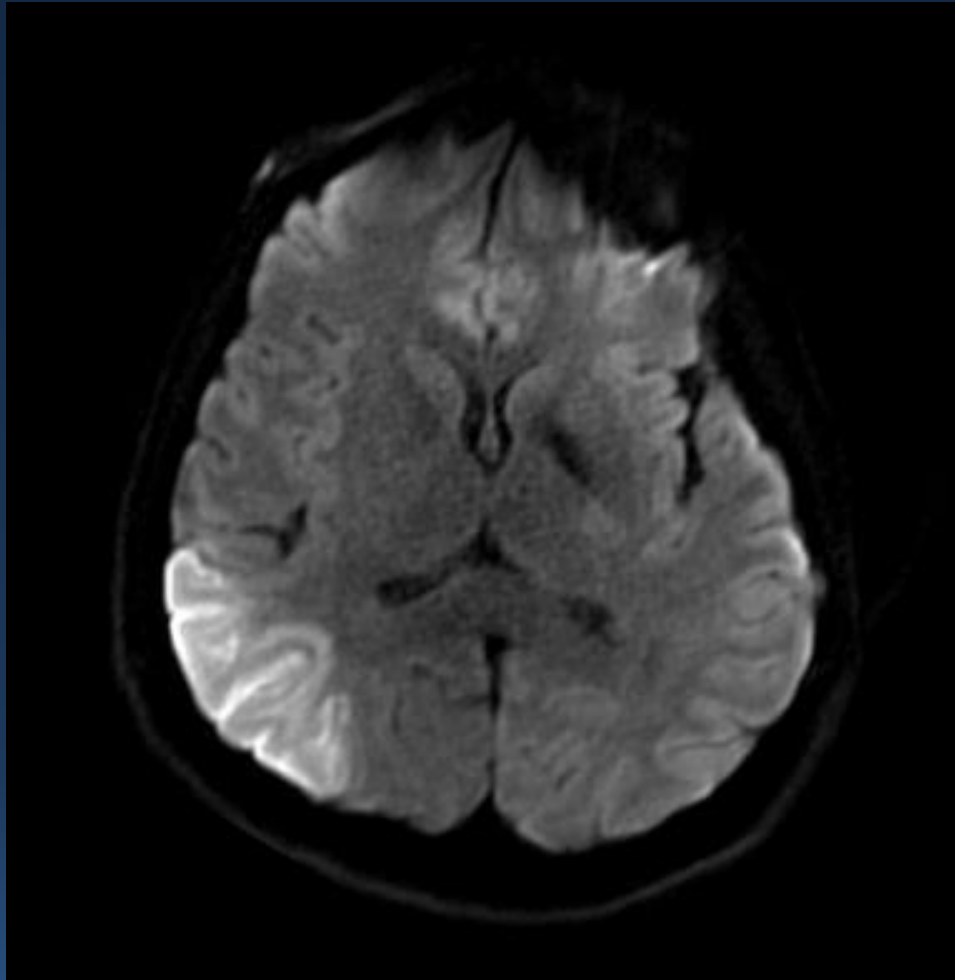
Brief case summary #1

- **Male / 35**
- **C/C: mental change, aphasia**
- **PHx : DM/HTN(+/+)** – insulin glargine, vildagliptin, metformin, atorvastatin 20mg
- **Current smoker(+)**
- **Troponin-T: 2210 pg/ml** **CK-MB: 3.21 ng/ml**

ECG



Brain MRI



Acute cortical infarction in Rt. temporoparietooccipital lobe

Cardiac evaluation

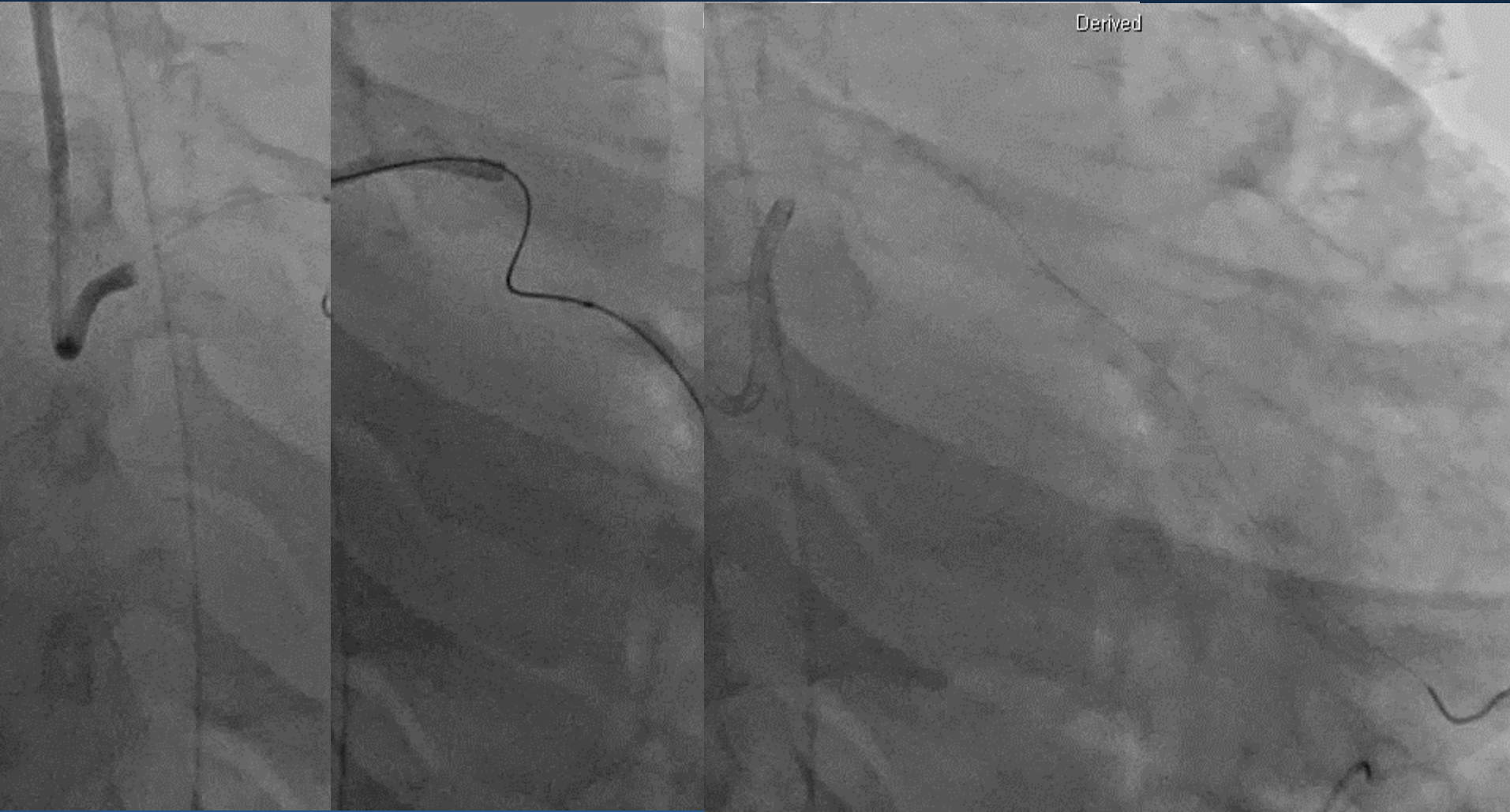
- **Echo : EF 40%, LAD & LCX RWMA(+)**
- **Holter : regular sinus rhythm**
- **Consultation from neurology**

POD#2, CAG

Derived

- ✓ Wiring
- ✓ Thrombus aspiration?
- ✓ Balloon angioplasty
- ✓ Stent implantation – metal stent? Bioresorbable scaffolds?

PCI

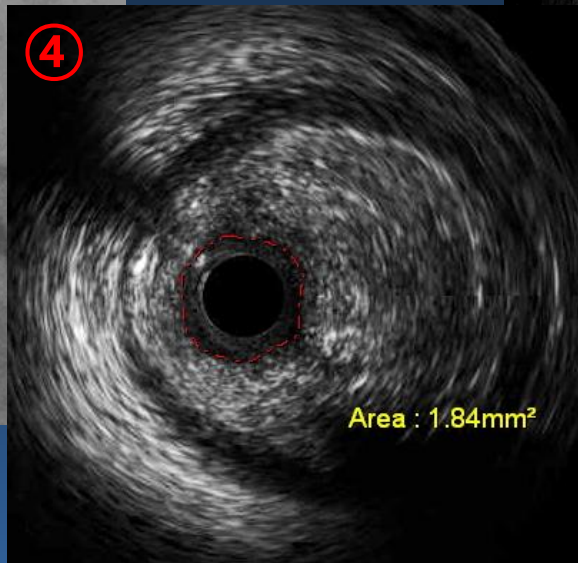
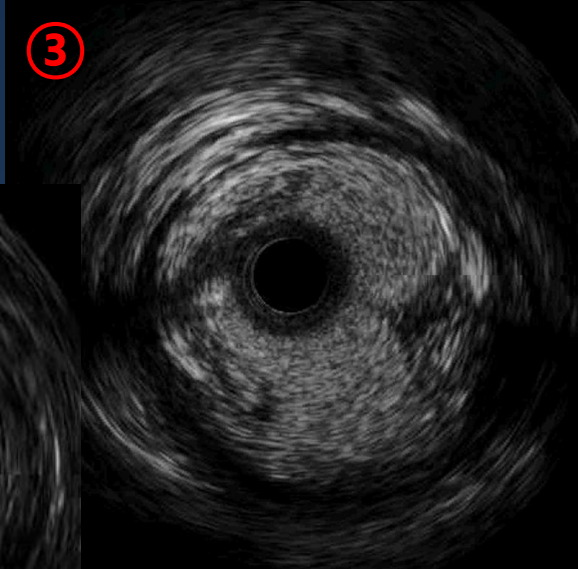
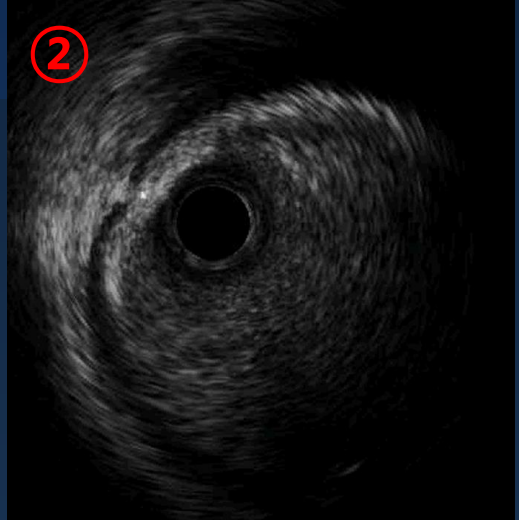
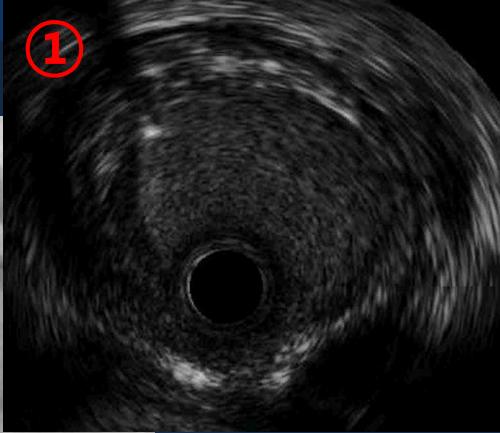
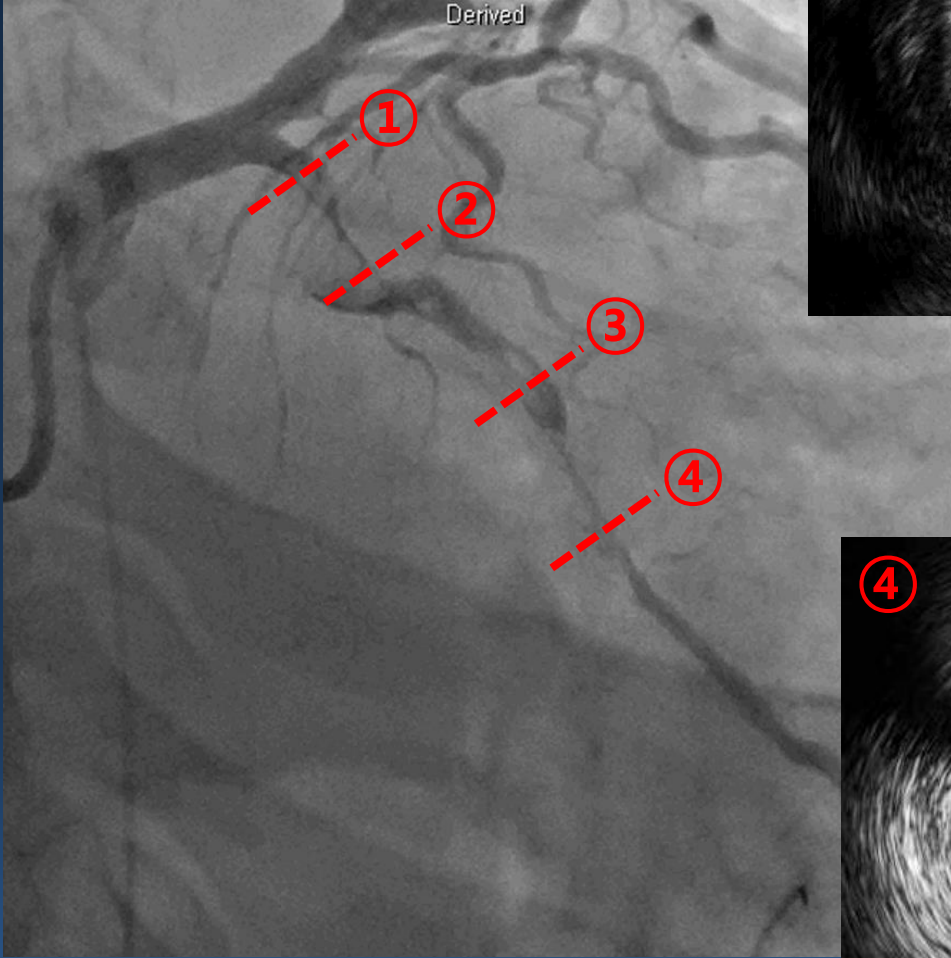


Finecross microcatheter + Fielder FC & Fielder XT-R
Thrombus aspiration: red thrombus (+++)

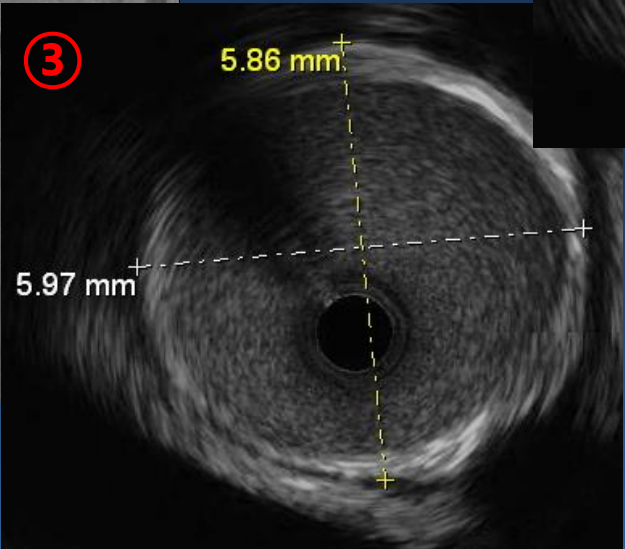
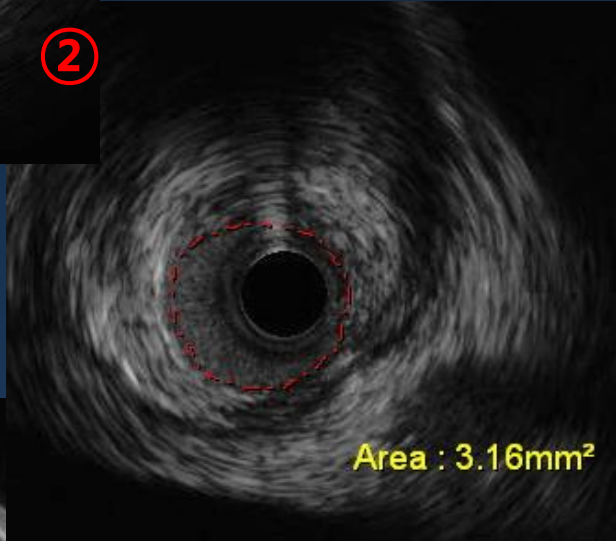
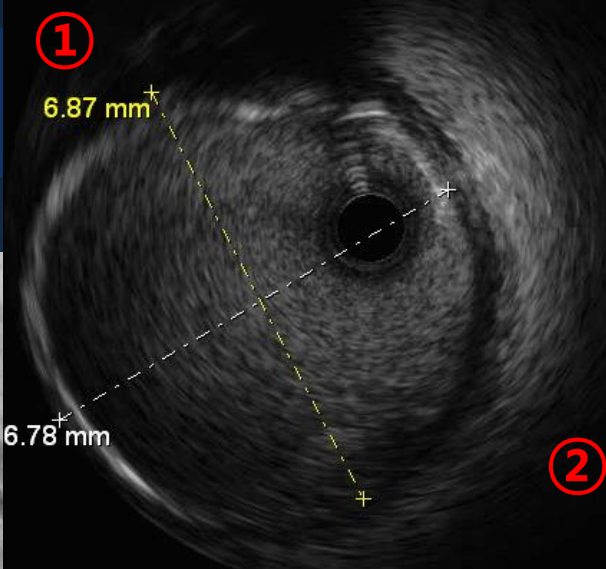
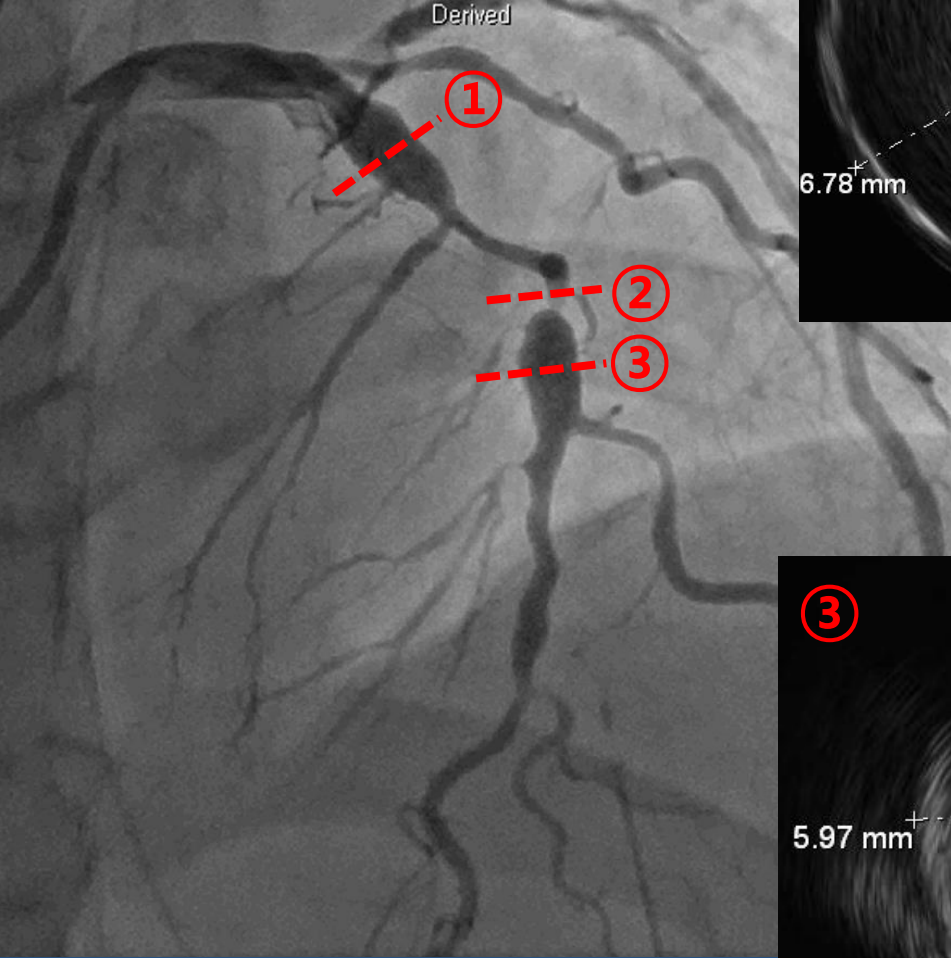
Treatment strategy

- **NSTEMI & angiographic significant stenosis**
 - ➔ **Revascularization !!!**
- **How PCI ? Stent ?**
- **MI, but aneurysmal change ➔ medical Tx.?**

IVUS: LCX



IVUS: LAD



Treatment strategy

- **NSTEMI & angiographic significant stenosis**
 - **Revascularization !!!**
- **How PCI ? Stent ?**
- **MI, but aneurysmal change → medical Tx.?**

PCI



Ryujin 2.5/15mm

Medications

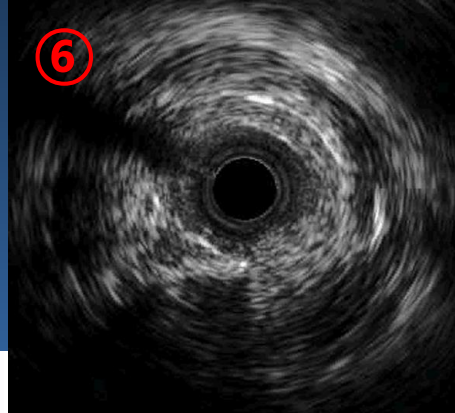
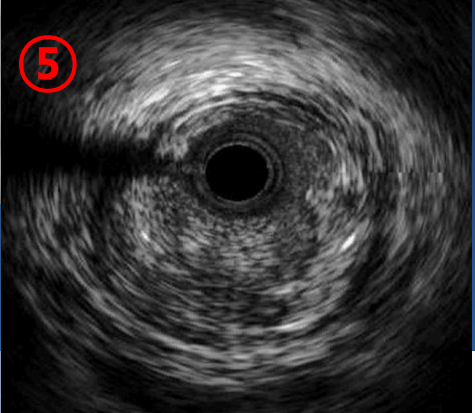
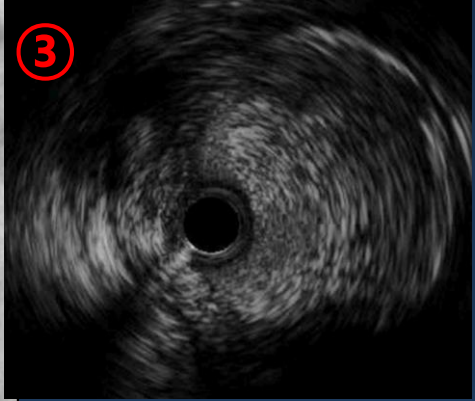
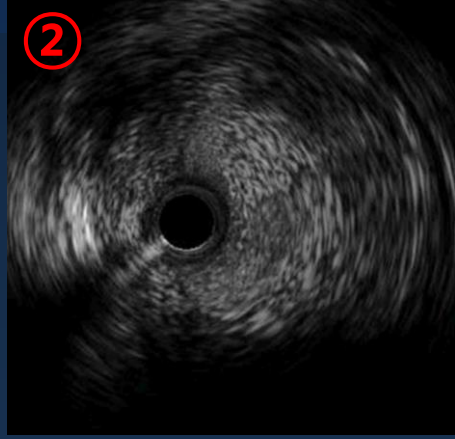
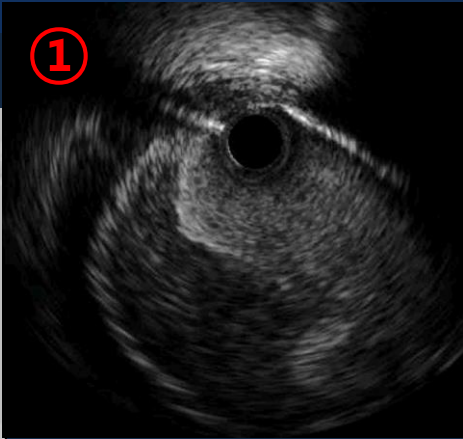
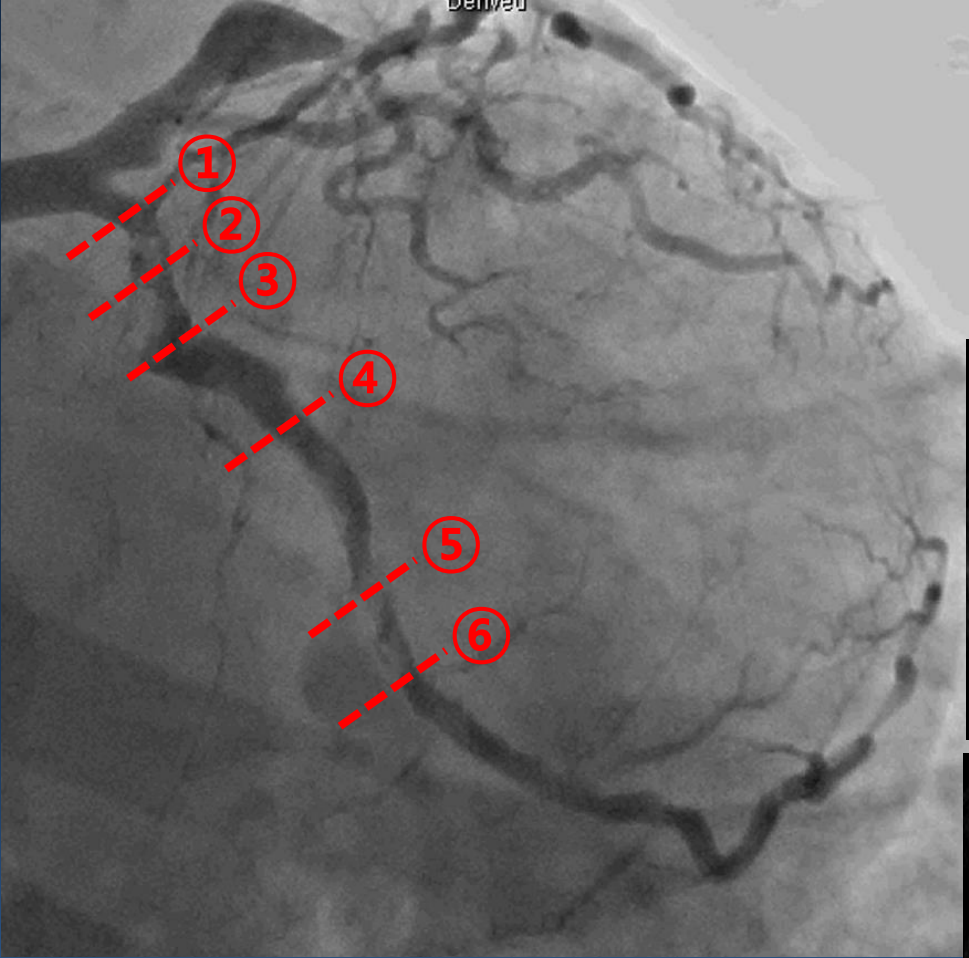
- Enoxaparin 120mg #2 s.c.
- Aspirin 100mg
- Clopidogrel 75mg
- Rosuvastatin 20mg
- Olmesartan 20mg

POD #7, f/u CAG



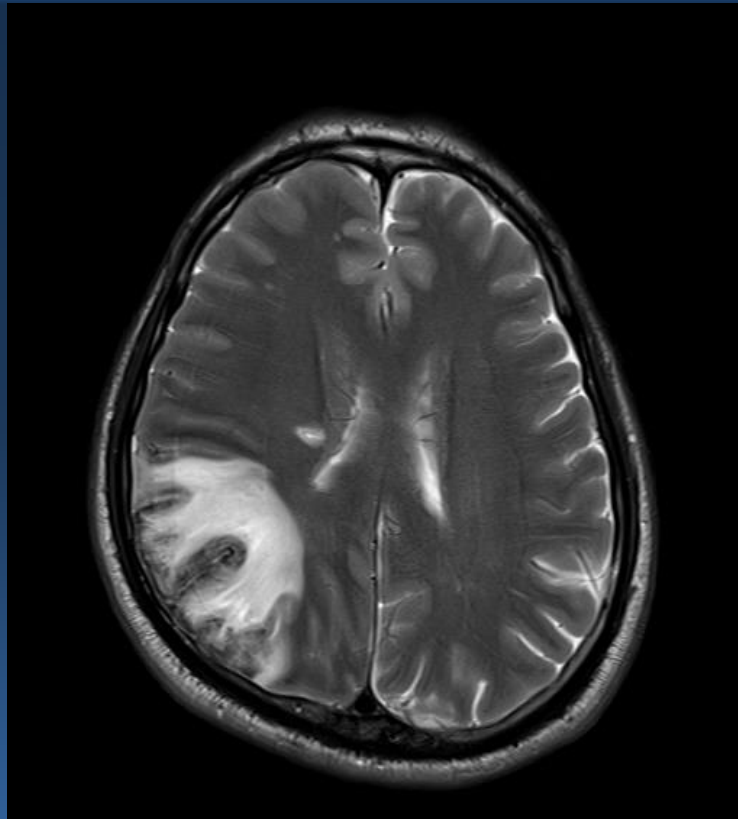
Warfarin + aspirin + clopidogrel

POD #7, f/u IVUS: LCX



POD #8, brain MRI

- Headache (+)
- Subacute infarction with gyral microhemorrhage in Rt. parietal cortex



POD #14, brain CT

- Headache (+)
- Rt. parieto-occipito-temporal ICH with edema



POD #14, brain CT

We stopped anticoagulation, aspirin, and clopidogrel.



After 1 months,

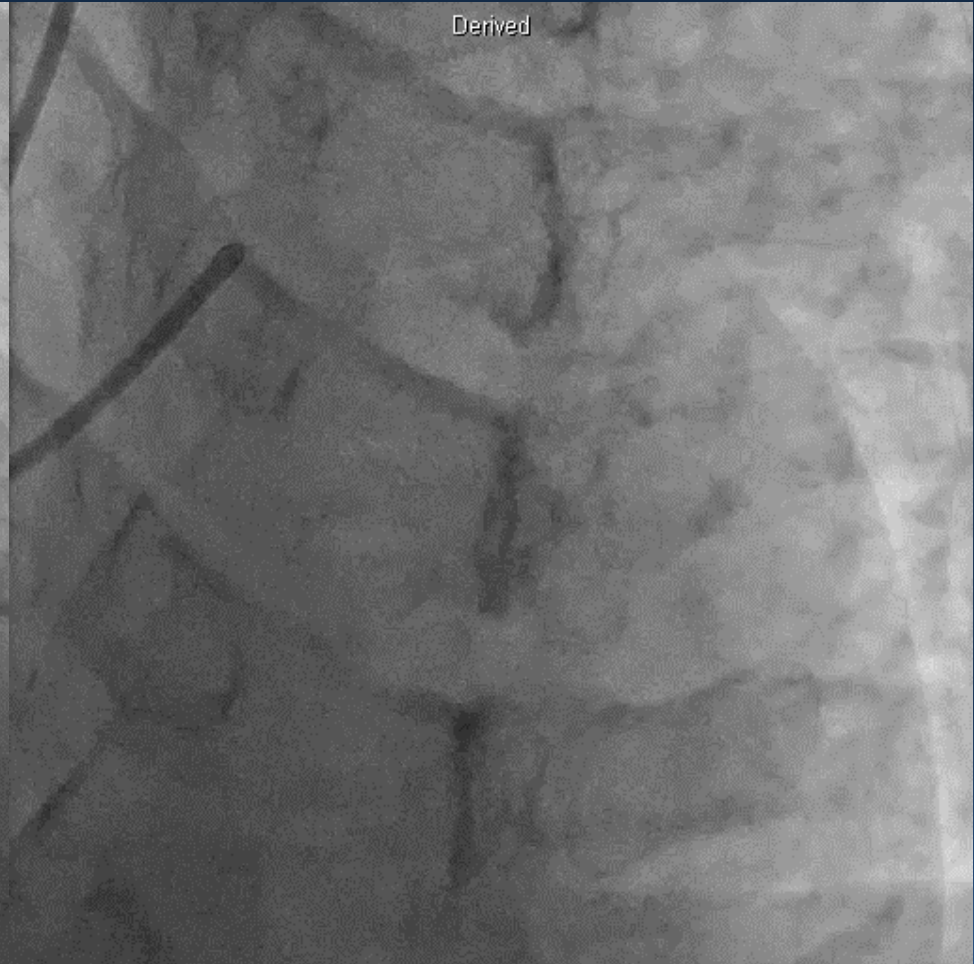
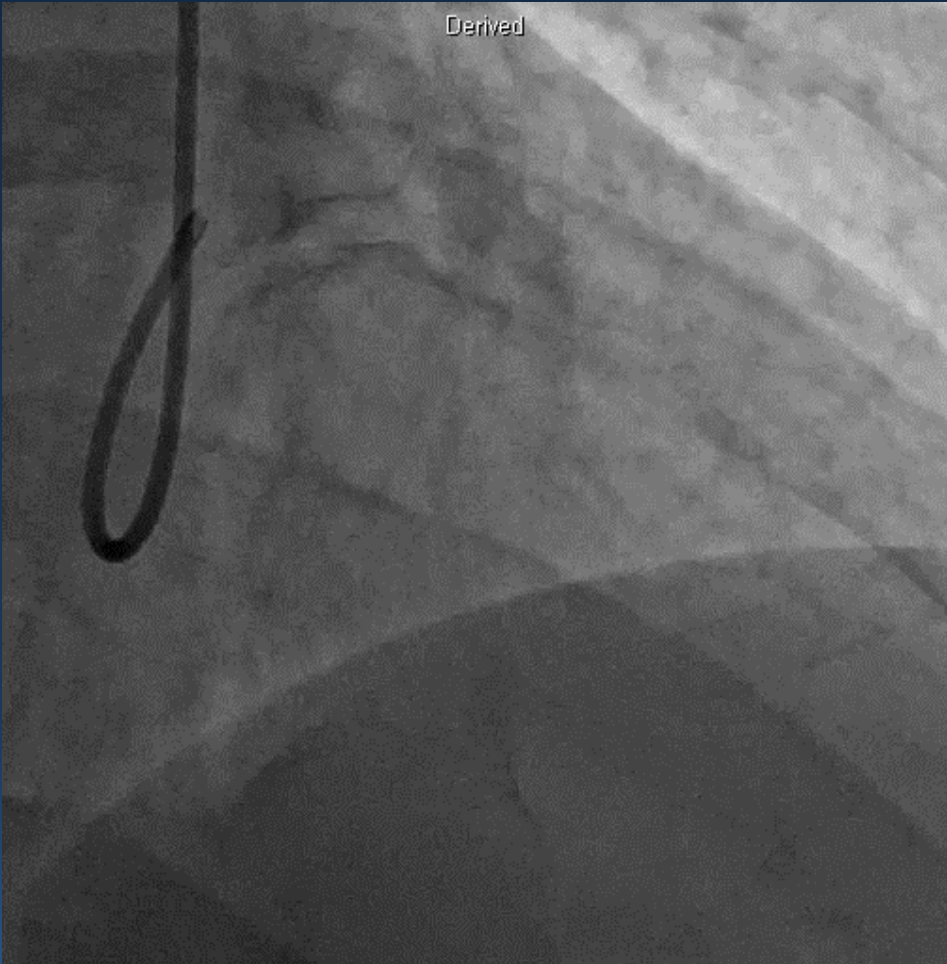
- Chest pain (-)
- Headache (-)
- **Aspirin alone**



After 6 months, in outpatient clinic

- Chest discomfort(+) –tightness
- Dyspnea on exertion (+)
- F/U echo: EF 51%, LCX RWMA(+)

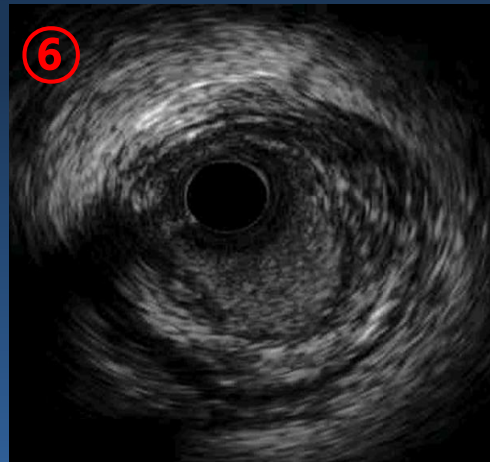
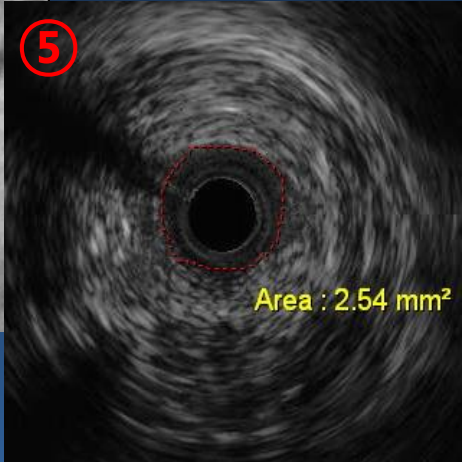
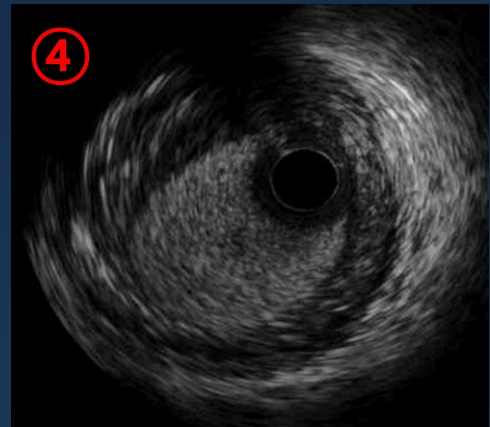
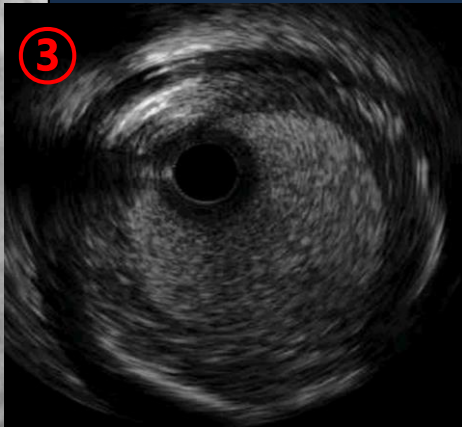
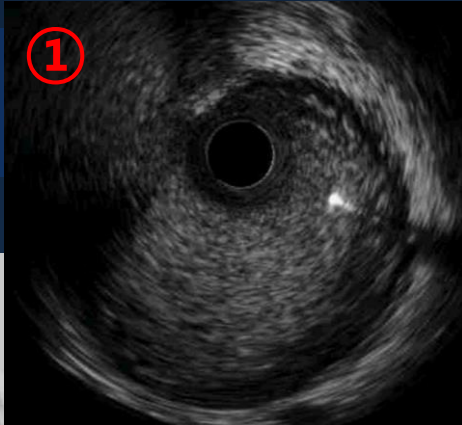
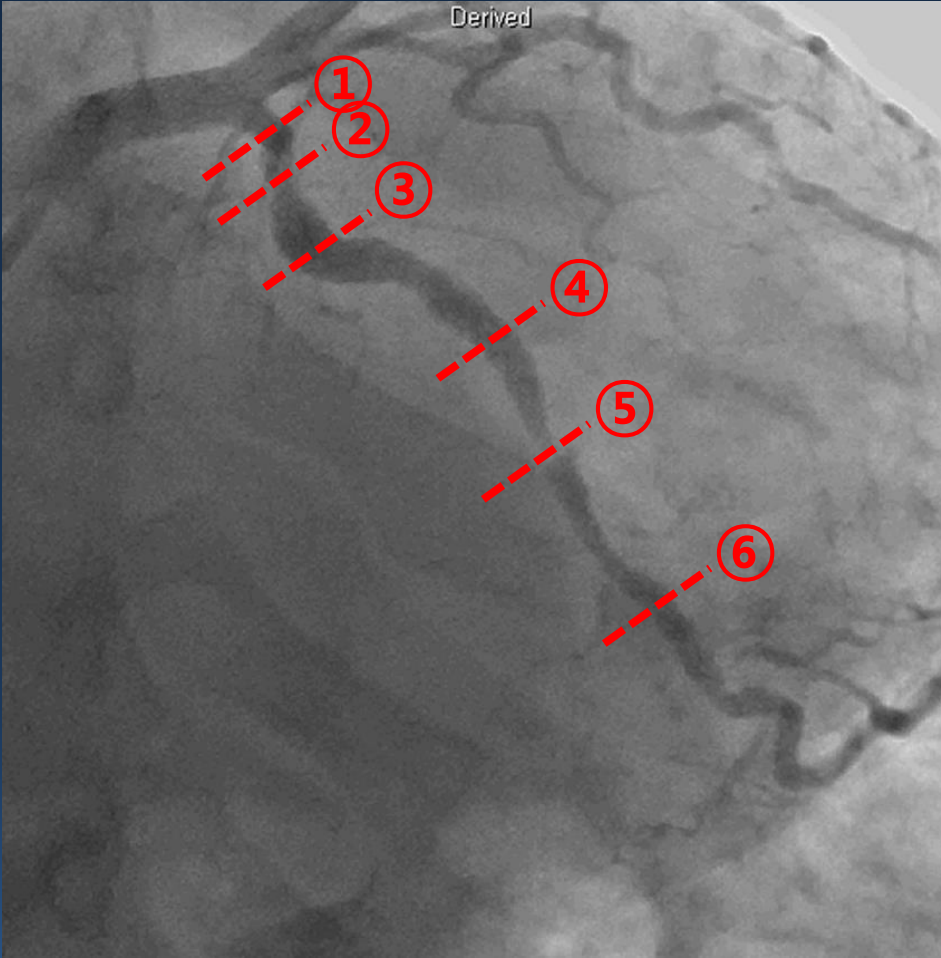
F/U CAG after 6 months



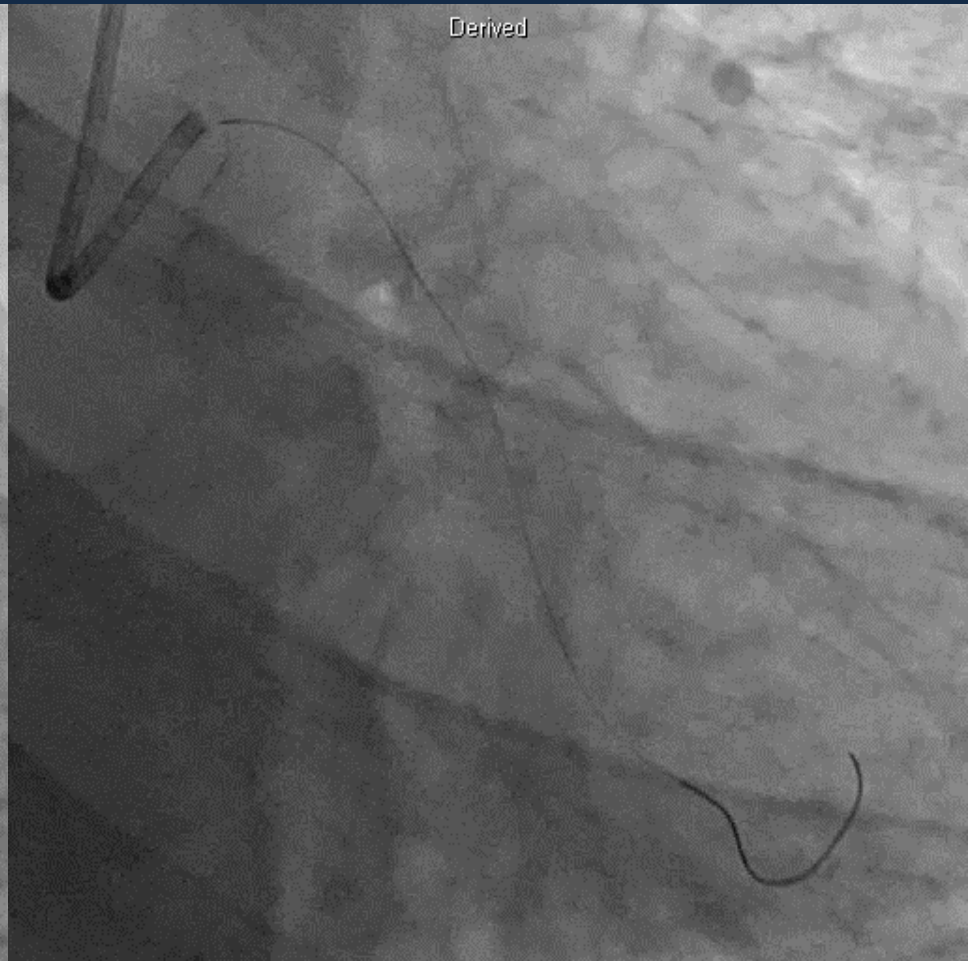
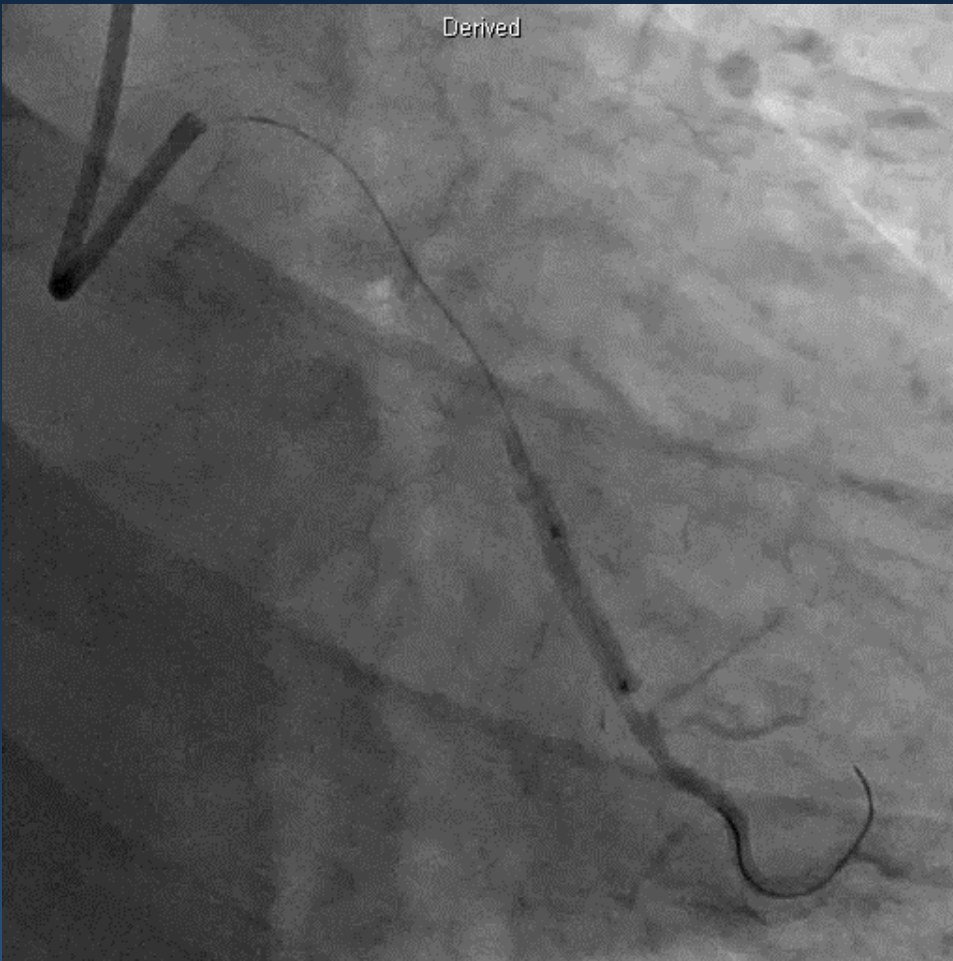
F/U CAG after 6 months



IVUS: LCX

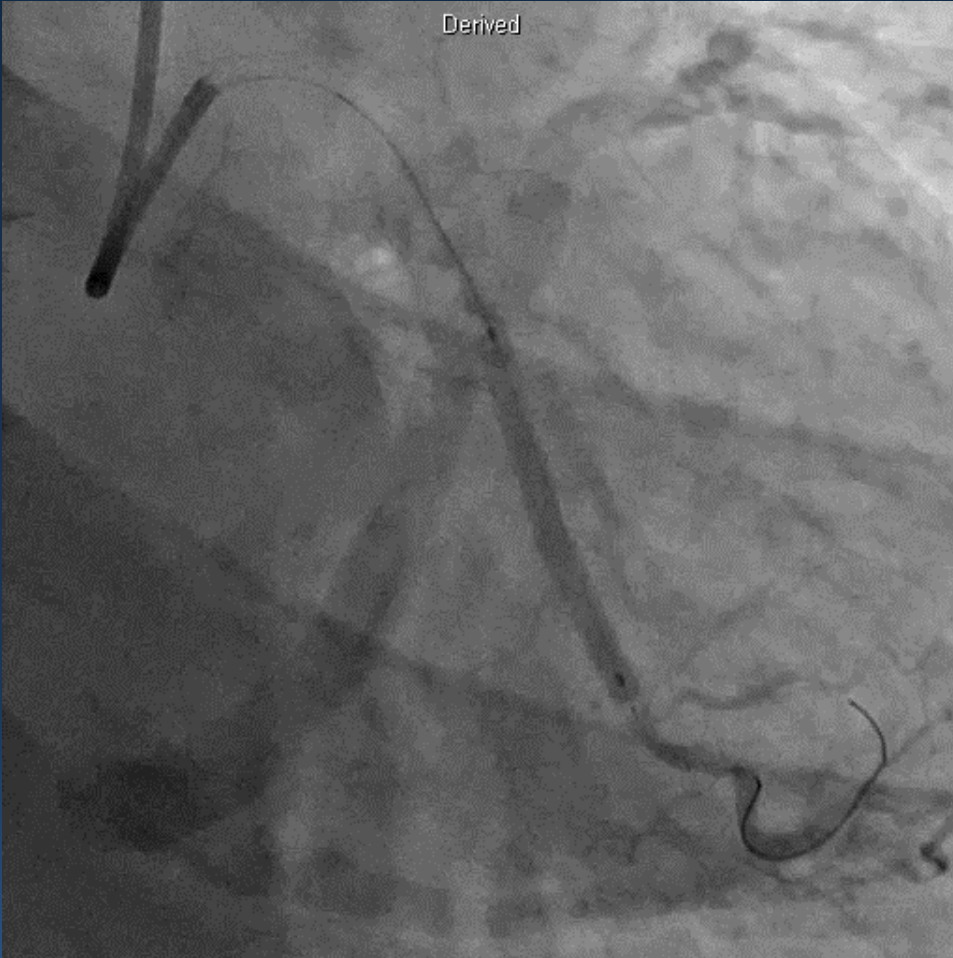


PCI



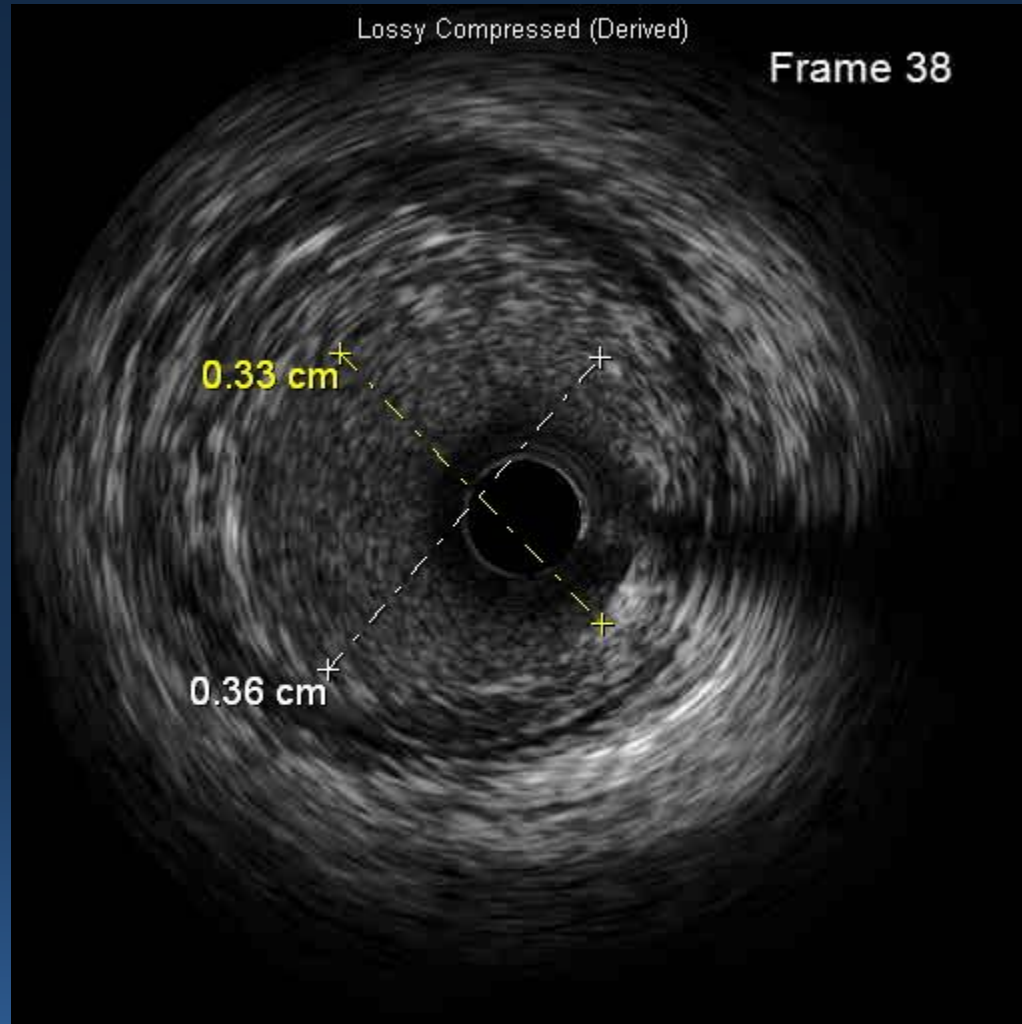
Ryujin 3.0/15mm

PCI



Paclitaxel-eluting balloon 3.5/30mm

IVUS after DEB



Final angiography



FFR : 0.75



FFR : 0.94

Medications

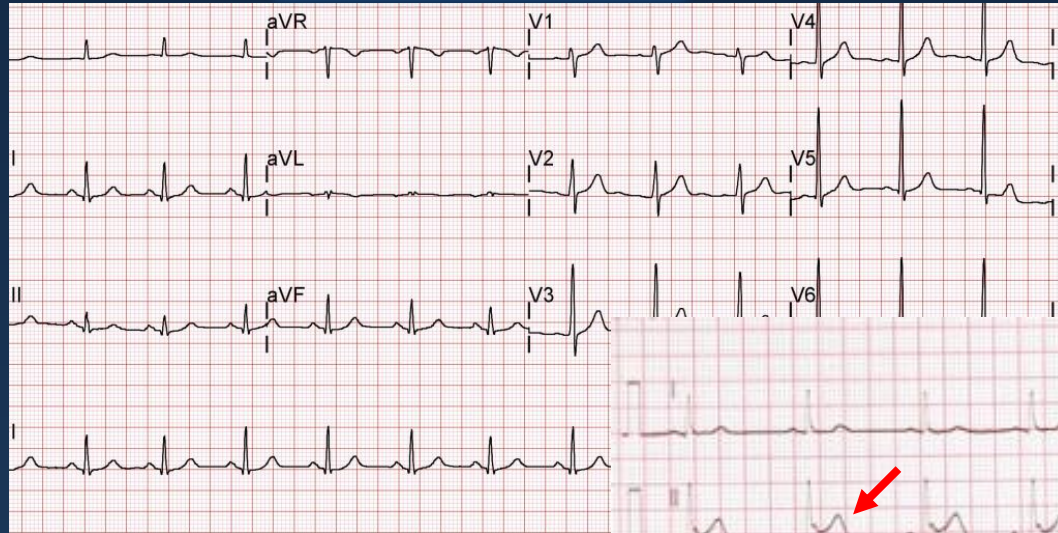
- Aspirin 100mg
- Clopidogrel 75mg
- Rosuvastatin 20mg
- Olmesartan 20mg
- Carvedilol 6.25mg bid
- Torsemide 5mg

Brief case summary #2

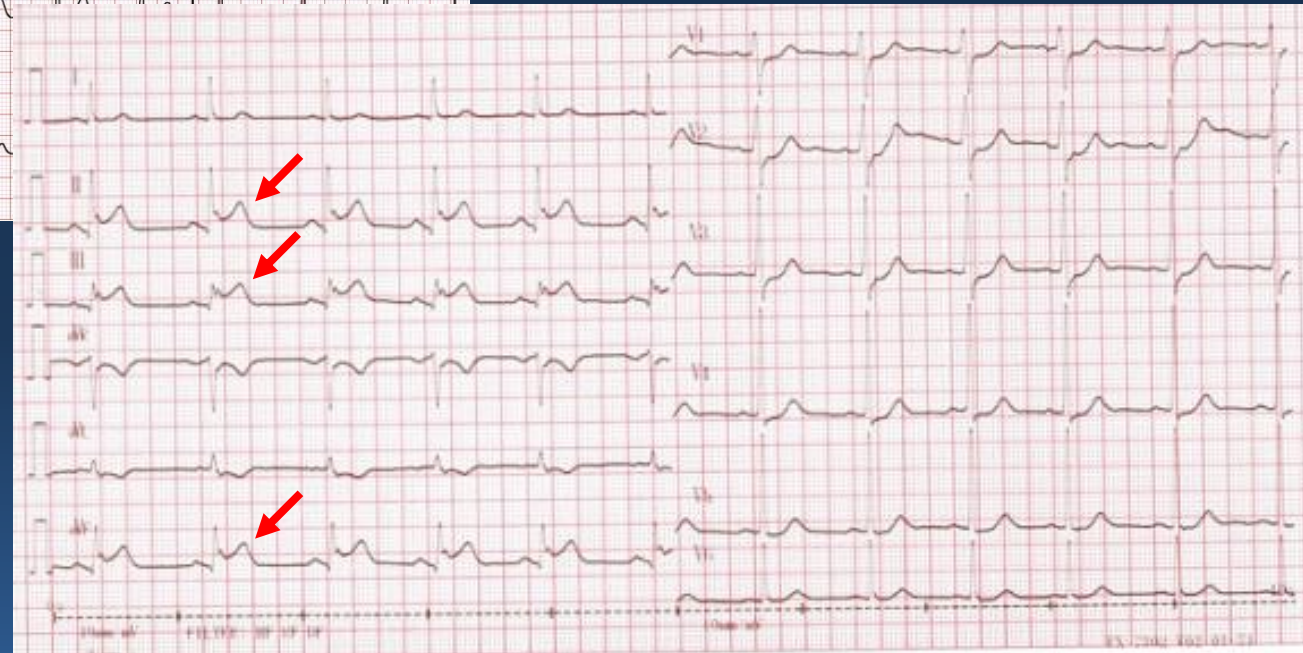
- Male / 67
- C/C: chest pain
- PHx : DM/HTN (-/-)
- **Current smoker(+)**
- **Esophageal ca.: consultation from oncology during concurrent chemo-radiation therapy**

EKG

Initial EKG



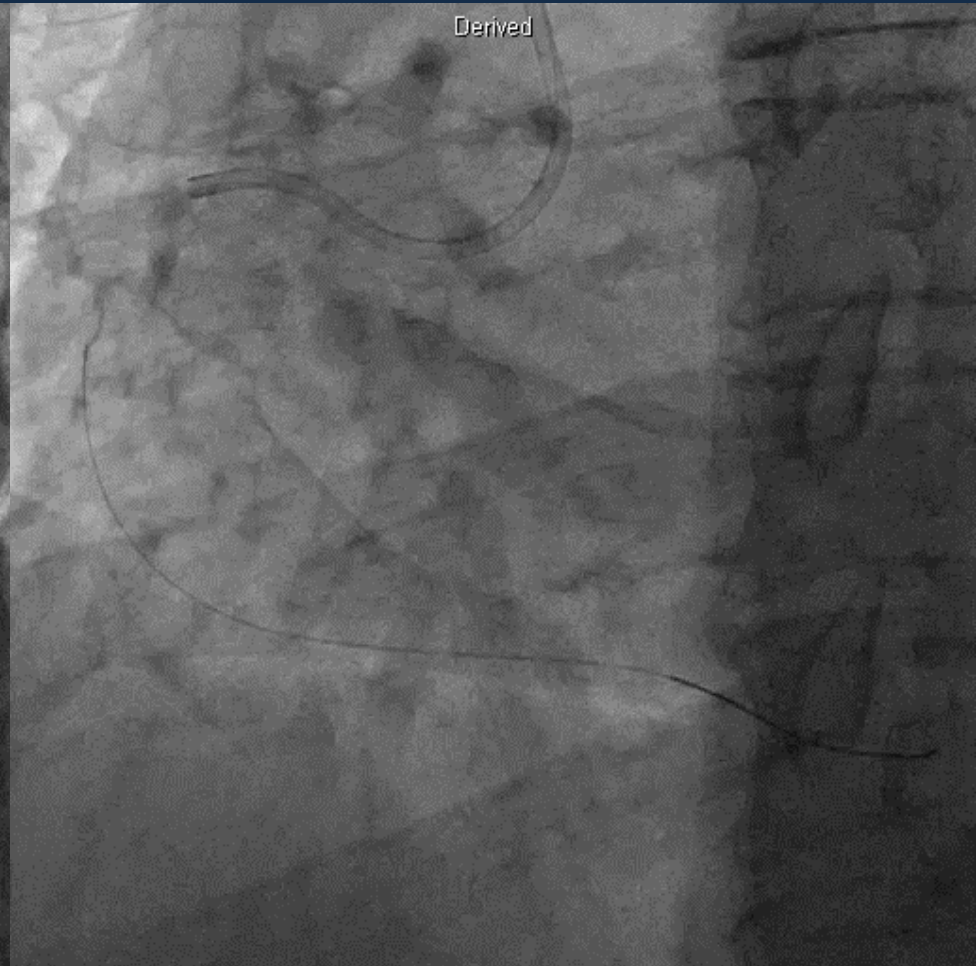
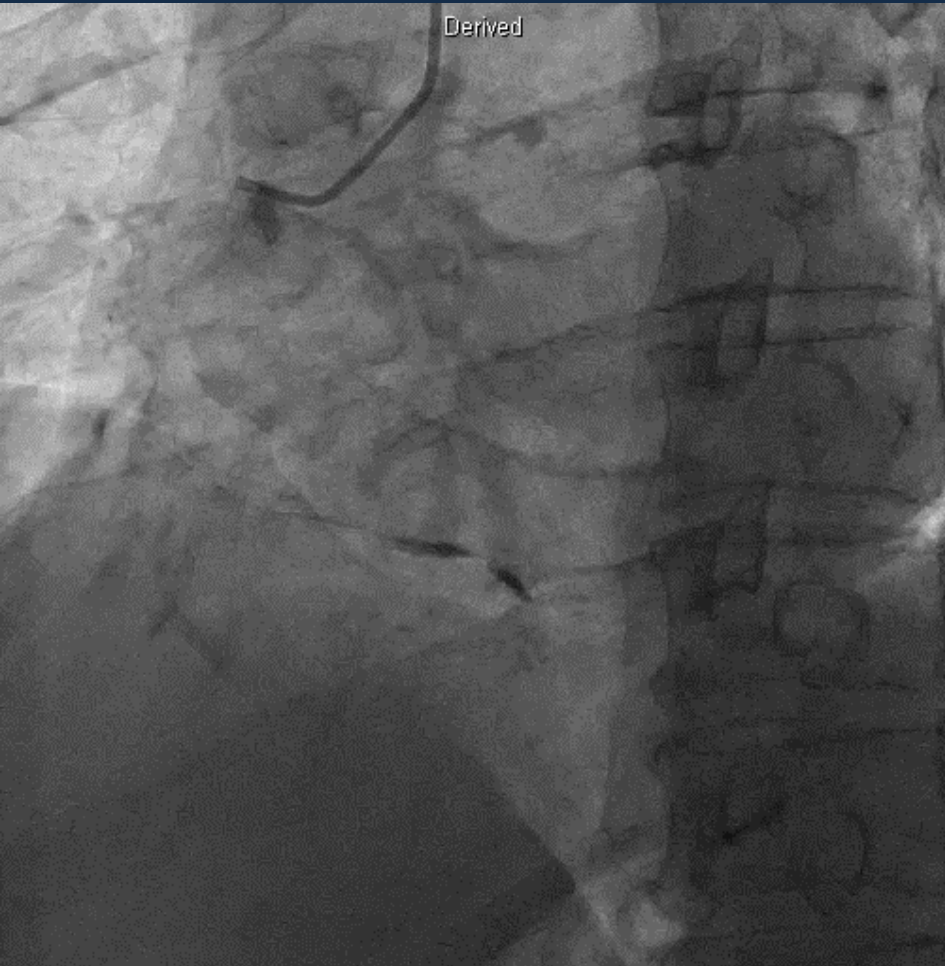
Chest pain

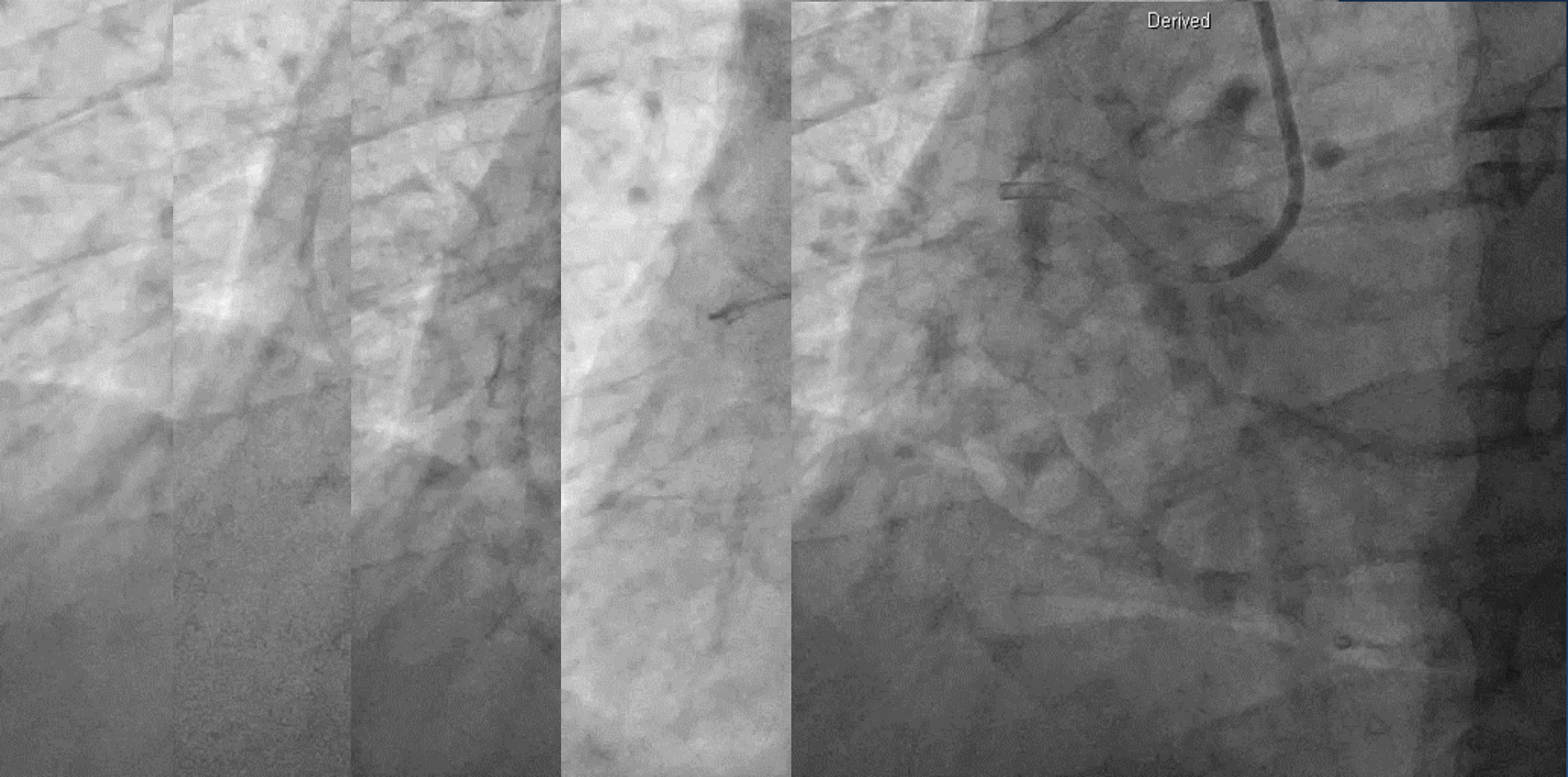




CAG

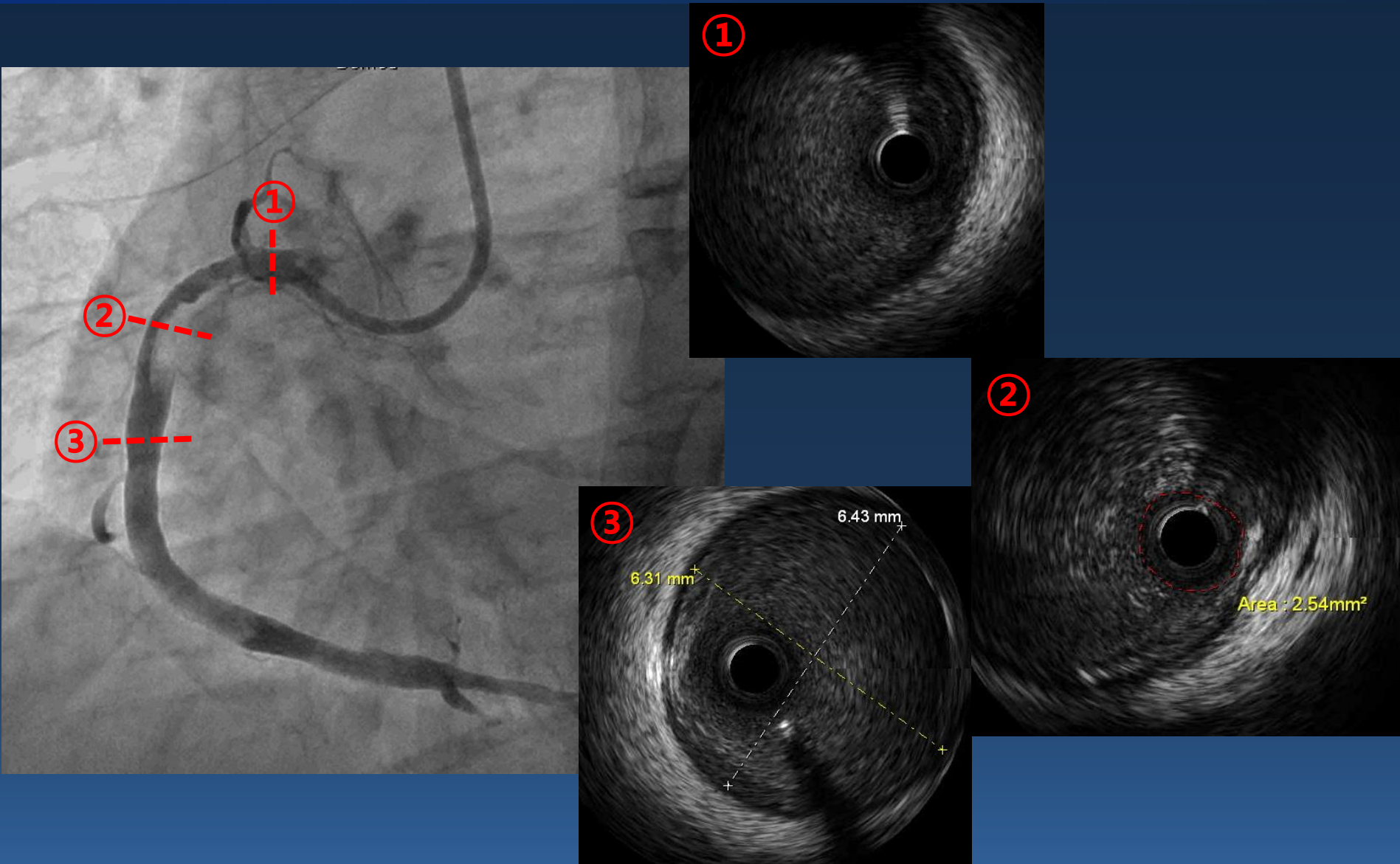
Thrombus aspiration & GP lib/IIIa inhibitor





Thrombus aspiration with 5Fr Heartrail catheter

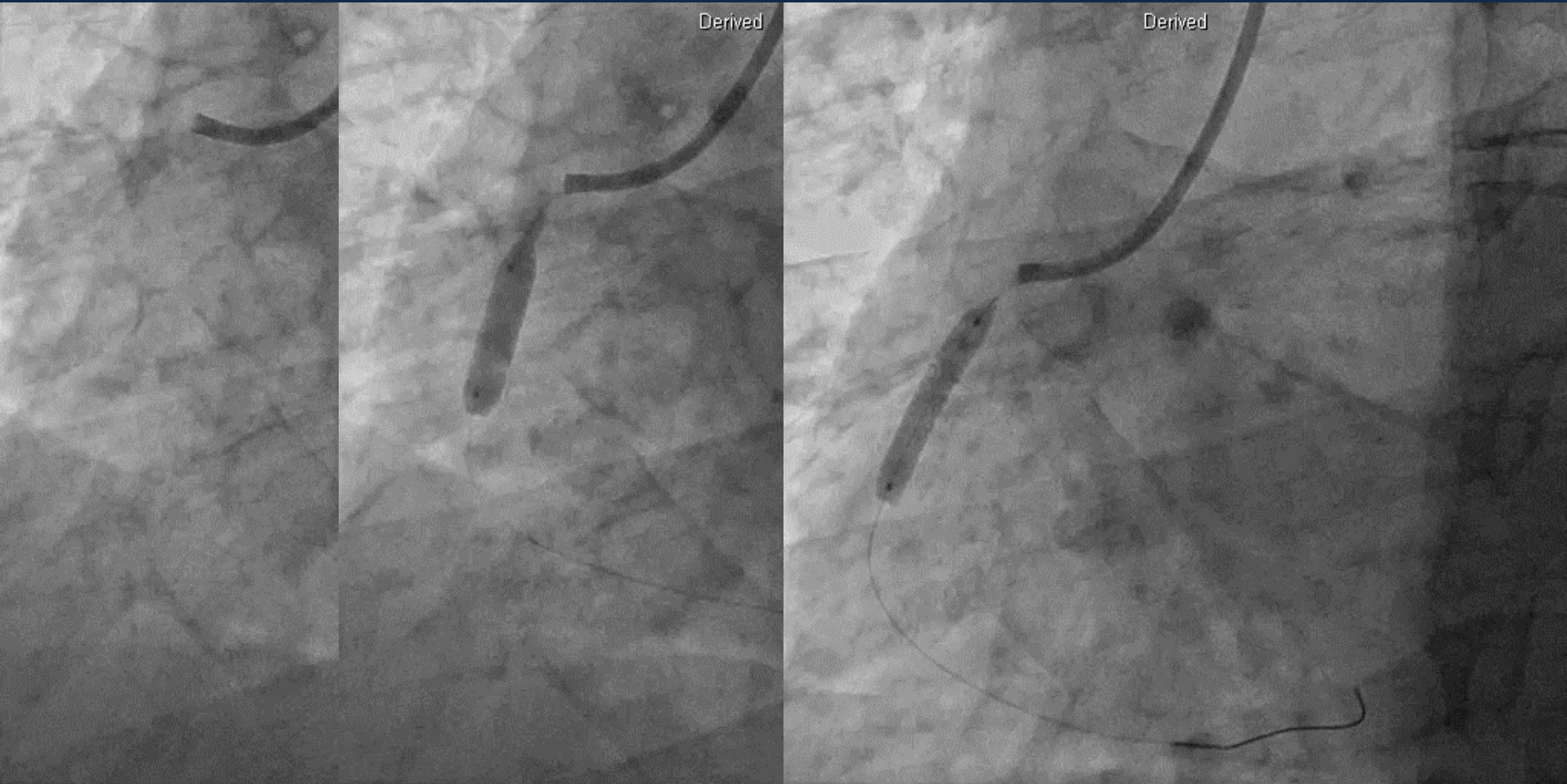
PCI



Medications

- **GP IIb/IIIa inhibitor IV**
- **Enoxaparin 160mg #2 s.c.**
- **Aspirin 100mg**
- **Ticagrelor 180mg #2**
- **Rosuvastatin 20mg**

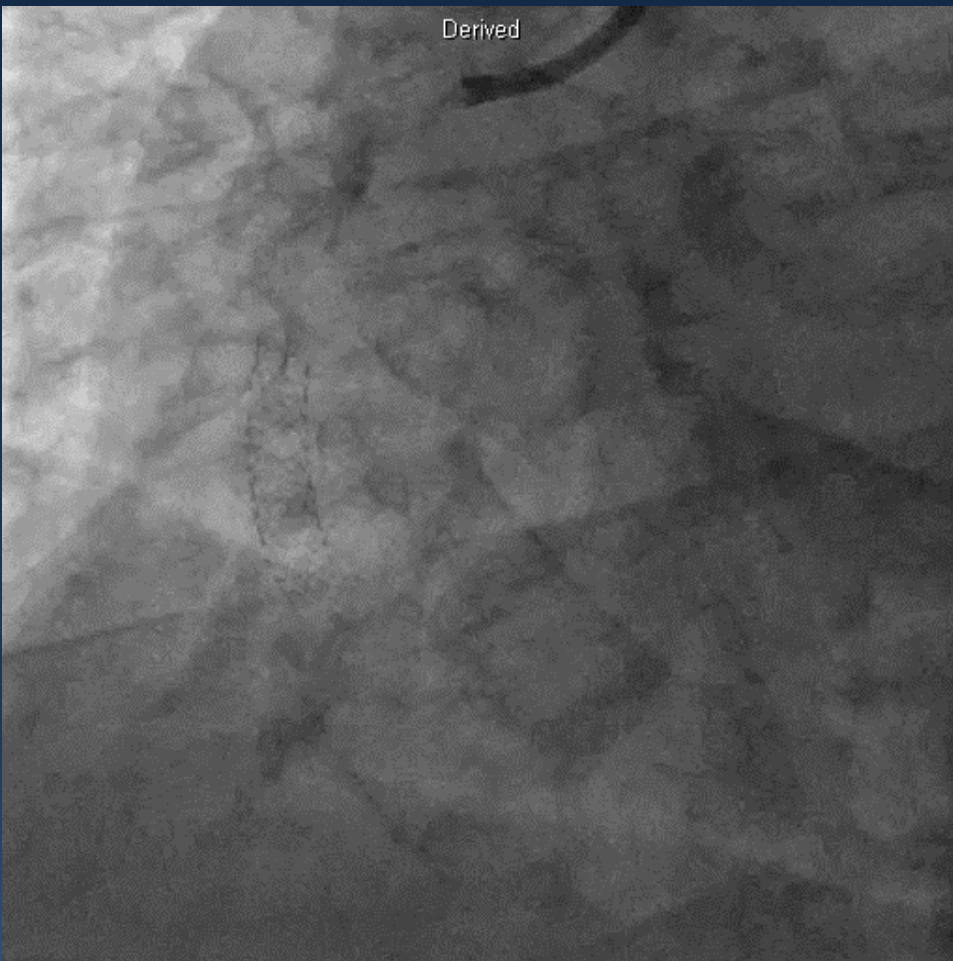
F/U CAG after 2 days



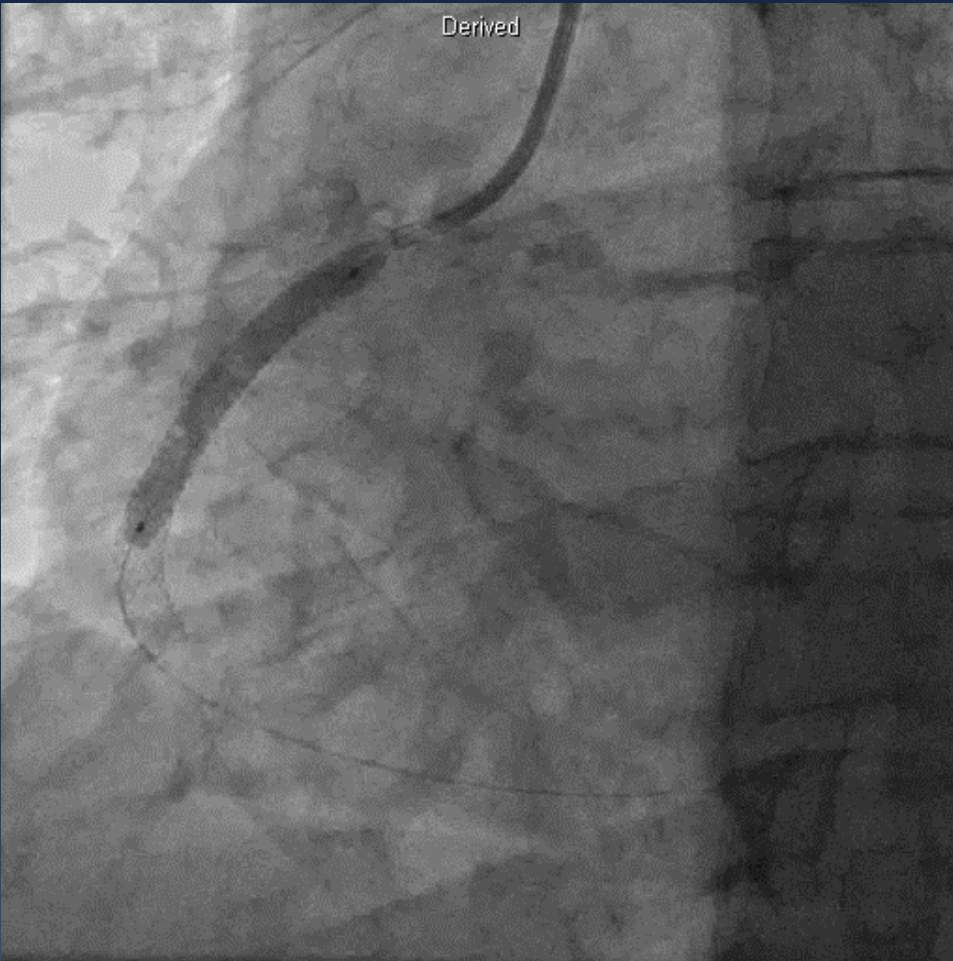
NC Trek 5.0/15mm

Synergy 4.0/20mm

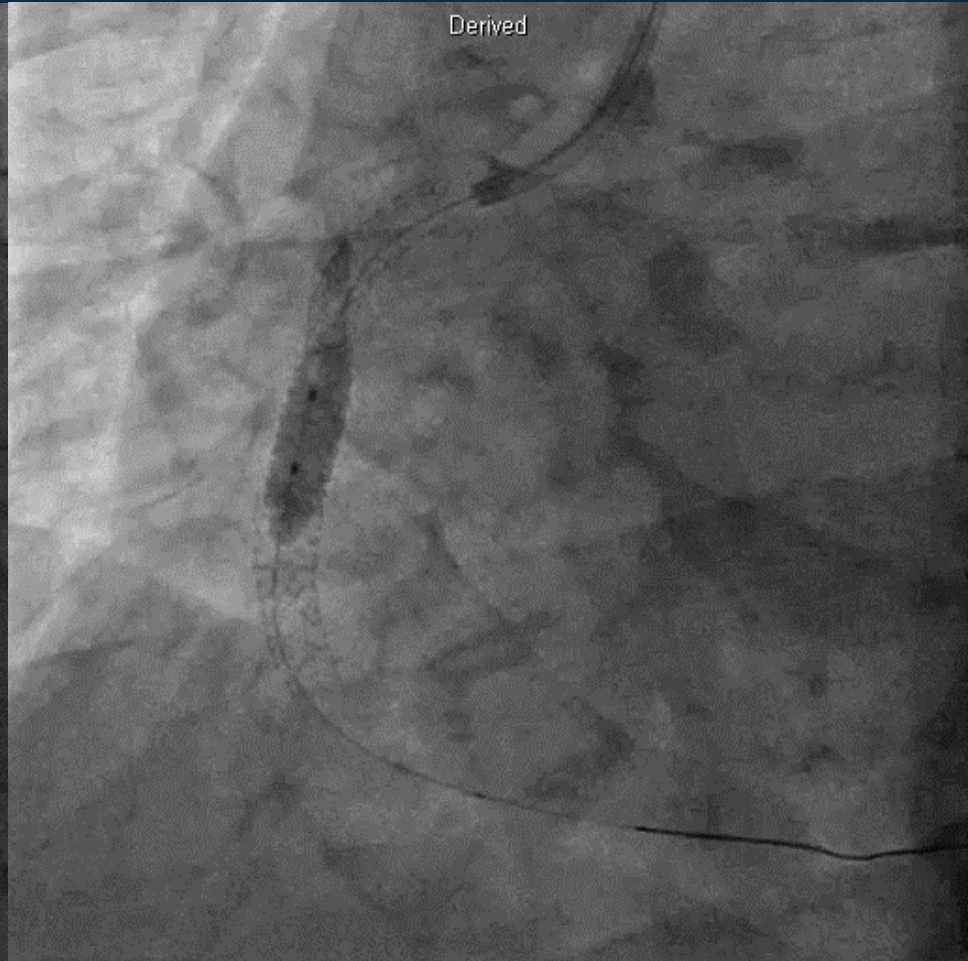
PCI



PCI

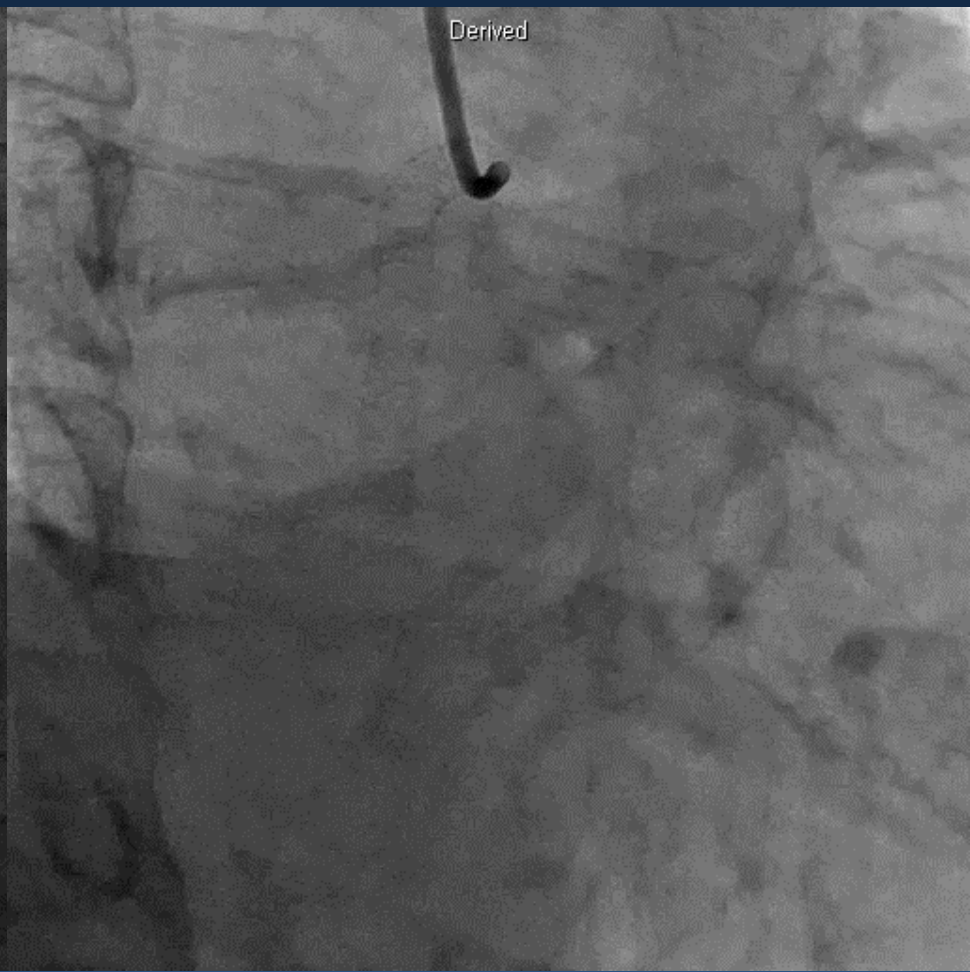
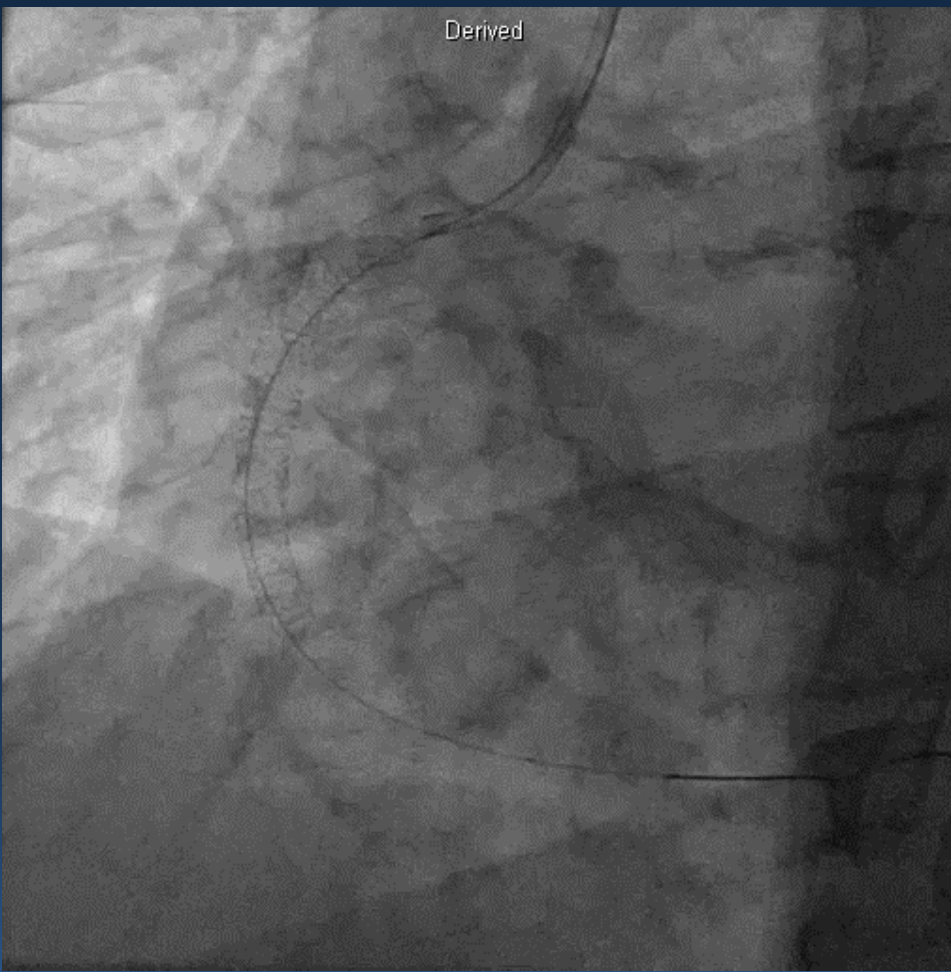


Synergy 4.0/32mm



NC Emerge 6.0/8mm

PCI



Summary

Huge thrombus burden in large coronary artery

Leave **nothing** behind

Leave the **right thing** behind

Summary

**CHIP Complex Higher-Risk and Indicated
Procedure/Patients**

**Imaging
guided-PCI**

Conclusion

**CHIP Complex Higher-Risk and Indicated
Procedure/Patients**

Complex PCI

Conclusion

CHIP Complex Higher-Risk and Indicated
Procedure/Patients

Complex patient
Simple PCI

Thank you for your attention.



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