



A Case of Successful DEB Angioplasty guided by FFR & IVUS

Jong Min Kim M.D. / Eun-Seok Shin M.D., Ph.D.

Division of Cardiology
Ulsan University Hospital
University of Ulsan College of Medicine

Presenter Disclosure Information

Presenter : Jong Min Kim, M.D.

**Title : A Case of Successful DEB Angioplasty
guided by FFR & IVUS**

**No relationships to disclose
No industry sponsorship**

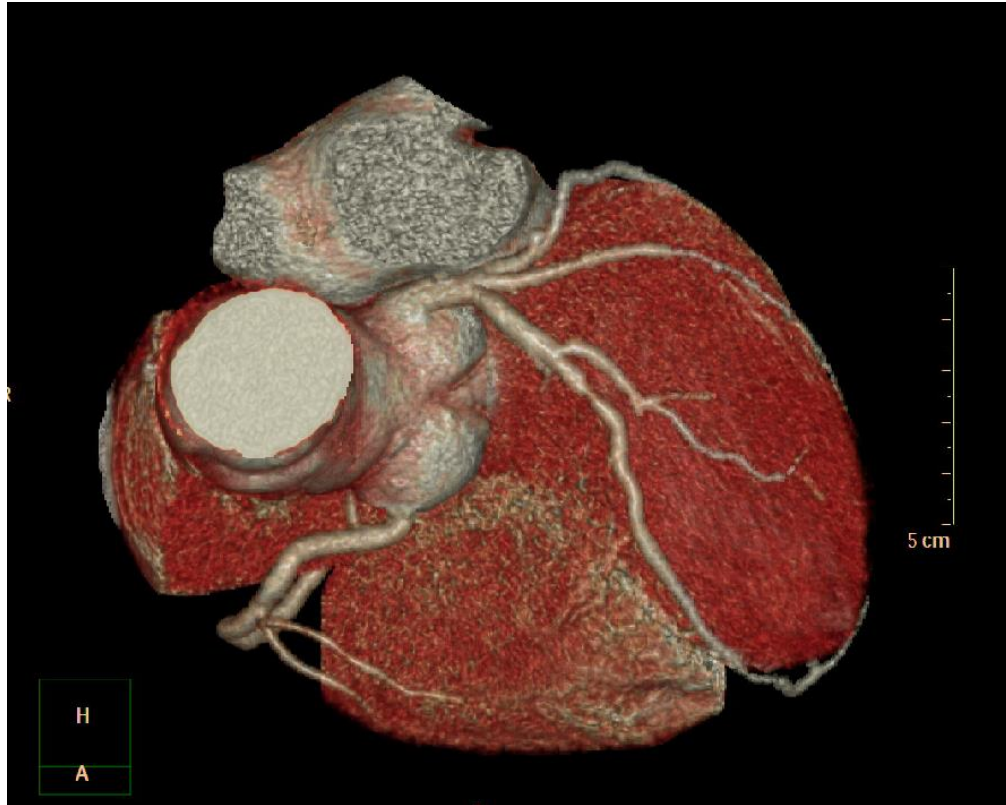
Case Review

- Age: 64, Gender: Male
- **C.C:** Effort related chest pain for 1 week
- **Risk factors**
 - HTN,
 - DM,
 - Dyslipidemia,
 - Current smoker(30PY)

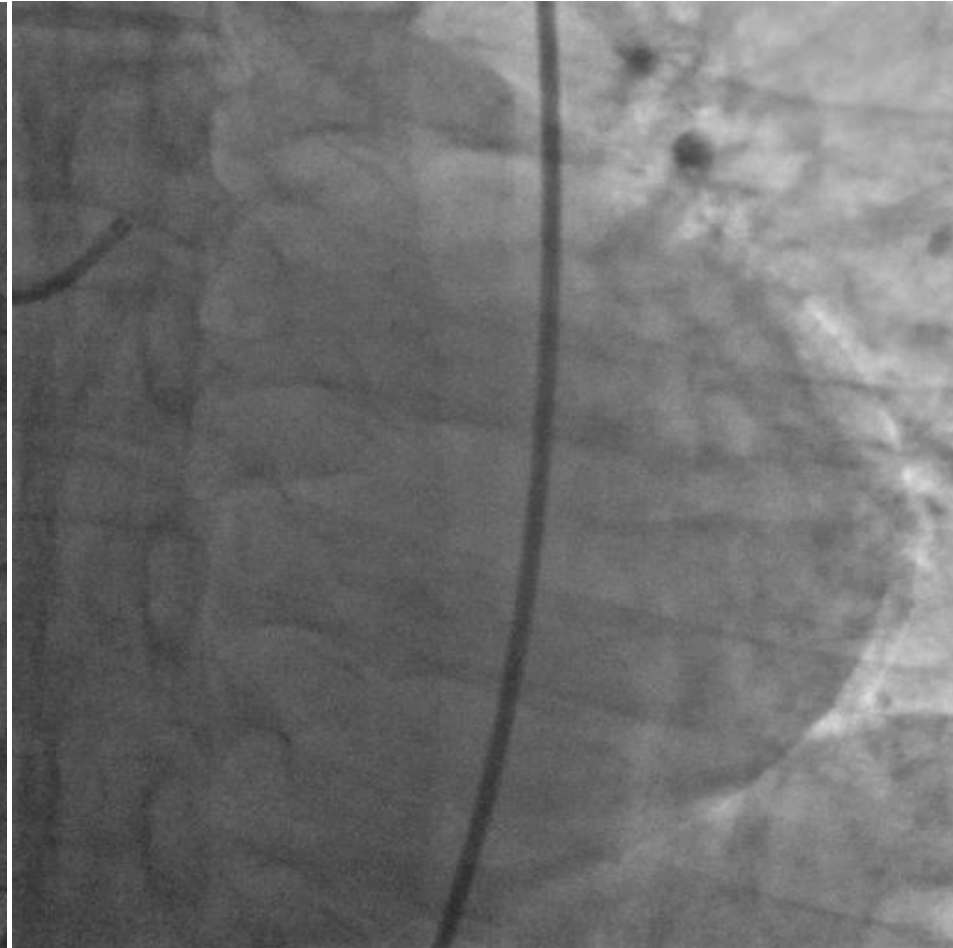
Case Review

- **ECG:** Normal
- **Lab:** T-chol 188, HDL 30, TG 201, LDL 122 mg/dl
HbA1C 7.1%
- **Cardiac enzyme:** Normal
- **EchoCG:** Normal
- **TMT:** Inadequate

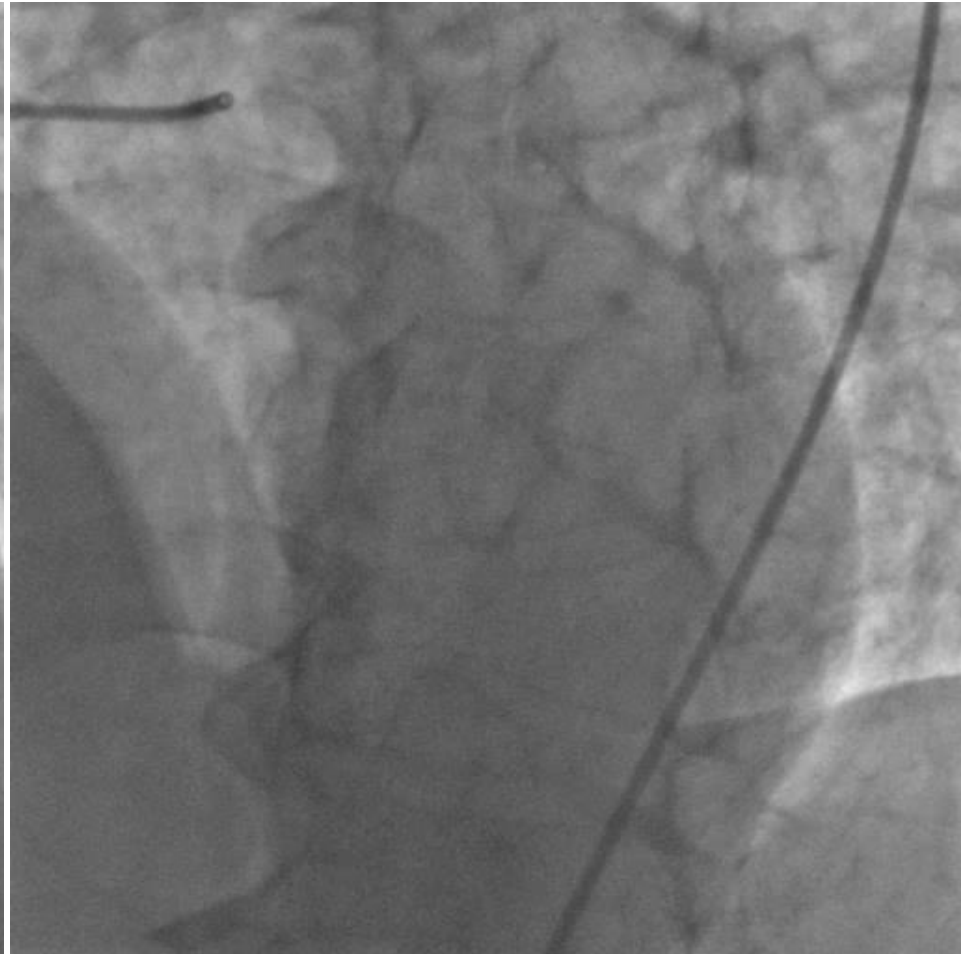
Coronary CT



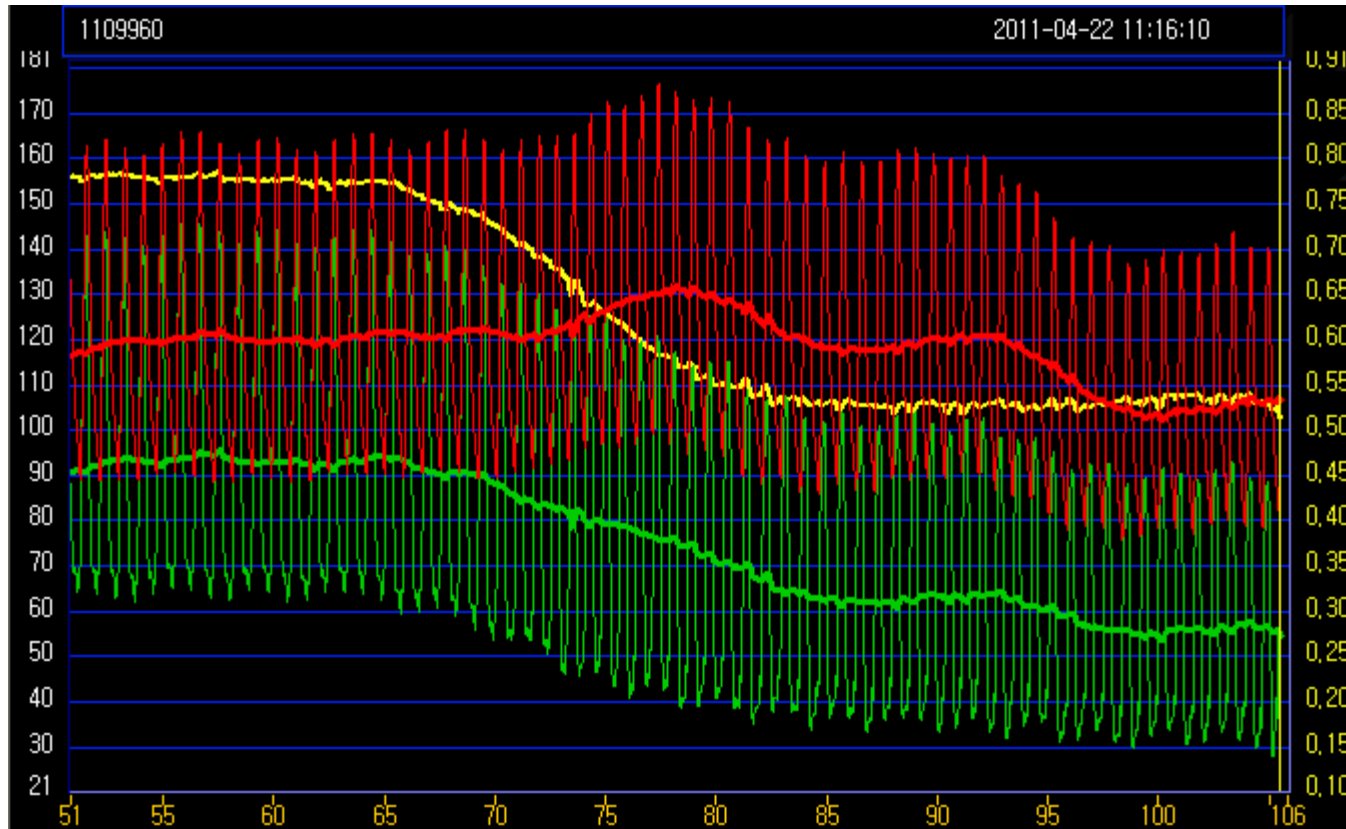
Coronary Angiography



Coronary Angiography

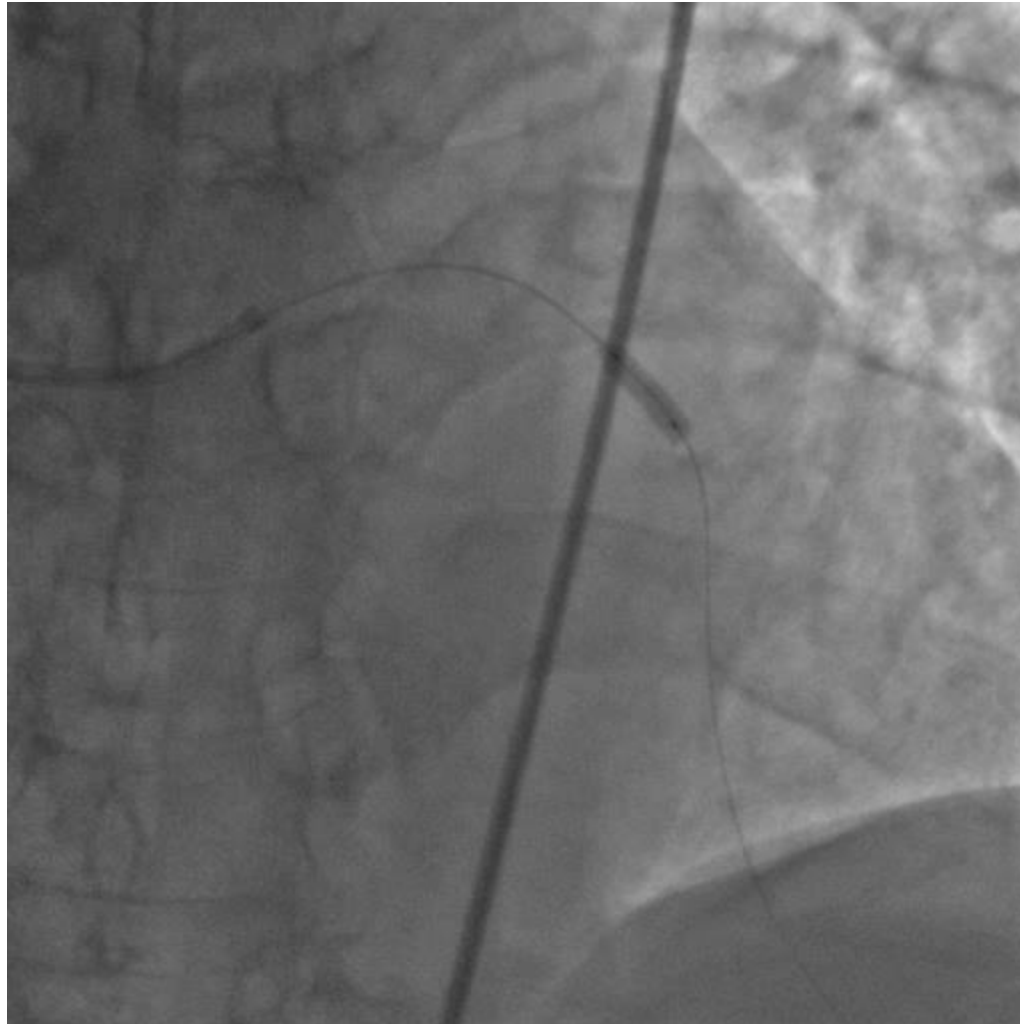


FFR(Baseline)



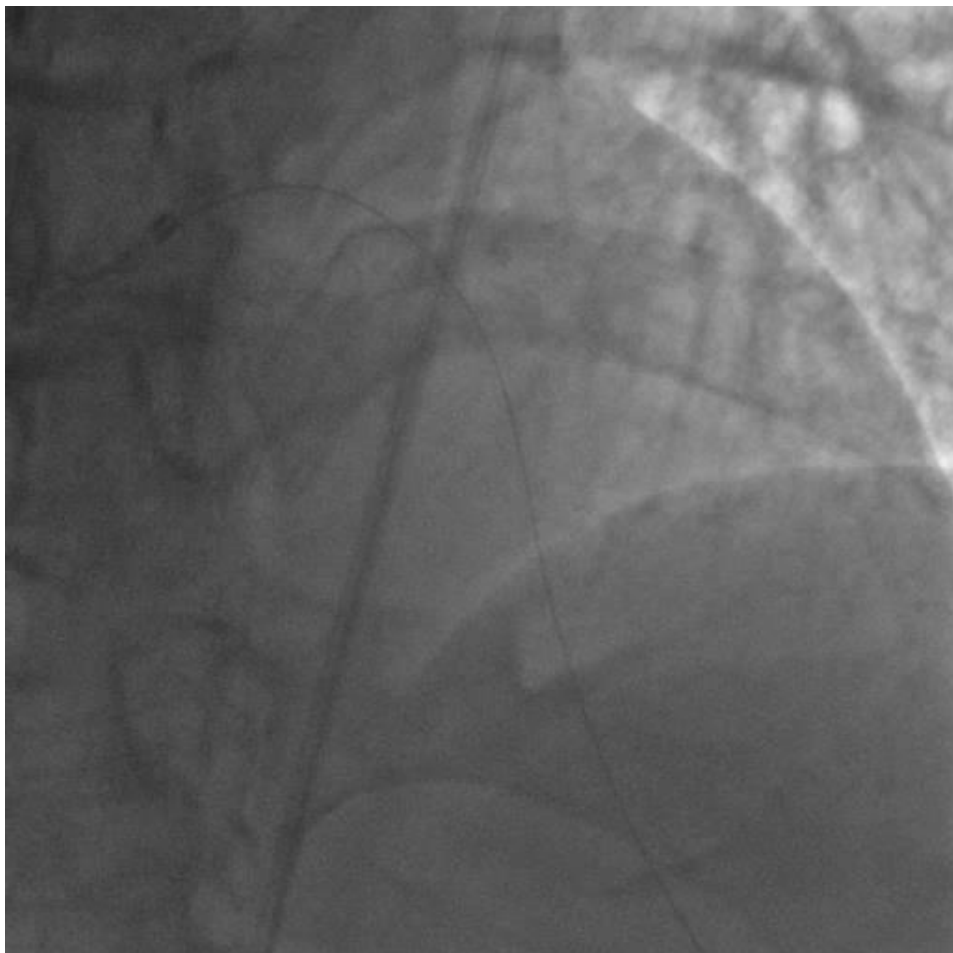
FFR 0.81 -> 0.51

POBA

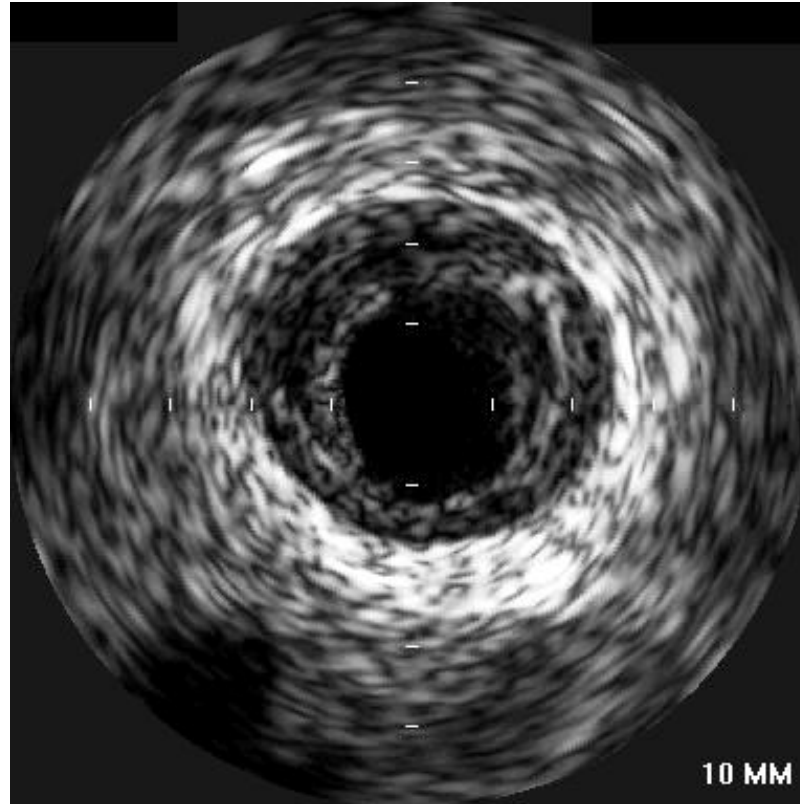


FORTIS 3.5mm * 13mm up to 3.5mm(12atm)

After POBA

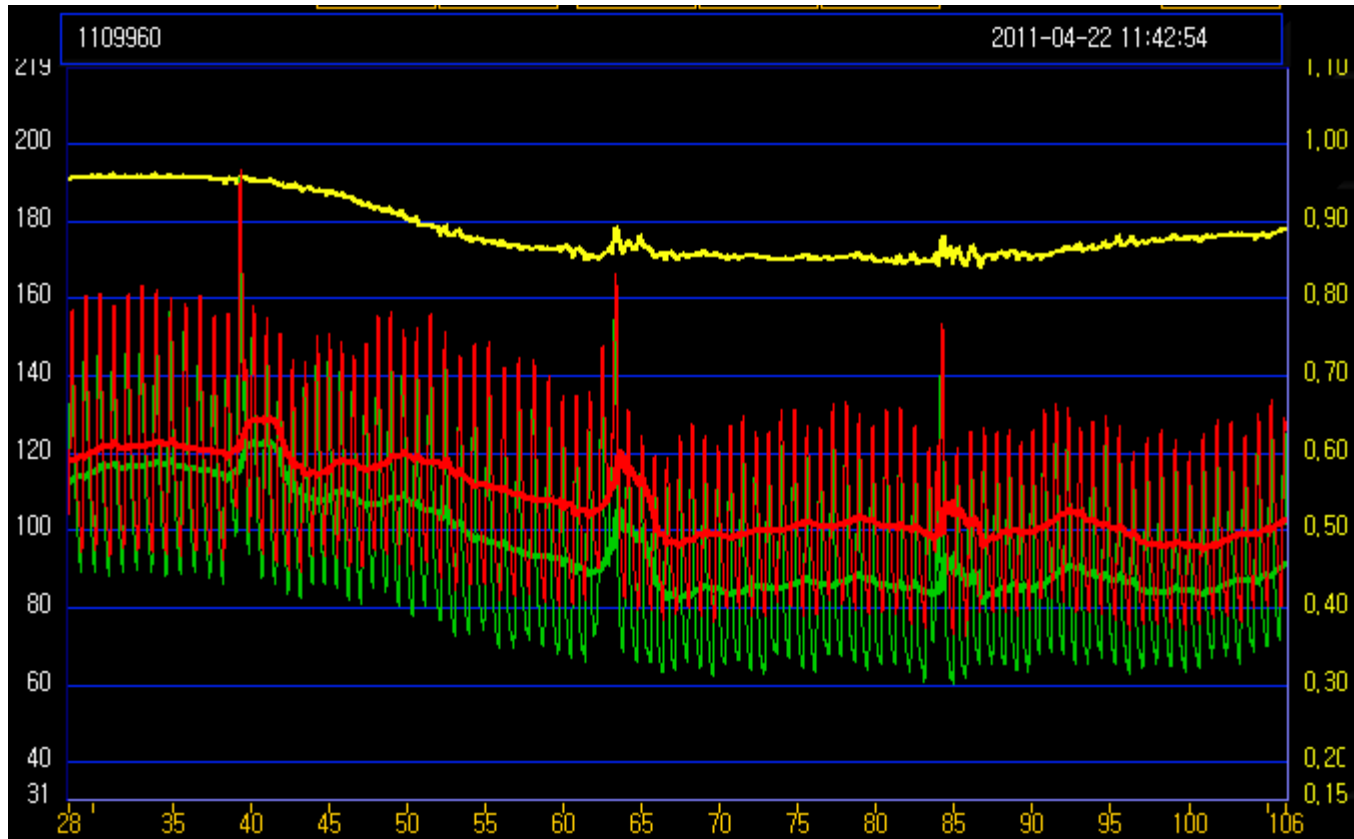


IVUS (After POBA)



MLA: 3.1mm^2
Plaque burden: 80%

FFR(After POBA)



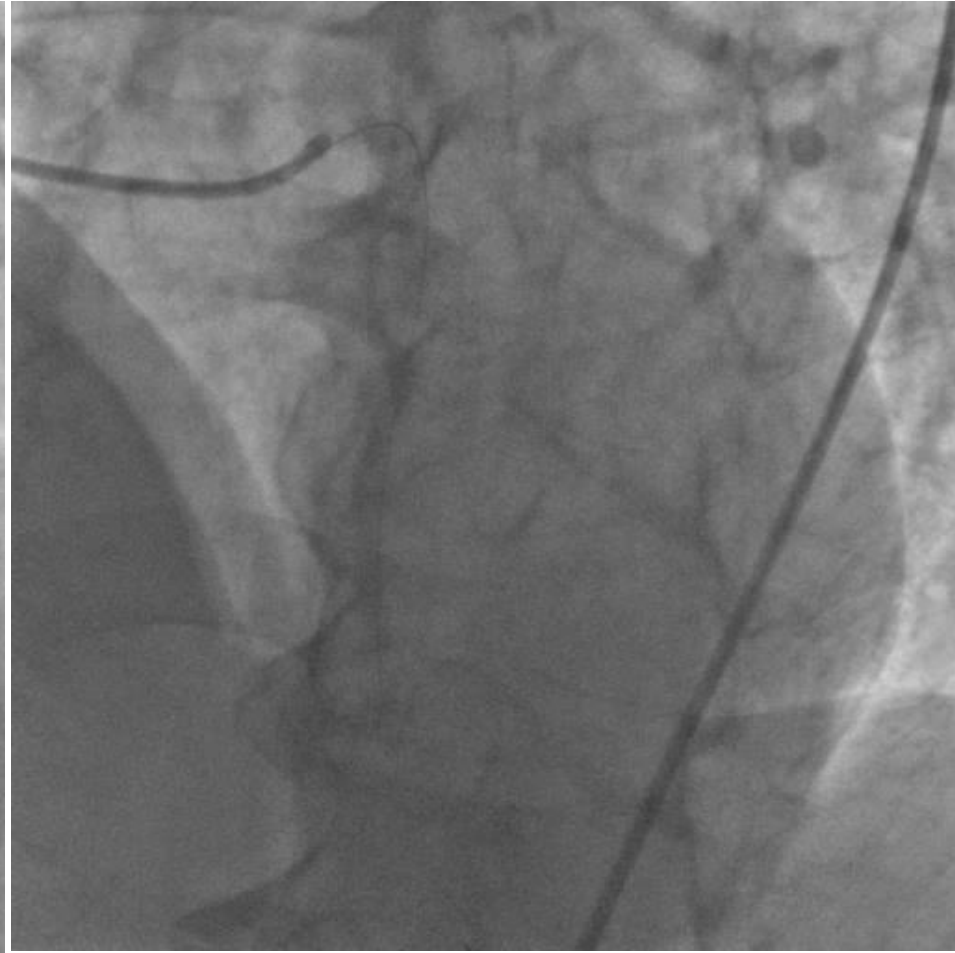
FFR 0.95 -> 0.85

DEB



SeQuent 3.5mm * 20mm up to 3.56mm(8atm) for 40sec

After DEB angioplasty

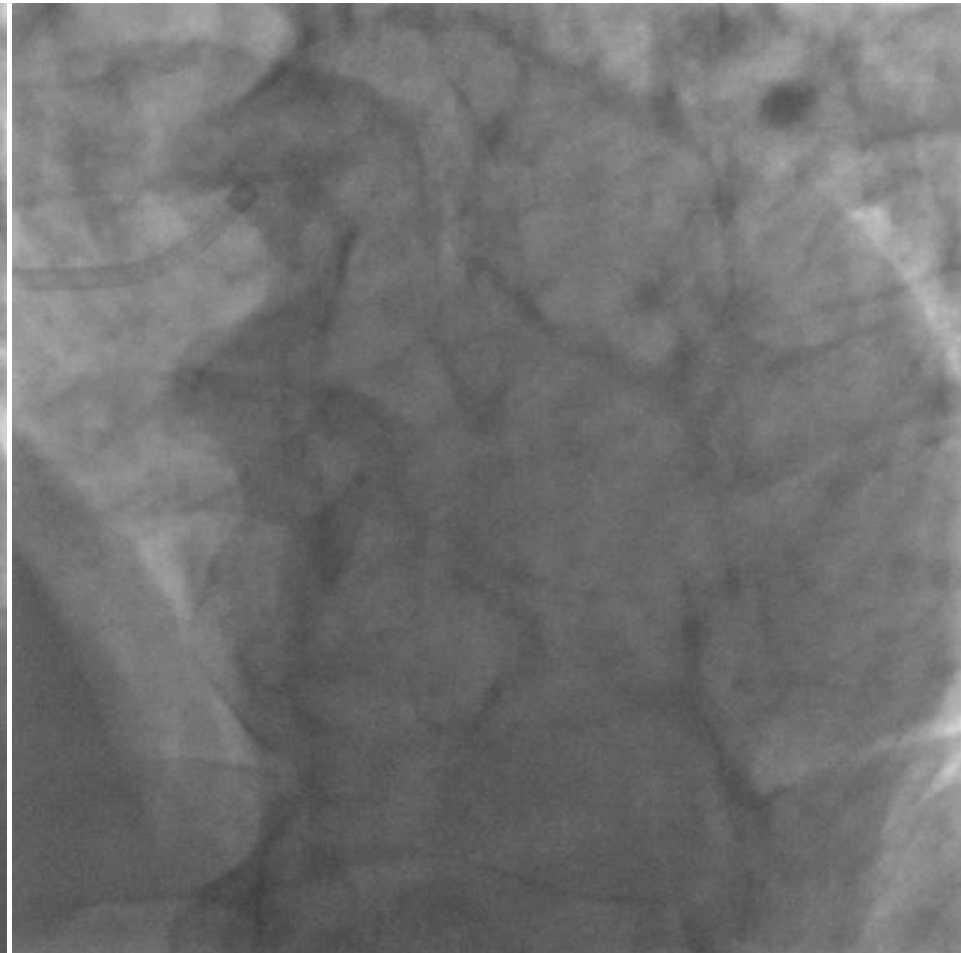
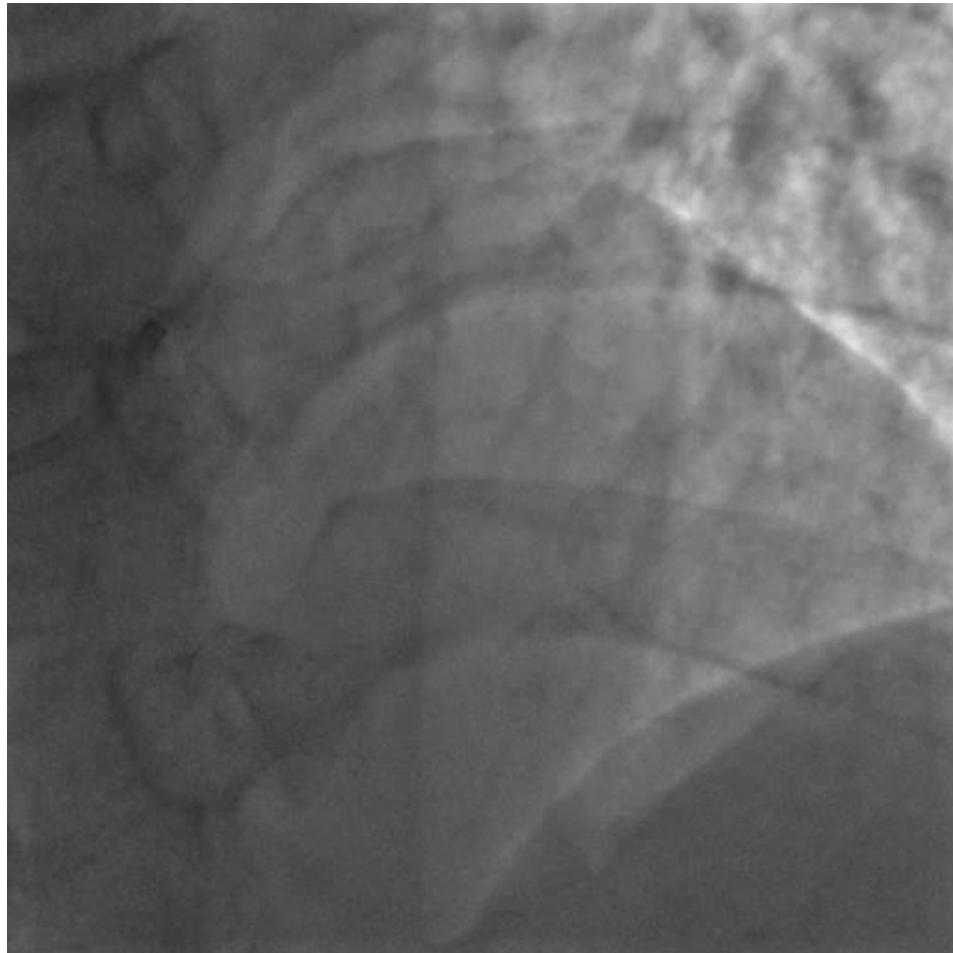


Discharge Medication

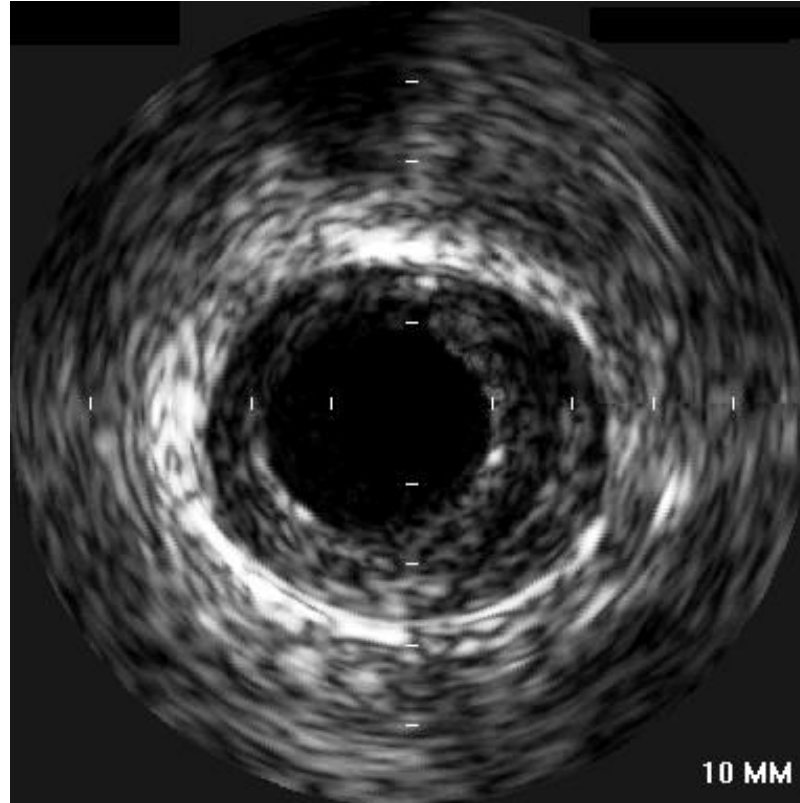
- Asprin 100mg qd,
Clopidogrel 75mg qd for 1 month
Amlodipine 5mg qd
Atorvastatin 20mg qd

➔ No CV event and angina symptom

F/U CAG (6months later)



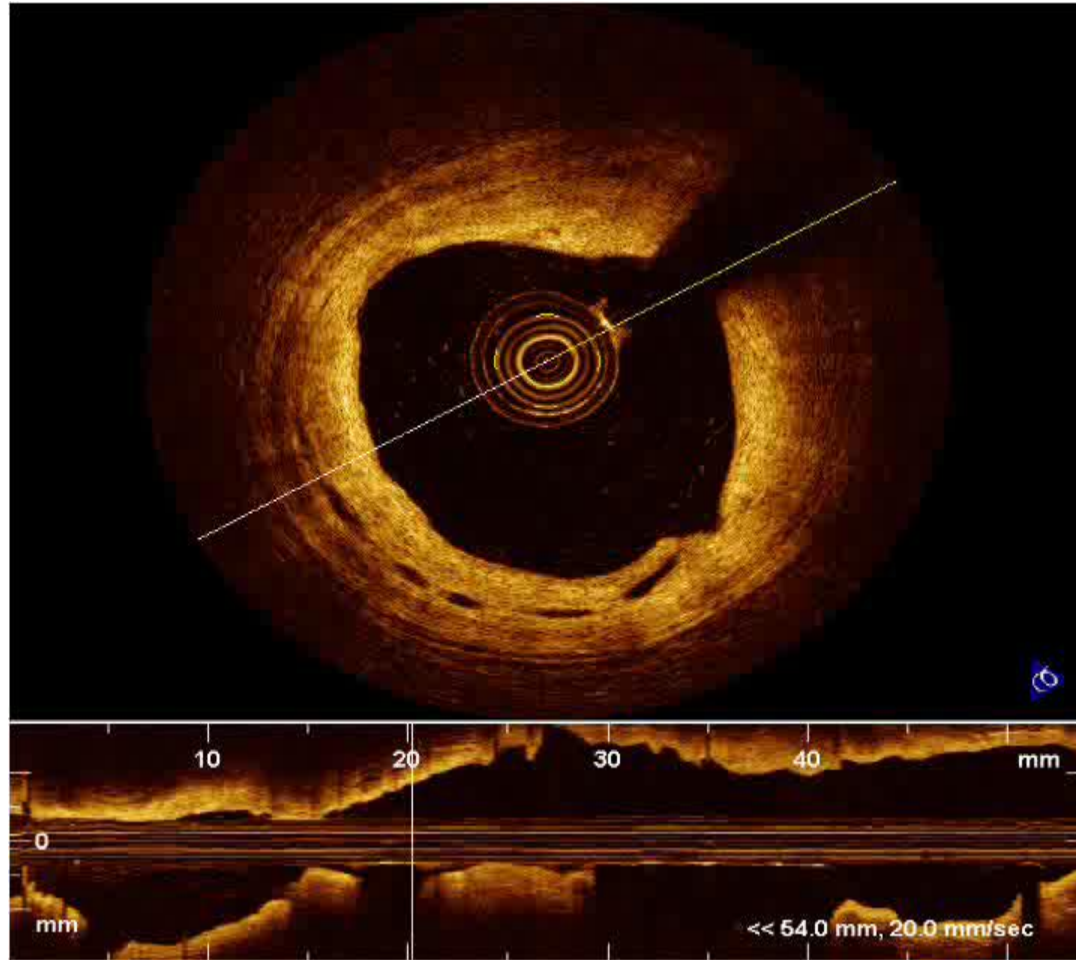
F/U IVUS (6months later)



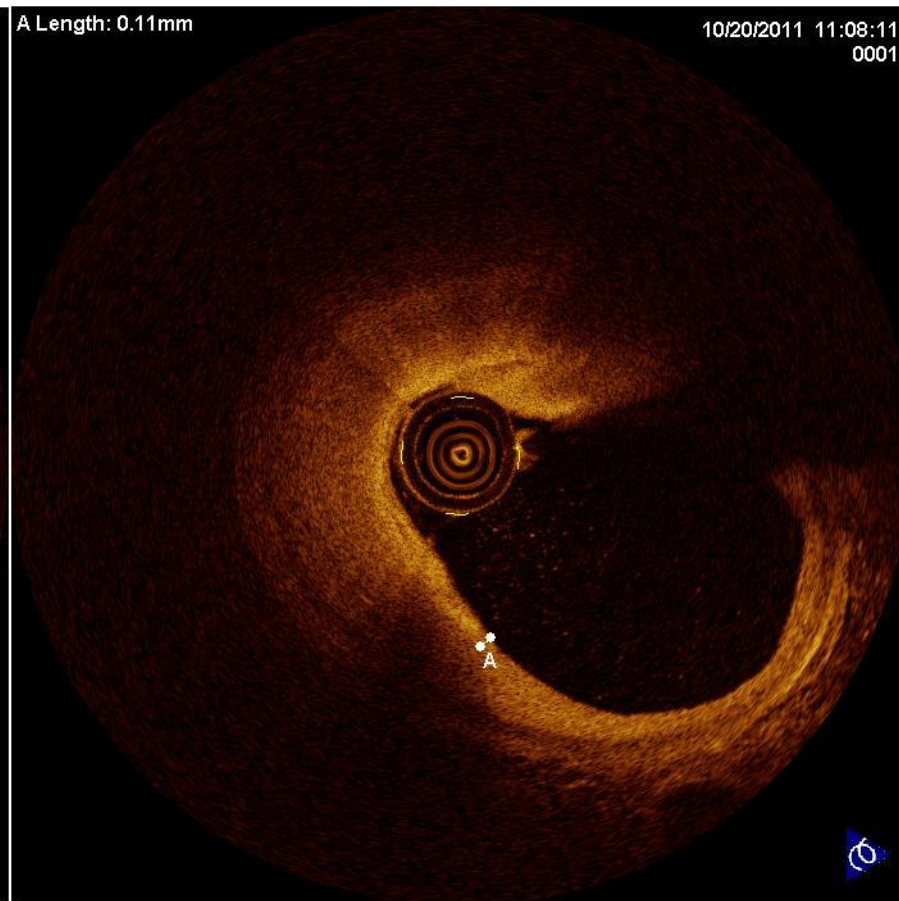
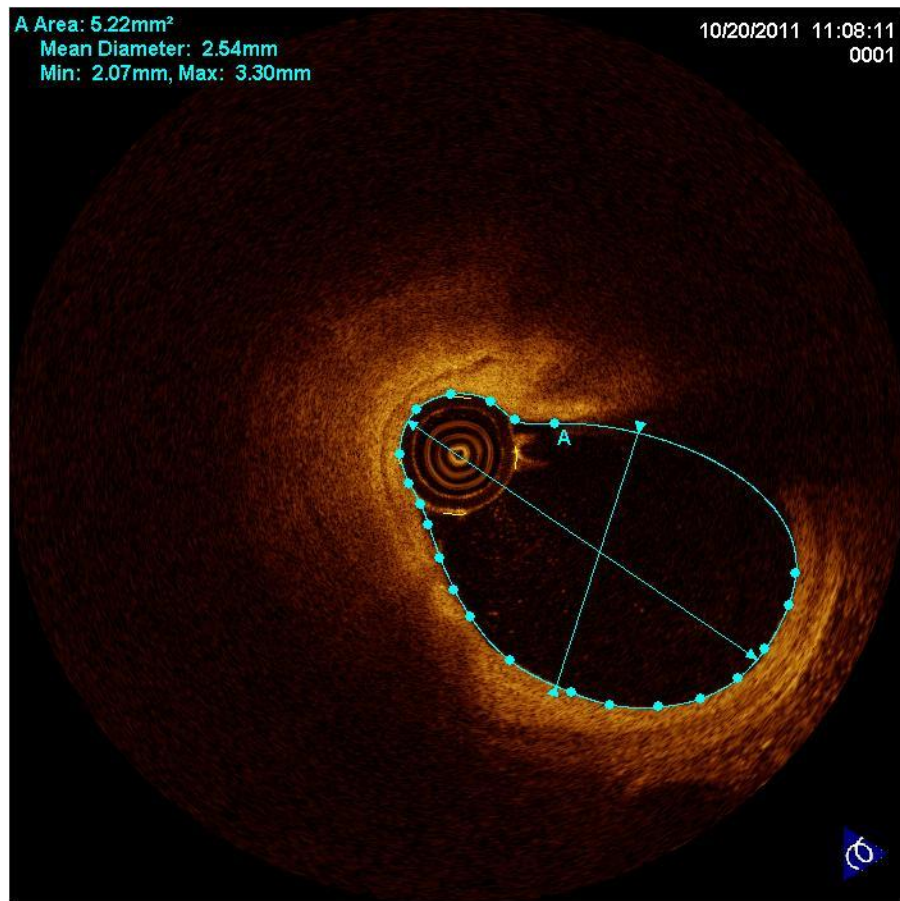
MLA: 6.0mm²

Plaque burden: 67%

OCT (6months later)

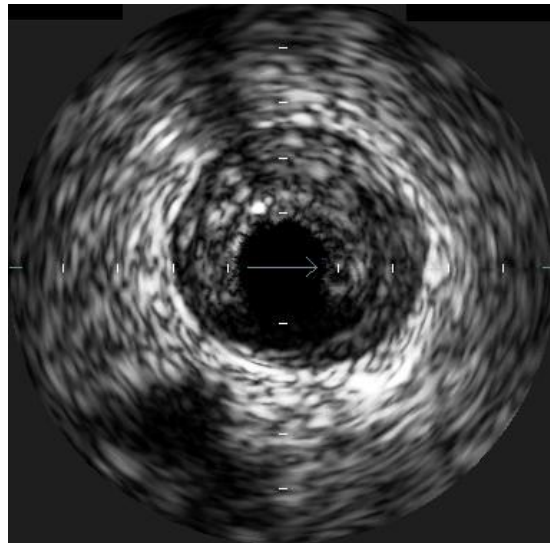


OCT (6months later)

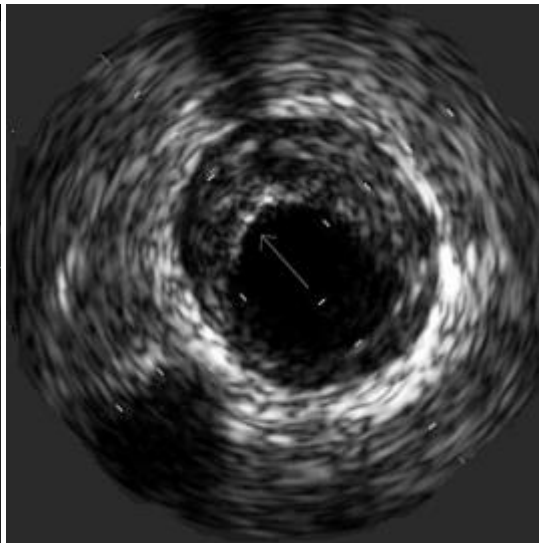


OCT (6months later)

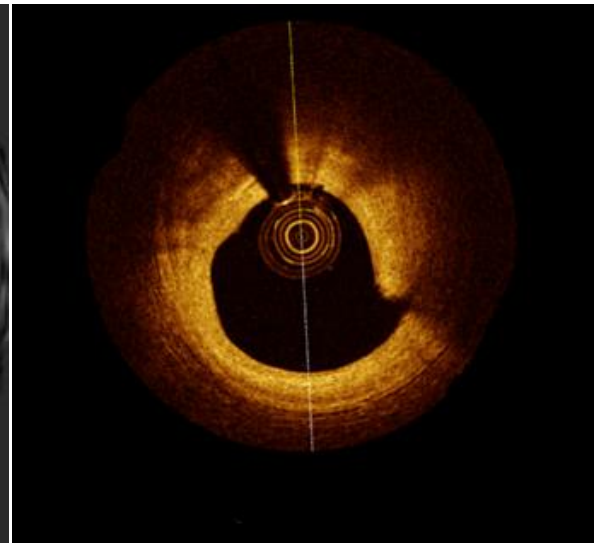
Baseline IVUS



FU IVUS



FU OCT



Summary

- 64/M, UA with focal tight stenotic lesion of mLAD
- Successful DEB angioplasty guided by FFR & IVUS
- Short-term dual antiplatelet therapy
- No any CV event and restenosis for 6 months
- The lesion was healed that confirmed by OCT

Messages from this case

- **Drug-eluting balloons(DEBs)**

: Latest technologies proposed to overcome limitation of DES, such as stent thrombosis, long-term dual anti-platelet therapy

: Substitute in the treatment of in-stent restenosis

- May be useful to prevent restenosis of de novo lesion subsets

Thank you for your attention !

