

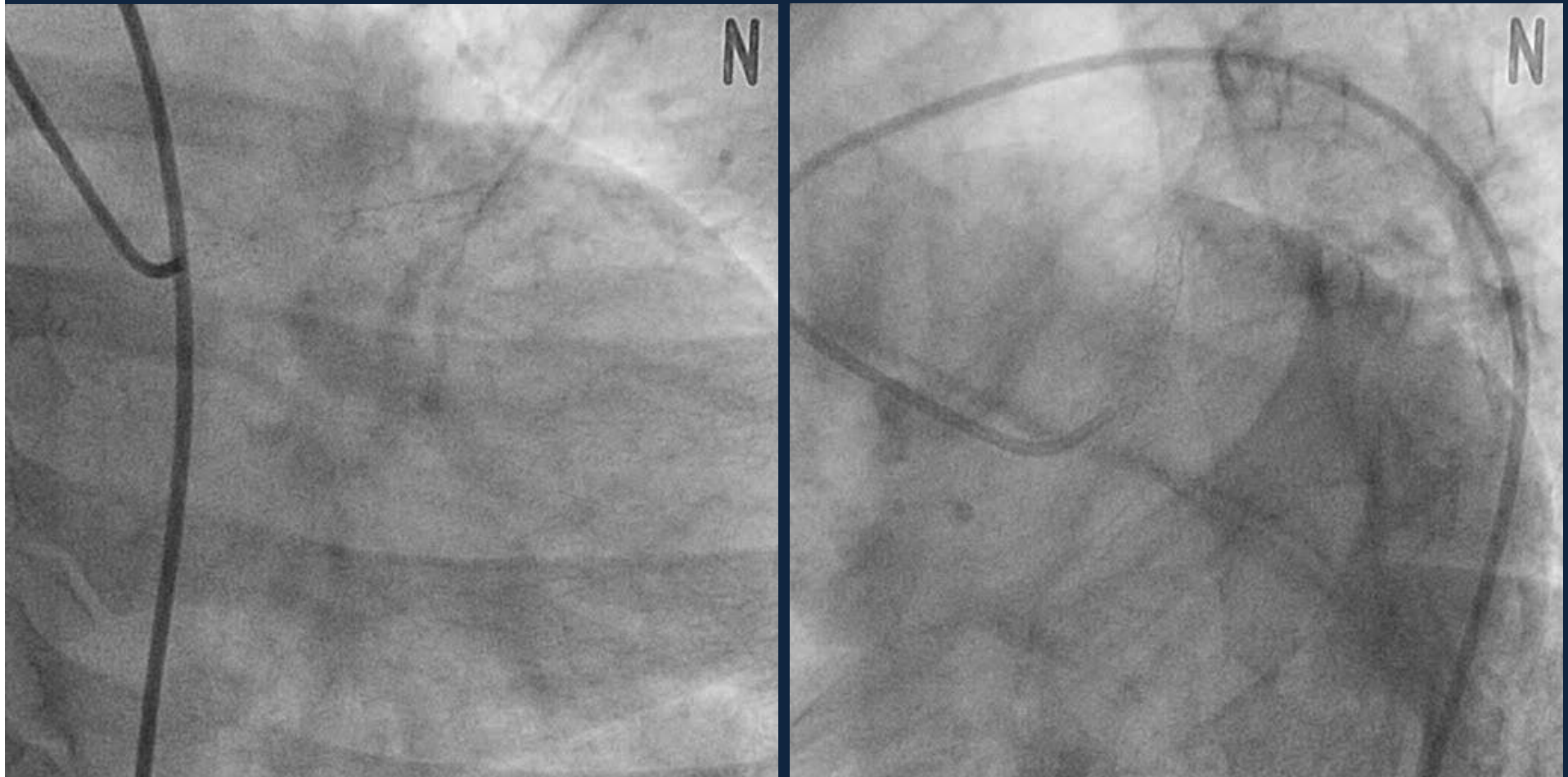
# **Drug-eluting balloon for in-stent restenosis lesion**

**Byoung-Joo Choi, MD**  
**Ajou University Hospital**

# Brief patient history

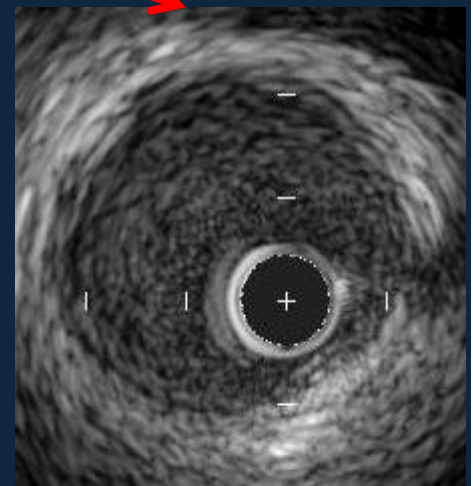
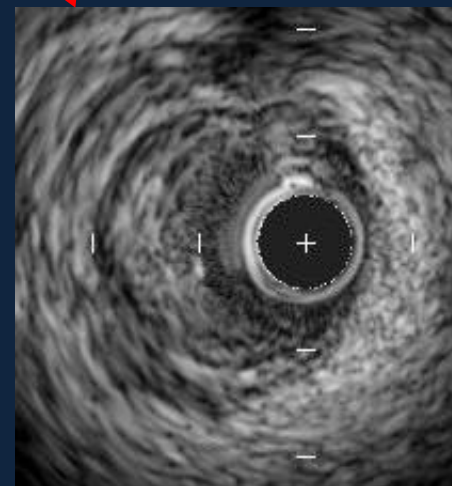
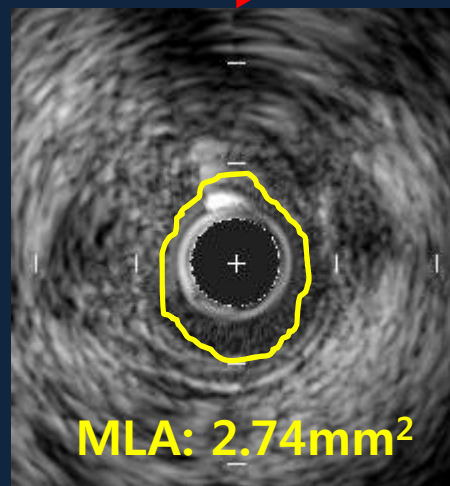
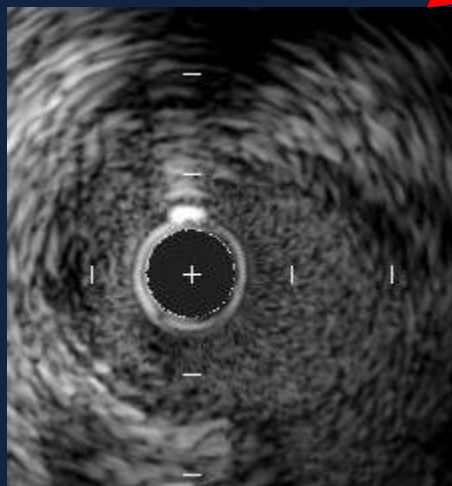
- F/46
- Chief complain
  - Typical effort chest pain
- Cardiac risk factors
  - HTN(+), DM(-), smoking(-), Hyperlipidemia (+)
- PCI History
  - LM os: Cypher 3.5/13mm
  - Prox LAD: Cypher 3.5/23mm
- LV ejection fraction: 72%

# Initial angiogram



# IVUS of LCX

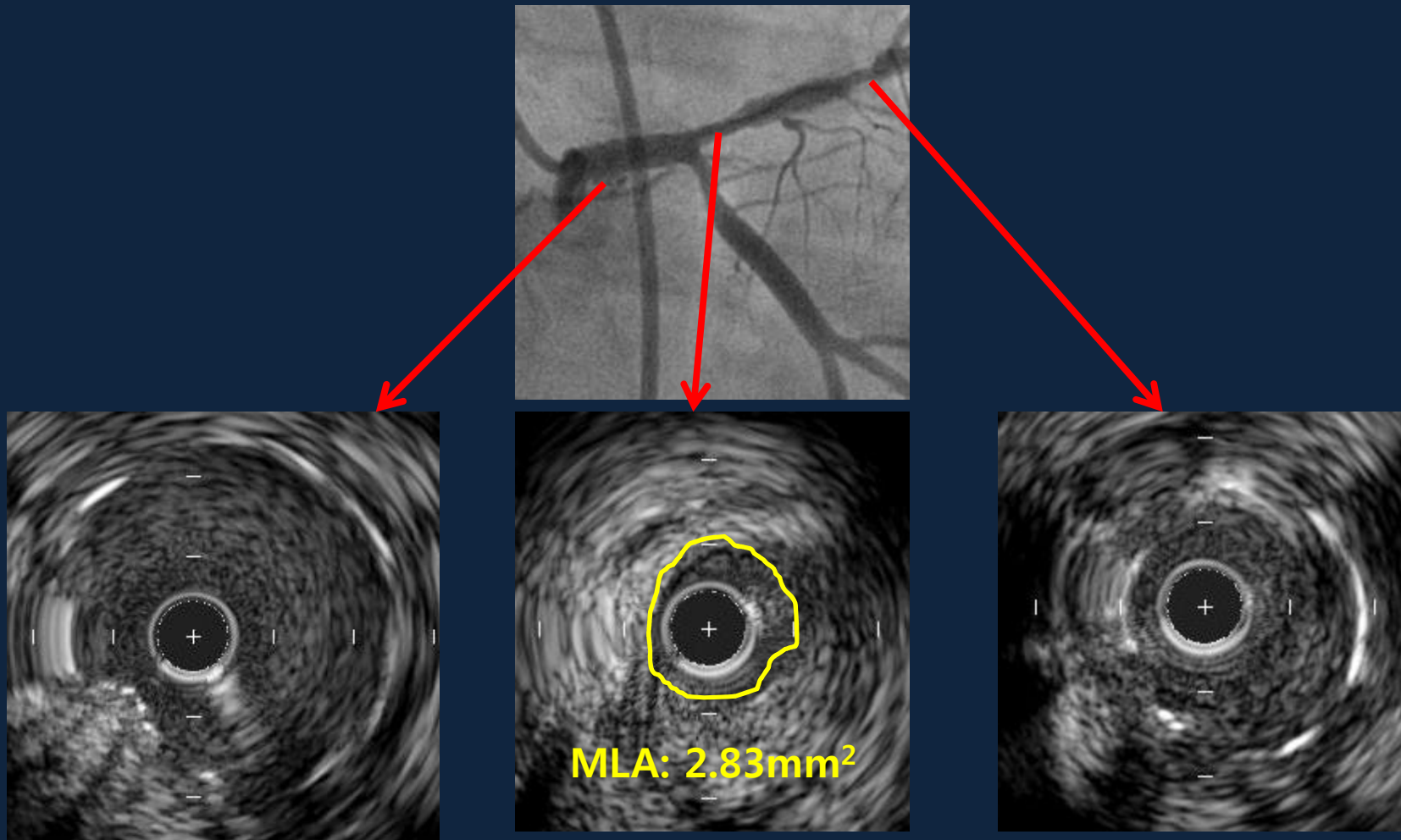
## Disease progression at prox-LCX



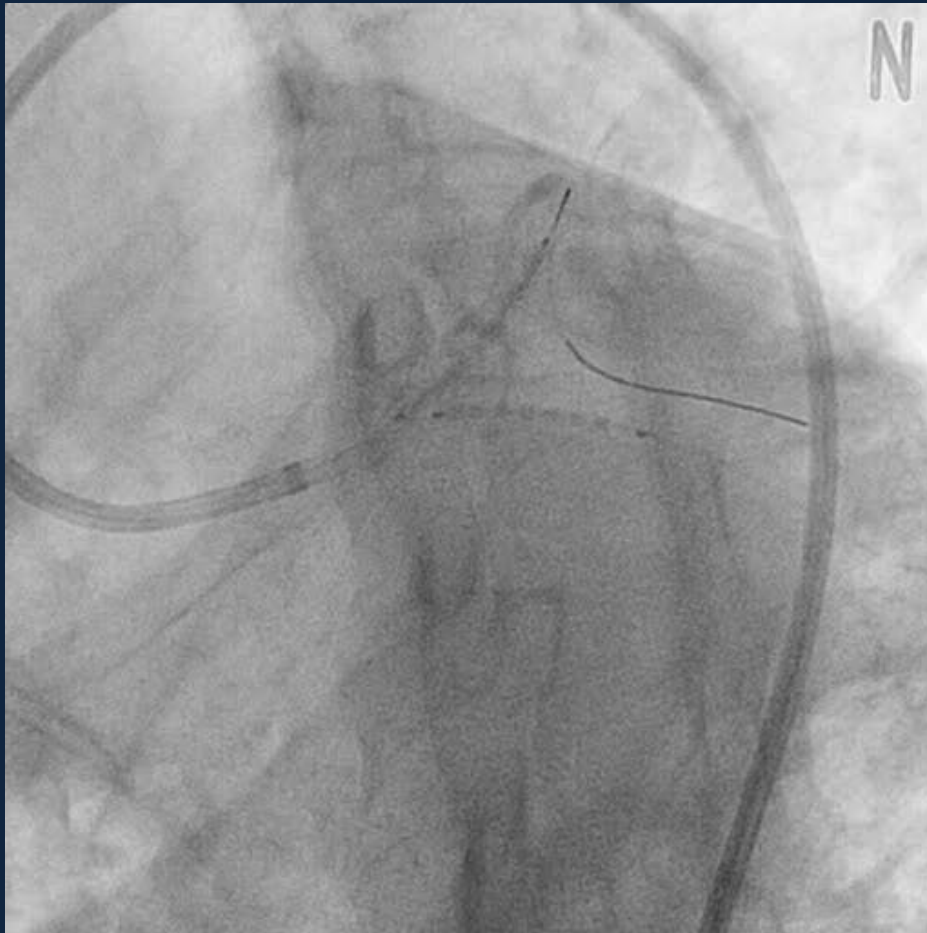
# IVUS of LAD

Disease progression at prox-LAD

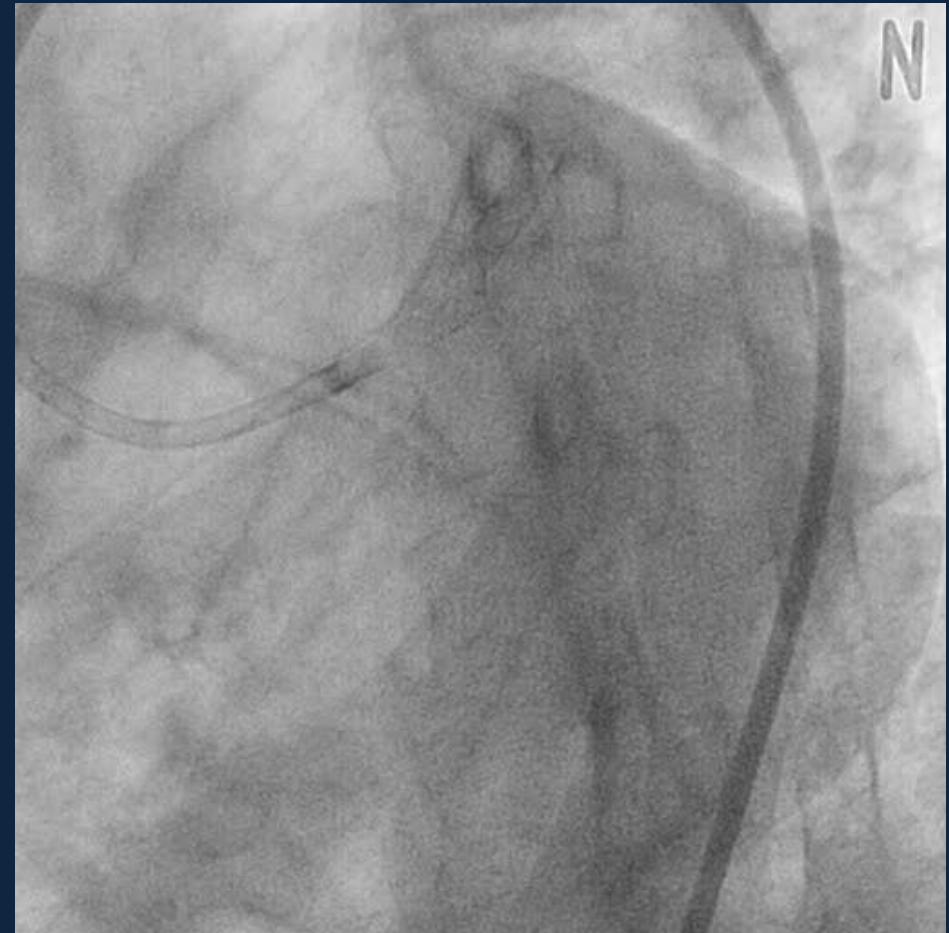
Focal ISR at prox-LAD stent



# Treating LAD and LCX lesions with crushing technique



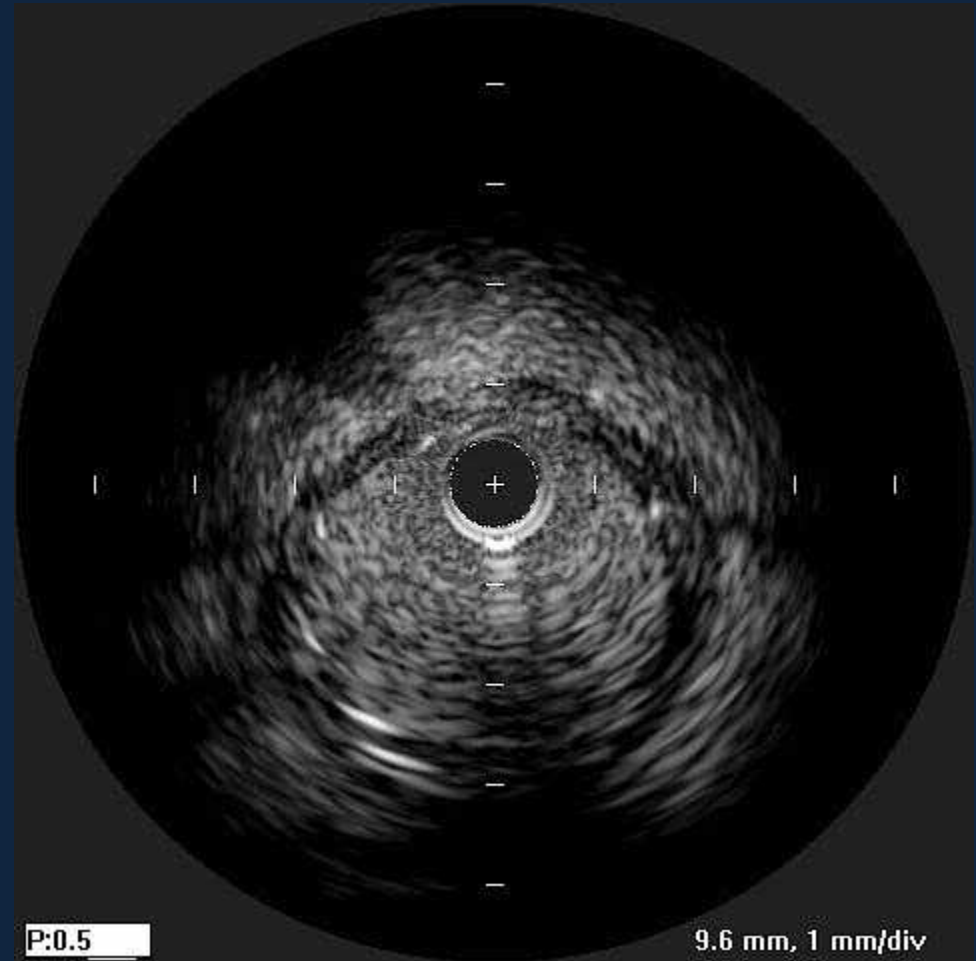
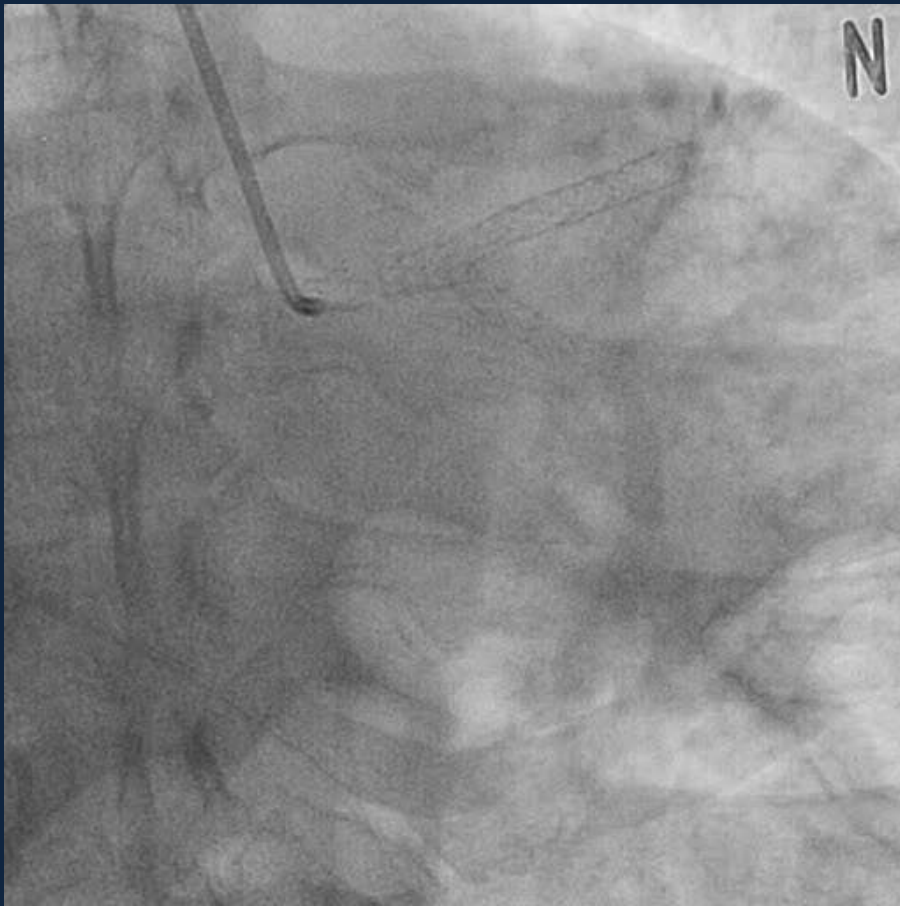
Cypher 3.5/33mm  
Cypher 3.5/18mm



After kissing balloon

**The patient had been happy  
for 2 years. but....**

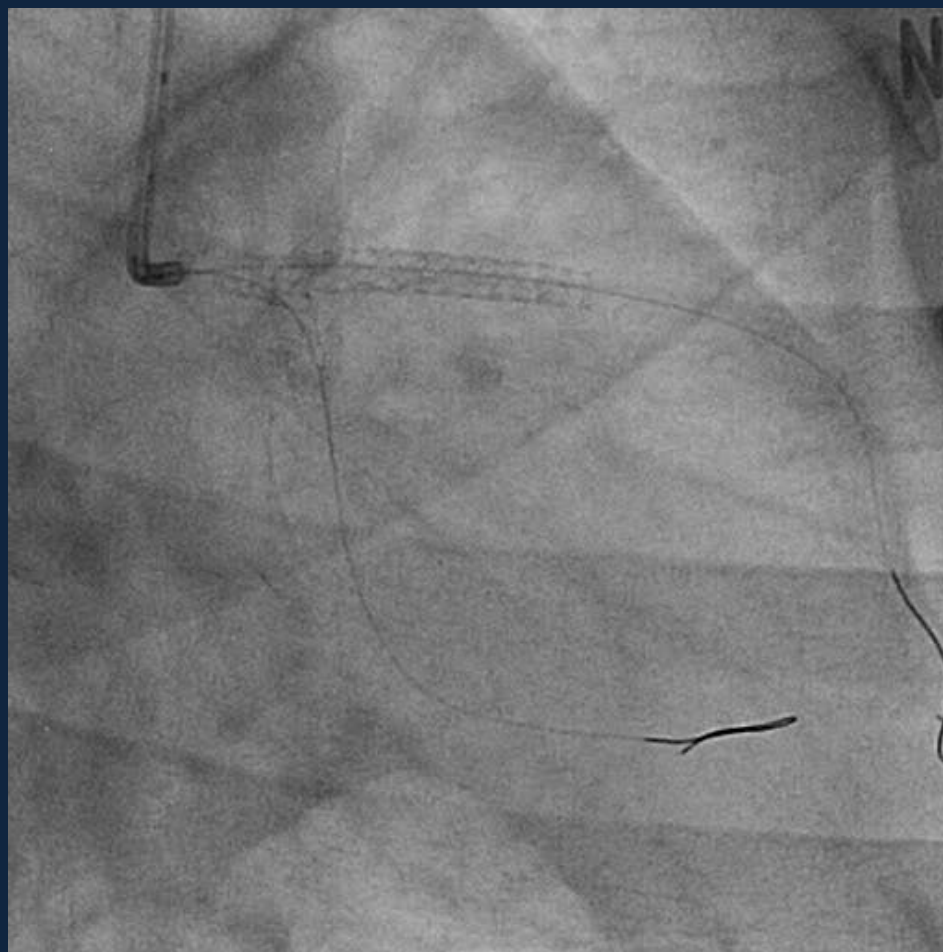
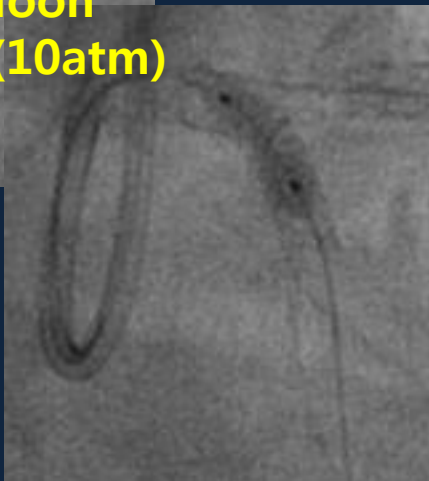
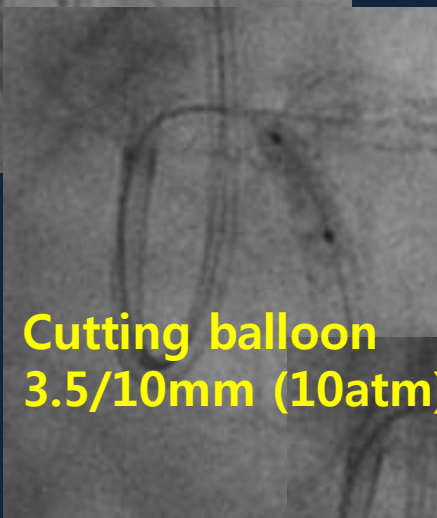
# 2yr-FU angiogram after PCI with crushing technique



# Cutting balloon PTCA

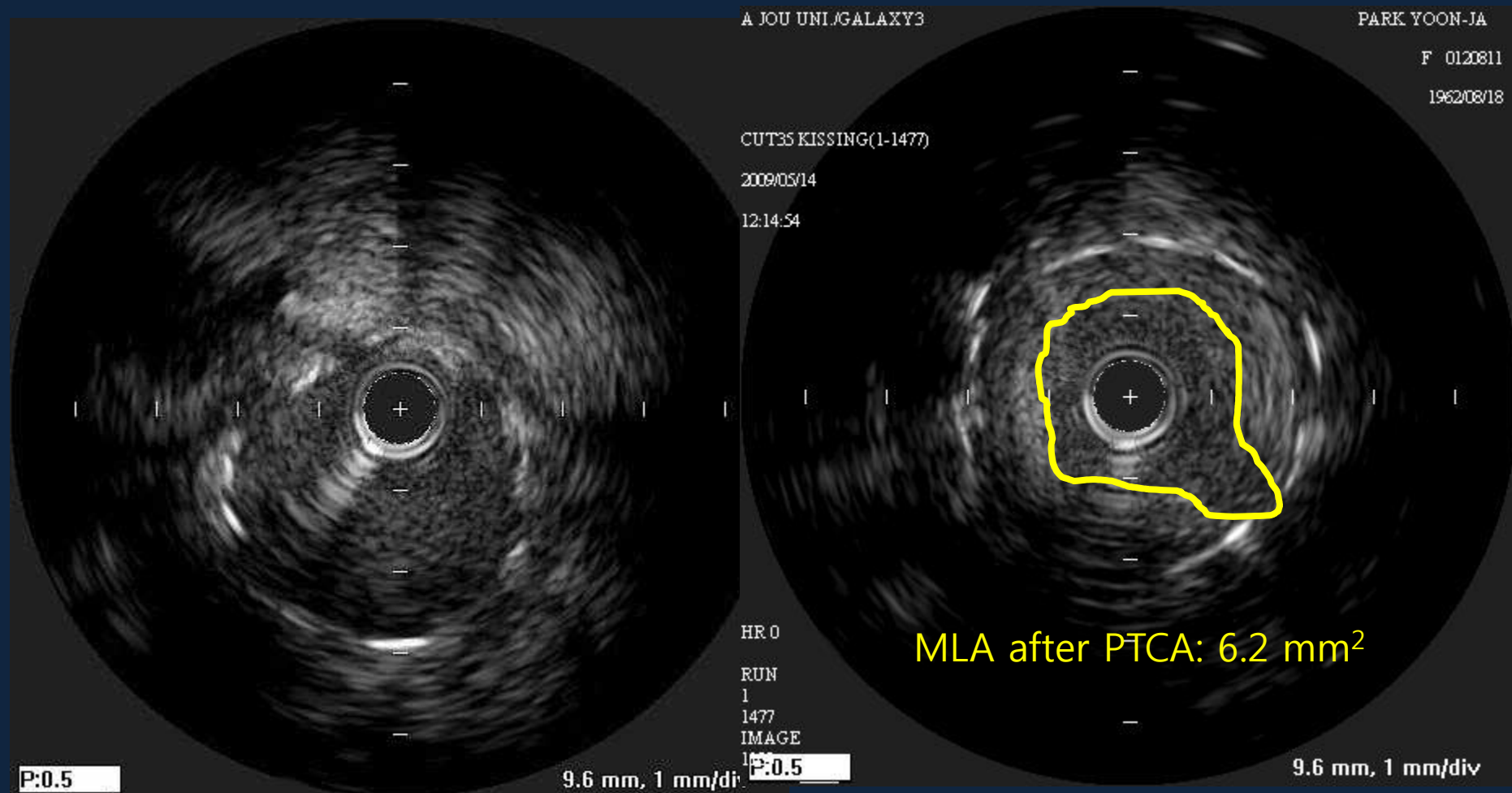


Cutting balloon  
3.5/10mm (10atm)



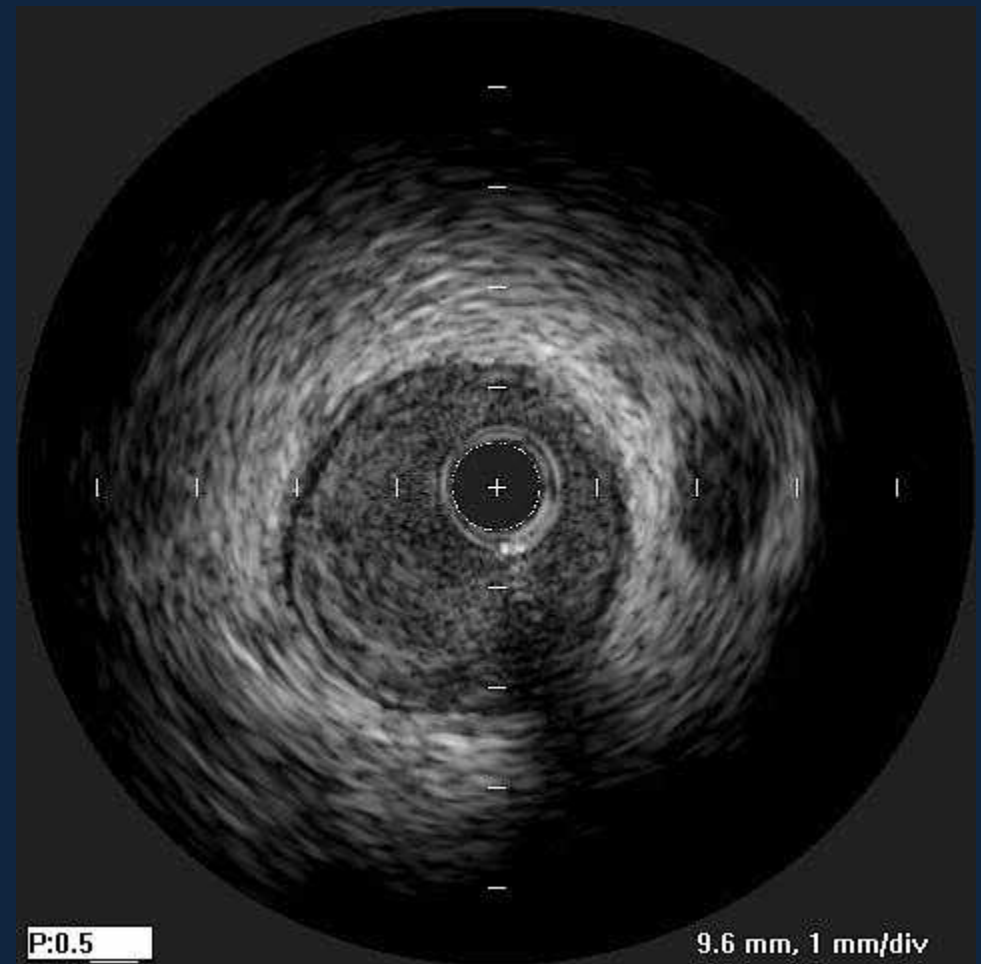
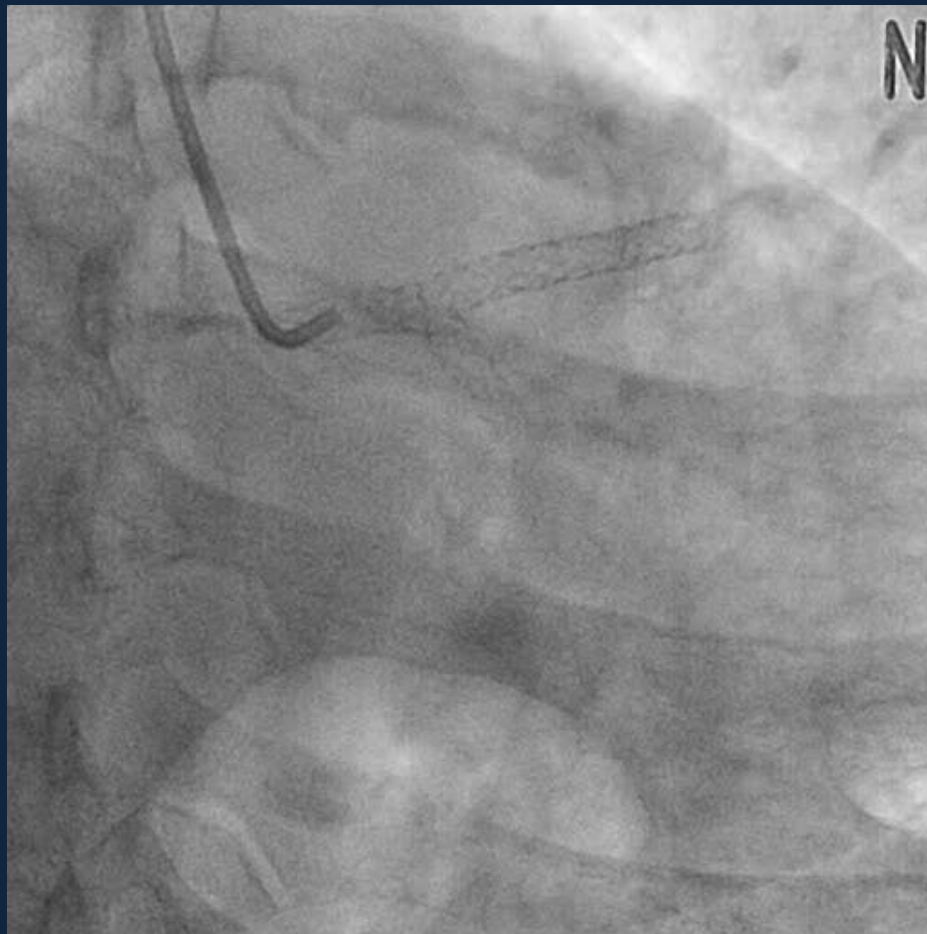
After kissing balloon

# IVUS of LCX after cutting balloon PTCA



**The patient had been happy for  
only 6 months at this time...**

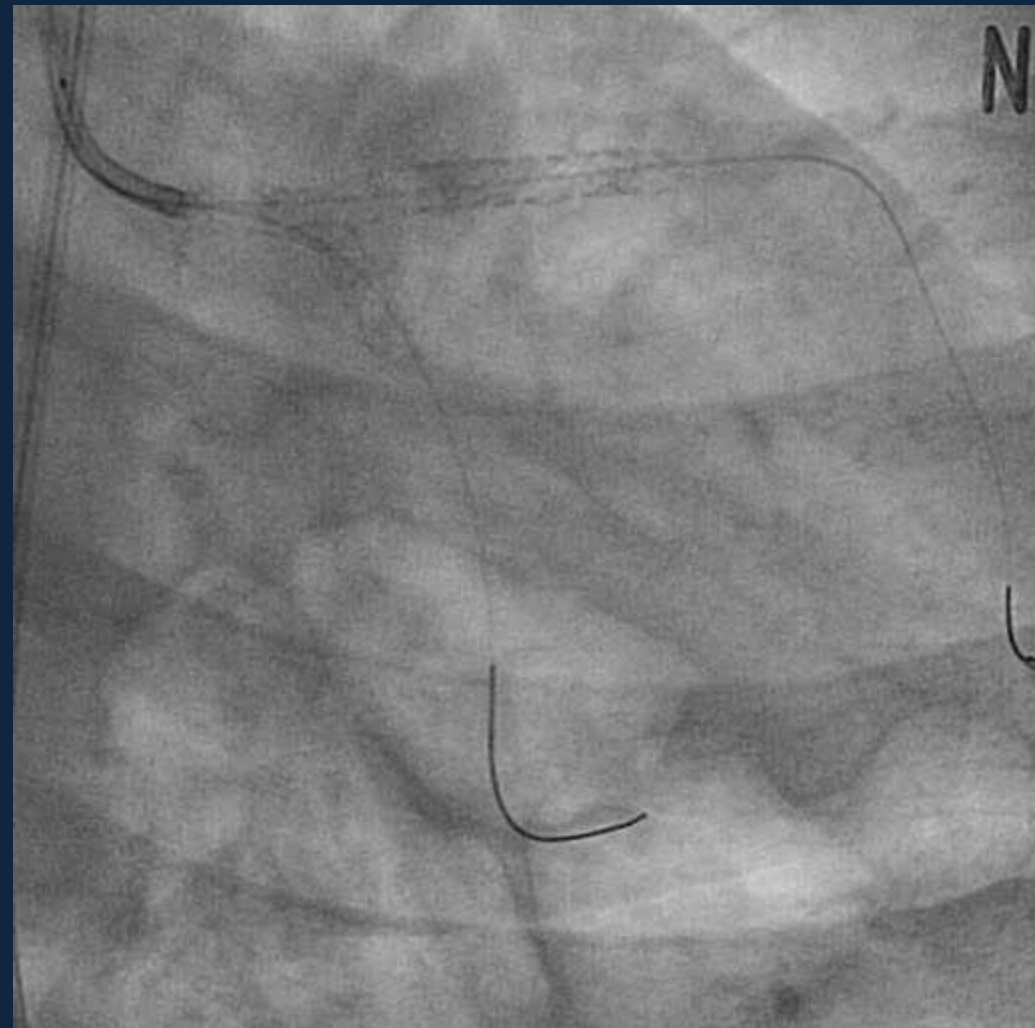
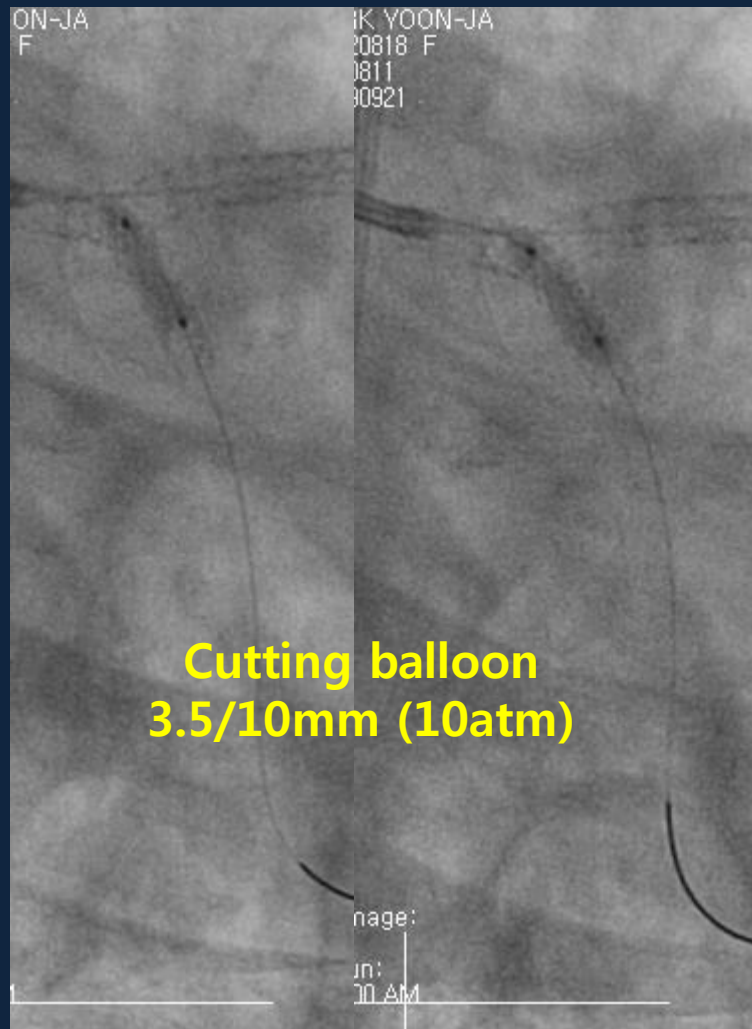
# 6 month after cutting balloon angioplasty of LCX-os



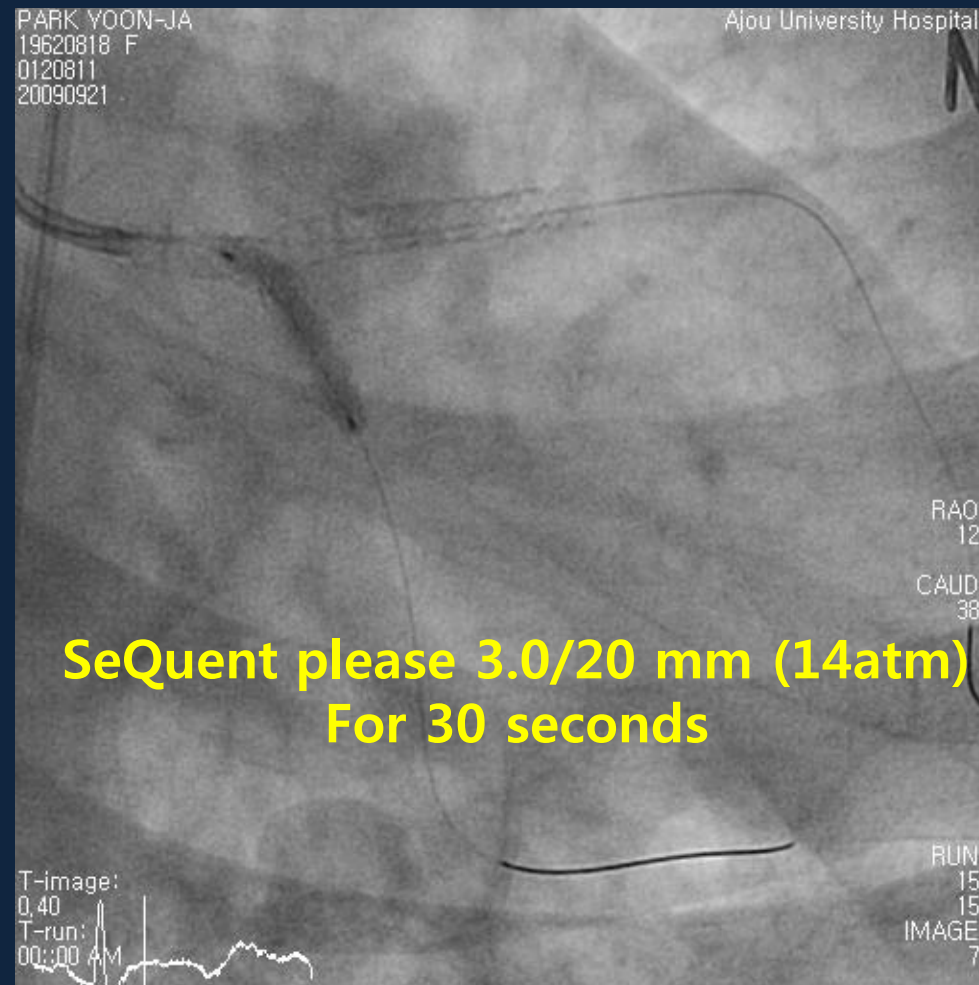
# Therapeutic options for this troublesome lesion

- Re-ISR
- Diffuse proliferative type
- Complex stenting – high metal burden
- Cutting balloon again?
- Another stent implantation?
- Brachytherapy?
- Drug-eluting balloon!

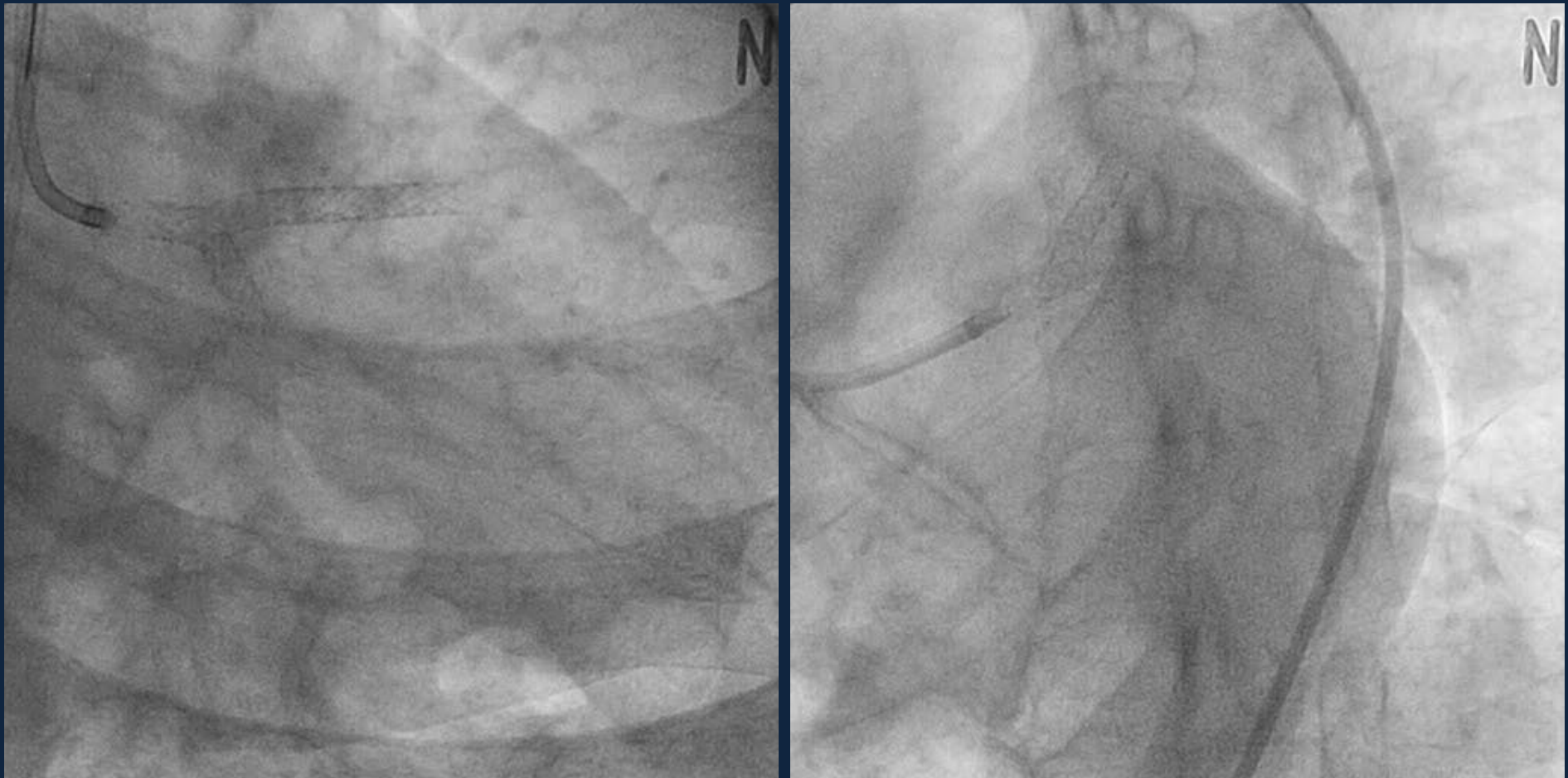
# Lesion modification before drug-eluting balloon PTCA



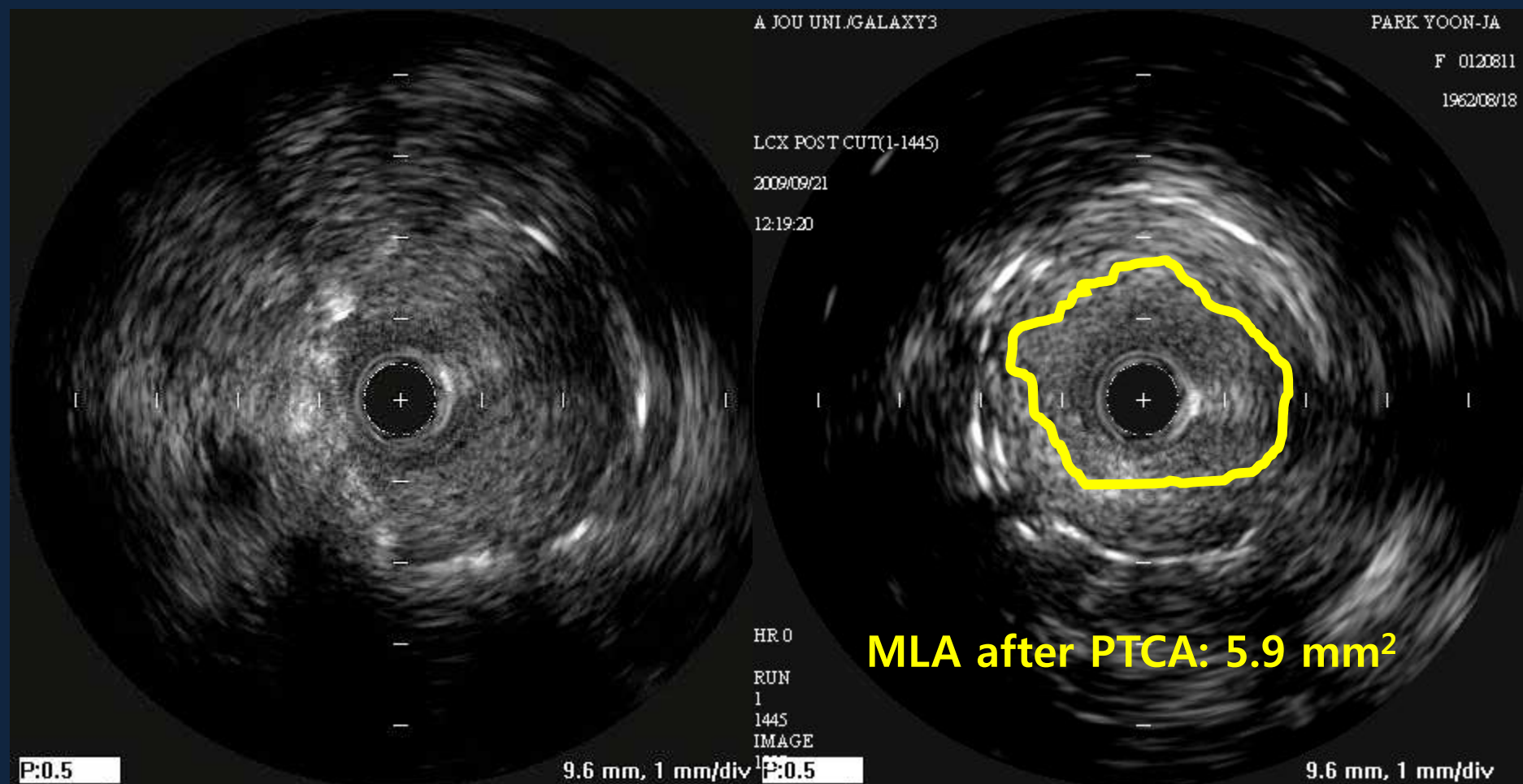
# Drug-eluting balloon PTCA



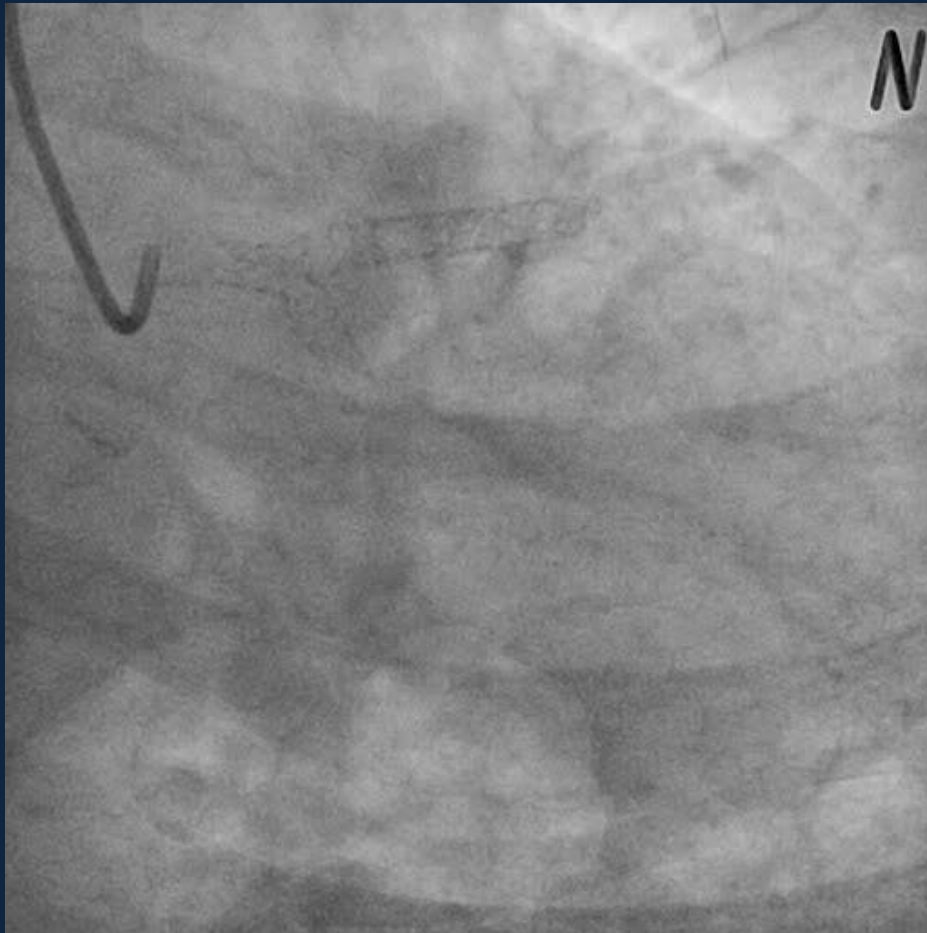
# Final result after drug-eluting balloon PTCA



# IVUS of LCX after Drug-eluting Balloon PTCA



# 6 month FU after Drug-eluting balloon angioplasty





**The patient has been happy  
so far !**

# Interesting points

- DEB was safe and useful in treating complex ISR lesion.
- DEB was superior to cutting balloon in DES failure lesion.

**Thank you**