Controversies of PCI in complex lesion ; cases of chronic total occlusion with good collaterals

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• Chest pain evaluation in cardiology OPD

- Chest pain on exertion
 - CCS II, duration < 5 min., for 4 months

• Clinical risk factors for atherosclerotic disease

- DM/HTN/Dyslipidemia (-/+/-) for 8 years
 - CCB
- Ex-smoker

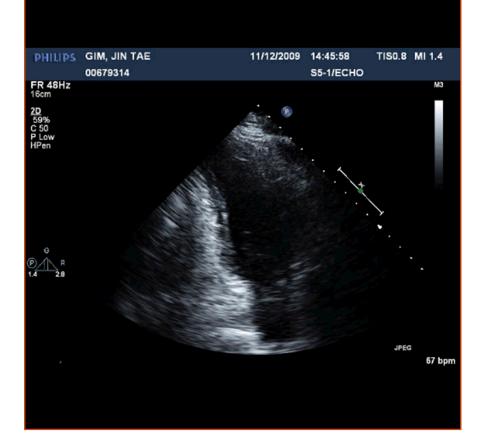
• Cardiologic work up in OPD

- Lipid: 146-249-28-73 mg/dL, FBS: 98 mg/dL
- Electrocardiography: normal
- Treadmill test
 - 2 mm down-sloped ST depression of II, III, aVF, V5, V6 in the 3rd stage
 - Normalized ST deviation in 3.5 min. during resting

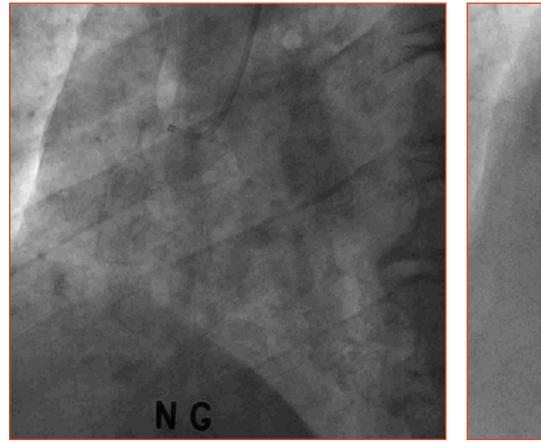
• Electrocardiography

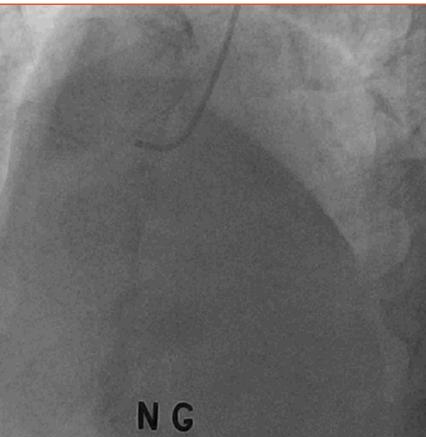


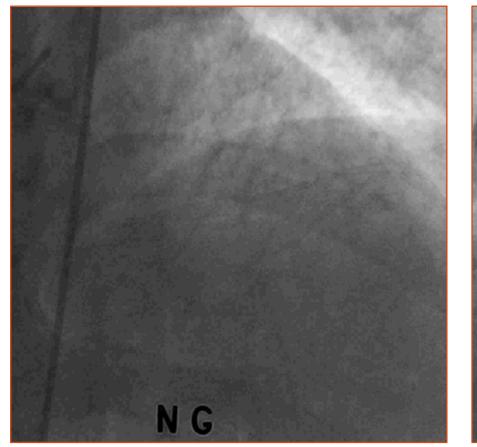
• Echocardiography

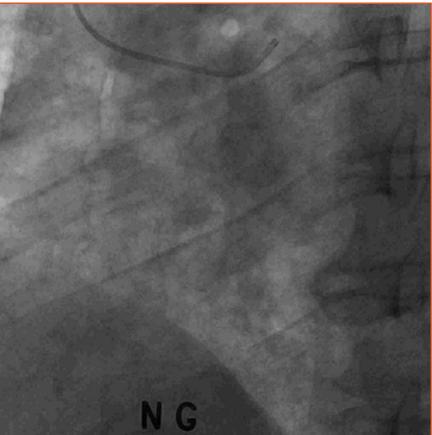


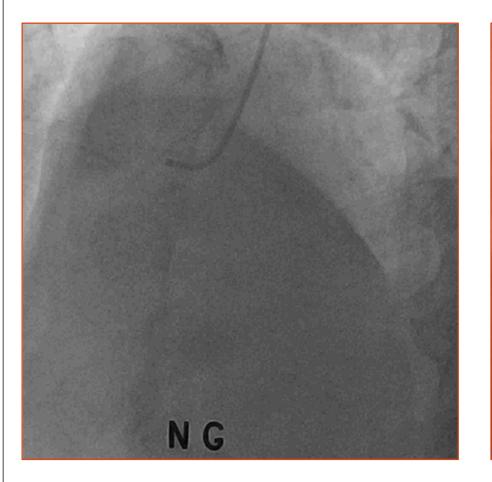


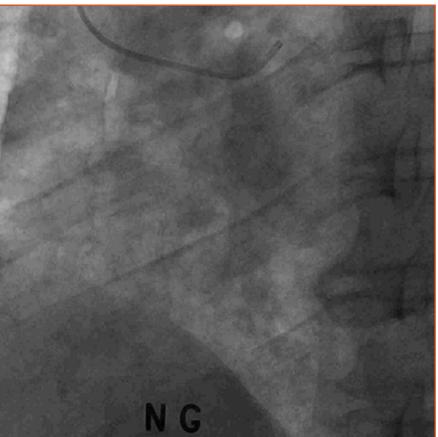








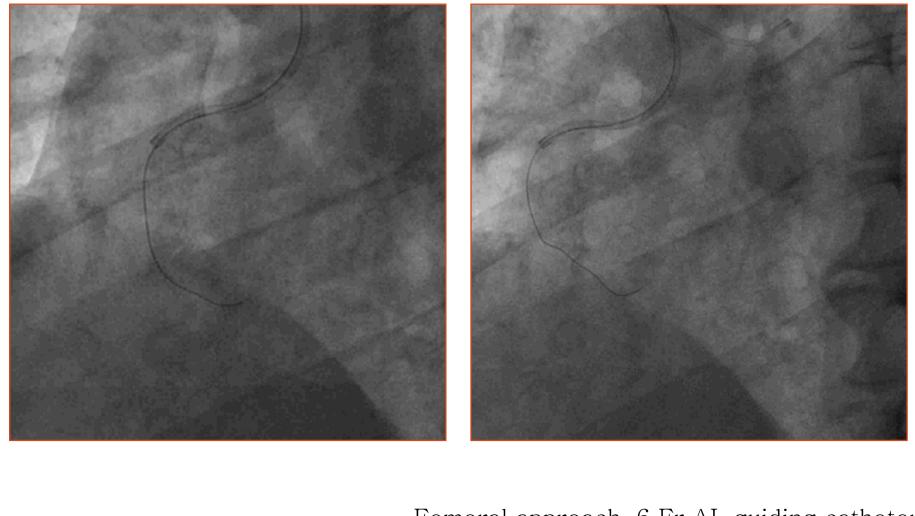


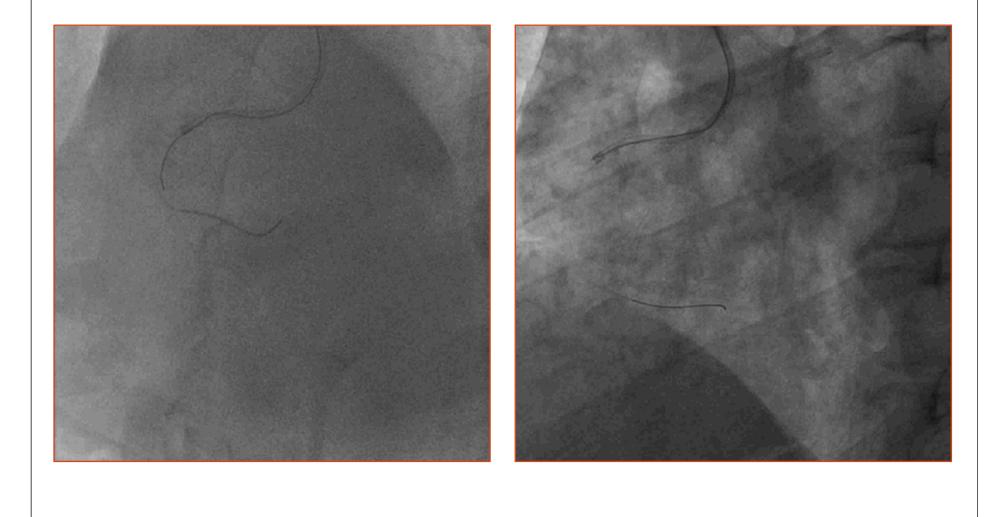


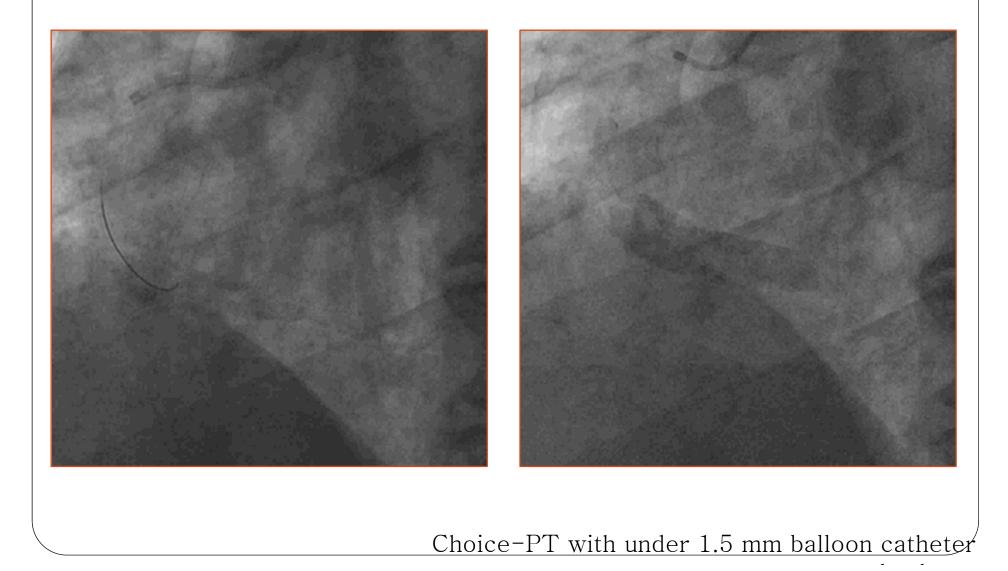
• Decision making

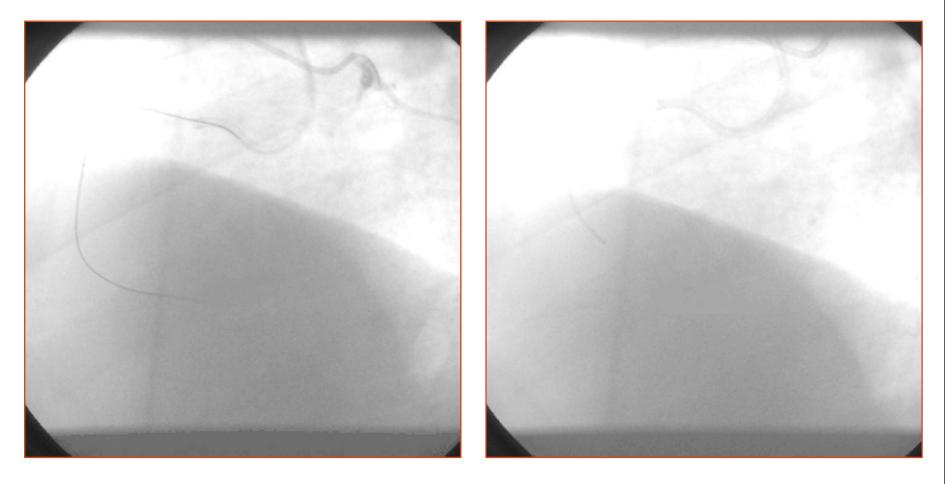
- Patients
 - Active worker
 - Relatively young
 - Exercise related pain
- Echocardiography
 - Normal systolic function, No RWMA
- Coronary angiography
 - Tapered proximal cap, blunt edge of distal cap
 - Good collateral

• PCI

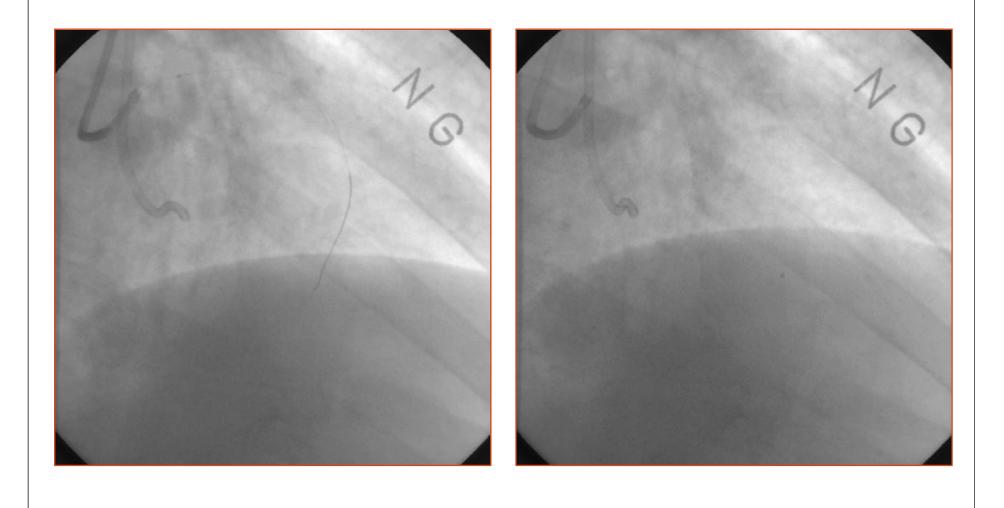


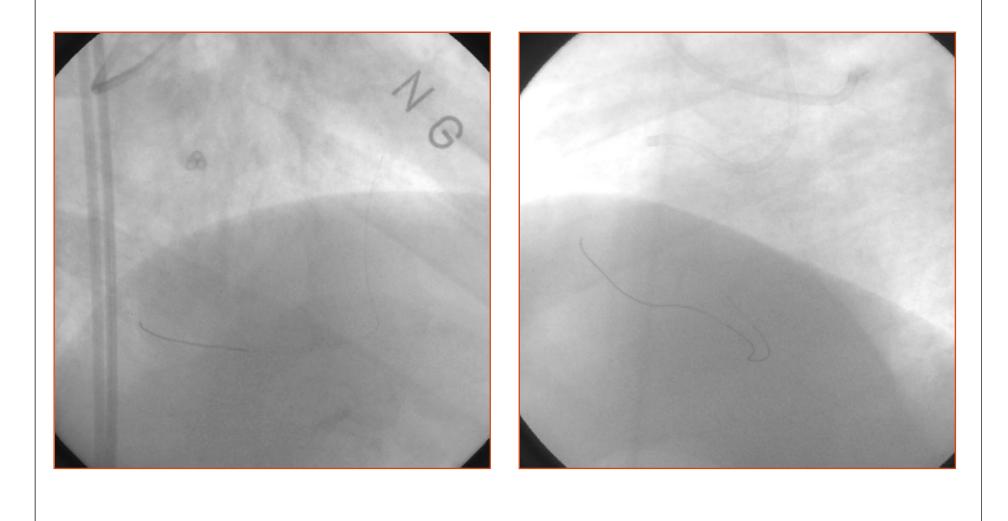


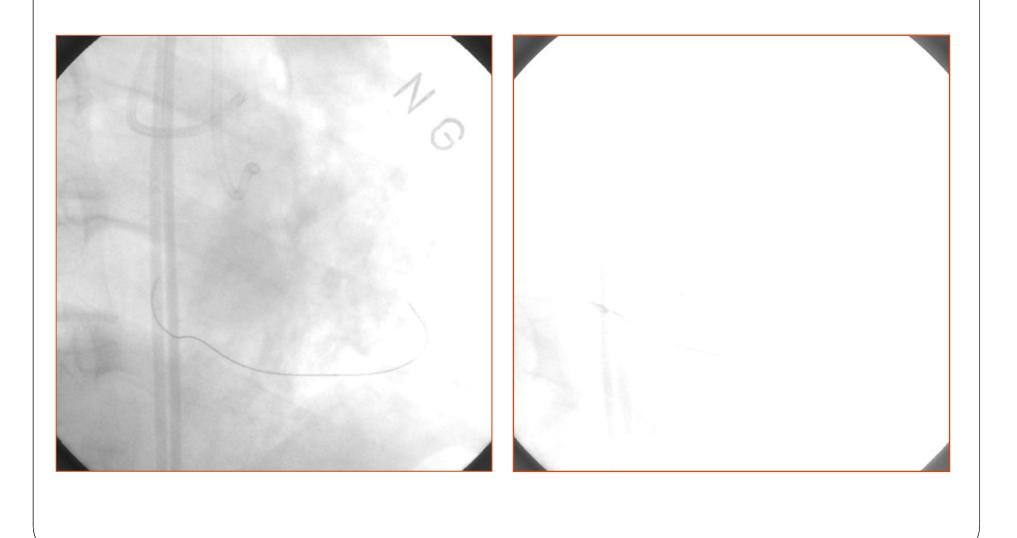


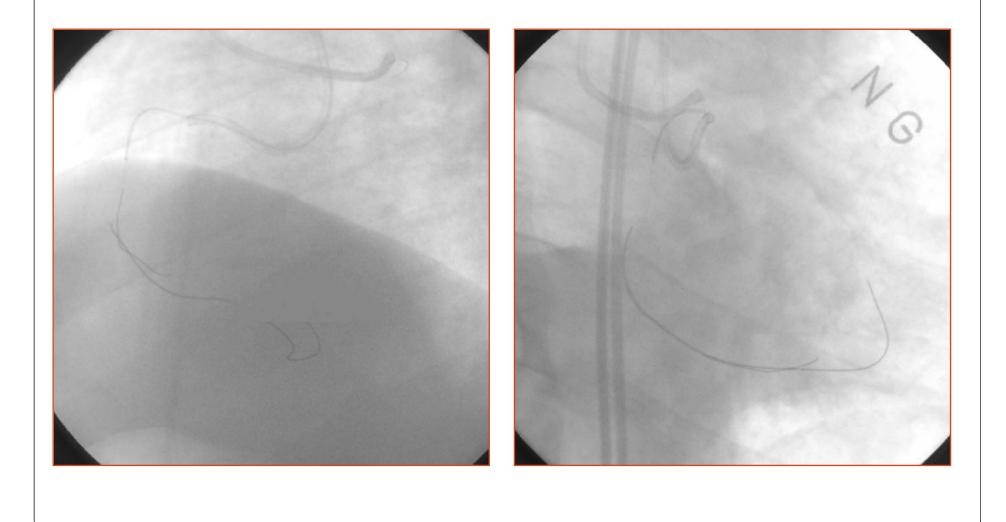


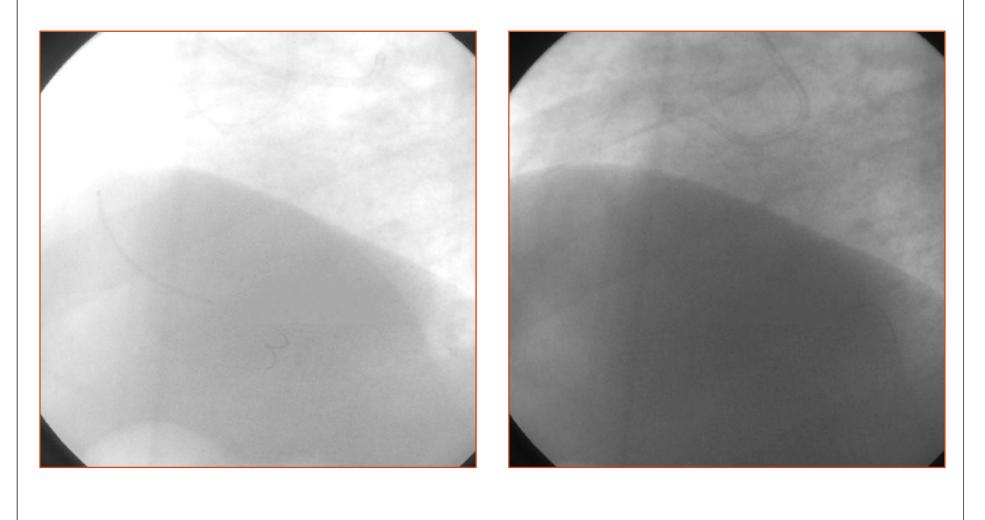
3 weeks later by Dr. Yoo Cheol-Woong in Sejong Femoral approach, 7 Fr AL1 guiding catheres,





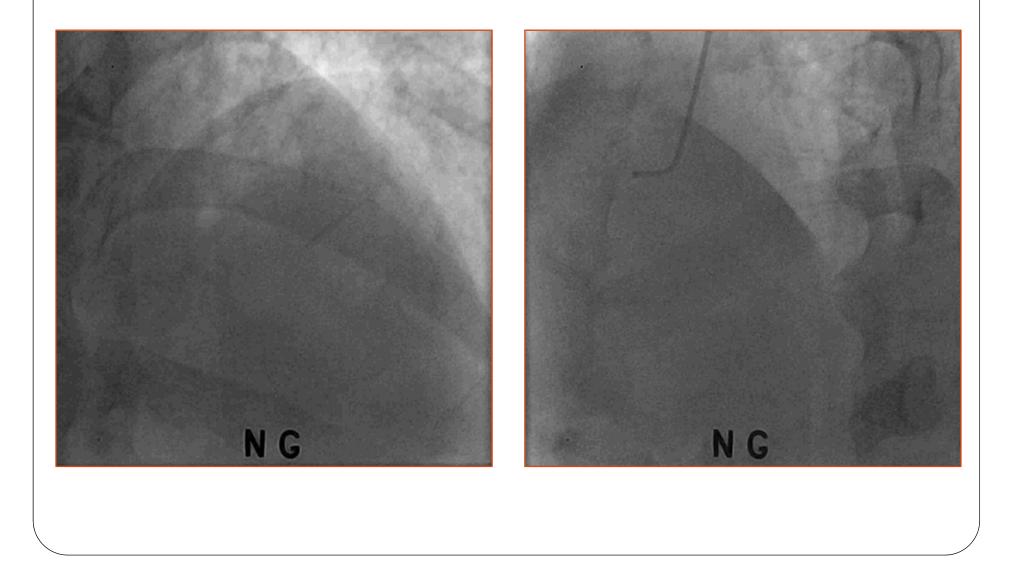


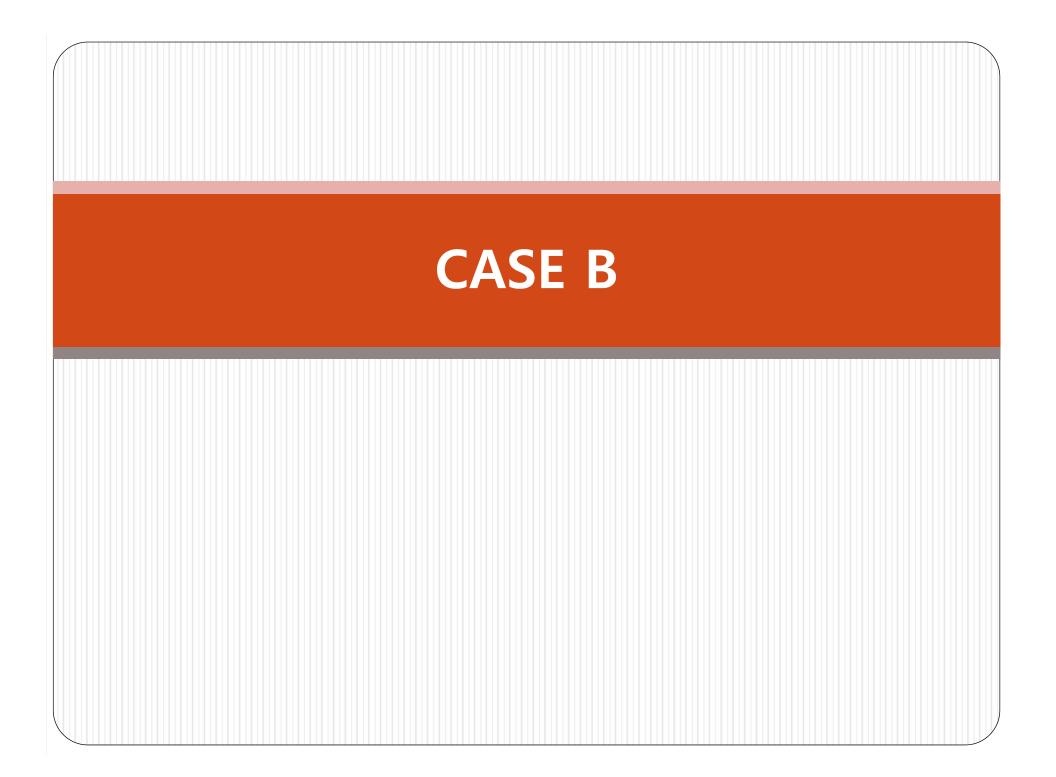




<u>Taxus 2.75X38 mm</u>

CASE A ; 53-year-old male, follow-up on 13 months later





CASE B

; 68-year-old female

Consulted from neurology

- Chest tightness during rehabilitation
- Septal Q waves in electrogardiogram

• Brief history

- intermittent chest pain during rapid walking for 6 months
- Hospitalized for right side weakness

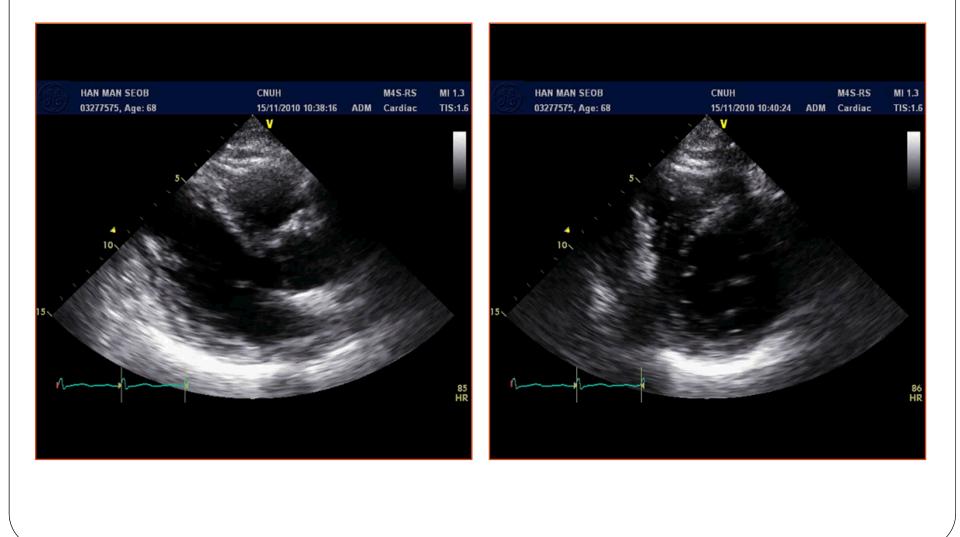
• Clinical risk factors for atherosclerotic disease

- DM/HTN/Dyslipidemia (-/+/+) for 2 years
 - CCB, ARB, Statin, Aspirin
- Ex-smoker
 - 70 PY, smoking cessation 2 years ago

• Electrocardiogram



• Echocardiogram

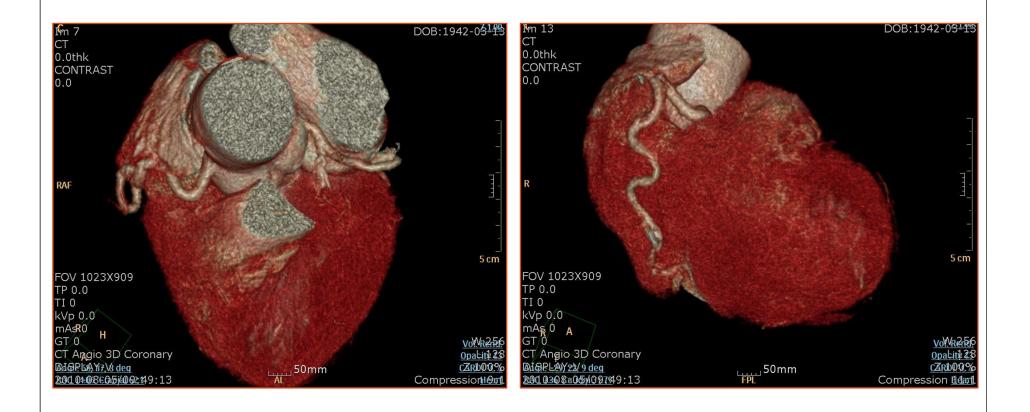


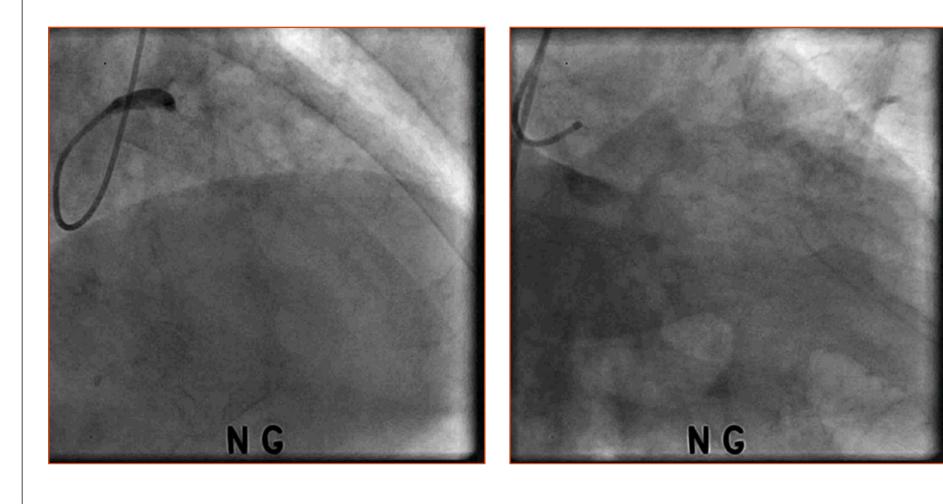
• Echocardiogram

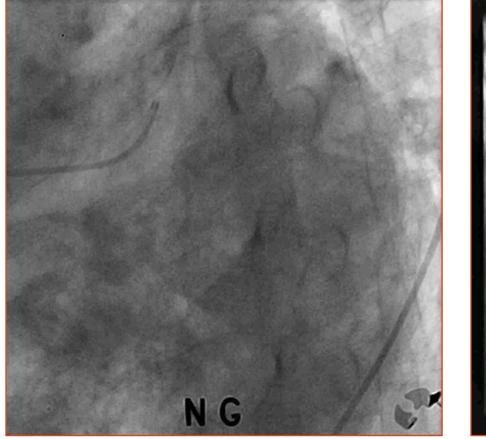


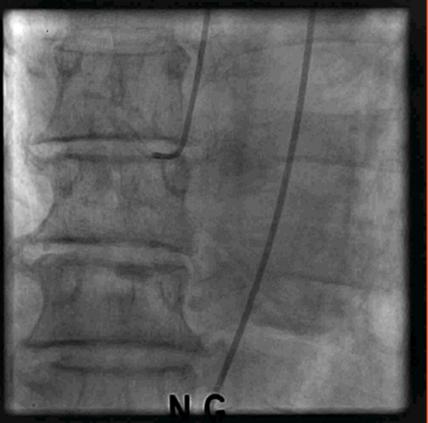


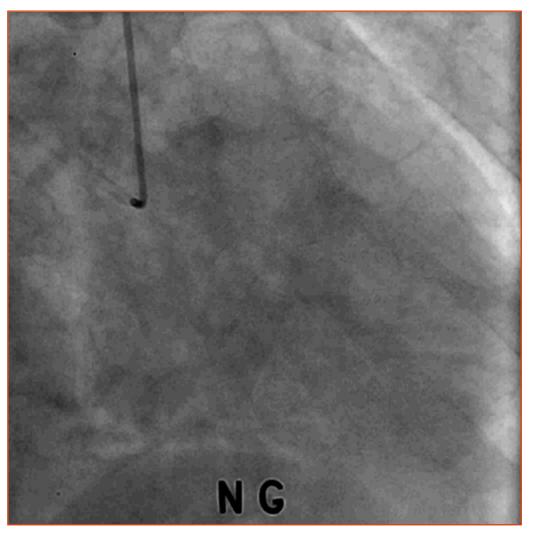
• Coronary angio-CT











CASE B

; 68-year-old female

• Decision making

- "She will depend on the wheel-chair."
- Relatively old, sedentary life style
- Coronary angiography
 - Abrupt cut-off
 - Big side branch
 - Not so severe chest pain
 - No RWMA
- Medical therapy
 - Aspirin, clopidogrel, BB, ARB, Nicorandil, Nitrate

• Evolution

• Doing well up to now for 8 months

Discussion points

• Do we have the any strong evidences of clinical benefit in revascularization with PCI for CTO lesion with good collaterals?

• Do we have any clinical or laboratory criteria to select "good candidate" to perform PCI for CTO lesion with good collaterals ?

• It's necessary to compare between PCI and medical optimization therapy to this category