

# OCT assessment of early and late stent thrombosis

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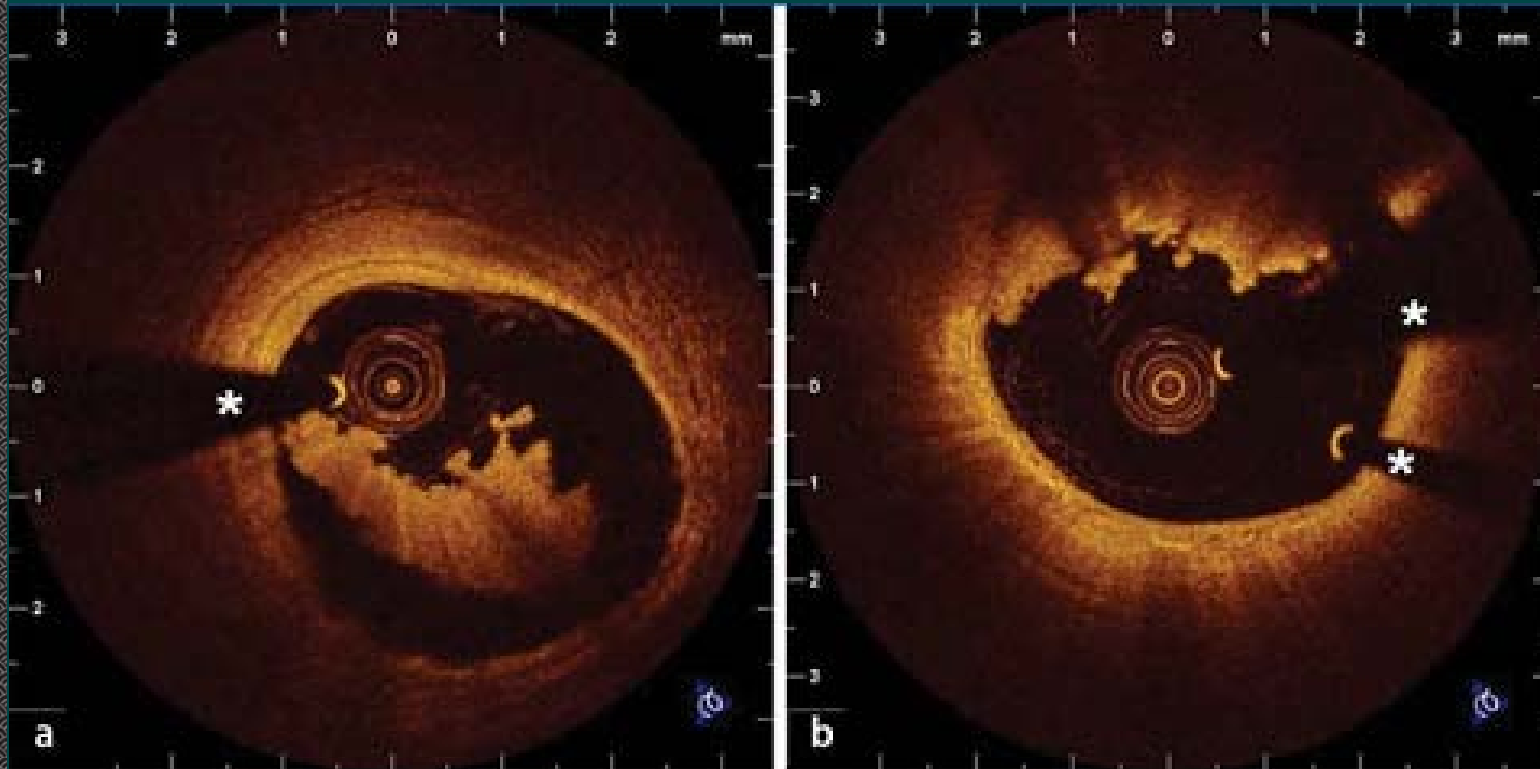


# Timing and Mechanism of DES Thrombosis



Early(<30d)	Late(1-12 Mo)	Very late(>12 Mo)
Procedural	Delayed healing	Abnormal vascular response
Underexpansion Edge dissection Residual plaque	Uncovered struts Fibrin deposition	Hypersensitivity Extensive fibrin deposition Late malapposition? Neoatherosclerosis

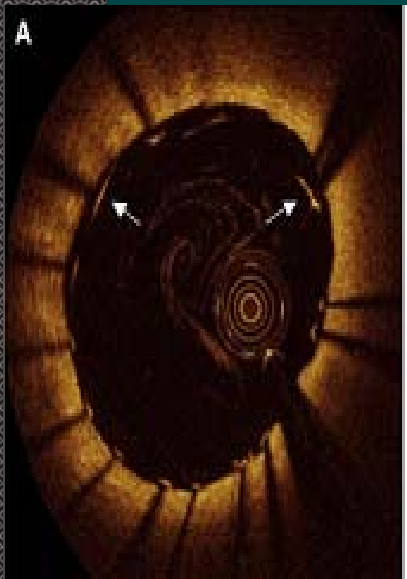
# Thrombosis evaluation



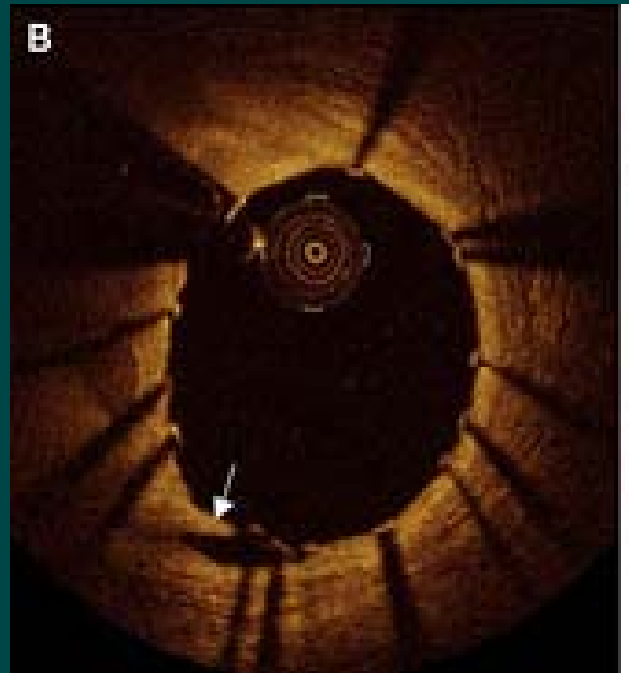
**White thrombus**

**Red thrombus**

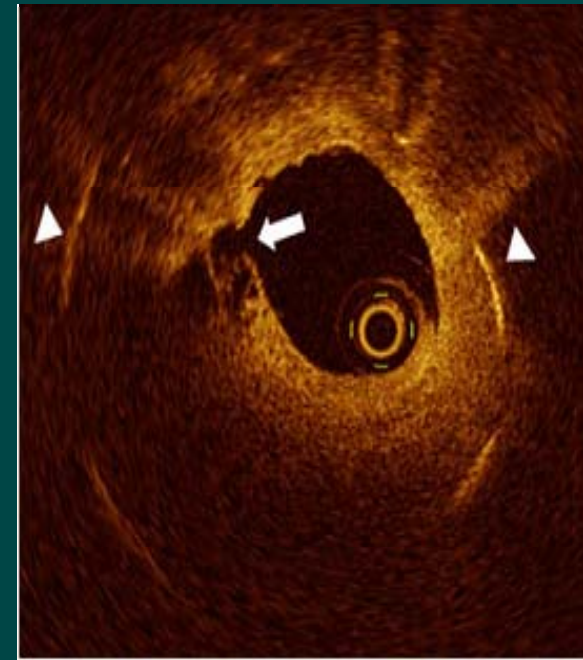
# Assessment of post-stenting



**Malapposition**



**edge Dissection**



**neoatheroma rupture**

# Case #1

Male , 53 years old

Diagnosis: CHD UA Hypertention

Cardiac risk: smoking



# Coronary angiography



LCX: CTO

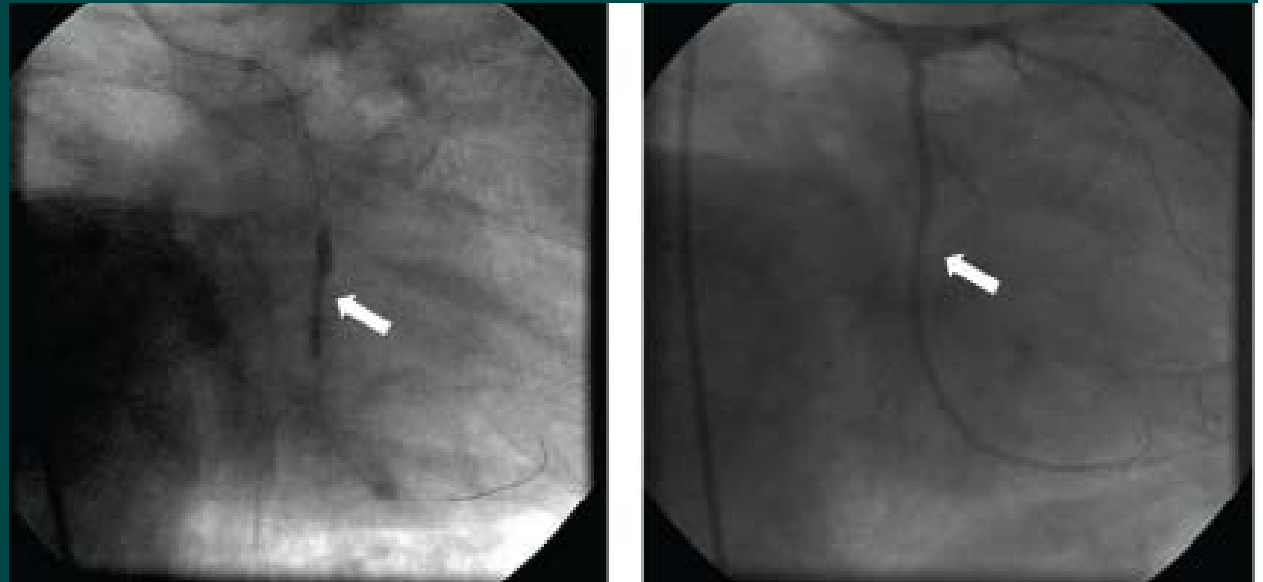
# PCI

LCX:

TAXUS Liberte

2.25x32 mm

2.5x32 mm

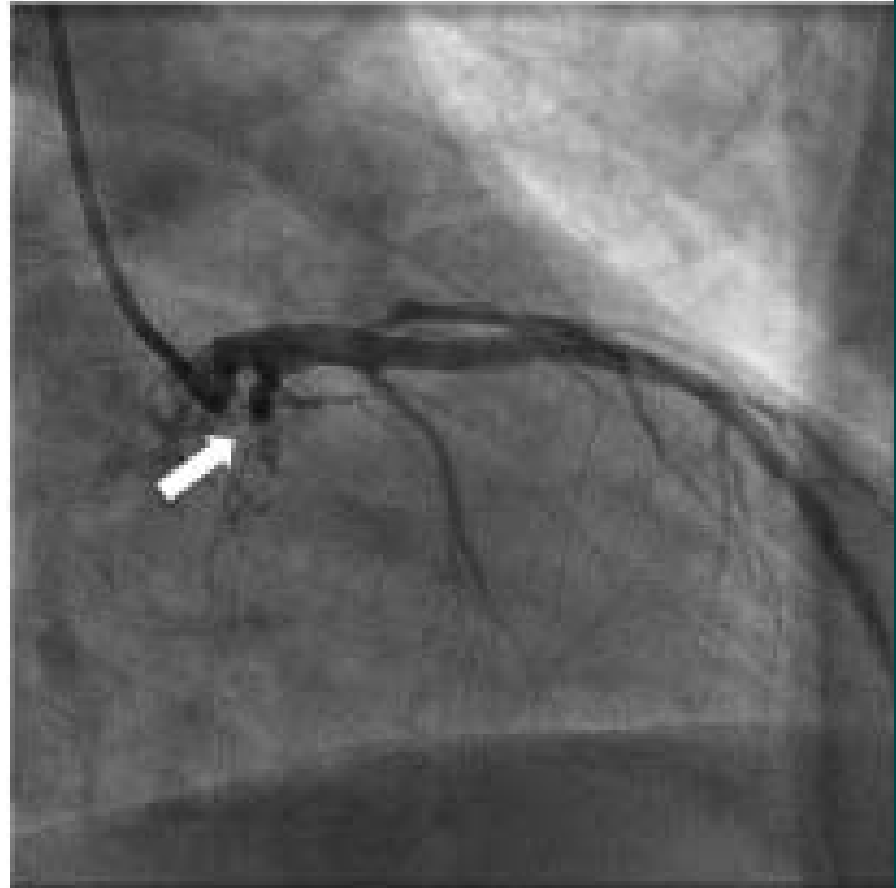
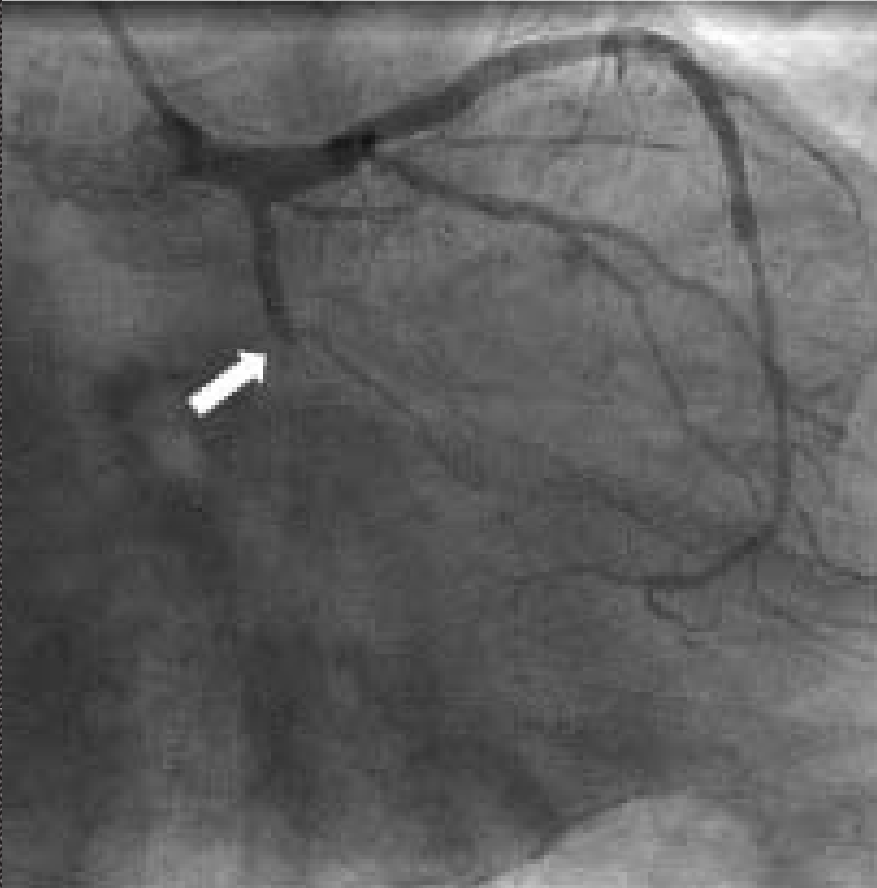


Stent underexpansion

# Coronary angiography

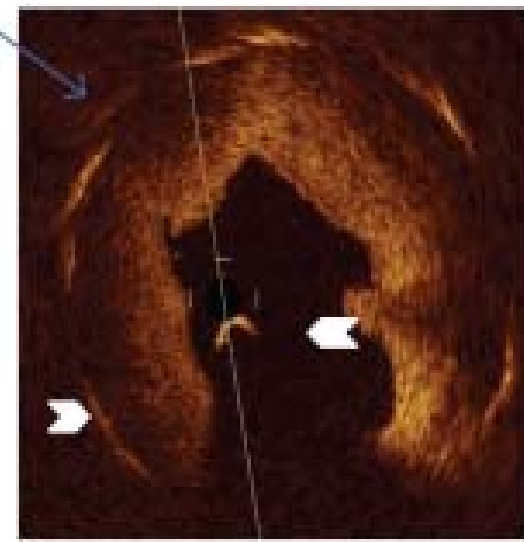
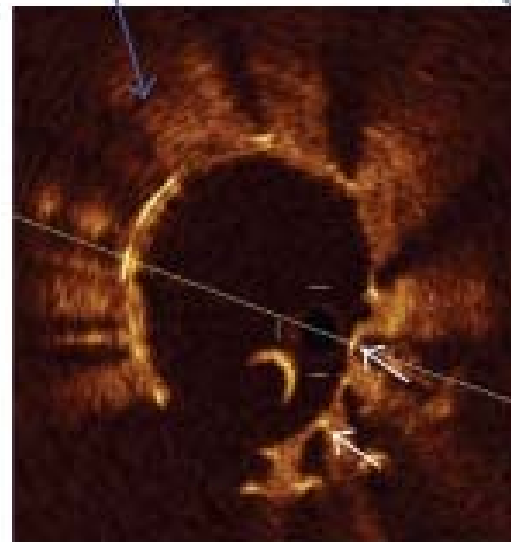
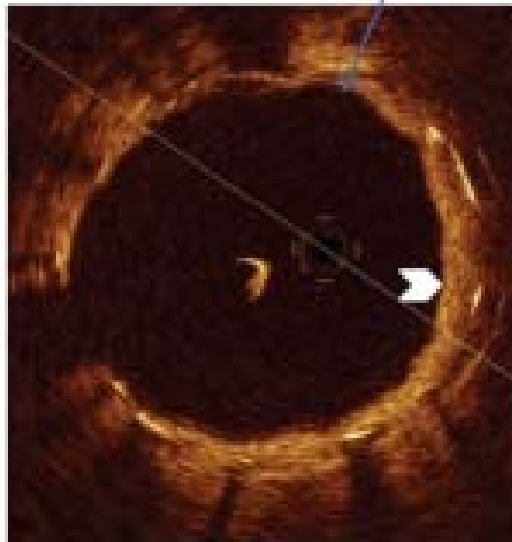
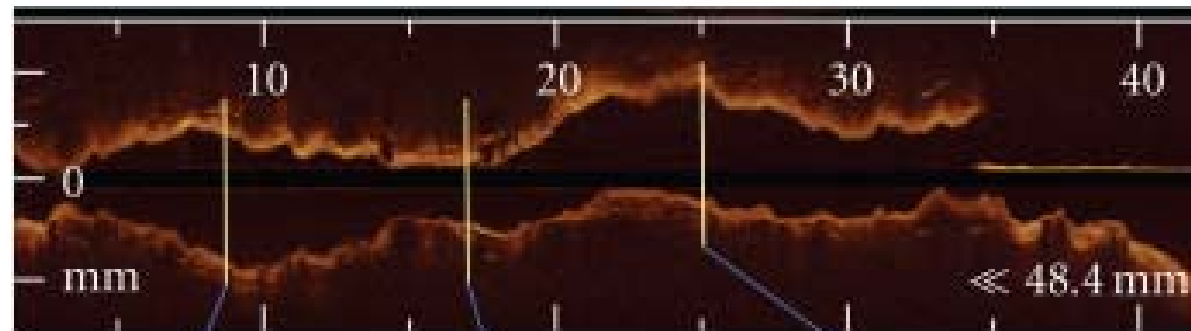


Chest pain after 6 days  
Posterior ST segment elevation





# Underexpansion and lower reaction of DATP



## Case #2



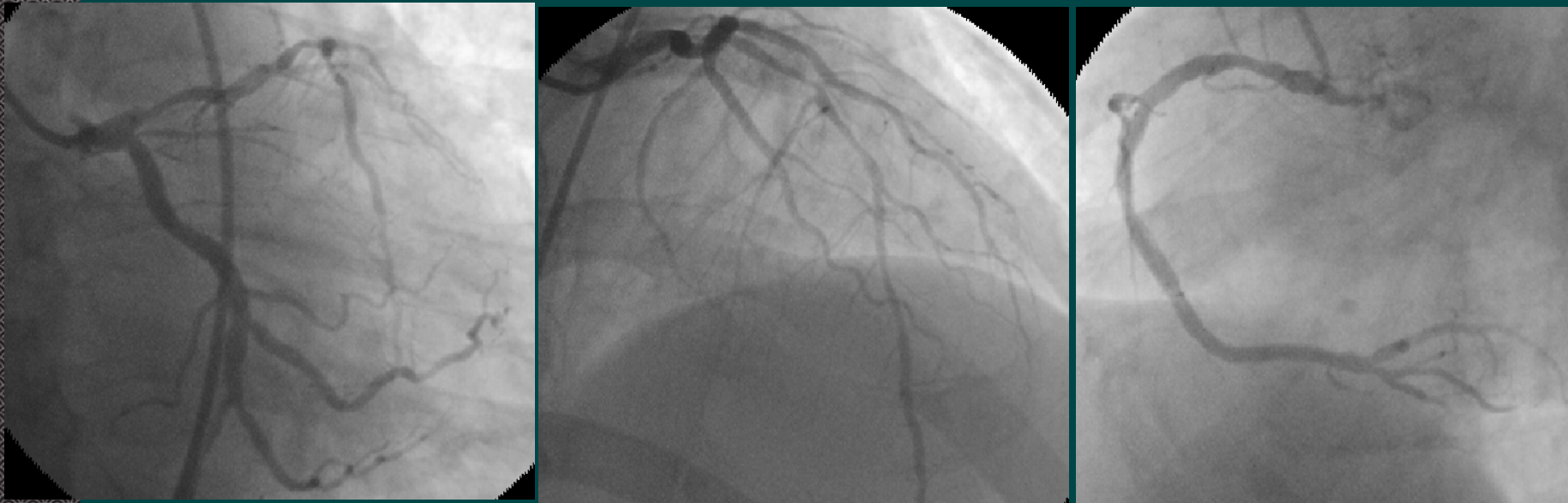
Male , 56 years old

Chest pain 3 years, aggravation 1 week

Diagnosis: CHD UA

Cardiac risk: smoking

# Coronary angiography



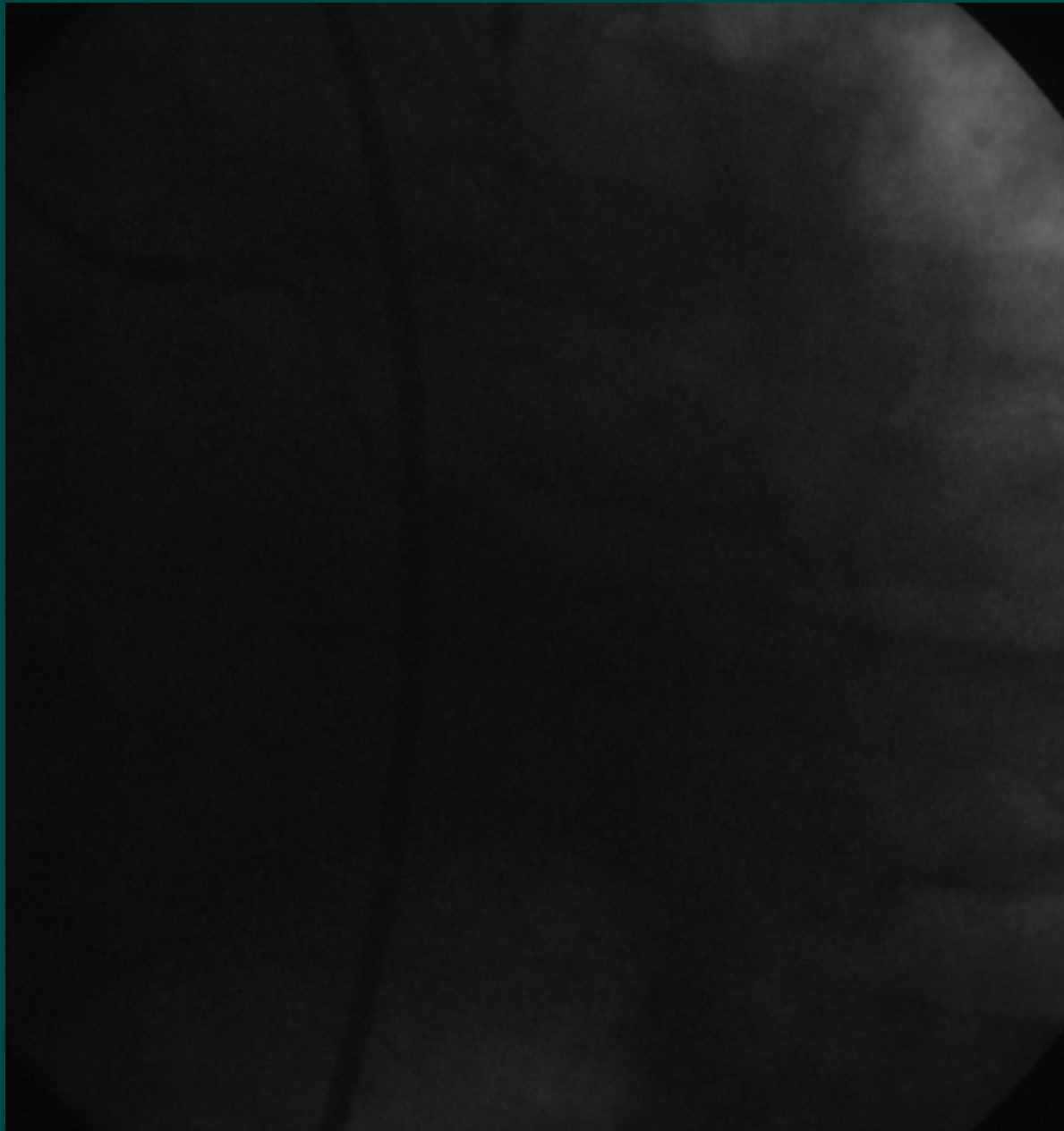
**LAD:**

**Partner 3.0x24 mm**

**Partner 3.5x18 mm**

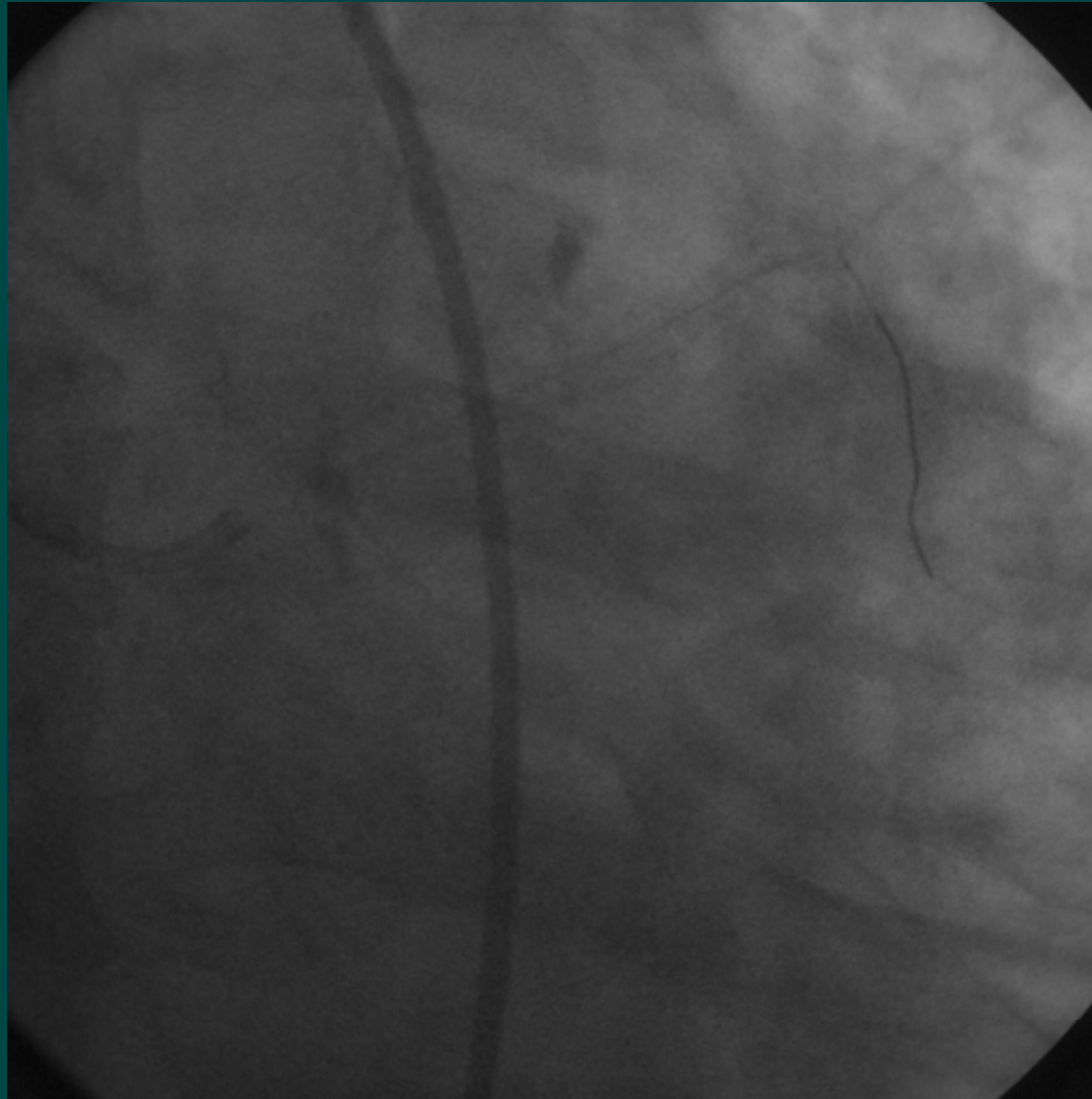
**2006-07-26**

# Chest pain 3 hours 10months later

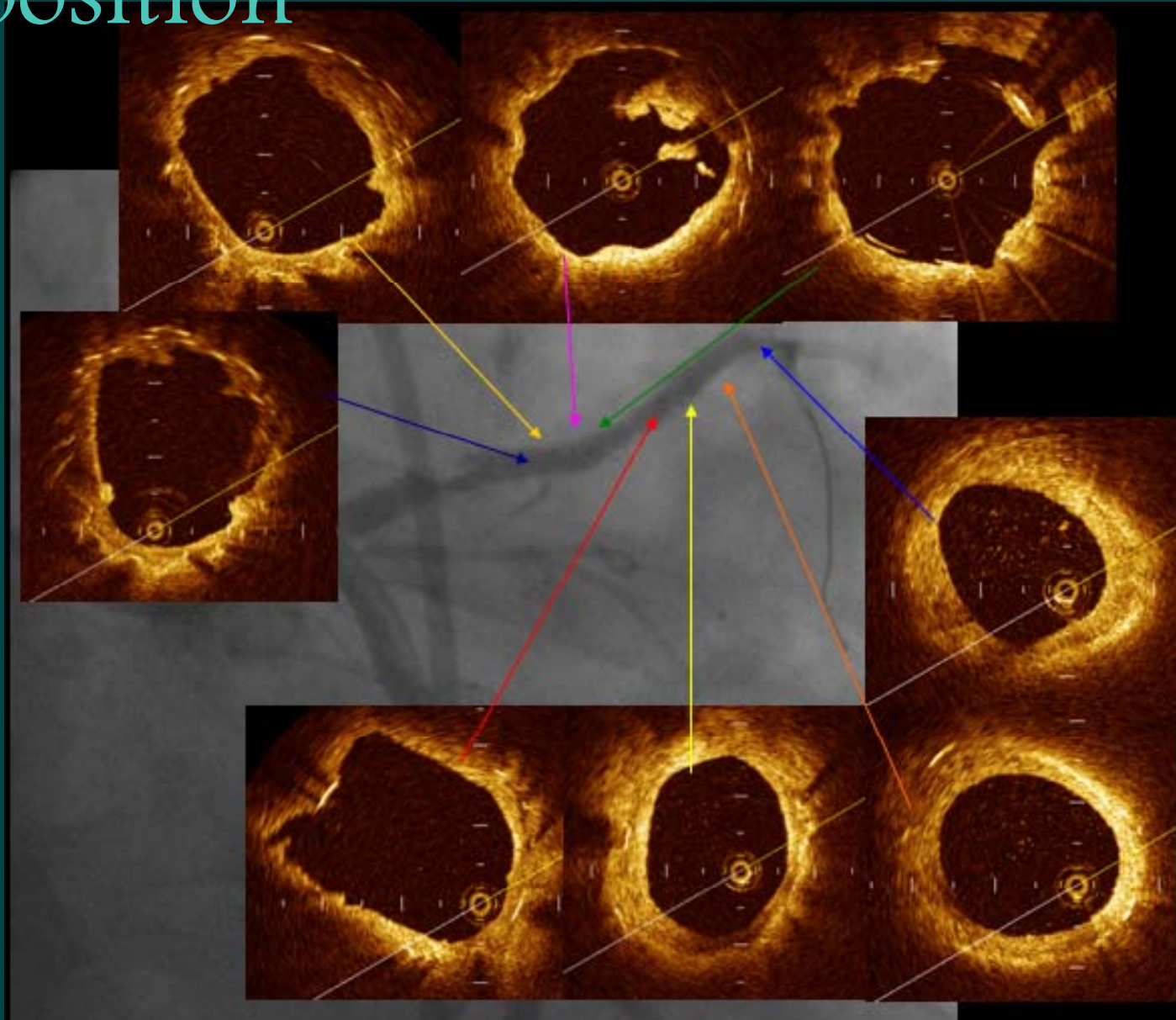


2007-05-17

# After Thrombus Aspiration



# Uncoverd struts and fibrin deposition



# Case #3

Male, 72 years old

Cardiac risk : hypertension, smoking

Diagnosis: CHD, UA, Hypertension

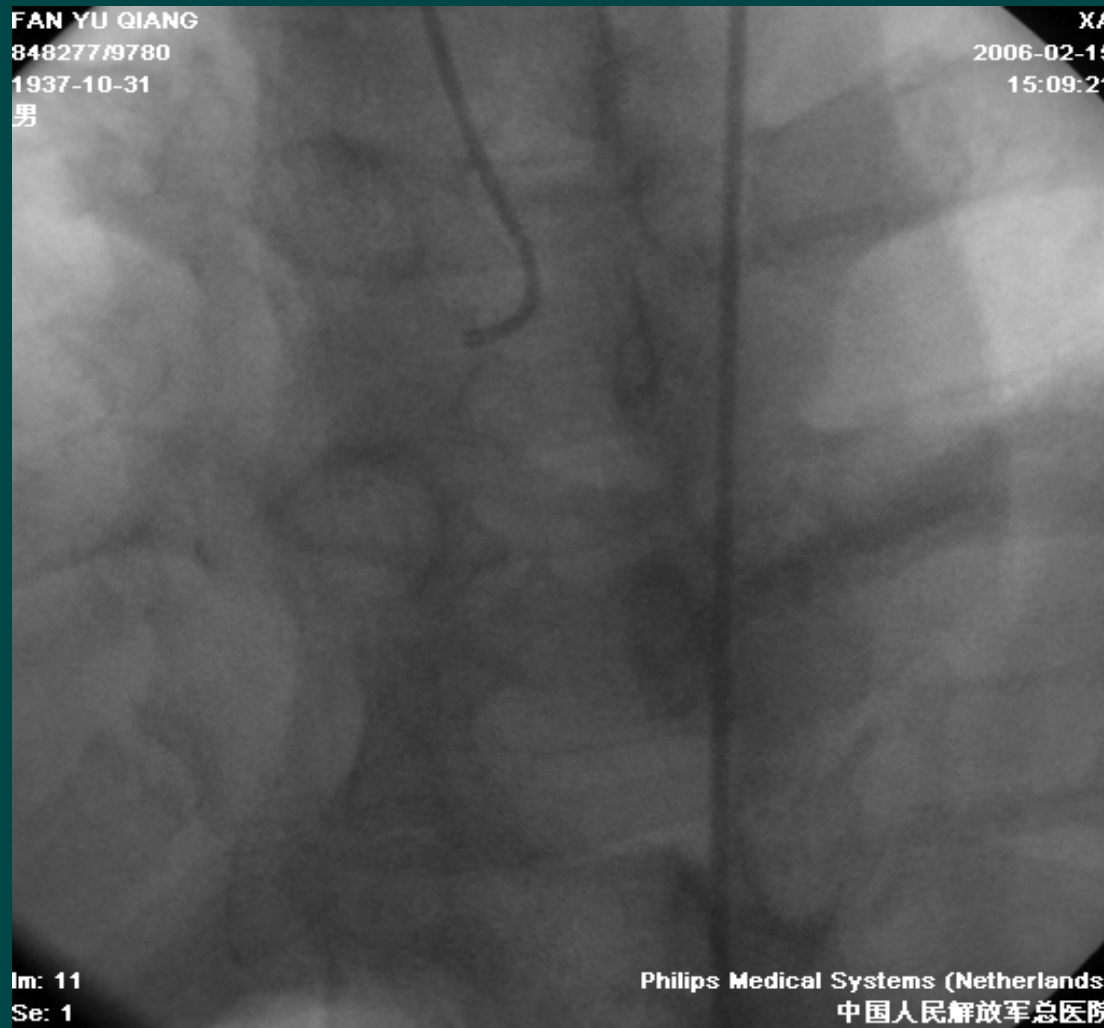


# Coronary angiography



FAN YU QIANG  
84827719780  
1937-10-31  
男

XA  
2006-02-15  
15:09:21



Im: 11  
Se: 1

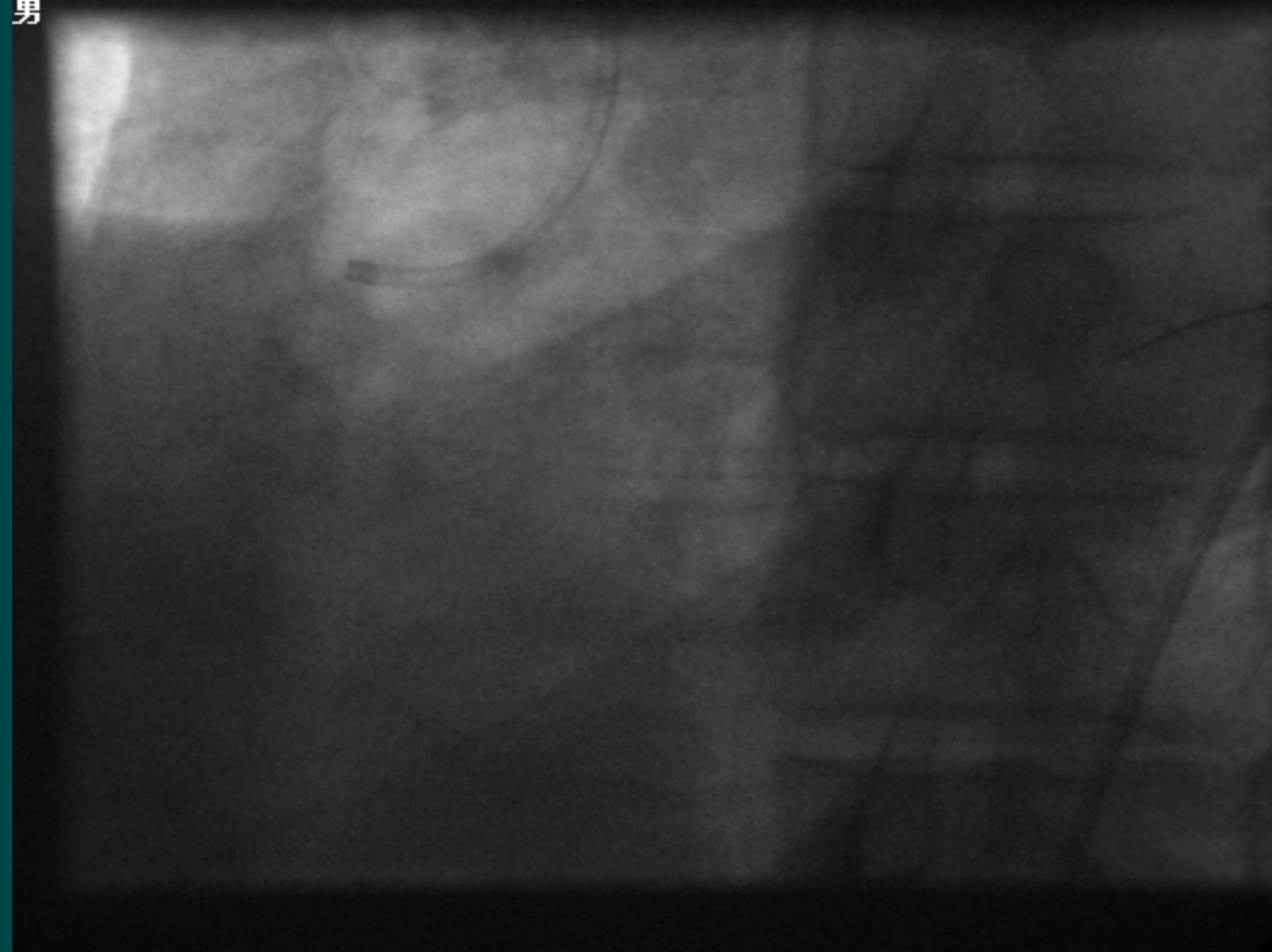
Philips Medical Systems (Netherlands)  
中国人民解放军总医院



PCI

FAN YU QIANG  
848277/9780  
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男

XA  
2006-02-15  
16:02:03

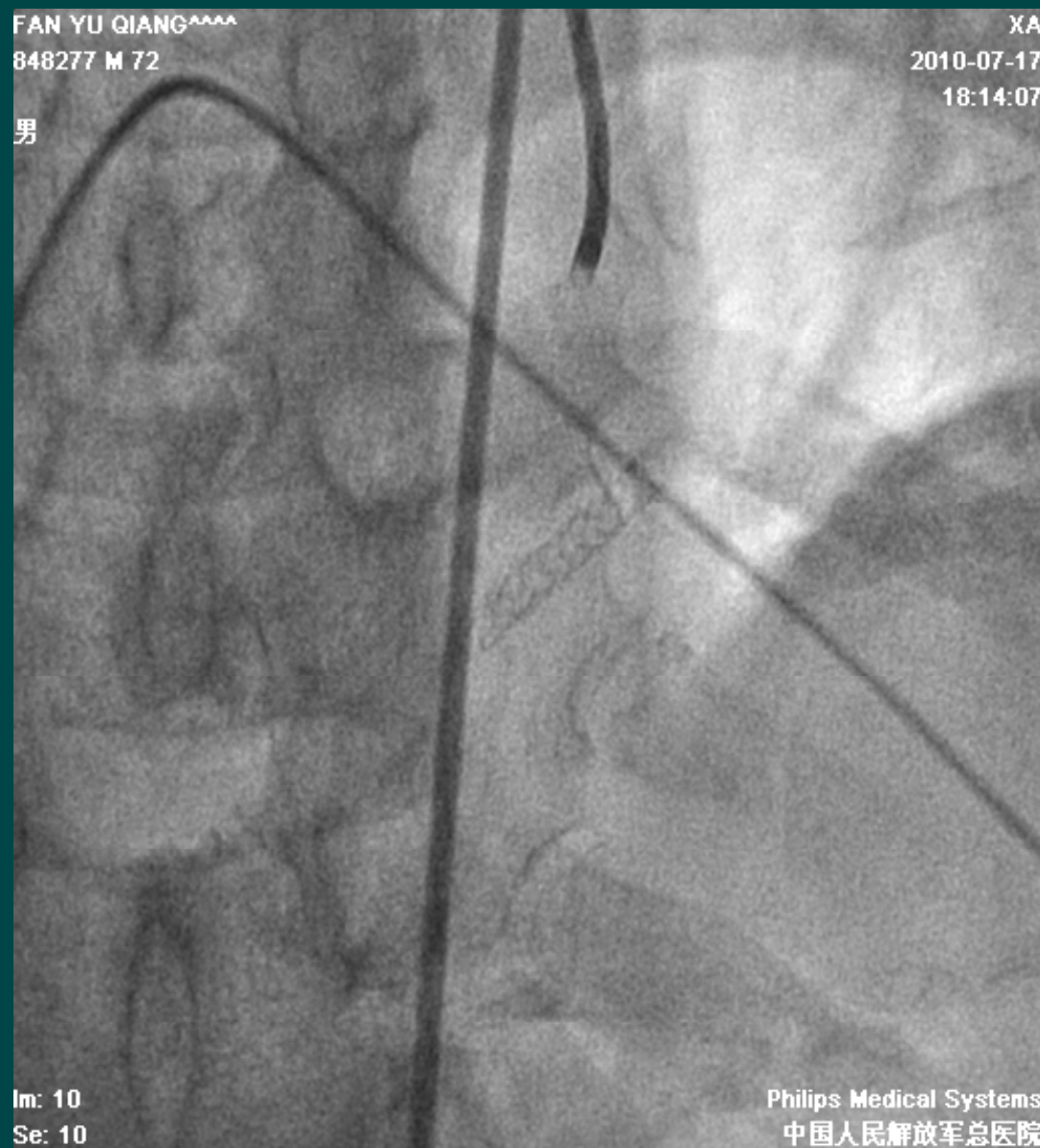


Im: 27  
Se: 1

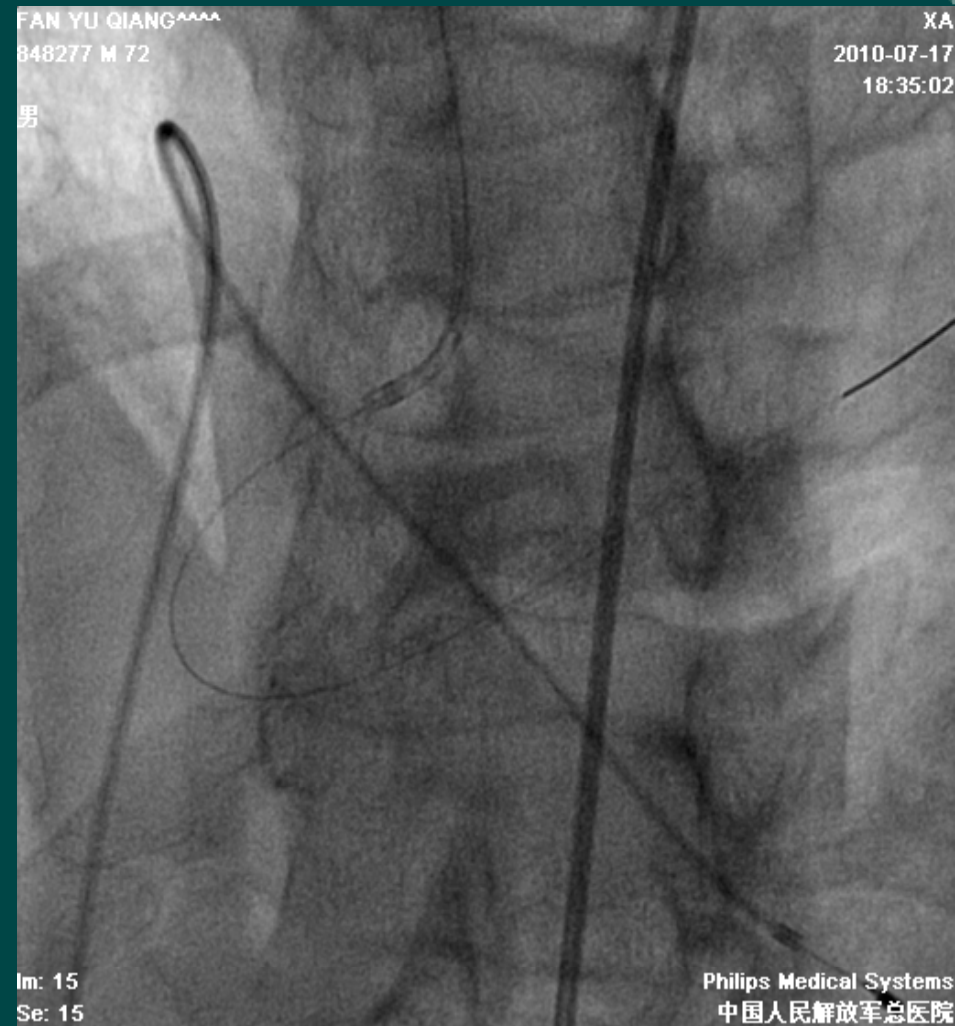
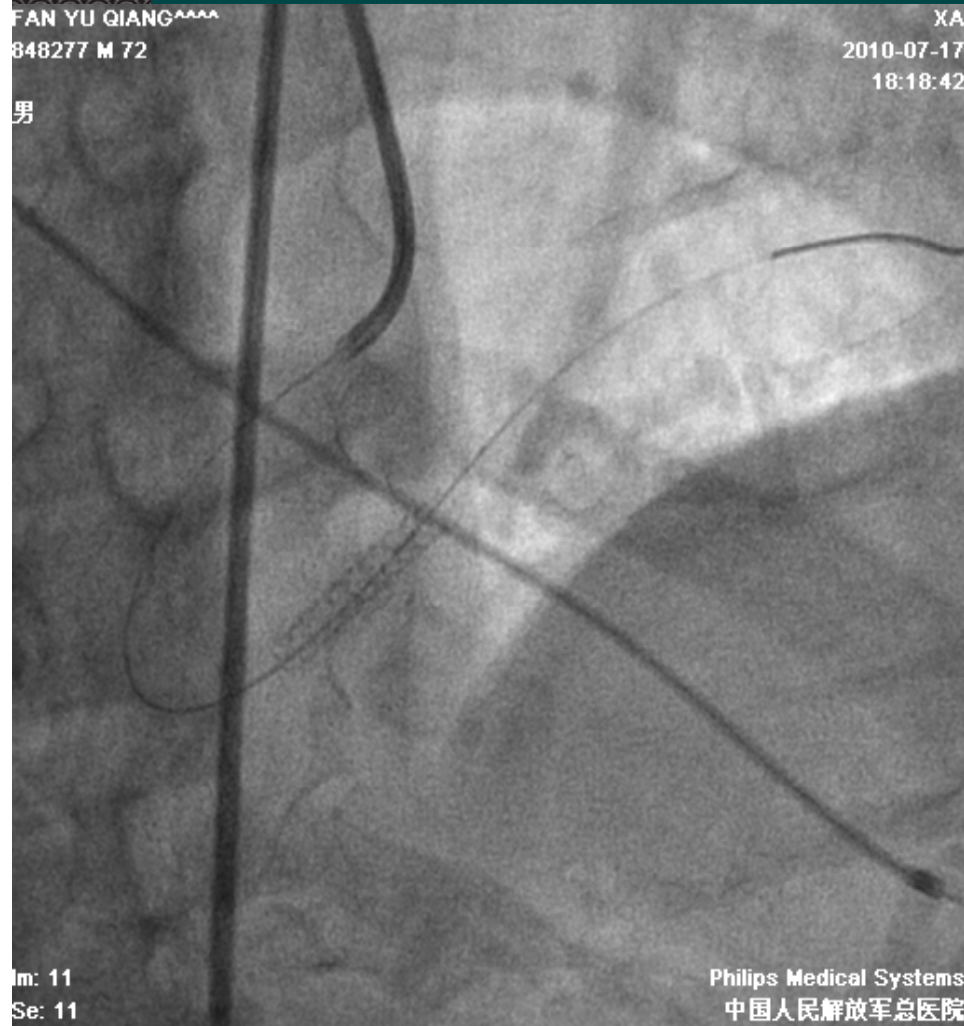
Philips Medical Systems (Netherlands)  
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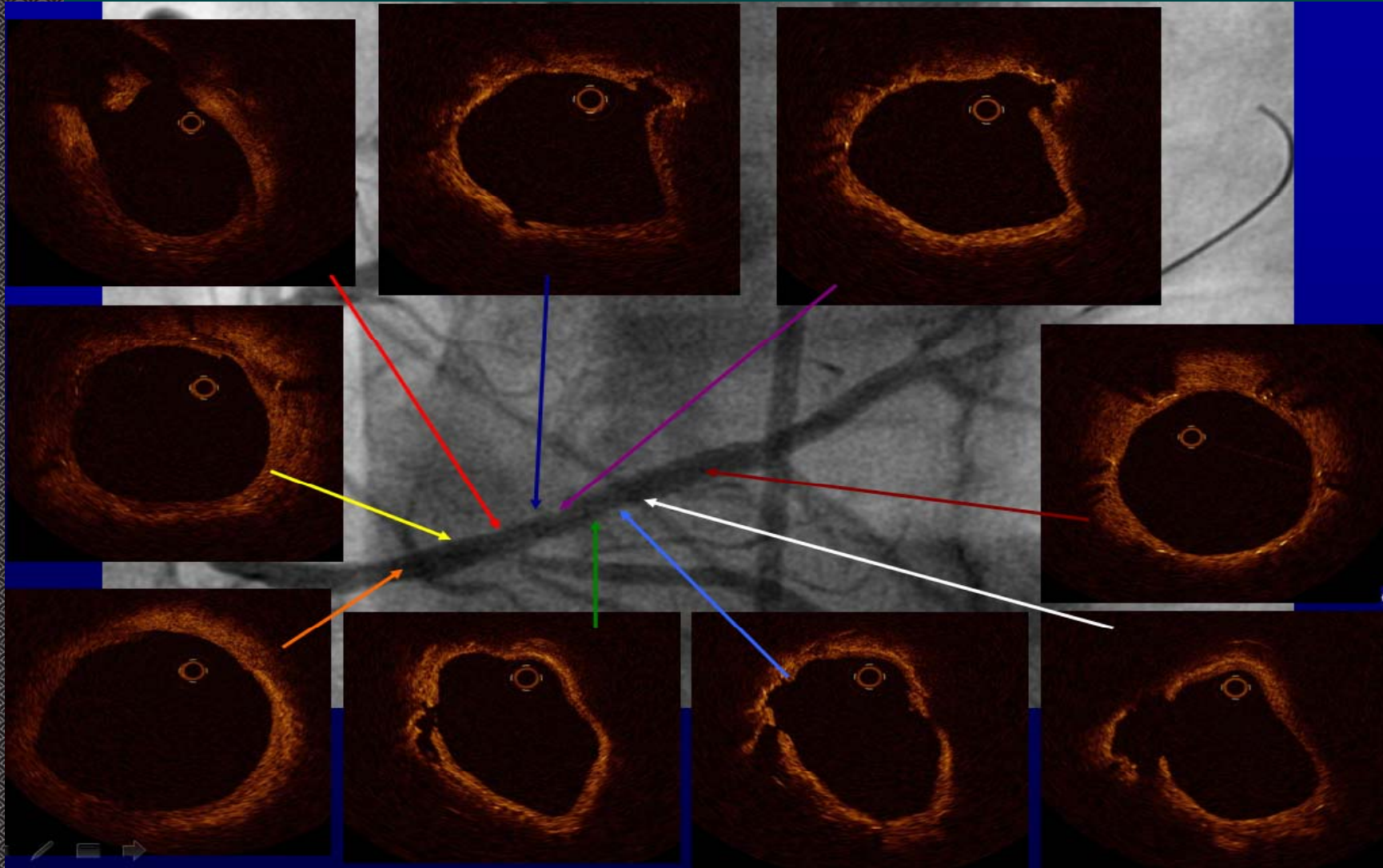
# Chest pain 3 hours 53months later



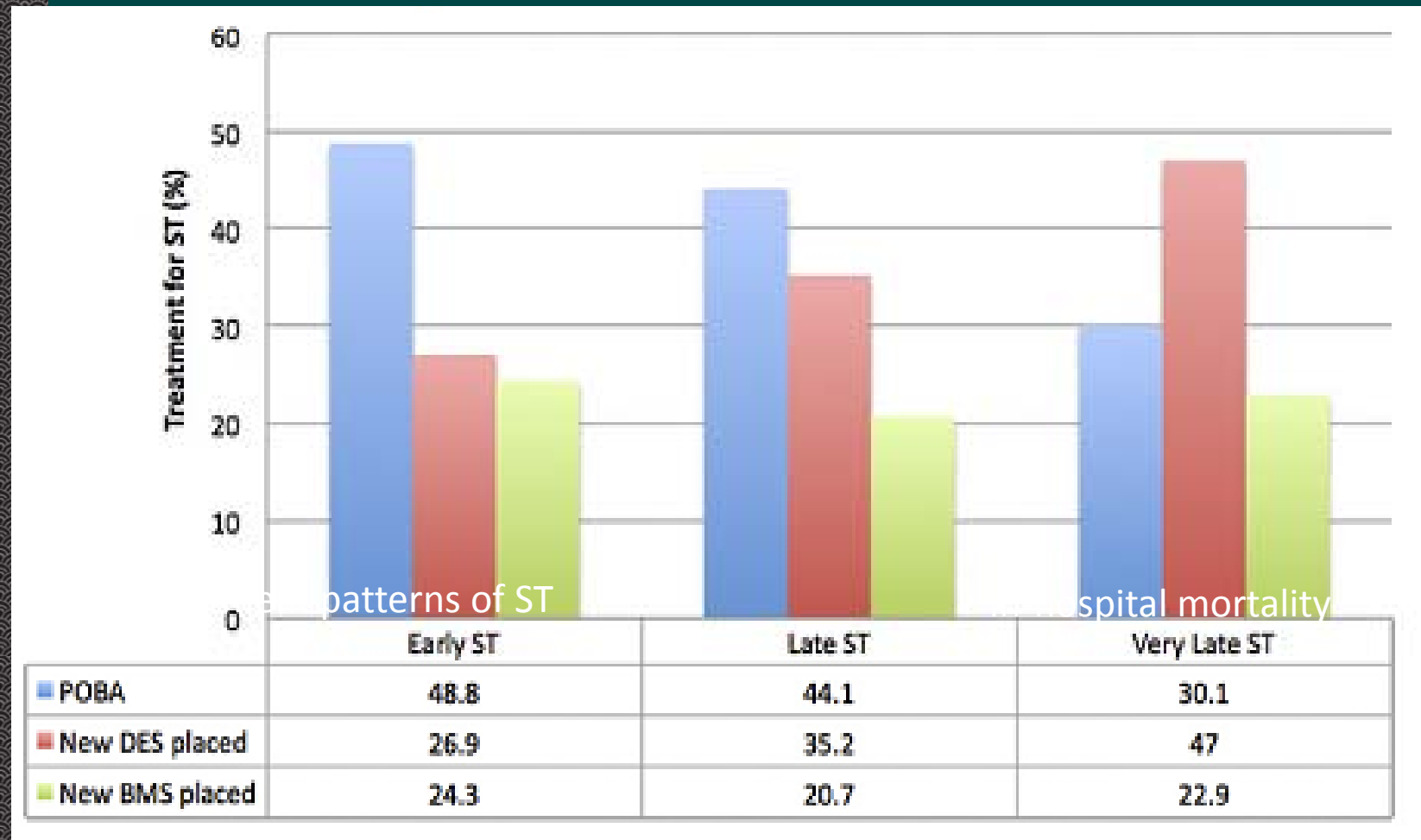
# aspiration



# Neoatheroma in stent rupture



# Treatment for early, late, and very late ST



# Take home message

- ❖ Oct could accurately detect the probably reason for Early \late\very late ST (under-expansion\uncovered struts\malapposition(postprocedure or late acquired ) and new plaque rupture
- ❖ How to treat this issue is not quite clear until now (POBA\DES\BMS\COVER S)
- ❖ Check the reaction of DAPT in useful for inadequate antiplatelet therapy

