



**Imaging and Physiology**  
**October 29<sup>th</sup>, 2010**



# **Stent Dislocation by Huge Aneurysm Formation after Implantation of Two TAXUS Stents**

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**Heart Center of Chonnam National University Hospital,  
Gwangju, Korea**

# 64-Year-Old Male

**CC** Chest discomfort

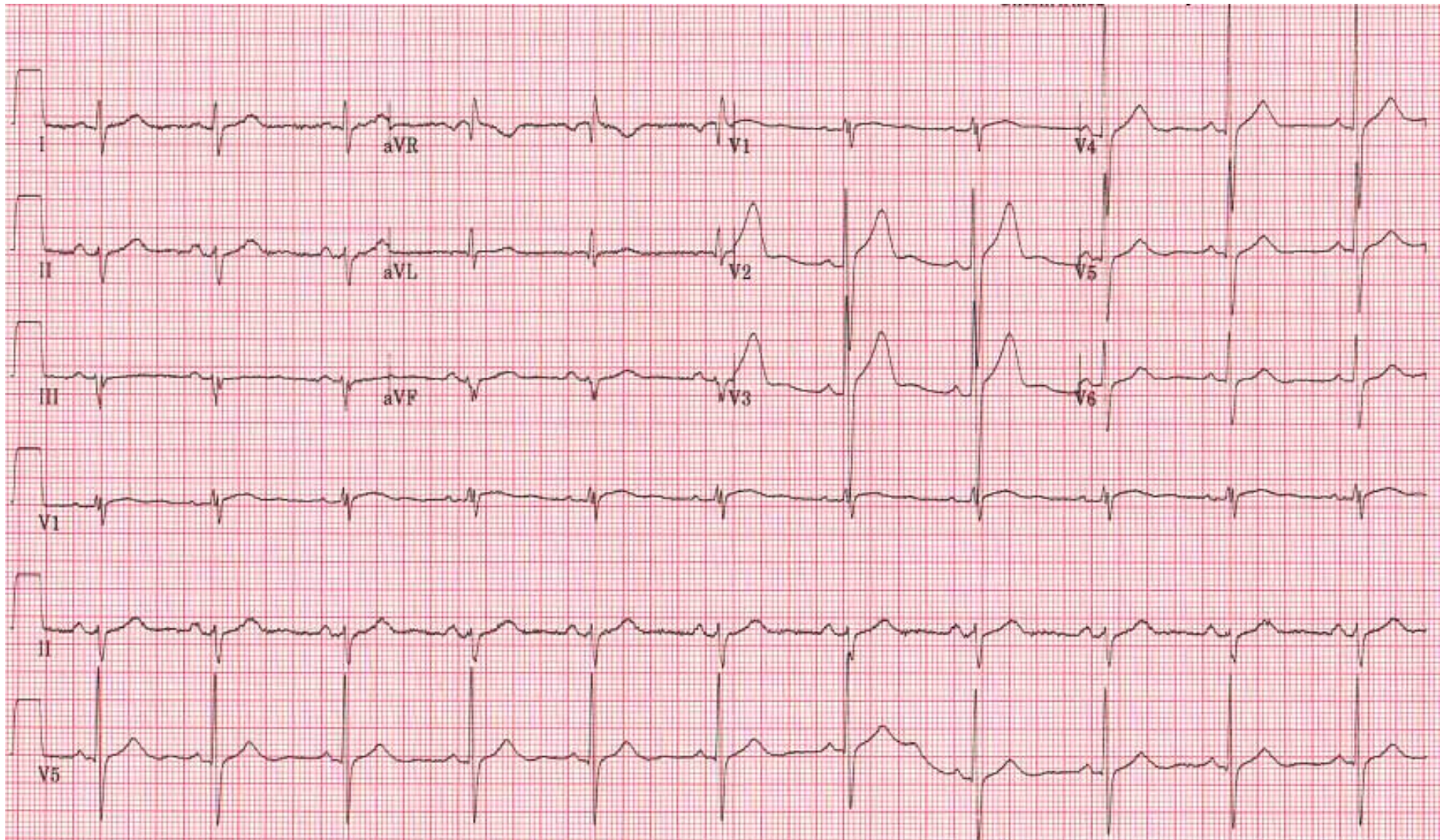
**PH** HT (-), DM (-)

**SH** Smoking: 40 PYS current smoker  
Alcohol: social drinker

**FH** Negative for CAD

**VS** BP 130/80 mmHg, PR 65 beats/min

# ECG



# LAB

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<b>WBC</b>	<b>7,400 /mm<sup>3</sup></b>	<b>APTT</b>	<b>34.8 /sec</b>
<b>Hgb</b>	<b>13.7 g/dL</b>	<b>PT INR</b>	<b>1.01</b>
<b>PLT</b>	<b>177k /mm<sup>3</sup></b>	<b>TC</b>	<b>174 mg/dL</b>
		<b>TG</b>	<b>55 mg/dL</b>
<b>AST</b>	<b>18 U/L</b>	<b>LDL</b>	<b>116 mg/dL</b>
<b>ALT</b>	<b>26 U/L</b>	<b>HDL</b>	<b>51.3 mg/dL</b>
		<b>LP(a)</b>	<b>61.5 mg/dL</b>
<b>hs-CRP</b>	<b>0.081 mg/dL</b>	<b>Tn-I</b>	<b>0.03 ng/mL</b>
<b>NT-proBNP</b>	<b>94.94 pg/mL</b>	<b>CK</b>	<b>126 U/L</b>
		<b>CK-MB</b>	<b>54 U/L</b>

# CAG (2006-06-13)

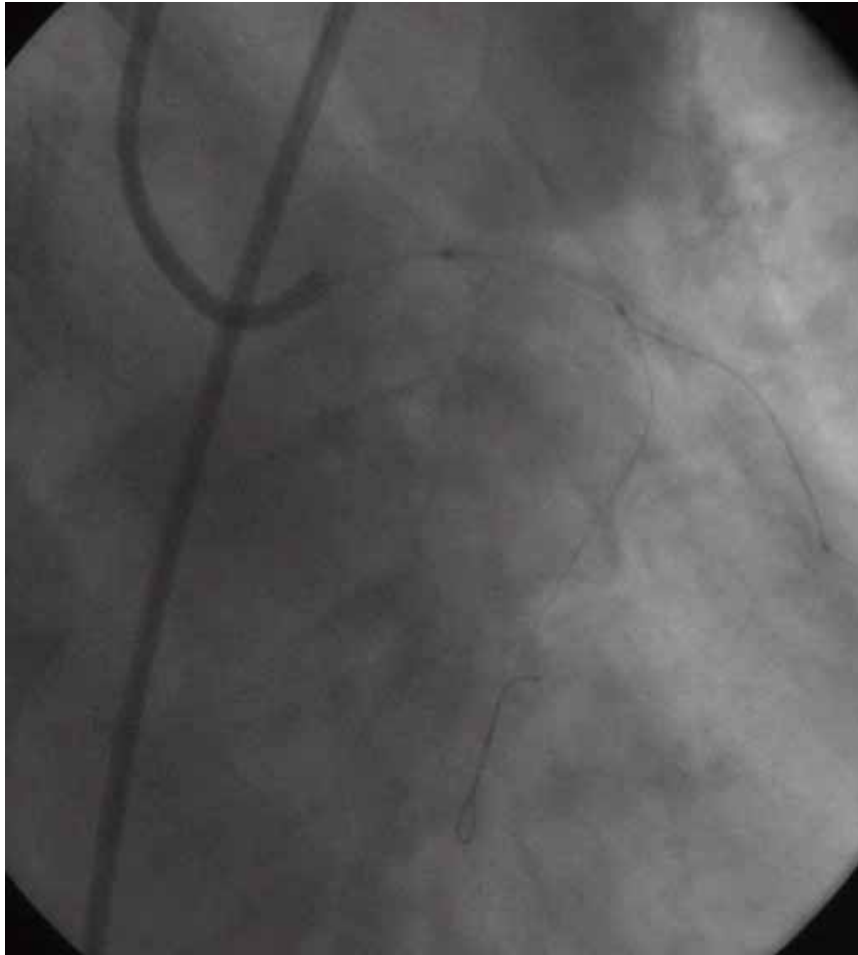


RAO

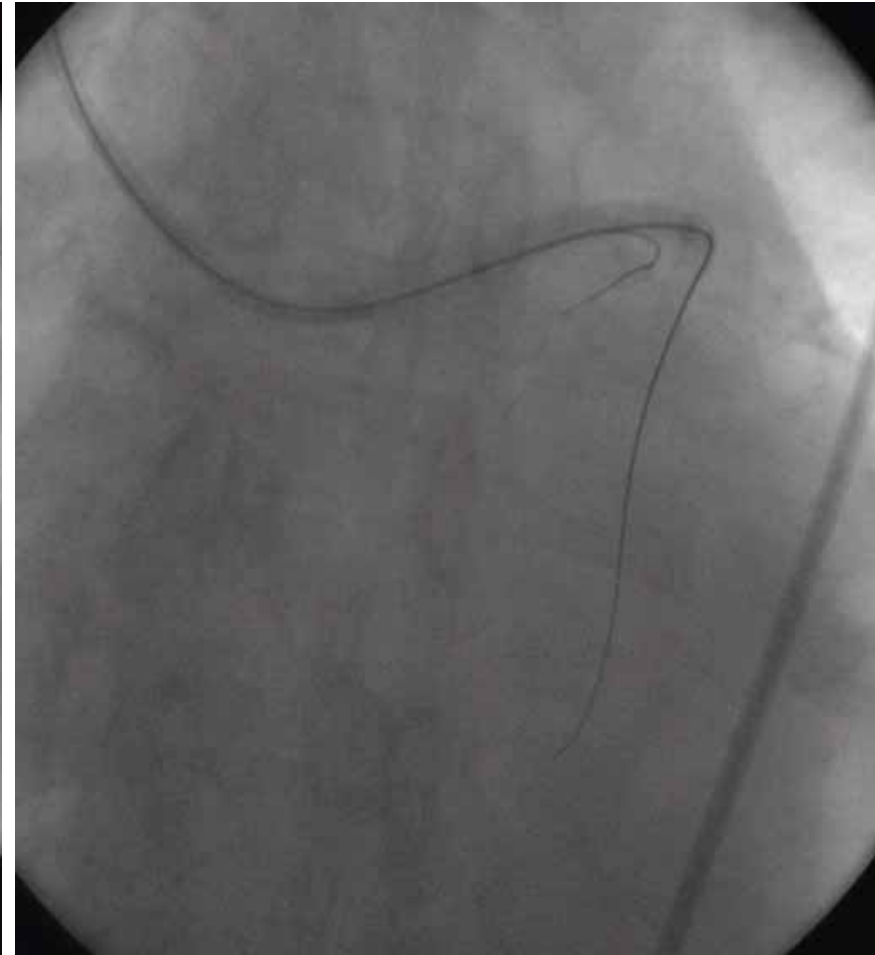


LAO

# CAG (2006-06-13)



RAO



LAO

**3.0mm balloon → 3.0X28mm X2 Taxus stent implantation**

# CAG (2006-06-13)



RAO



LAO

# **Discharge Medications**

**Aspirin 100mg**

**Plavix 75mg**

**Pletaal 200mg (1 month)**

**Prastan 20mg**

**Molsiton 4mg**

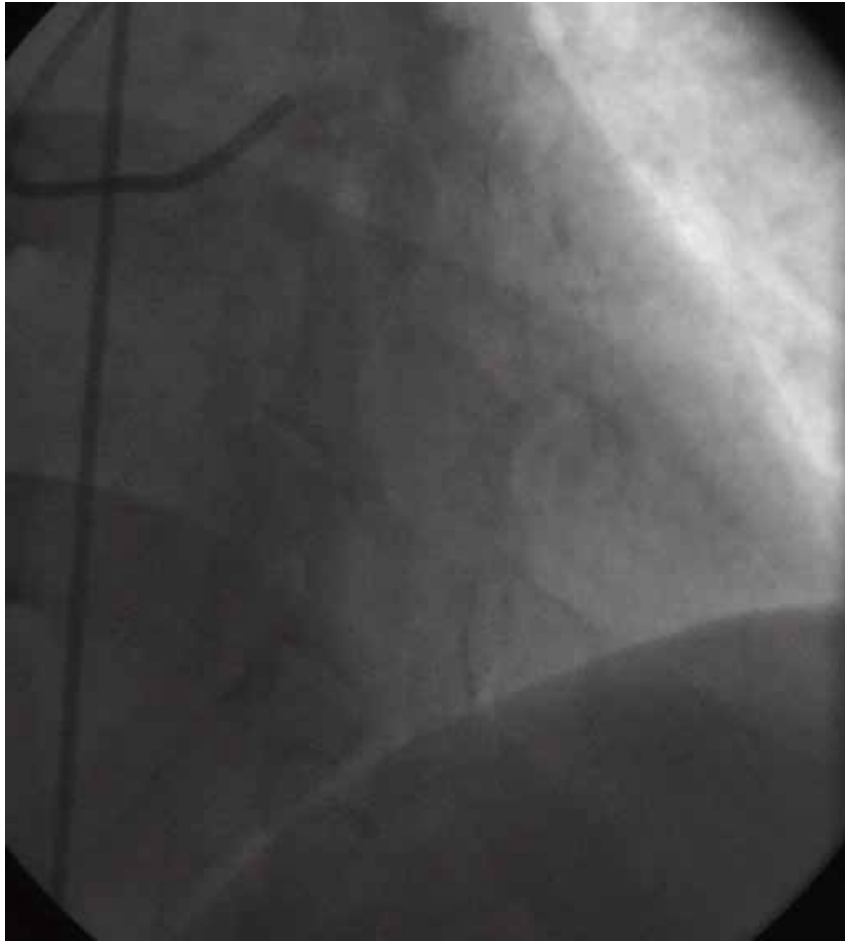
**Dilatrend 3.625mg**

**Tritace 5mg**

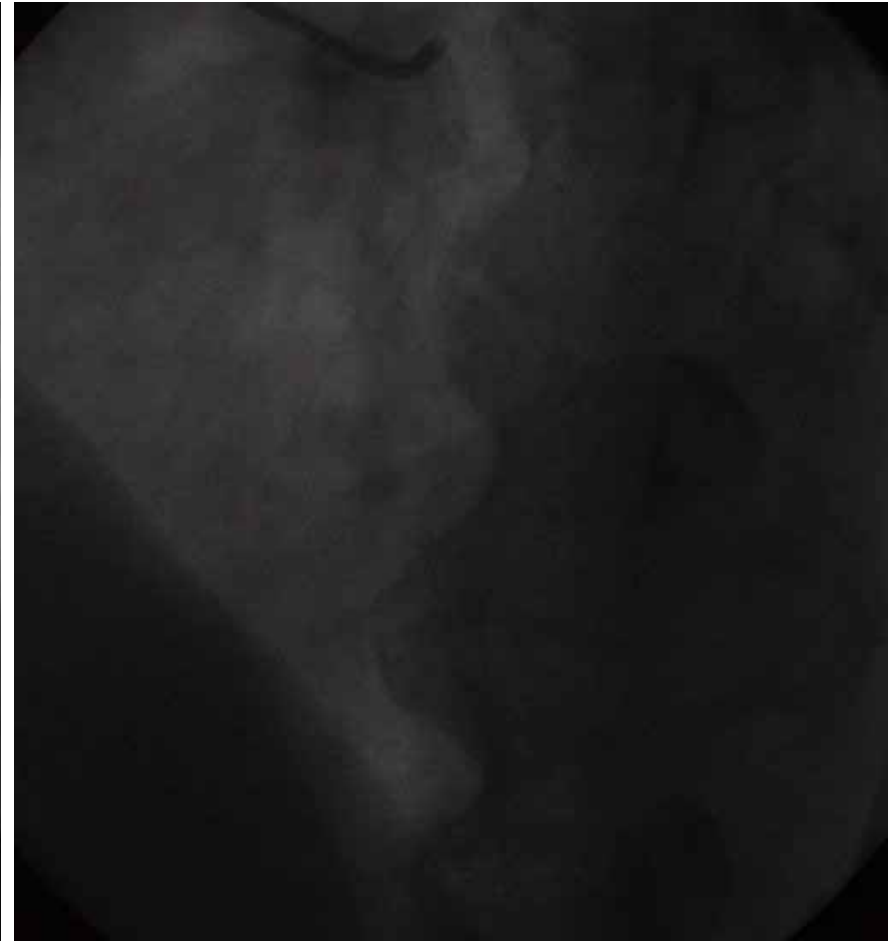


# No Angina, F/U CAG (2007-09-20)

15 months after stenting



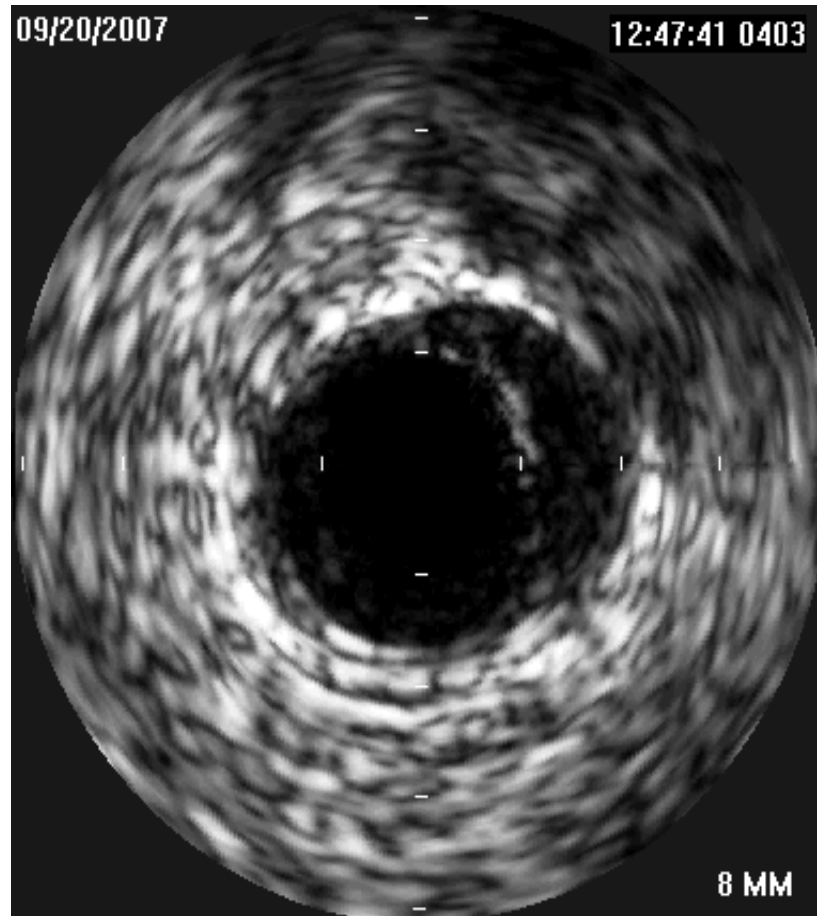
RAO



LAO

Stent aneurysm

# IVUS (2007-09-20)

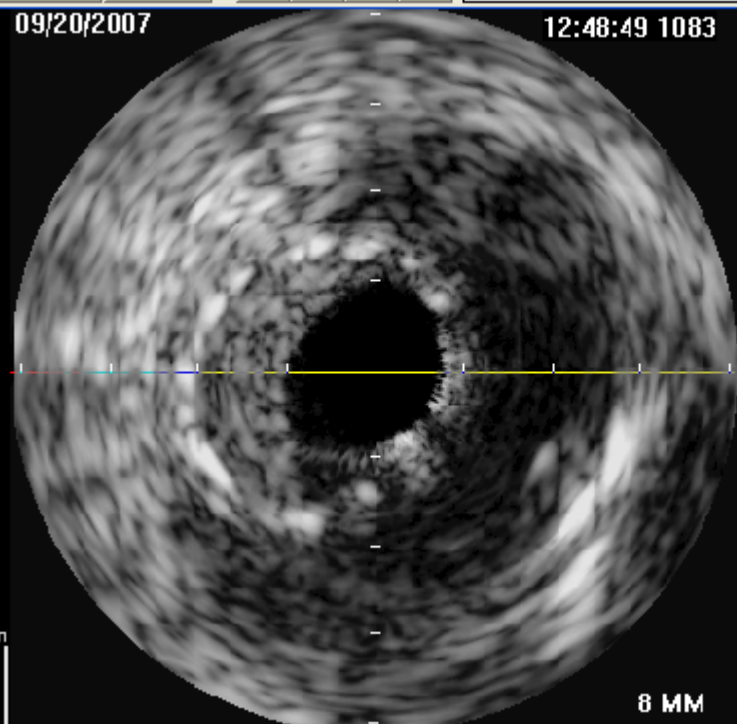


# F/U CAG (2007-09-20)



09/20/2007

12:48:49 1083



8 MM

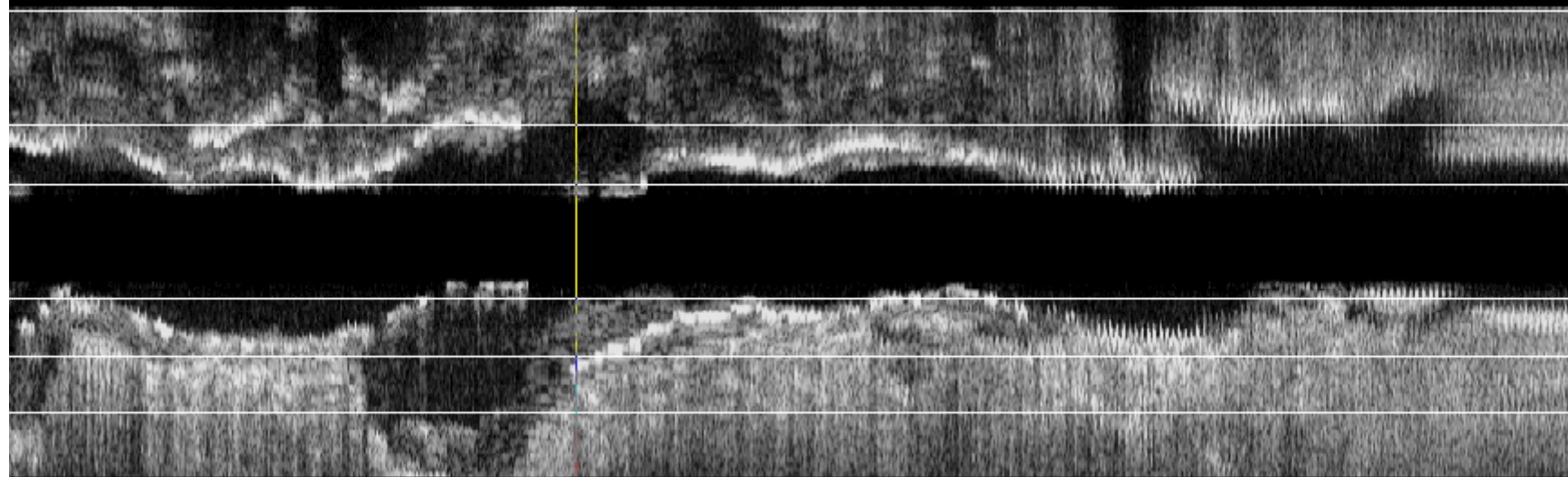
Dist : 53.09 / 85.39 mm

Frame : 1083 / 1742

## Proximal edge of distal Taxus

Stent CSA=5.8mm<sup>2</sup>

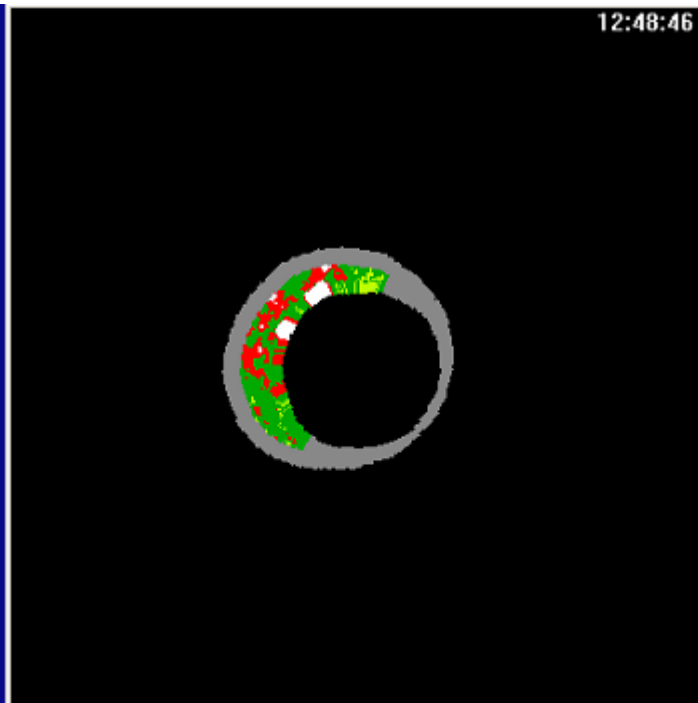
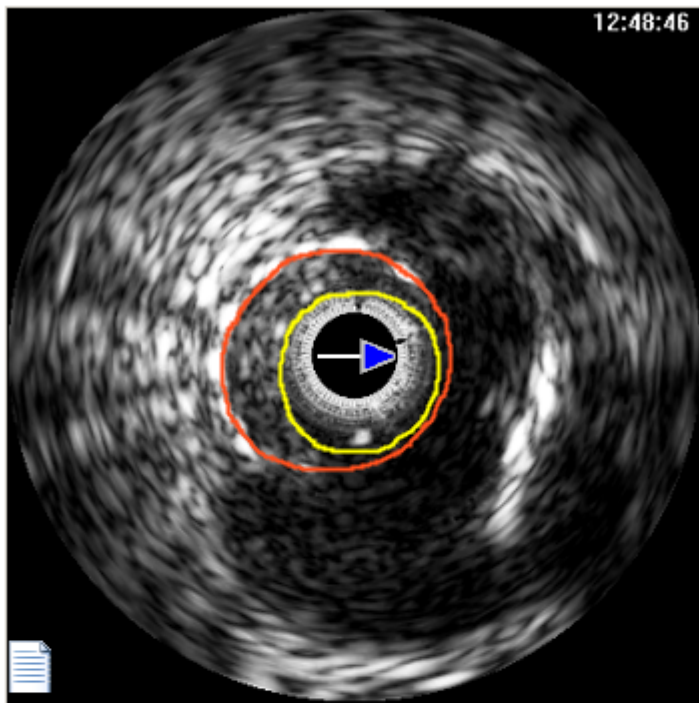
EEM CSA=40mm<sup>2</sup>



1 mm

Acquisition  
Analysis  
Processing  
Options...  
Range...  
Render  
Measures  
Volume...  
Data/Result  
Patient...  
DataView...  
Reporting  
Bookmark  
Report  
Screen Sh

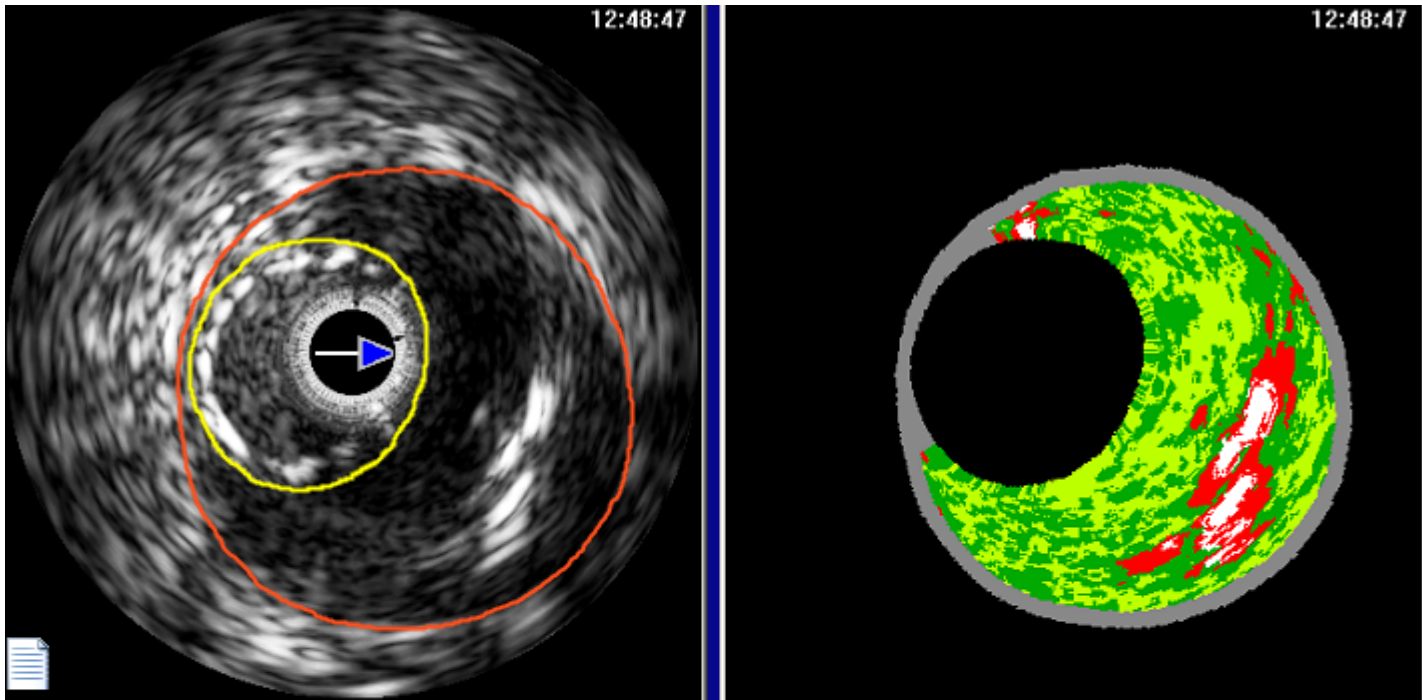
inserting new slides



Lumen Area	4.3 mm	
Vessel Area	8.6 mm	
Plaque Area	4.4 mm	
% Plaque Burden	51 %	
FI Green Area	1.1 mm	59 %
FF Light Green Area	0.1 mm	7 %
DC White Area	0.2 mm	9 %
NC Red Area	0.5 mm	26 %

More ...

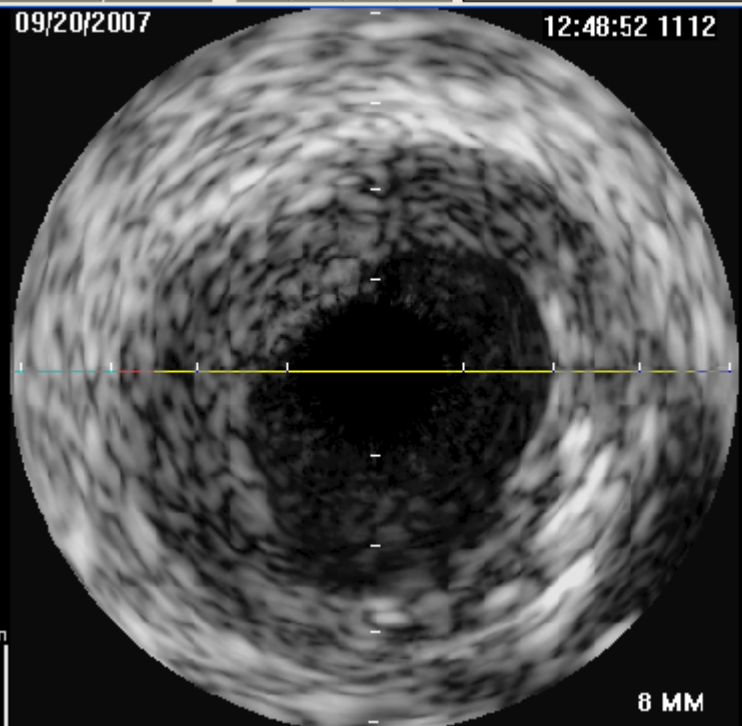




Lumen Area	9.7 mm		<a href="#">More ...</a> 
Vessel Area	35.5 mm		
Plaque Area	25.8 mm		
% Plaque Burden	73 %		
FI Green Area	9.7 mm	47 %	
FF Light Green Area	7.9 mm	38 %	
DC White Area	0.9 mm	4 %	
NC Red Area	2.2 mm	11 %	

09/20/2007

12:48:52 1112



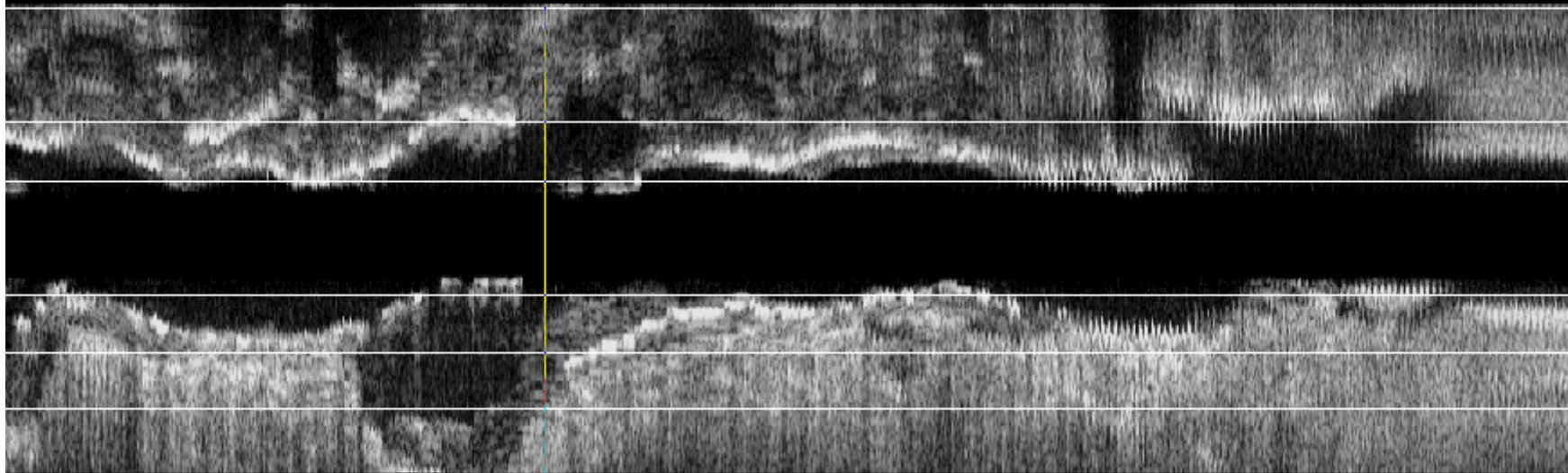
8 MM

Dist : 54.51 / 85.39 mm

Frame : 1112 / 1742

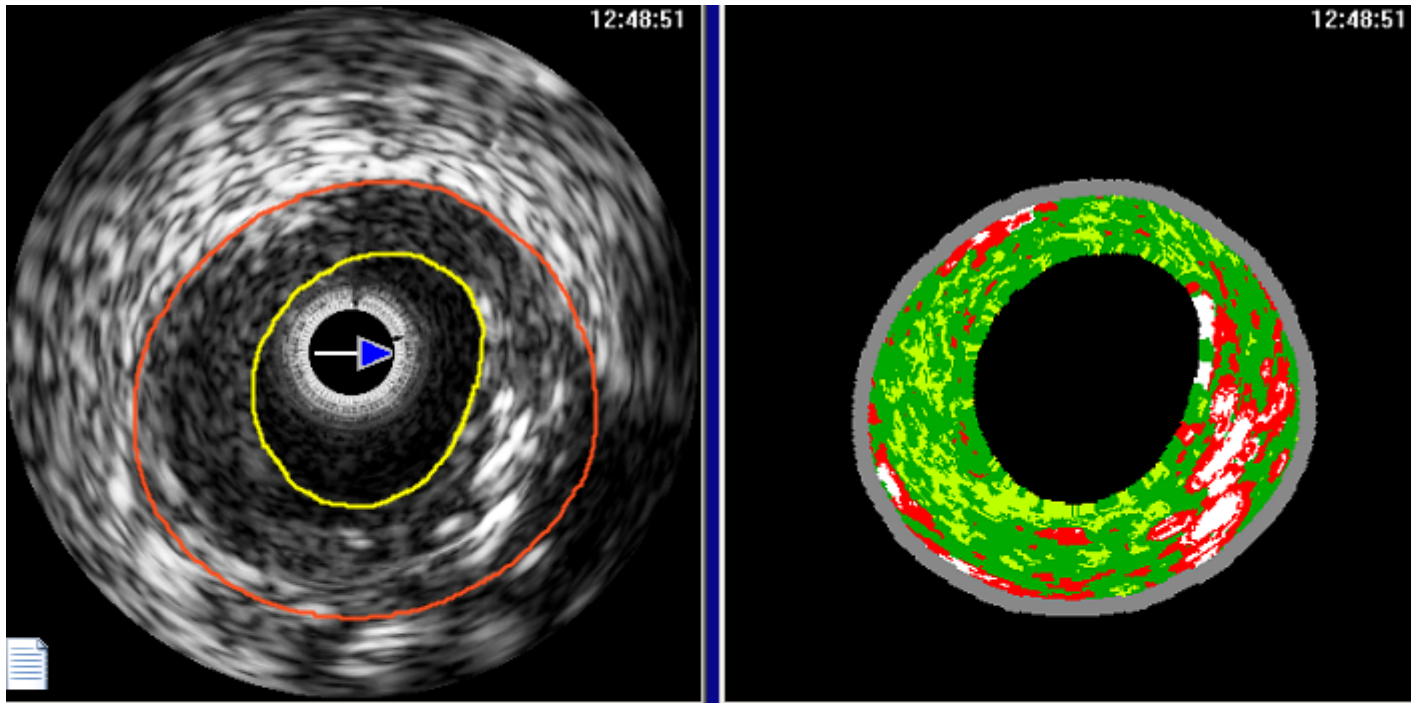
**Stent fracture site**

- Acquisition
- Analysis
- Processing
  - Options...
  - Range...
  - Render
- Measures
  - Volume...
  - 
  - 
  - 
  - 
  - 
  - 
  -
- Data/Result
  - Patient...
  - DataView...
- Reporting
  - Bookmark
  - Report
  - Screen Sh...



1 mm

Inserting new slides



Lumen Area	9.4 mm	
Vessel Area	33.6 mm	
Plaque Area	24.2 mm	
% Plaque Burden	72 %	
FI Green Area	11.2 mm	58 %
FF Light Green Area	3.1 mm	16 %
DC White Area	1.5 mm	7 %
NC Red Area	3.6 mm	19 %

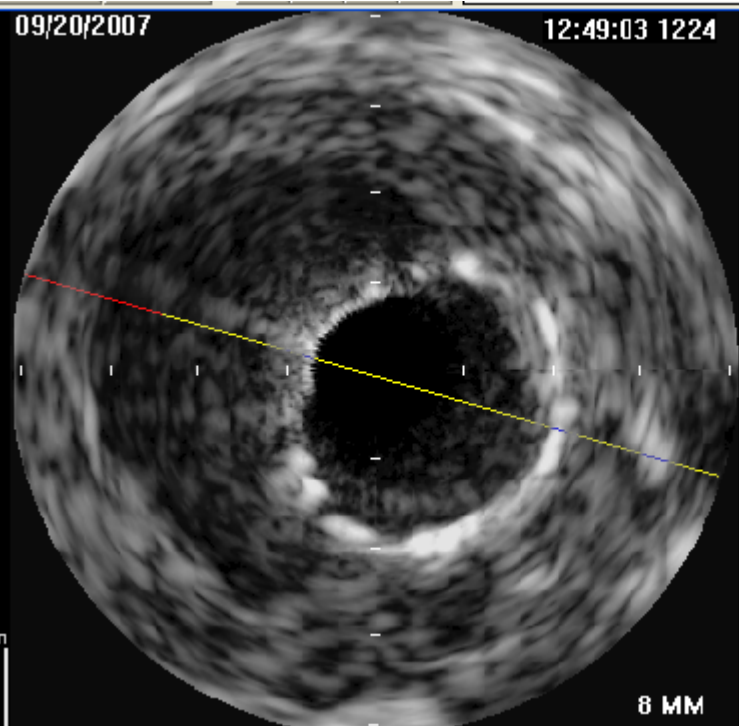
More ...





09/20/2007

12:49:03 1224



Dist: 60.00 / 85.39 mm

Frame: 1224 / 1742

8 MM

## Midportion of proximal Taxus

Stent CSA=6.4mm<sup>2</sup>

EEM CSA=48mm<sup>2</sup>

Acquisition

Analysis

Processing

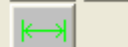
Options...

Range...

Render

Measures

Volume...



Data/Result

Patient...

DataView...

Reporting

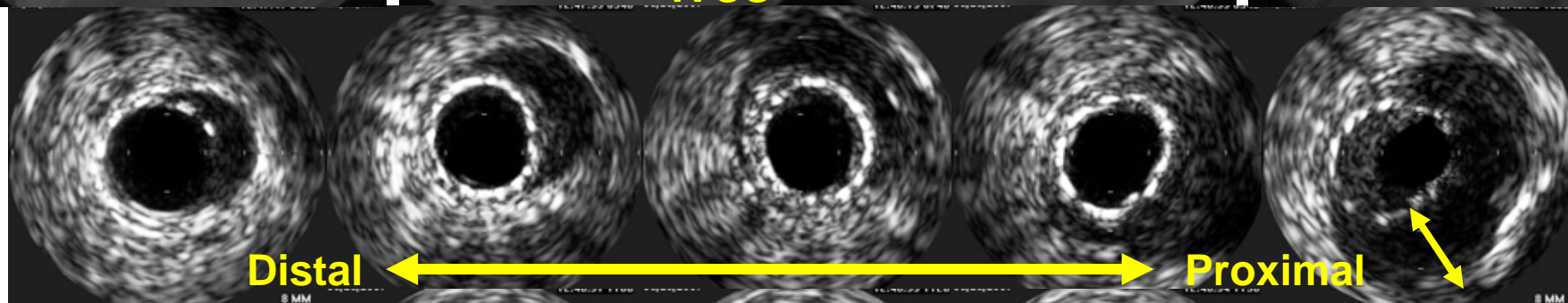
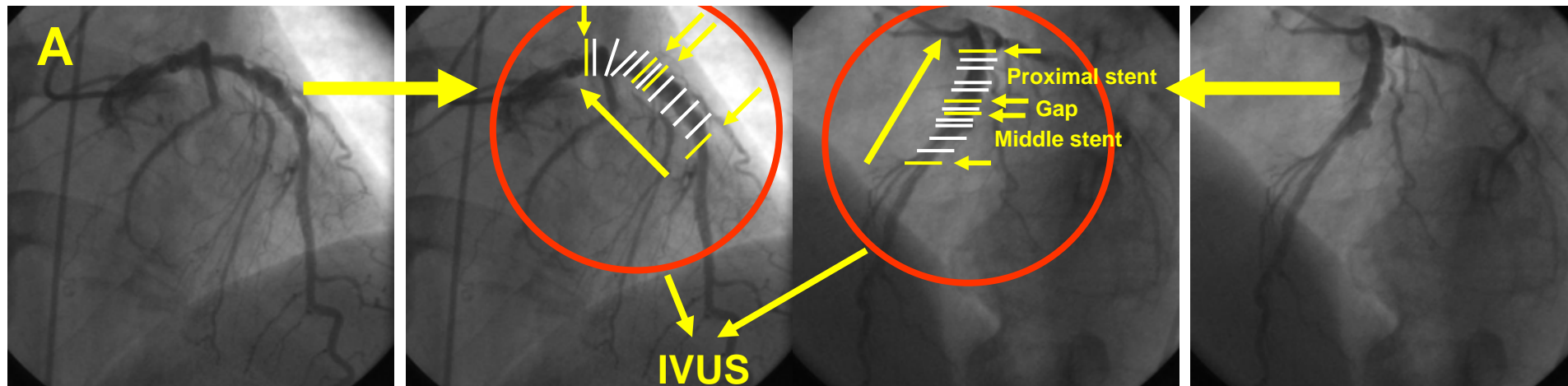
Bookmark

Report

Screen Sho

Inserting new slides

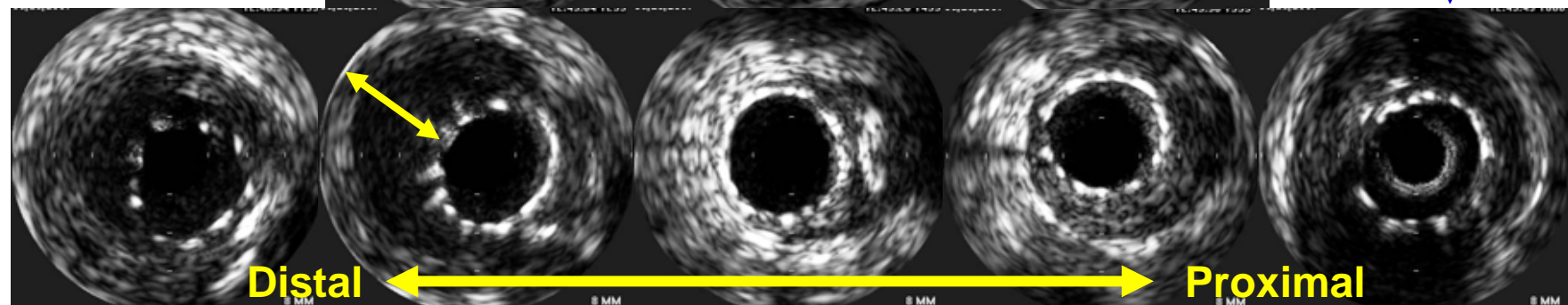
1 mm



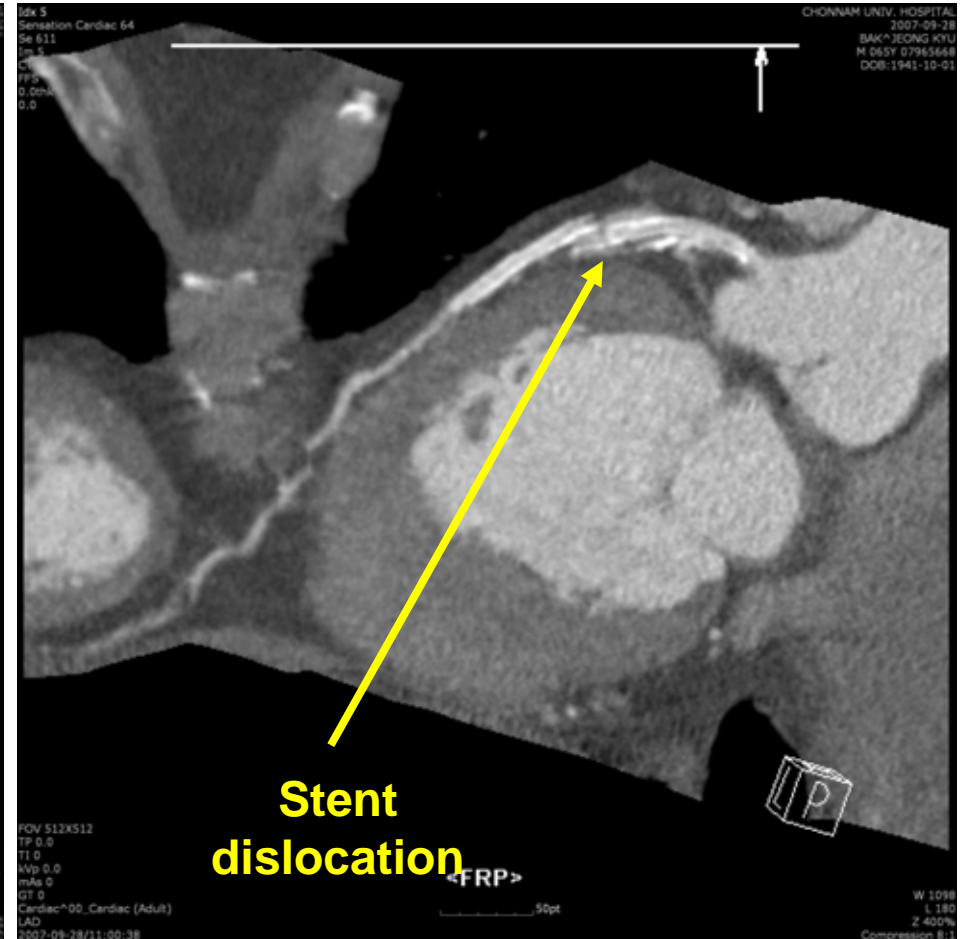
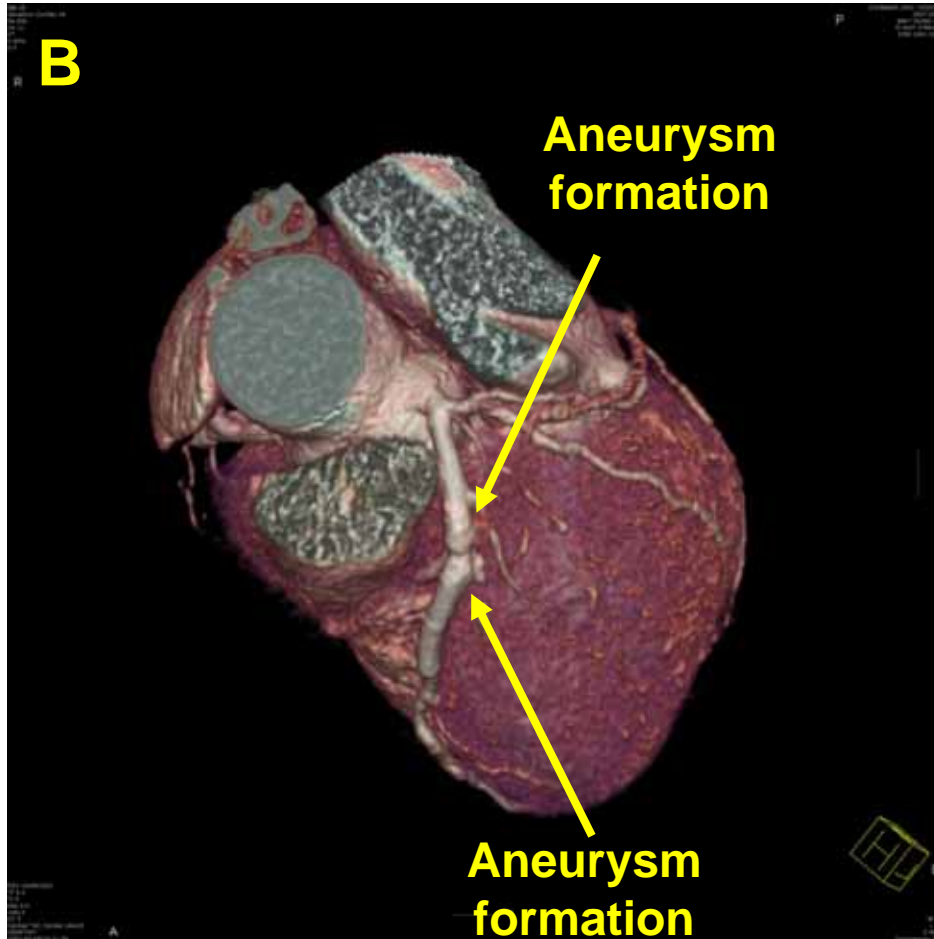
↑  
Middle stent

→  
Fracutre

↓  
Proximal stent



# CT (2007-09-28)



# **Discharge Medications**

**Aspirin 100mg**

**Plavix 75mg**

**Pletaal 200mg**

**Prastan 20mg**

**Molsiton 4mg**

**Dilatrend 3.625mg**

**Tritace 5mg**

## Discussion

- 1. What is the cause of stent dislocation by huge aneurysm formation in this patient ?**
- 2. What is the best medical treatment option ?**



**Imaging and Physiology**  
**October 29<sup>th</sup>, 2010**



# Very Late PES Thrombosis

**Young Joon Hong, MD, PhD**

**Heart Center of Chonnam National University Hospital,  
Gwangju, Korea**

# 43/M

**C/C** Chest pain (Onset: 20 min ago)  
Duration: 20 min  
Nature: pressure  
Site: substernal area  
Radiation: none  
Aggravating factor : exercise  
Relieving factor : rest  
Associated sx: Nausea/vomiting/cold sweating(-/-/+)  
NTG response (-)

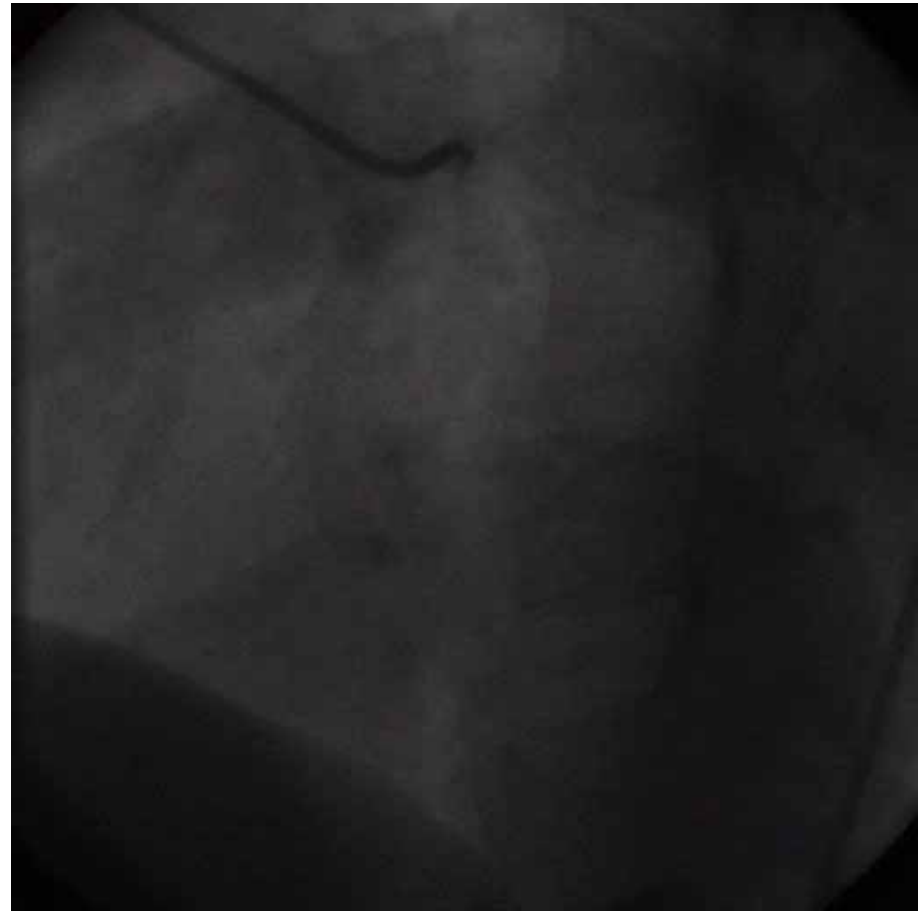
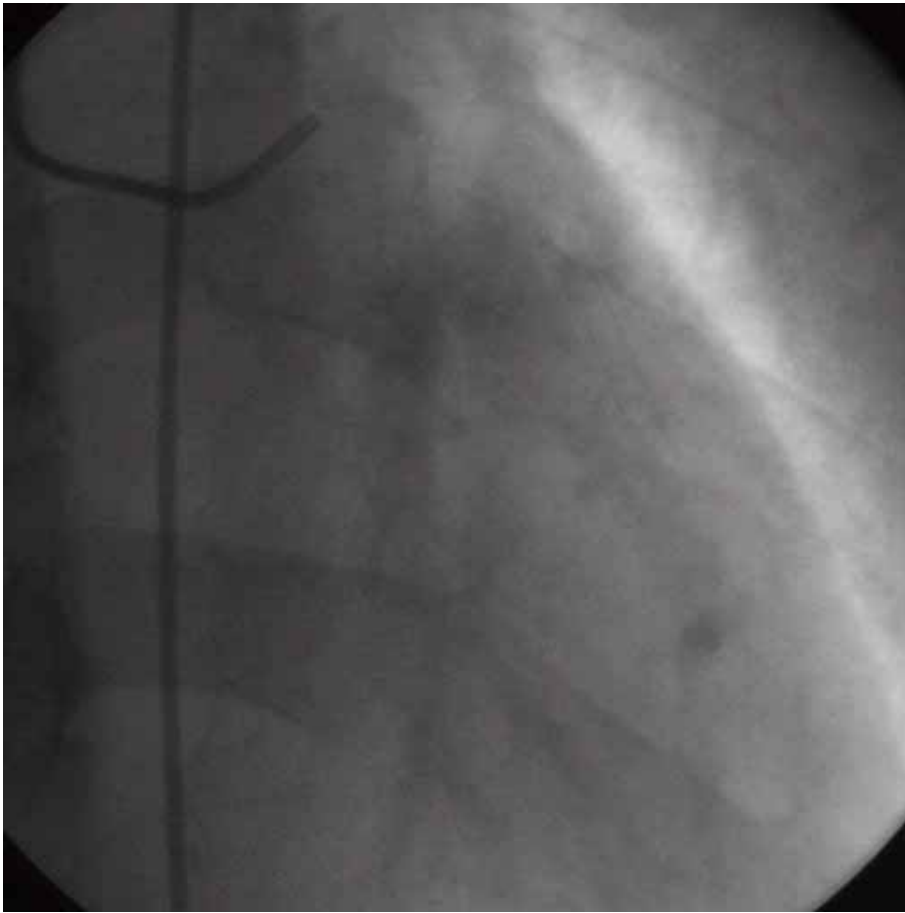
**P/H** No known Hx of HTN, DM, Pul. TBc, Hepatitis  
PCI for p-RCA & m-LAD at 2004.9.25 d/t SAP

**S/H** Smoking: none  
Alcohol: none

**F/H** Negative for coronary artery disease

**V/S** BP 100/70 mmHg BT 36.0  
PR 60/min RR 20/min

Previous CAG [F/U CAG after PCI  
(2005.2.25)]





Previous CAG [F/U CAG after PCI  
(2005.2.25)]



## Previous Treadmill Test (2010.7.27) (Modified Bruce Protocol)

Heart rate reached 150/minute (84% of MHR)

Peak blood pressure was 157 / 88 mmHg

Exercise capacity : 12.8 METS (good)

Reason For Termination : fatigue

Treadmill score : 16

Result ) Negative exercise test

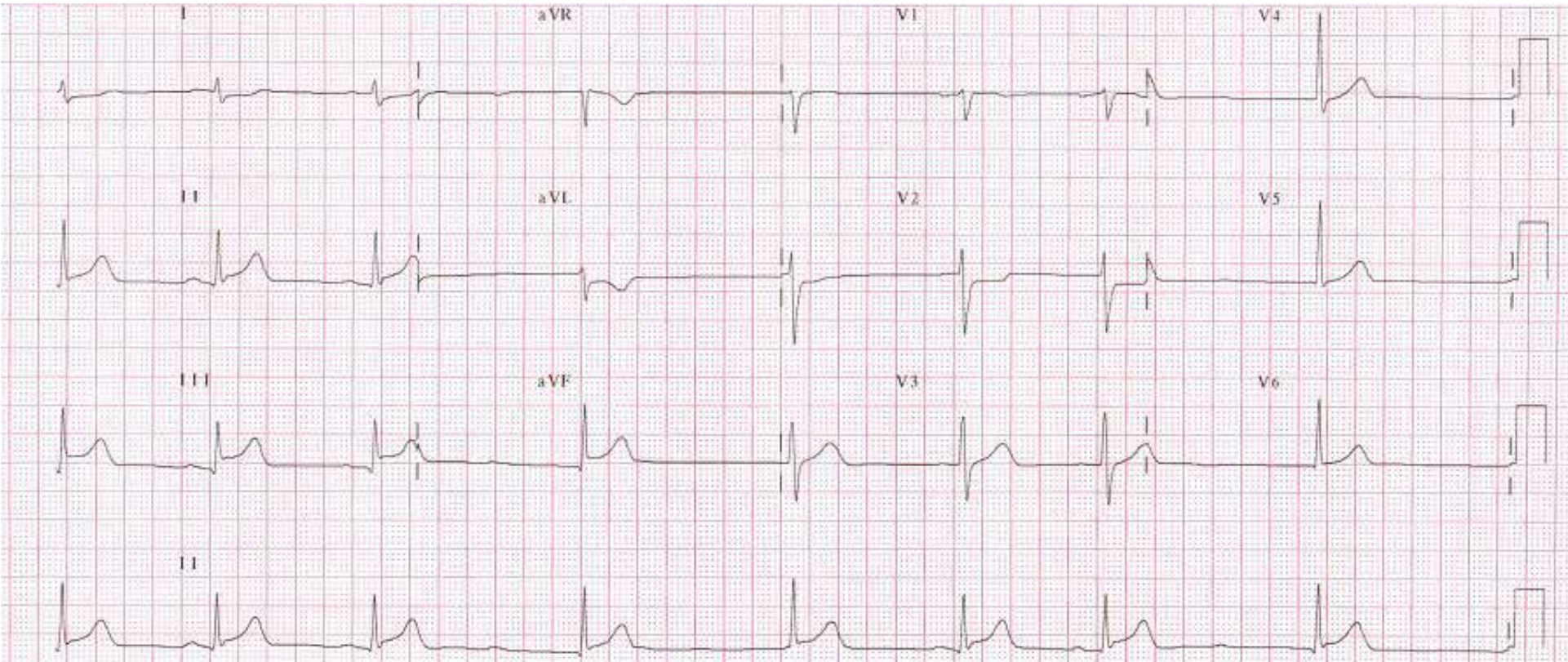
## Medication History

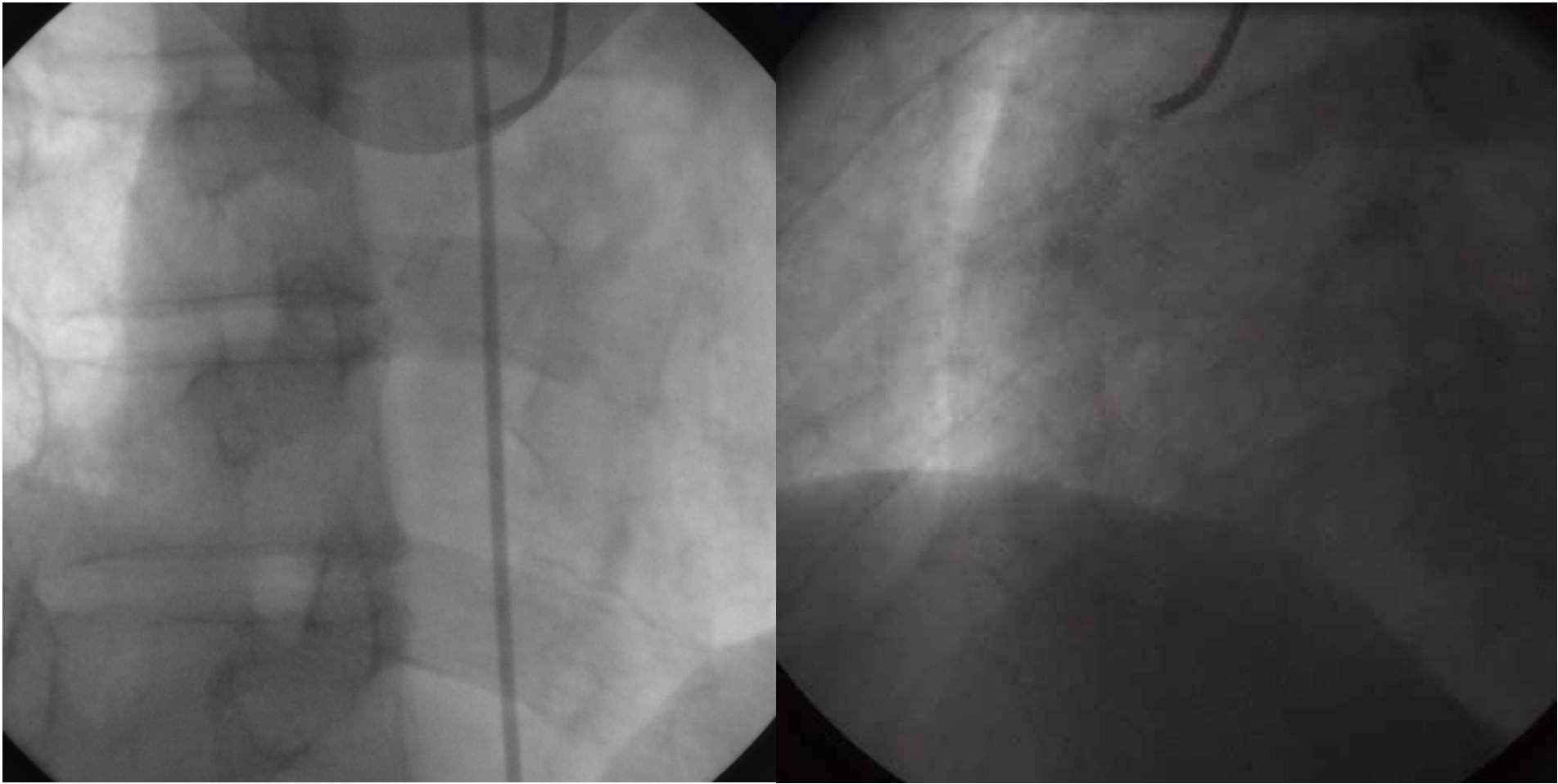
Aspirin	100mg DB
Clopidogrel	75mg DB
Carvedilol	6.25mg DB
Isosorbide dinitrate	20mg DD
Ezetimibe/Simvastatin	10mg/20mg

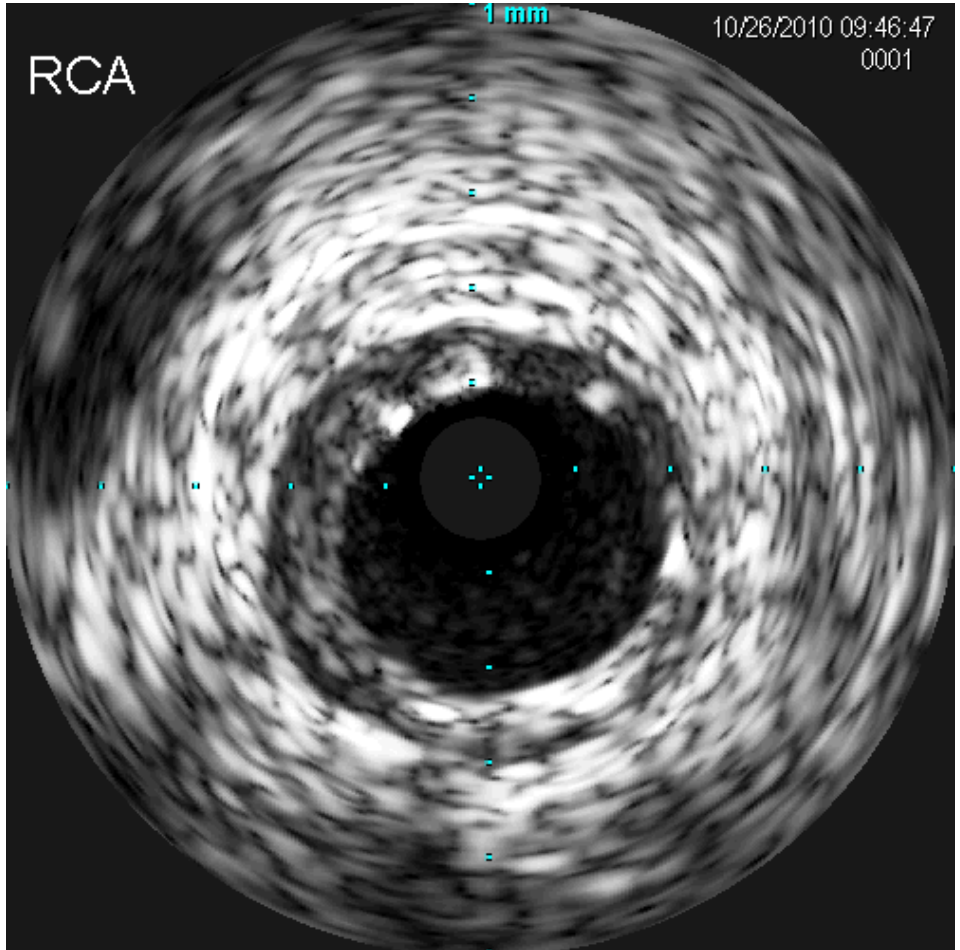
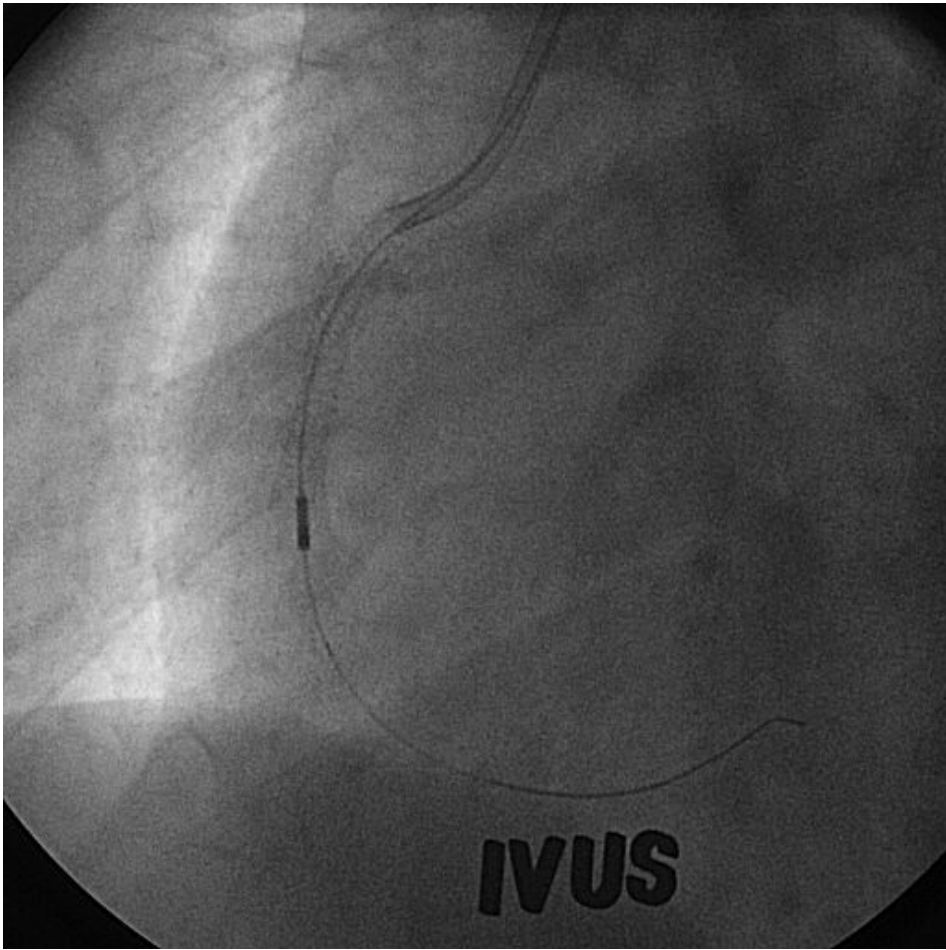
## LAB

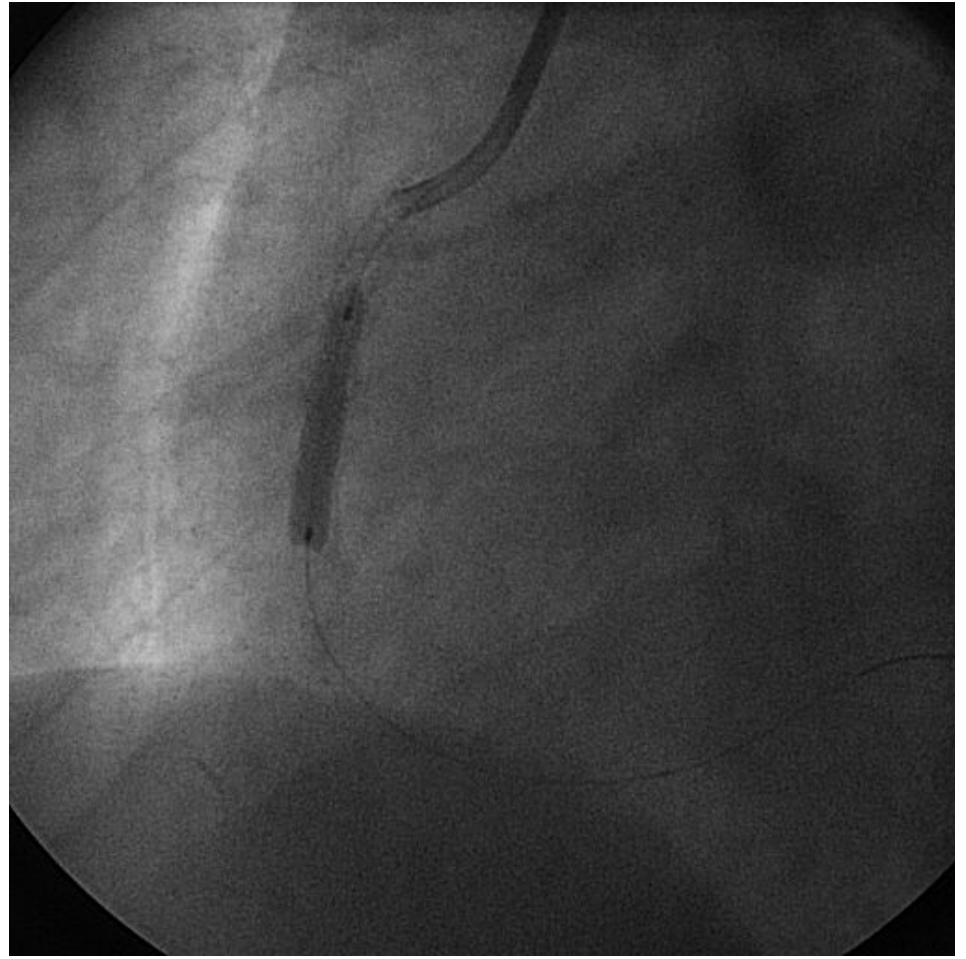
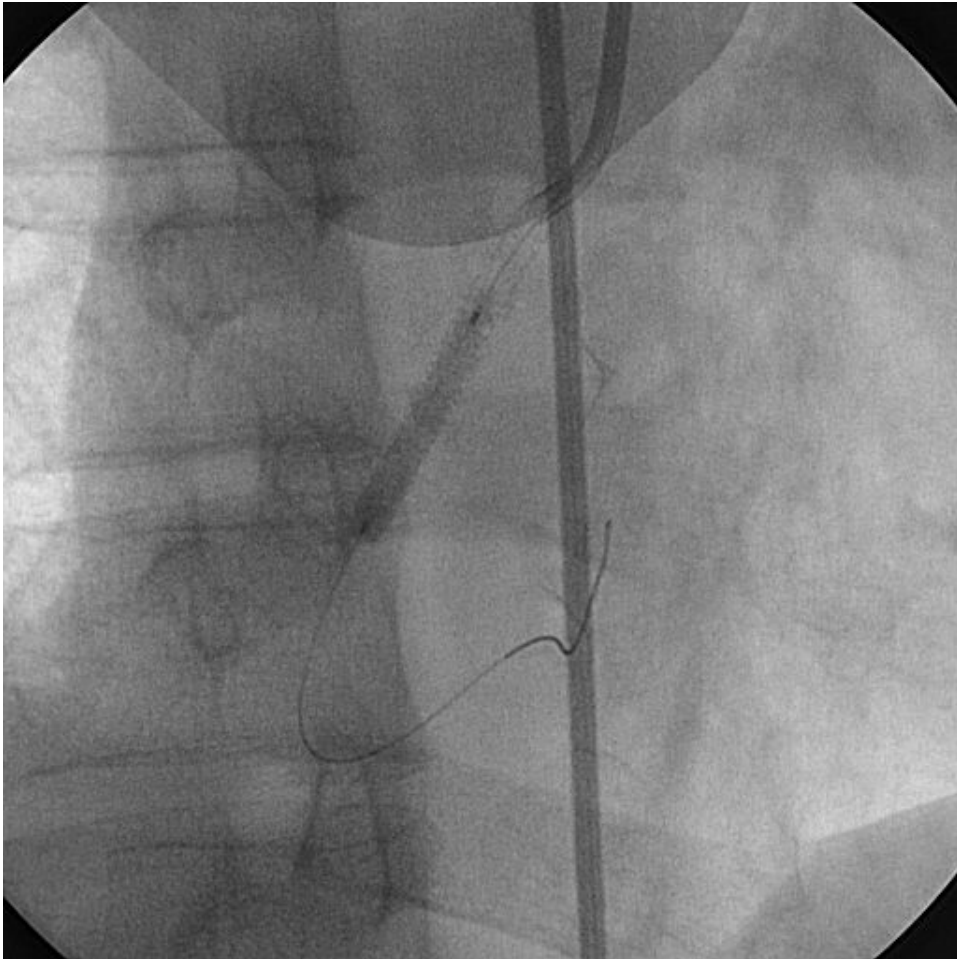
CK	178 U/L	T-chol	198 mg/dL
CK-MB	4.5 U/L	Triglyceride	164 mg/dL
Tn-I	0.02 ng/mL	LDL	128 mg/dL
		HDL	54 mg/dL

# 12-lead EKG

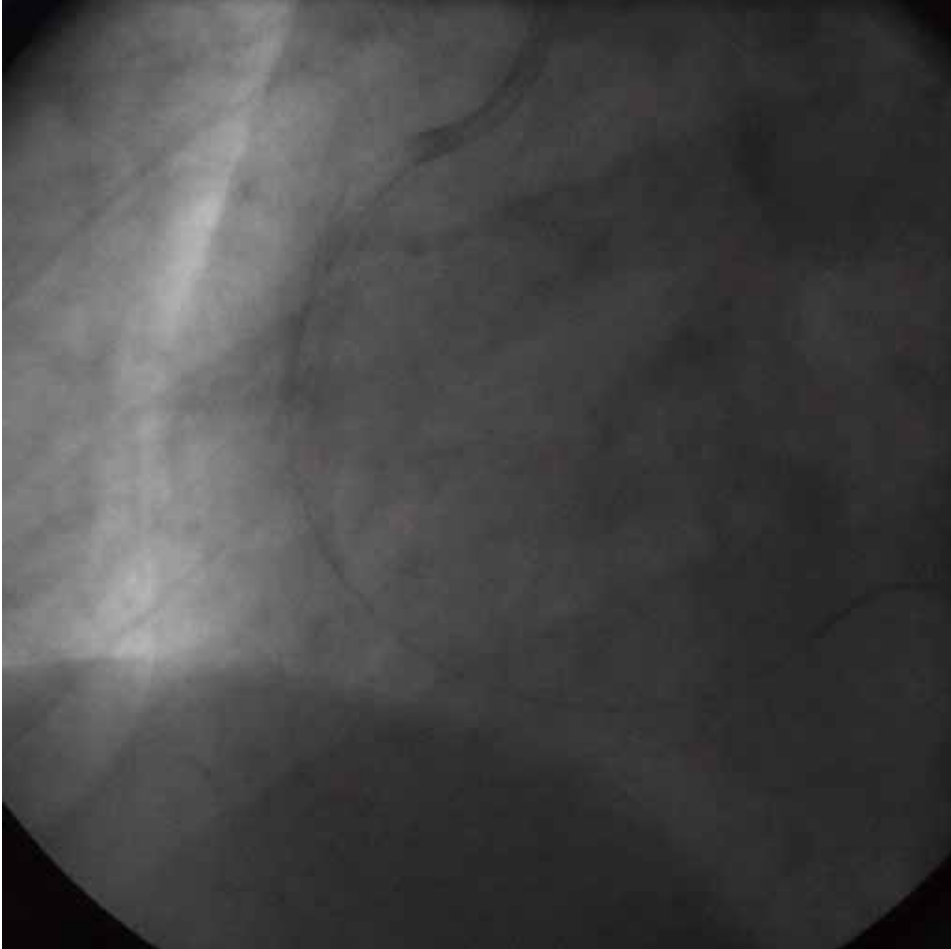
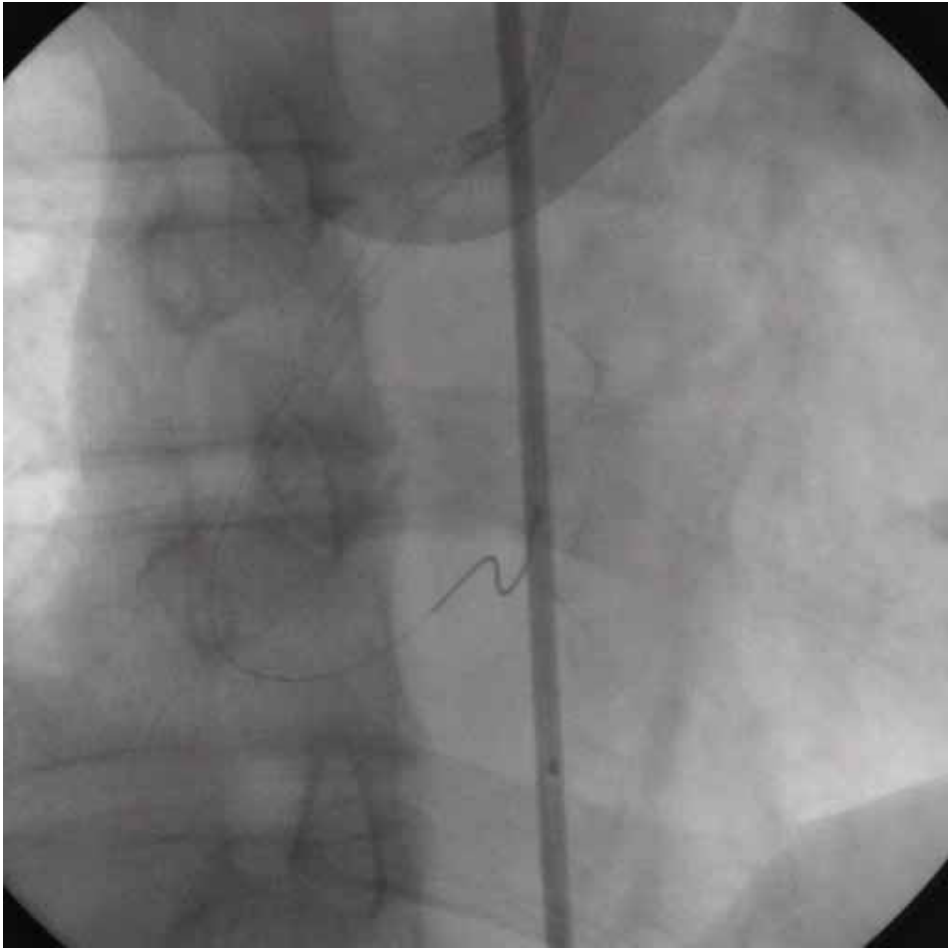




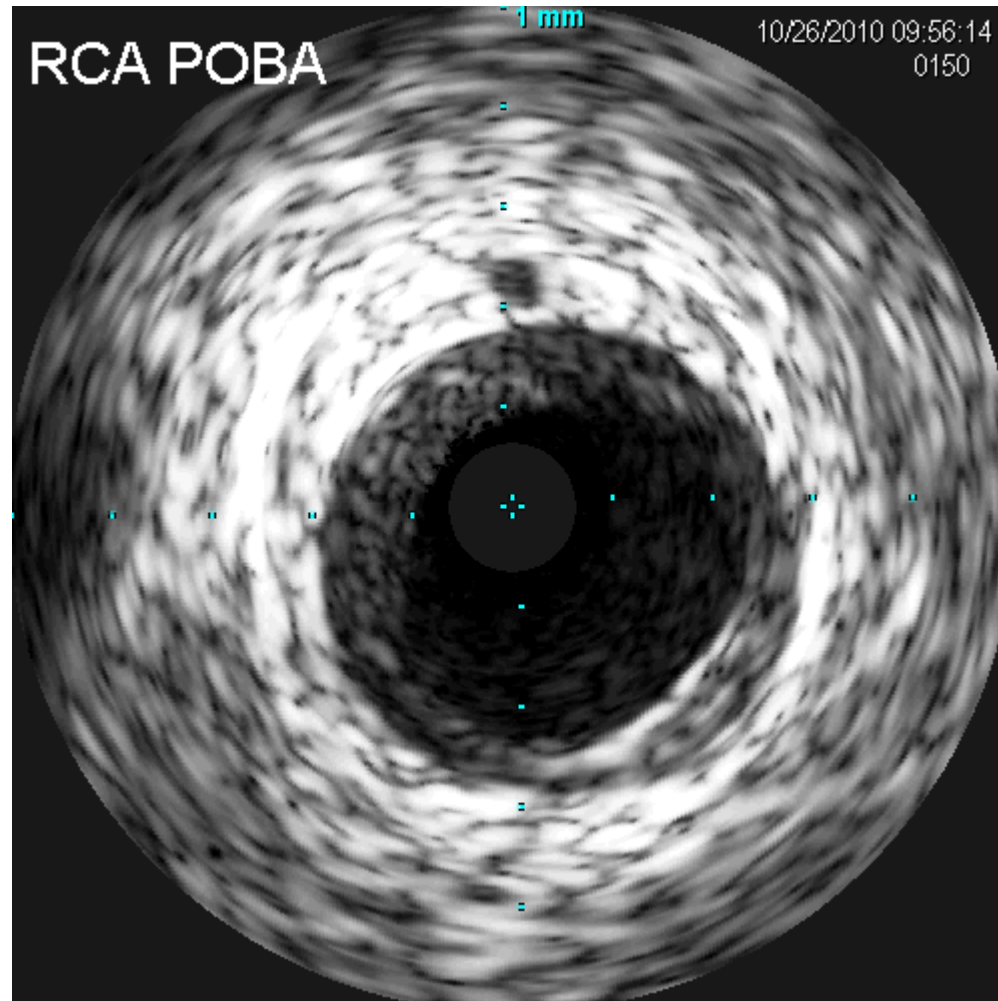




3.5x15mm balloon

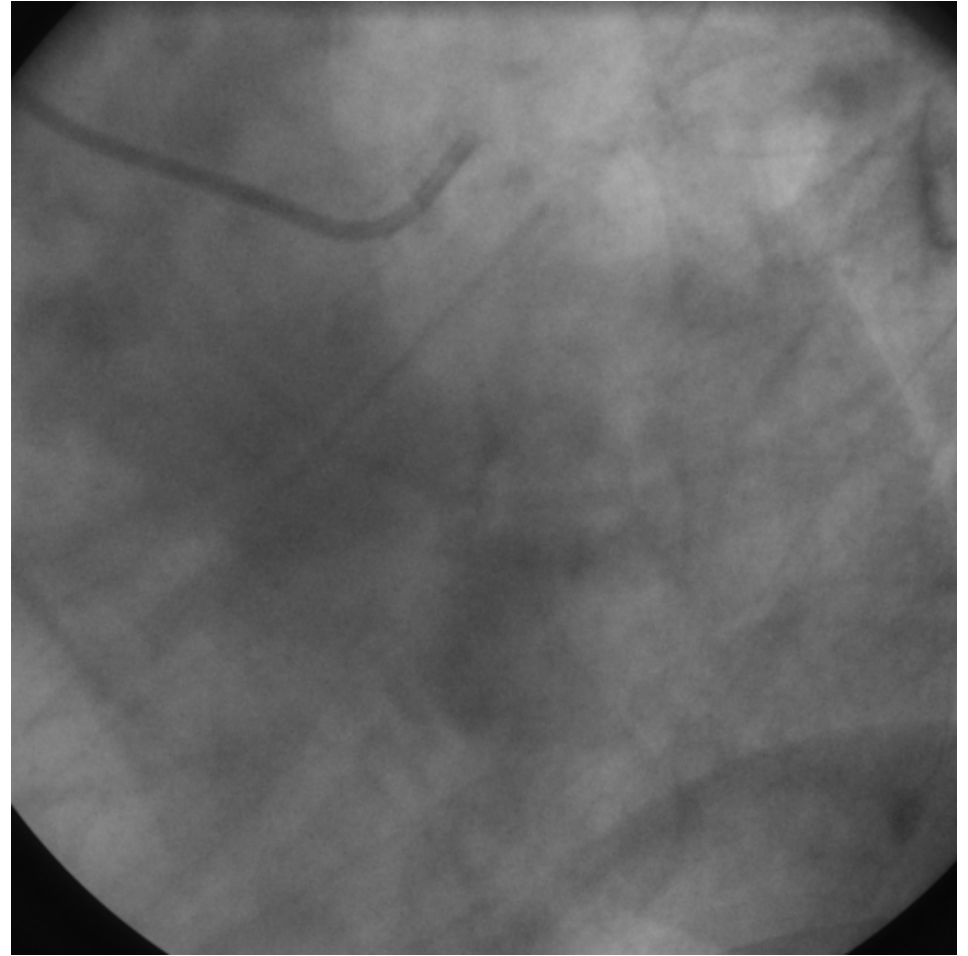
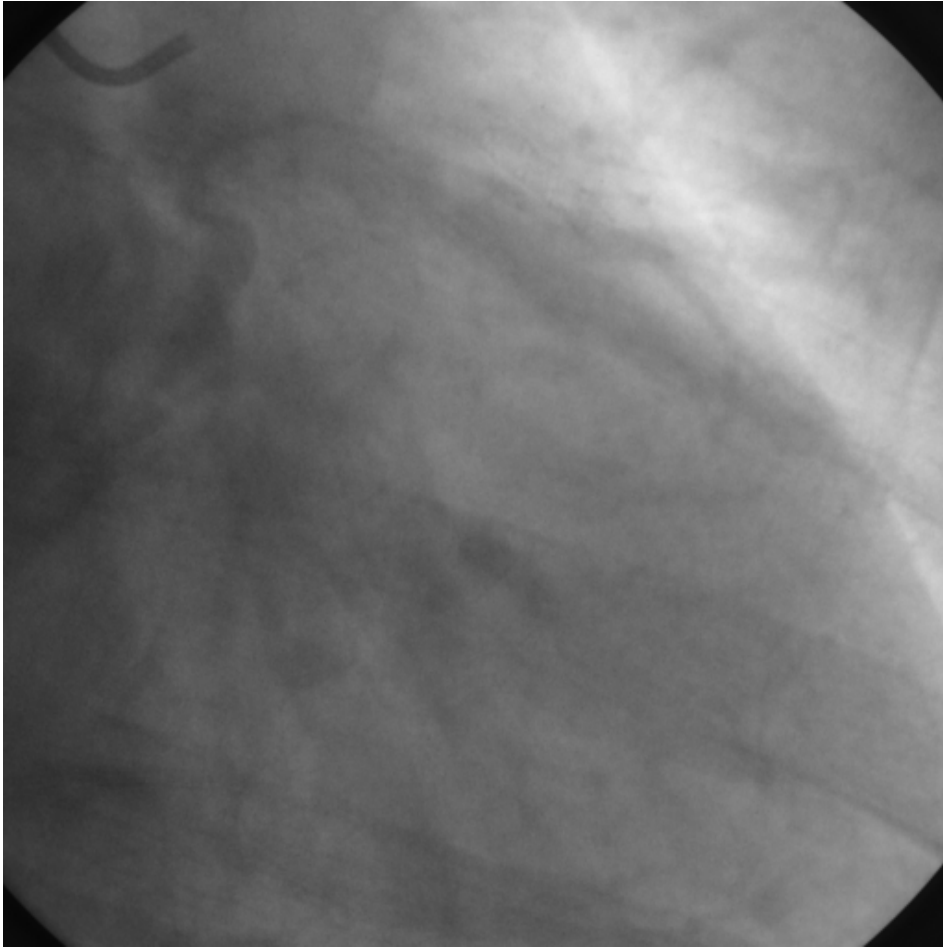


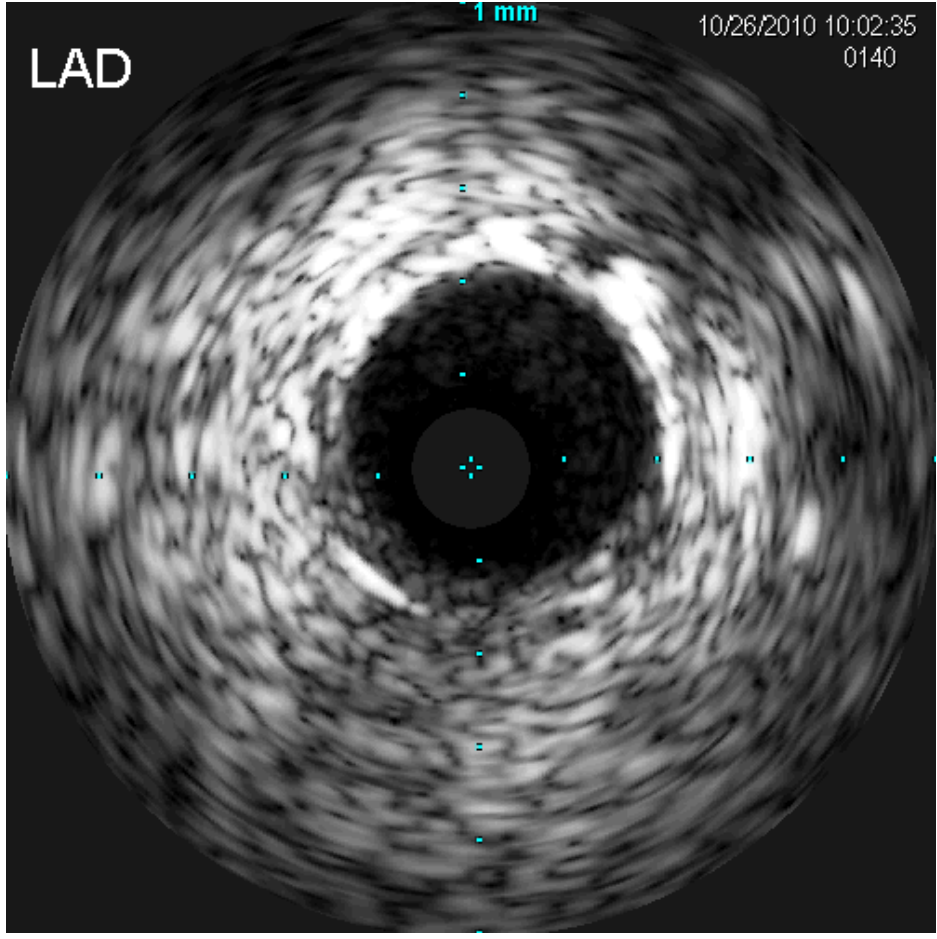
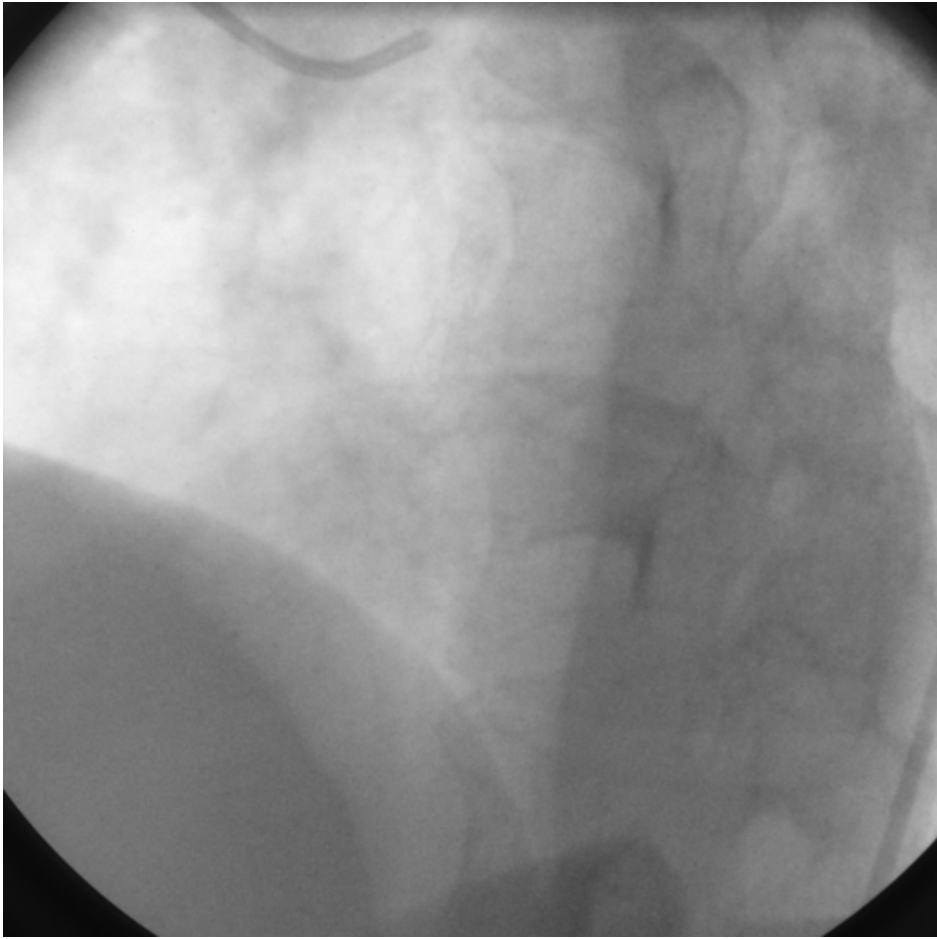




IVUS - after POBA

CAG (2010.10.26)





## Platelet function test

Aspirin 498 ARU (Ref range <500)

Clopidogrel 301 PRU (Ref range <250)

## Current medical treatment

Aspirin	100mg DB
Clopidogrel	75mg DB
Cilostazol	100mg B
Carvedilol	6.25mg DB
Ramipril	2.5mg DB
Rosuvastatin	20mg DB

## Discussion

1. What's is the major cause of VLST?
2. What's the difference between LAD Taxus and RCA Taxus.
3. How should we treat this patient in the future?