

IVUS Guide PCI at Acute Coronary Syndrome

Kobe City

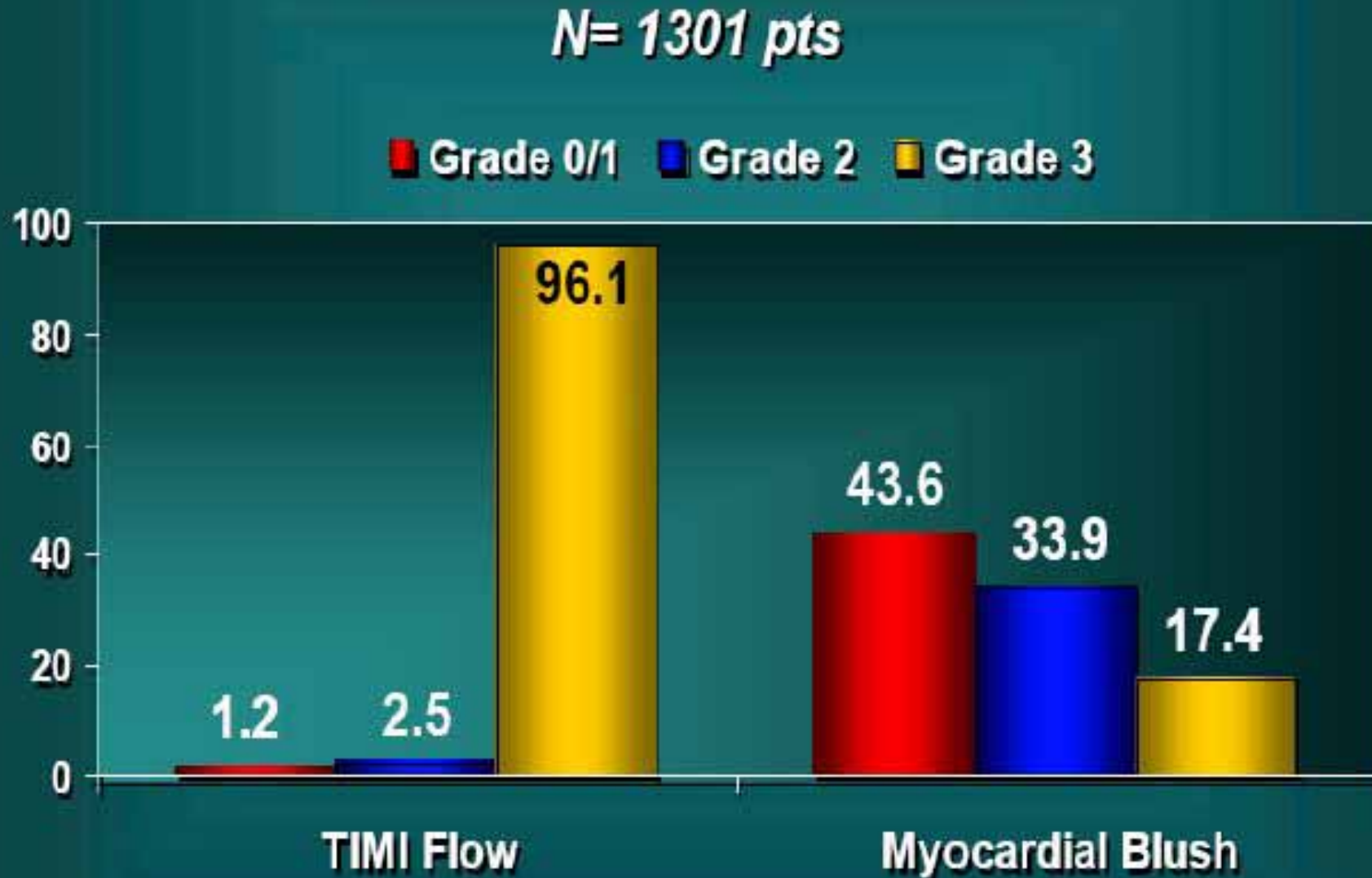
Mt. Rokko



Hyogo College of Medicine
Department of Internal Medicine,
Division of coronary heart disease
Motomaru Masutani MD, PhD

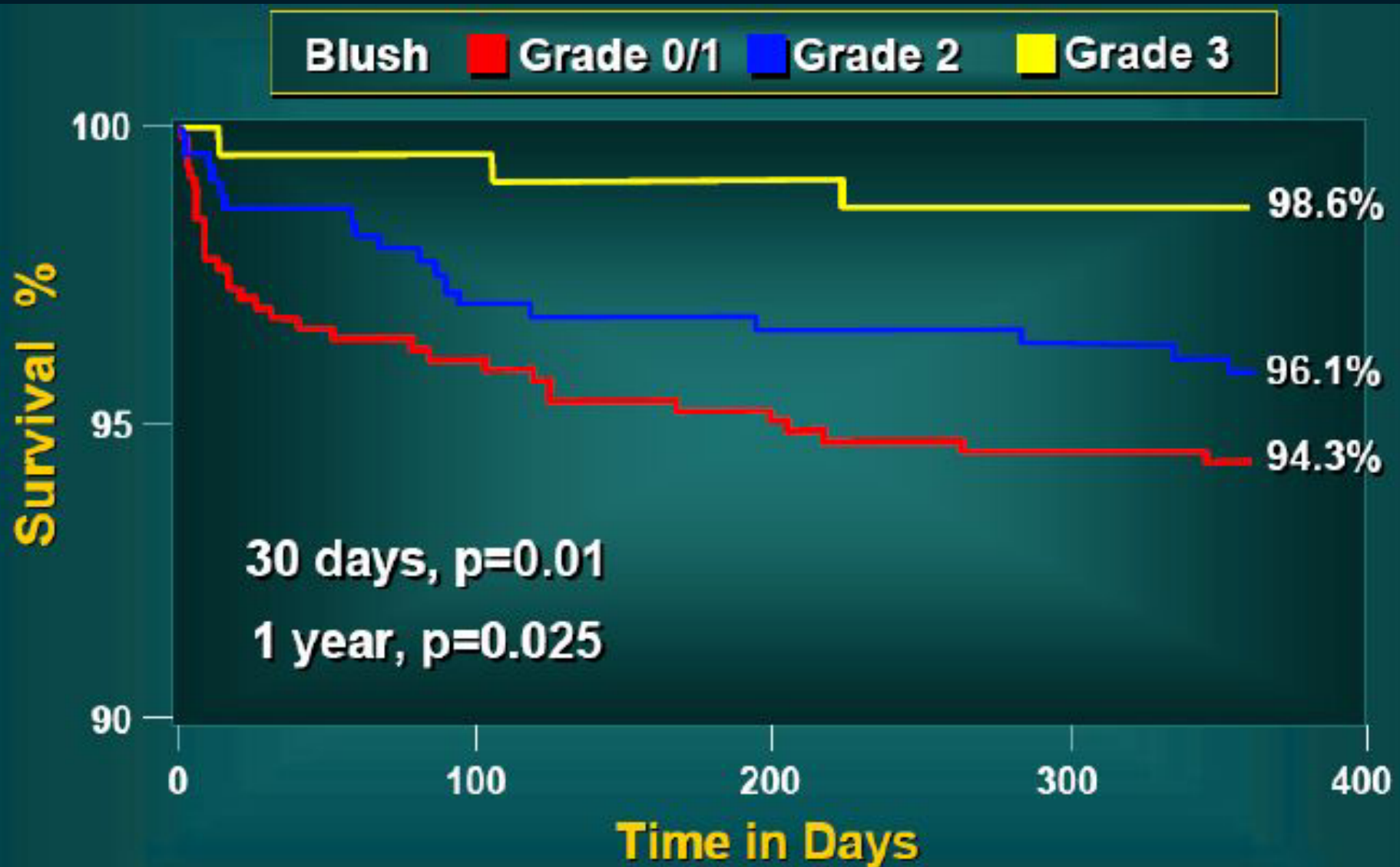
CADILLAC

- Angiographic Result



CADILLAC

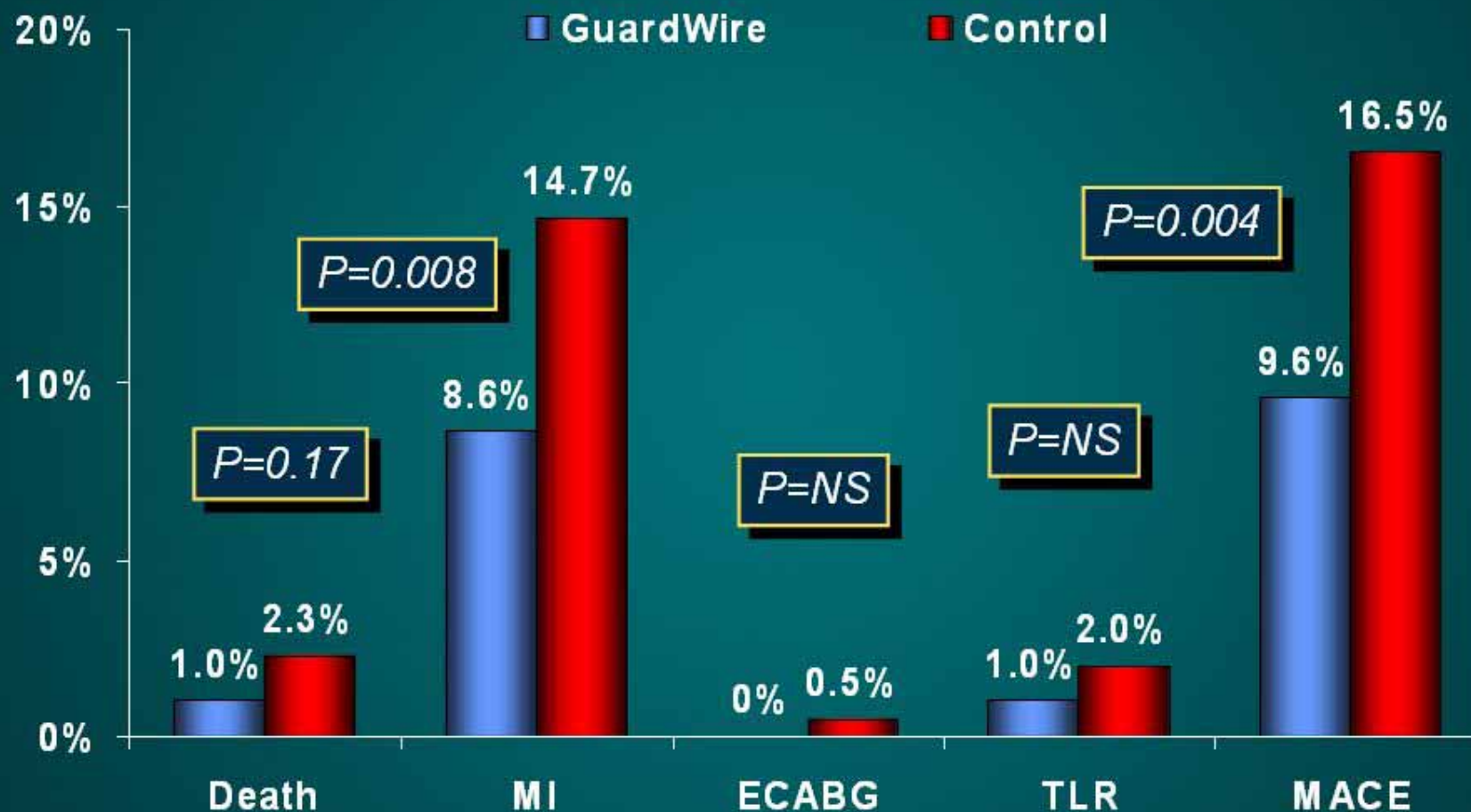
- 1 year Survival



How to reperfuse better?

- Use Distal protection !

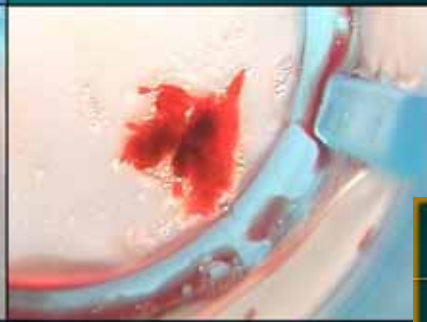
SAFER: 30 Day MACE (n=801)



ACS \doteq SVG



PercuSurge Distal Protection in AMI



PercuSurge Aspirates from SVGs

The **SAFE** study – 103 SVGs (105 lns) stented with PercuSurge distal protection at 10 sites; particles retrieved in 91%.

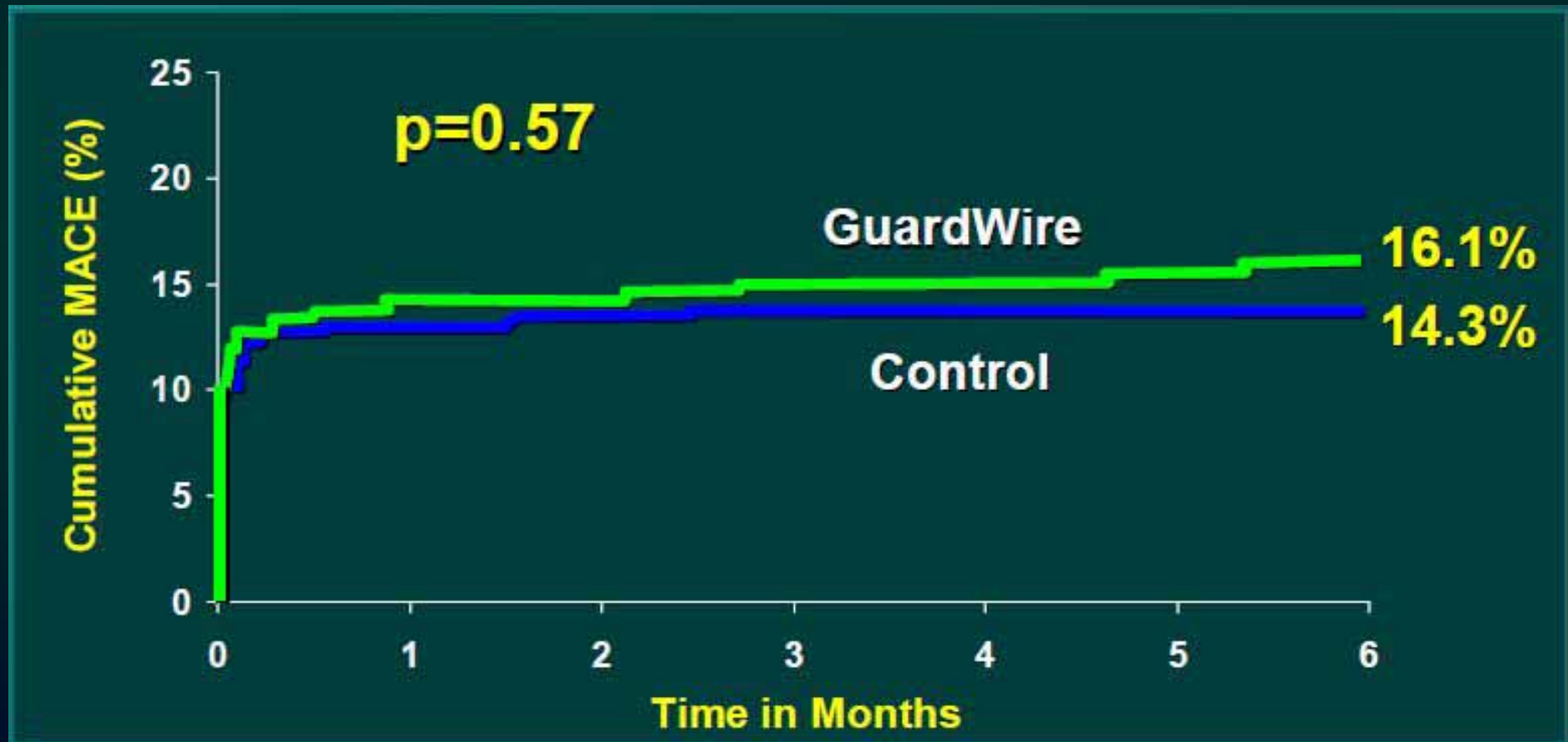
Histology: fibrin & necrotic core – 100%; foam cells – 80.2%; cholesterol clefts – 28.5%



Grube et al *AJC* 2002;89:941-5

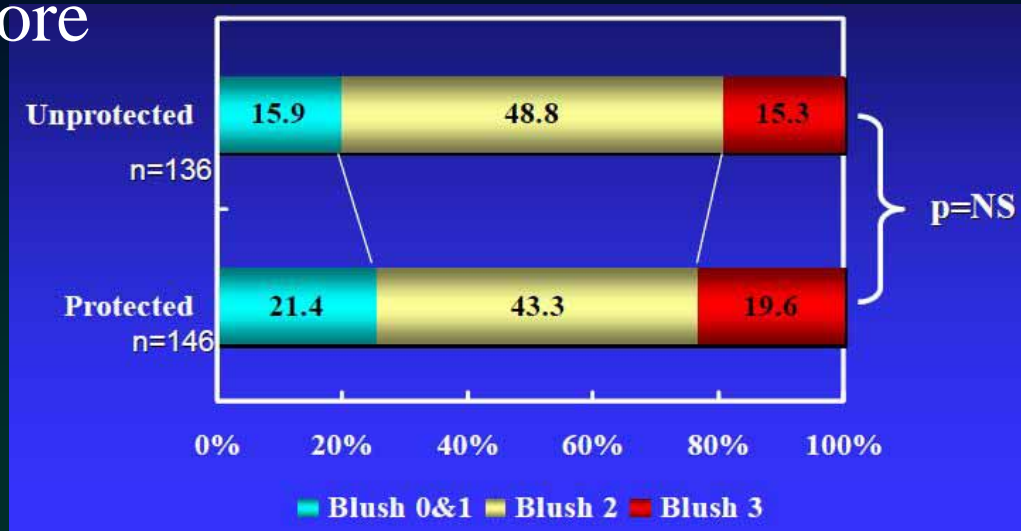
EMERALD

- 6 month MACE

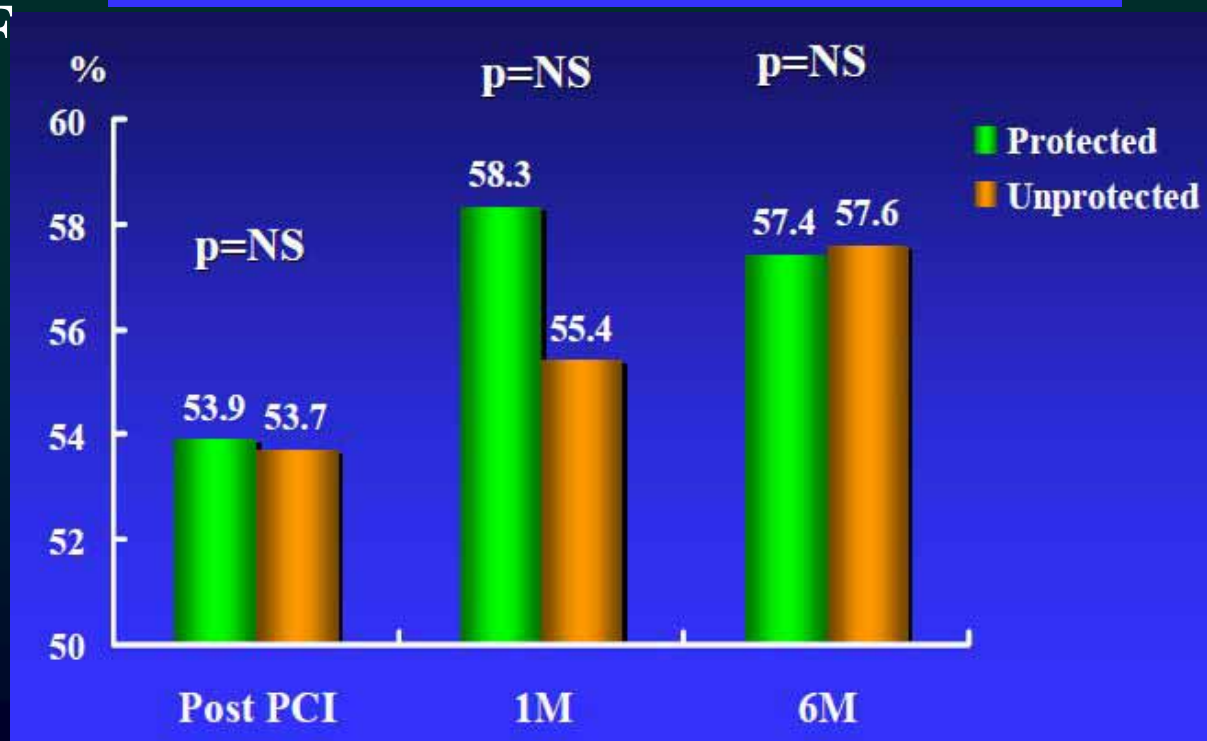


ASPARAGUS

Blush Score



LVEF



Distal protection for AMI ?



“...distal embolic protection with this device did not result in improved microvascular flow or function...”

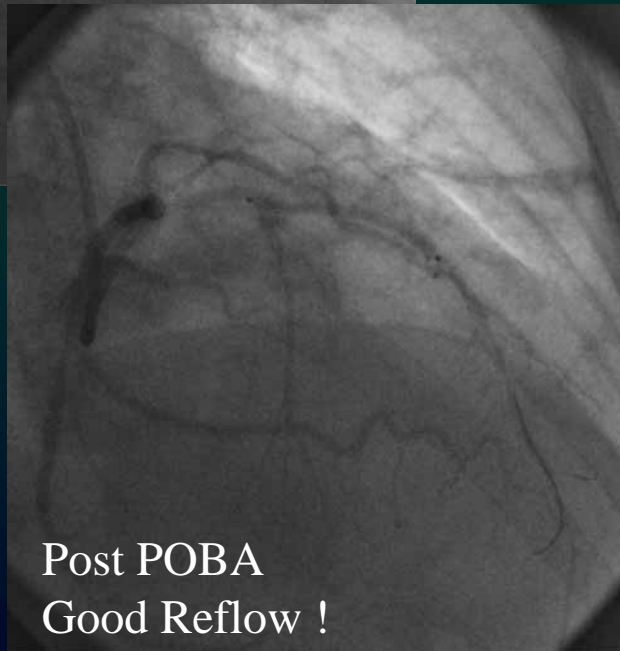
G. Stone

Should we throw away our distal protection devices in AMI patients treated with primary PCI?

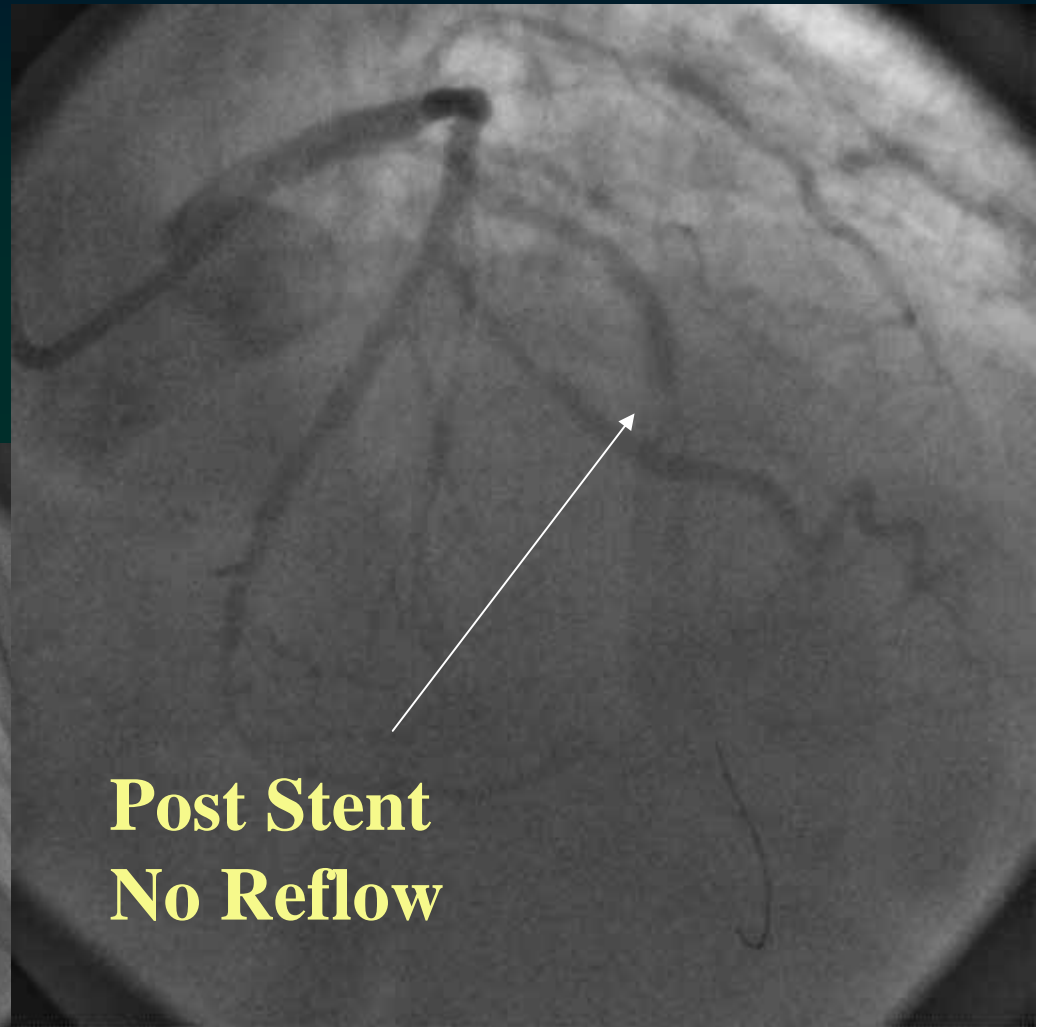
Exist No Reflow Case



AMI (ant)

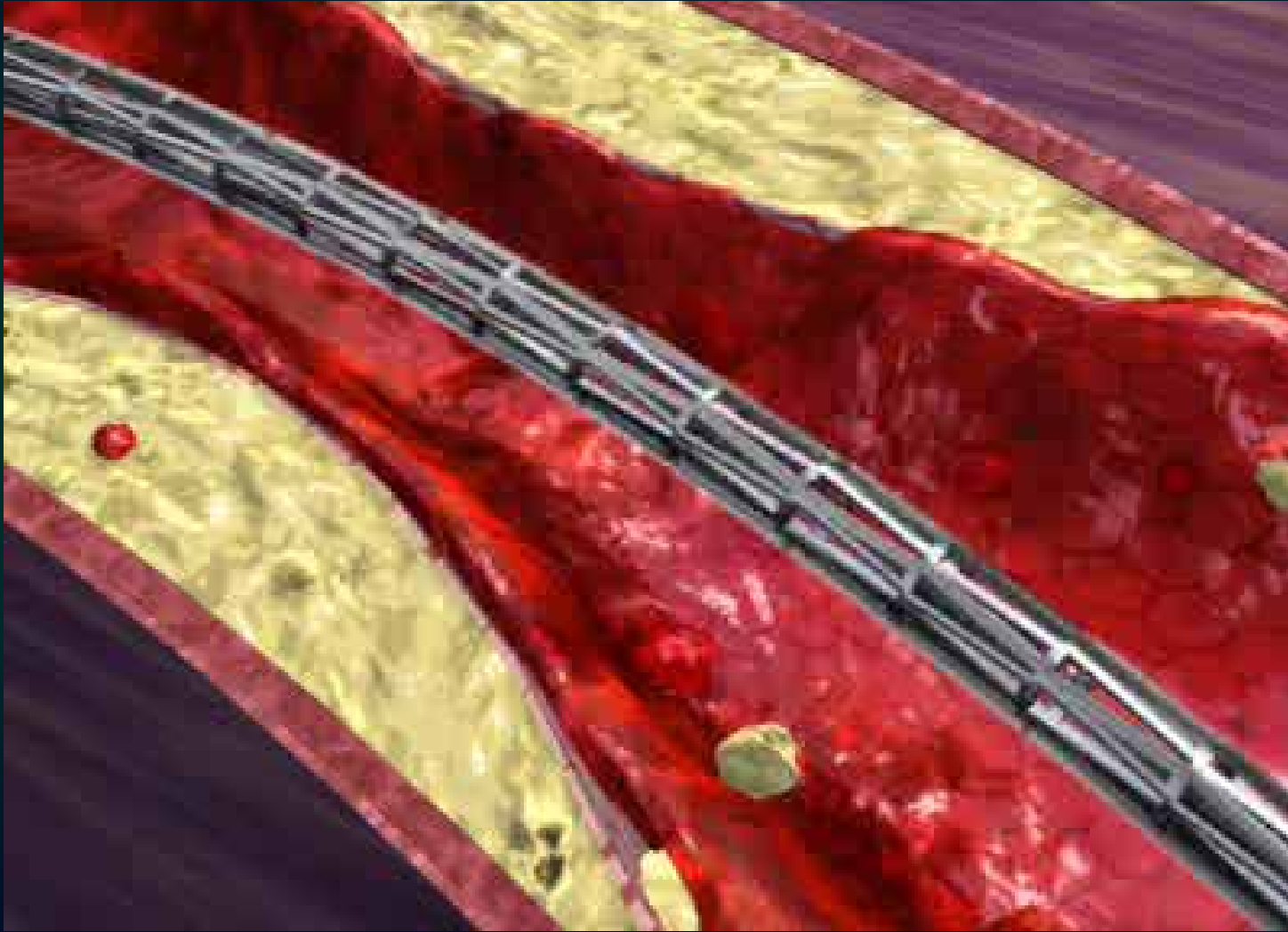


Post POBA
Good Reflow !



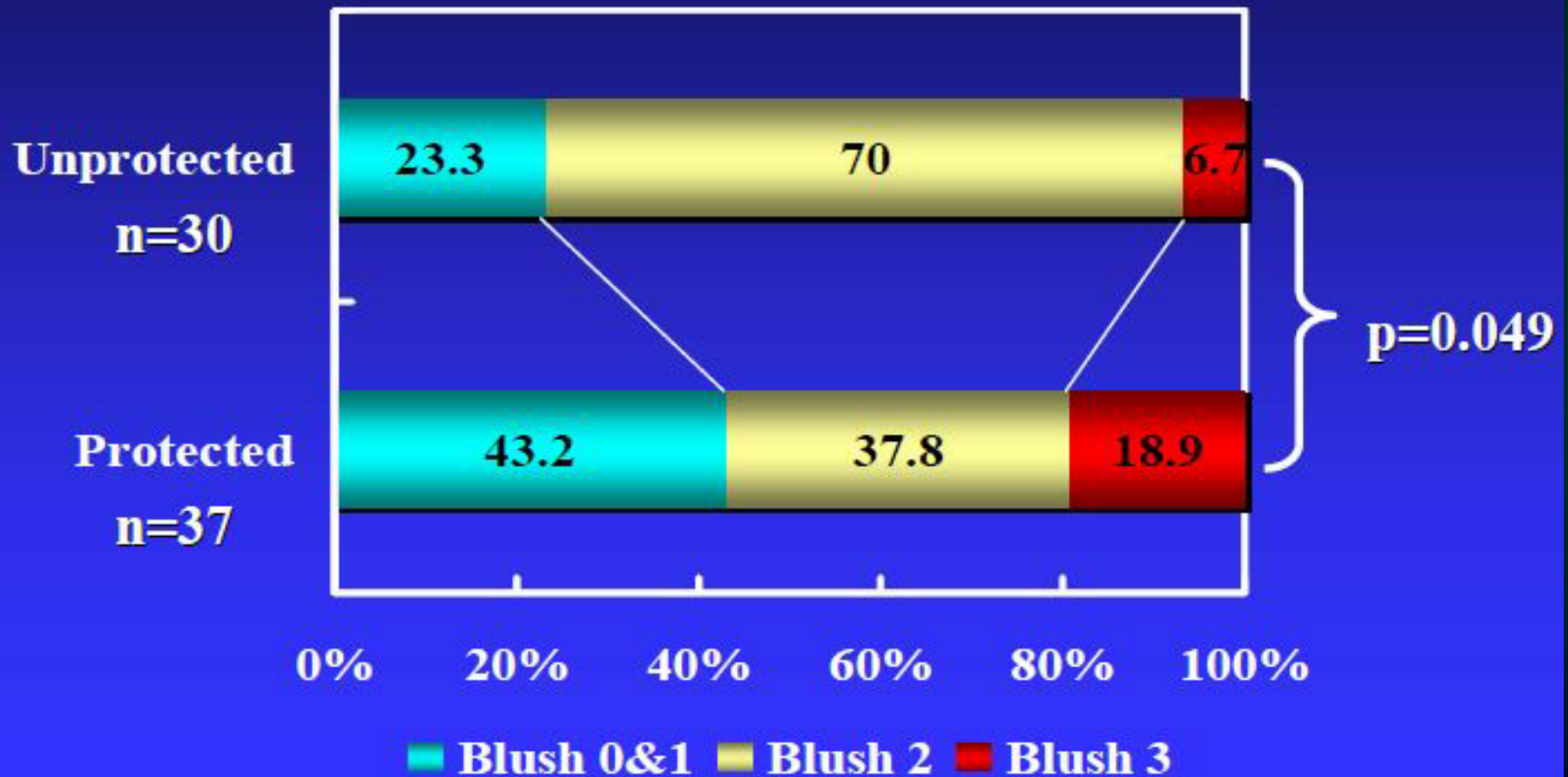
**Post Stent
No Reflow**

Stenting for ACS



Distal protection Use or not

- ASPARAGUS Result RCA Proximal only



Prevention of Slow/No reflow

- **Full time Distal Protection**

- **Negative Data**

- **EMERALD**
- **ASPARAGUS**

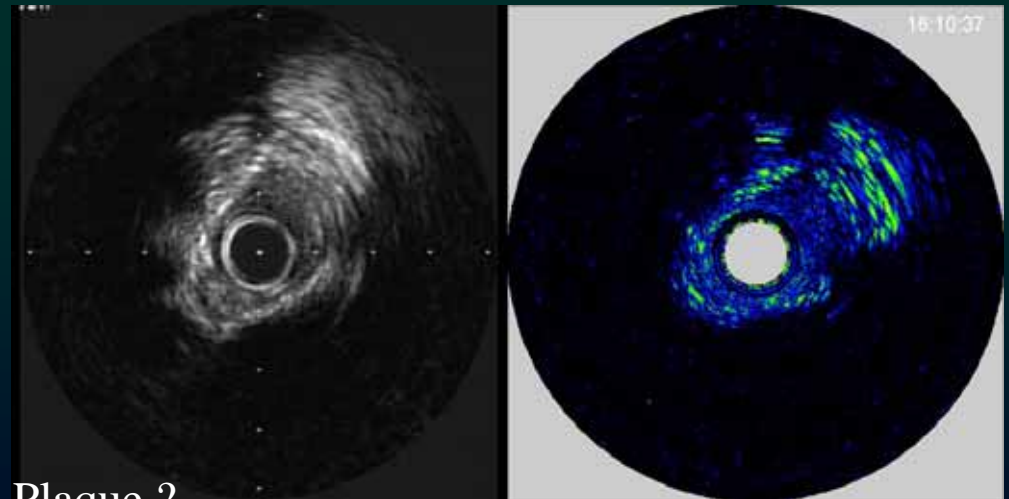
- **Select High Risk Case**

- **IVUS**

- **Histology by IVUS**

- **VH**
- **IB-IVUS**

IB-IVUS

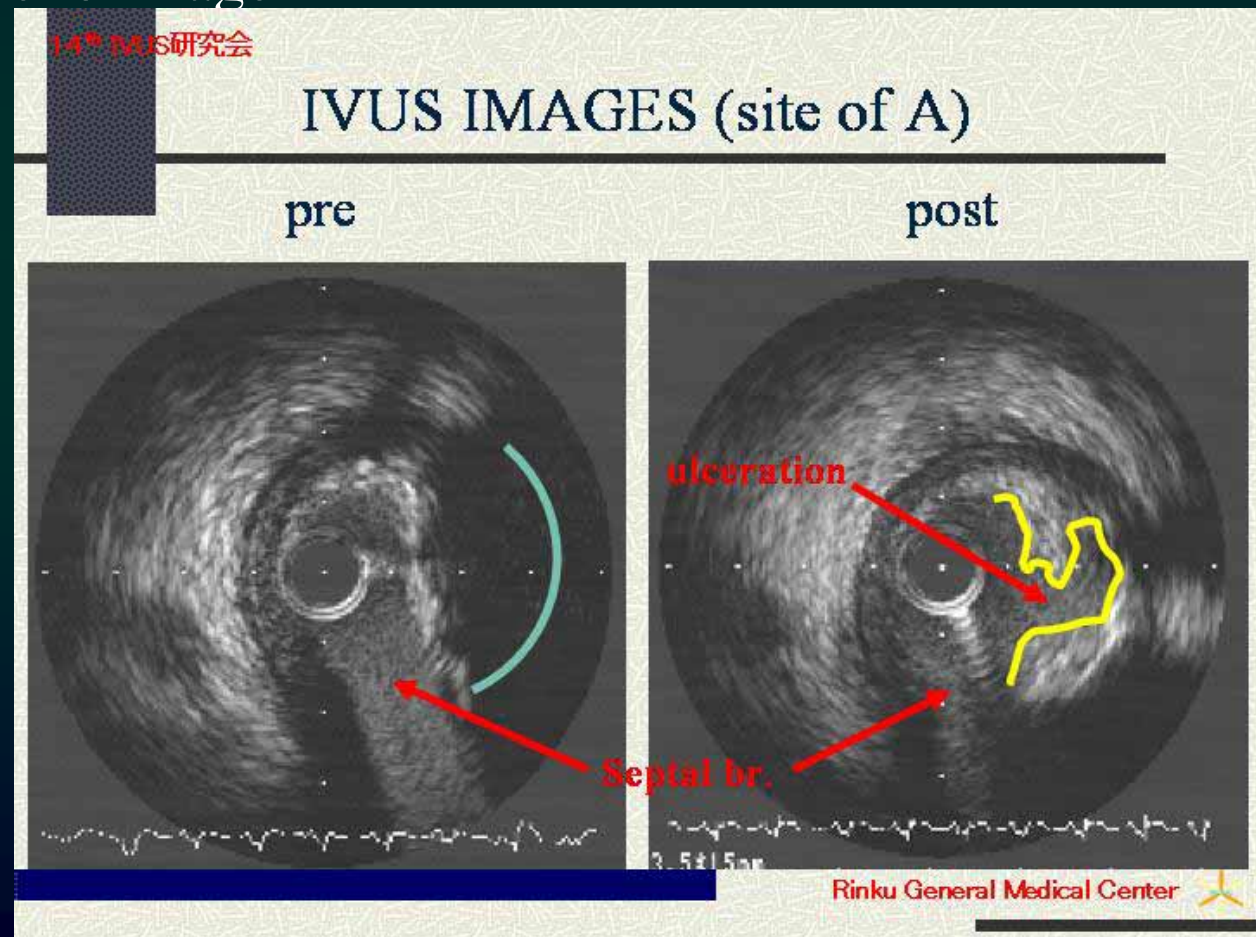


Calcium or Attenuation Plaque ?

Lipid and micro Calcium

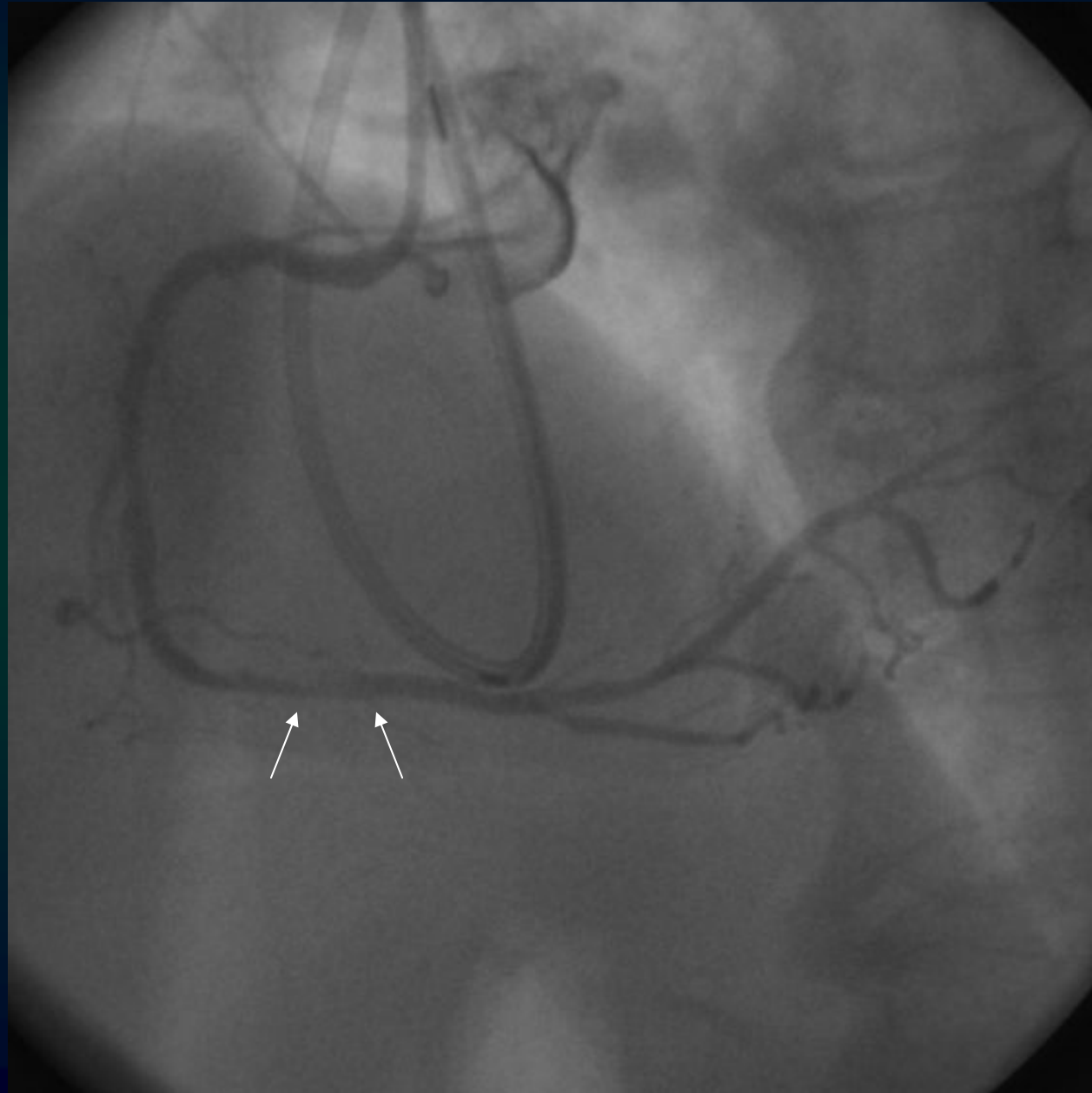
IVUS at ACS plaque

- Pre PCI
 - Attenuation plaque
 - Superficial high echo image
- Post POBA
 - Slow flow (+)



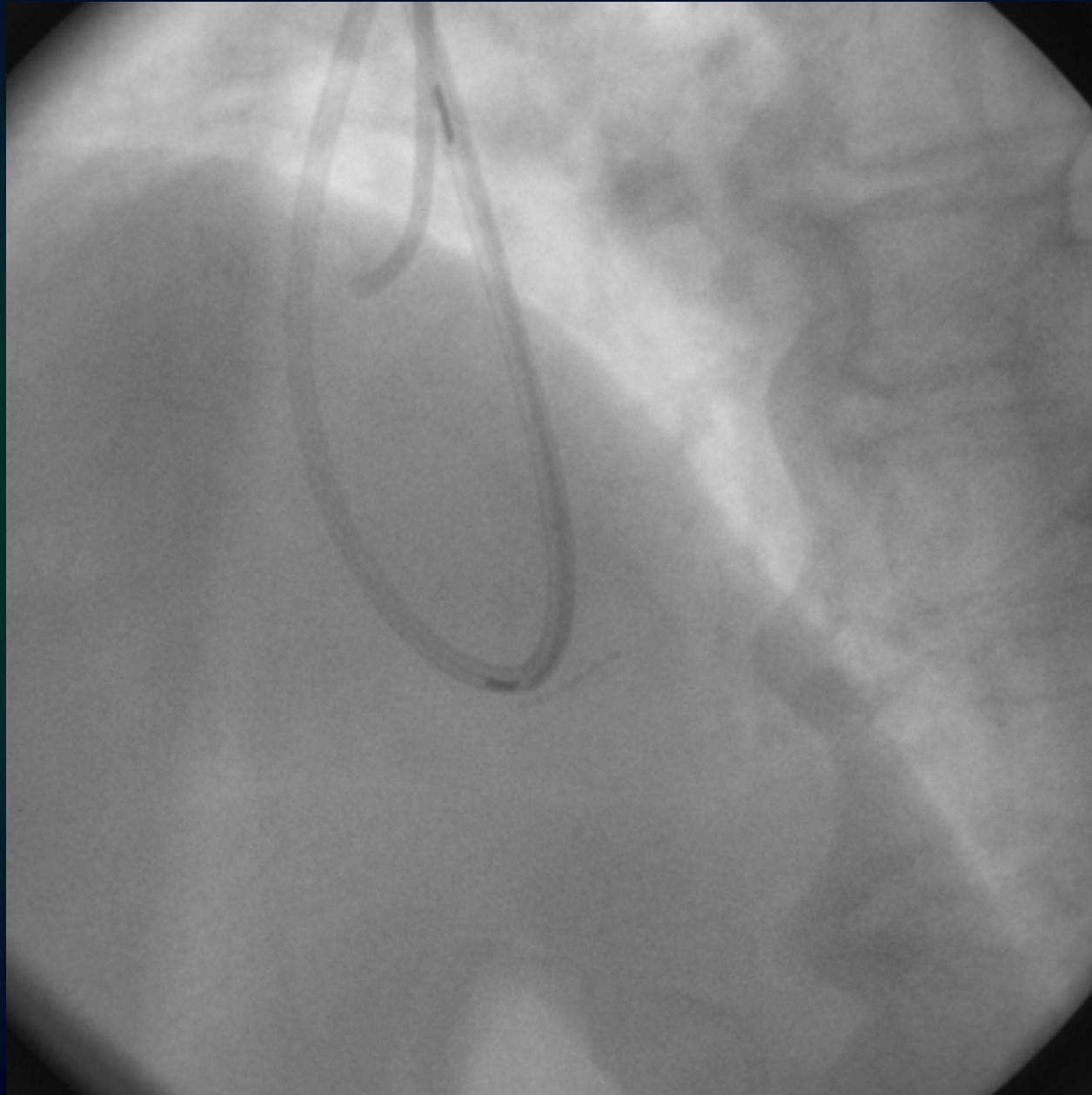
Case 1

- 75y/o Female
- AMI (inf)

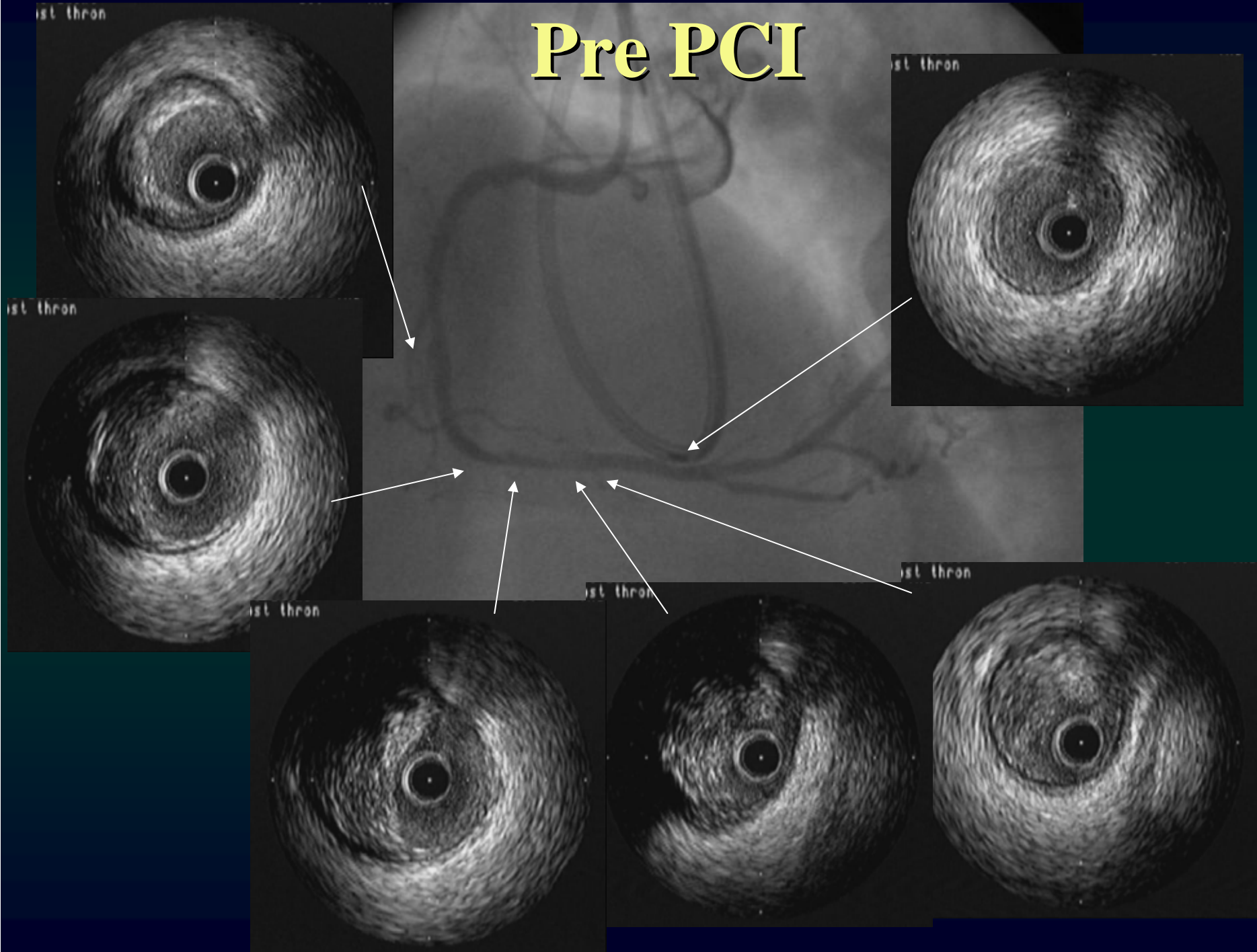


Case 1

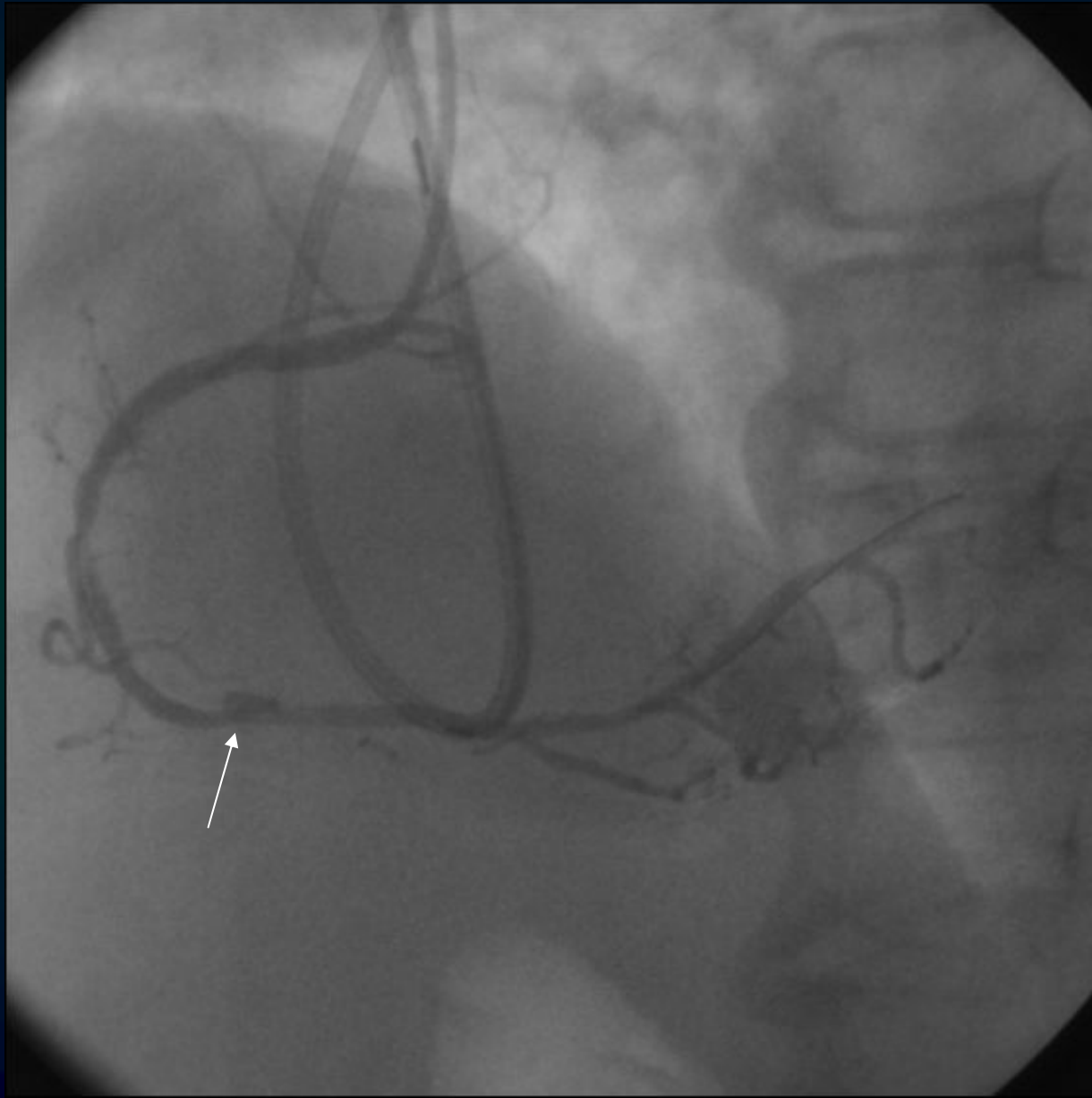
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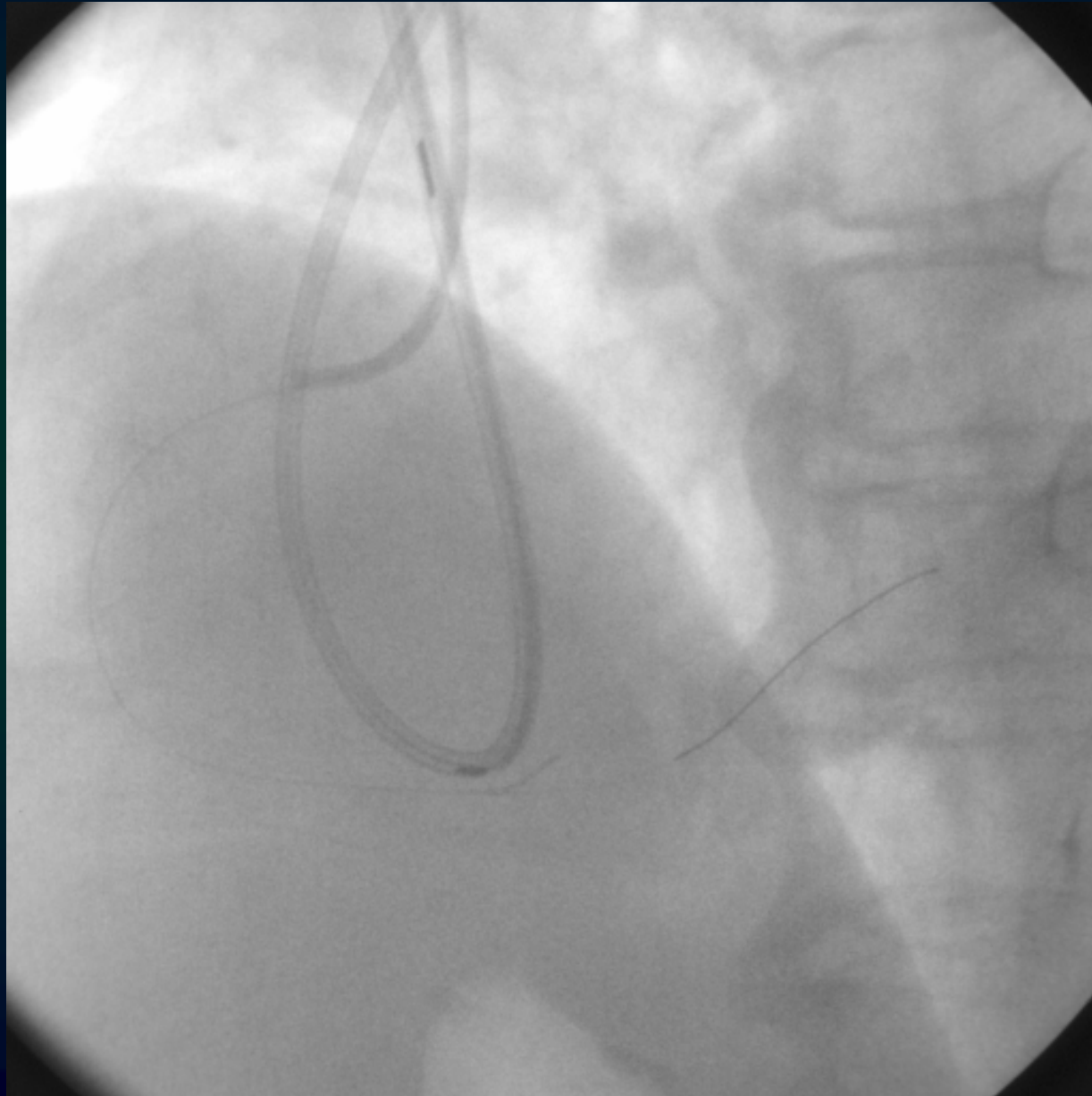
Pre PCI



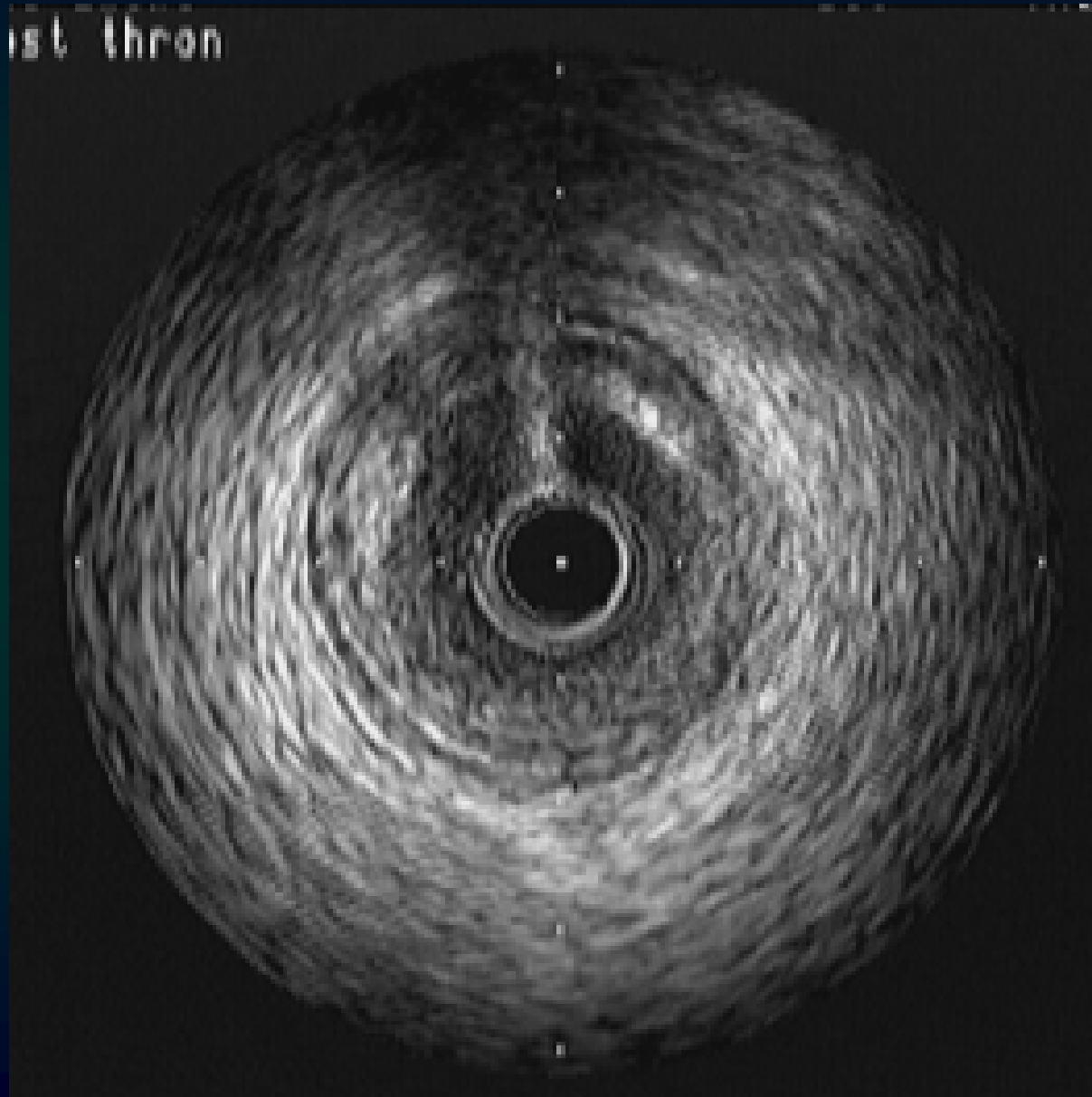
Post Thrombectomy



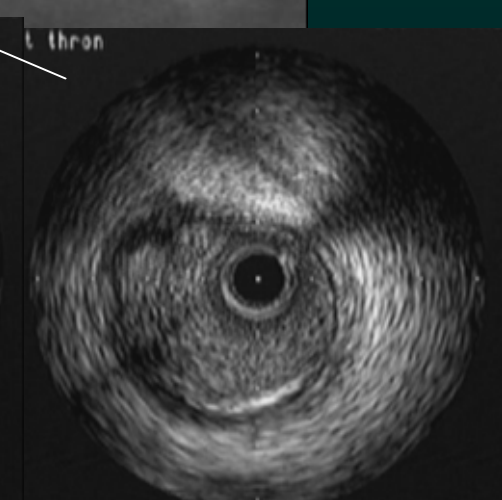
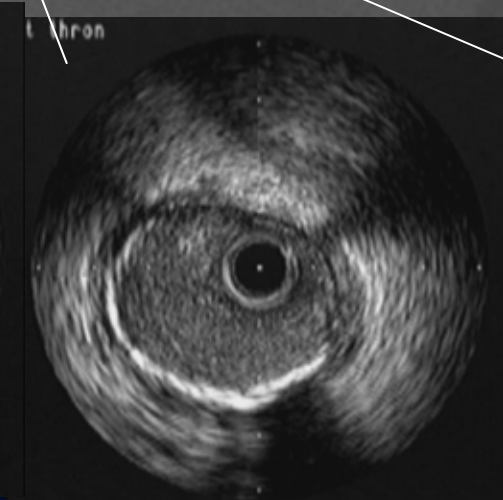
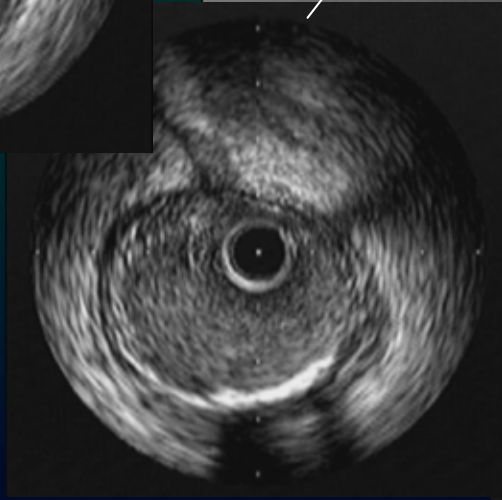
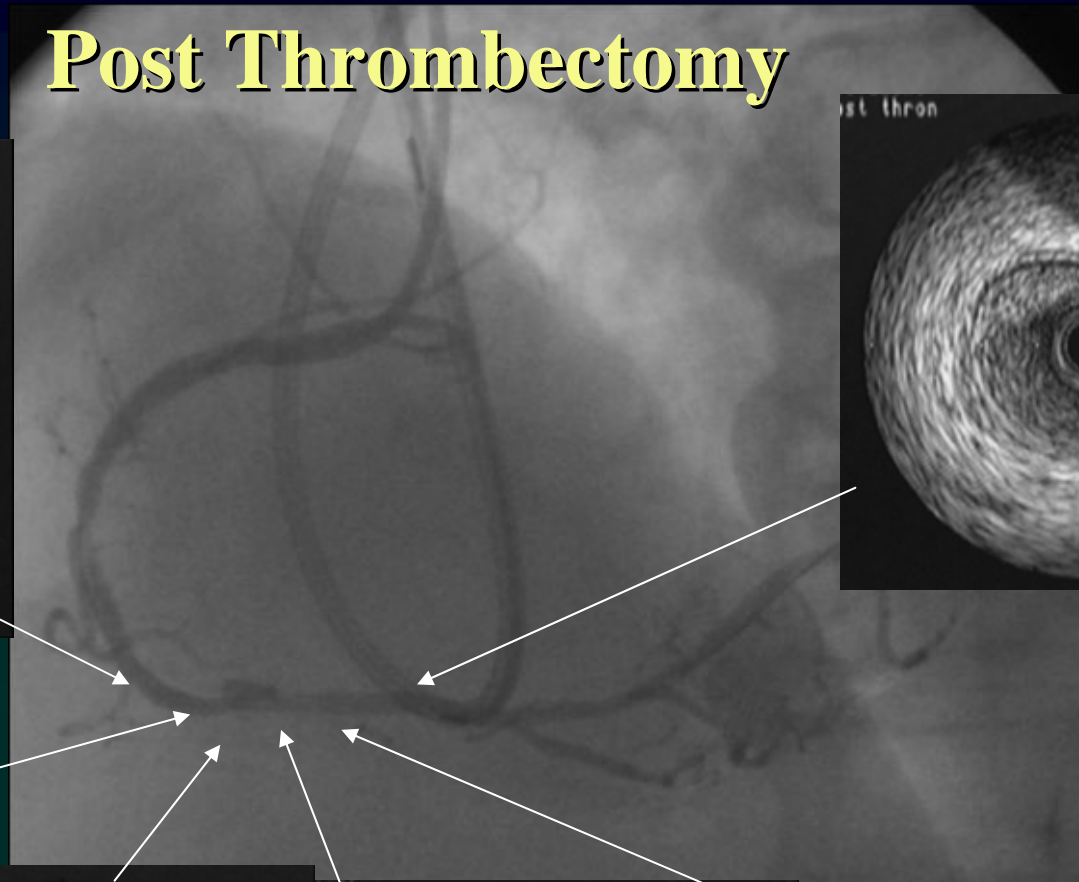
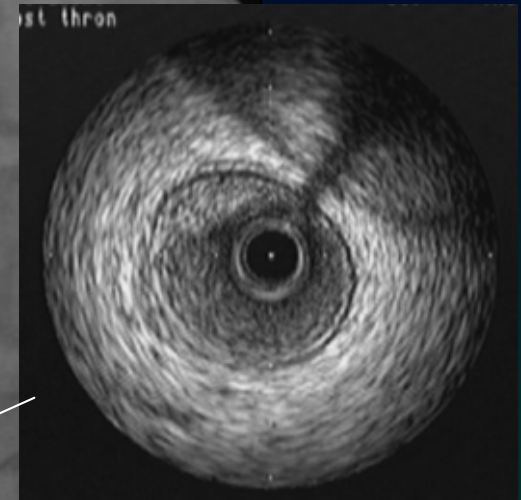
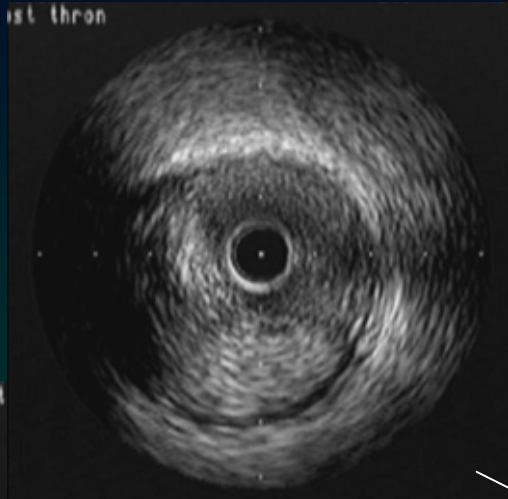
Post Thrombectomy



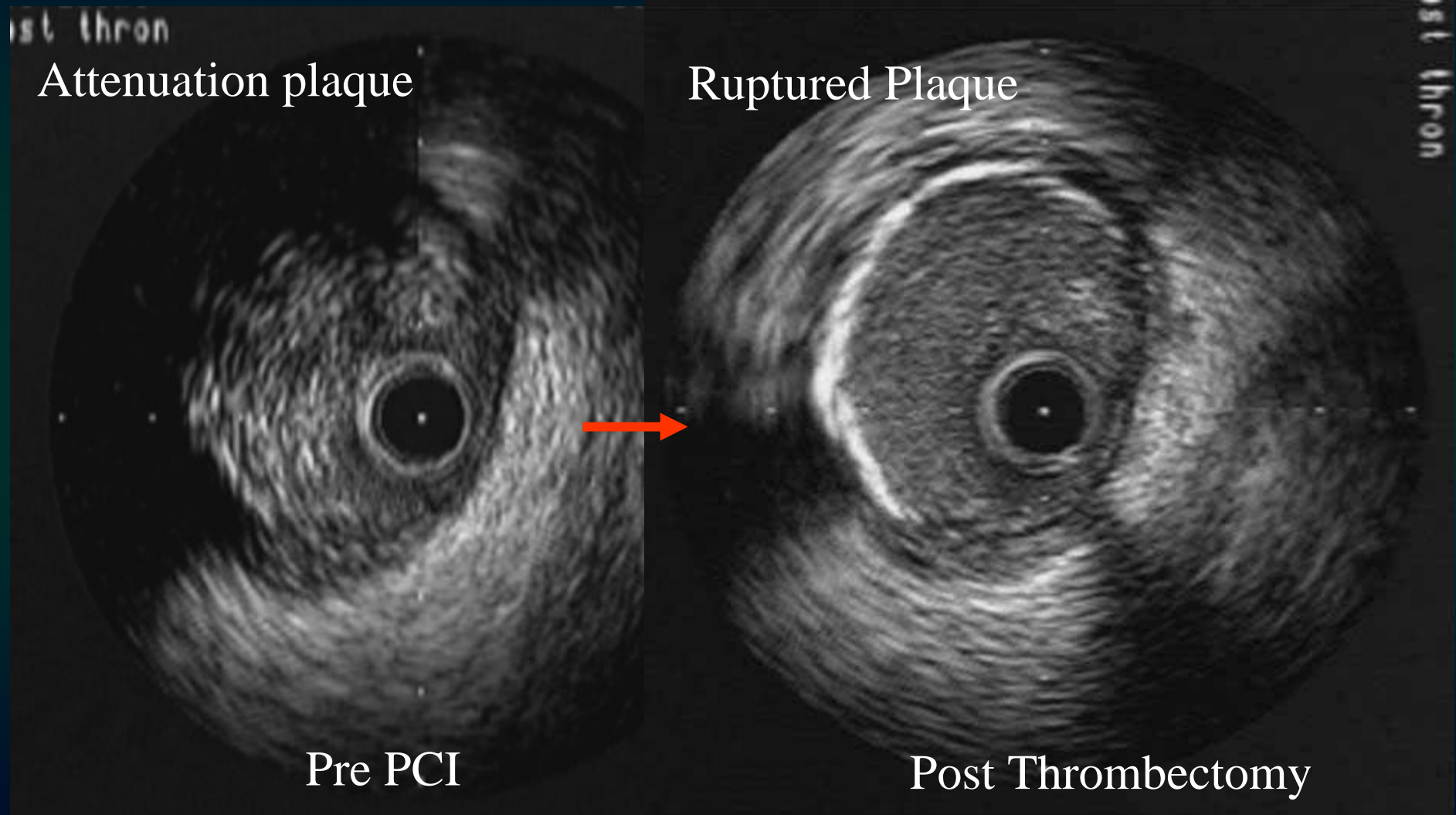
IVUS at post thrombectomy



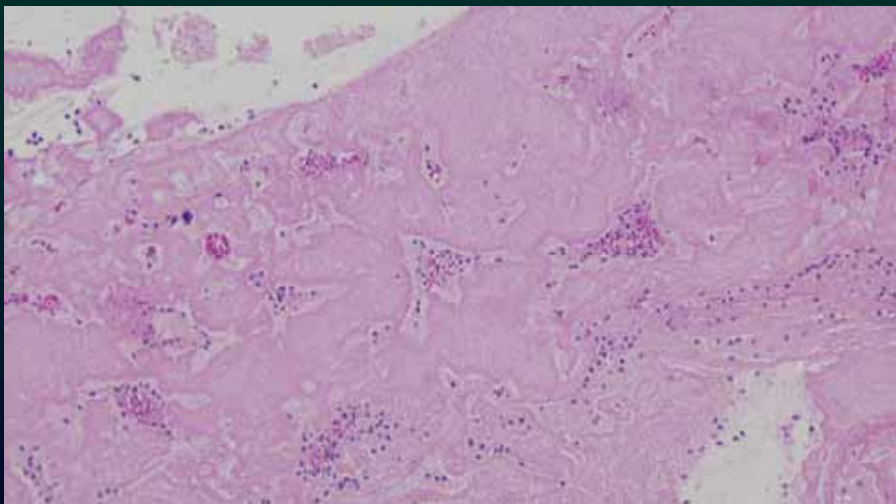
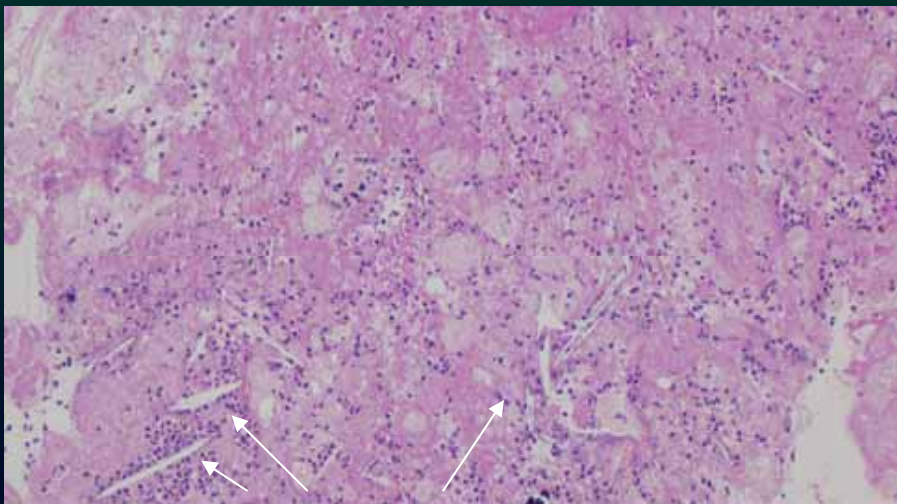
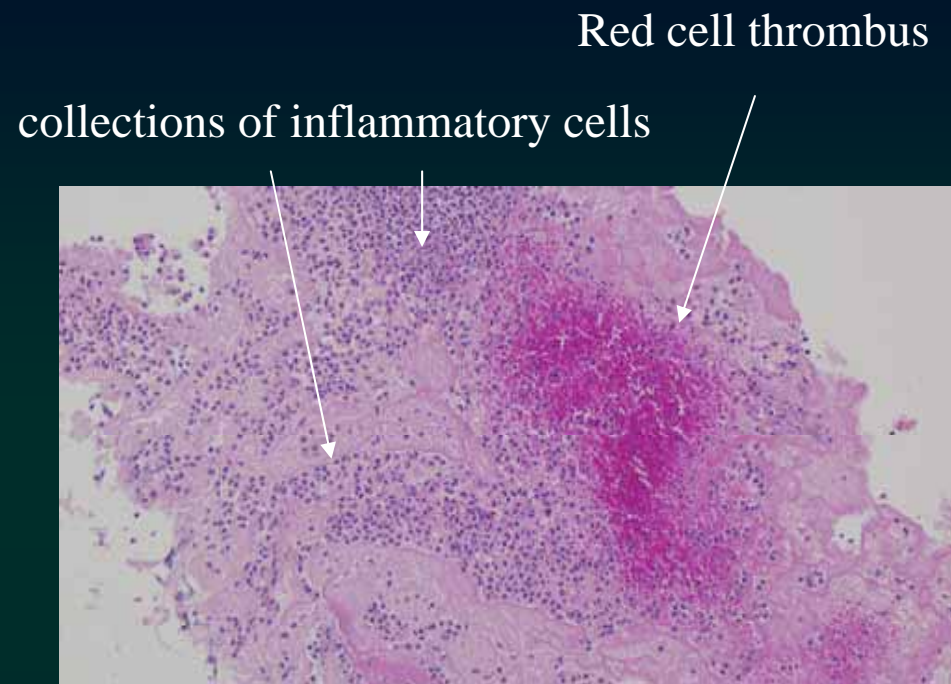
Post Thrombectomy



IVUS pre to post



Debris



Cholesterin crystallization

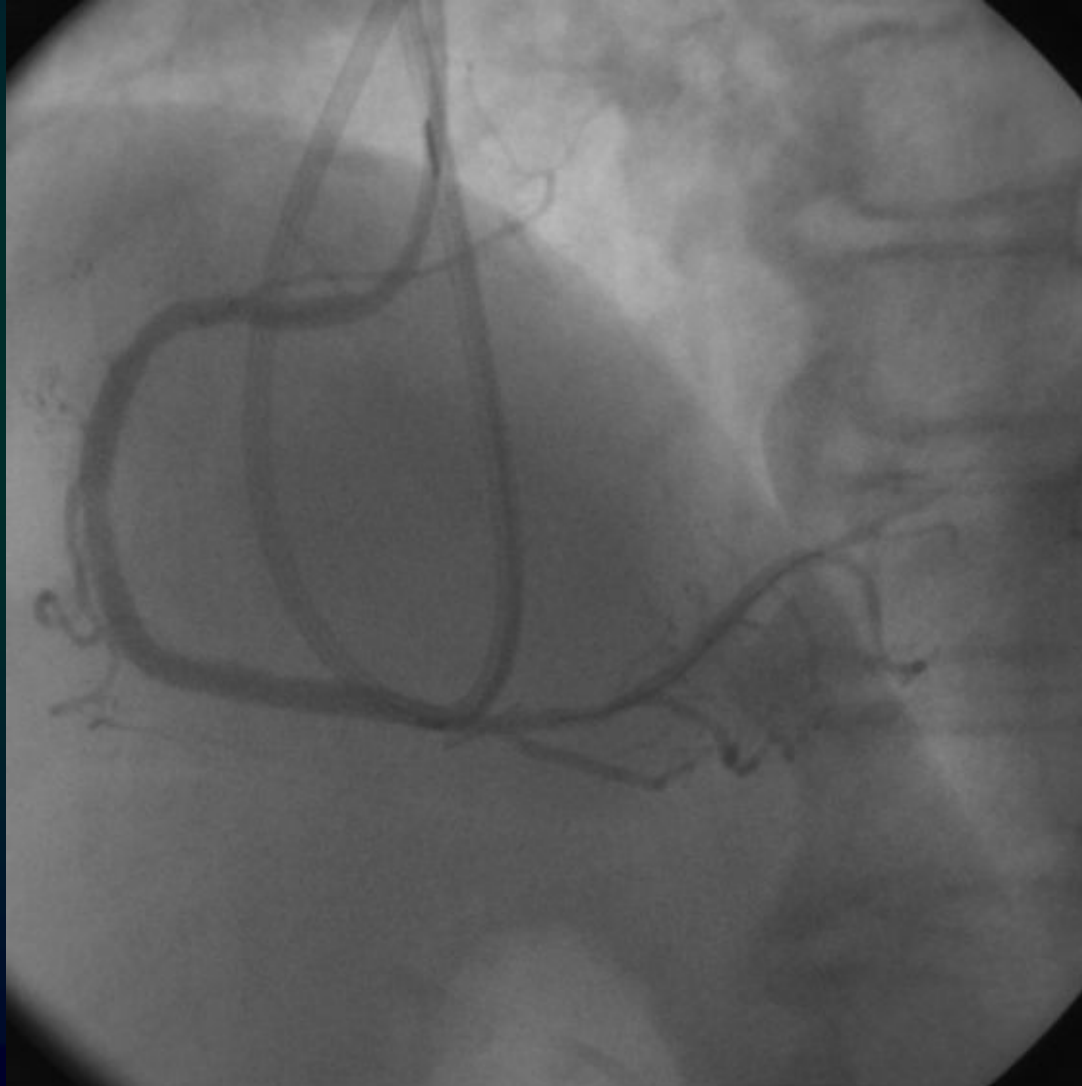
Platelet thrombus

What procedure

- This attenuation plaque was removed completely
- Our procedure
 - Direct Stenting without distal protection

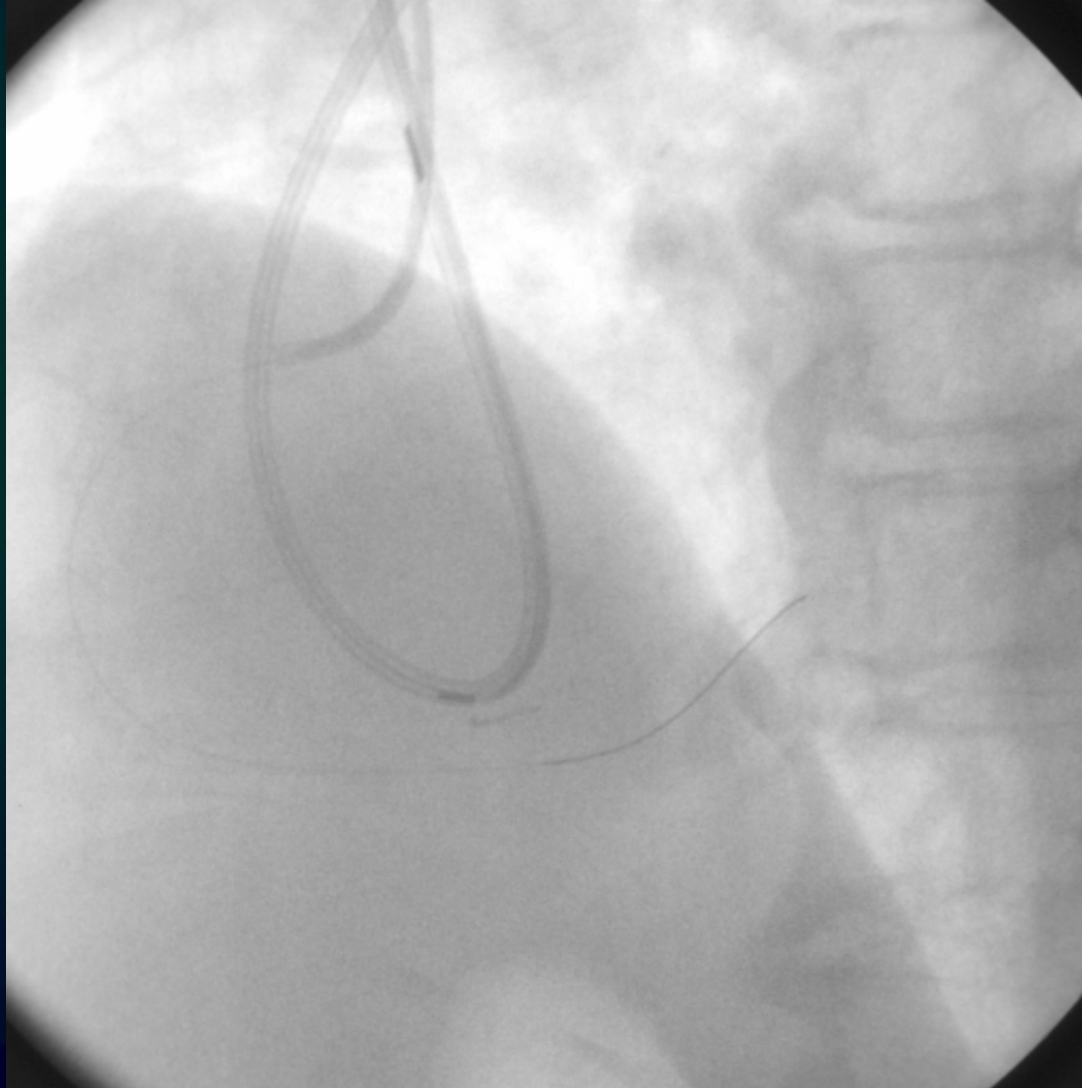
Final CAG

- TSUNAMI 3.5 x 30mm 14atm
- Duraflex 4.0 x 15mm 12atm
- Without Distal Protection device



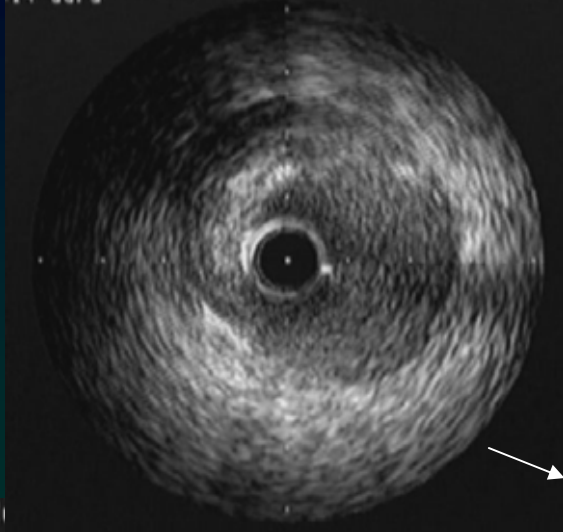
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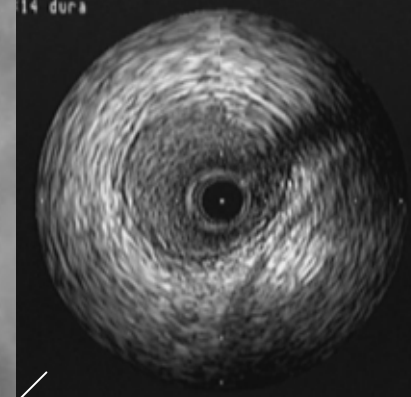


Final Result

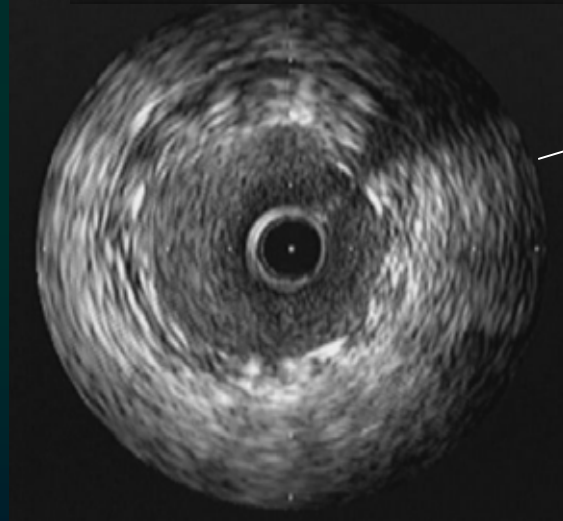
14 dura



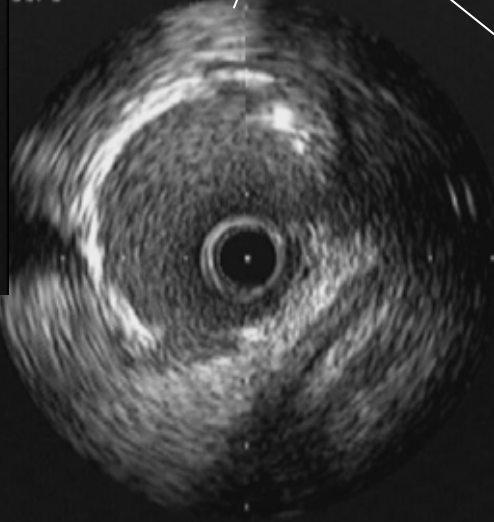
14 dura



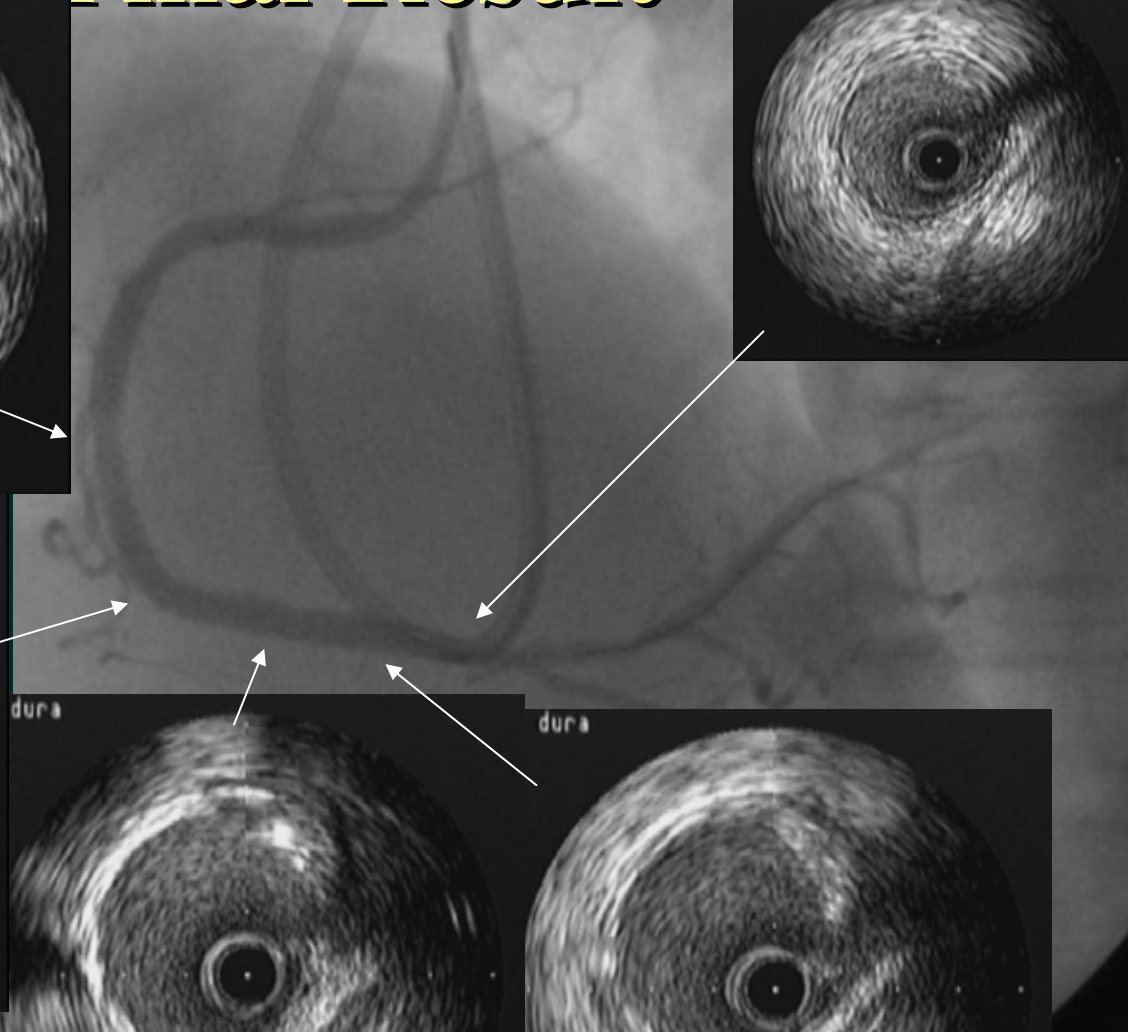
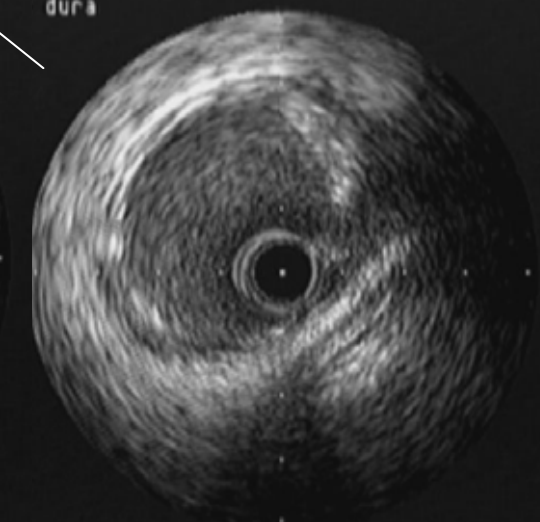
14 d



dura

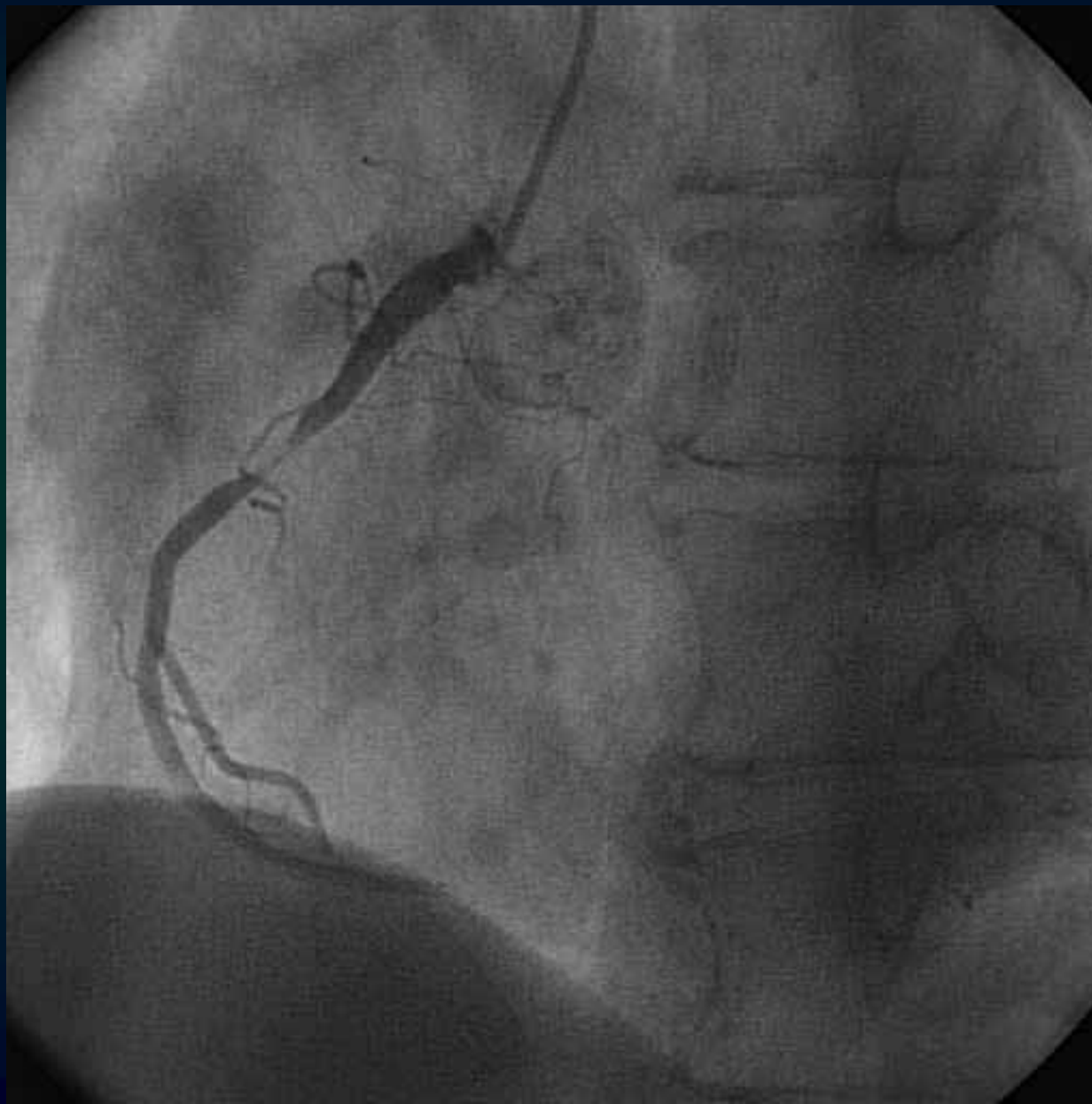


dura



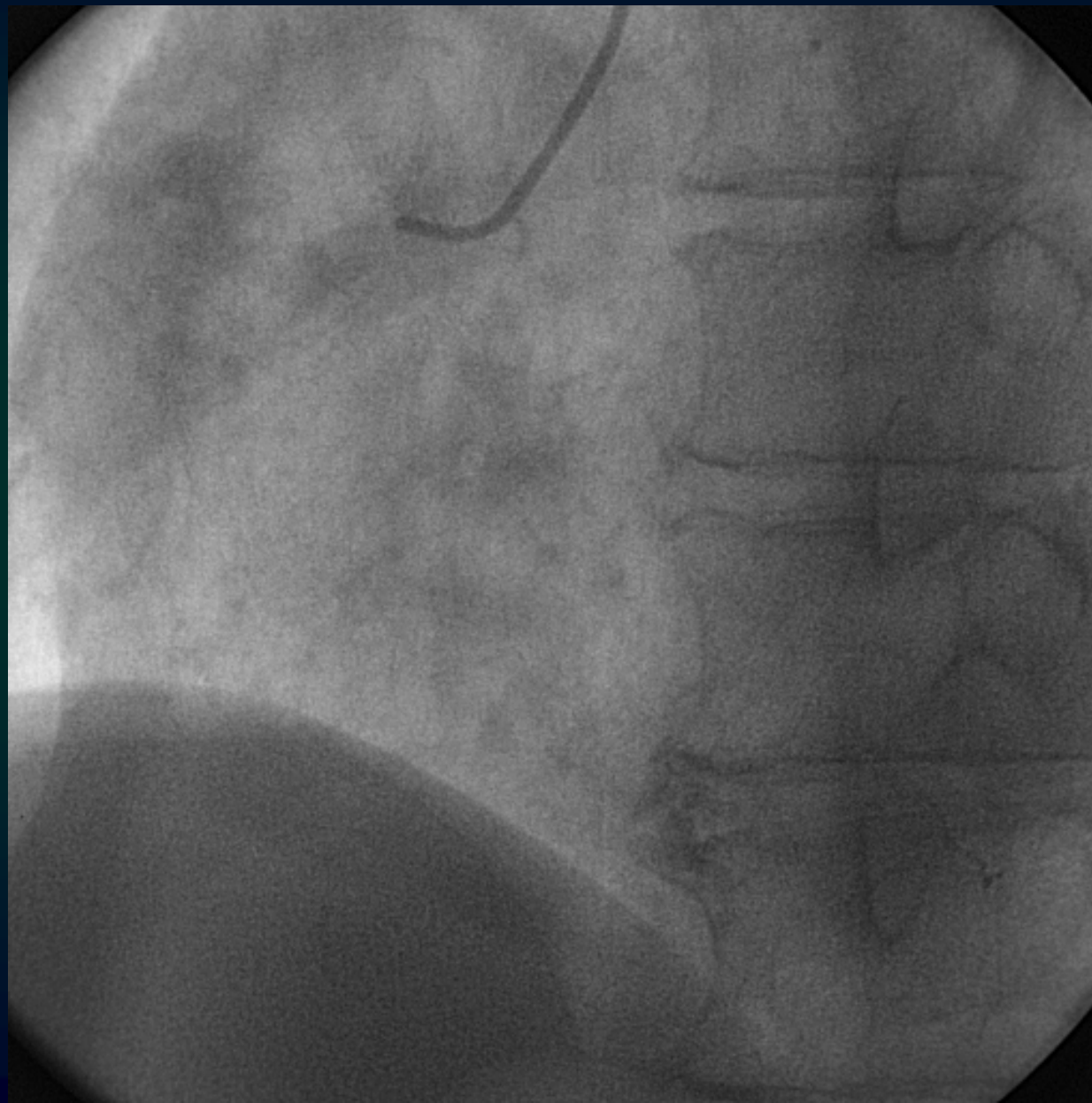
Case 2

- 79 y/o male
- AMI (inf)

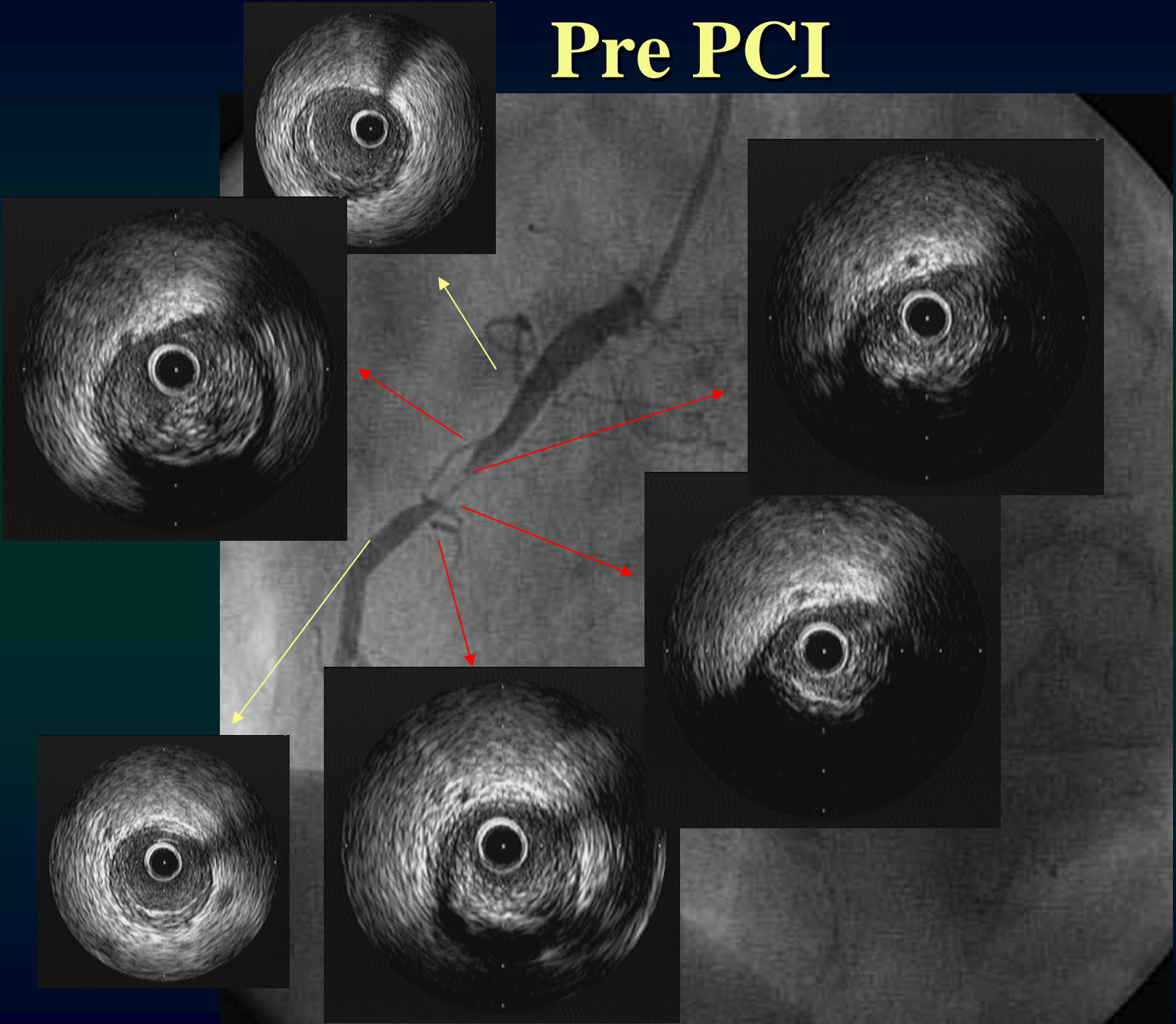


Case 2

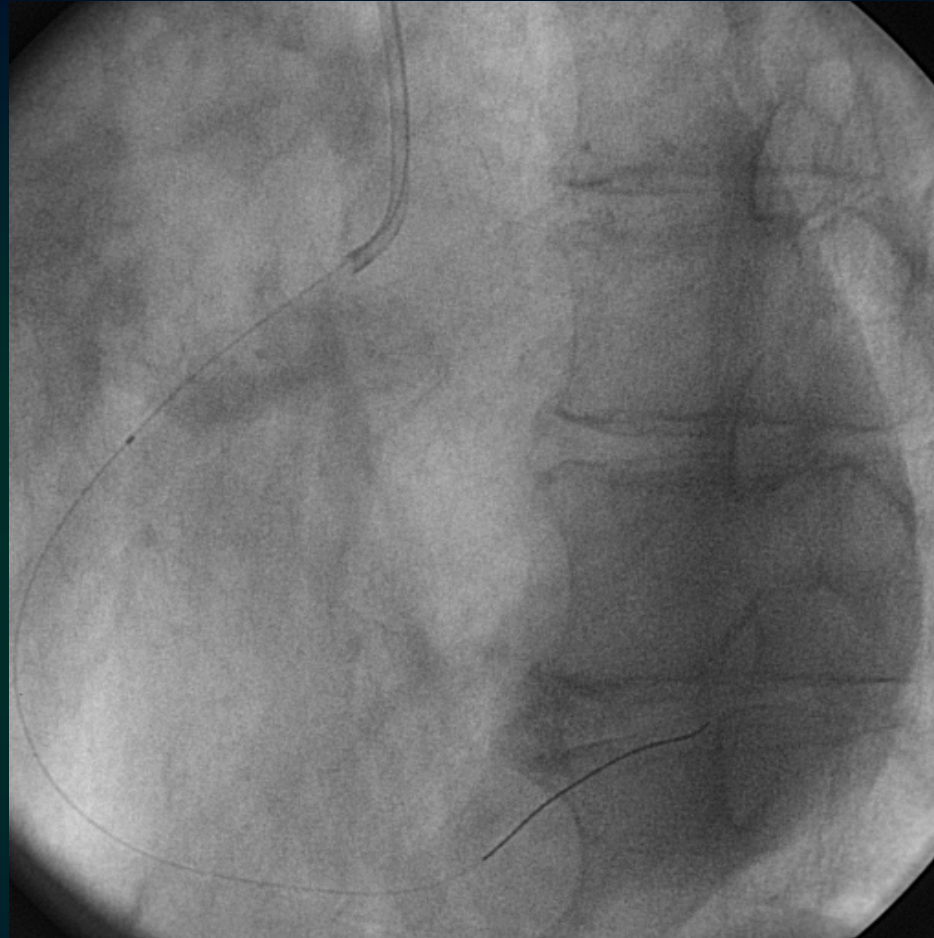
- 79 y/o male
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Pre PCI



Thrombectomy



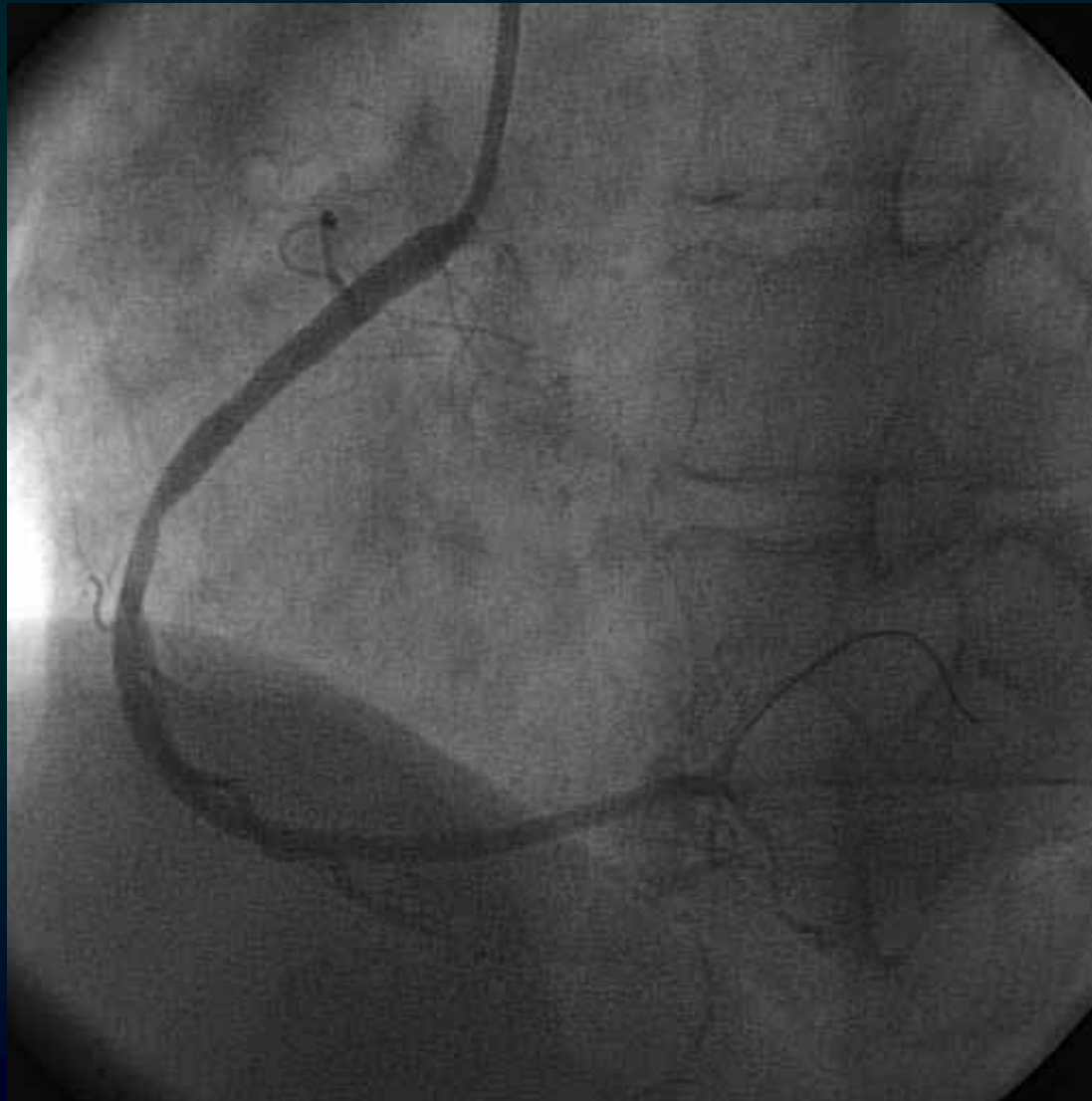
- There wasn't Deviris!
- IVUS image was no change post thrombectomy

What procedure

- This plaque was not fresh thrombus ?
- Our procedure
 - POBA and Stenting without distal protection

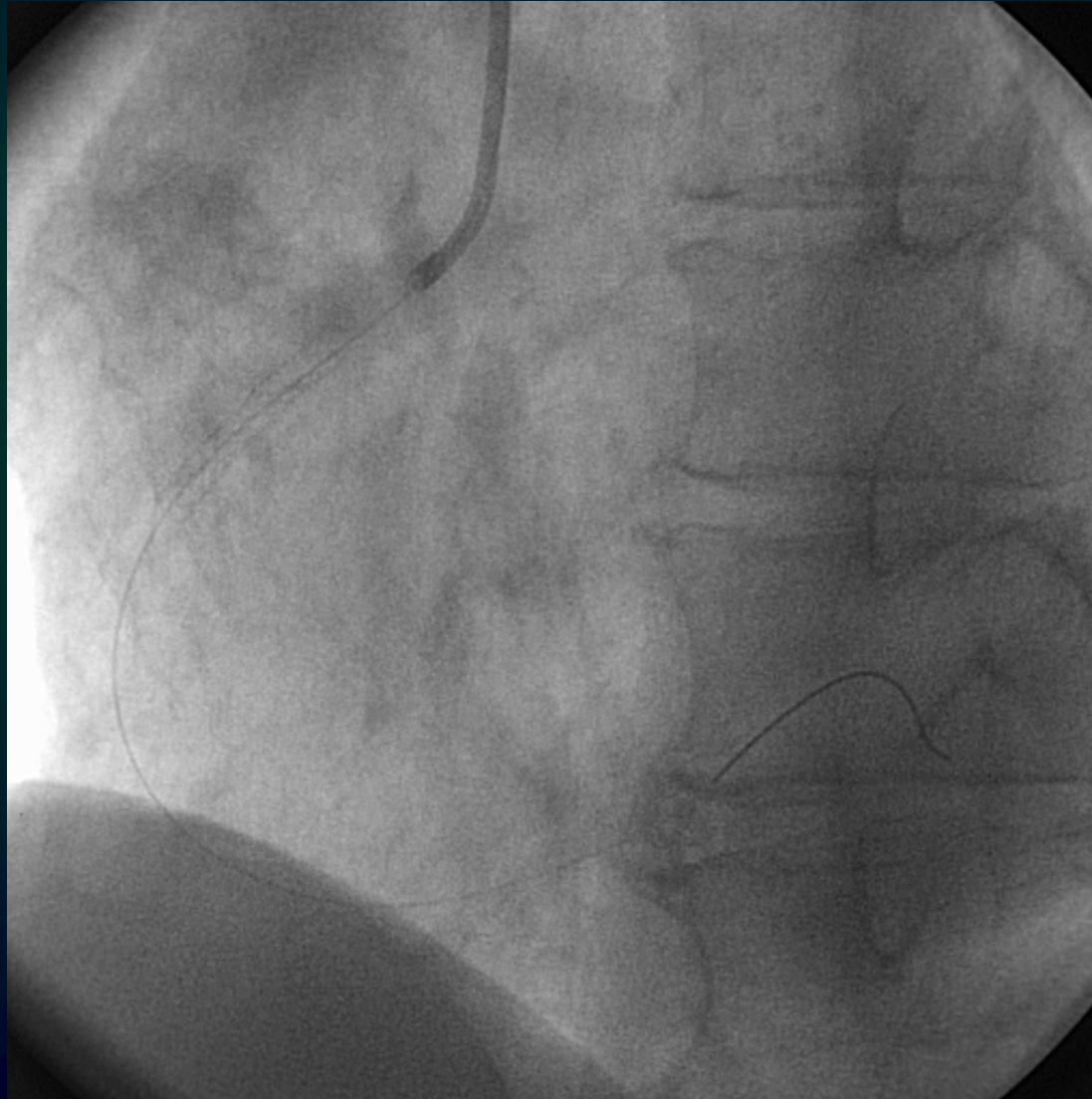
Final CAG

- Driver 3.5-24mm
- Without distal protection

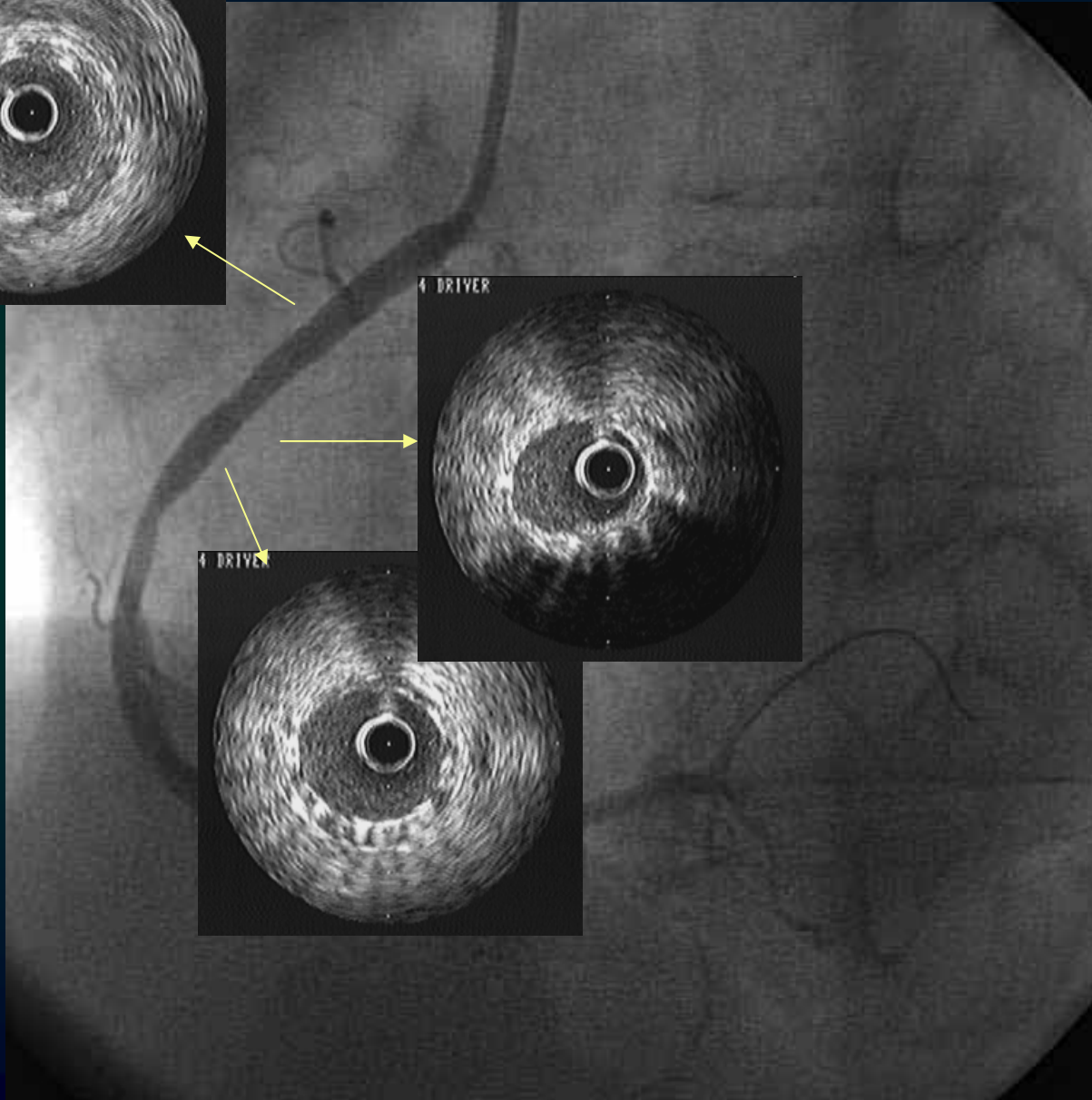
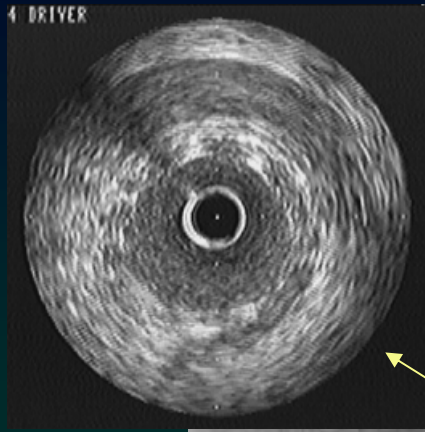


Final CAG

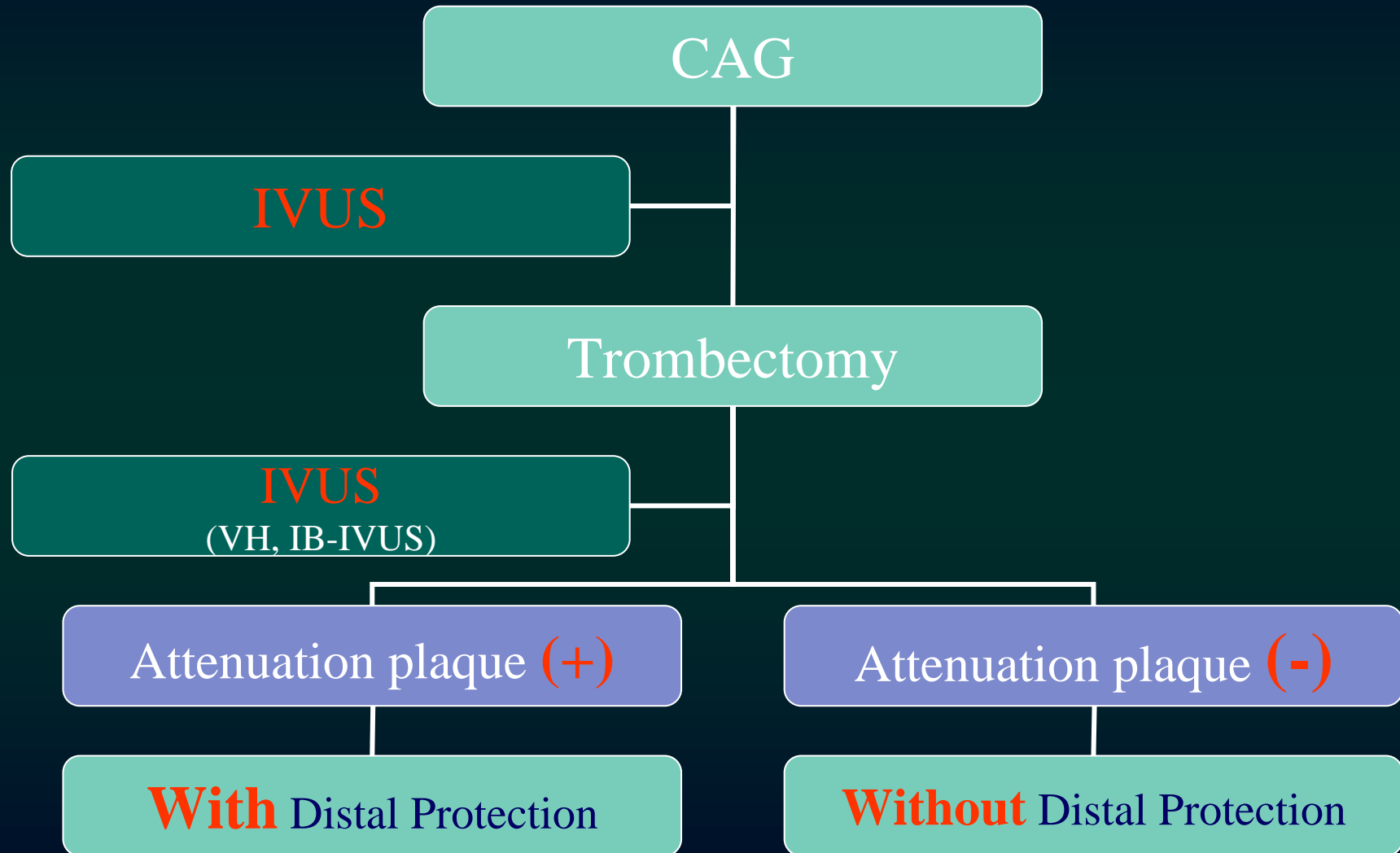
- Driver 3.5-24mm
- Without distal protection



Final Result



IVUS Guide PCI for ACS



IVUS Guide PCI for ACS Study

- Now enrollment, analysis
- Report at next this summit

IVUS Guide PCI



- Safty, Easily
- No Complication
- No Slow/No Reflow
- Say Yes !