

# **Percutaneous intervention of acutely occluded saphenous vein grafts:**

**Thrombectomy with guiding catheter & IVUS guided PCI**

**Eun-Seok Shin MD.,PhD.**

Division of Interventional Cardiology,  
Department of Internal Medicine,  
Ulsan University Hospital,  
University of Ulsan College of Medicine



# Presenter Disclosure Information

---

Presenter: Eun-Seok Shin, M.D.,Ph.D.

Title: Percutaneous intervention of  
acutely occluded saphenous vein grafts:  
Thrombectomy with guiding catheter & IVUS guided PCI

**No relationships to disclose**

**No industry sponsorship**



# Case Review

---

## Patient Demographics

Age: 68

Gender: F

Risk factors: HTN, DM

s/p CABG ( 14 yrs ago)

## Clinical Presentation

Sudden resting chest pain for 1 hour → ER



# Initial Laboratory Findings

---

CK-MB	2.88	→	9.27 ng/ml
Troponin T	<0.101	→	0.54 ng/ml
Troponin I	0.66	→	4.6 ng/ml

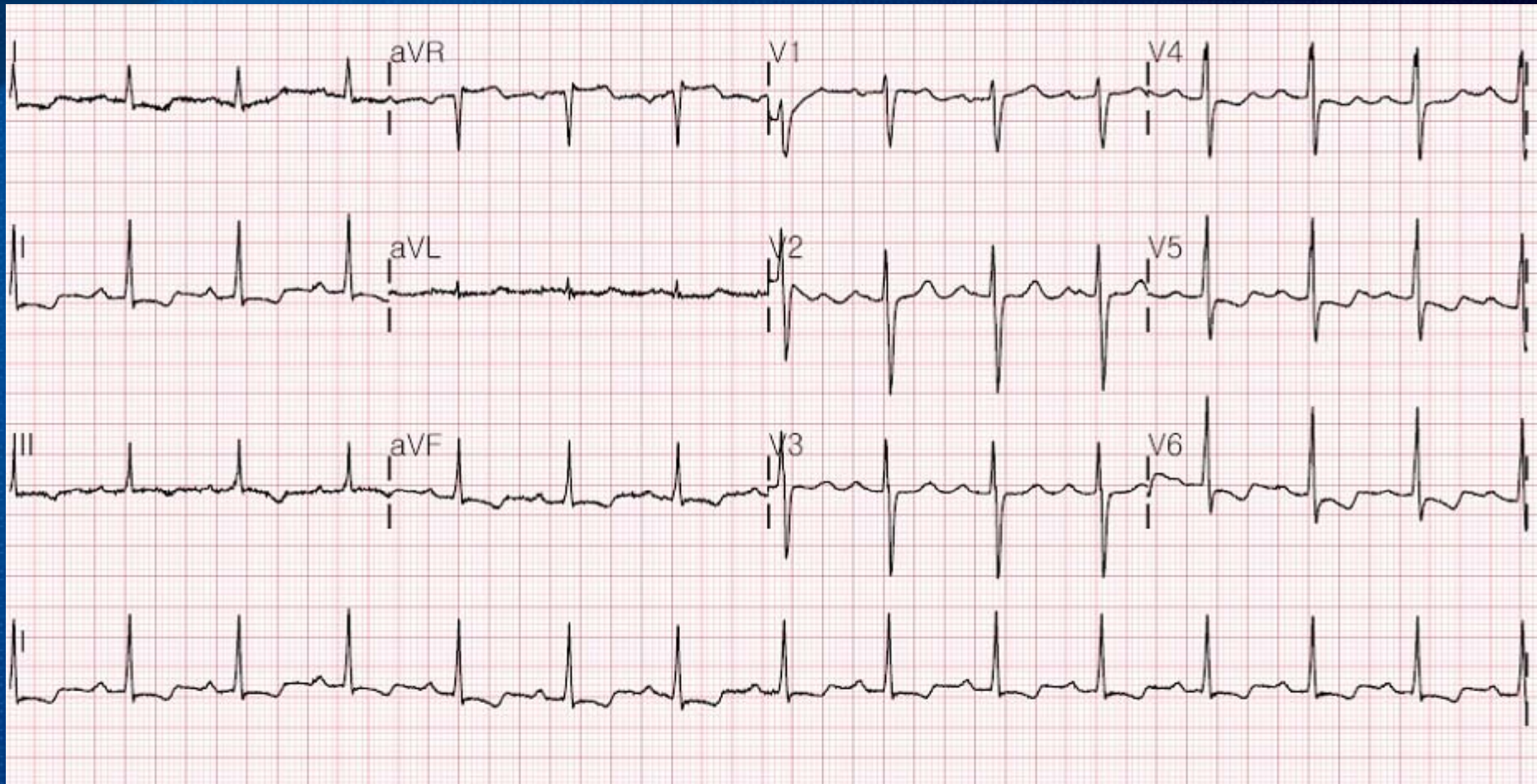
Lipid:	TC	141 mg/dl
	HDL	41 mg/dl
	TG	74 mg/dl
	LDL	86 mg/dl

EchoCG: Akinesia without thinning of basal inferior, basal inferoseptum with mild LV systolic dysfunction (EF 48%)



# Initial ECG

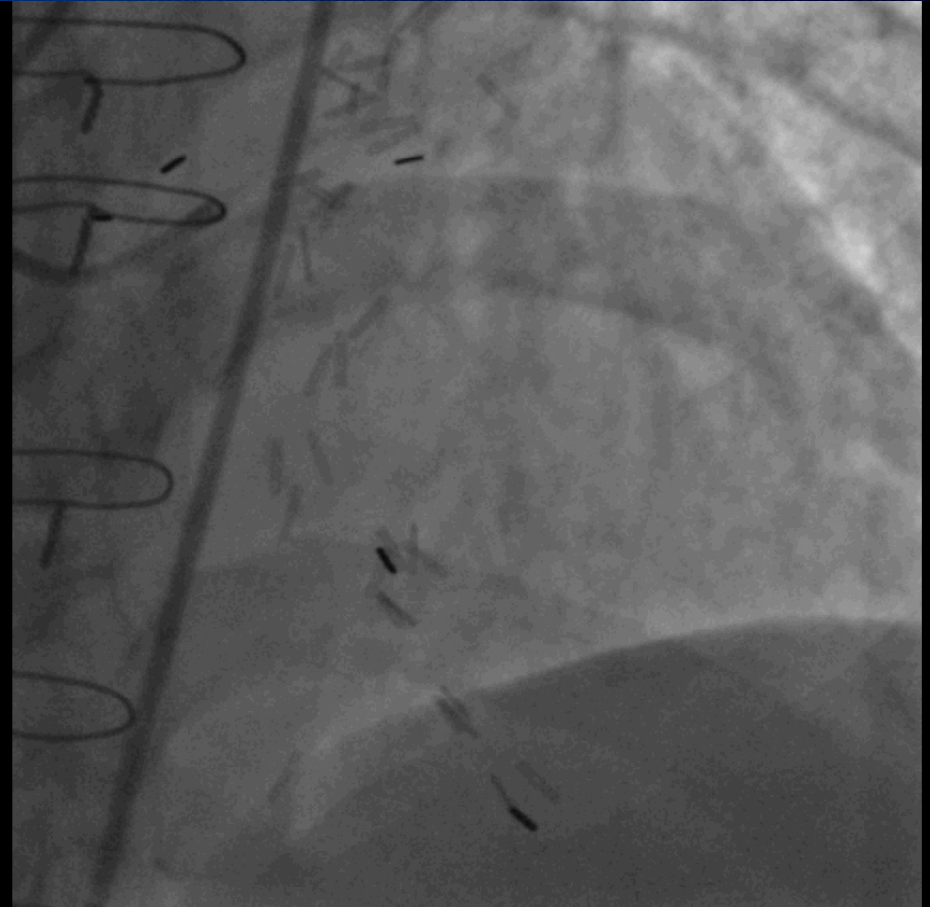
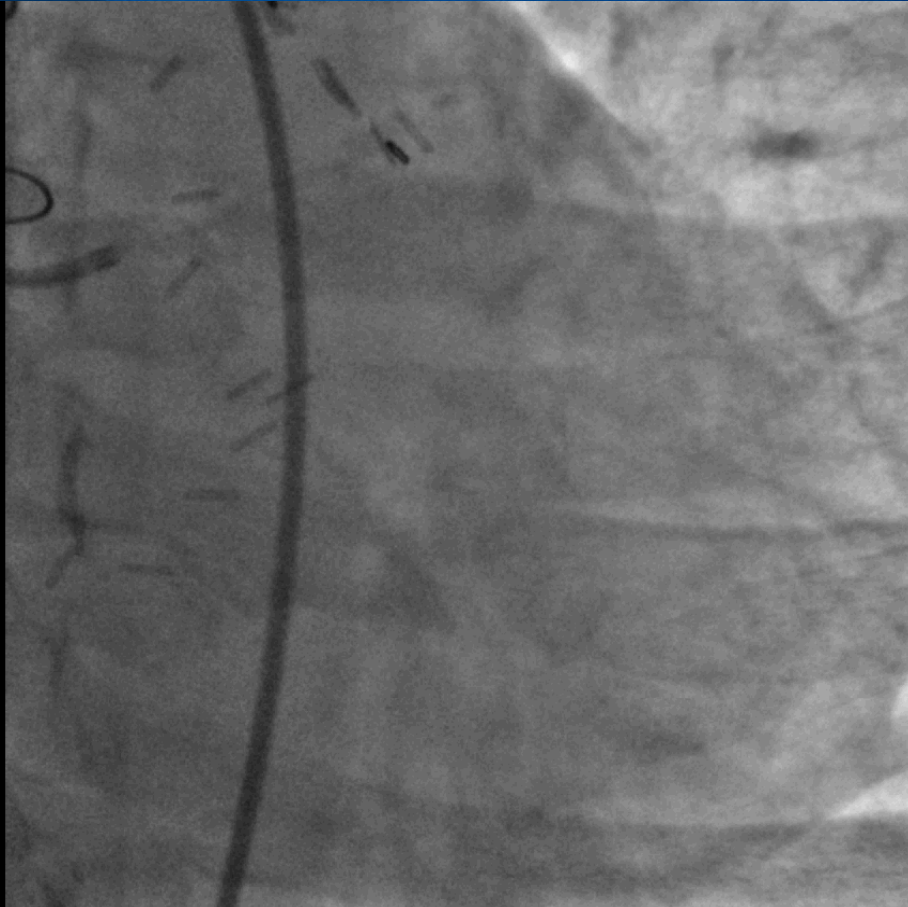
BP 187/79 mmHg





# Baseline Angiogram ( LCA )

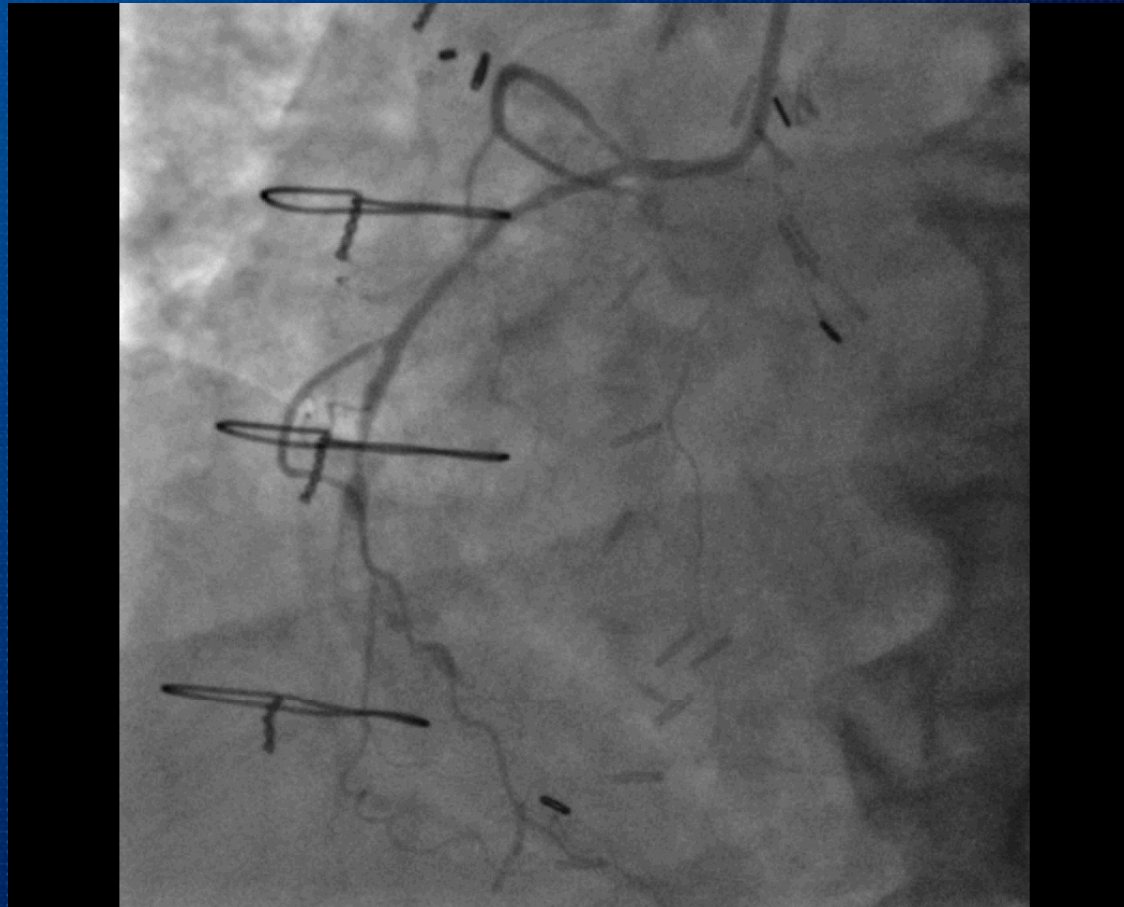
---





# Baseline Angiogram ( RCA )

---





# Baseline Angiogram ( LIMA to LAD)

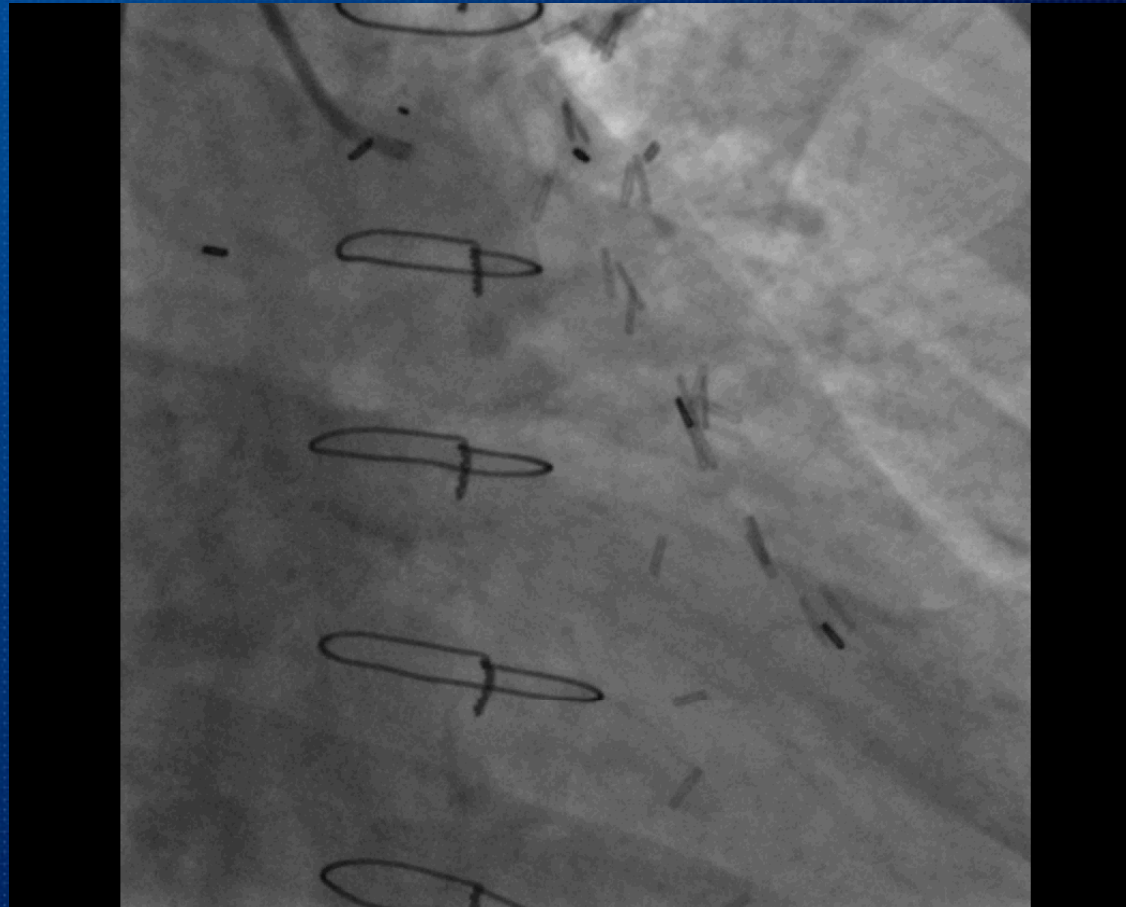
---





# Baseline Angiogram ( SVG to OM )

---





# Baseline Angiogram ( SVG to RCA )

---

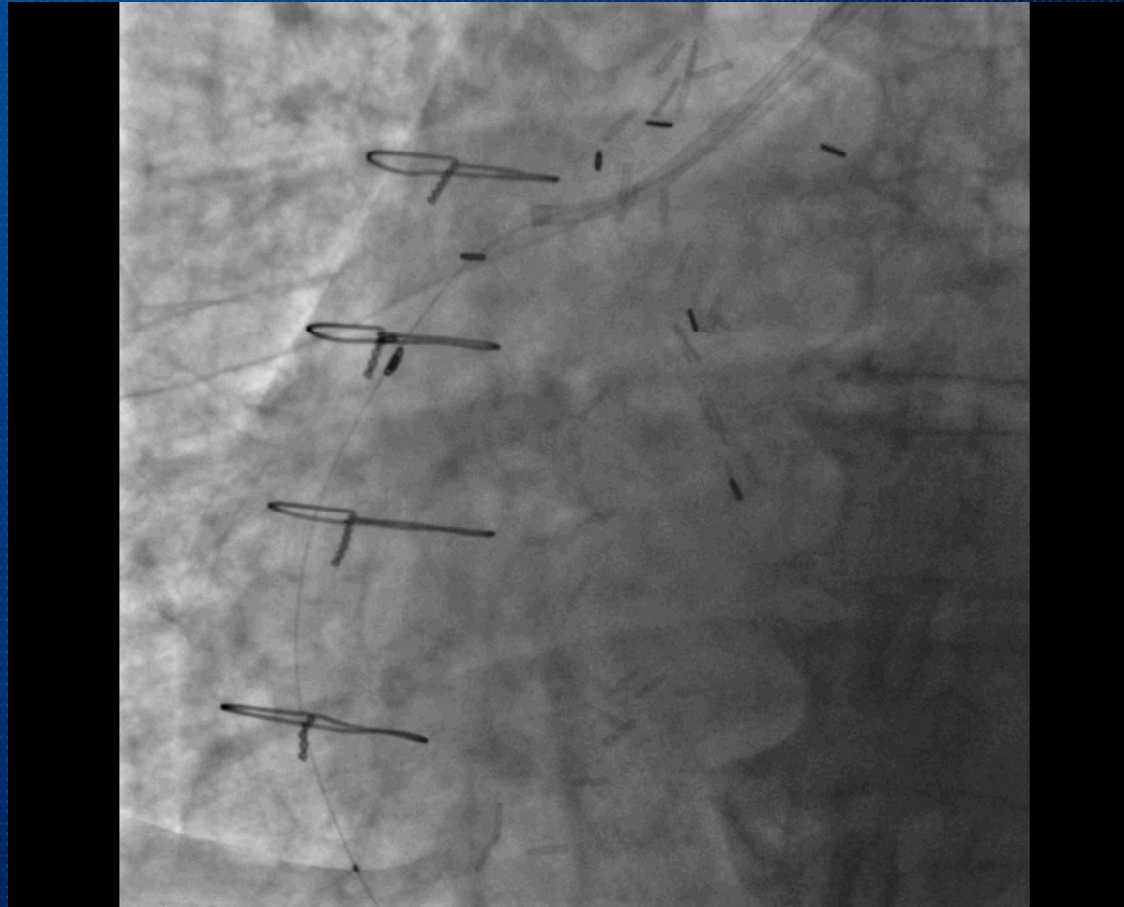
7F JR4 guiding





# Thrombectomy with Export asp. catheter

6F export aspiration catheter : 2 times

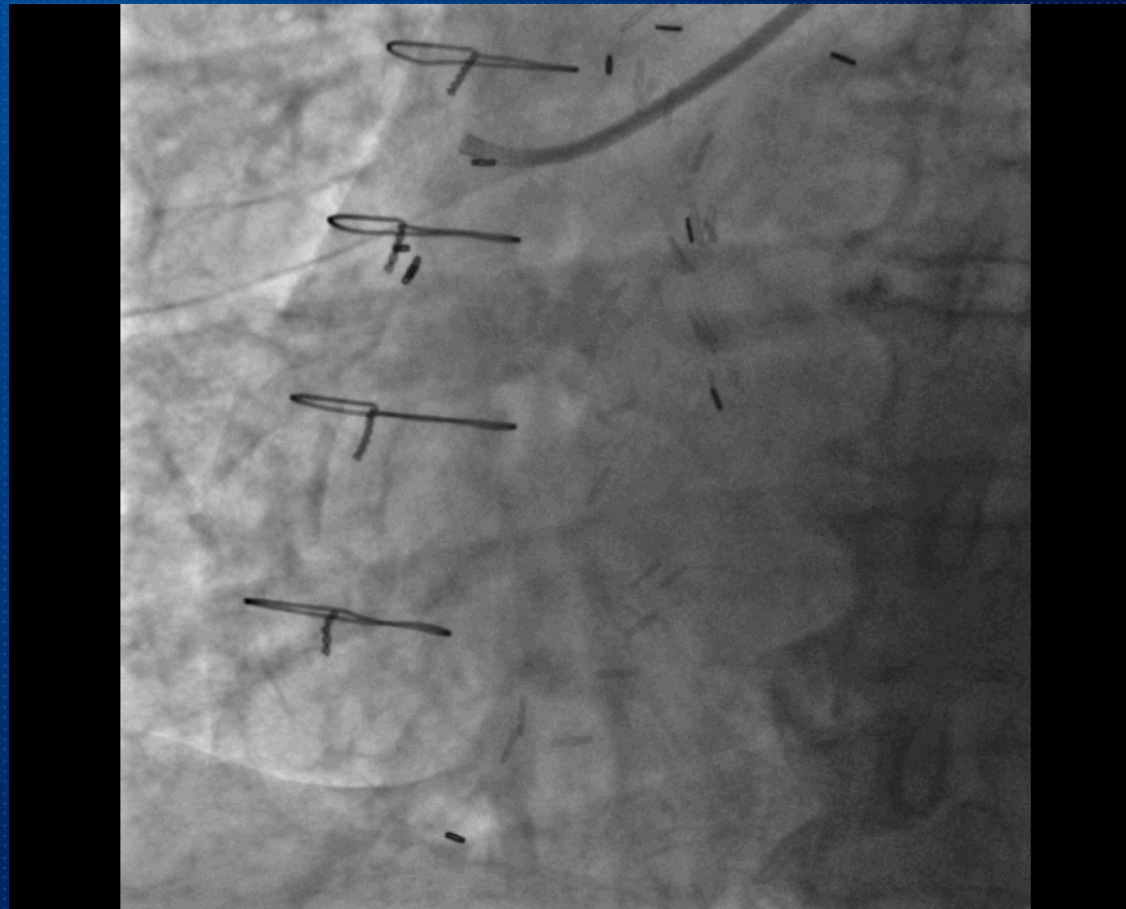


ID: 0.054 inch  
(1.3716 mm)



# After Export asp. catheter

---





# Thrombectomy with Heart-rail guiding catheter

5F Heart-rail guiding catheter: 2 times

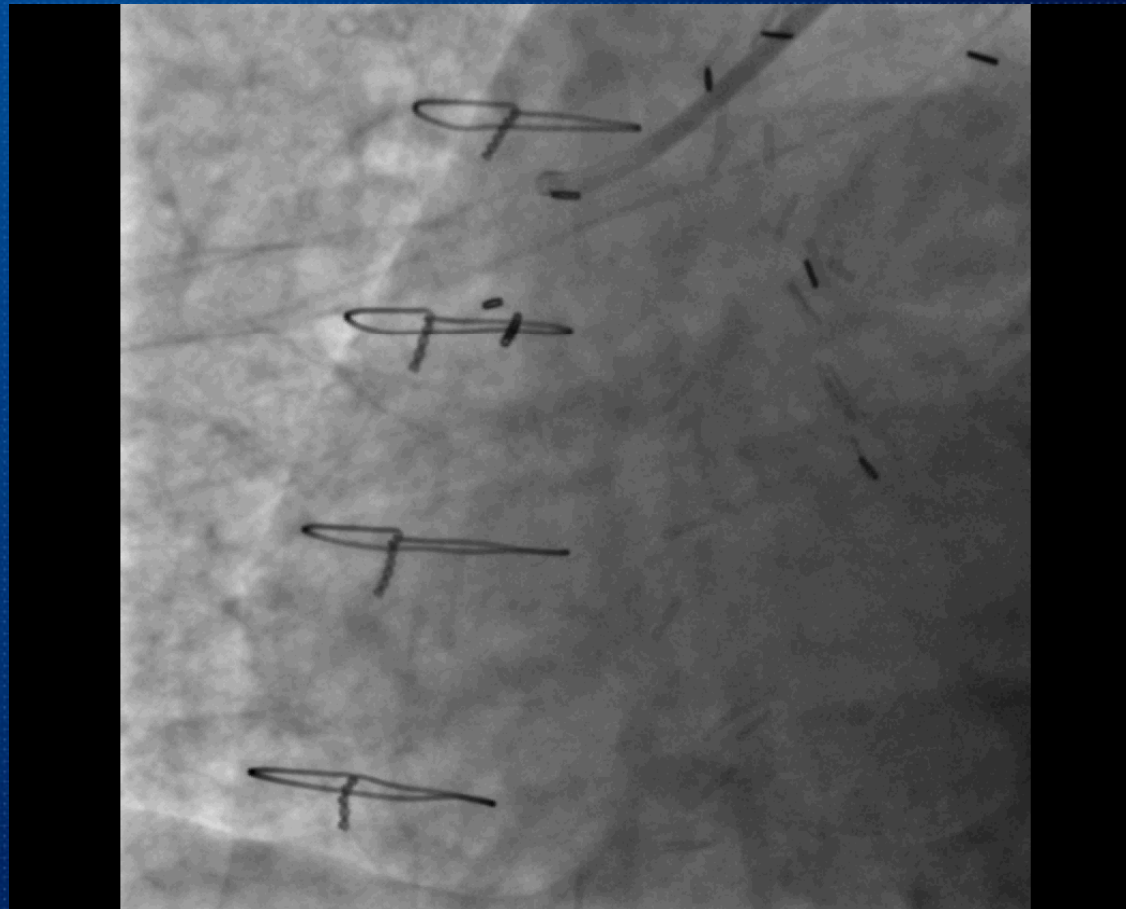


**ID: 0.059 inch  
(1.4986 mm)**



# After Heart-rail guiding catheter

---





# Aspirated thrombi

from Export asp. cath

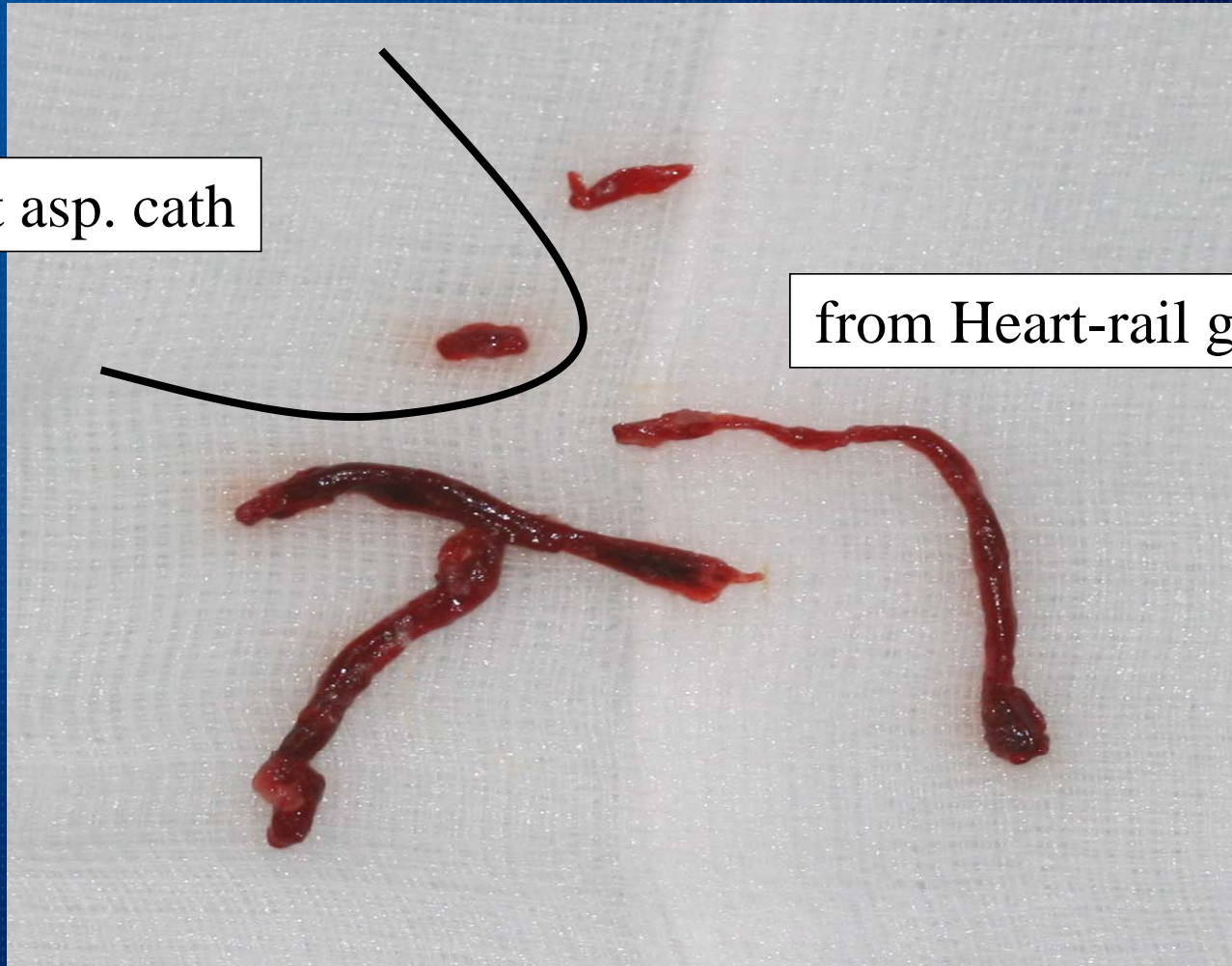


ID: 0.054 inch  
(1.3716 mm)

from Heart-rail guiding catheter

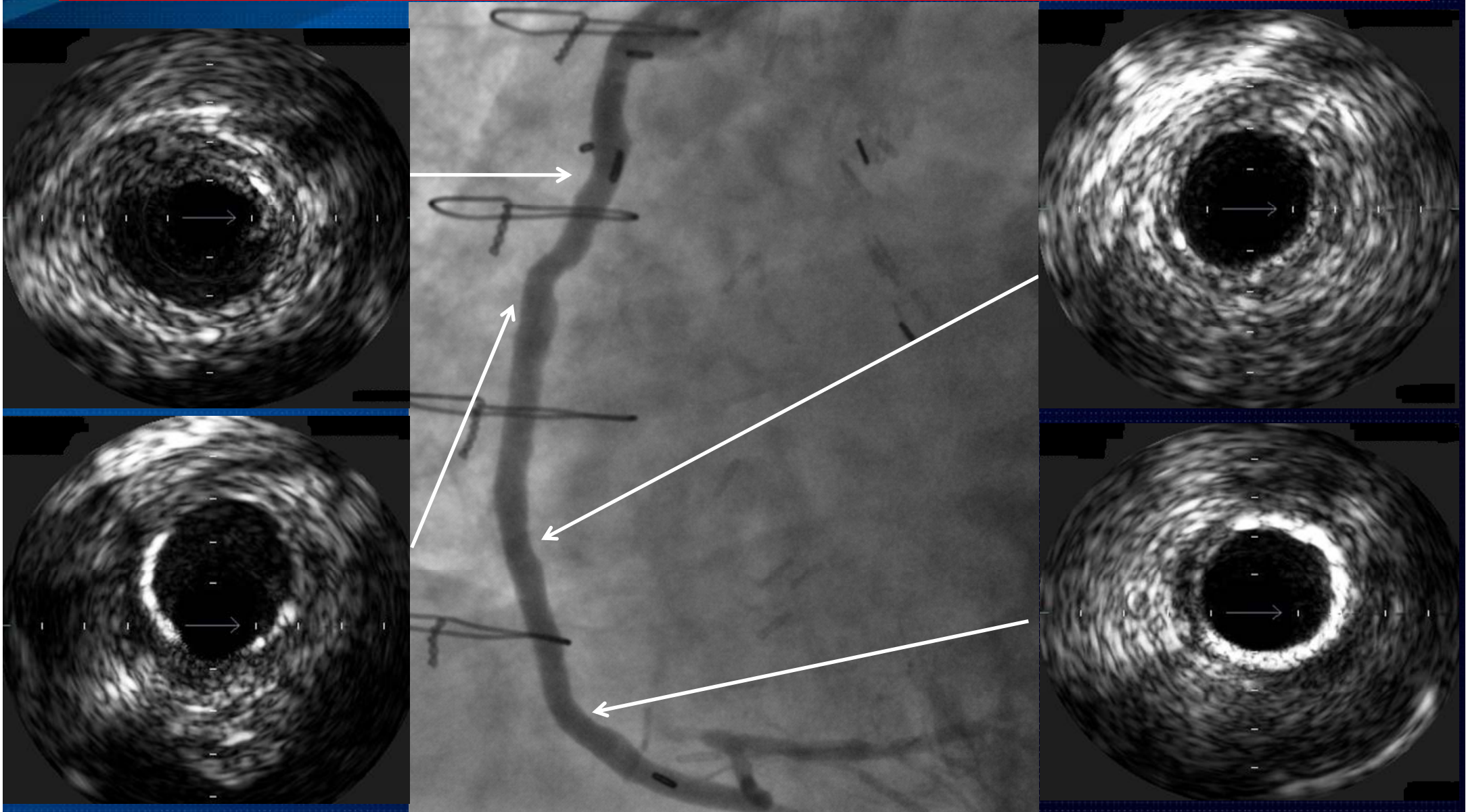


ID: 0.059 inch  
(1.4986 mm)





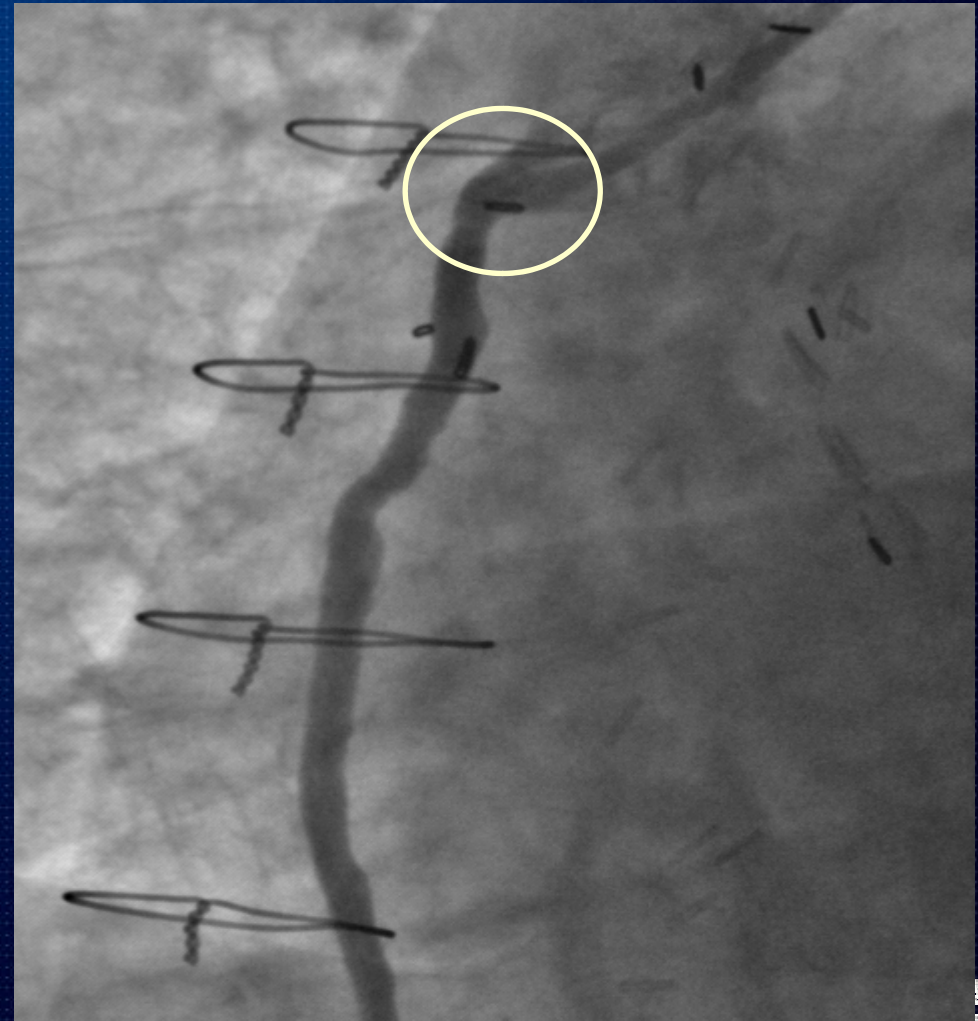
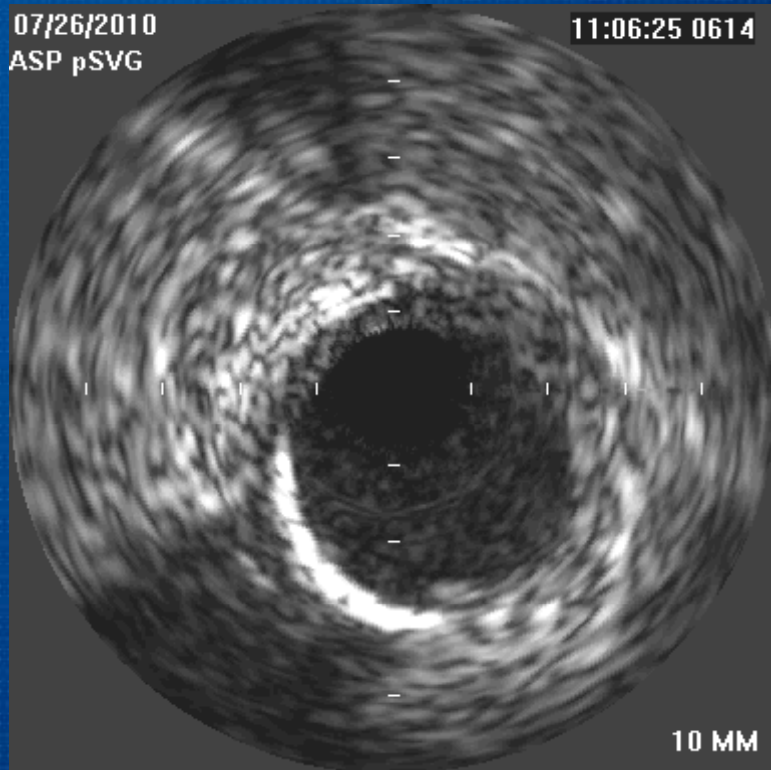
# IVUS after thrombectomy





# IVUS

calcified plaque with thrombi at ostium





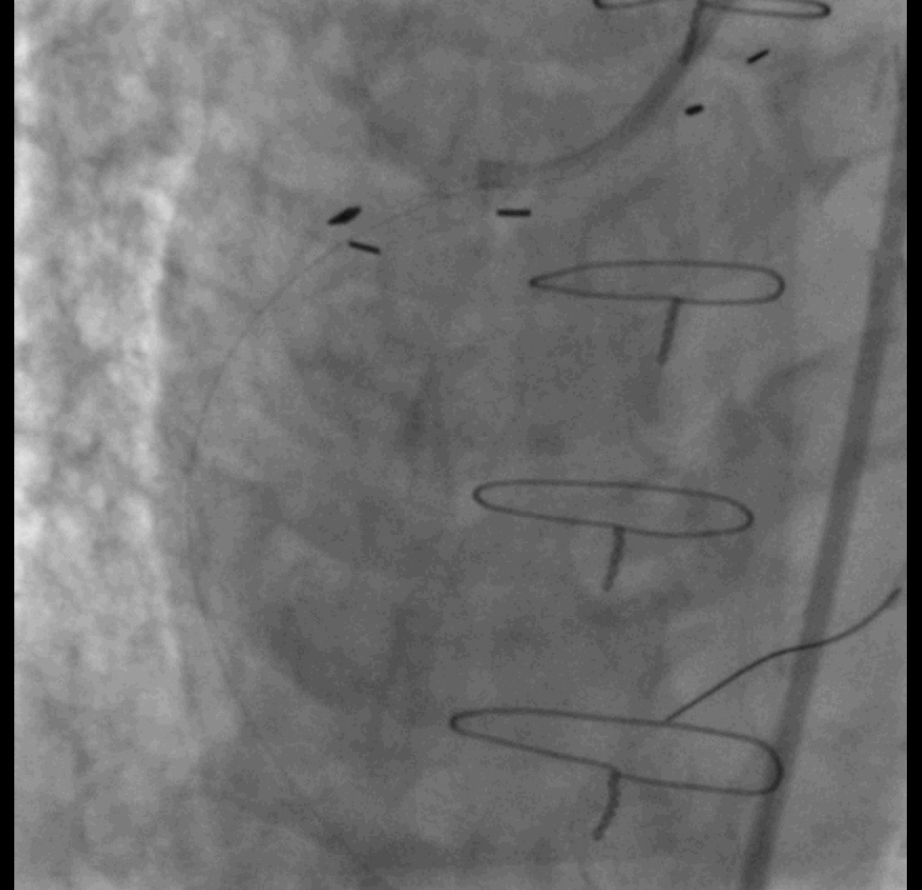
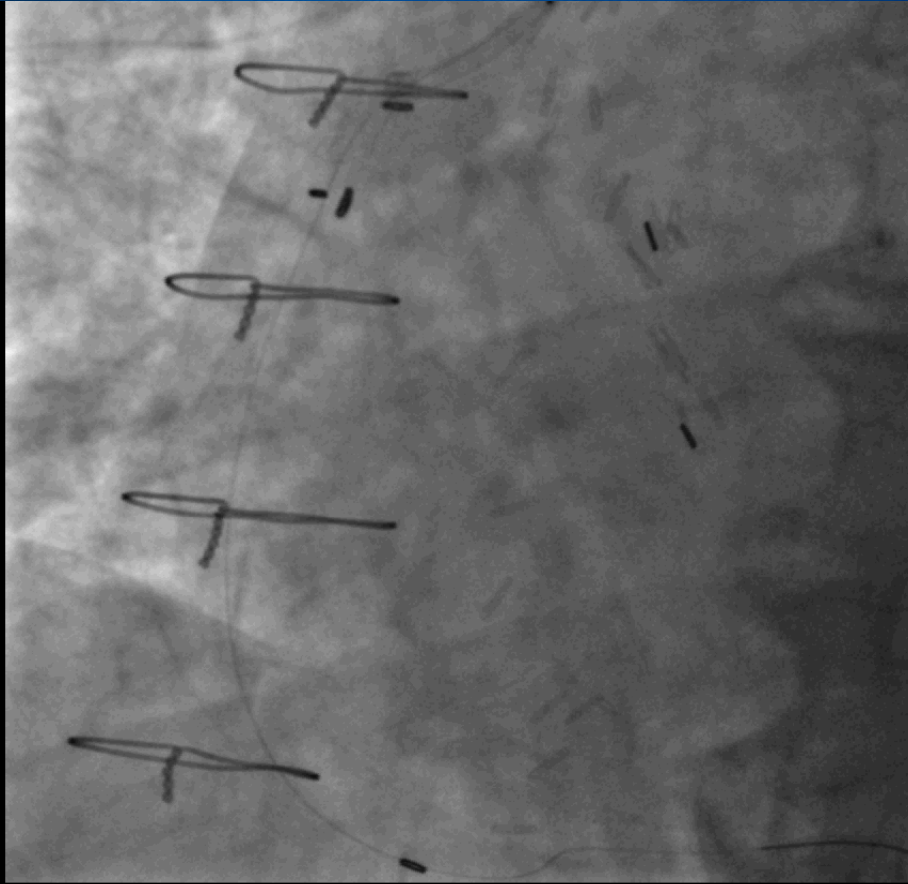
# Stent PCI

Xience 4.0 x 15



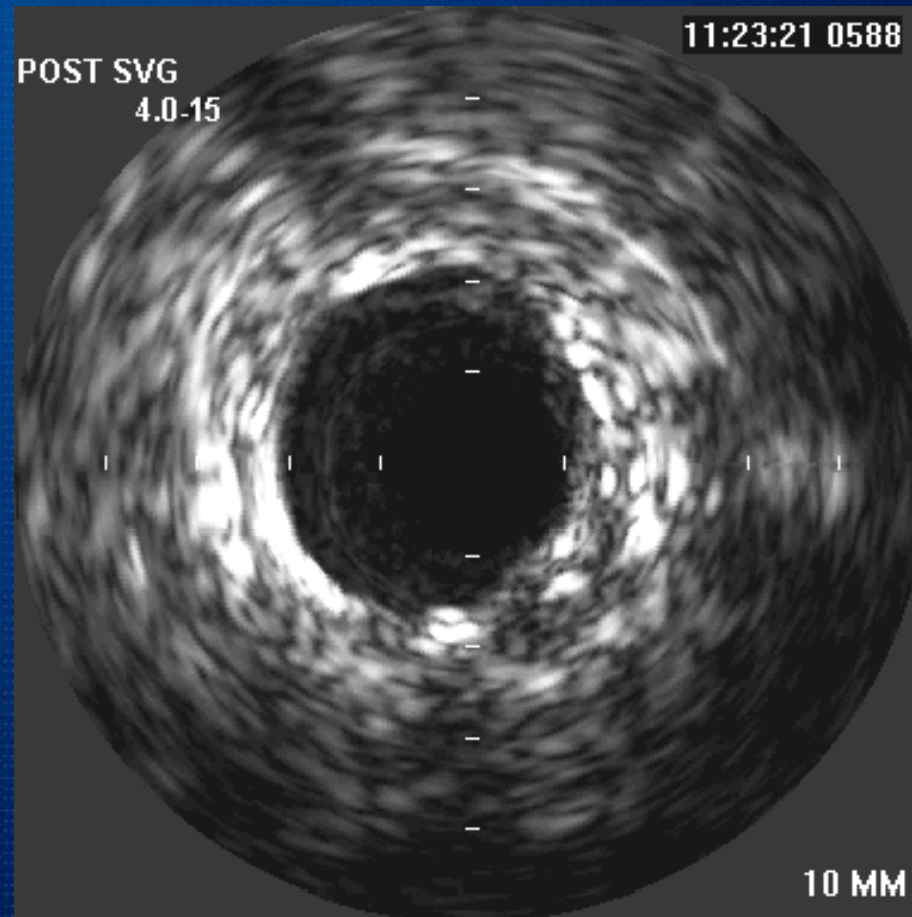


# Final angiogram





# Final IVUS





# Summary

---

- 68/F, Hypertension, DM, s/p CABG
- NSTEMI & total occlusion with thrombi in SVG
- Successful thrombosuction with Heart-rail guiding catheter
- Successful IVUS-guided stent PCI at ostium of SVG



# Message from this case

---

- Aggressive thrombectomy

➔ Minimize using stent

- Using IVUS

➔ Find out culprit lesion &  
accurate stent implantation