

# Severely calcified CTO in an octogenarian woman

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# Potential conflicts of interest

**Speaker's name: Claudio Cigalini**

**I have the following** potential conflicts of interest to report:

- Research contracts
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

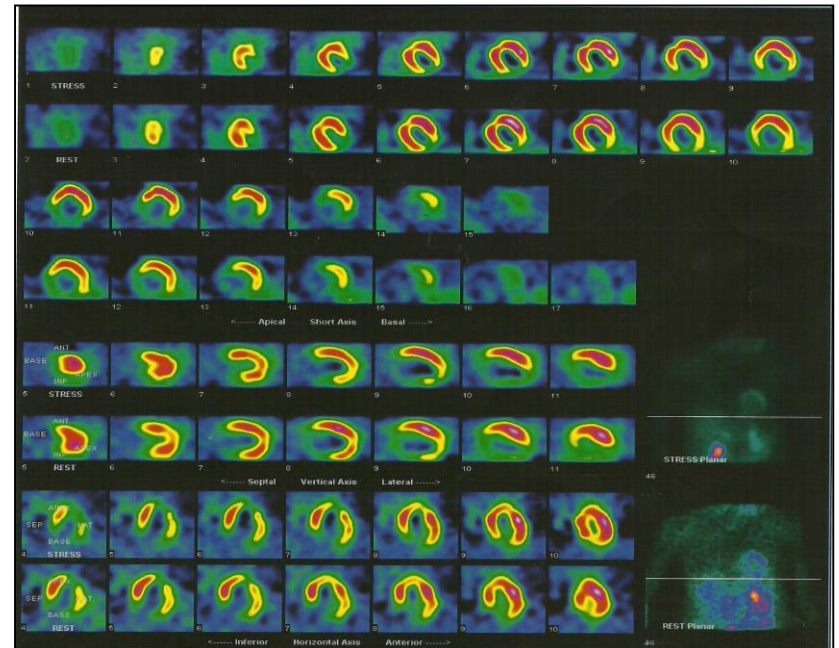
**I do not have any potential conflict of interest**

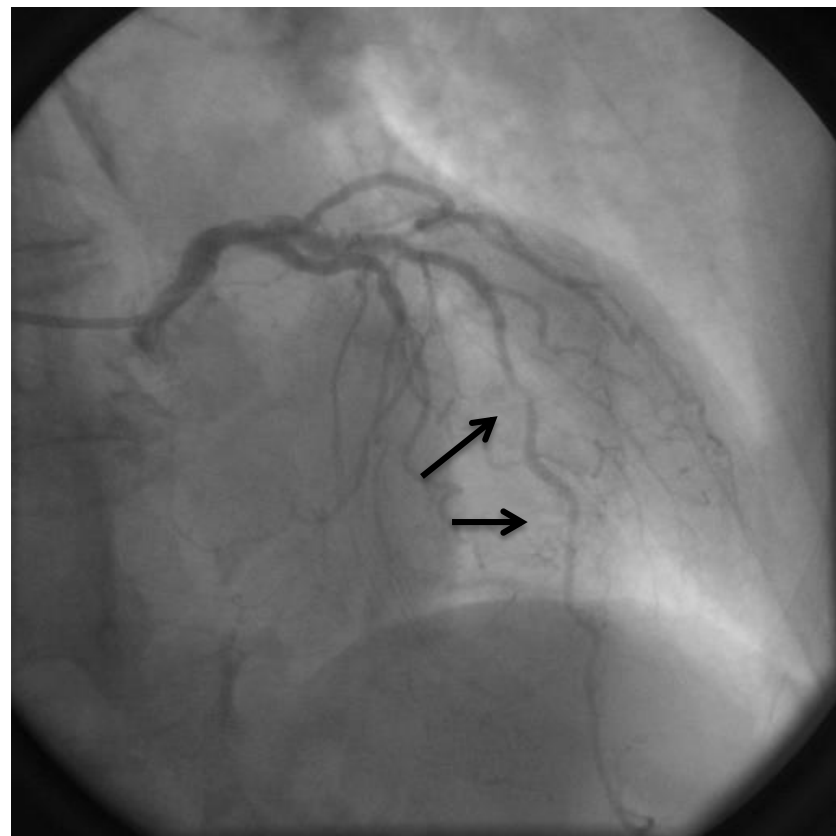
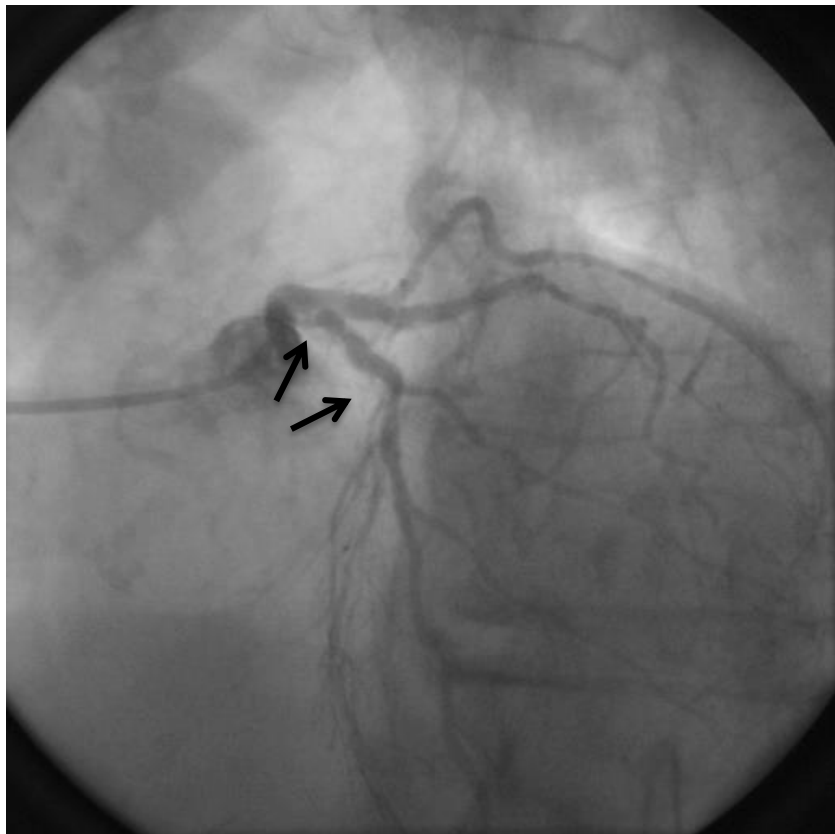


# Clinical History

- 85 y.o., female, NYHA FC III Angina, approximately 6 months duration
- Optimal Medical Treatment
- Hypertension and dyslipidemia
- Moderate Renal impairment (CC: 55 ml/min)
- Euroscore II: 6.46%
- SYNTAX Score: 27

Necrosis of moderate extension with mild to moderate ischemia homozonal in infero-latero-dorsal territory





**Severe and difuse disease of LAD.  
EF: 38%**

**RCA Angiography**

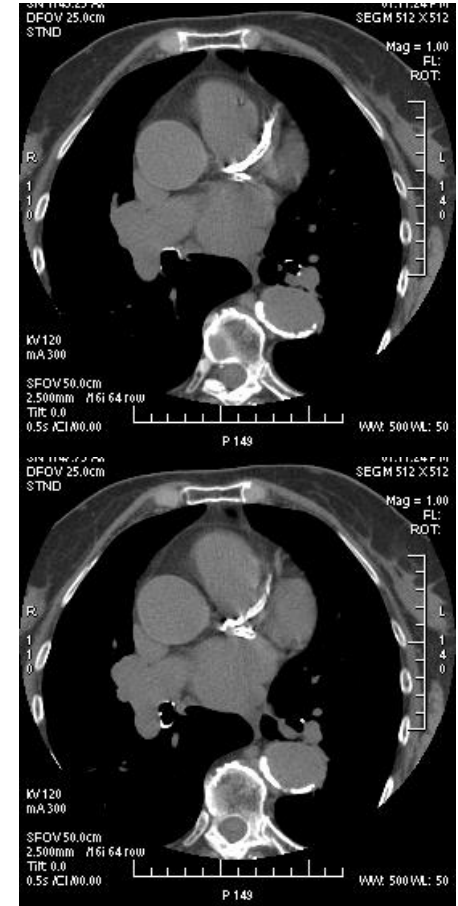


**Late-Time Angiography**



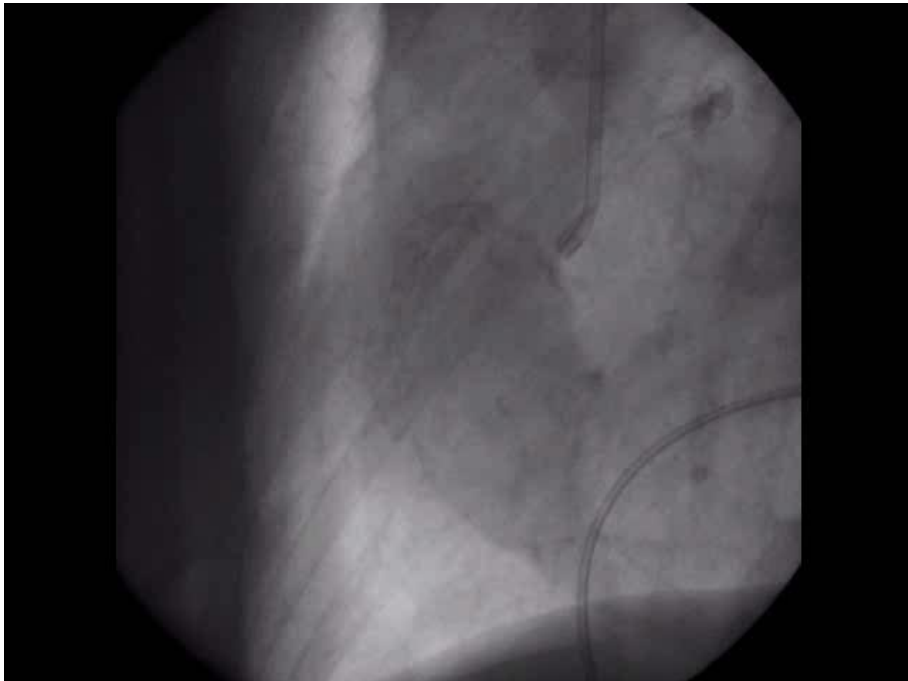
# Calcium Score

| CORONARY                          | Volume130   | AJ-130      |
|-----------------------------------|-------------|-------------|
| Left Main Artery (LMA)            | 287         | 384         |
| Left Anterior Descending (LAD)    | 1,173       | 1,525       |
| Left Circumflex (LCX)             | 930         | 1,233       |
| Right Coronary Artery (RCA)       | 2,690       | 3,556       |
| Posterior Descending Artery (PDA) | 0           | 0           |
| A                                 | 0           | 0           |
| B                                 | 0           | 0           |
| C                                 | 0           | 0           |
| <b>Total</b>                      | <b>5080</b> | <b>6698</b> |

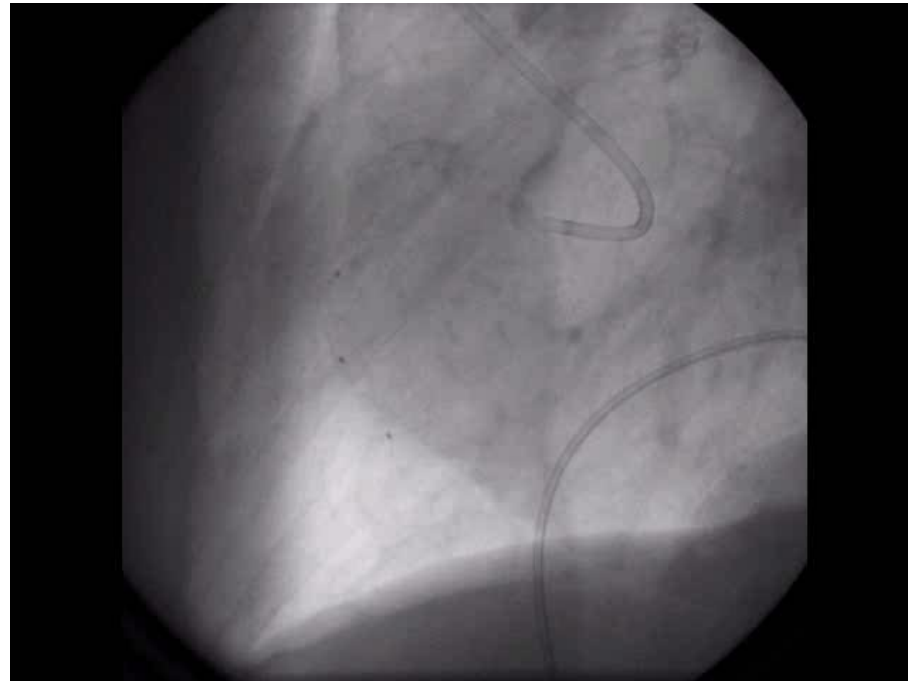


# CONSIDERATIONS

- ✓ **Severe calcification is one of the most important negative factors affecting success when treating chronic total occlusions**
- ✓ **It often makes difficult crossing the lesion with balloons or stents**
- ✓ **Heavily calcification can also lead to poor expansion or incomplete apposition of the stents**
- ✓ **Frequently, trying to save time and money, we choose to perform balloon angioplasty**
- ✓ **Many times we switch to Rotablator after spending much time, contrast media, radiation and money**
- ✓ **An initial strategy of vessel preparation using Rotational Atherectomy would save time and be cost-effective.**



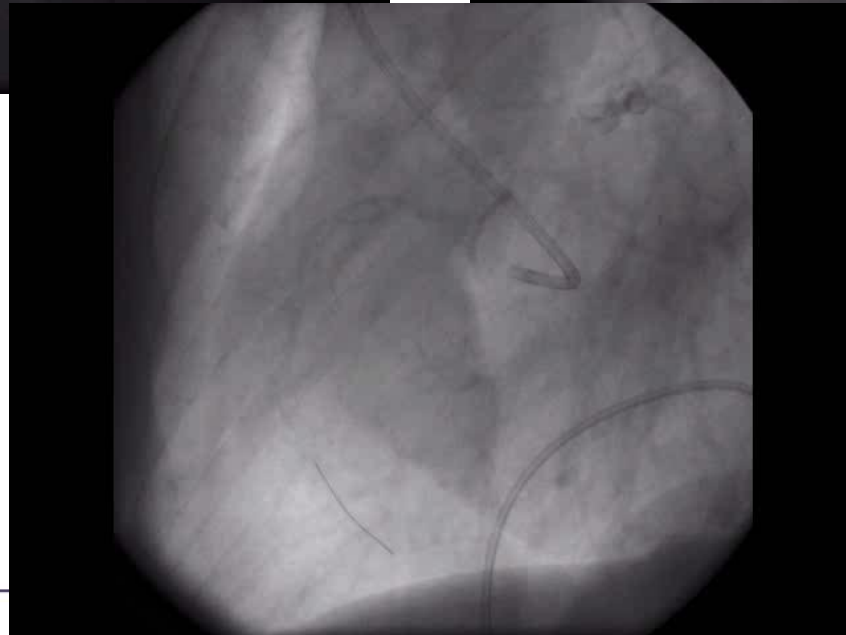
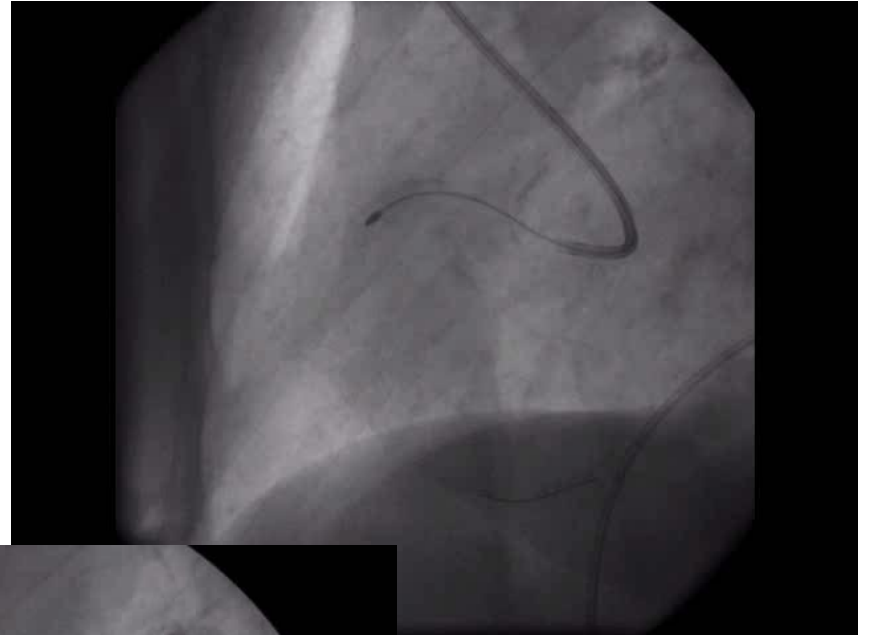
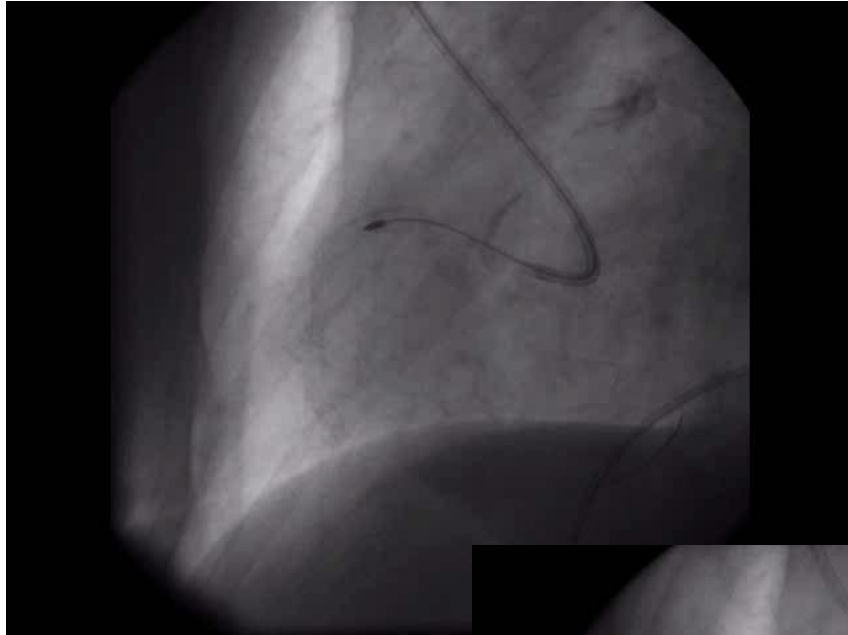
**GUIDING CATHETER: JR 4.0 Terumo Heartrail II 7F**



**OTW technique**  
**GUIDE WIRE: Asahi Miracle 3 (0,14" – 3.9 gm)**  
**MC Quick Cross (SPECTRANETICS) 0,014" X 135 cm**



**ROTA WIRE: Rotawire Extra Support**  
**ROTABLATOR BURR: 1.25 - 1.5 mm**  
**Rotational Speed 160.00 rpm**

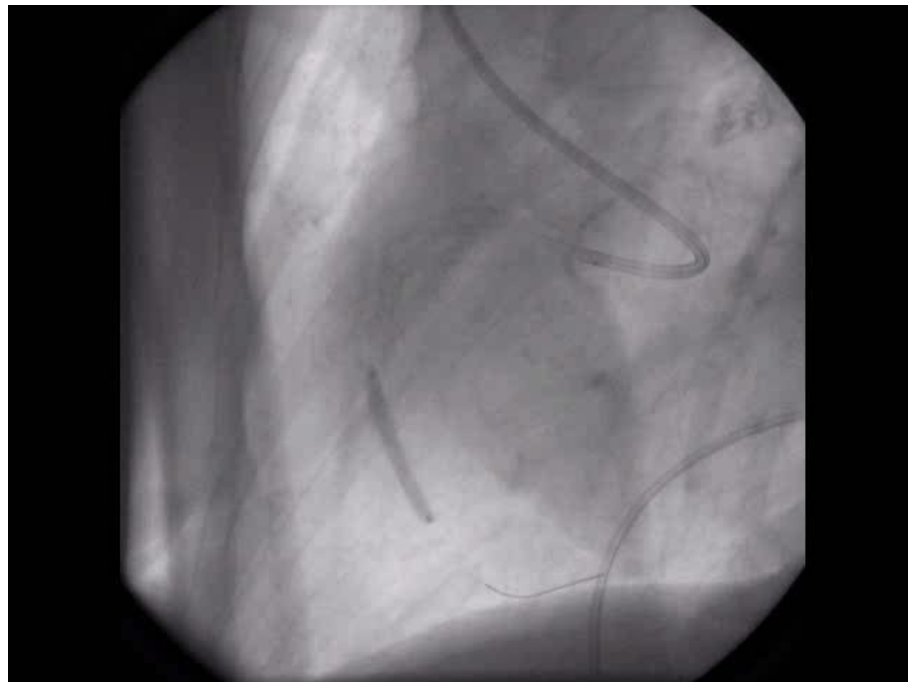
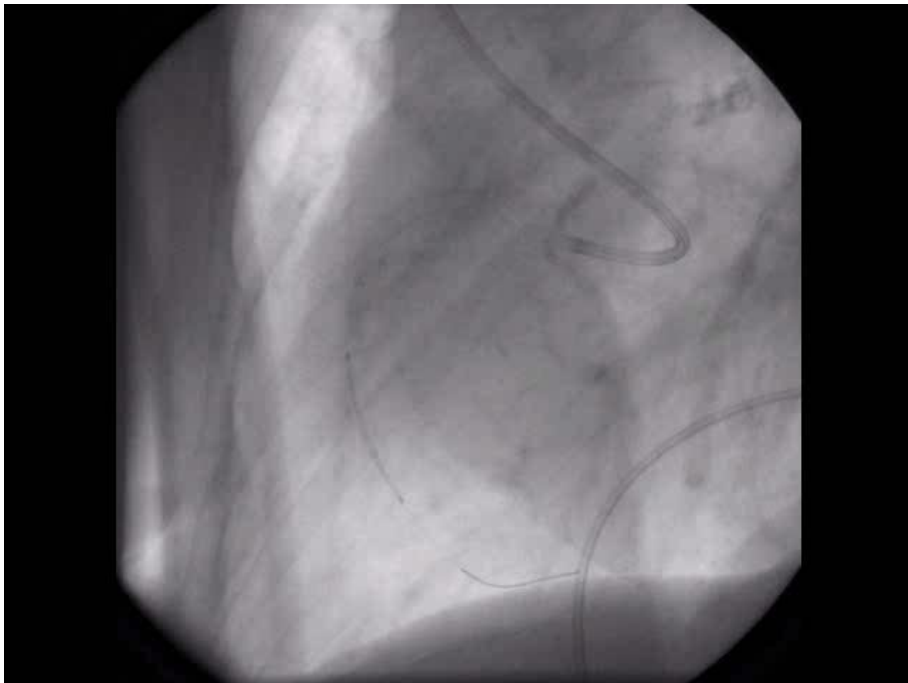


**Guide Wire Exchange: 0.014" Choice Extra Support Wire**

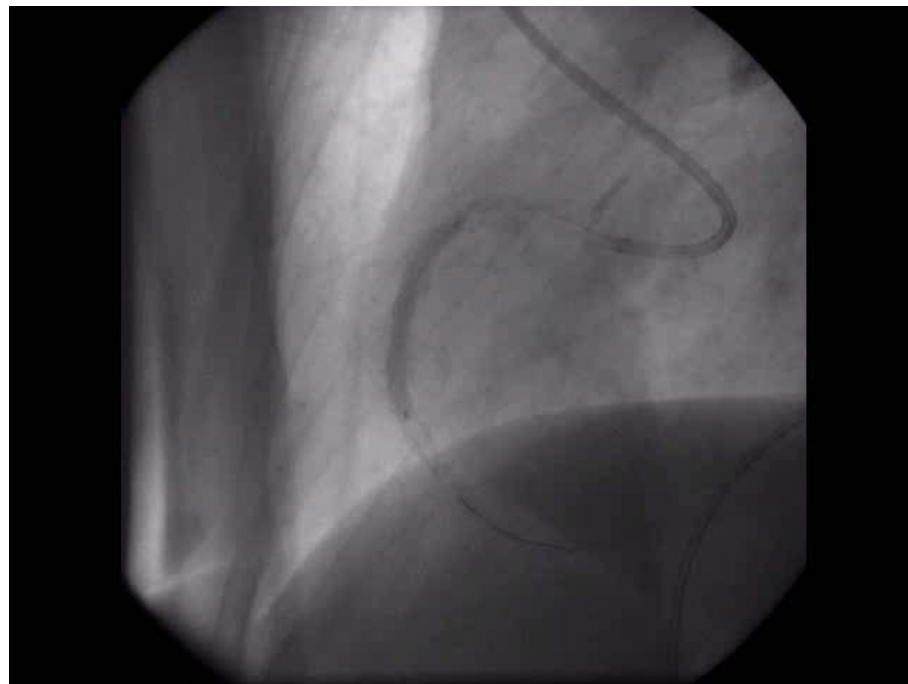
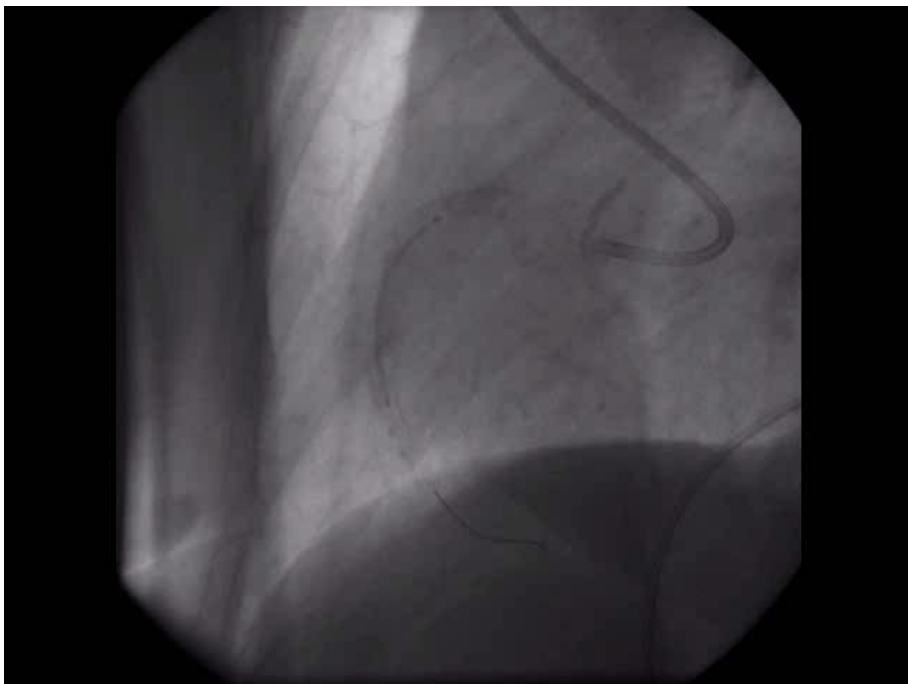
**PREDILATATION: non-compliant balloon Quantum Maverick 2.5x30 mm, at 15 atm.**



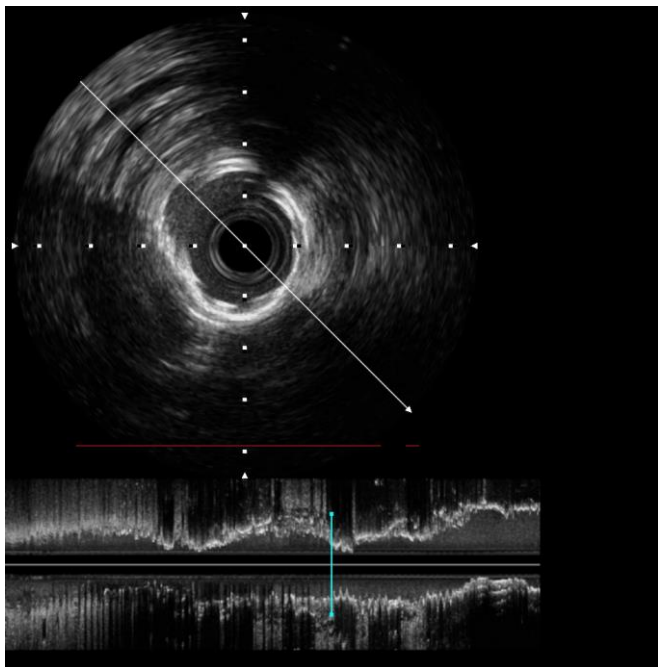
**PES Texus: 2.75 x 24 mm – 14 atm.**



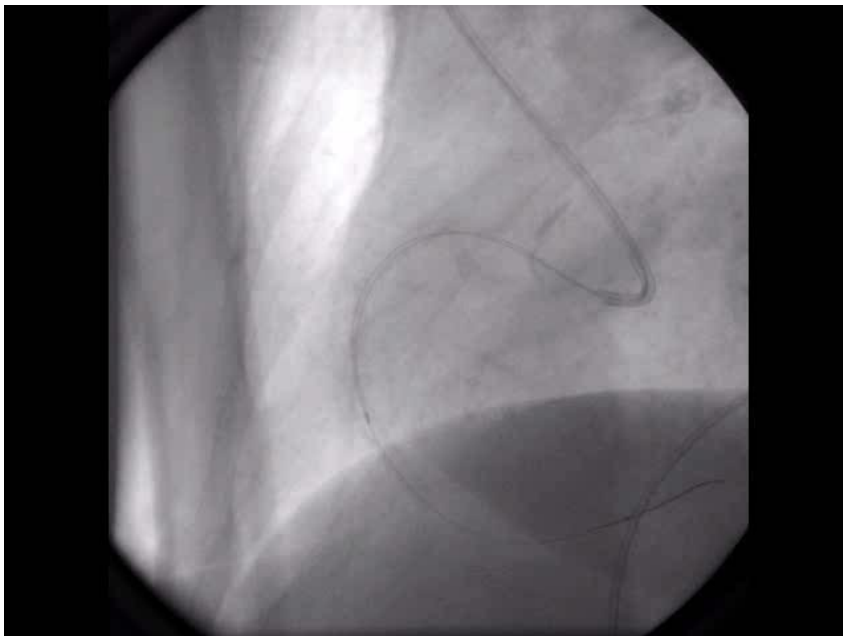
**PES Taxus: 3.0 x 32 mm – 16 atm.**



## IVUS guided postdilatation



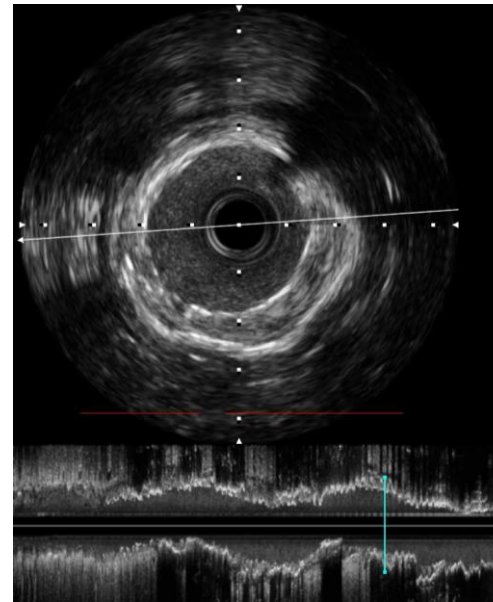
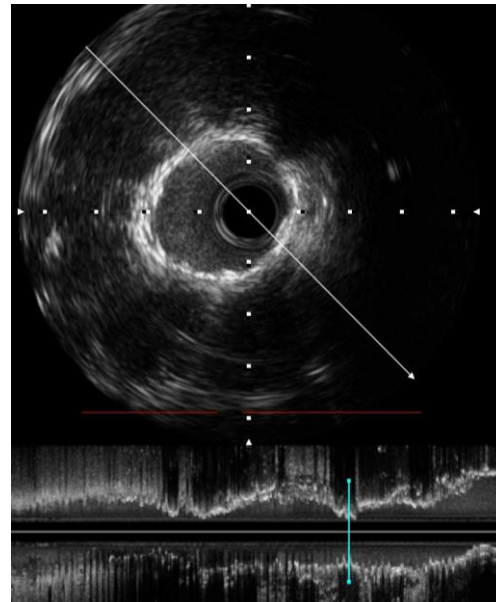
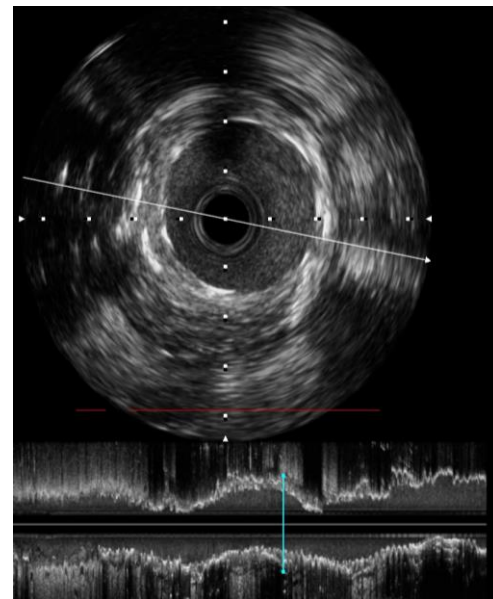
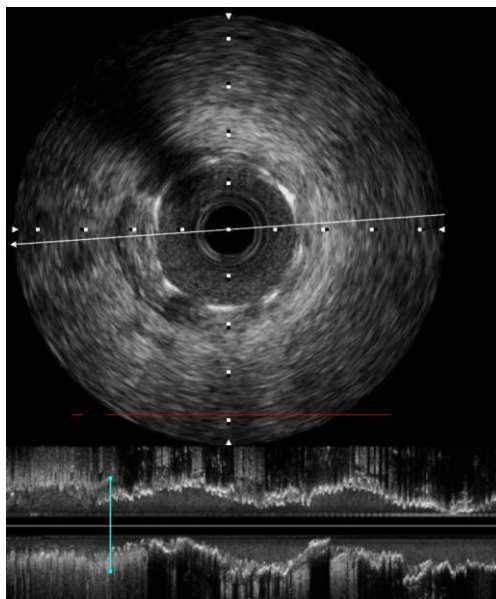
**Non-compliant Balloon 3.0 x 30 mm.  
24 atm,**



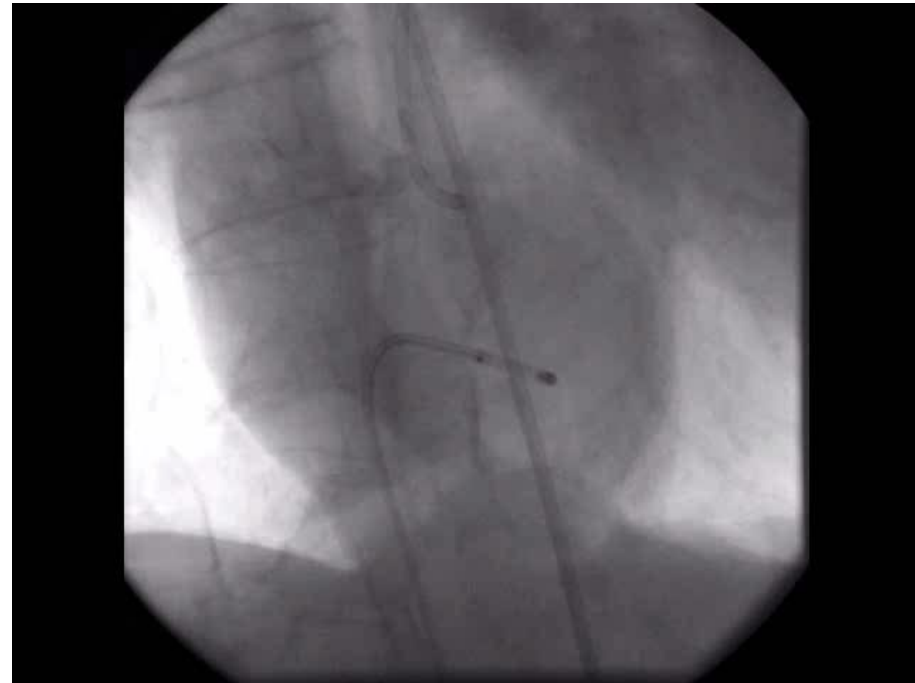
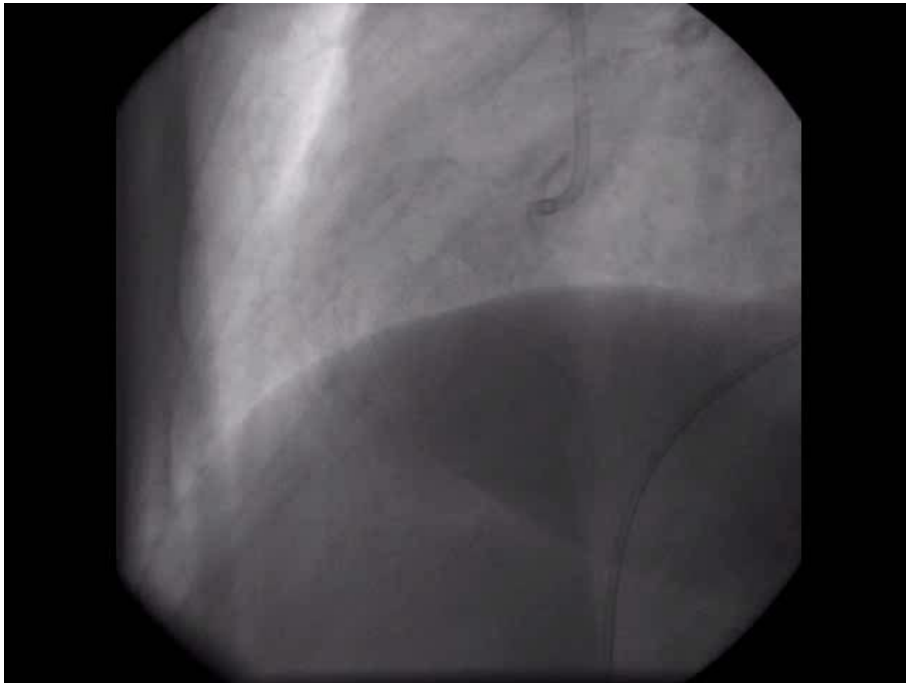
# FINAL IVUS



**MLA: 5.98 mm<sup>2</sup>**

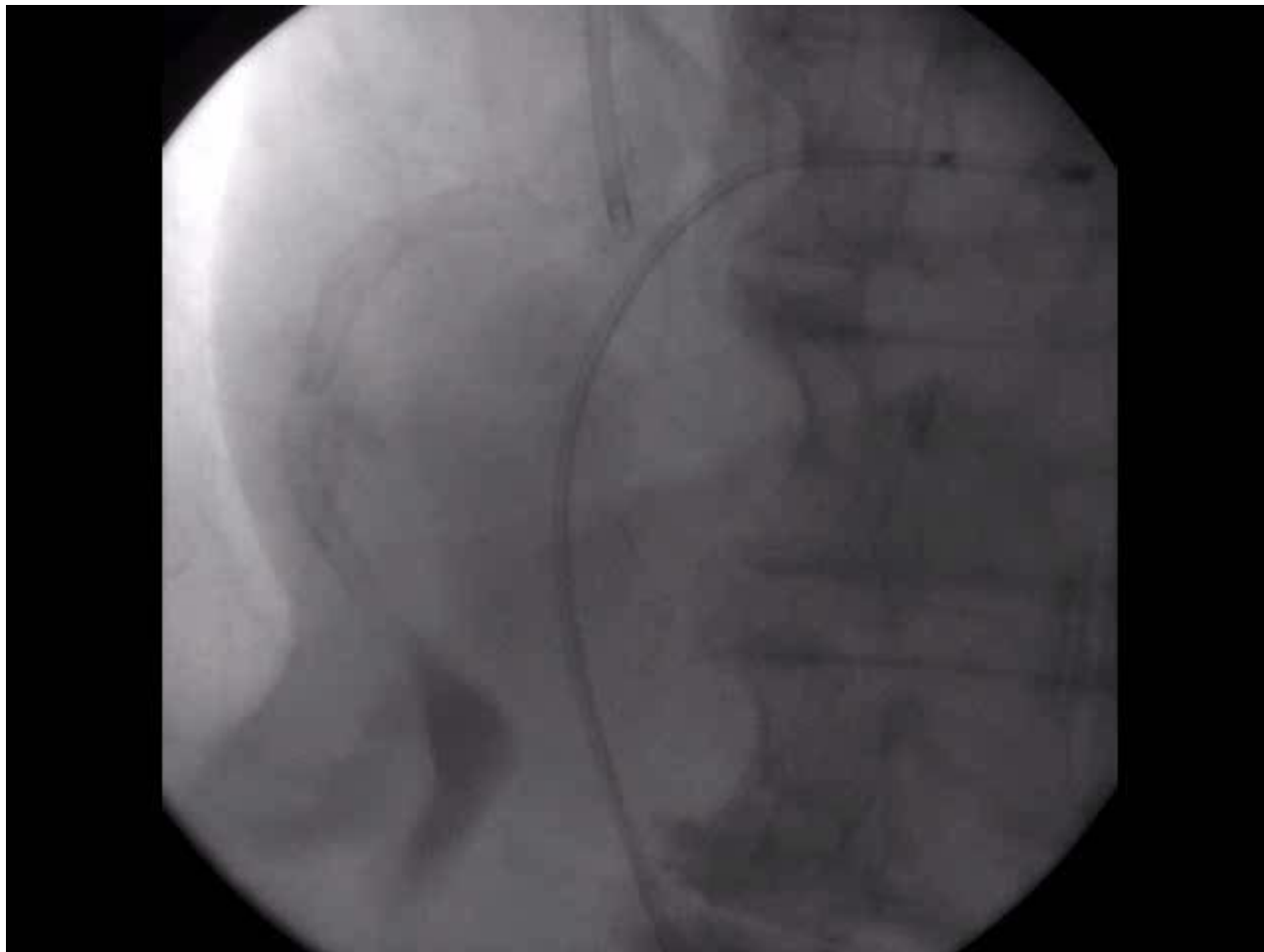


# FINAL ANGIOGRAM



**No CK or Troponin elevation**  
**Total procedure time: 1h 57 min.**  
**Fluoroscopy time: 63 min.**

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**6-month F-U:  
Asymptomatic**

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