

Unusual sub-acute stent thrombosis in 29 yr old Male patient with acute ant MI with cardiogenic shock

Dr. Shams Munwar FRCP

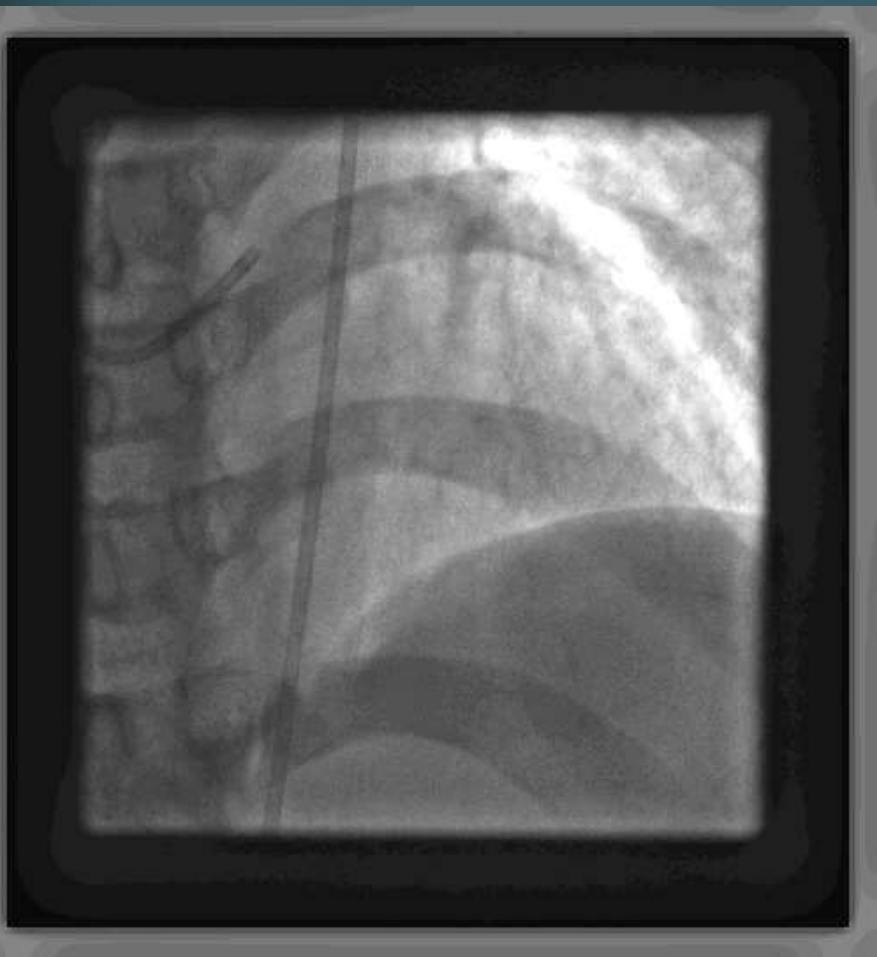
Apollo Hospitals Dhaka

Profile

- H/o- Anterior Wall MI- Jan 2016 treated with STK el sewhere. LVEF 35%
- CAG- in the 1st week of February 2016 in a different hospital showed severe DVD and was advised for CABG
- CAD Risk Factors: Smoking, Dyslipidaemia strong FH +ve for CAD (Father and sister died of MI early 30s)
- Pt accepted for PCI to LAD and RCA at our centre, because of poor quality distal LAD

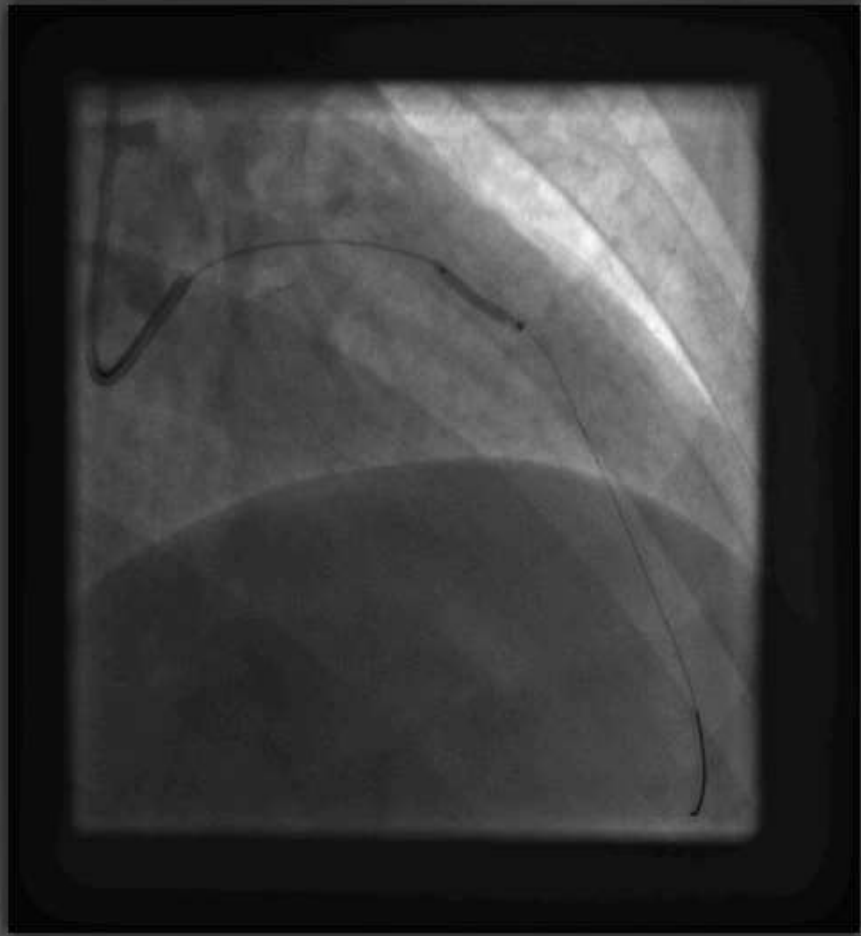
CAG

- Small calibre LAD with lengthy lesion from proximal to distal segment



PTCA

- Ballooning done by 2.0 x 15 mm balloon

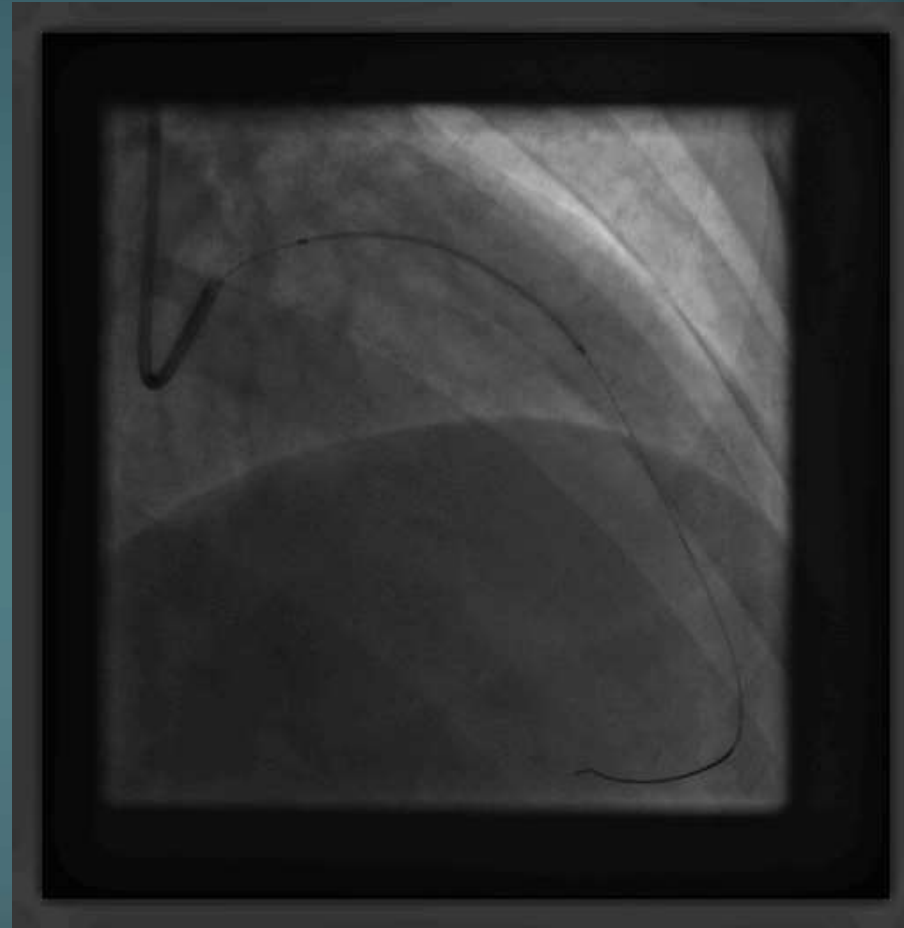
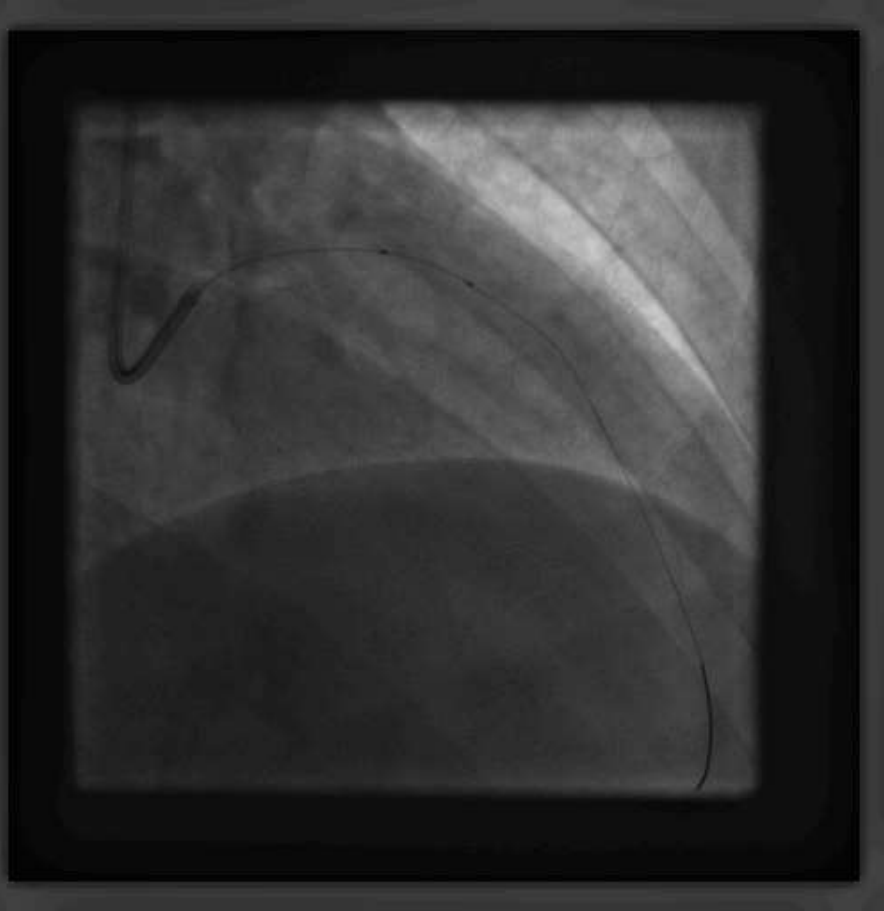


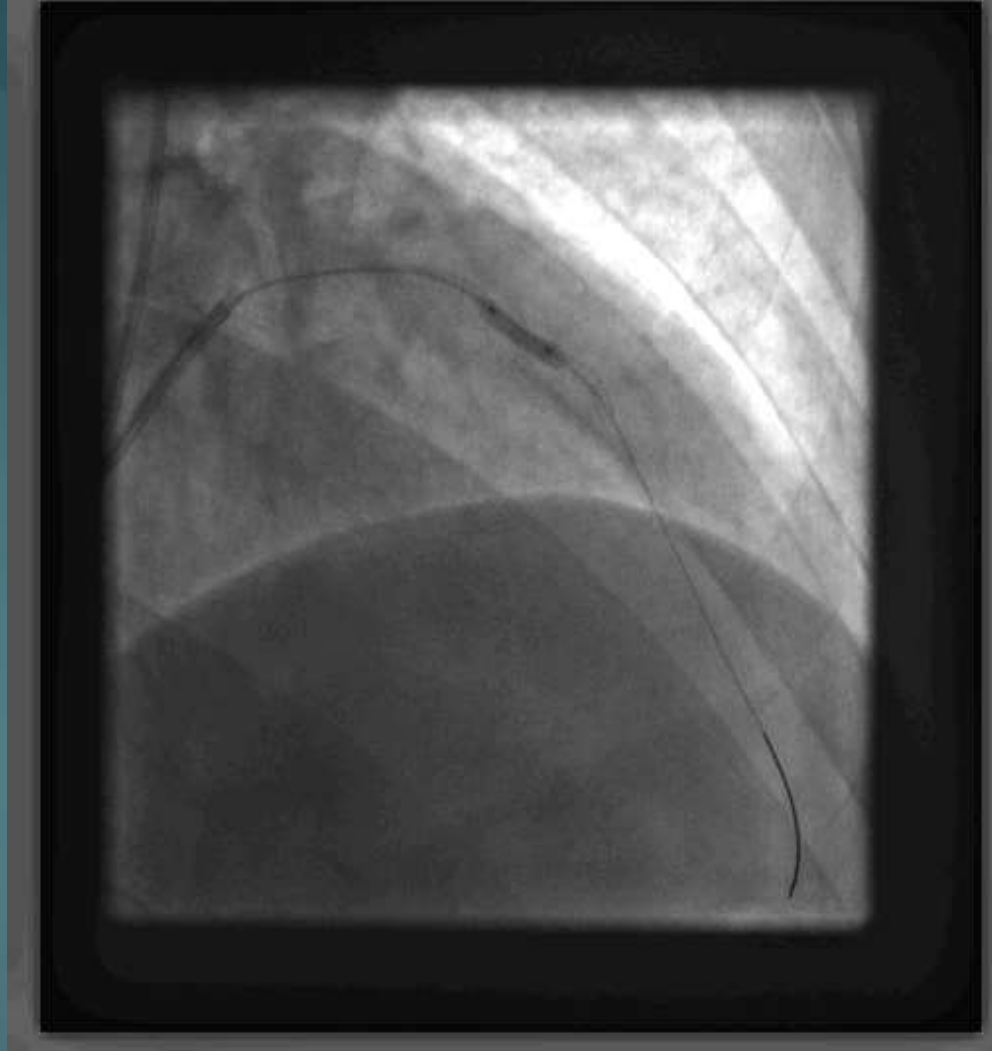
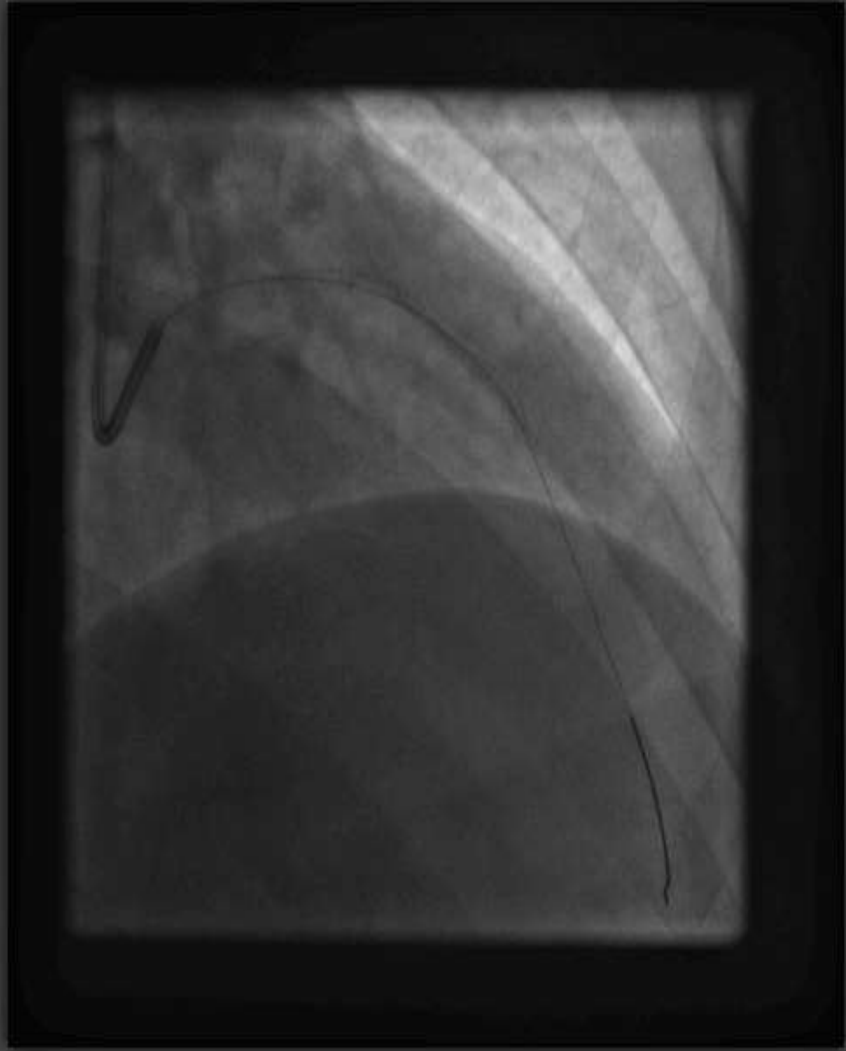
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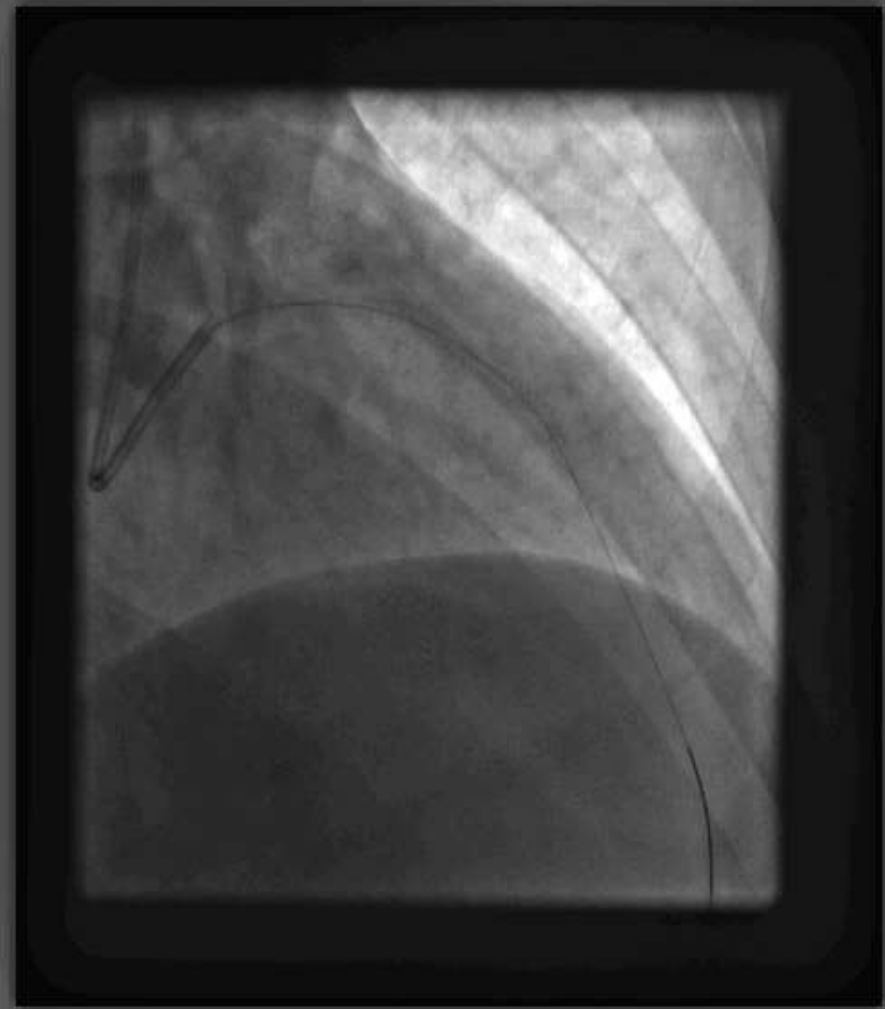
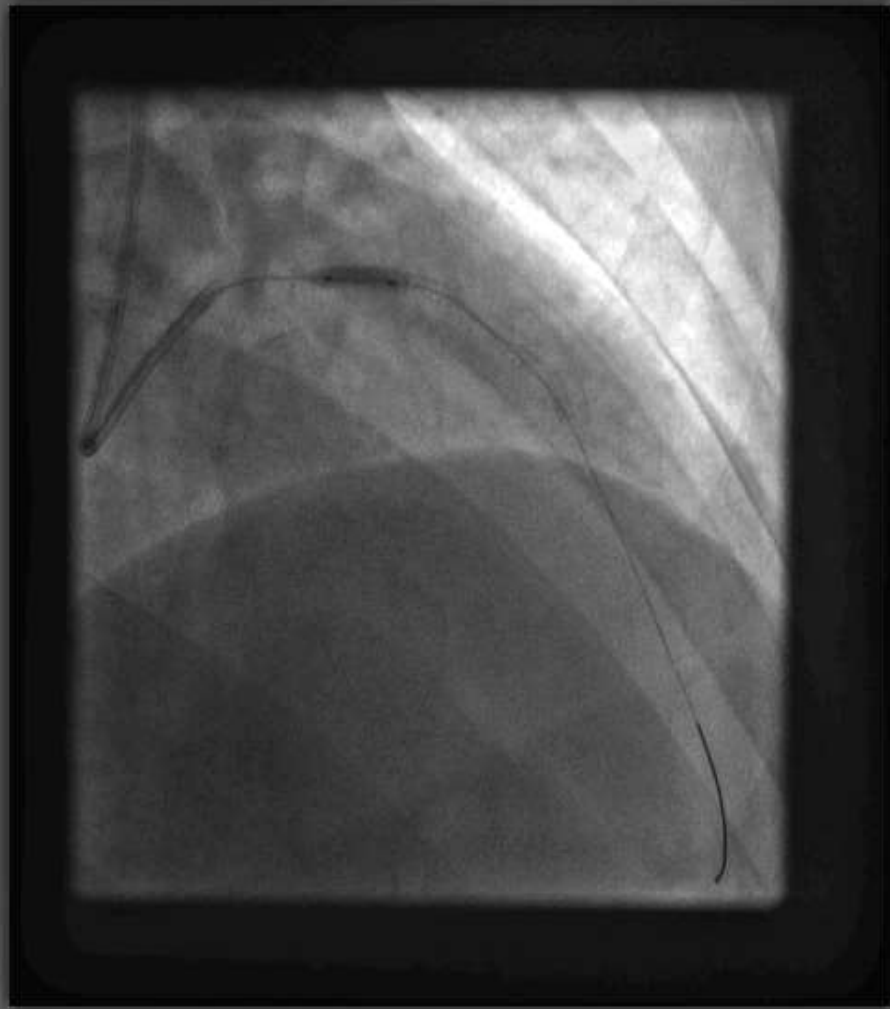
Stent 2.5 x 48mm DES

- Decision taken to stent the proximal –mid LAD only
(Beyond this dLAD is very small in calibre)

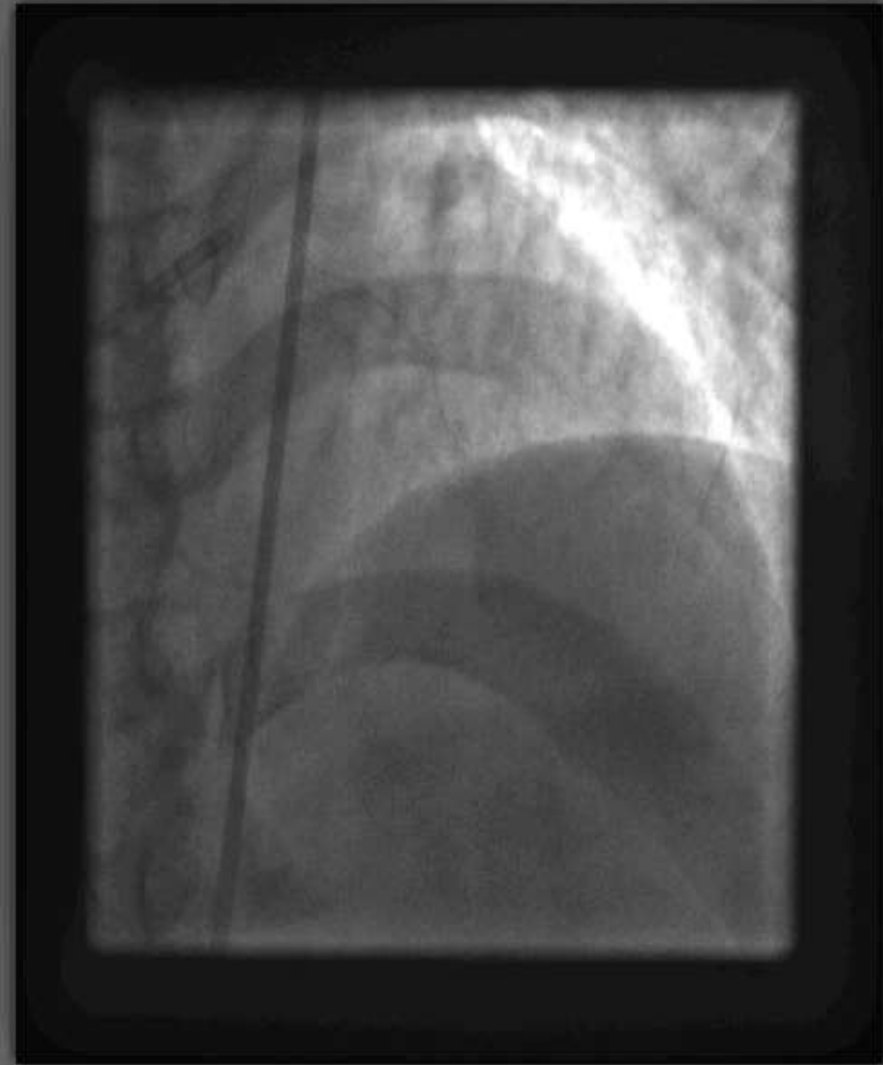
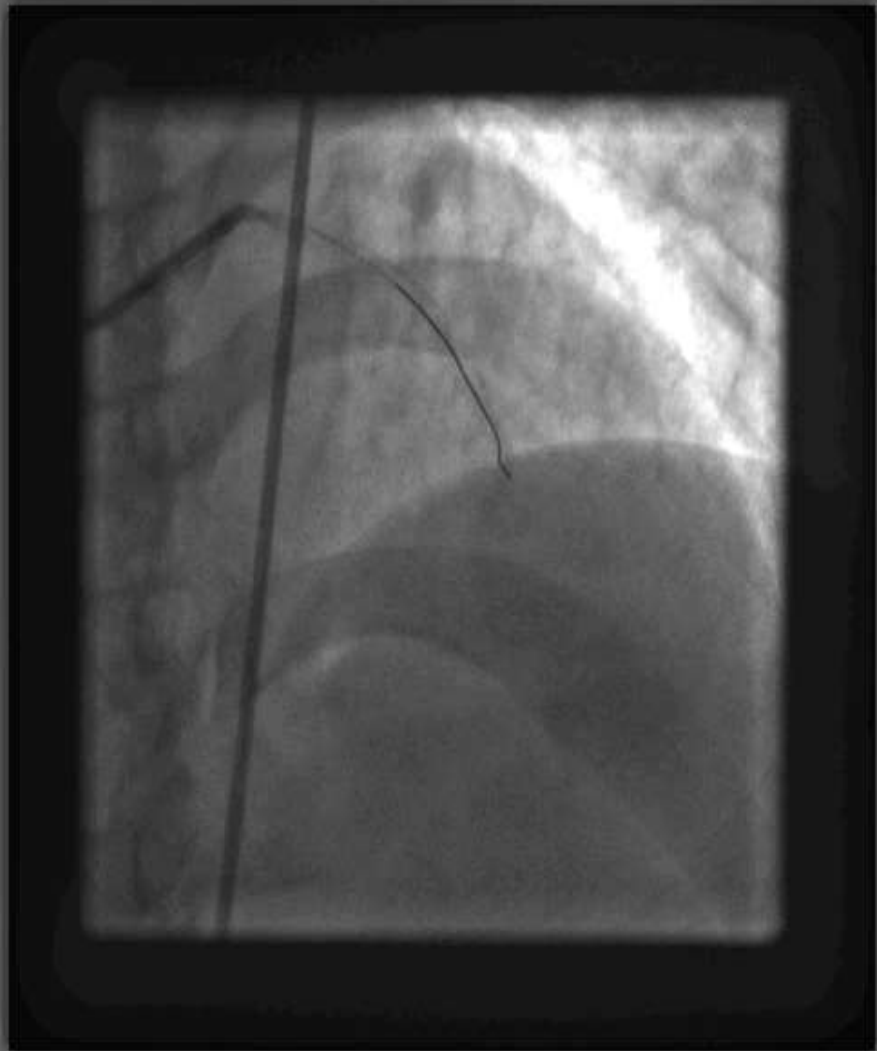




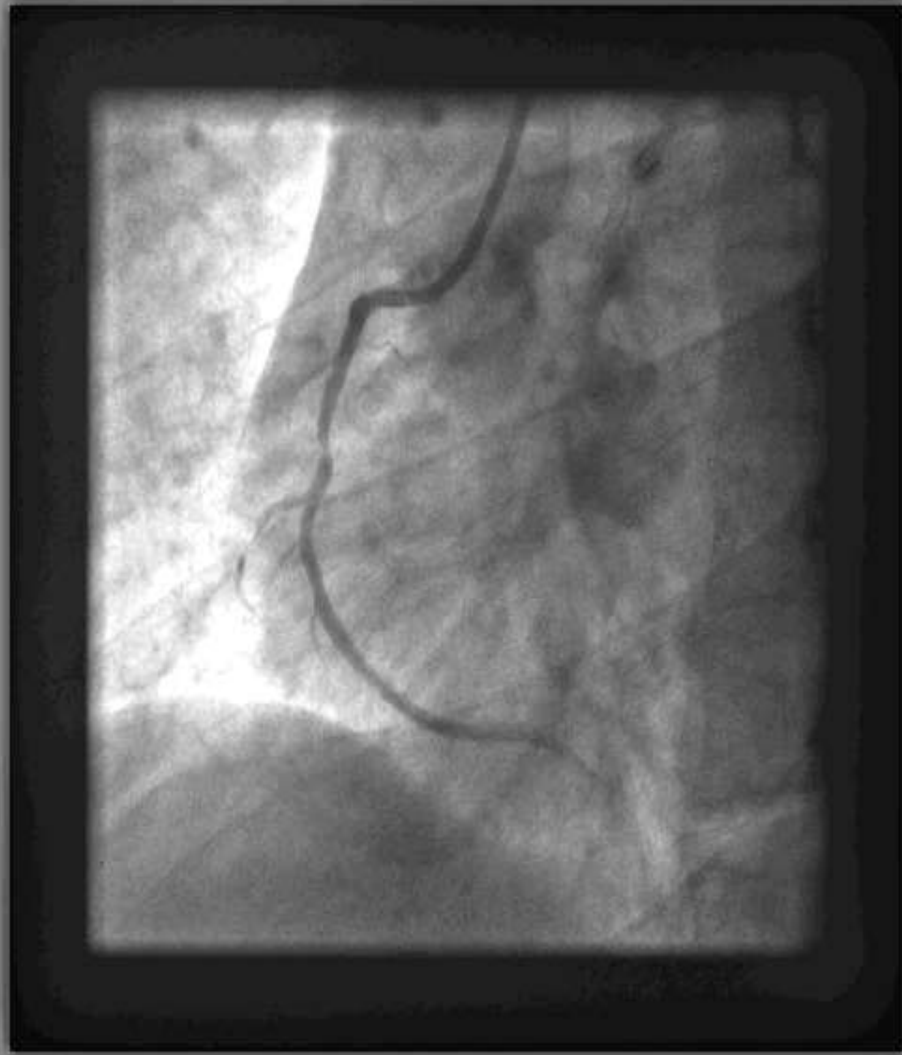
Post-dilatation: 3.0x 10mm Balloon



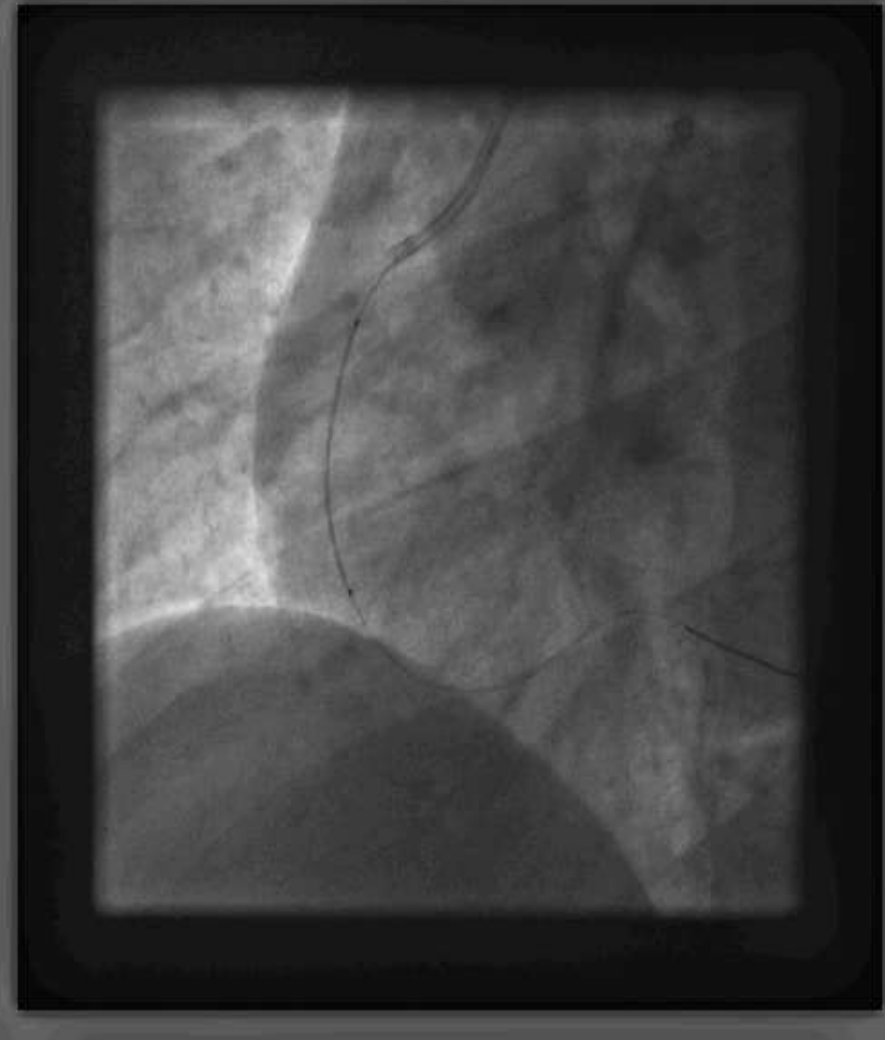
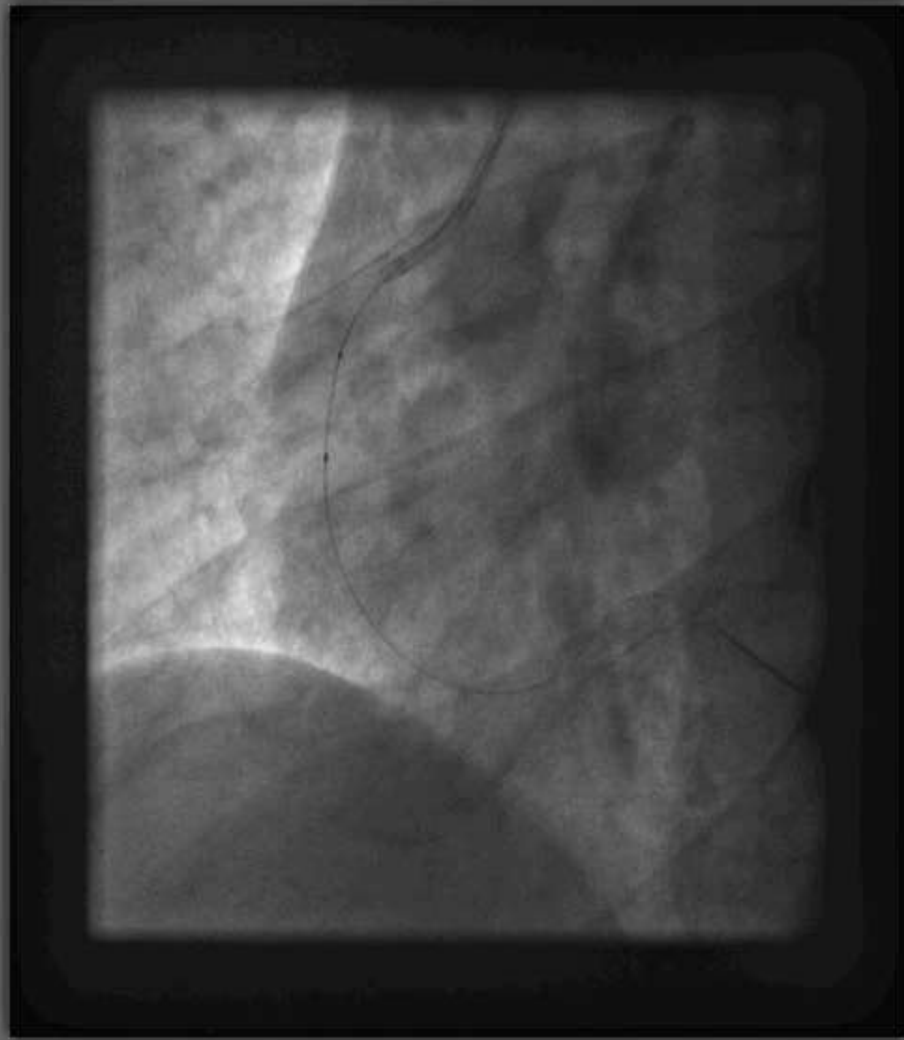
Final Cine showed-TIMI III distal run off



- Base line RCA picture and stenting



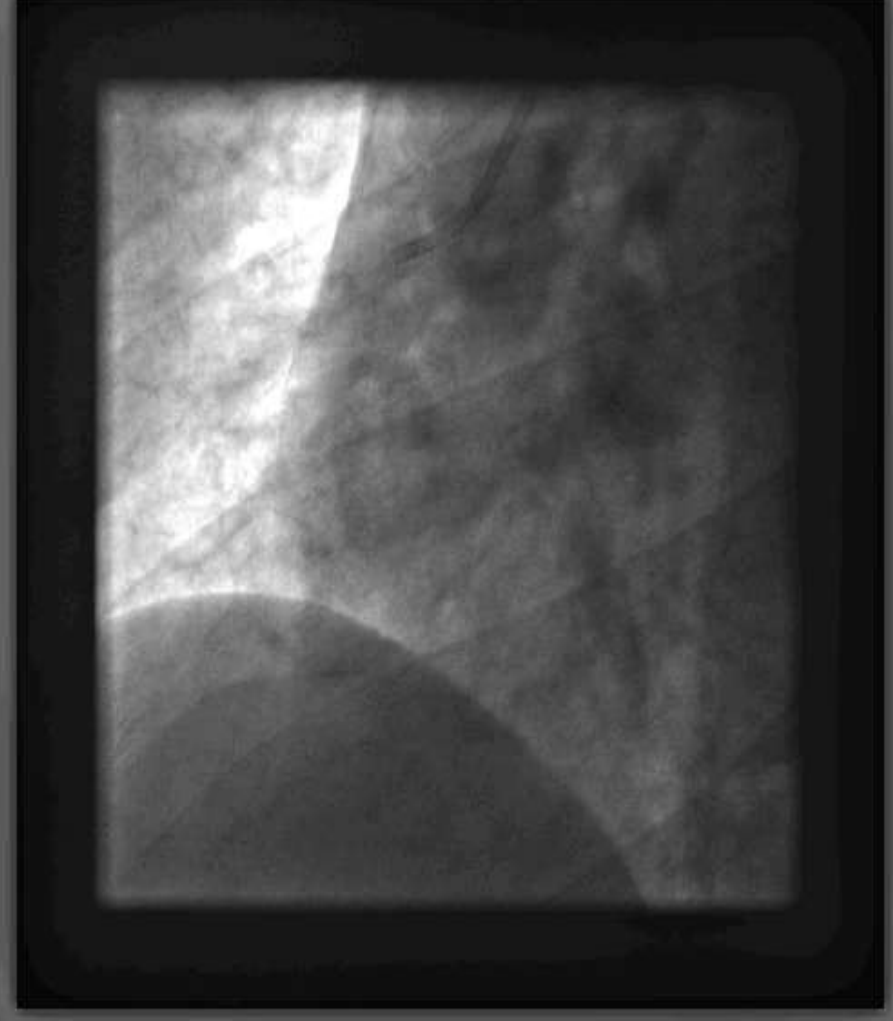
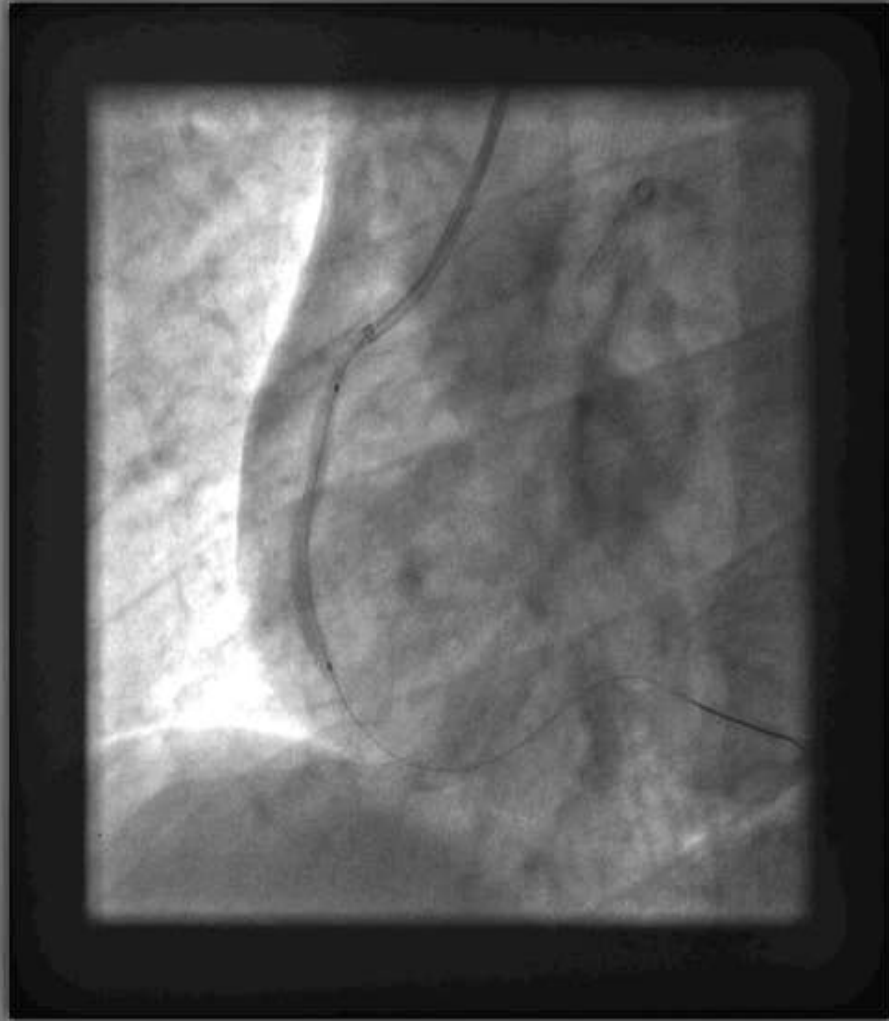
PCI-RCA: 3.0 x 35 DES stent



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Final Cine-TIMI III distal run-off



At discharge

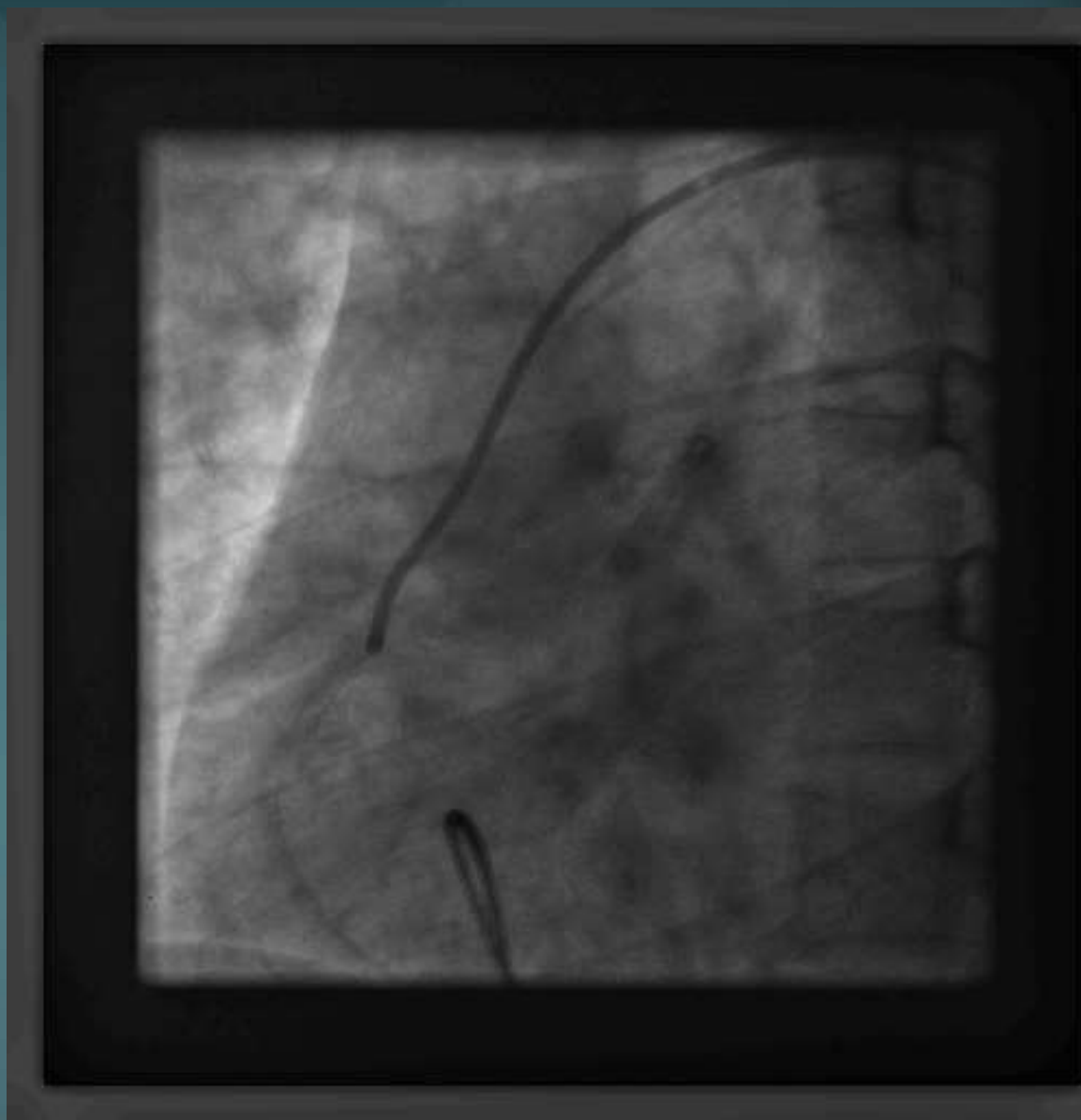
- Pt discharged 48 hrs after PCI in a stable condition with standard DAPT (Clopidogrel 150mg and Aspirin 300mg) with Statin

Re-admission-

- Pt re-admitted 36 hrs after the initial discharge at 0200 hrs with severe chest pain of 3hrs duration
- Admission ECG revealed Acute Antero-septal MI with gross ST elevation from V1-V6 with Complete heart block and was in cardiogenic shock
- Patient taken to cath lab immediately, TPI done and CAG shots taken

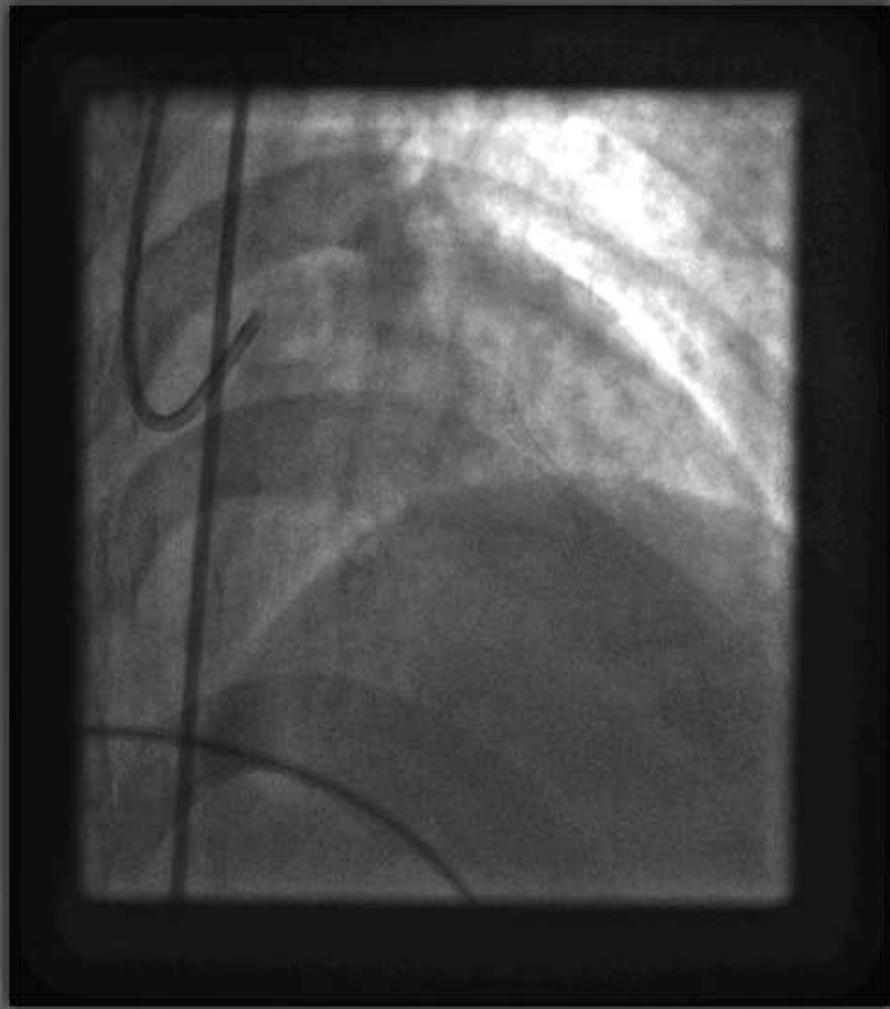
**CAG started with
RCA shot
because of Ant MI**

**Spots of thrombus
in the middle of the
RCA stent**



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Acute Stent thrombosis in LAD stent and beyond



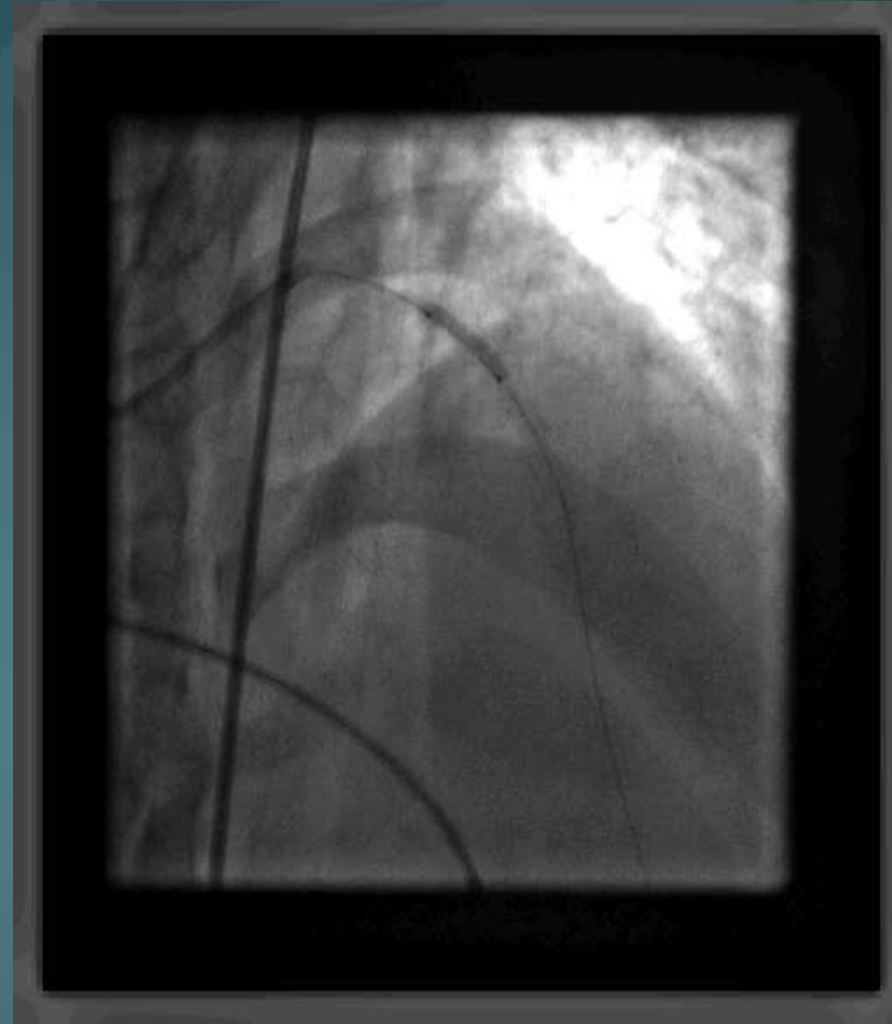
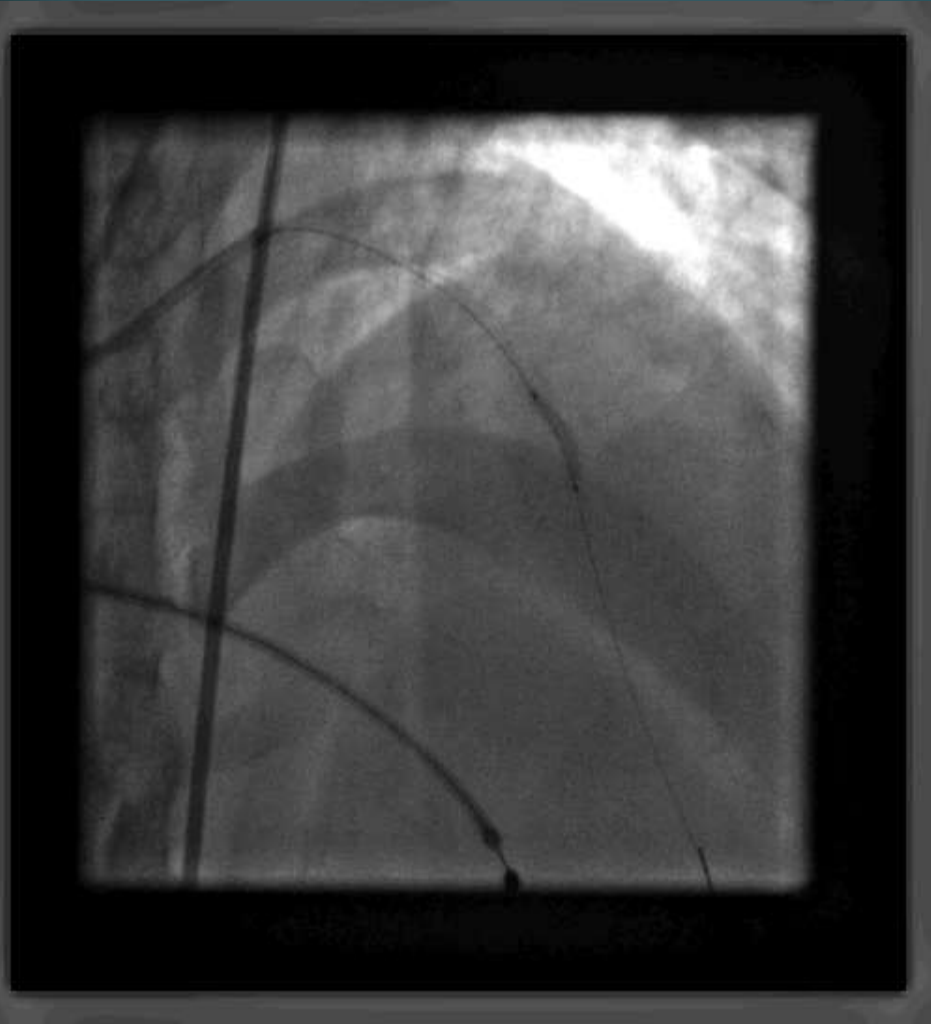
• Possible cause of thrombus

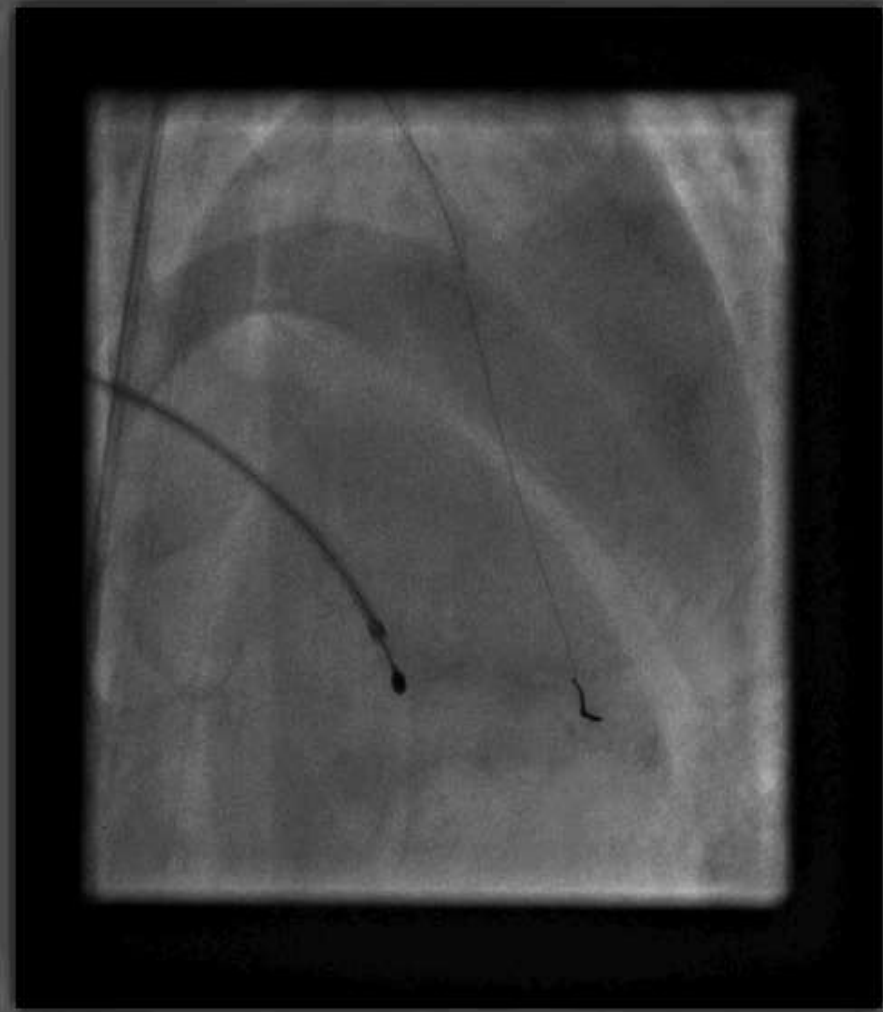
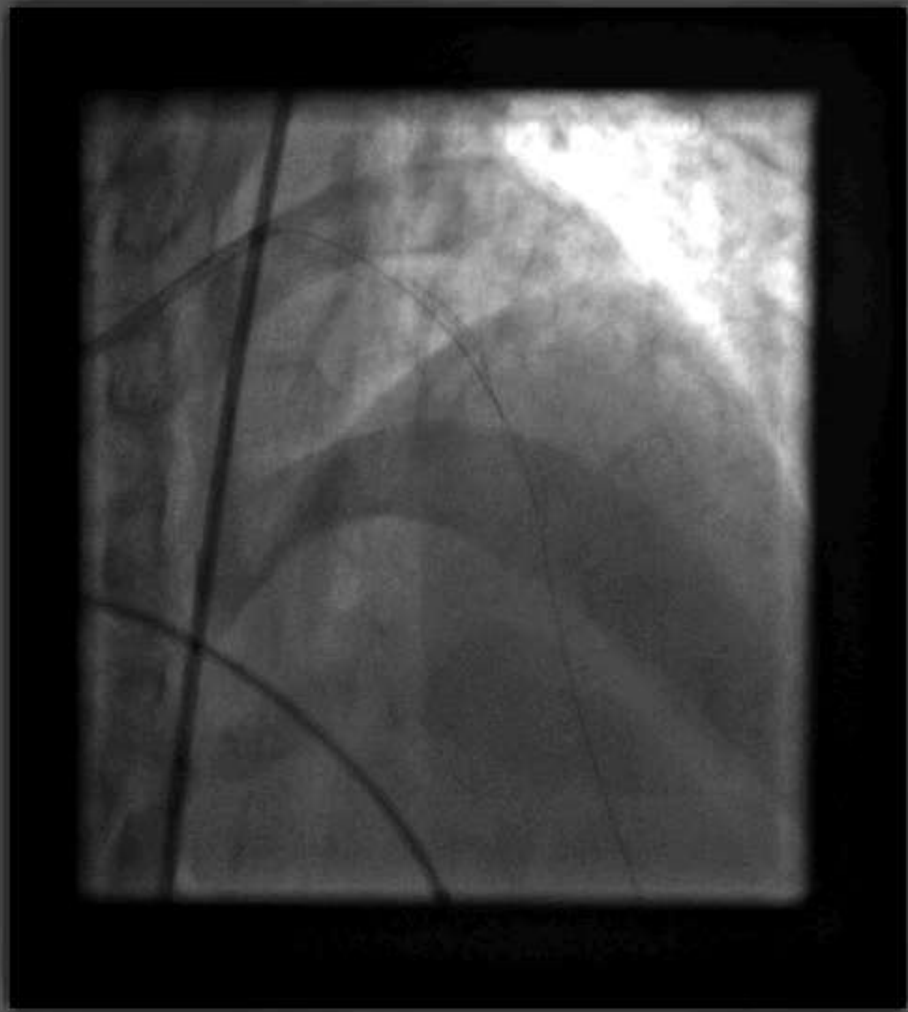
- ? Left over LAD lesion
- ? Under estimation of LAD caliber
- ? Antiplatelet resistance
- Why thrombus forming in RCA

• Treatment plan

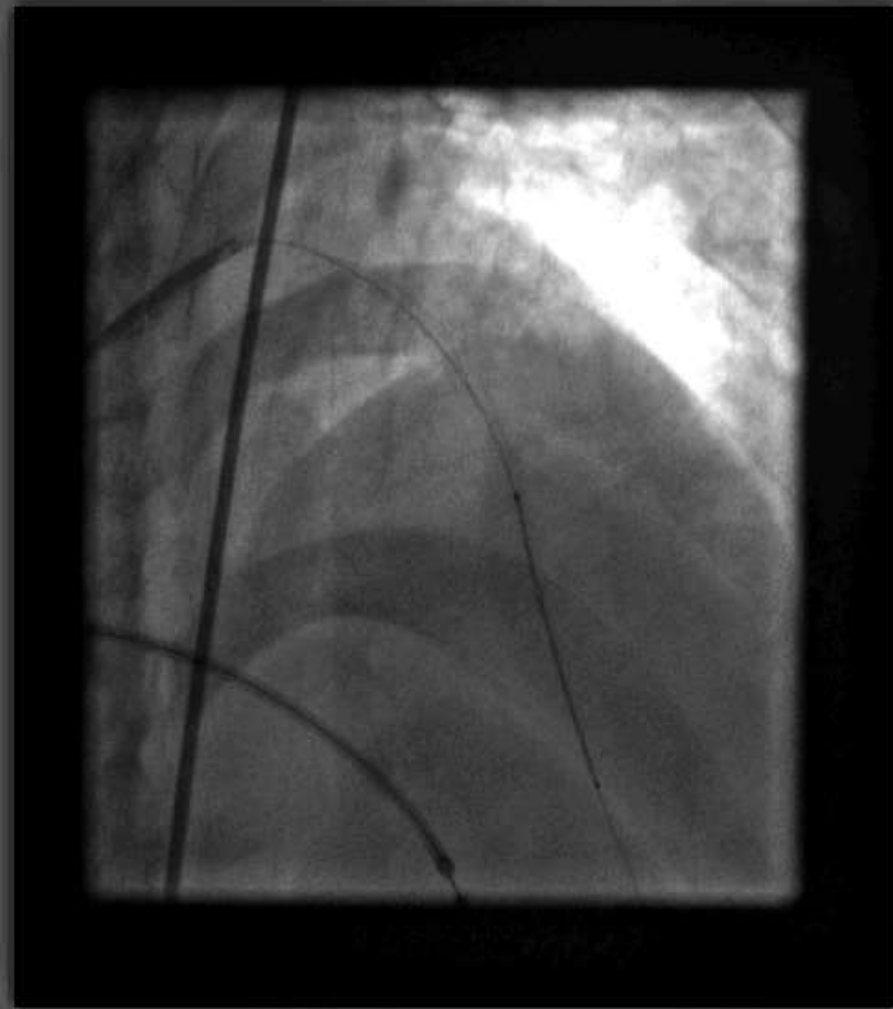
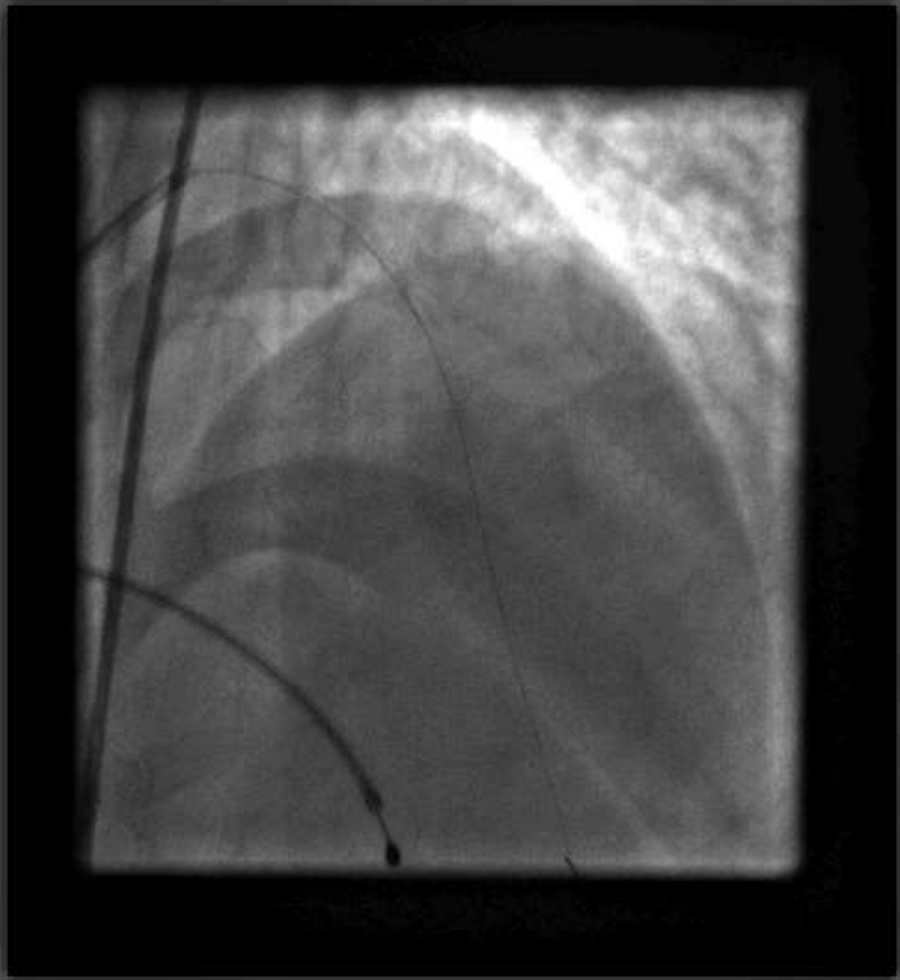
- * Ticagrelor 360mg given loading
- ** Along with 300mg Aspirin
- Bivaluridin loading and maintainance infusion given
- followed by Eptifibatide infusion
- ***Plan taken to rescue LAD first

Balloon dilatation of LAD stent and beyond

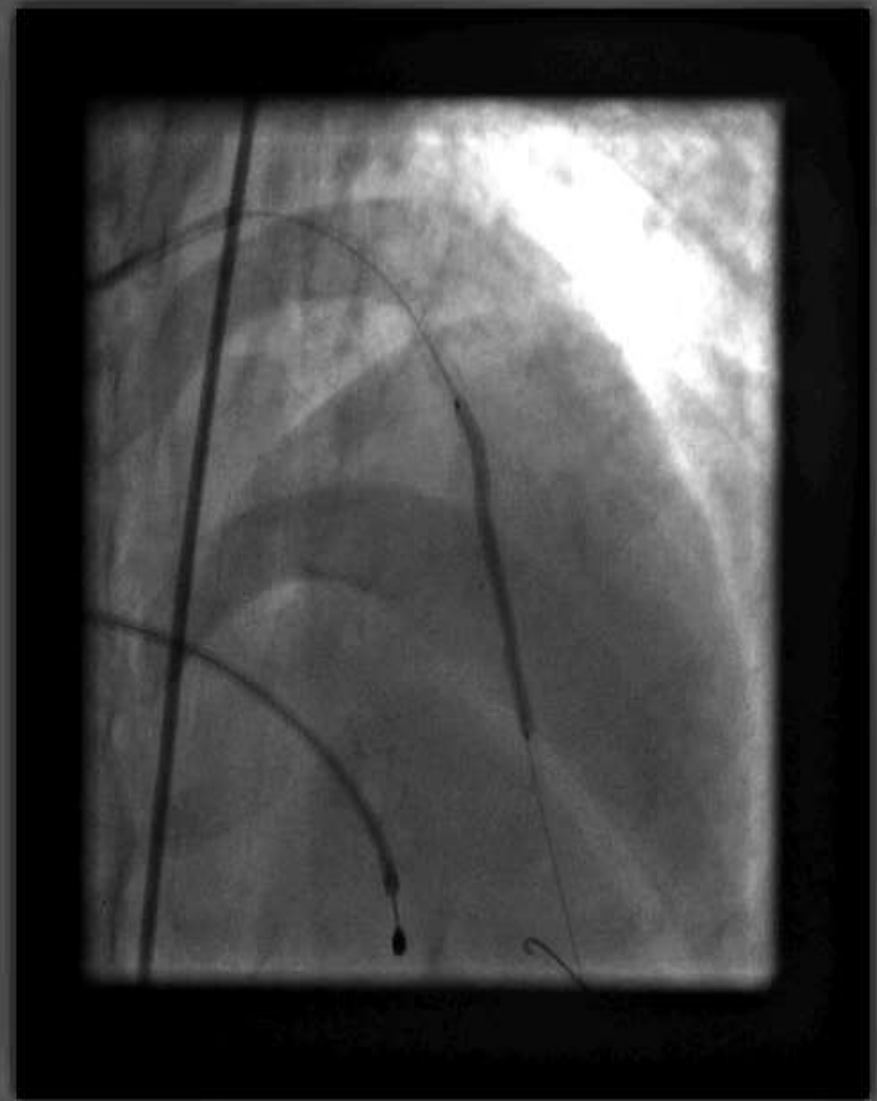
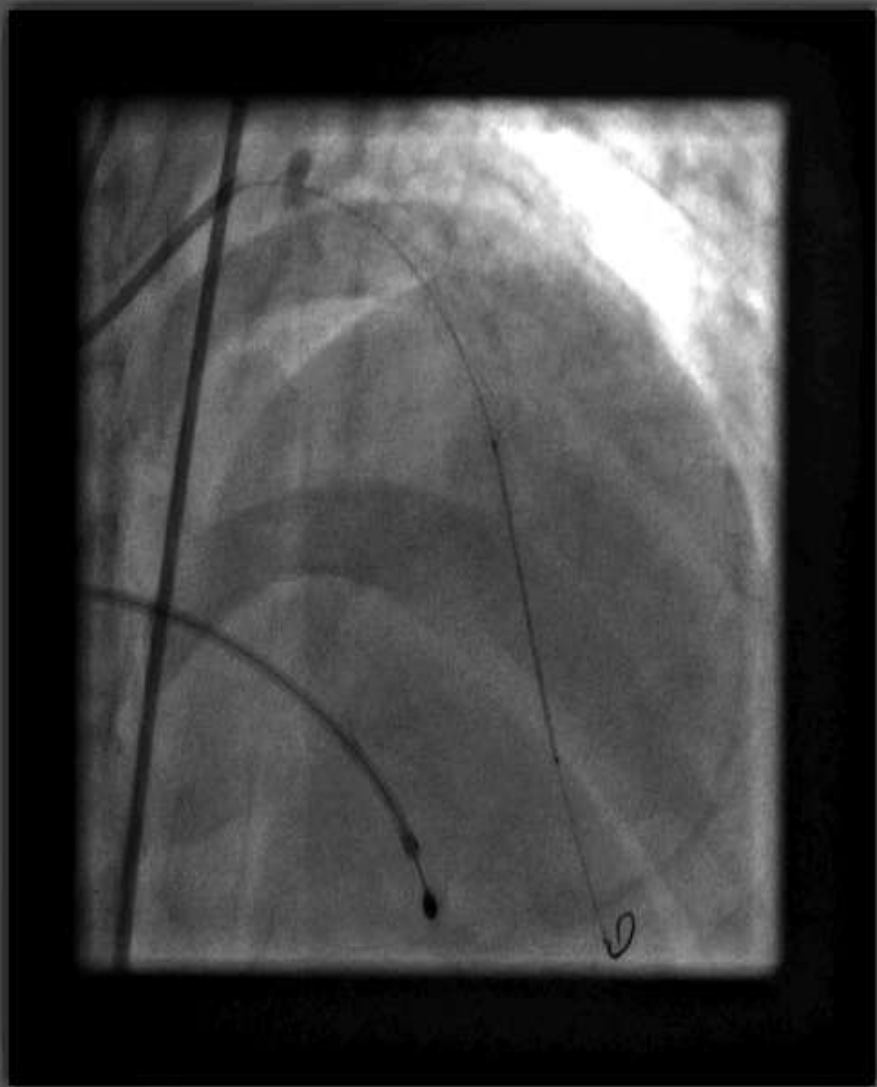




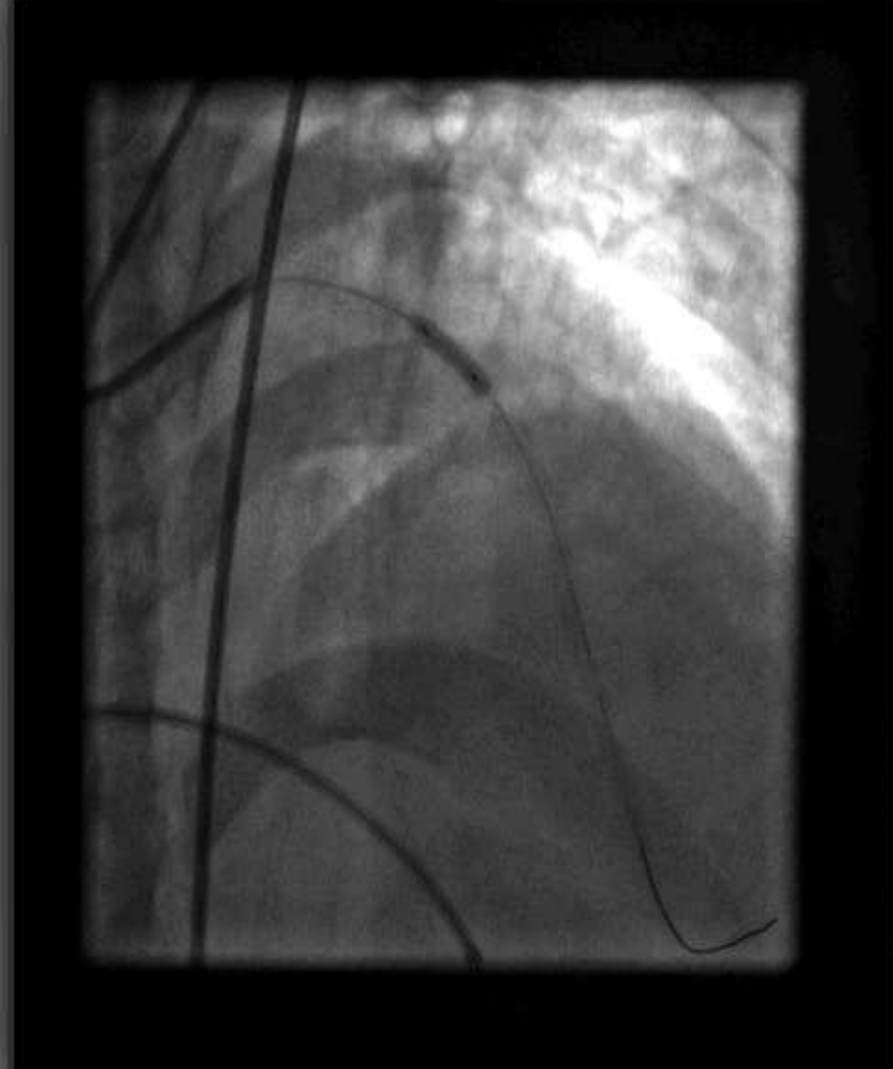
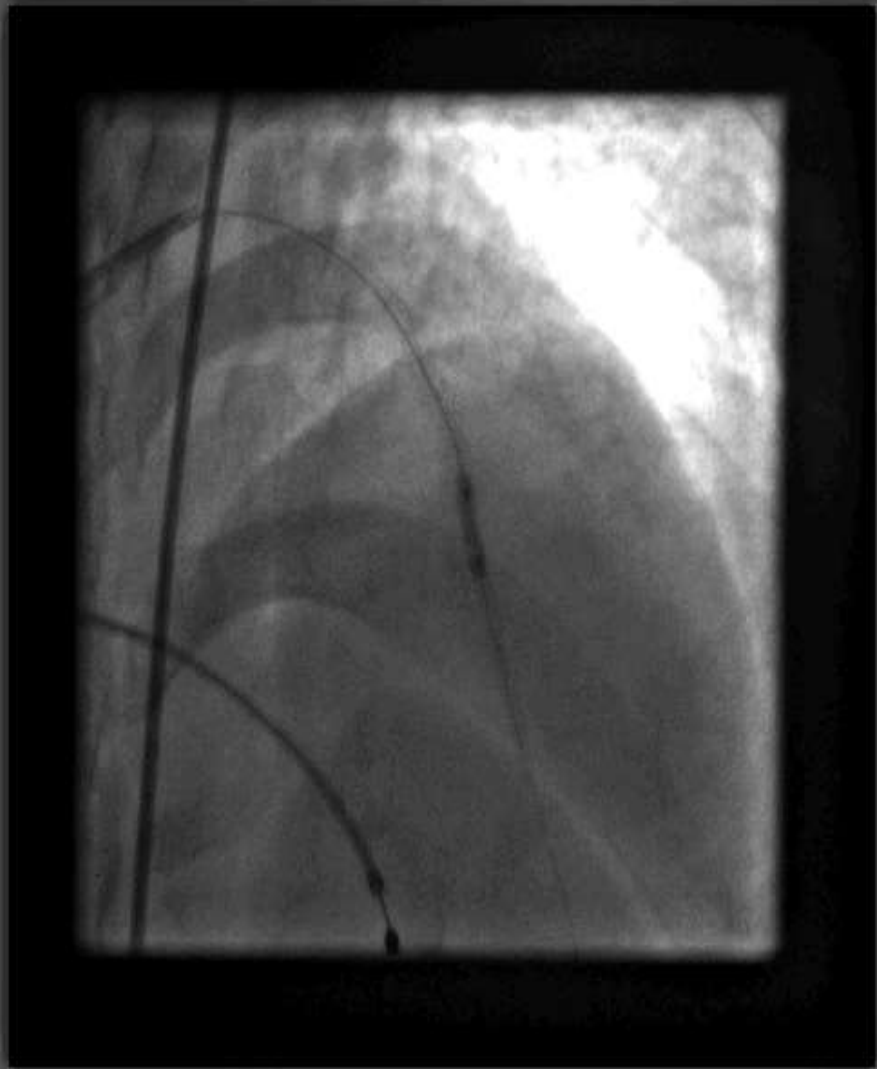
- 2.25x 40mm DES deployed in dLAD overlapping the previous stent



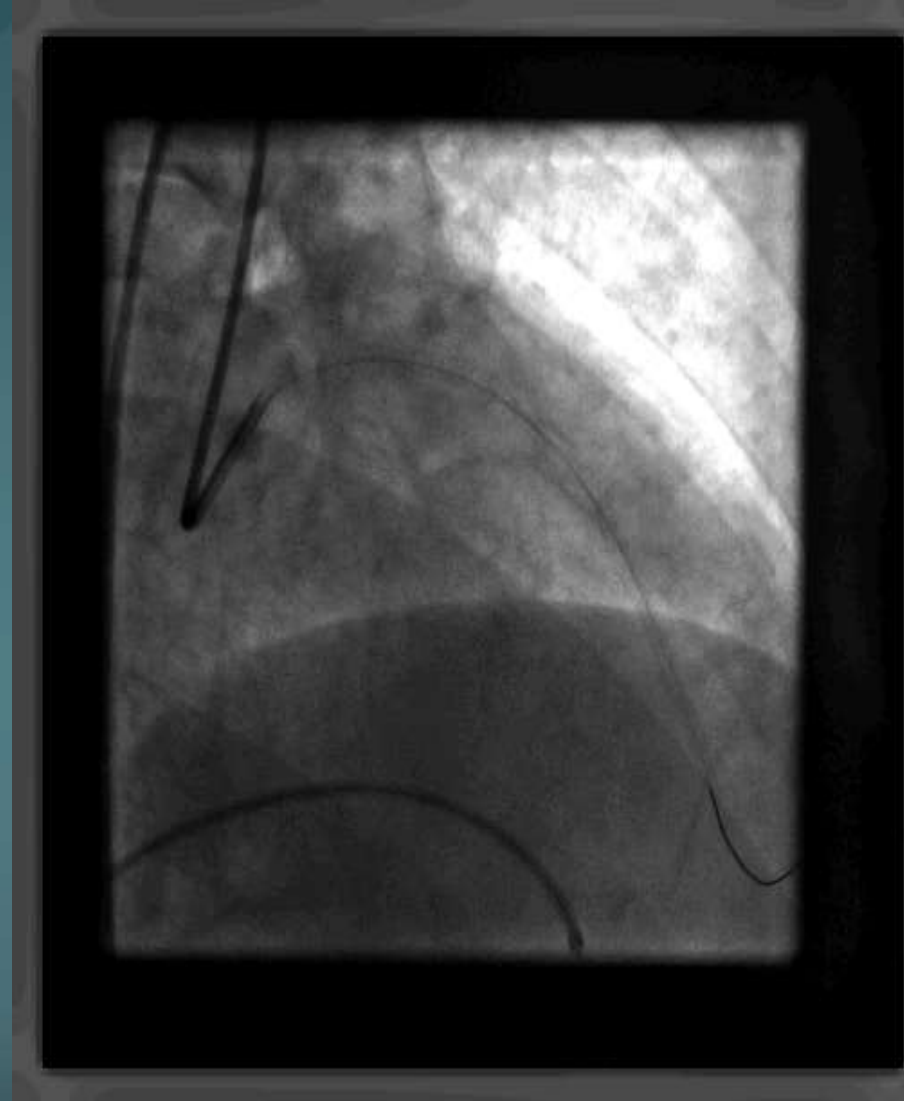
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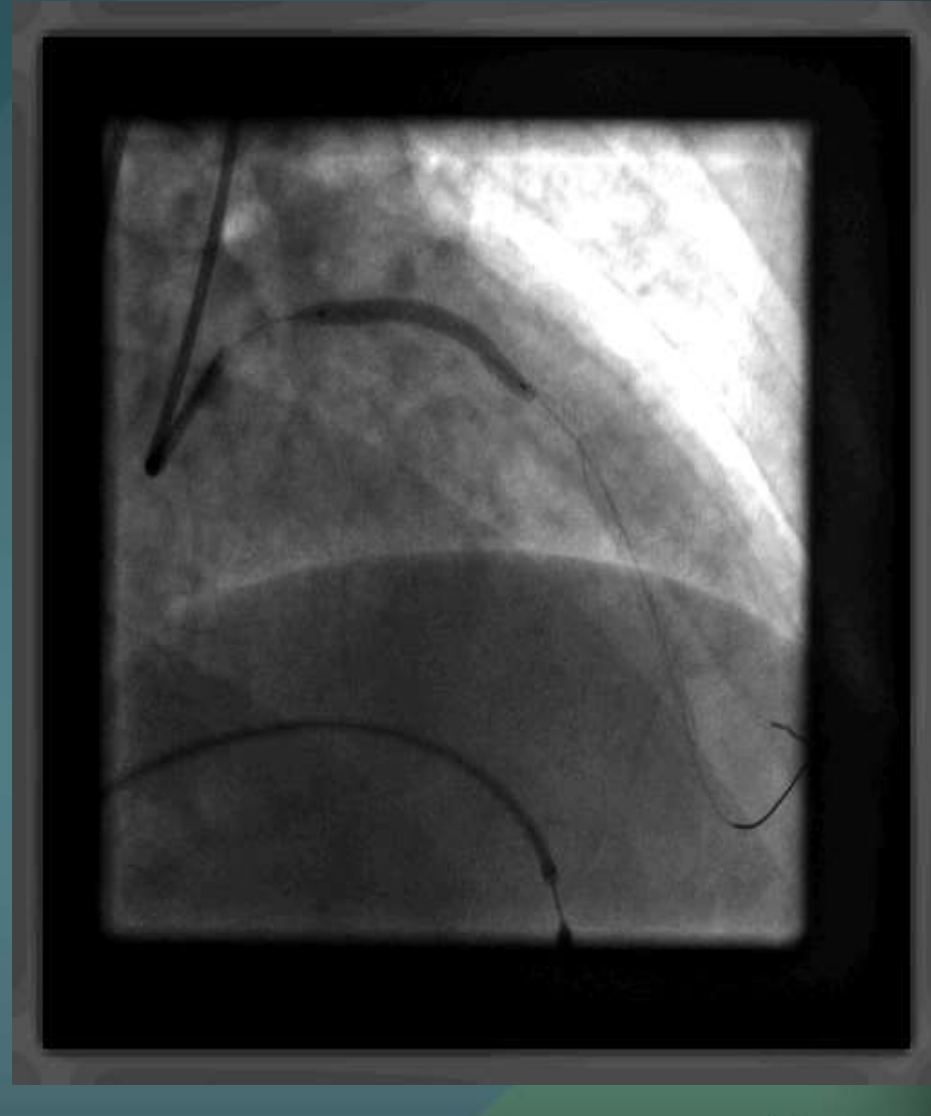
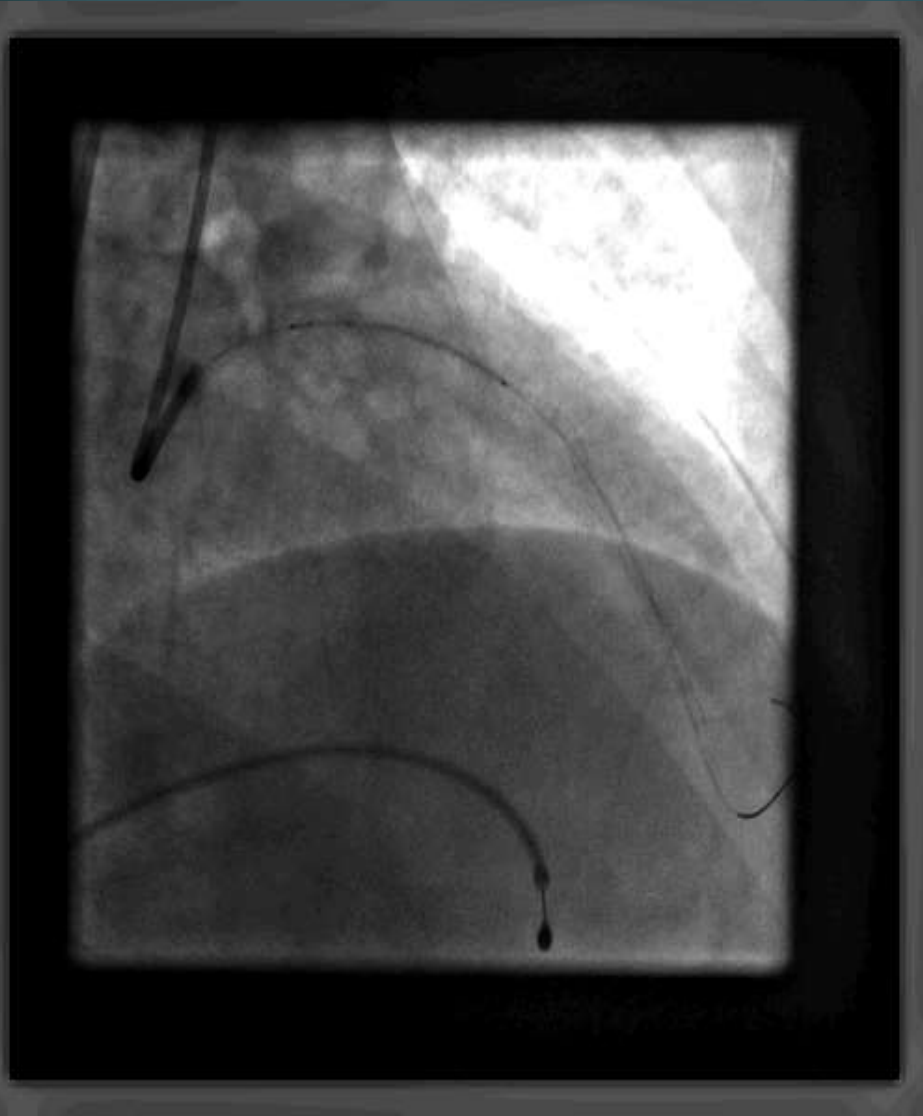
Post-dilatation throughout the length of both stents with 3x10mm Balloon



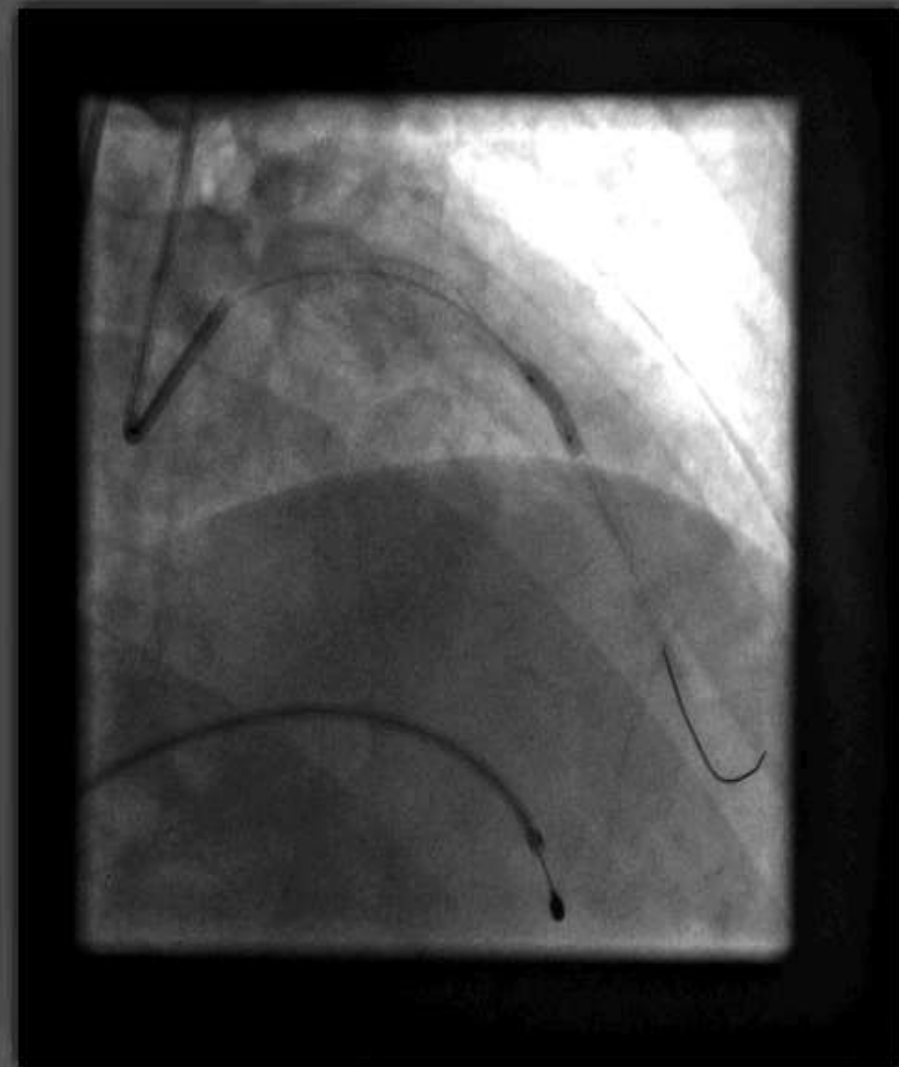
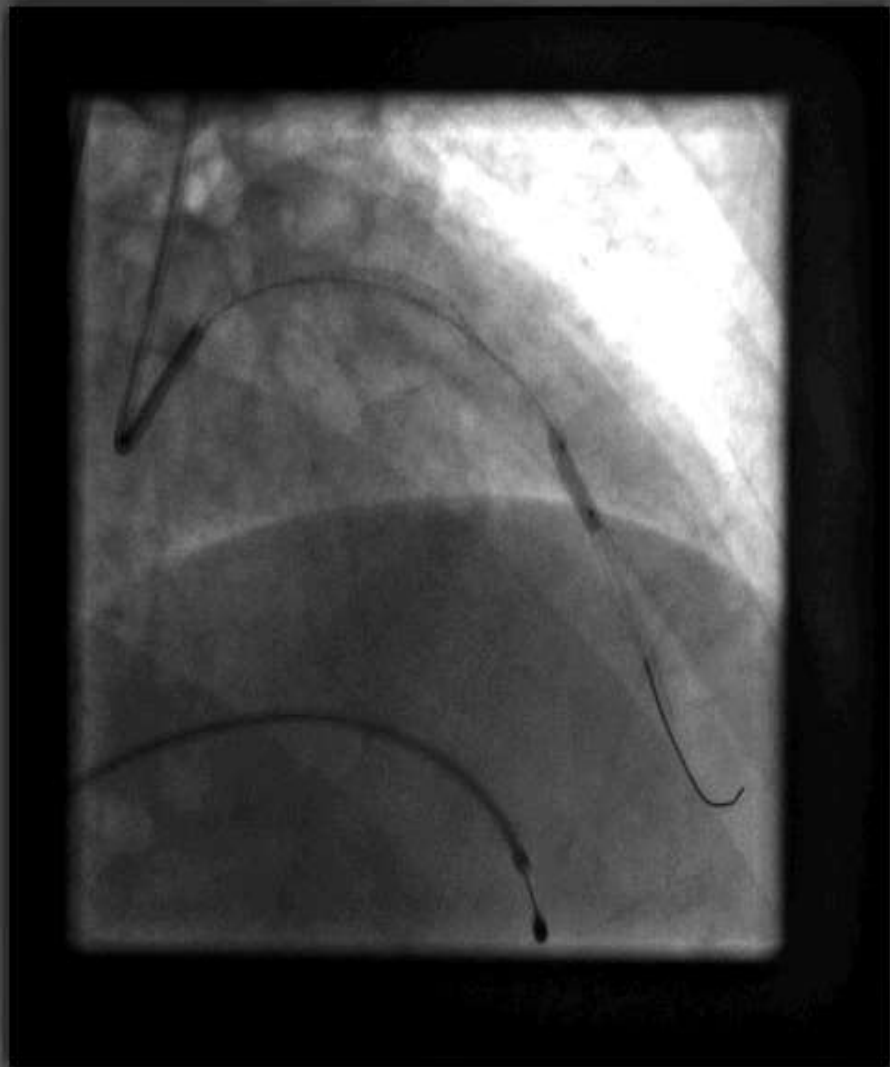
- Despite high pressure dilatation-an area of opacity remain in the middle of the first stent
- Stent boost showed small area of deformed scaffold

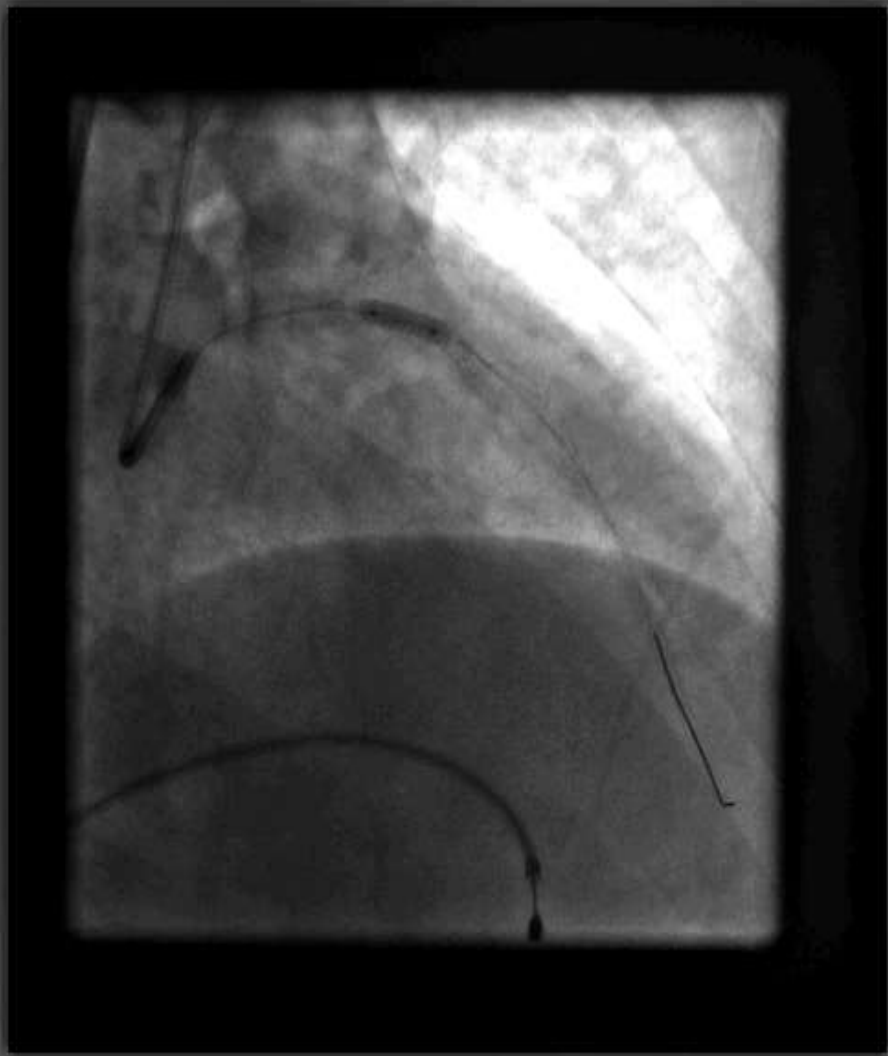


- Decision taken to put a stent covering the affected area of the previous stent – a 3.0x 30mm BMS



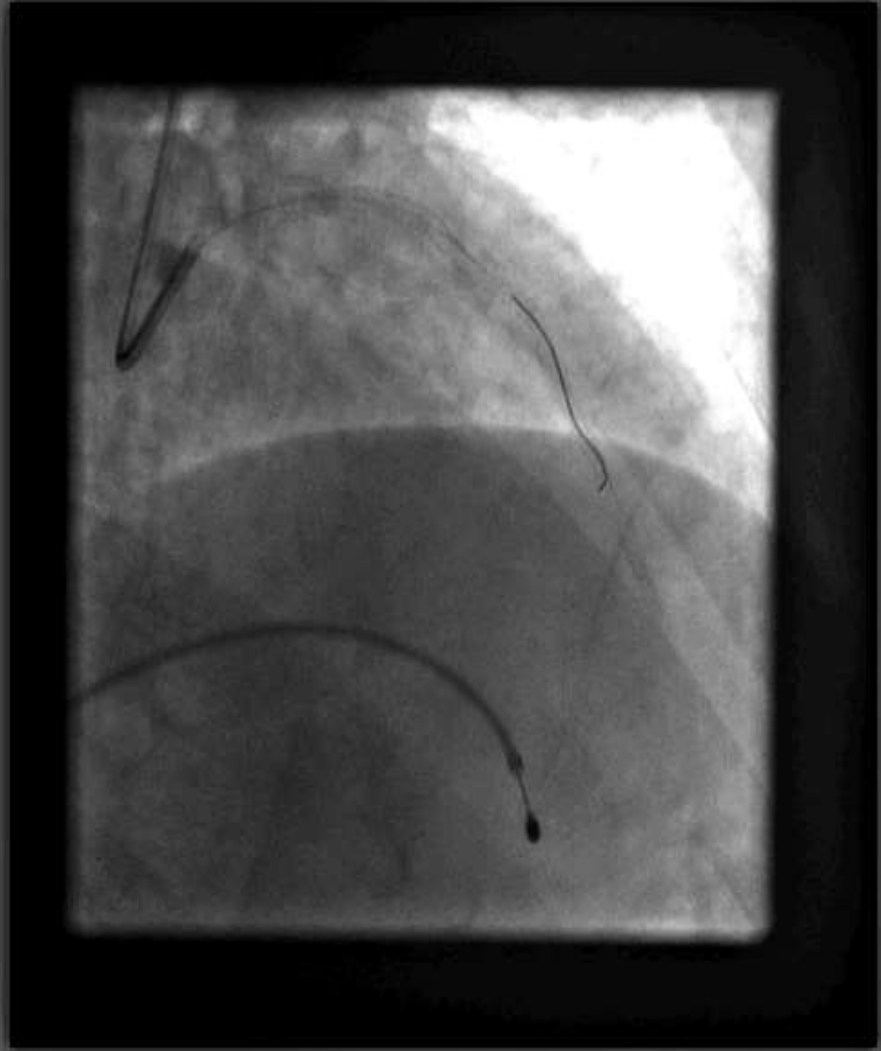
Further post-dilatation of the affected area with 3.0x10 Balloon at very high pressure





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Final Check cine

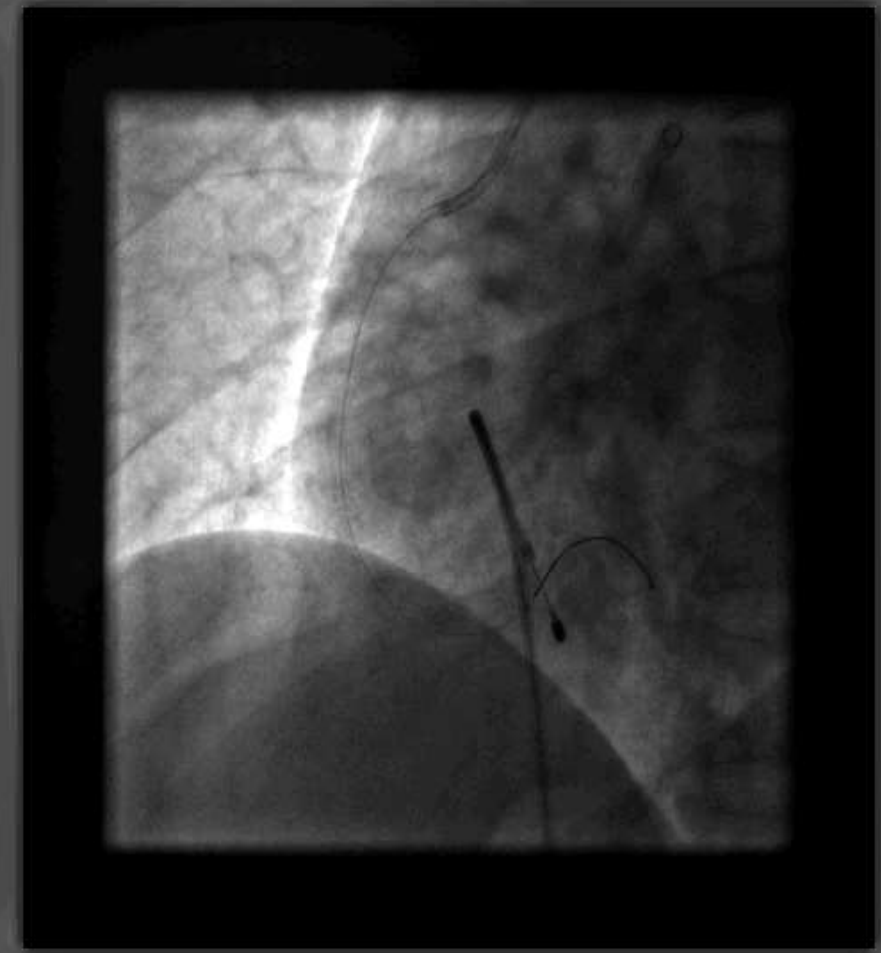
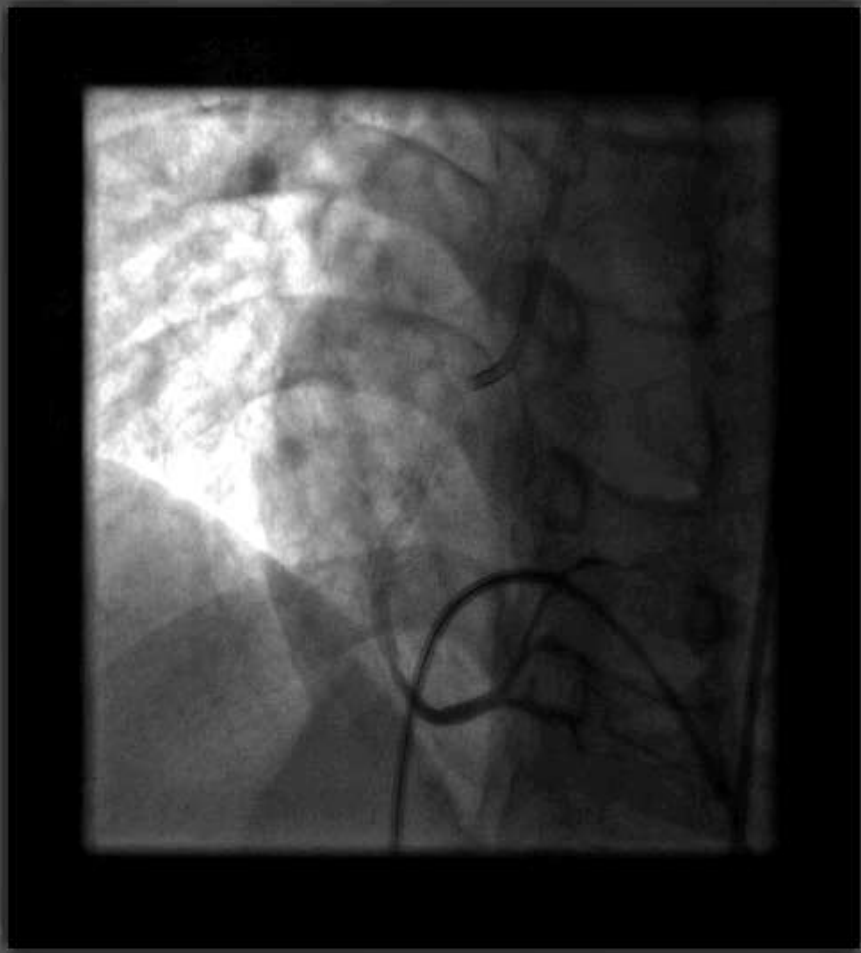


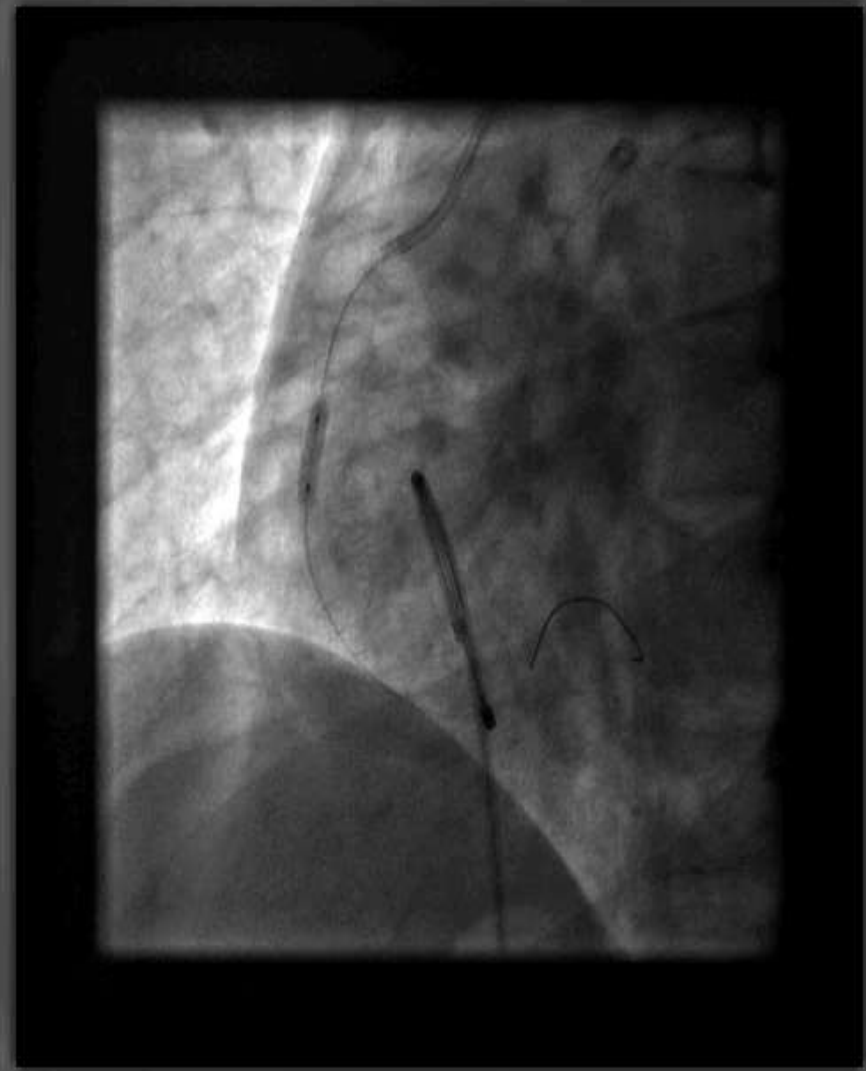
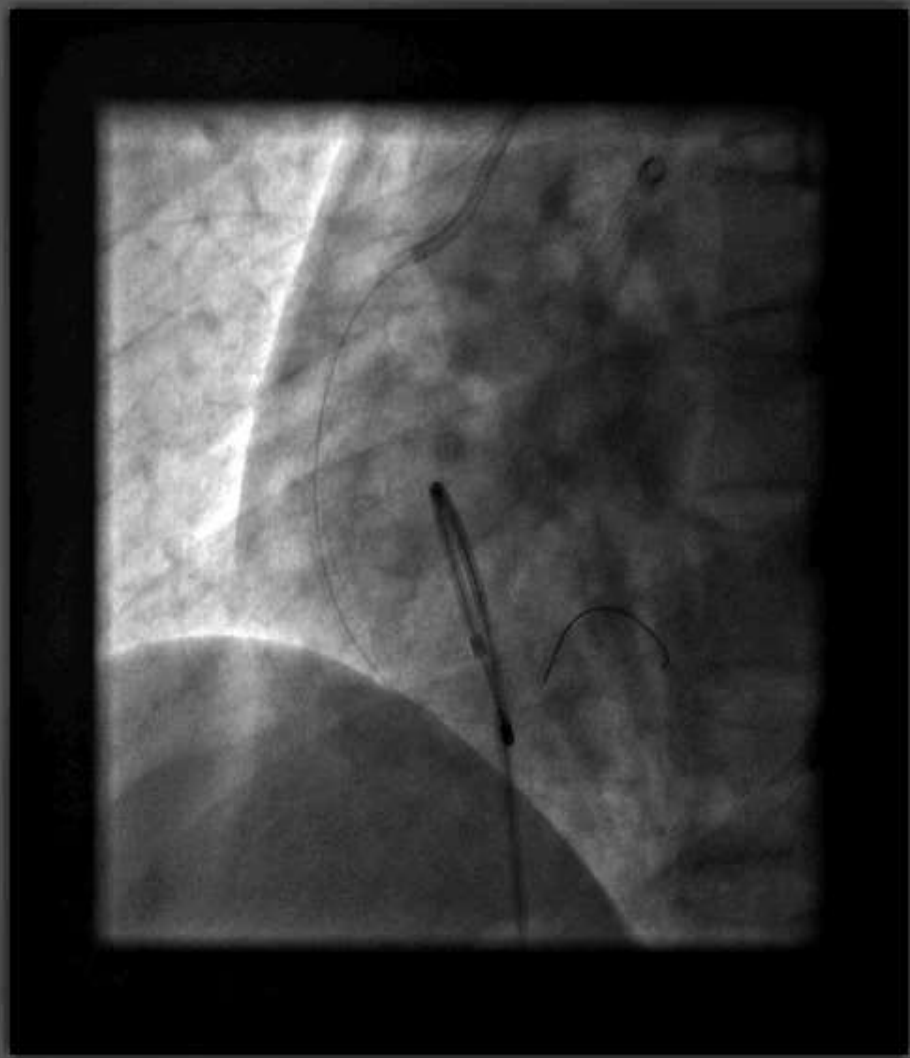
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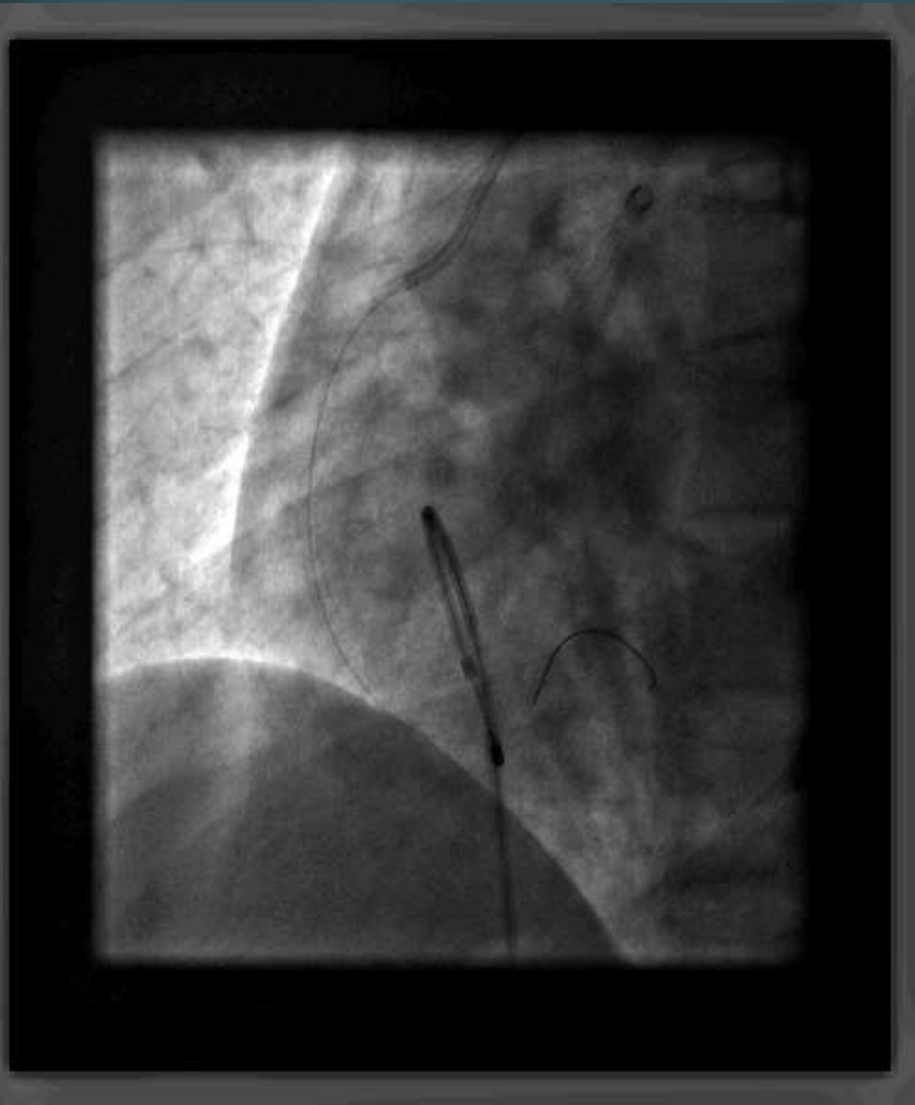


- RCA clot already started disappearing, by the time LAD PCI was finished.
- POBA done with a 3.0 x 10 mm Balloon at very high pressure





- Well dilated stent without any clot



Interpretation

- Problems
 - I. Unusual thrombus in LAD and RCA
 - II. ? High thrombogenicity?
 - III. Unusual appearance of the previous LAD scaffold
 - IV. ? Strut fracture
??Underexpansion
 - V. (doesn't explain RCA thrombus)
- Solution
 - Pt kept on newer generation antiplatelet along with Rivaroxaban
 - At 18 months follow-up-patient remain angina free

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Thank you

