

Where CTO Saves A Life

A Case of CTO and Bifurcation

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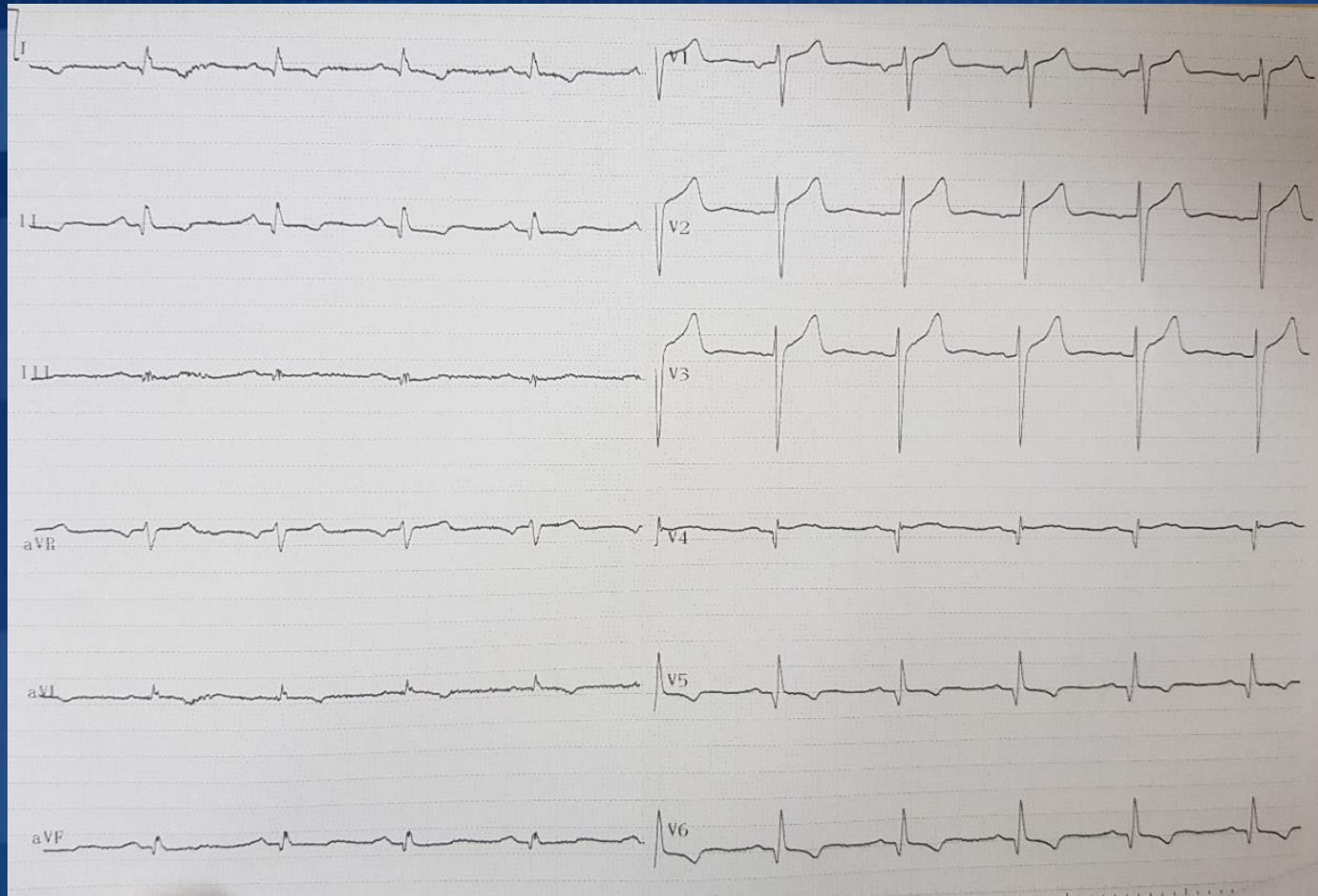


Patient Presentation

- 59 years old male, had a CABG done in 2012, presented with 3 day history of typical angina
- He was diagnosed with ACS in the form of NSTEMI with a peak hs-troponin I level of 1836 ng/L
- His LVEF in 2012 was documented to be normal, he was discussed with surgeons and accepted for 3 vessel CABG (LAD, RCA and OM)
- The old surgical notes were however unavailable

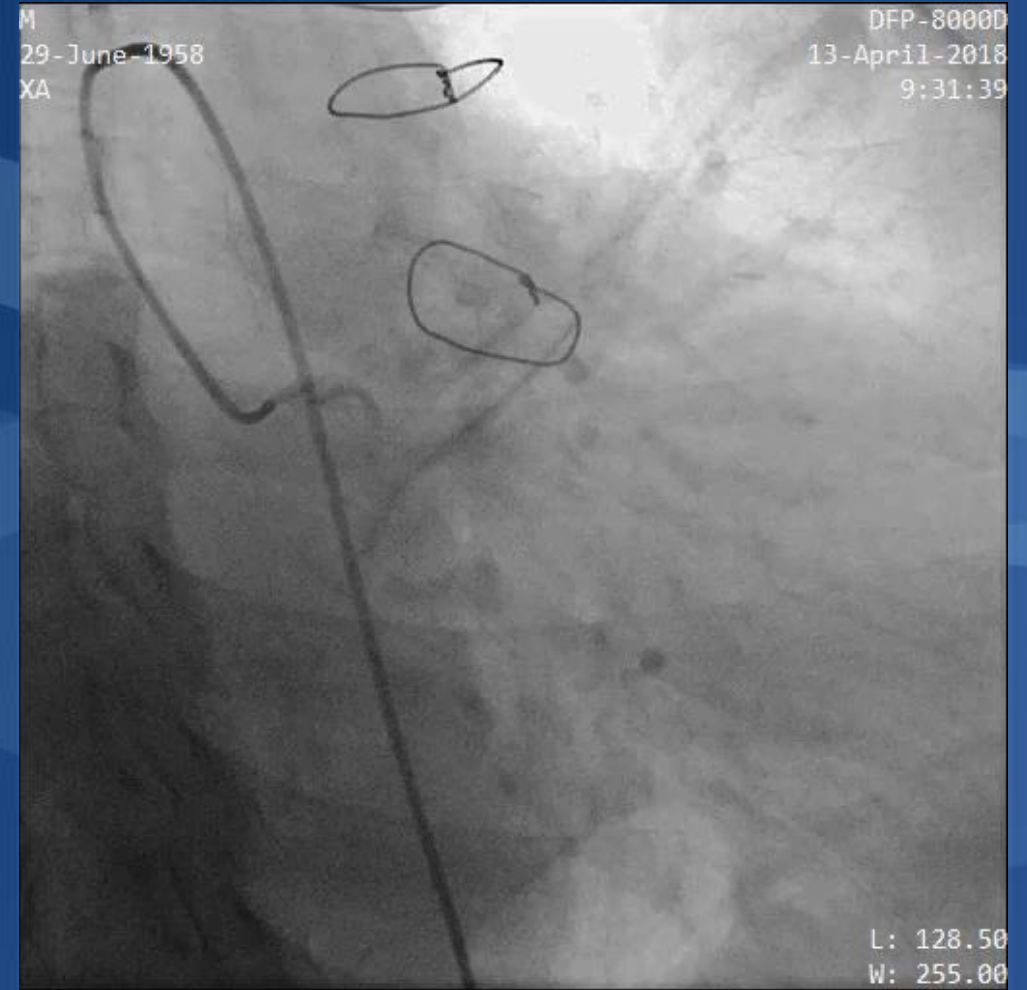
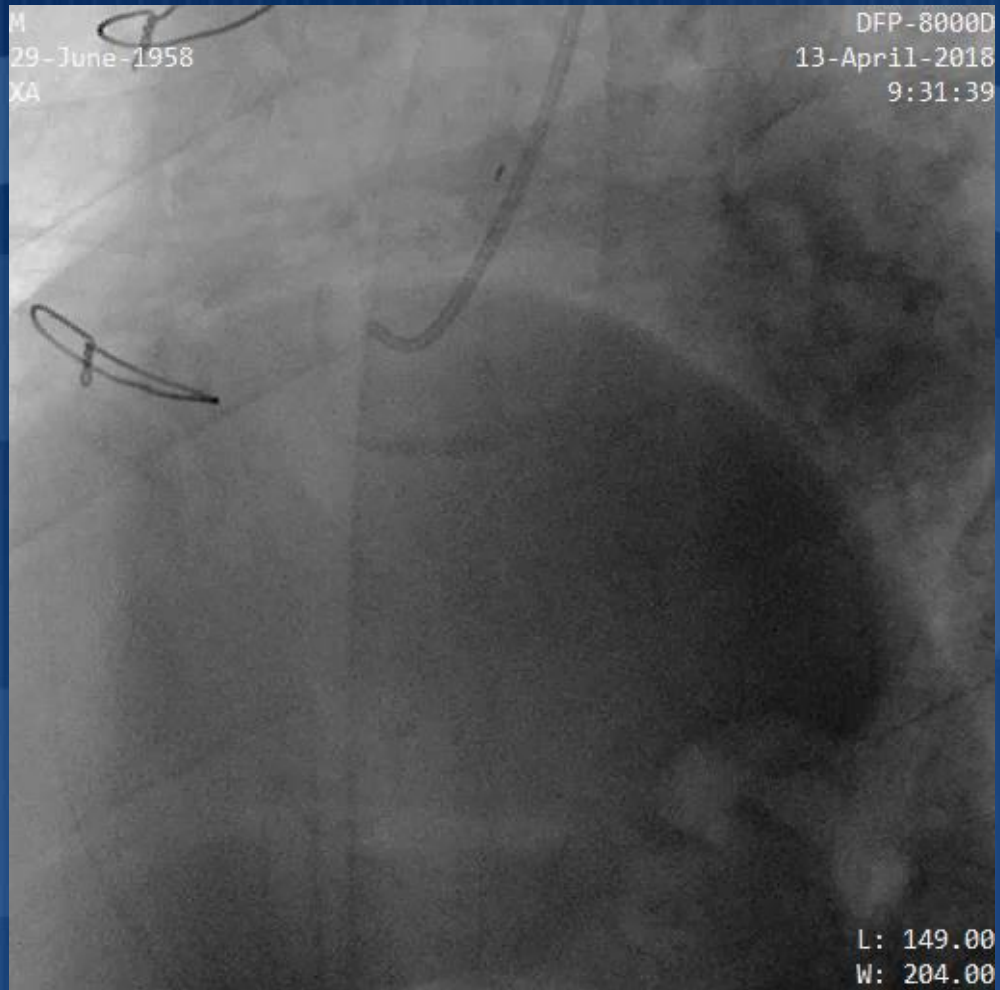


Patient Presentation

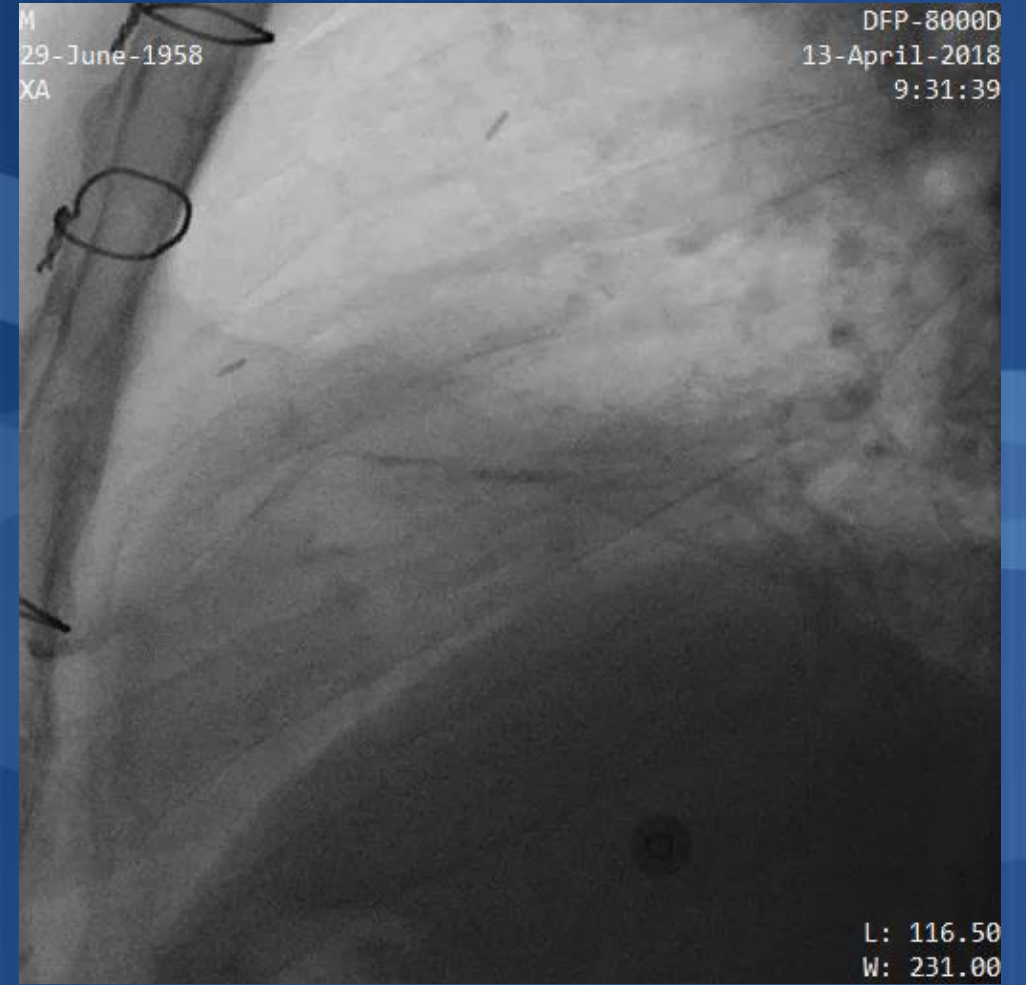
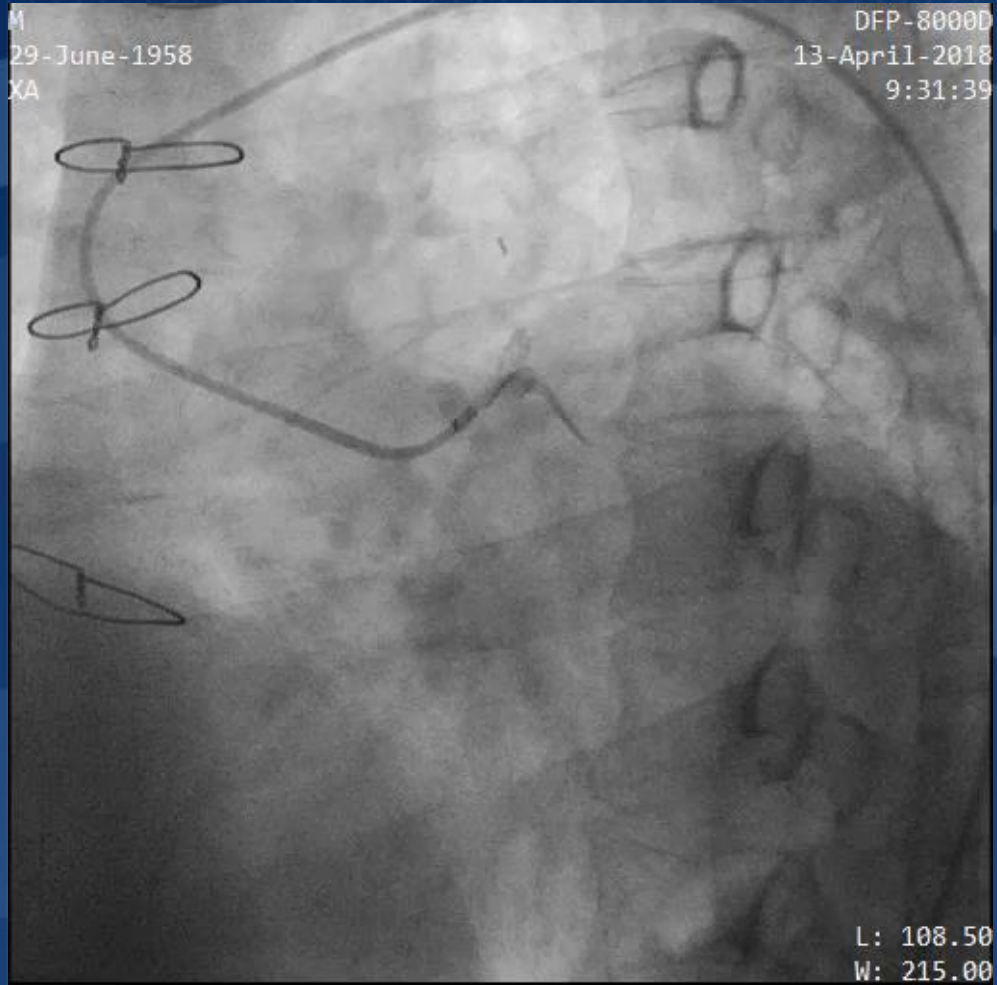


- He is in sinus rhythm
- T wave inversion in leads II, III, aVF as well as V5, V6, I
- R waves are largely preserved in the precordial leads

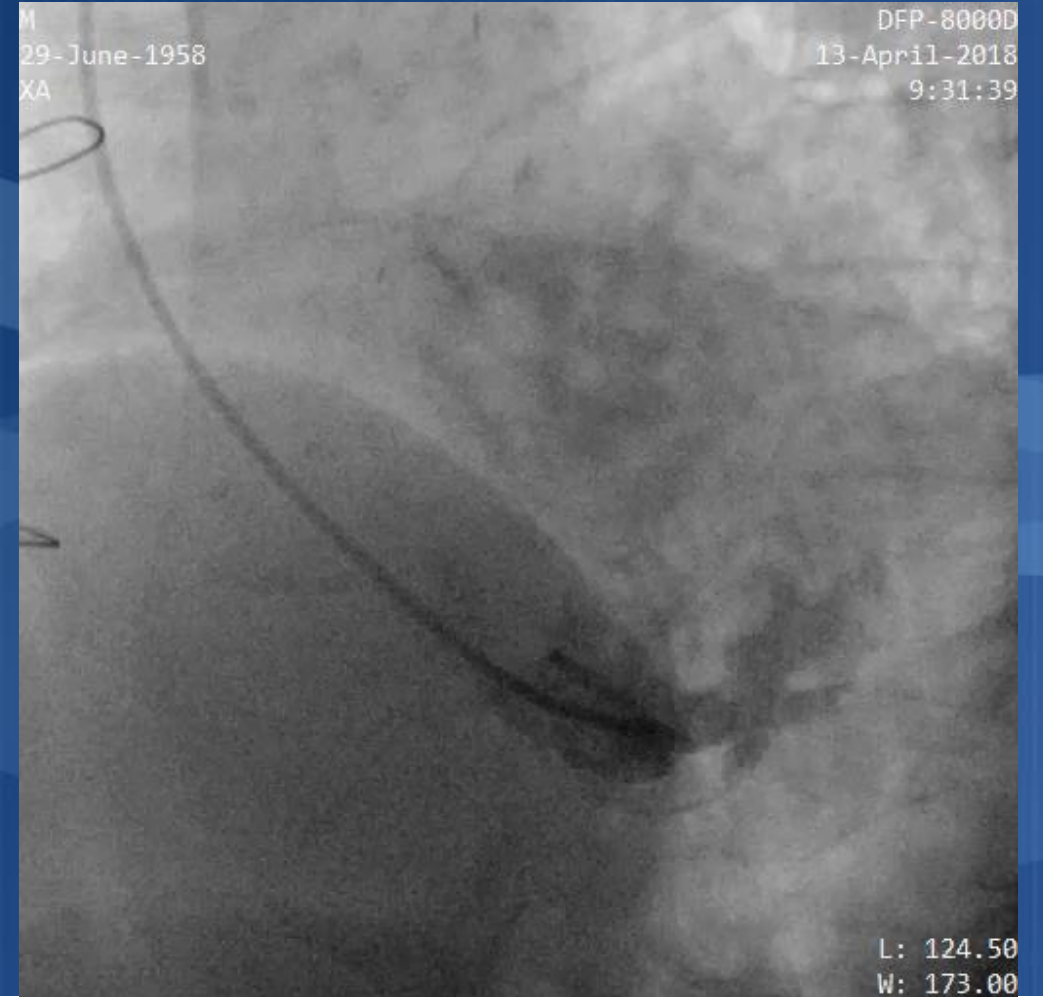
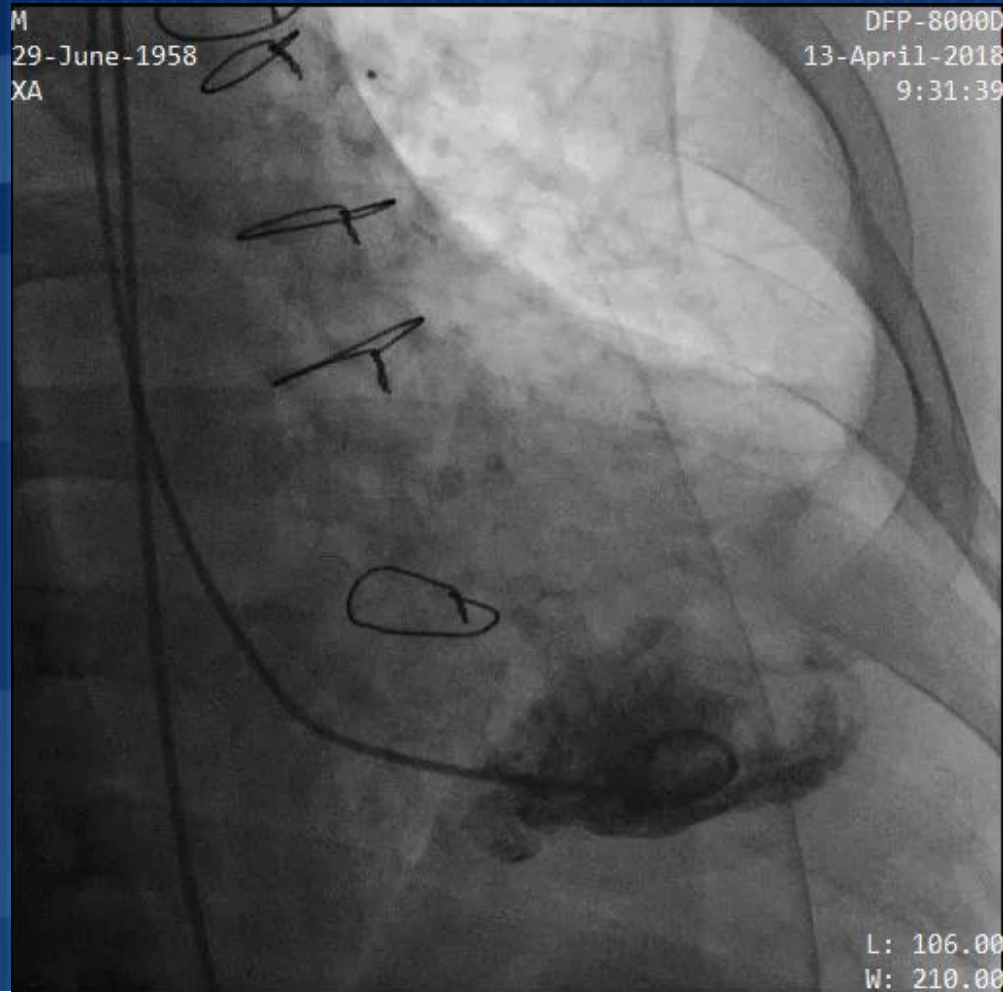
Diagnostic Angiogram



Diagnostic Angiogram



Diagnostic Angiogram



Patient Discussion

- He has a total occlusion of his RCA proximally
- The LAD is supplied by a vein graft, which is completely patent with no disease, has a reasonable anastomosis, however the vessel is completely occluded just after the anastomosis.
- He has a large LCX system with 2 major branches. The OM2 is sub-totally occluded with TIMI 1 flow distally. One can appreciate the large amount of myocardium in the inferior-lateral wall subtended by this vessel
- There is also a tight lesion at the ostium of LCX continuation in the AV groove
- There is significant LV dysfunction. The calculated EF was 25%

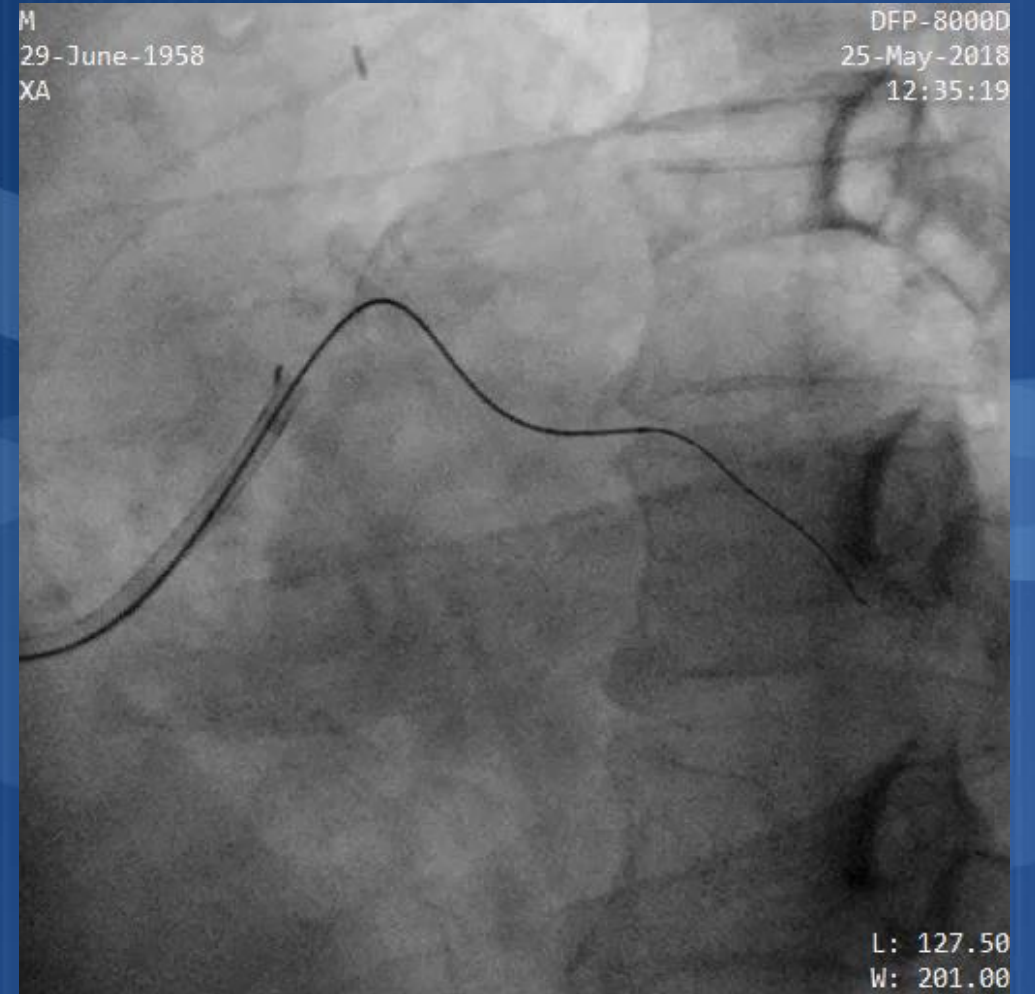
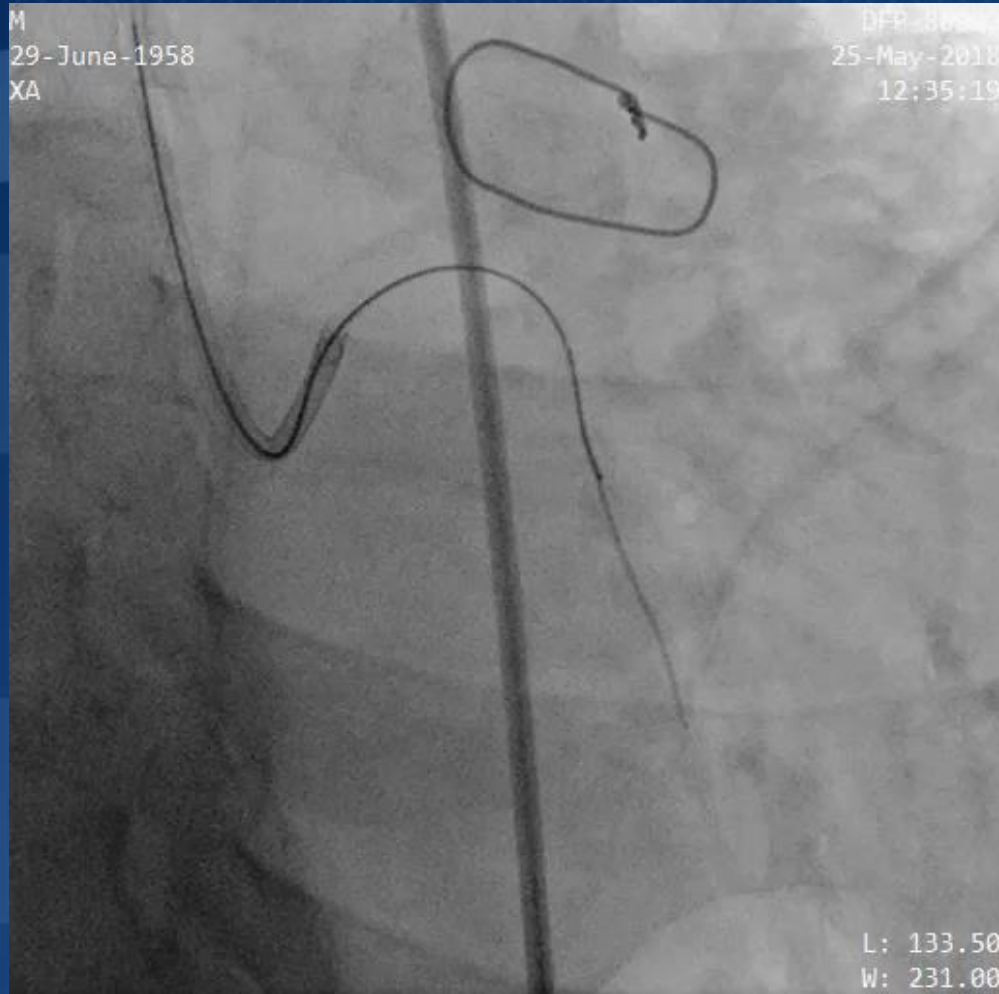


Patient Discussion

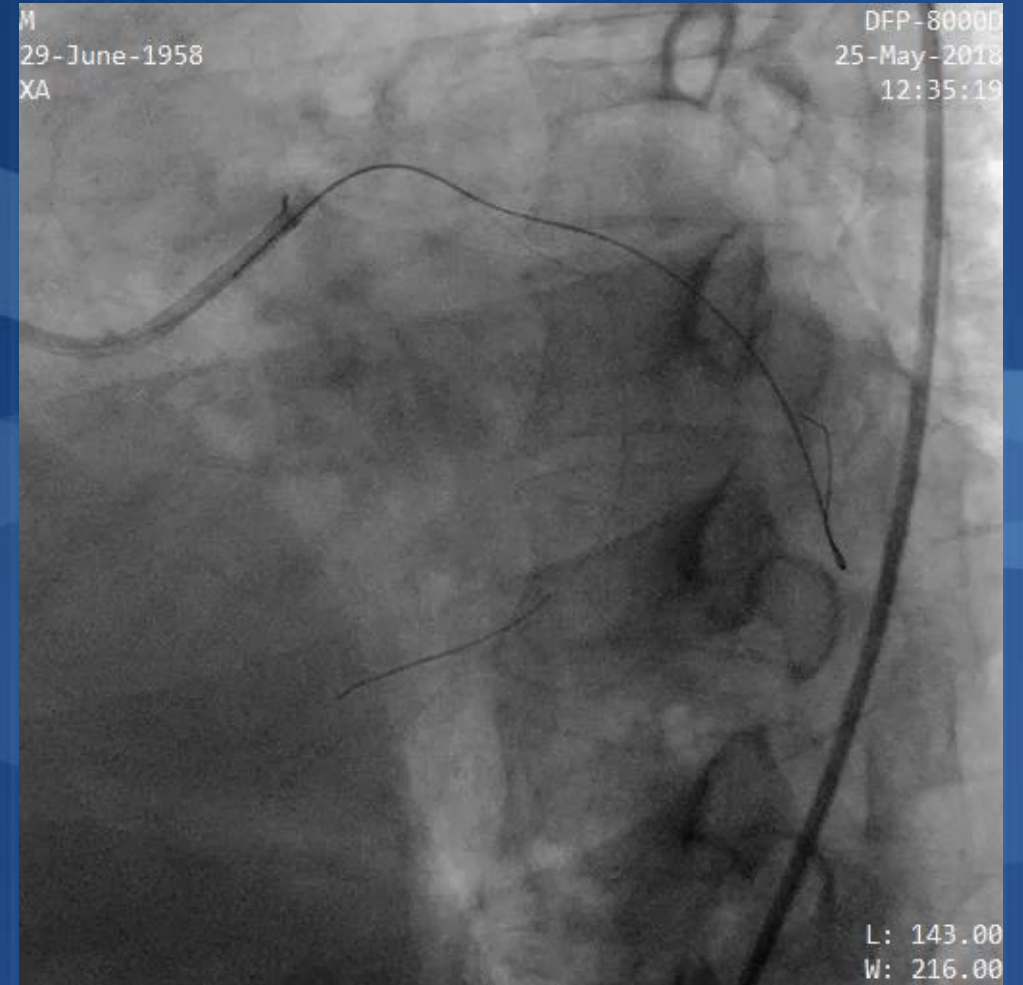
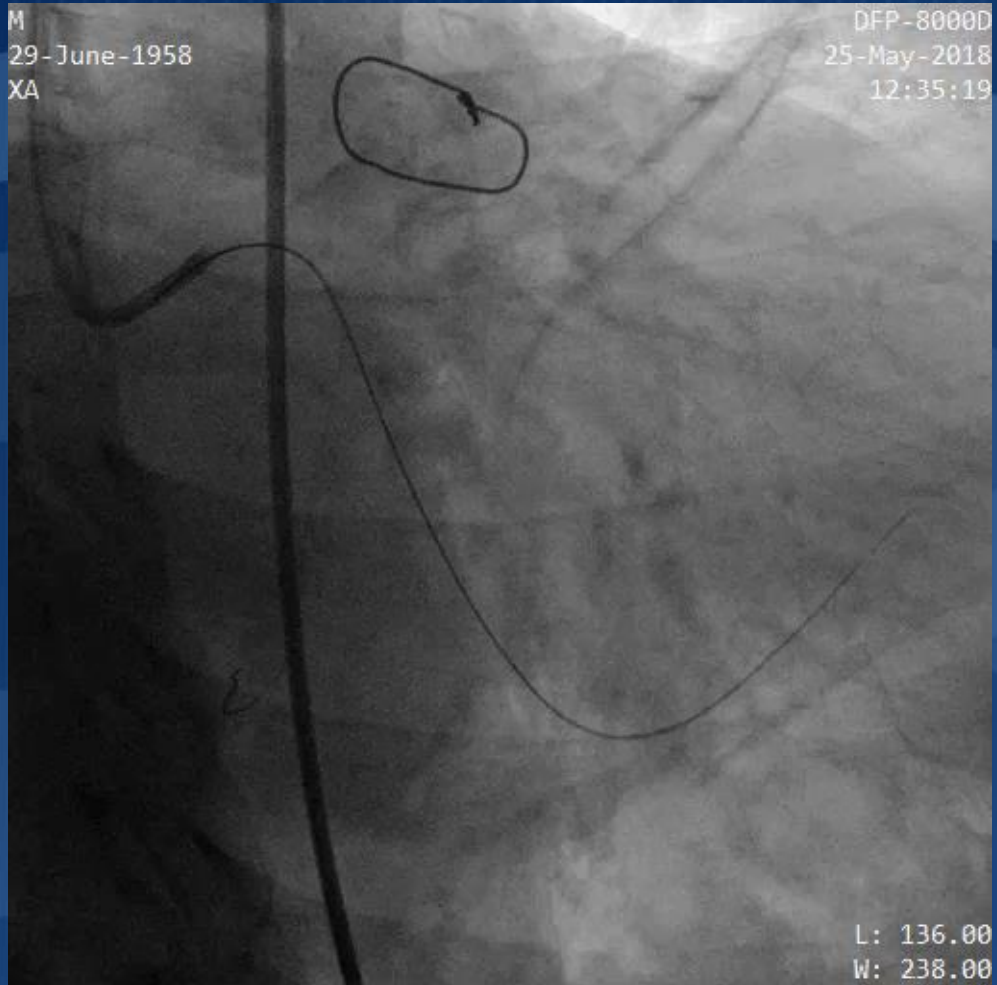
- MIBI
 - Post Stress EF of 32%
 - SSS = 39 (57% myocardial involvement)
 - Large area of transmural defect in apical walls, mid and basal inferior and infero-lateral segments
 - Small area of stress-induced ischemia in mid and basal lateral walls



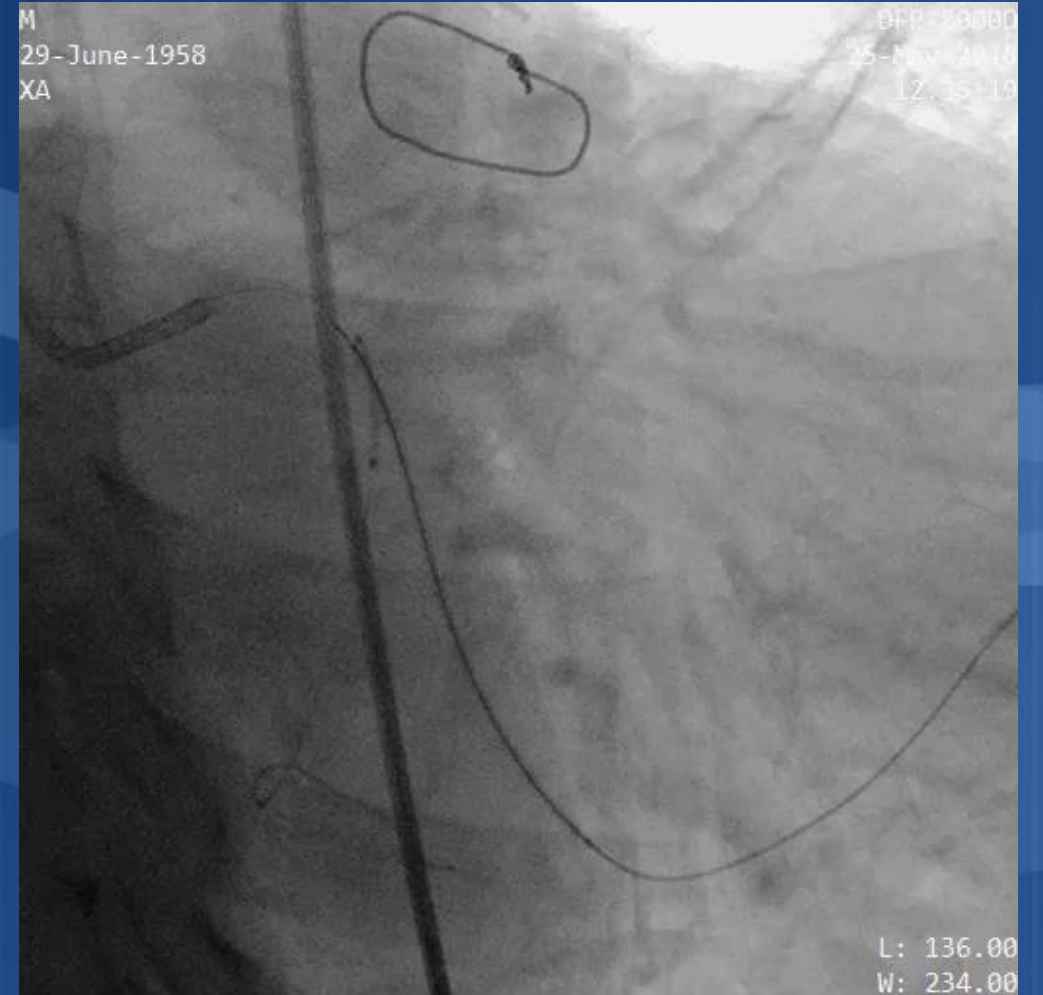
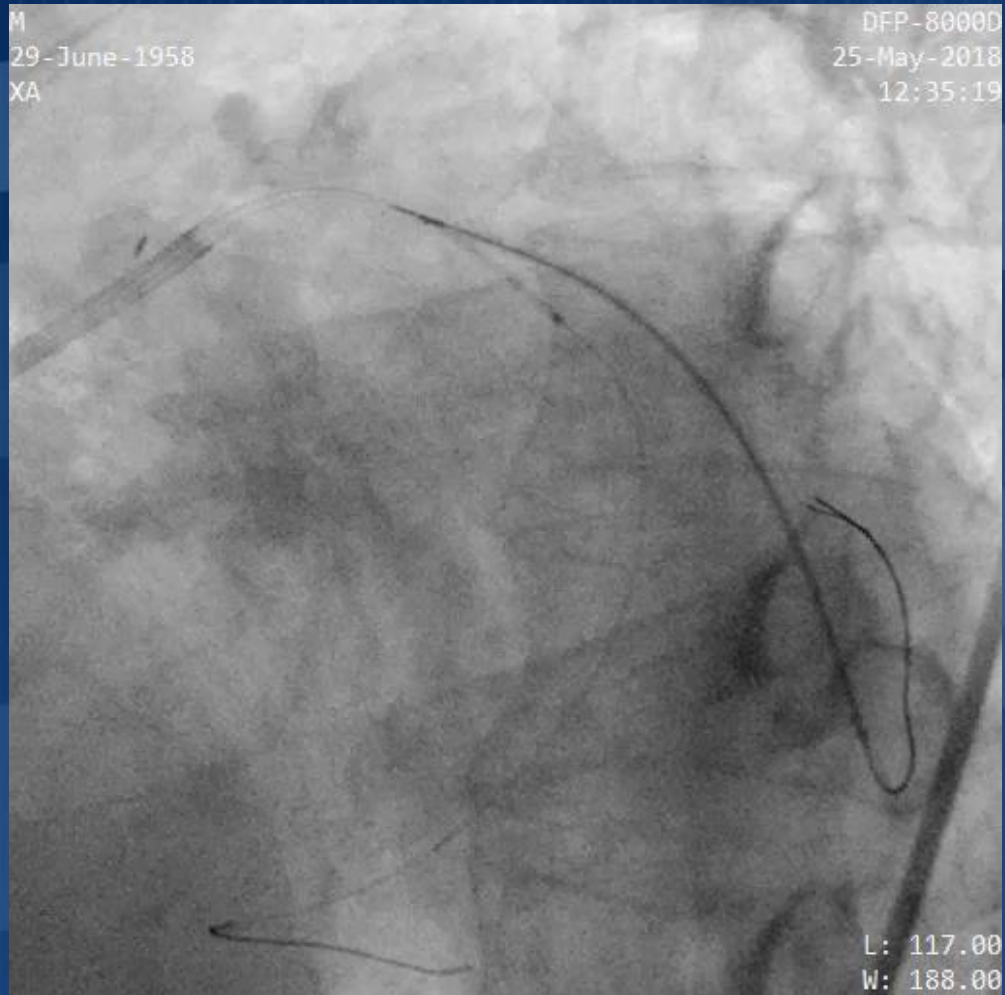
Percutaneous Coronary Intervention



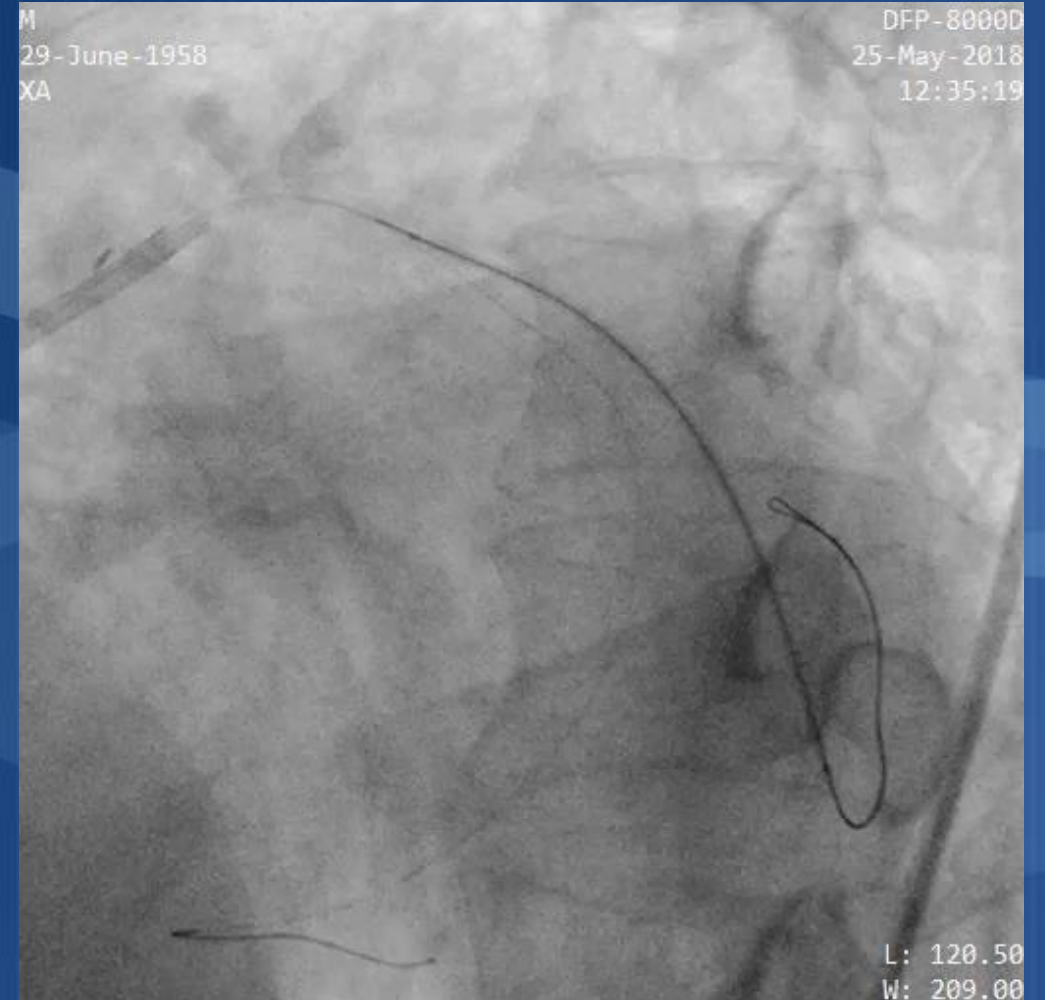
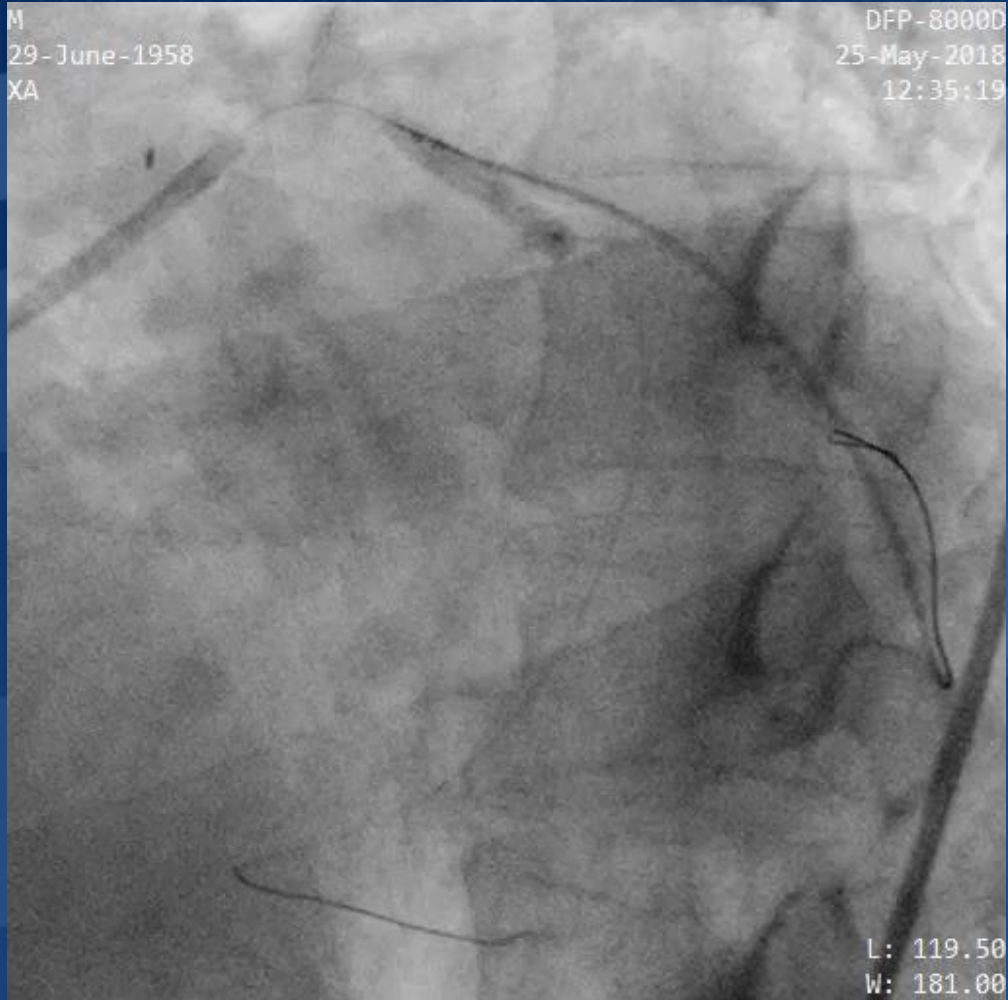
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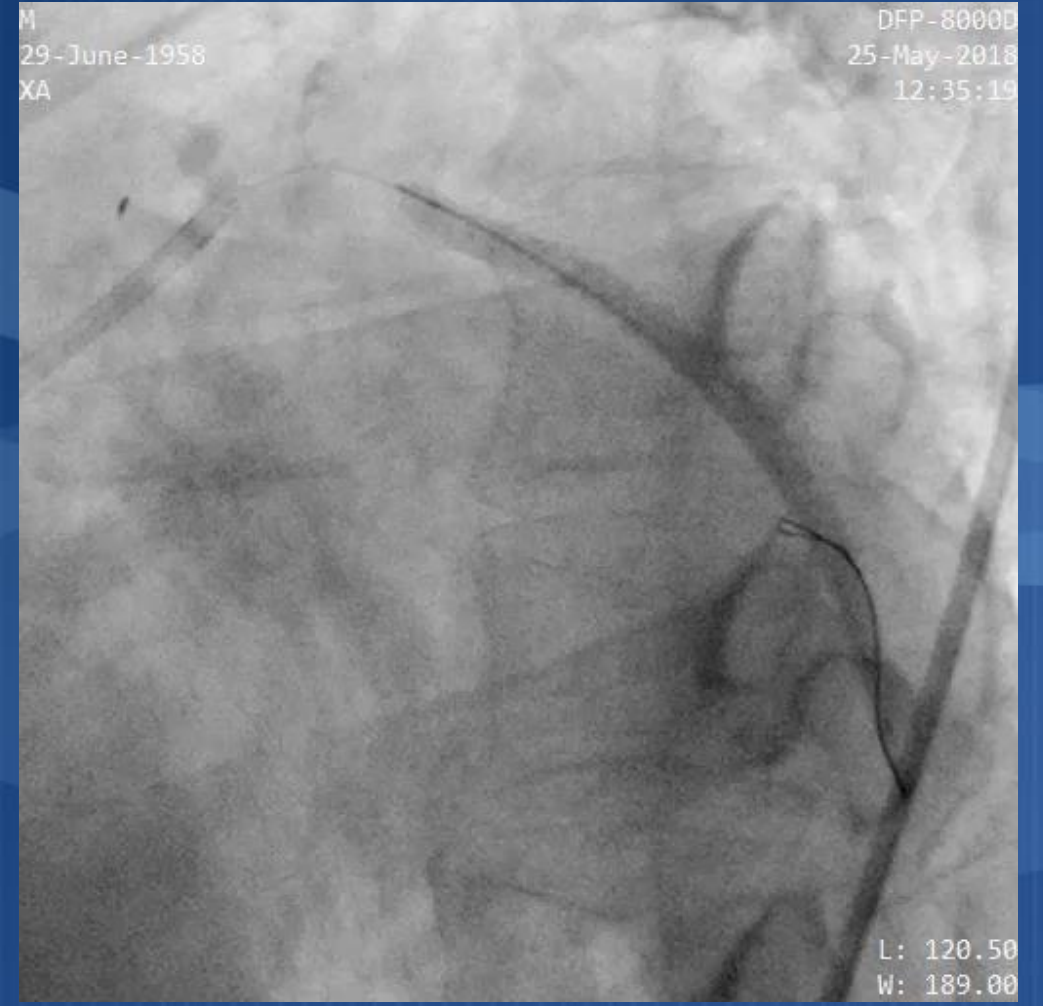
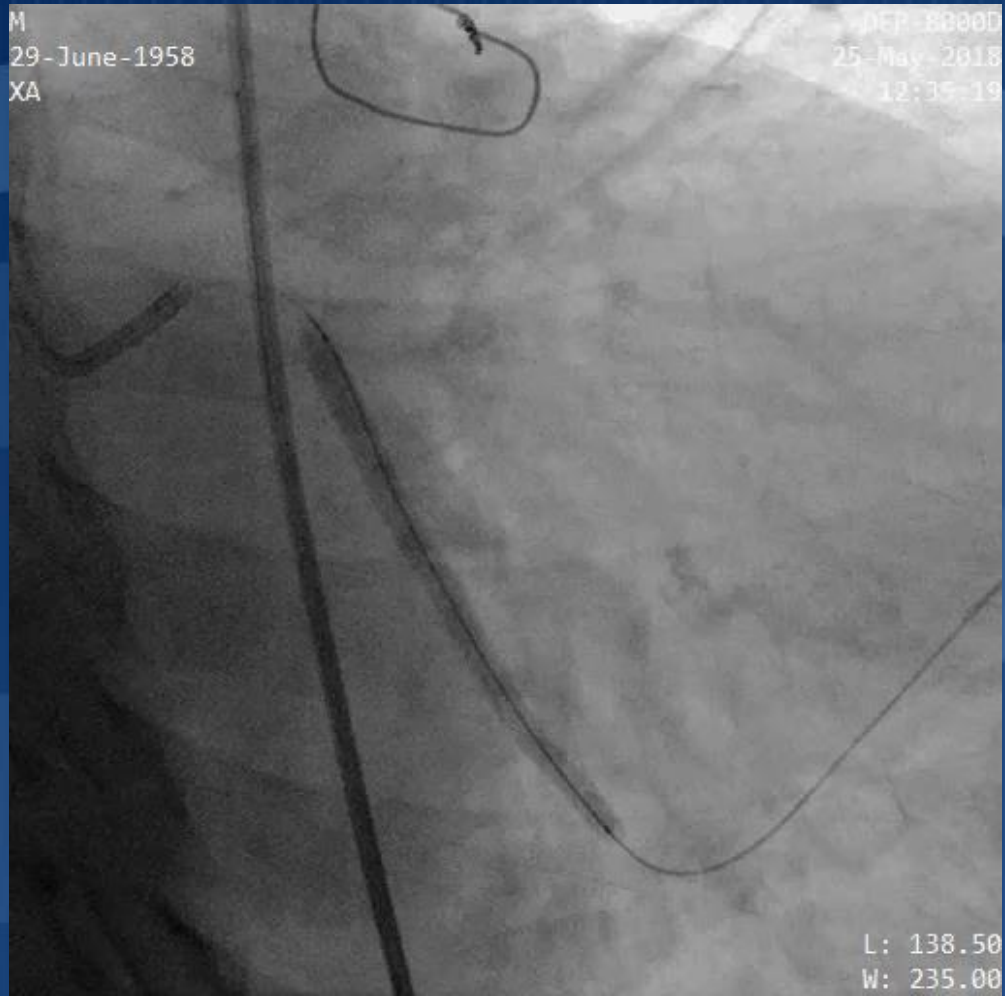
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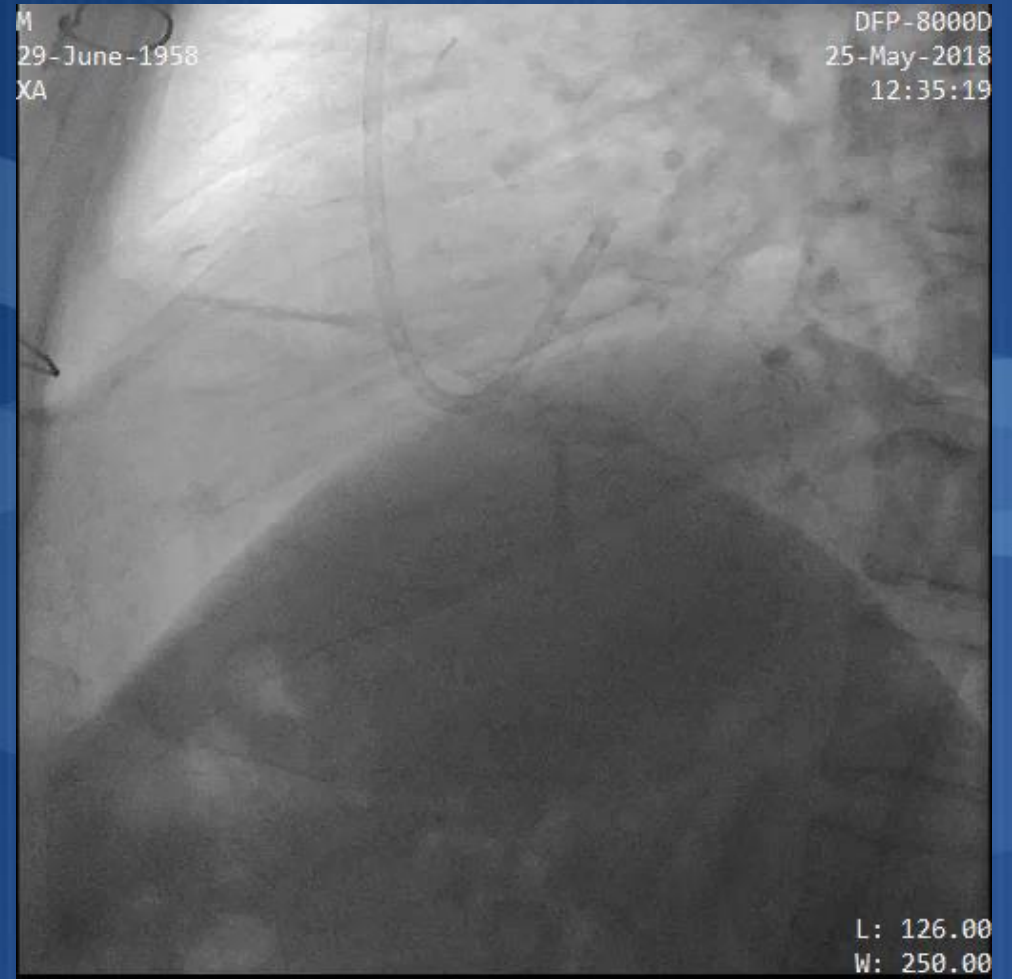
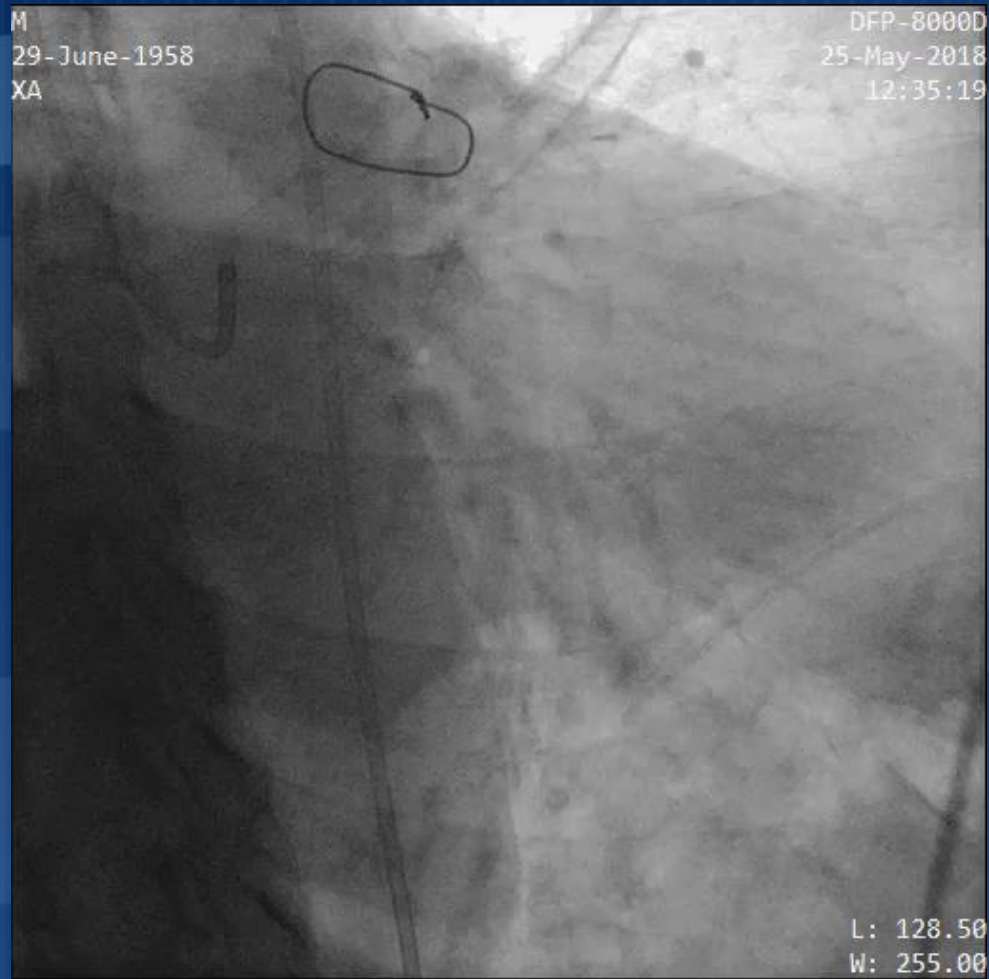
Percutaneous Coronary Intervention



Percutaneous Coronary Intervention



Percutaneous Coronary Intervention



Patient Presentation

- Patient was well post procedure, did not require inotropic support.
- He was discharged 2 days post procedure.
- He returned to our outpatient service, with no symptoms and an improvement in functional status
- His latest echo showed an EF of 38%, 6 months post procedure

