Severe Coronary Calcification

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Case Presentation

Brief Case Summary

- A 57 year old male
- Unsuccessful PCI due to STEMI at 2 days ago

Past Medical History

■ Diabetes : Y

- Hypertension : Y

Hyperlipidemia : Y

• Smoking : N

■ Family History : N

Previous MI : Y

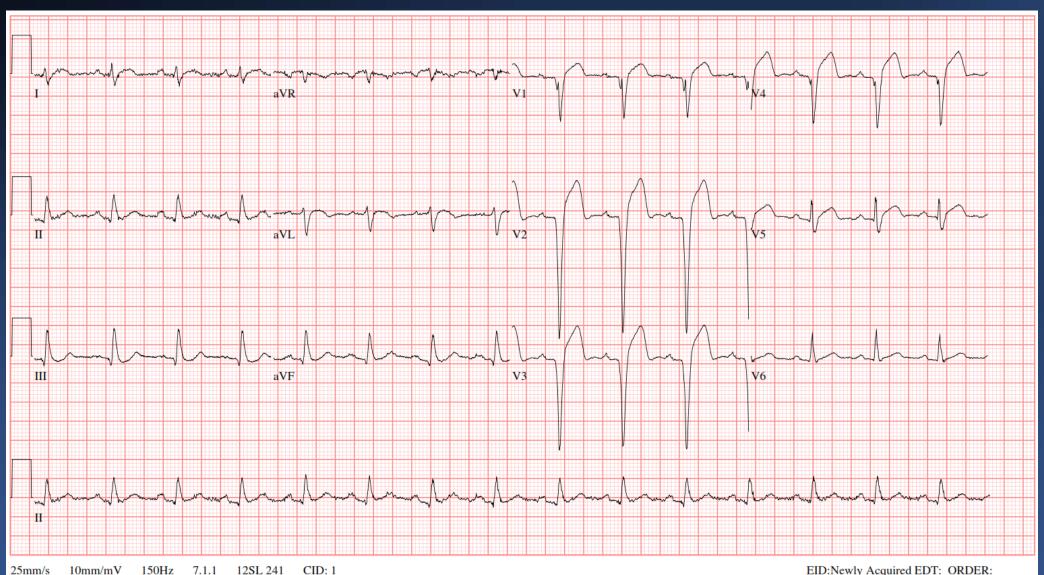
Previous PCI: Y

mLAD: Xience 2.75 x 23





Electrocardiogram







Chest X ray

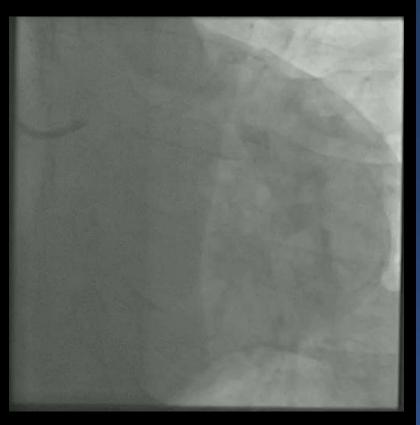






Coronary Angiography Outside Hospital (2 Days ago)

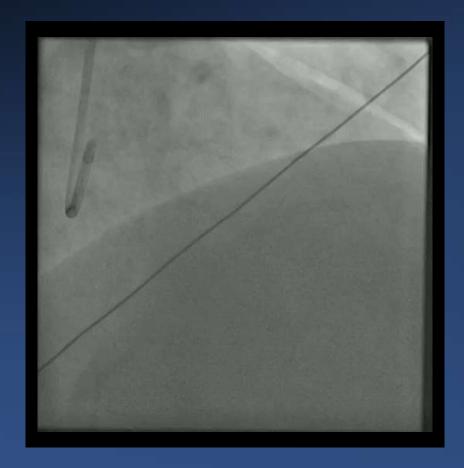








PCI at LAD Outside Hospital (2 Days ago)

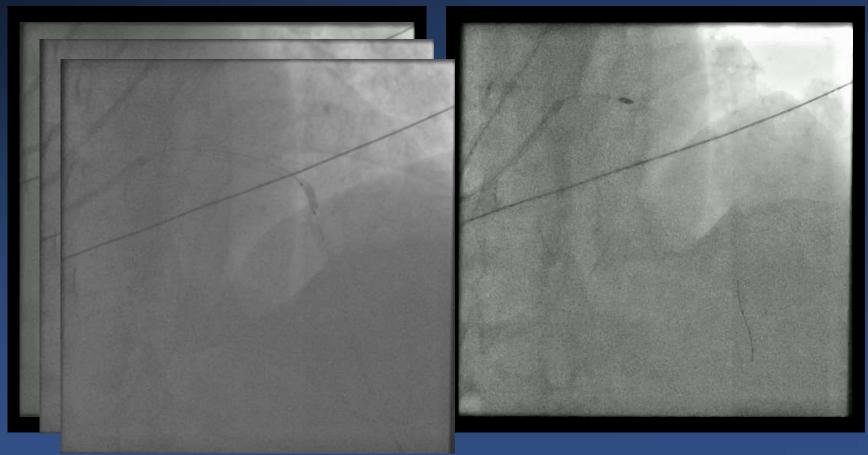








Pre-Balloon did not pass the culprit lesion



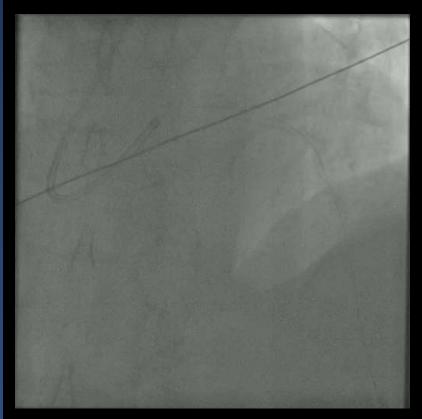


Rotablator 1.5 burr



DES deployment at suboptimal position

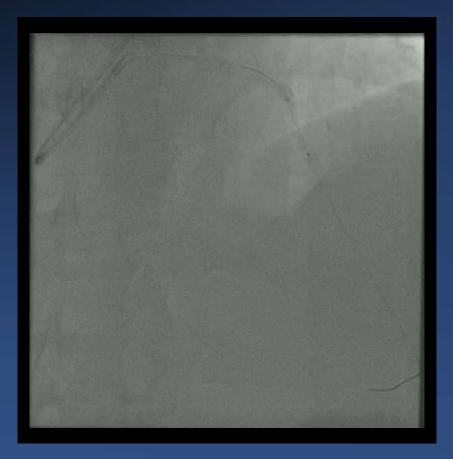


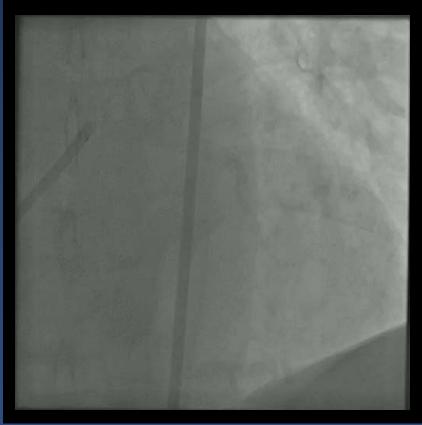


Xience Sierra 2.75(23)



Still, balloon did not advance distally to mLAD



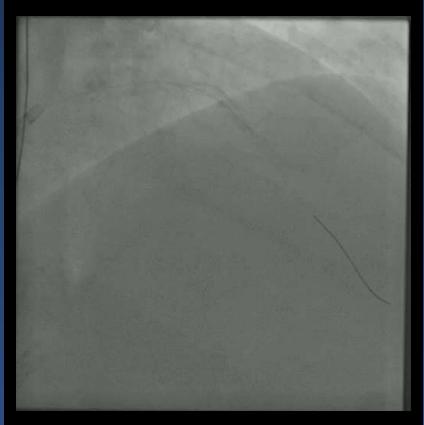






Another stent at the same location with overlap





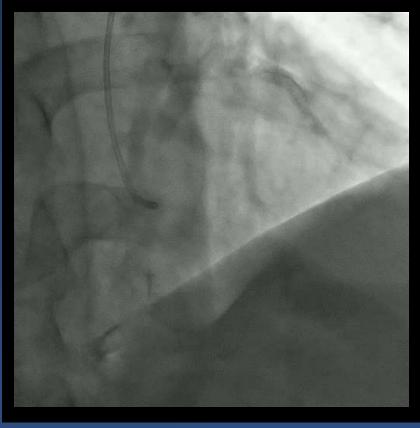
Xience Sierra 2.75(23) overlap to facilitate the NC balloon delivery





Coronary Angiography RCA



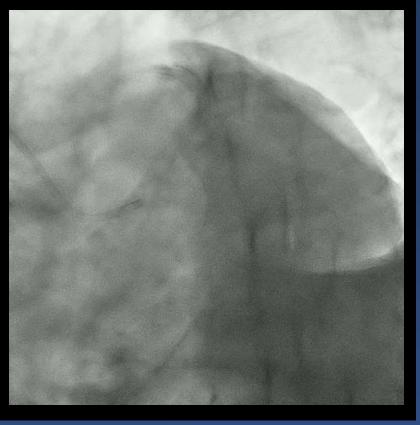






Coronary Angiography LAD









Transthoracic Echocardiography

- EF 56%
- Akinesia of LV apex and hypokinesia of mid anteroseptum





Myocardial Perfusion Imaging

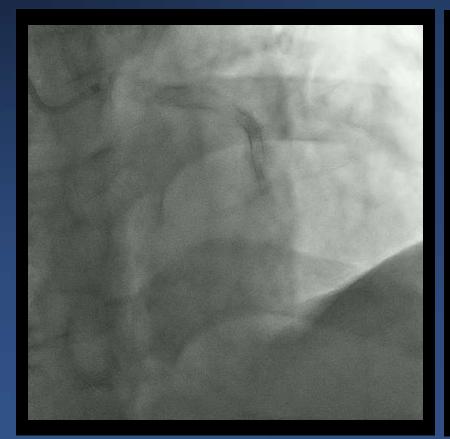
• Fixed large sized severely decreased to absent perfusion in apical-mid anterior, apical septal, mid anteroseptal wall. apical inferior wall





Myocardial Perfusion Imaging

 Fixed large sized severely decreased to absent perfusion in apical-mid anterior, apical septal, mid anteroseptal wall. apical inferior wall

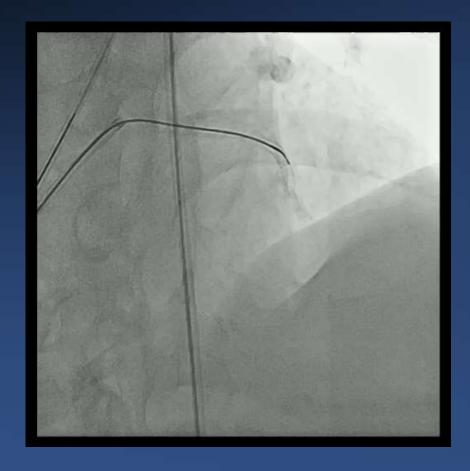








Coronary Micro-Guide catheter (Corsair)

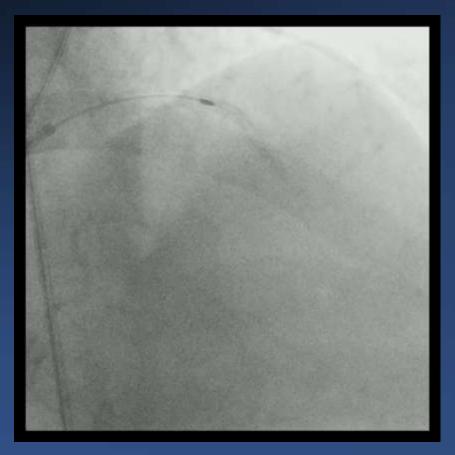


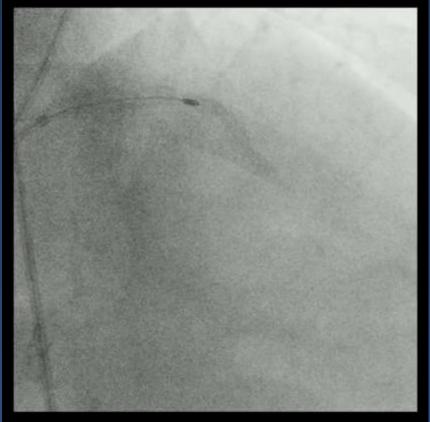
BMW 0.014" - 190cm

Fielder XT-R 0.014" – 190cm



Rotablation for heavy calcification





Rotablator 1.25 burr, 208000 bpm

Rotablator 1.5 burr, 192000 bpm



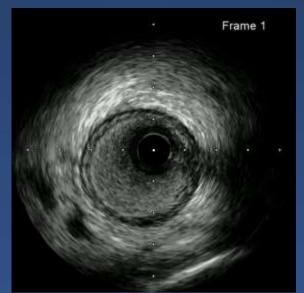
IVUS

Plaque dissection and Subintimal course





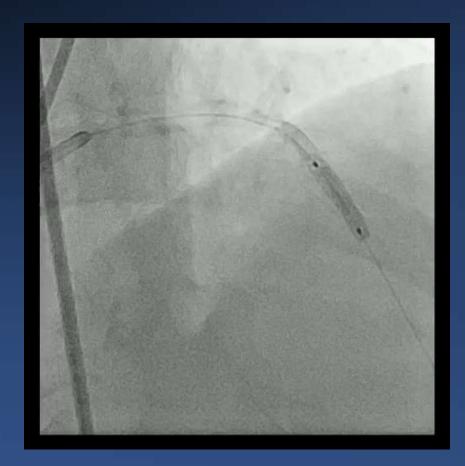


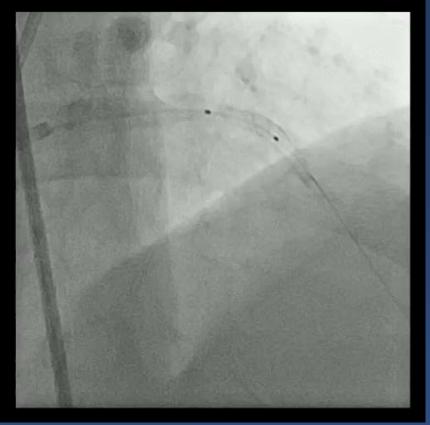






POBA at LAD Sapphire NC 3.25(15) upto 22 atm



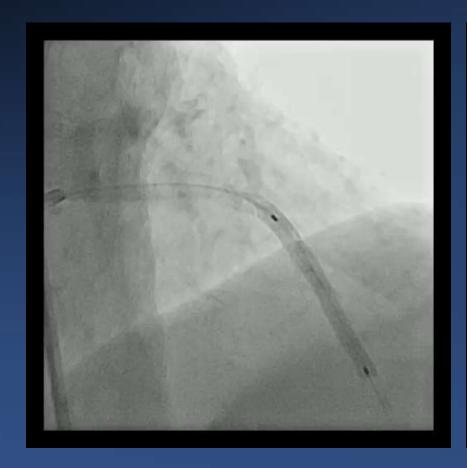


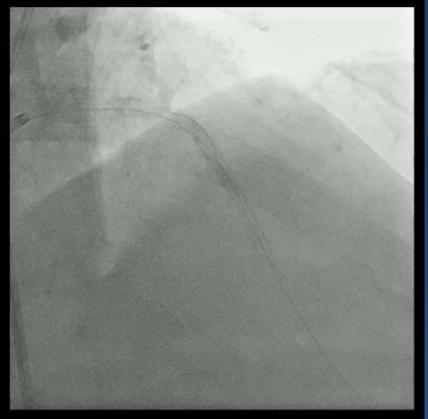




DES at mLAD

Xience Sierra 3.25(33) upto 16 atm



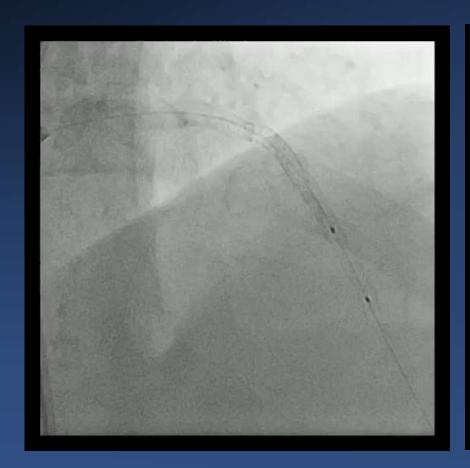


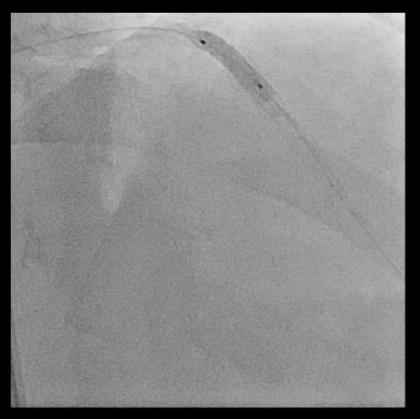




LAD stent optimization

Sapphire NC 3.25(15) upto 22 atm

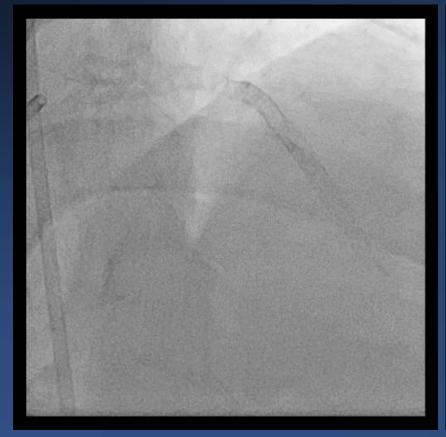


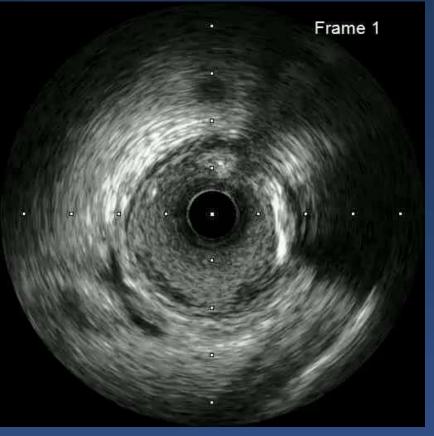






Final IVUS

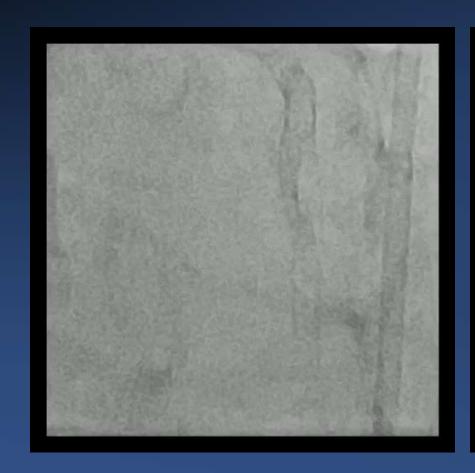


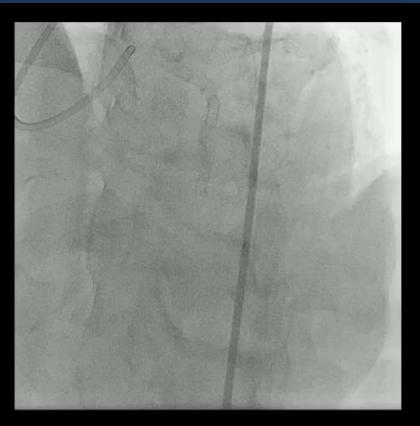






The Final Results









Follow up ECG

