Complicated PTCA of Left Main Total Occlusion in NSTEMI

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Disclosure Statement of Financial Interest

Within the past 12 months, I or my spouse/partner never had a financial interest/arrangement or affiliation with the organization(s) listed below.

Affiliation/Financial Relationship	Company
Grant/Research Support	No
Consulting Fees/Honoraria	No
Major Stock Shareholder/Equity	No
Royalty Income	No
Ownership/Founder	No
Intellectual Property Rights	No
Other Financial Benefit	No

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I, (Dr AM Thirugnanam) DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

Patient's Demography

- Personal history: Asian,56yrs old male, Private school teacher.
- Family History: Both parents are healthy
- Lifestyle: no exercise, wt-65kg, vegetarian by diet, no smoking, no ethanol
- Medical history: T2DM for 6 yrs, HTN for 10 yrs. Epilepsy for 3 yrs

Patient's Presentation

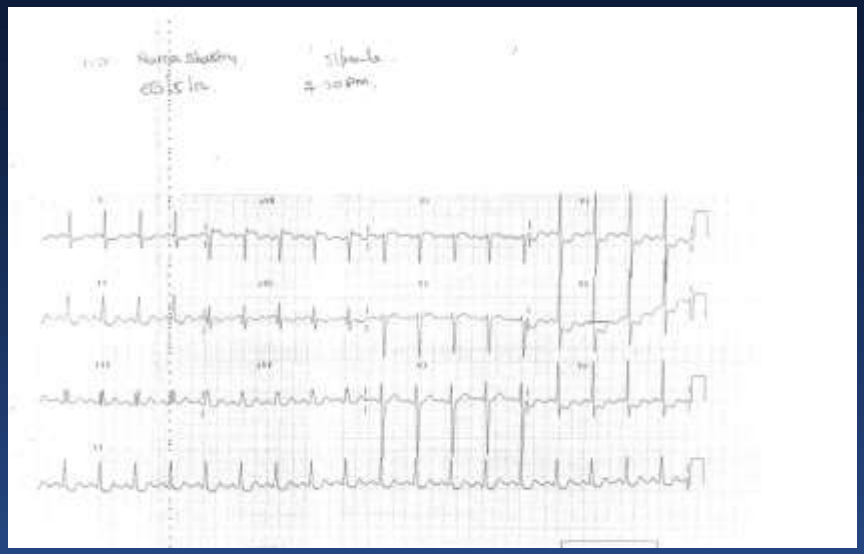
- Crescendo pain for last 3 hrs, arrived at emergency 7.15 PM, had intermittent chest pain which was radiating to jaws and bilateral shoulders for the last 15 days, no treatments were given.
- BP-80/100mmHg, HR-130/min. RR-24/min, O2-93% in room air.

Investigation Reports

- ECG-ST depression >2mm in V4-V6, ST elevation in aVr, and borderline ST-T changes in other leads.
- ECHO-Severe ischemia in LAD and LCX territories with normal wall thickness. EF-40 to 45%, moderate LV dysfunction
- RBS-215mg/dl, CTnI->50ng/dl, CKMB-28, CK-NAC- 89, LDL-120mg/dl, HBA1C-8.5, TG-290mg/dl, Cr-1.0, CRP-136.

ECG- at Emergency 7.15 PM

Clopigogrel-300mg, ASA-325 mg, Bolus 8ml-Integrillin



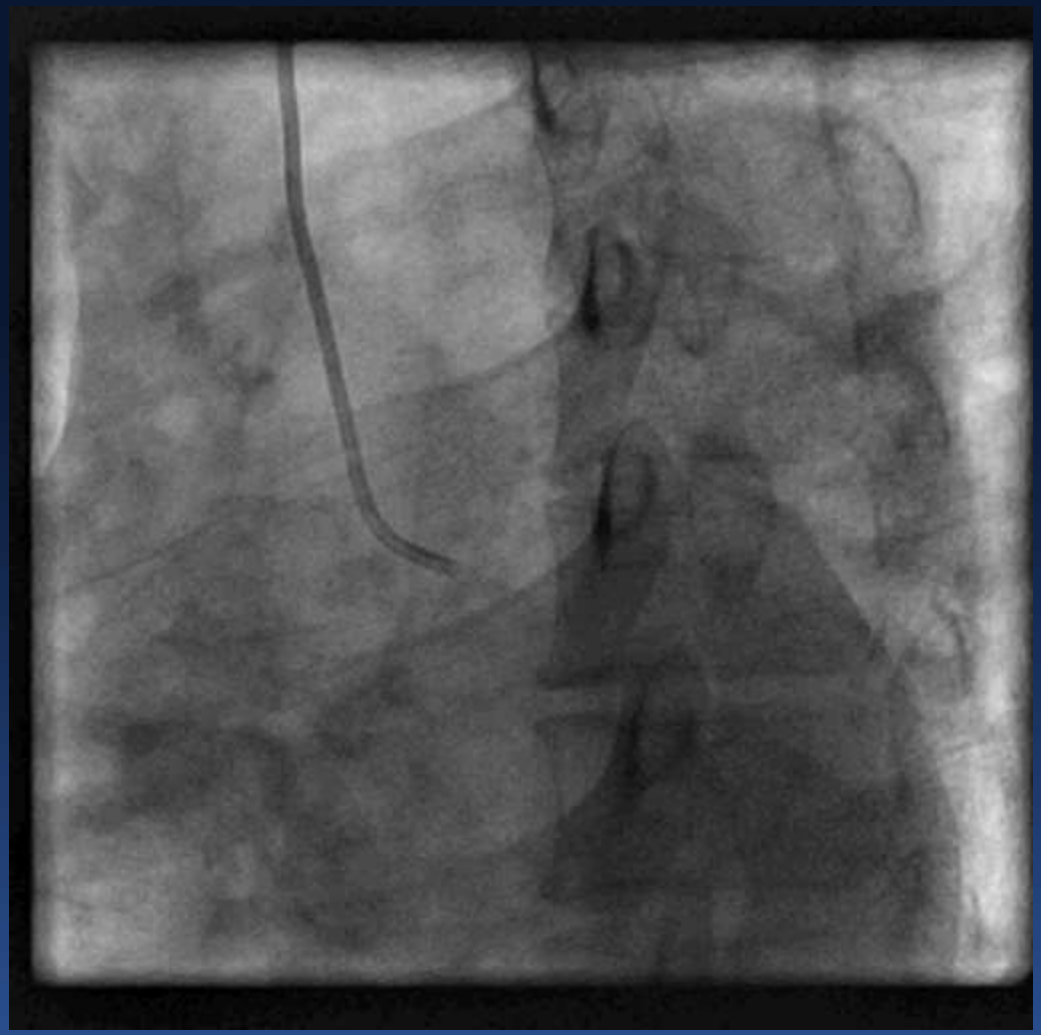
Shifted to ICCU, Planned morning cath

- **ICCU Rx-Ivabradine 5mg BD, Atorvastatin-80 mg OD, Insulin, Trimetazidine 30mg BD, ASA-150mg OD, CLO-150 mg OD, Nicorandil -5mg BD, O2-3L/min, Magnex1.5gm antibiotic BD, Ranitidine IV BD, Alprazolam 0.5 mg OD**

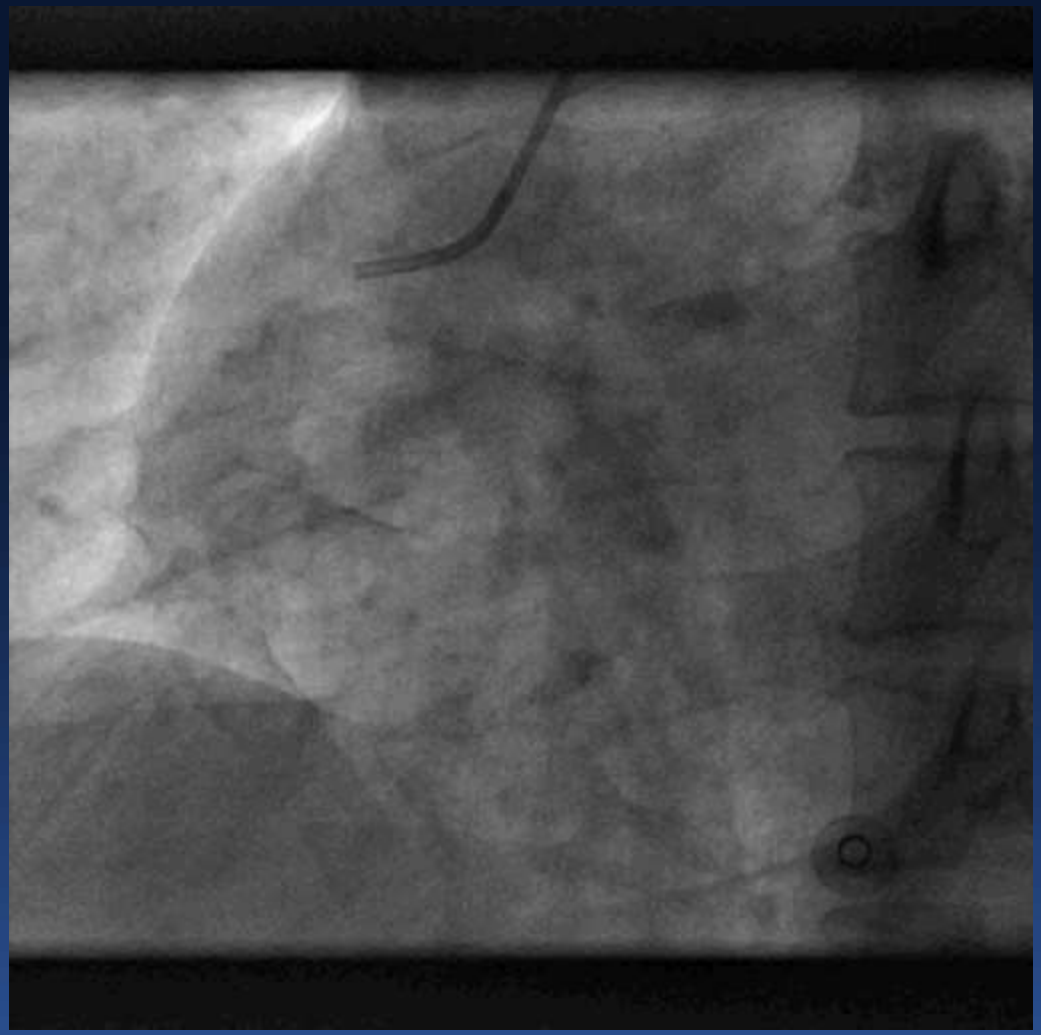
Right Radial Route, CAG study

- LM- mid 100% occlusion, filling retrograde from RCA distal
- RCA- Dominant, mid mild disease, ostial PDA mild disease.
- LV angio was not done, LVEDP not measured.

LM injection



Right Coronary Injection

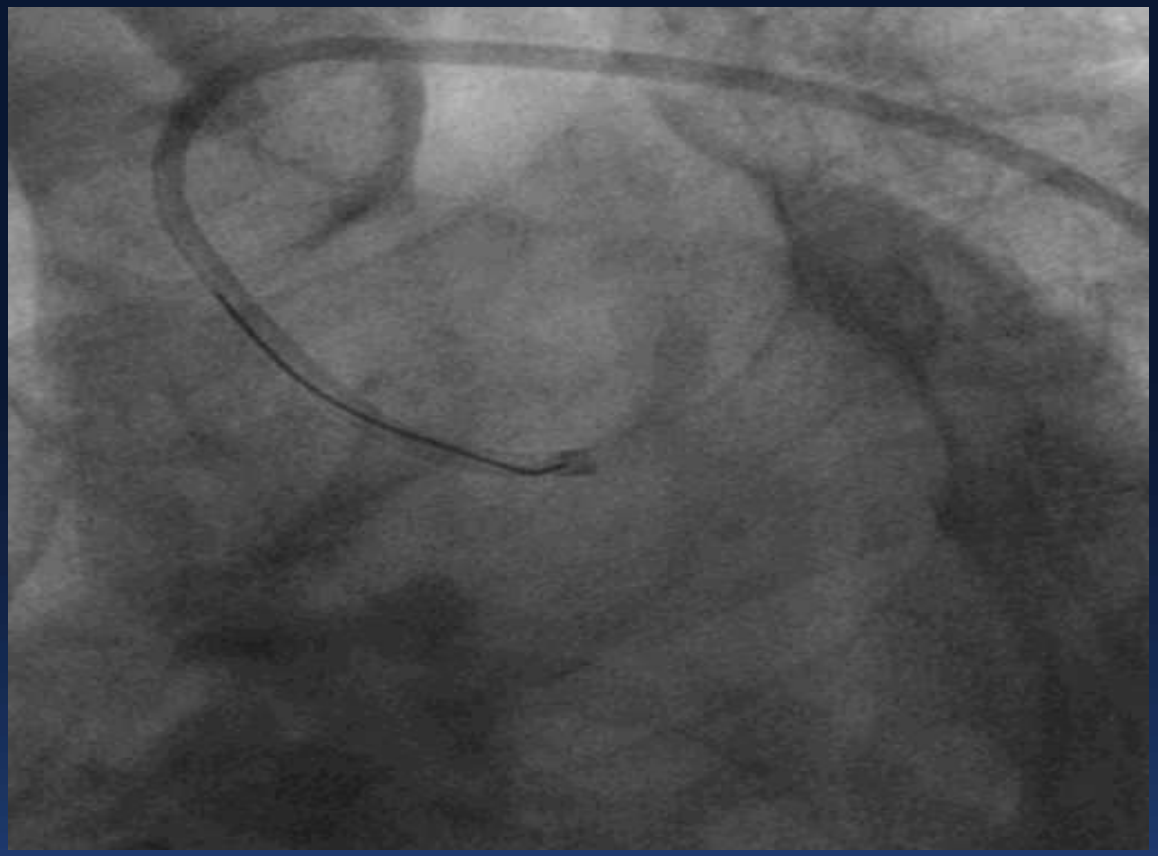


Complications during cath

- Patient had developed seizure and given Phenytoin IV
- Immediately called my CT surgeon for CABG, but denied after seeing on going angina, highly elevated trop, and moderate LV dysfunction.
- I have planned to do high risk PTCA to LM to LAD.

During the Plan of PTCA

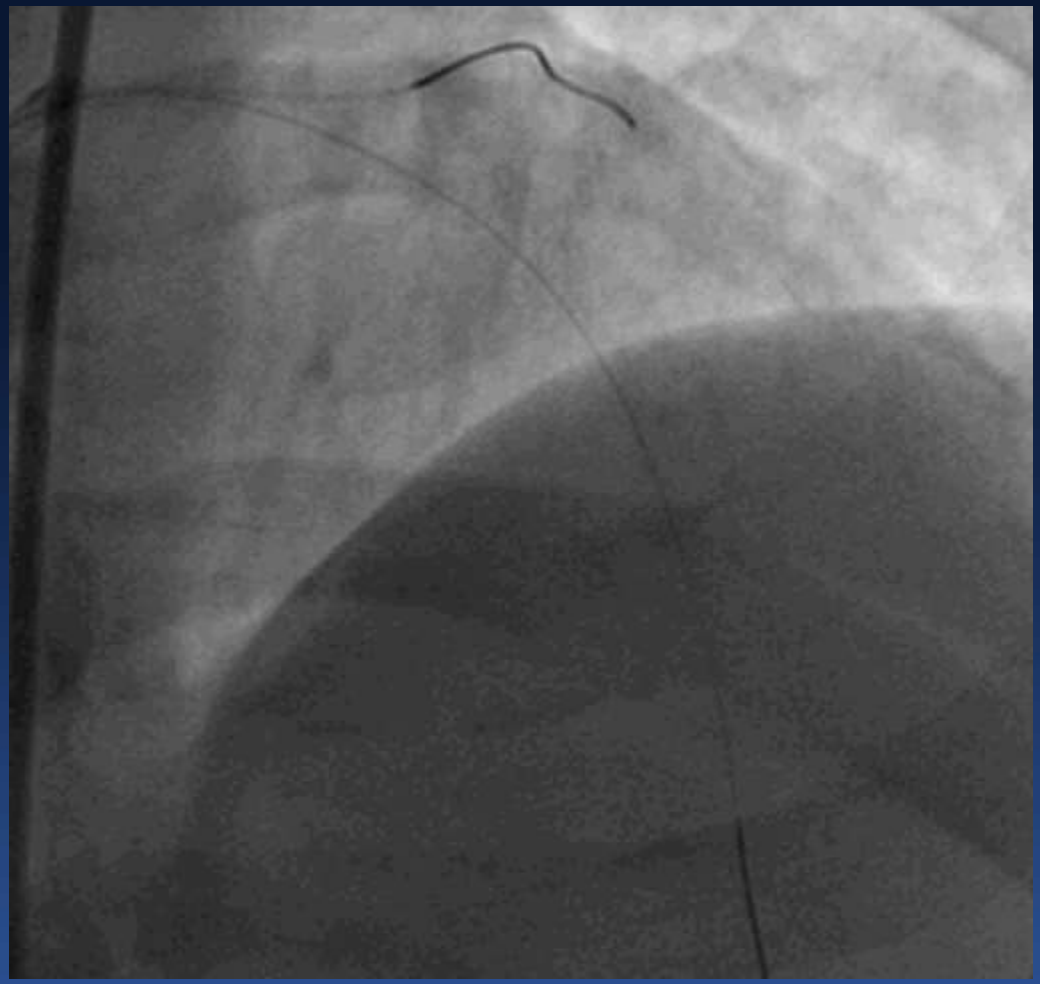
- 7Fr sheath had kept in RFA, 6Fr sheath in RFV and TPI lead was in IVC, 6Fr sheath in LFA for IABP line, in case of any support.
- Second dose of 600mg Clopidogrel, Bolus 48mg Bivalirudin were given before crossing wires. 110mg Infusion of Bivalirudin had been given and kept ACT->300 sec



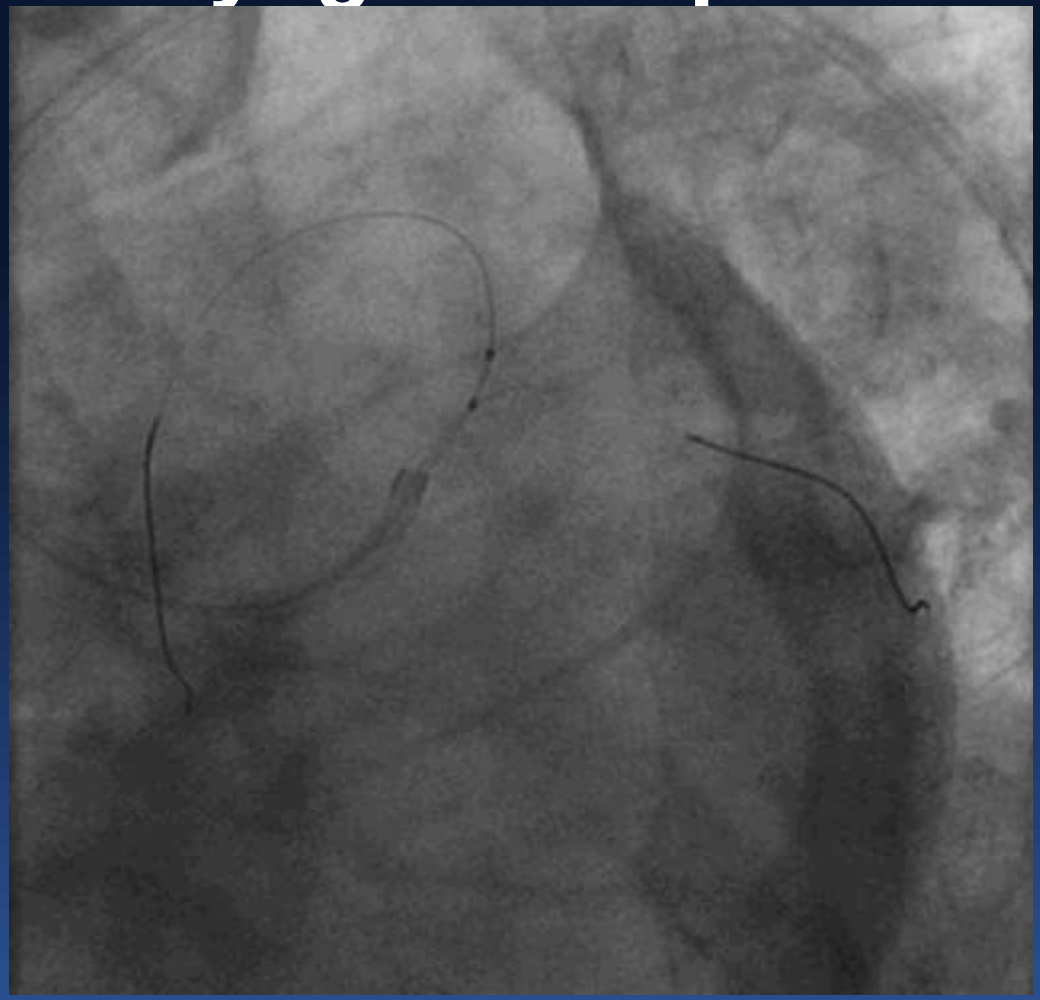
LM engaged with 7Fr JL under RFA

Borderline Hypotension and started Dobutamine 7.5mcg with Dopamine 5mcg. HR-140/min

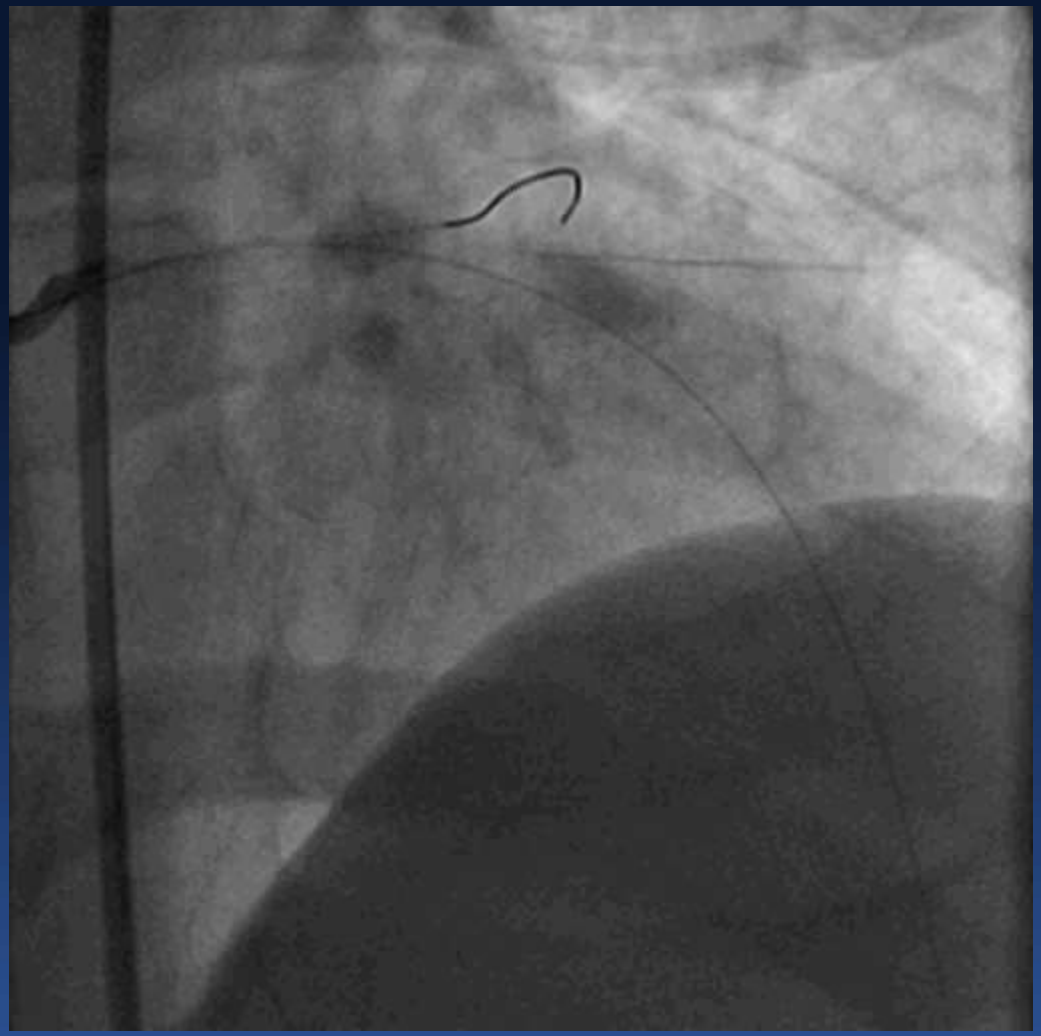
BMW guide wires were in LAD, LCX



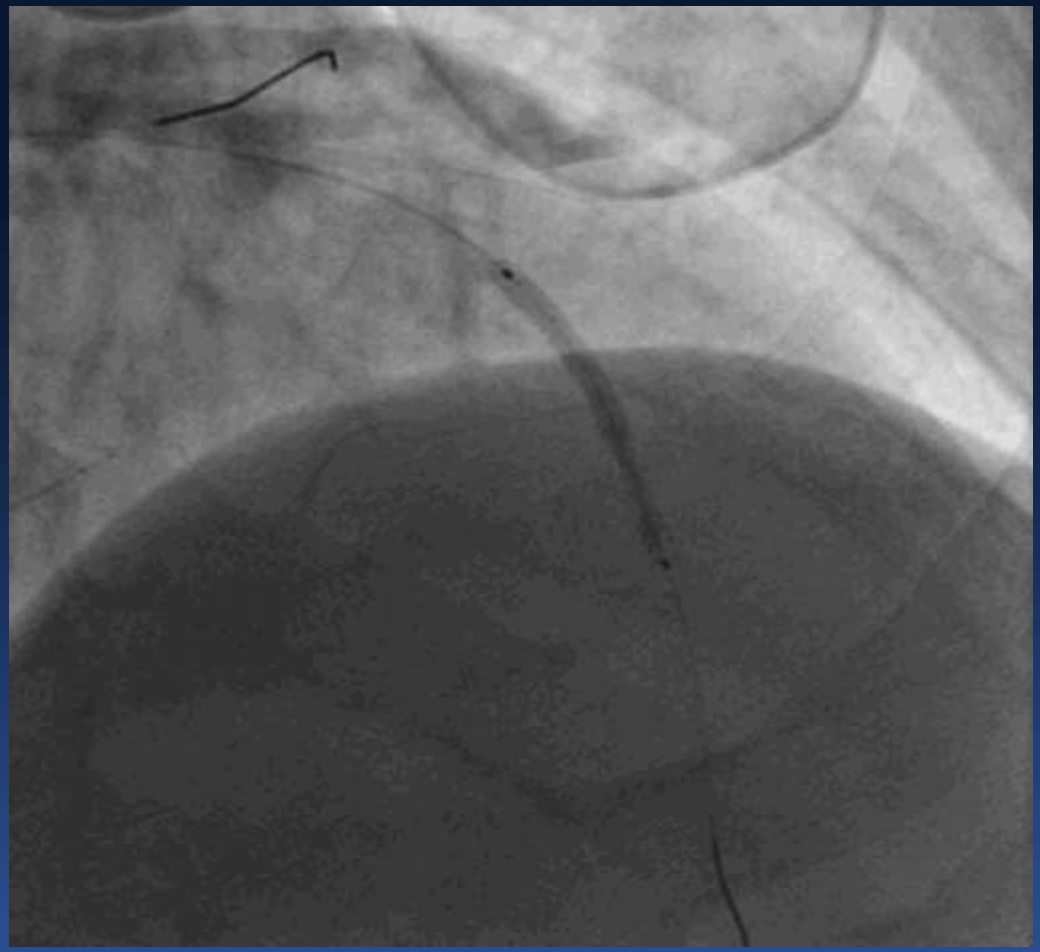
Balloons-2/10, 2.5/15 and 3/12 voyager compliant



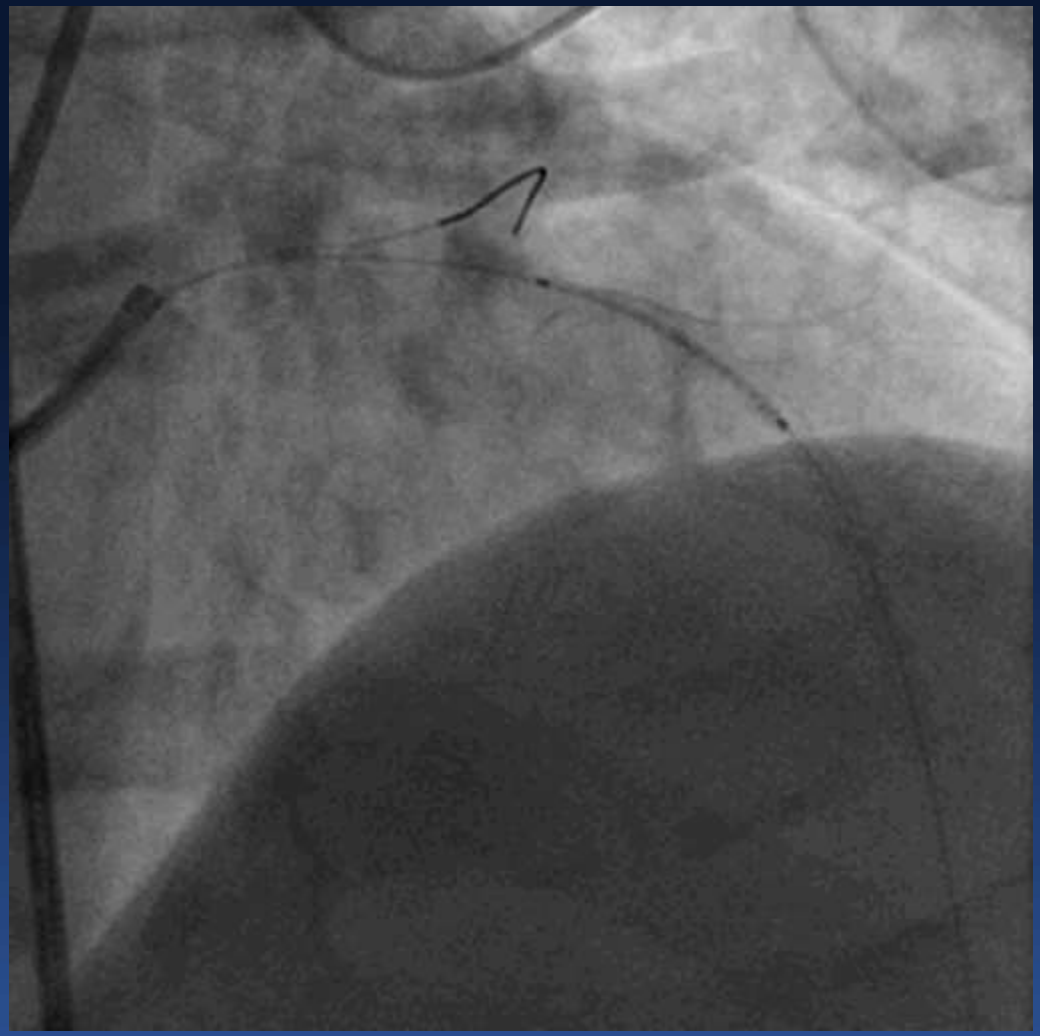
LM to distal LAD was predilated



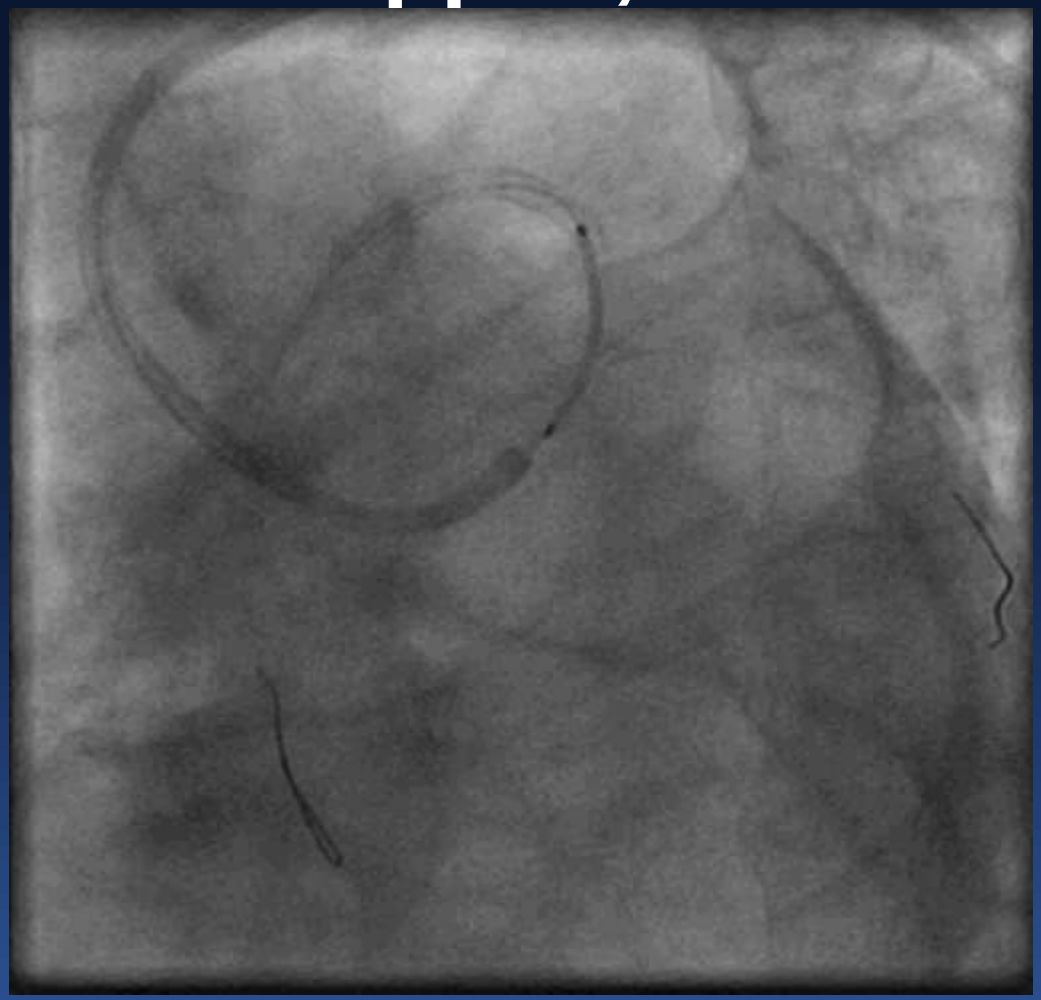
First stent 2.5/33mm Xience Prime, Post dilatation with 2.75NC 16atm



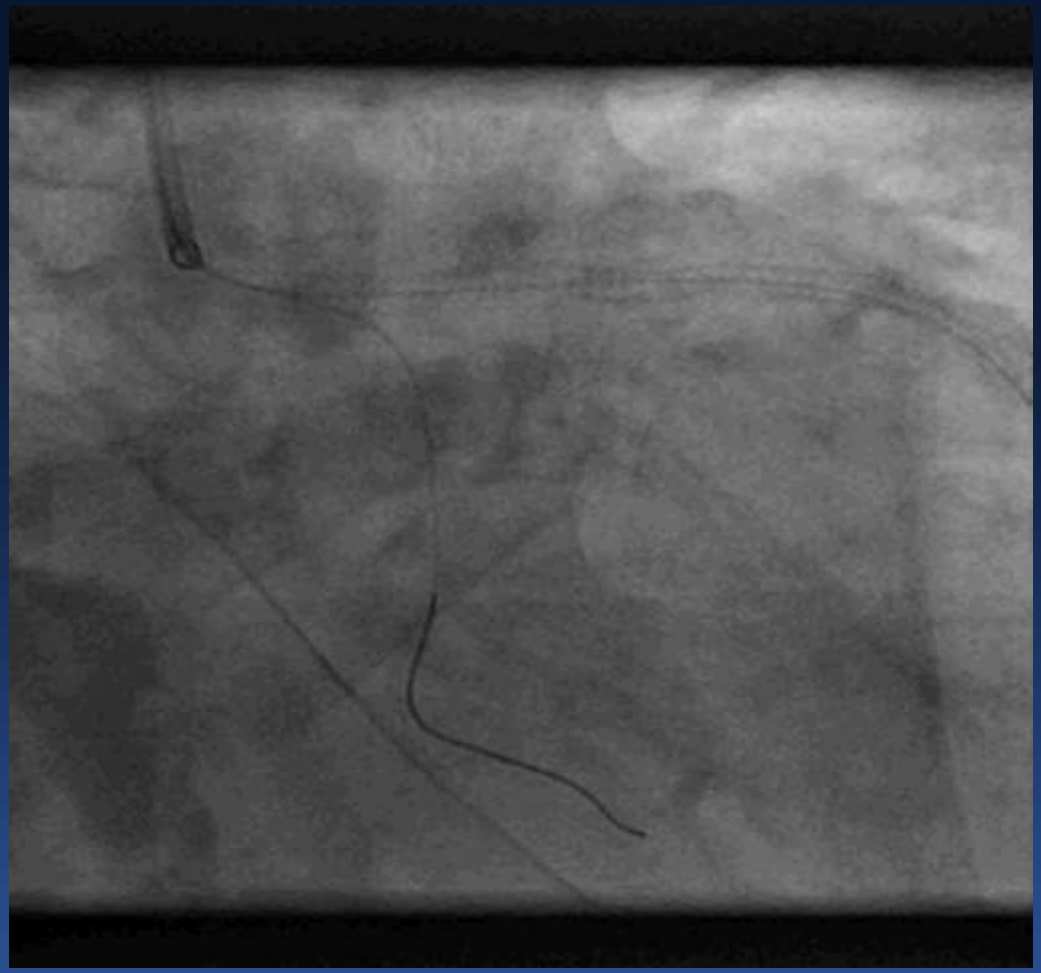
2nd stent 2.75/33mm, overlapped



3rd stent 3/33mm LM to LAD and overlapped,12 atm



Post dilatation was done from LM to LAD distal with 3/10 and 3.5/10

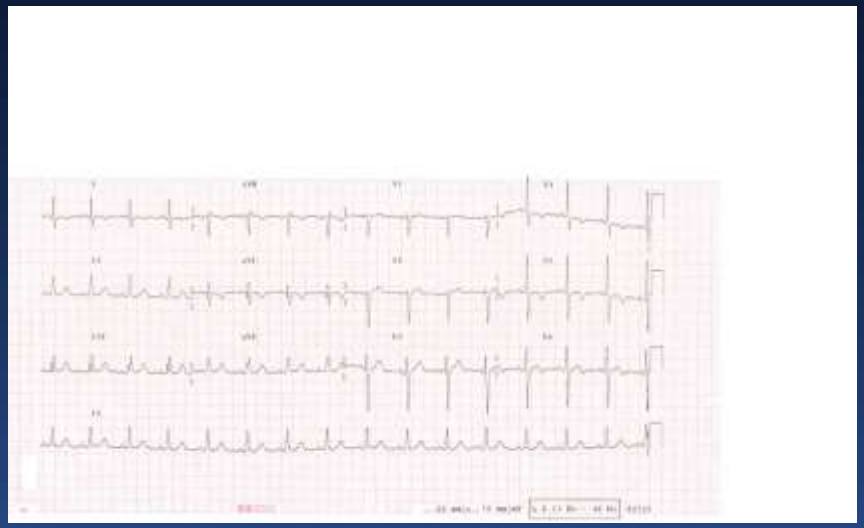


Patient was discharged on 5th day

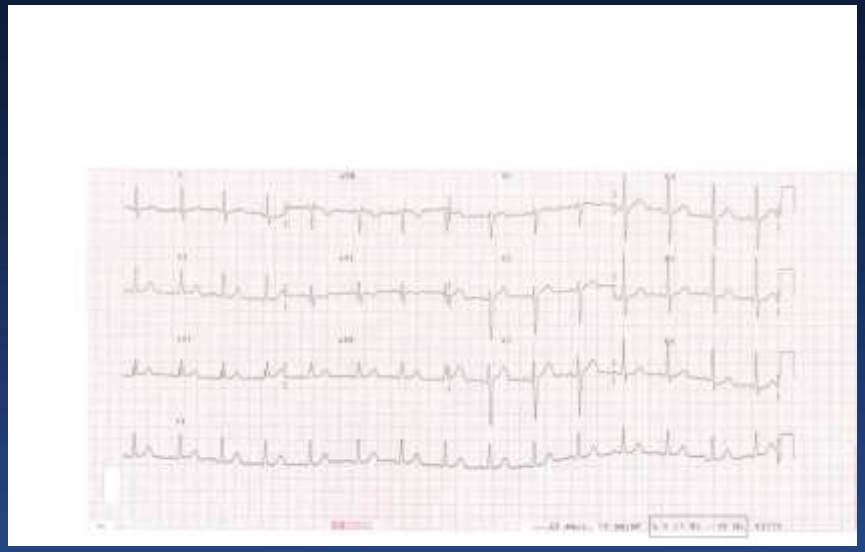
- Discharge Medications: Ramipril 1.25mg BD, ASA-325mg OD, Clopidogrel 150mg OD, Cilostazole 100mg OD, Ivabradine 5mg BD, Atorvastatin 80mg OD, Insulin, Trimetazidine 30mg BD, Ranitidine 300mg OD, Alprazolam 0.5mg OD, Mononitrate 20mg BD and epileptic drugs

Patient has started his teaching after 3wks of rest, only bread winner

ECG after 10 days



ECG after 20 days



Precautions and Preparation

- Selection of IABP in prophylaxis or elective case should have clear guidelines in ACS regards with biological markers and co morbid conditions
- Even though there was no mortality benefit over 30 days in shock-II trial, the importance of maintaining perfusion pressure during and after stenting in compromised LV function is must.

Challenges what We have faced

- High mortality in NSTEMI with LM
- No Surgical help in high risk CAD with acute condition
- Cost factor in Ad hoc urgent PTCA, because waiting for approval
- Syntax score-40 with elevated troponin implicates high procedural complications
- Entire procedure was done at HR 130