



## Case presentation

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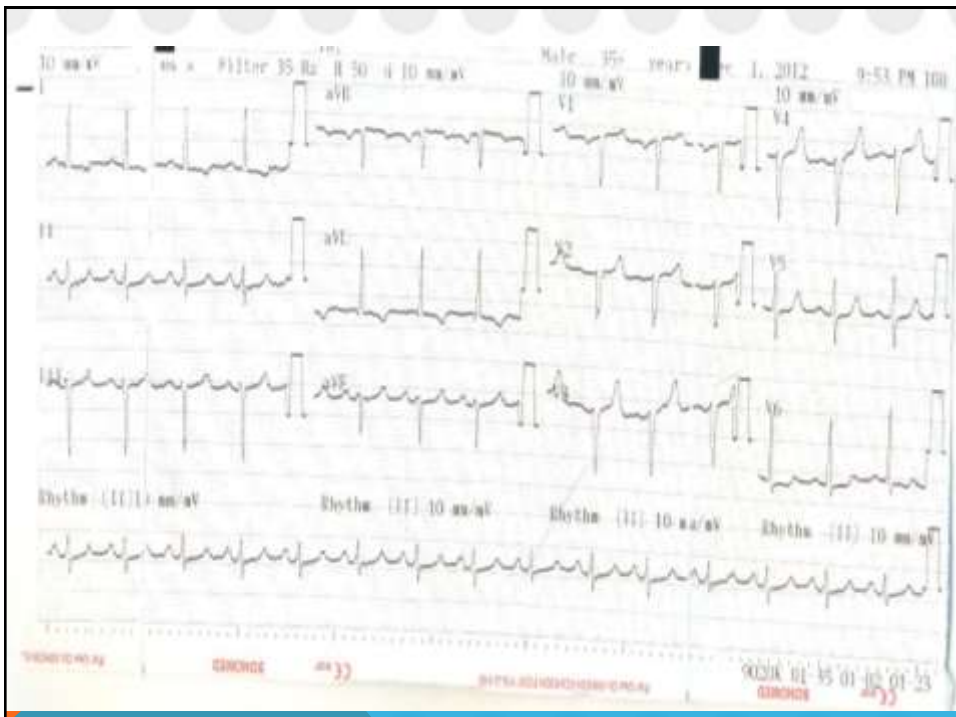
Critical Care Department, Cairo University  
Nuclear, Echo and Cardiac Catheterization Labs

## Medical History

Female patient  
53 years old  
Obese  
Diabetic , hypertensive  
Dyslipidemic  
Unstable angina since September 2014  
PCI to LAD at January 2015

## Complaint

- Recurrent attacks of chest pain increasing in frequency and duration.
- ECG: sinus rhythm with no evidence of active ischemia.
- Echo: Normal LV function with no resting wall motion abnormality.



# Myocardial Perfusion Imaging

## Resting vital data:

HR:92 beat/minute

Bl.pr : 140/80

## Physical stress study

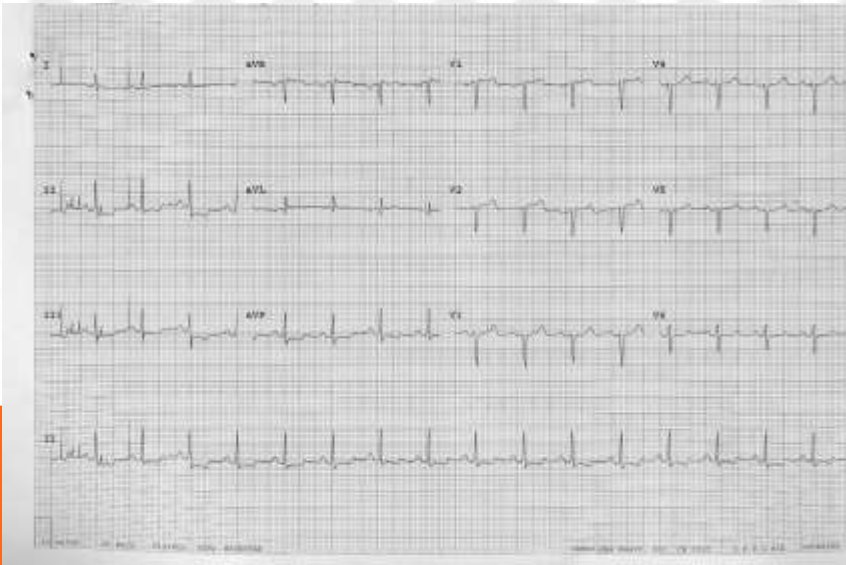
Bruce protocol

Time 4 : 13 min

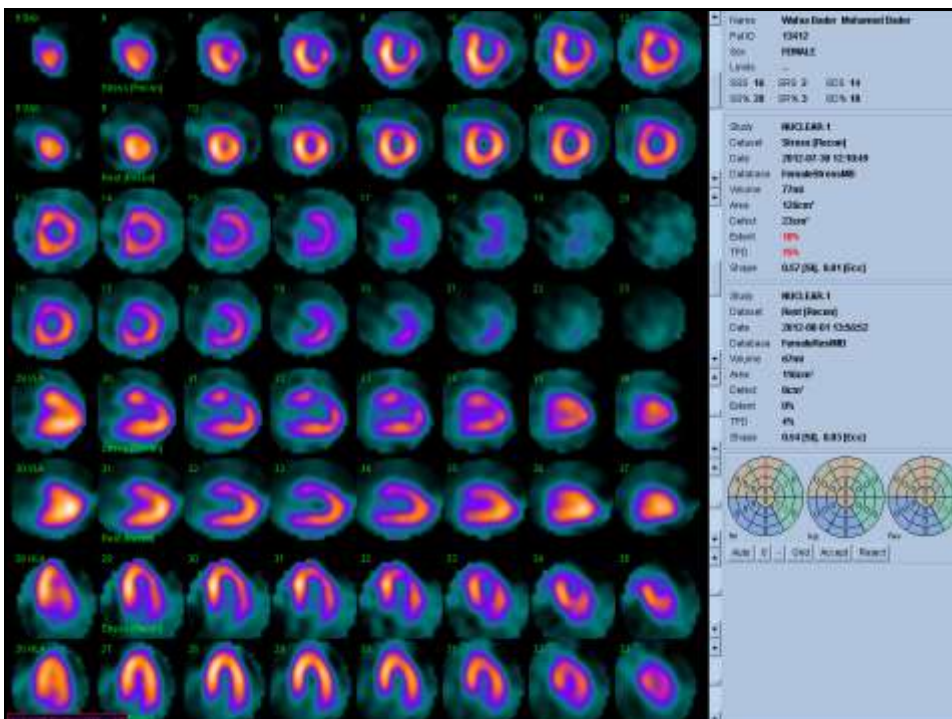
HR achieved : 142 b/min

Termination reason : chest pain

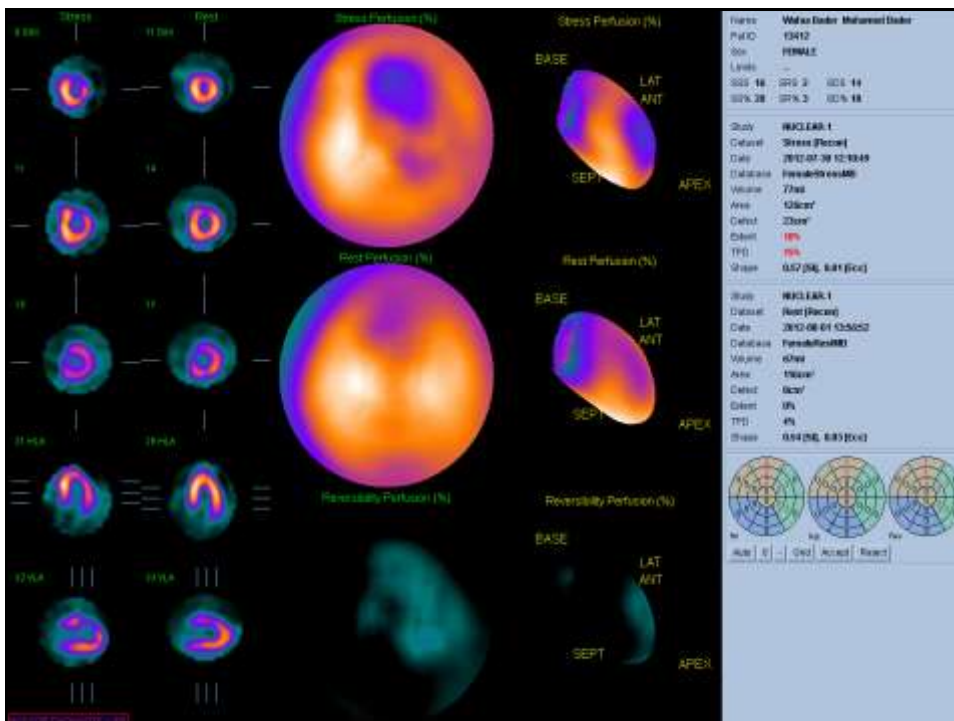
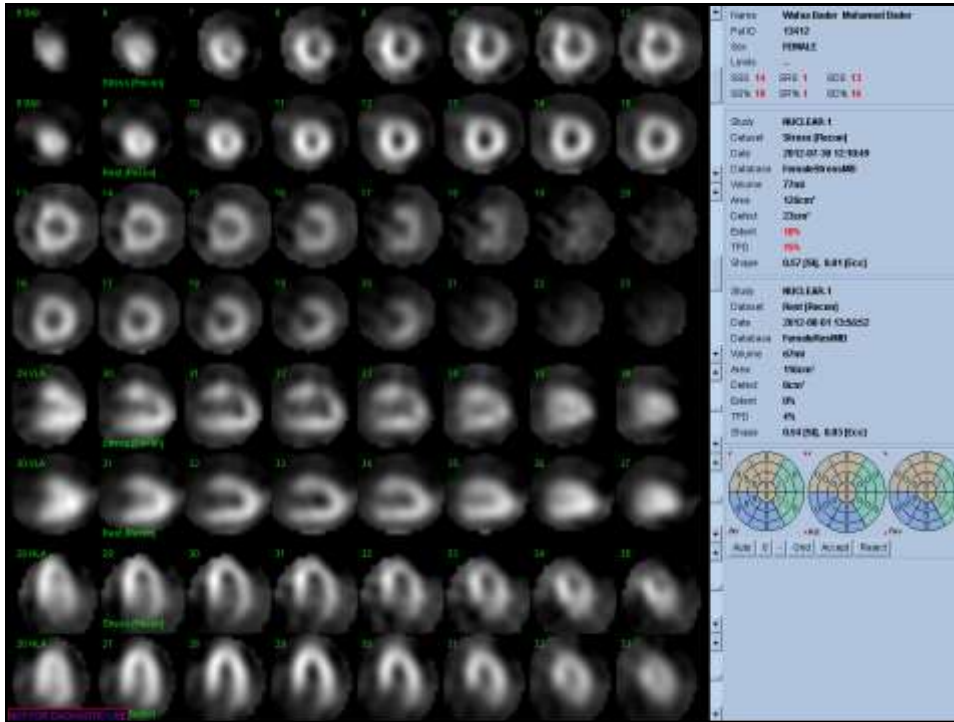
Peak Bl/pr : 200/100

**REST ECG****PEAK HR ECG**

## RECOVERY ECG







## MYOCARDIAL PERFUSION SCAN

Positive Tc99m sestamibi Gated SPECT showing combination of severe ischemia and small sized scar at LAD / ischemia in LCX territory with stress induced LV dilatation.

Myocardial perfusion scan pointed to possible LAD and LCx ischemia with need for coronary angiography for anatomic delineation

# Coronary angiography

## Coronary Angiography showed

- Patent stent in the LAD with diffuse distal disease without angiographic significant lesion and CTO of diagonal branch
- An intermediate lesion in the LCX.



**Decision:**

- In view of recurrence of chest pain and physiologic evaluation of the lesion by MPI, IVUS was warranted for anatomic evaluation of both LAD and LCx lesions

**IVUS TO LAD**



## **IVUS TO LCX**

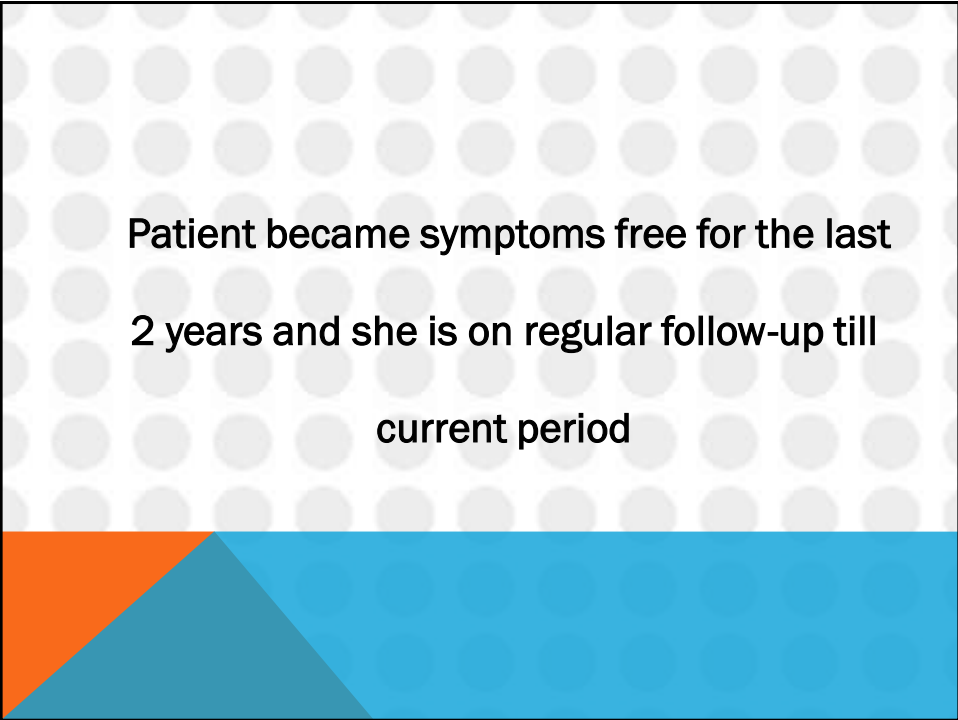


### **IVUS FINDINGS:**

**IVUS findings supported angiographic findings with non-significant LAD instent restenosis and a significant LCx lesion with need for intervention**



## IVUS LCX POST PCI



Patient became symptoms free for the last  
2 years and she is on regular follow-up till  
current period

# Conclusion

Respect patient complaint.

MPI is essential for diagnosis of ischemia in angiographically borderline / insignificant stenoses.

IVUS is useful in localizing exact site for coronary intervention.

