

Paradigm Shift to Functional Angioplasty

Mismatch Lesion

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Case

- F/49

- Chief complaints

Efforting related chest discomfort from 4 months ago

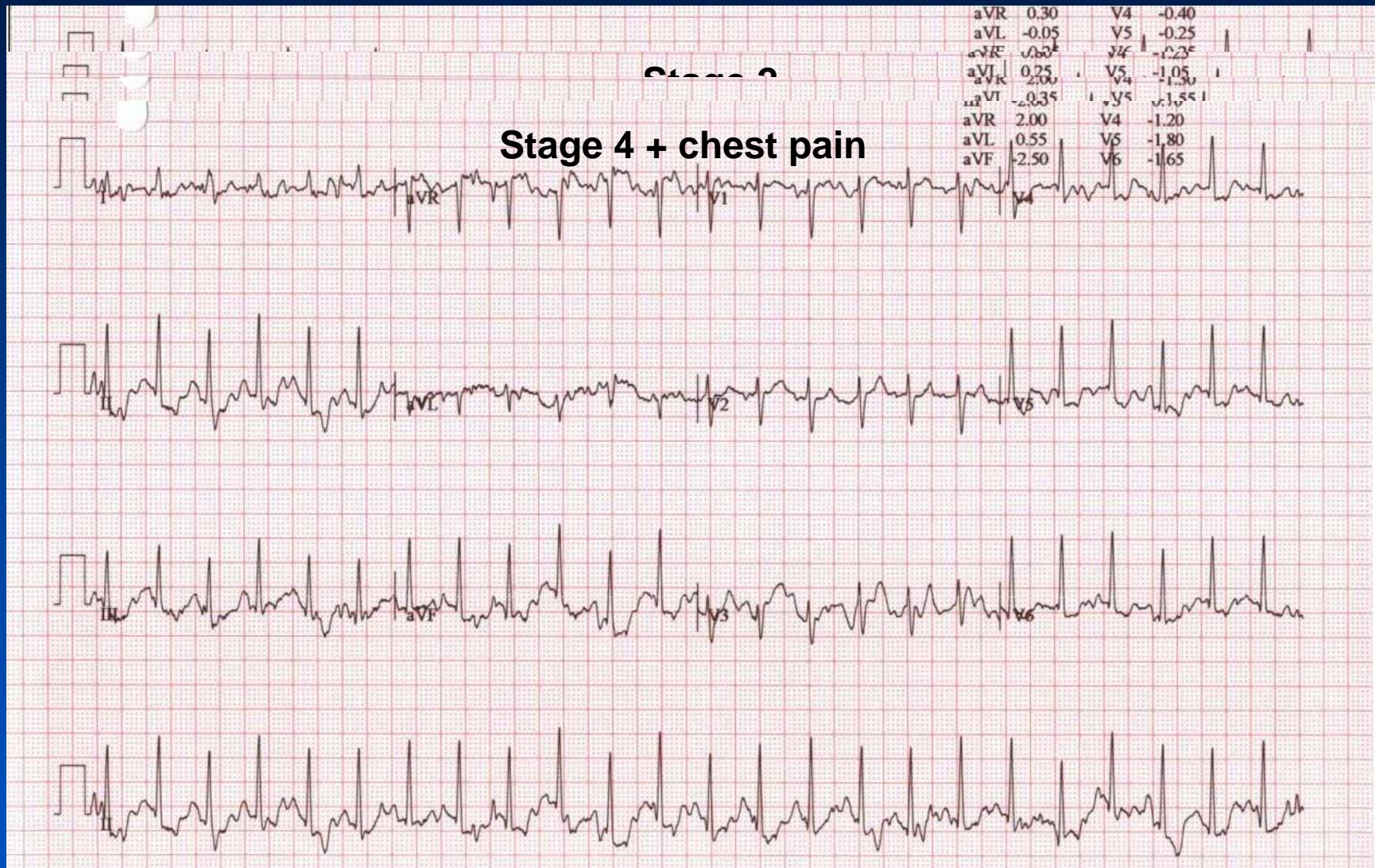
- Past medical history

Hypertension

Hyperlipidemia



Treadmill test



positive



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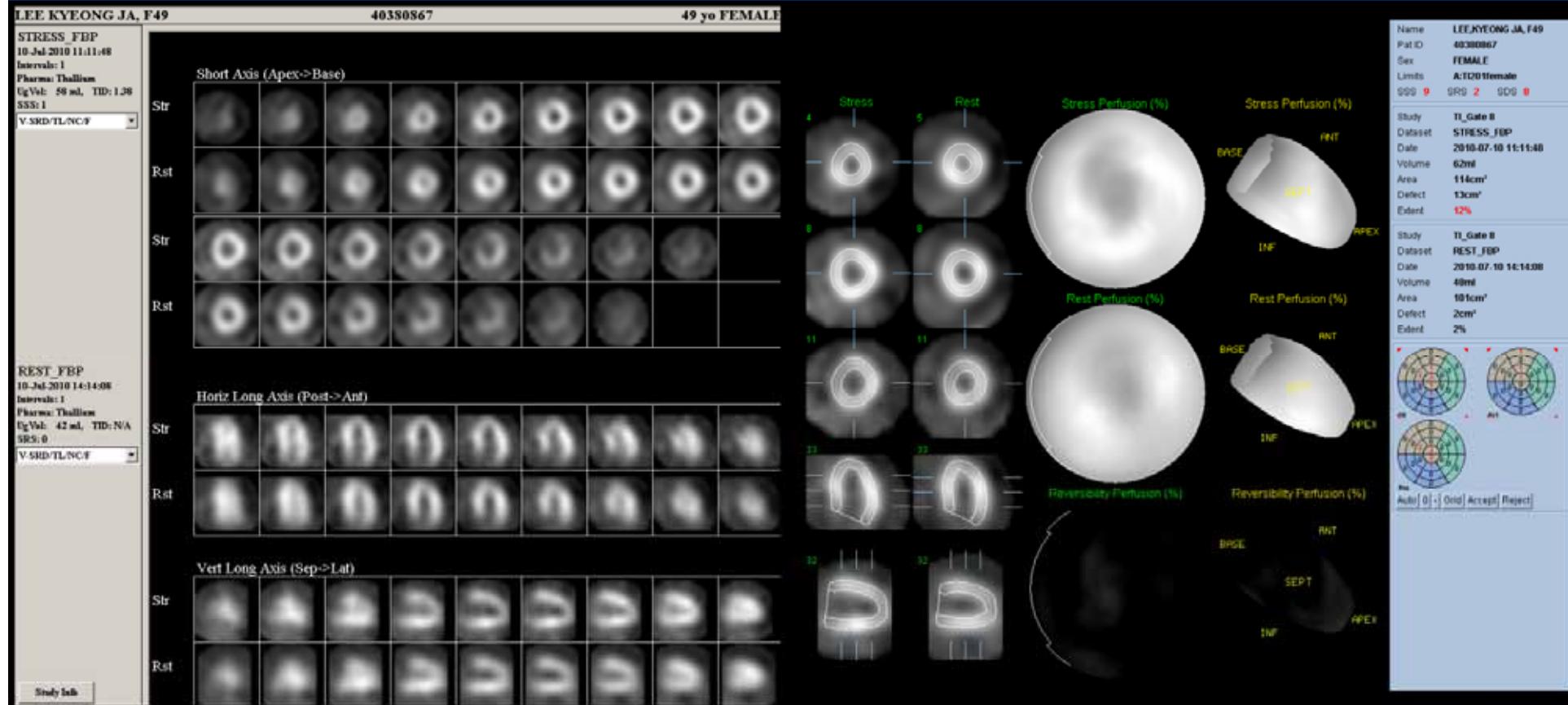


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Thallium Spect



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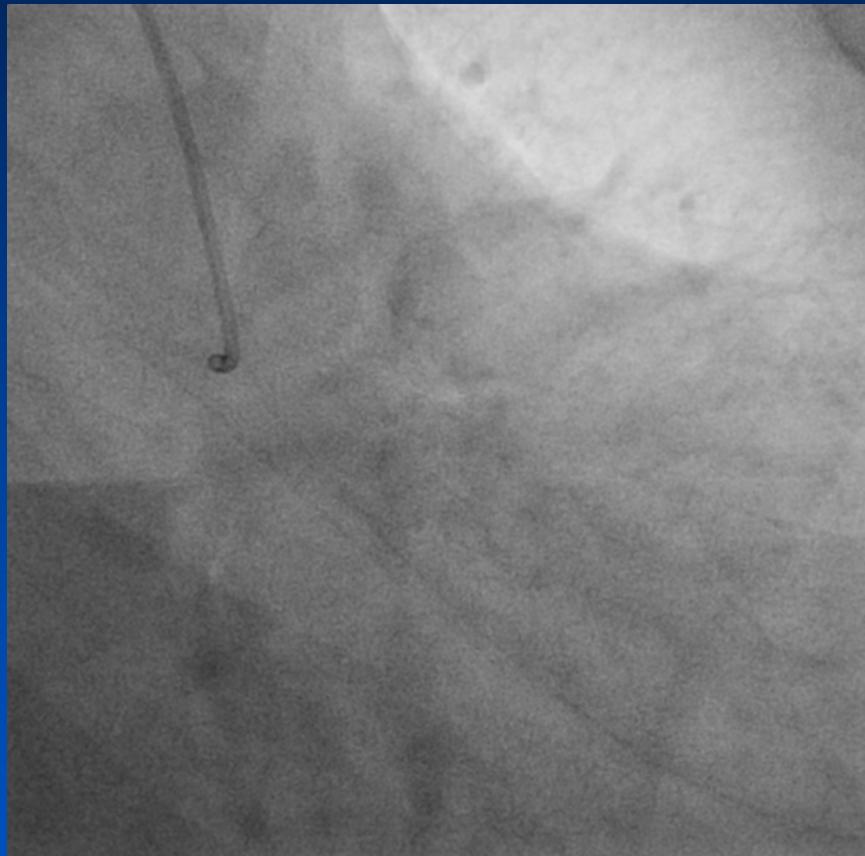


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Coronary Angiography



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Coronary Angiography



Intermediate stenosis in proximal LAD



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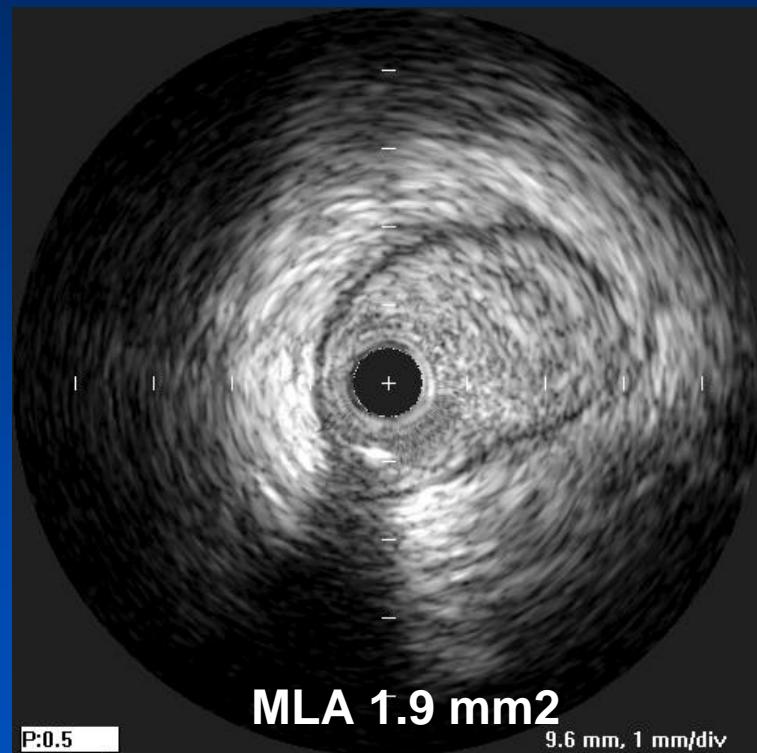


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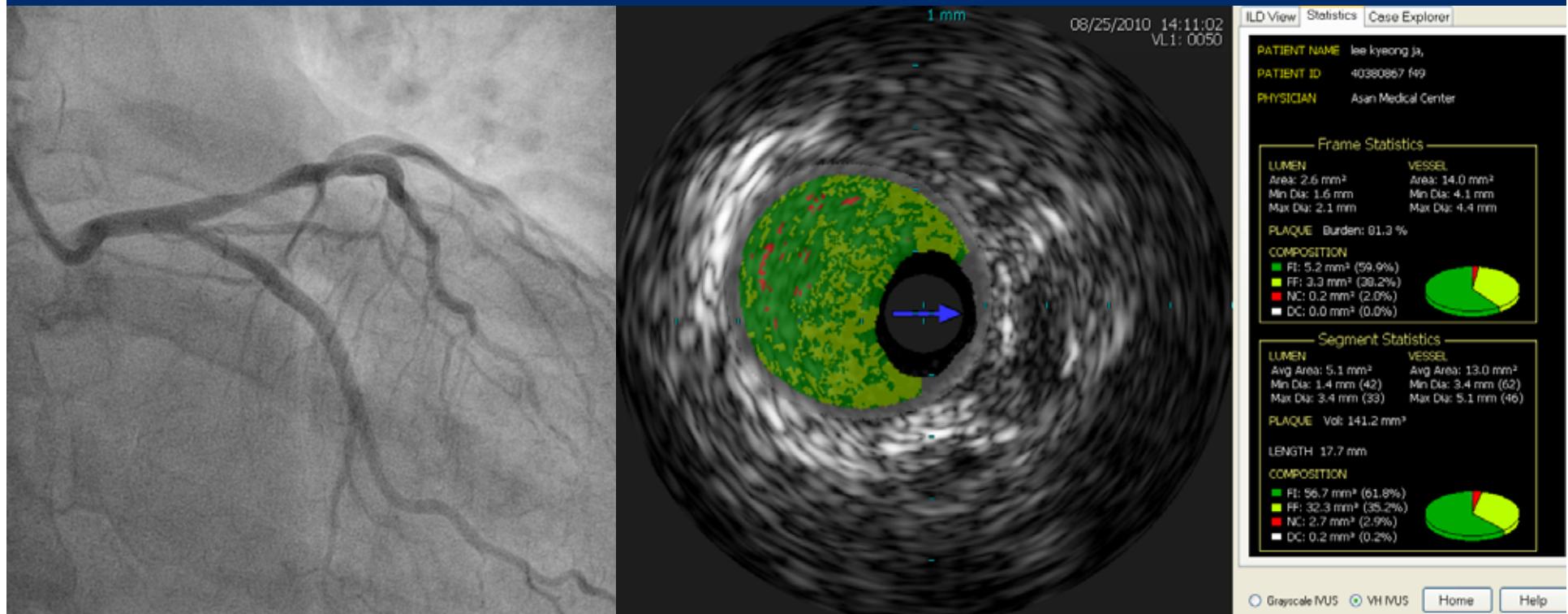


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IVUS (LAD)



Virtual histology (LAD)



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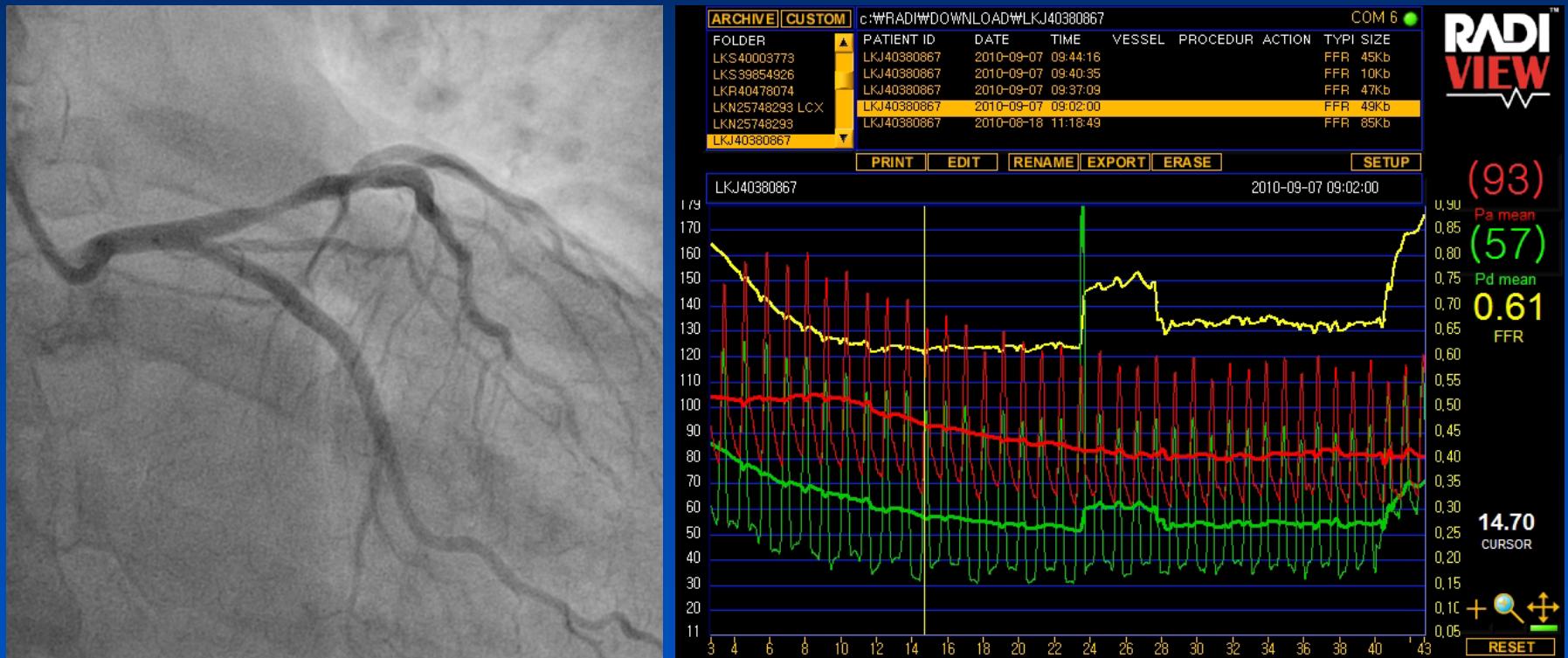
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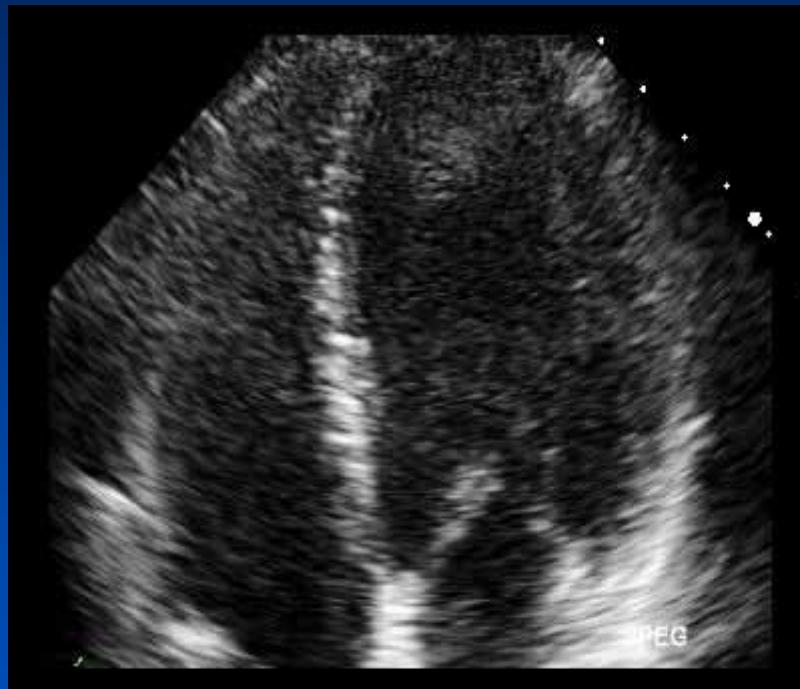
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FFR

Intravenous (140ug/kg/min)



Stress EchoCG



Baseline



Adenosine 100ug/kg/min

Positive at LAD territory



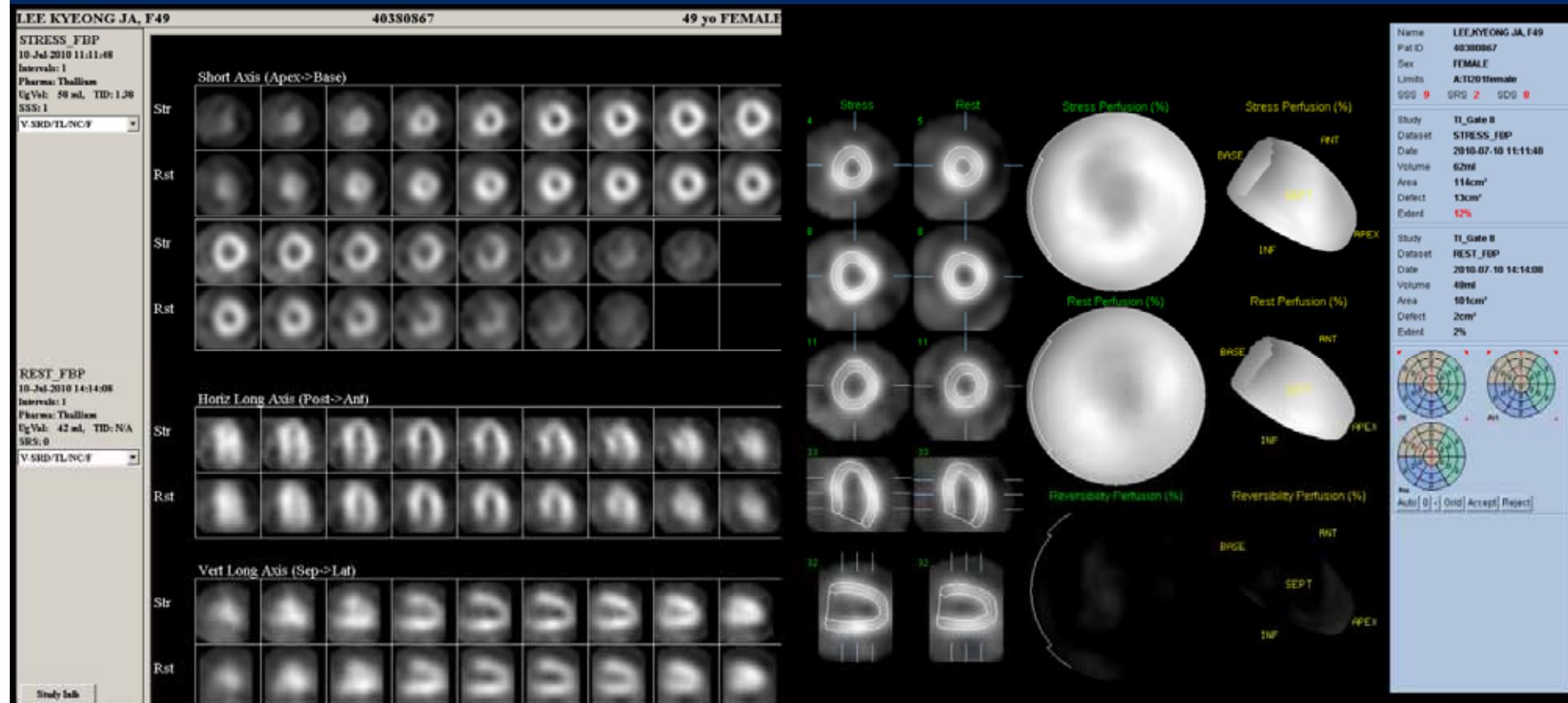
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Thallium Spect

High dose of adenosine 200ug/kg/min



Normal



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What would you do ?



Typical angina (+)

Visual Estimation : **60%**

IVUS MLA : **1.9 mm²**

FFR : 0.61

Treadmill test : (+)

Stress EchoCG : LAD (+)

Thallium spect (-)

PCI !!



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FFR & Non-invasive testing

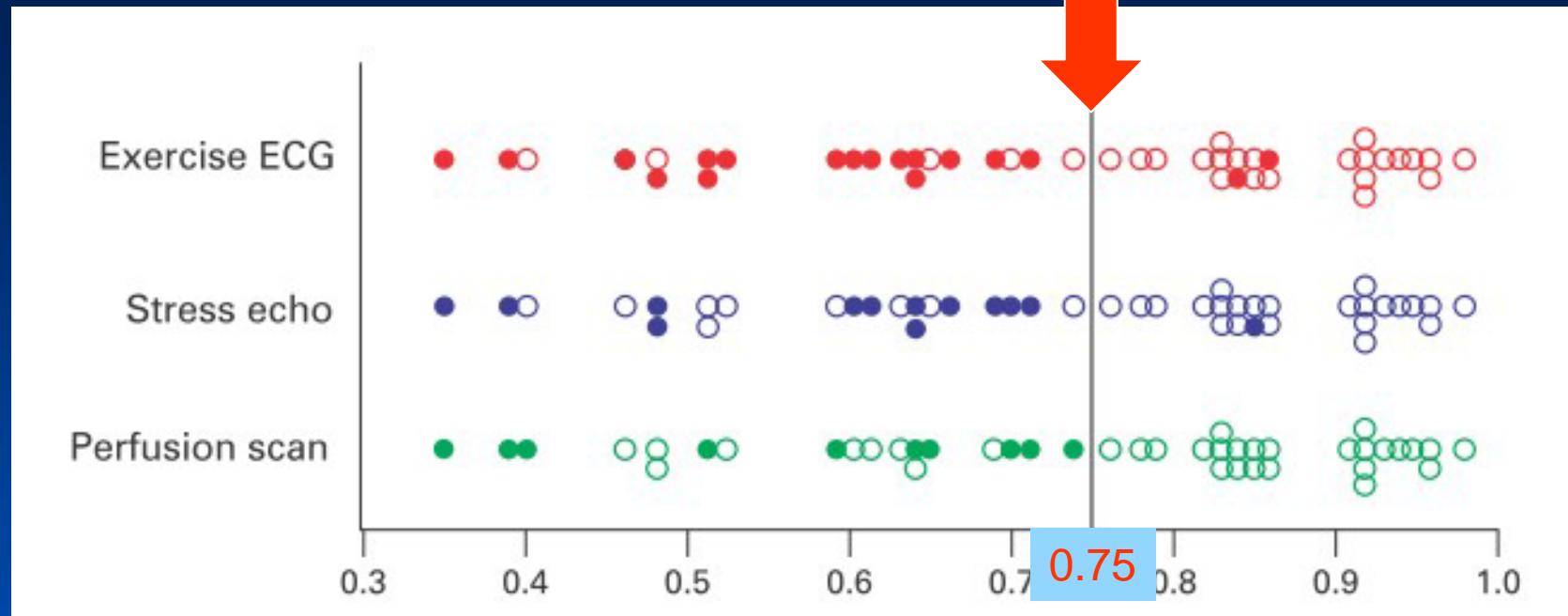
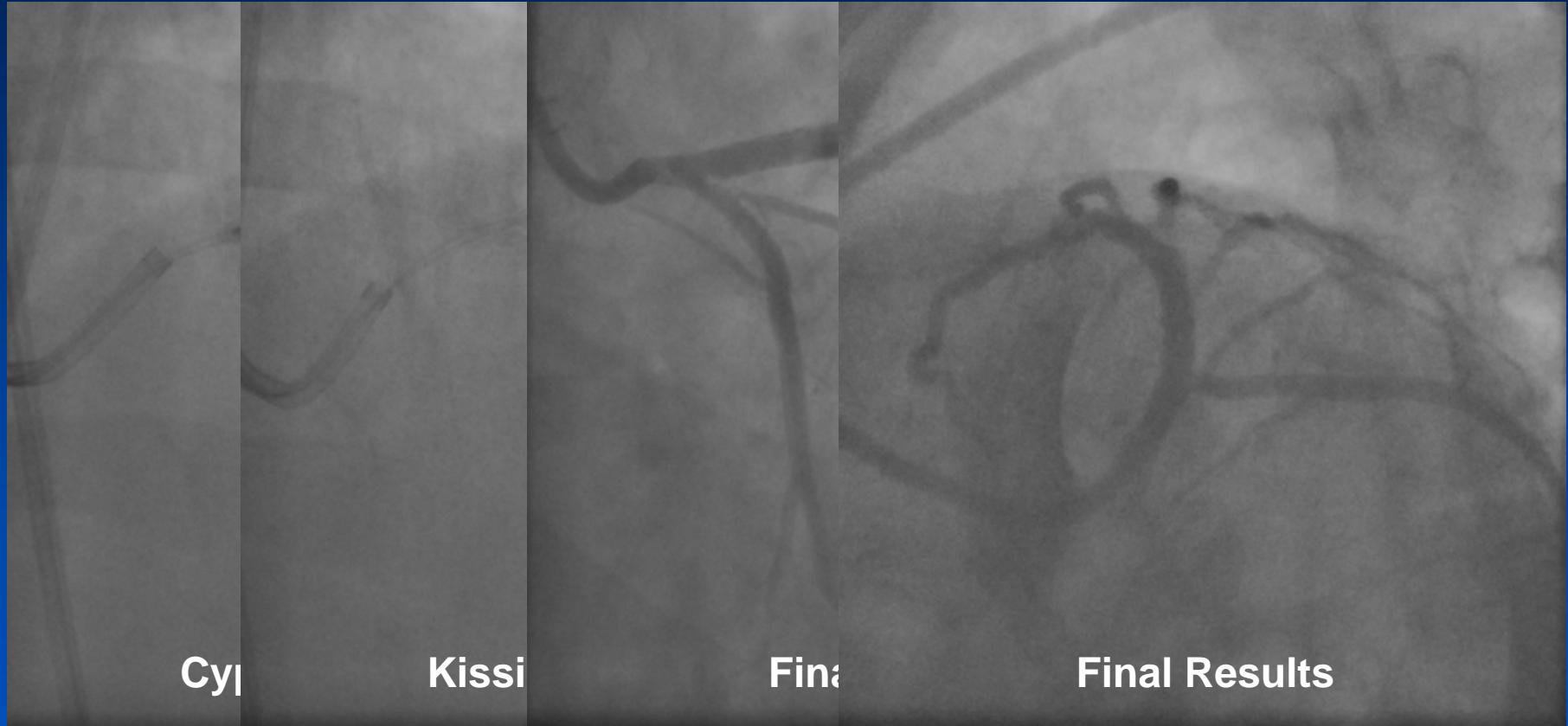


Figure 4 Plots of the fractional flow reserve (FFR) in 45 patients with an angiographically intermediate stenosis according to the results of non-invasive testing. The hollow circles represent negative tests. The black dots represent positive tests. Positive tests were considered positive only if they were positive before revascularisation and became negative after revascularisation. Among the 21 patients with an FFR < 0.75 , 18 showed concordant results of non-invasive tests (see Wijns et al³).

Sensitivity=88%
Specificity=100%
Positive predictive value=100%
Overall accuracy=93%

Final Results



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A scenic view of a mountain range under a clear blue sky with a few wispy clouds. The mountains are covered in dense green forests, with the peaks becoming darker and more shadowed at the bottom.

Thank You !!

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