



Acute LM occlusion PCI under IVUS Guidance

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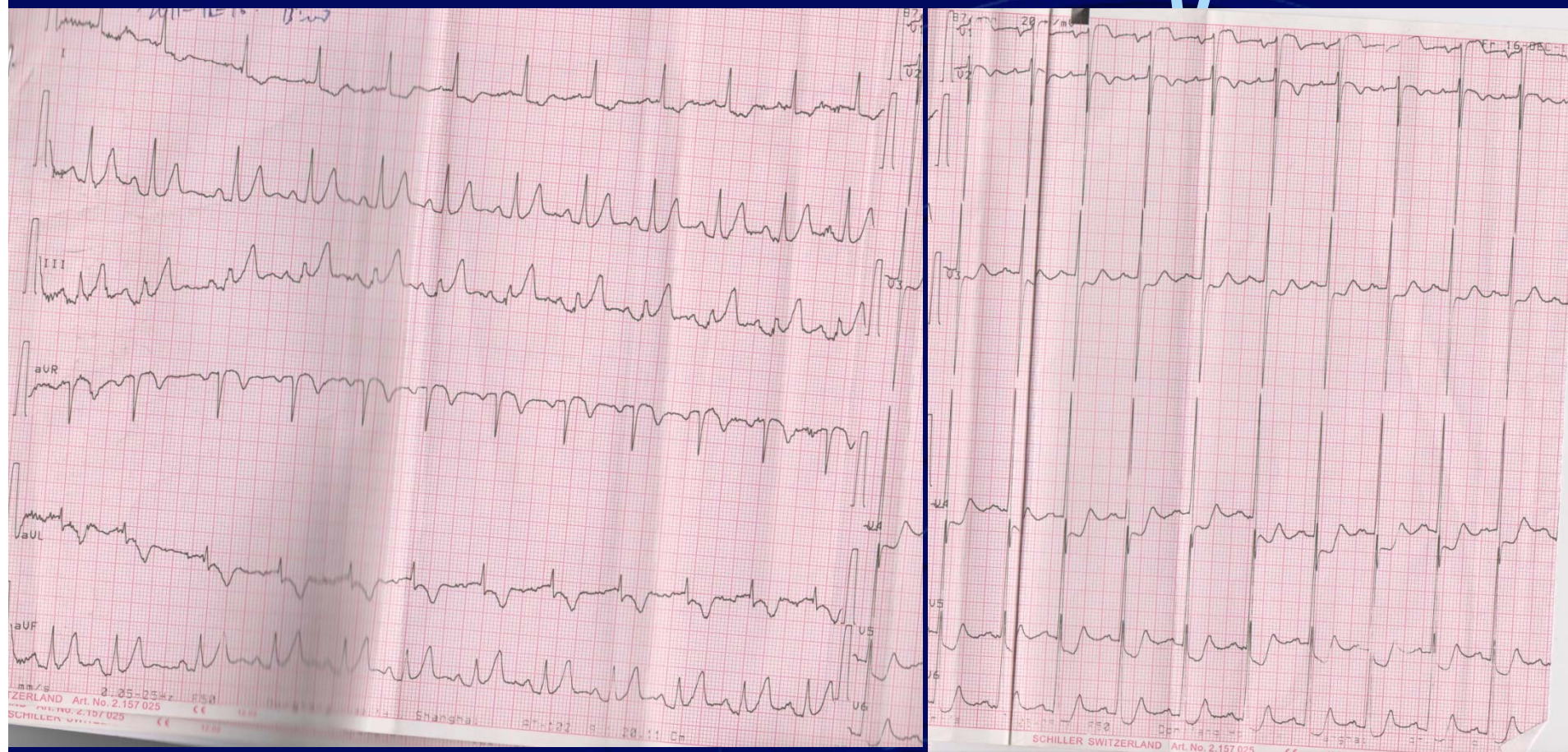
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History

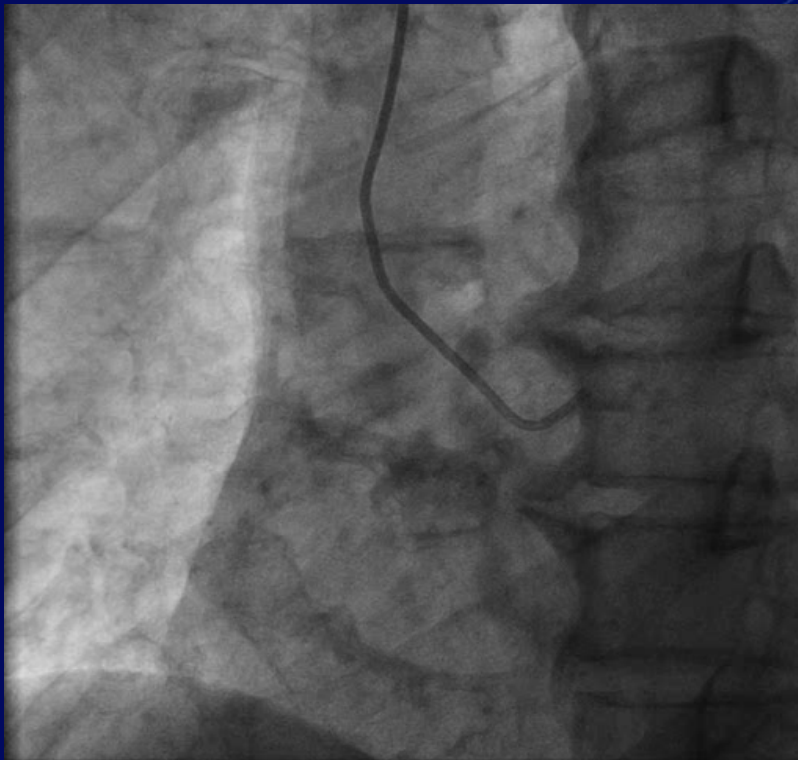


- Male, 80 years old
- Admitted due to recurrent chest discomfort for five days, worsen in 5 hours
- Risk factor: hypertension
- ECG showed tall peaked T wave in Lead II、 III、 AVF, global ST depression in Lead V1-6 and I、 AVL

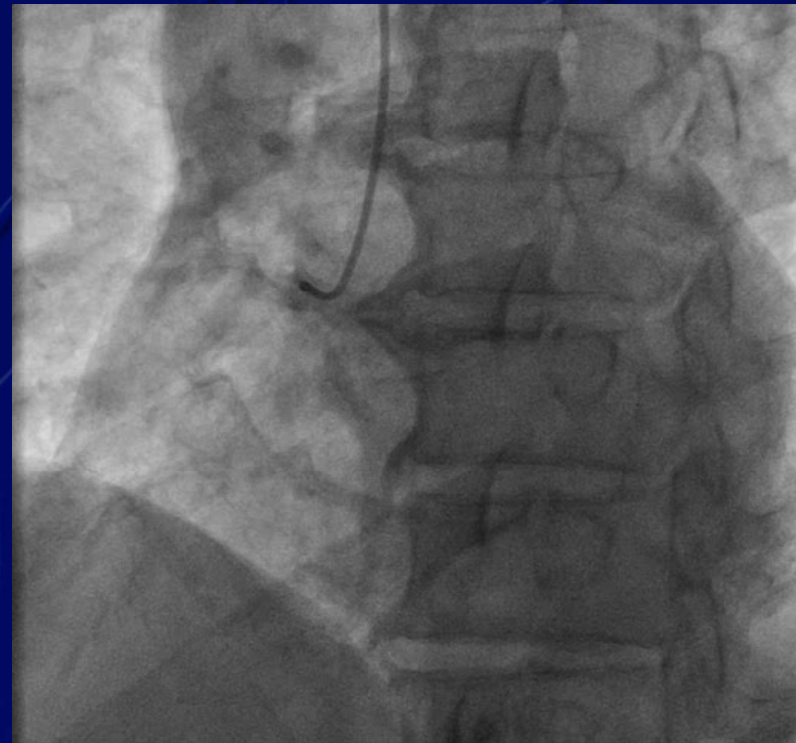
ECG before admission



Emergency CAG



LM: severe calcification, totally occluded



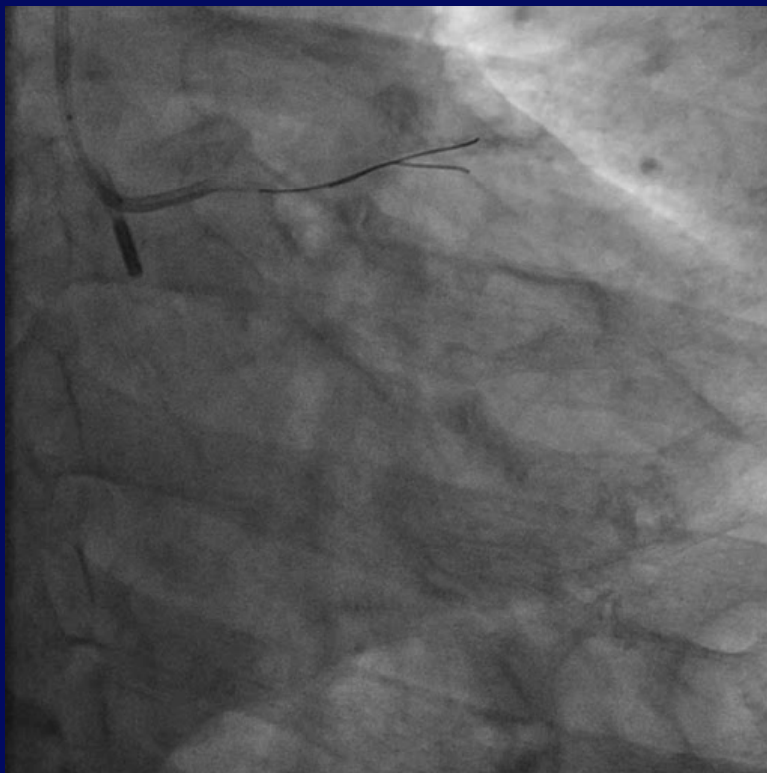
RCA (-), A side branch from RCA filled LCX, and the distal LCX was filled through the collateral channel of RCA

Treatment



We inserted an intra-aortic balloon pump into the right femoral artery for hemodynamic support during intervention

PCI Procedure

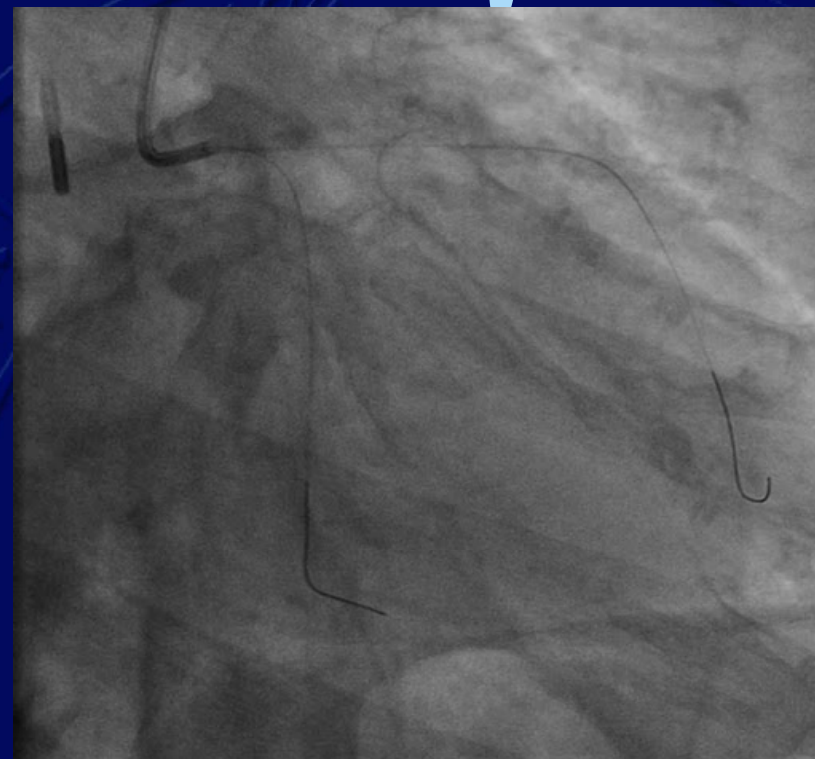
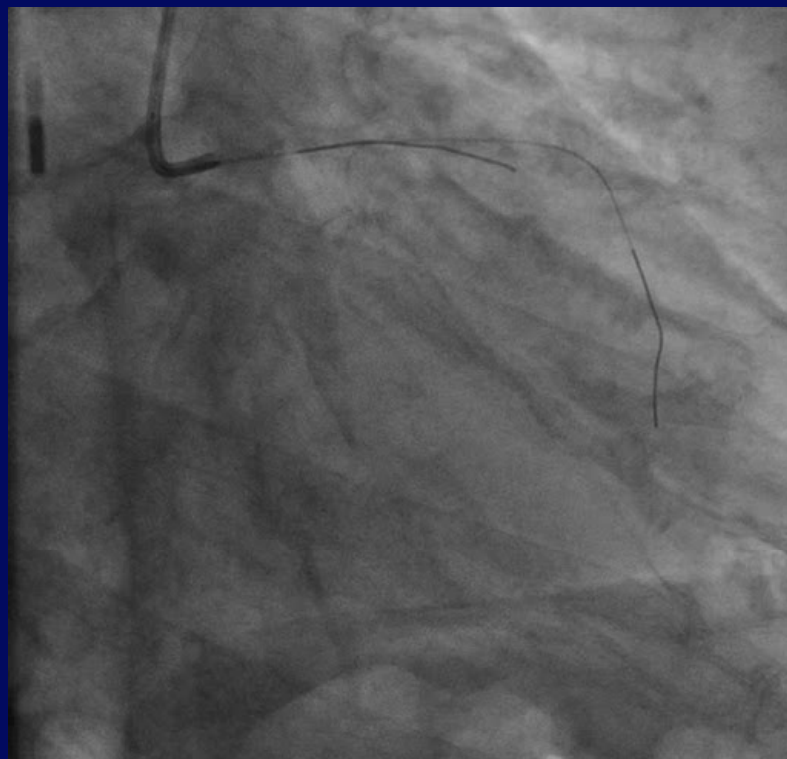


6F EBU 3.5 was engaged in LCA, 0.014"Runthrough wire passed the occlusion, and the other Rinato wire passed the lesion



2.5*20mm Sprinter balloon passed the lesion and 10-12atm sequentially pre-dilate, and the EXPORT aspiration catheter was put from LAD to LM for suction

PCI Procedure



It seemed that LAD and LCX appeared

PCI Procedure



The sprinter balloon was repeatedly pre-dilated, but there were no reflow, what happened?

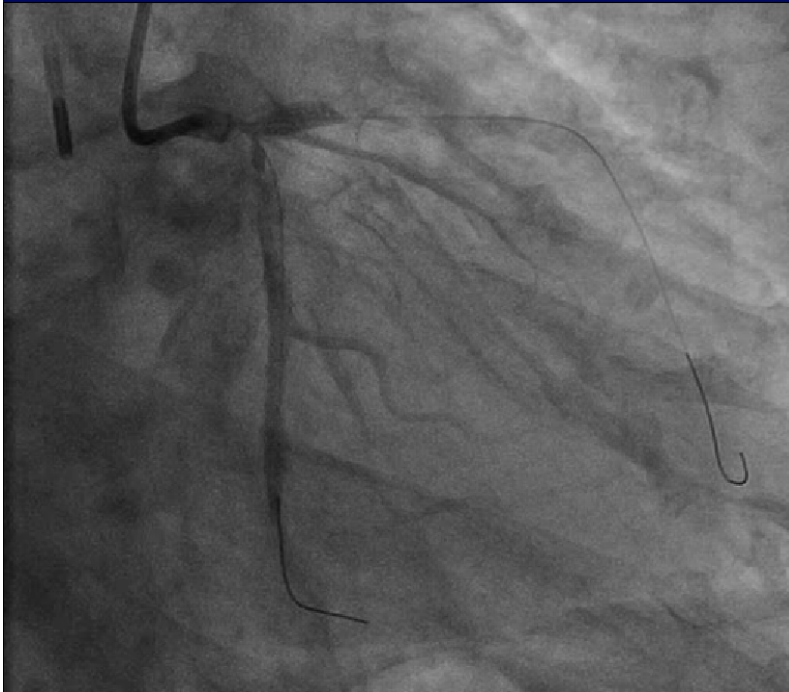
Dissection?
False lumen?
No reflow?
Or other?

PCI Procedure—Micro catheter



The distal segment of LCX and LAD showed and sodium nitroprusside was injected into the artery

What's Next?



It seemed that the proximal segment of LCX and LAD were normal, so just deployed a stent from LM to LAD or LCX ?

IVUS Image



Im: 1/1906
Se: 1

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IVUS-24220111216

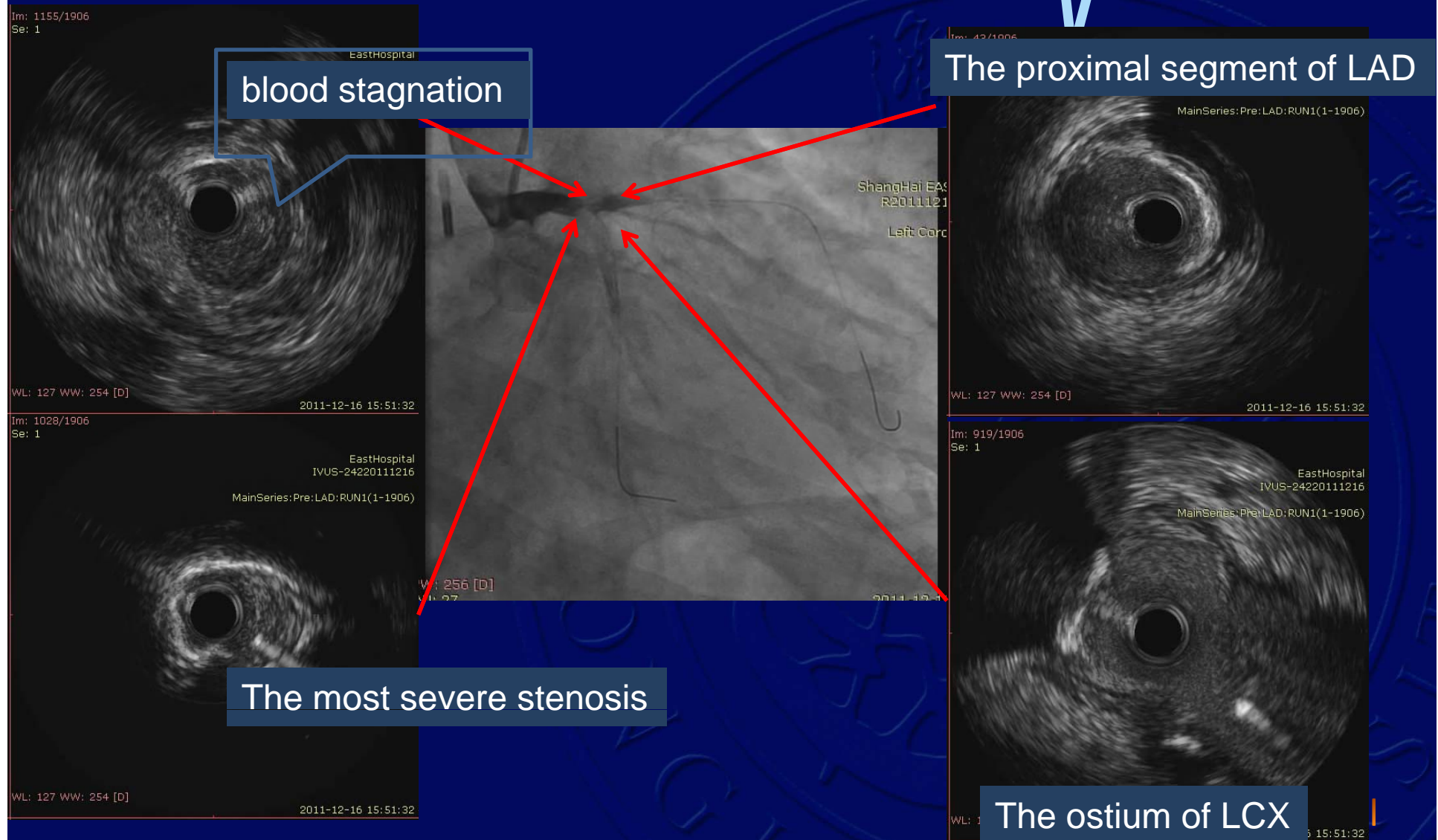
MainSeries:Pre:LAD:RUN1(1-1906)

WL: 127 WW: 254 [D]

2011-12-16 15:51:32

IVUS confirmed the wire was in the true lumen, and there were a severe stenosis in the mid segment of LM

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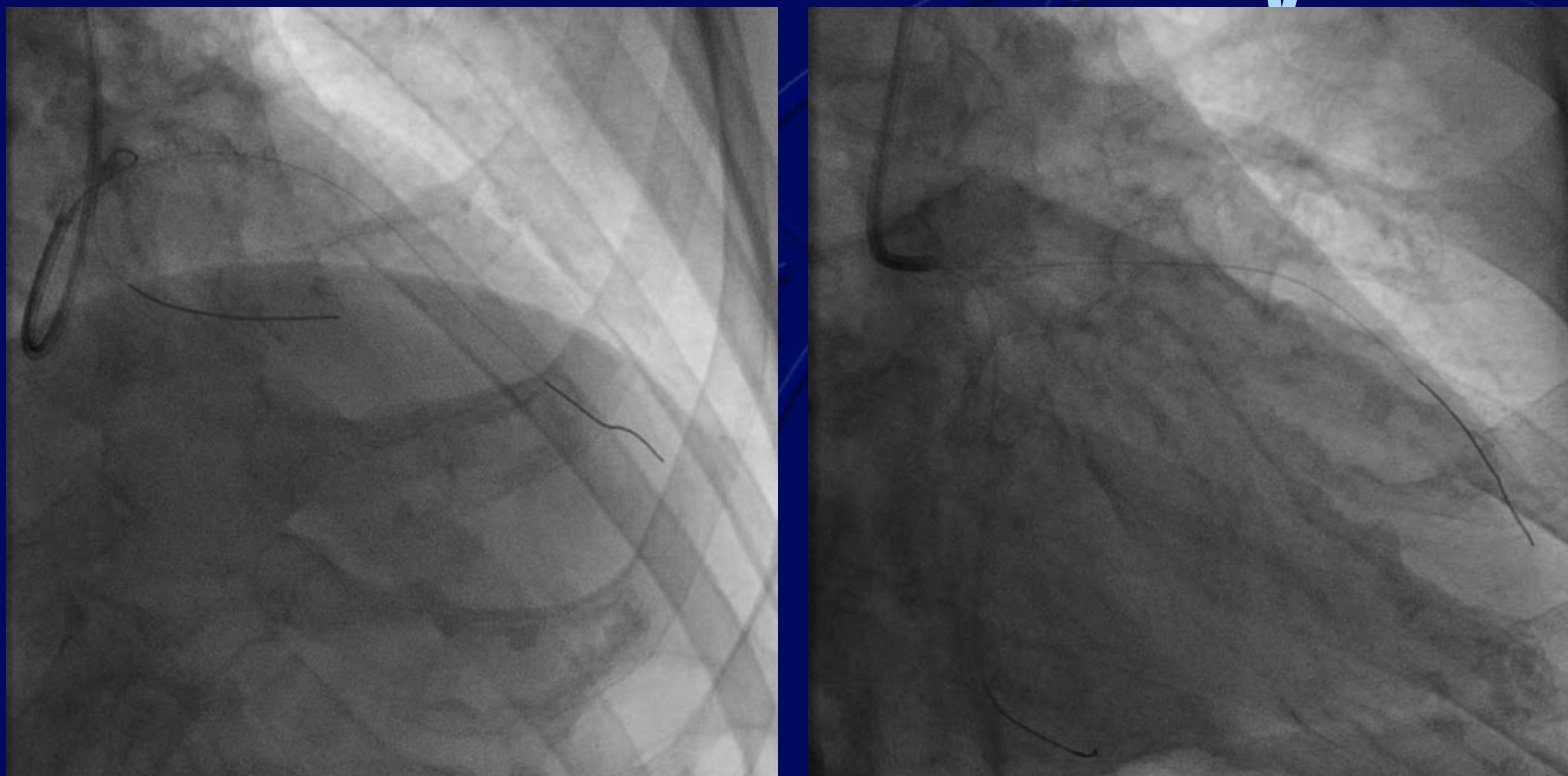
PCI Procedure



3.5*24mm DES was placed from LM to LAD

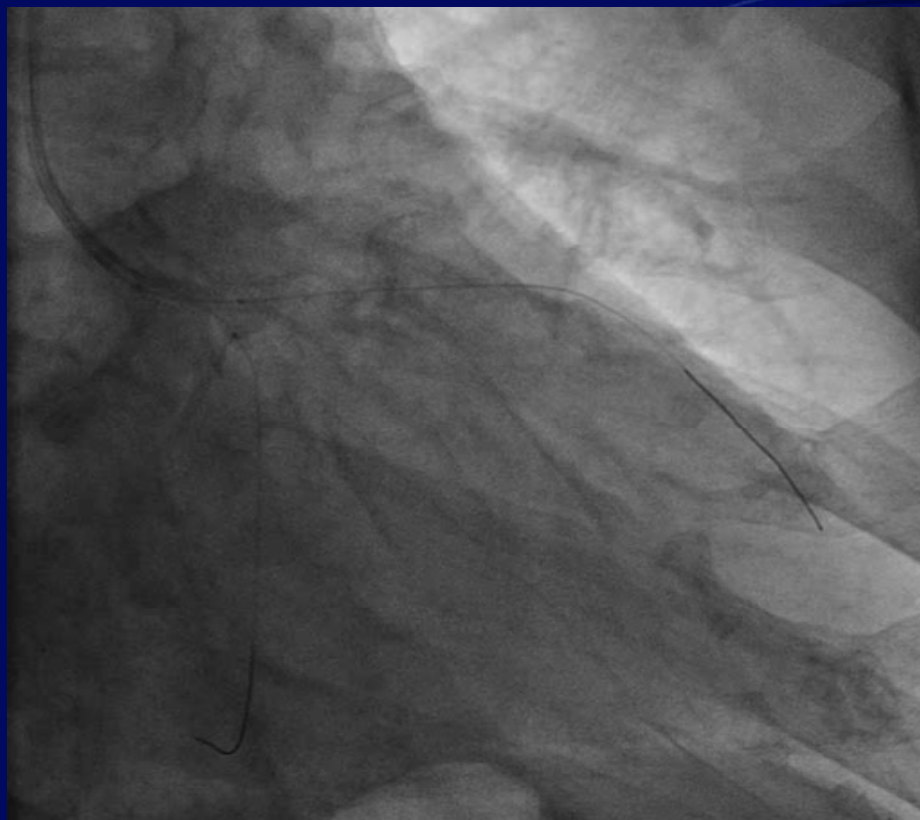
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Post-PCI



After the stent was placed, LCX and LAD showed up

Final Kissing



A final kissing balloon dilation was performed with 2.5*15mm Sprinter balloon in LCX and 3.5*15mm Voyager NC balloon in LAD (6atm*5s)

Final Results



IVUS image after Stent



Im: 1/2109
Se: 2

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MainSeries:Post:LAD:RUN2(1-2109)

WL: 122 WW: 243 [D]

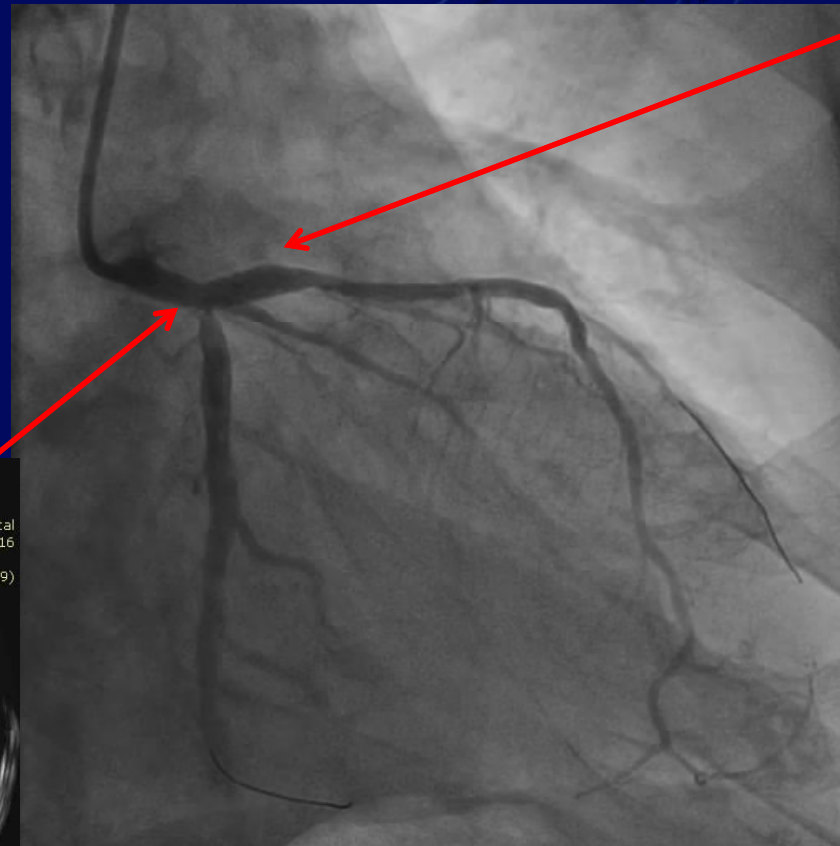
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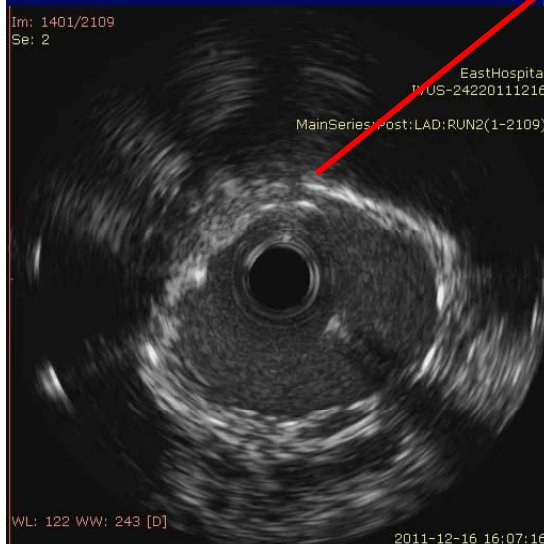
IVUS image after Stent



No dissection near
the distal edge of
stent

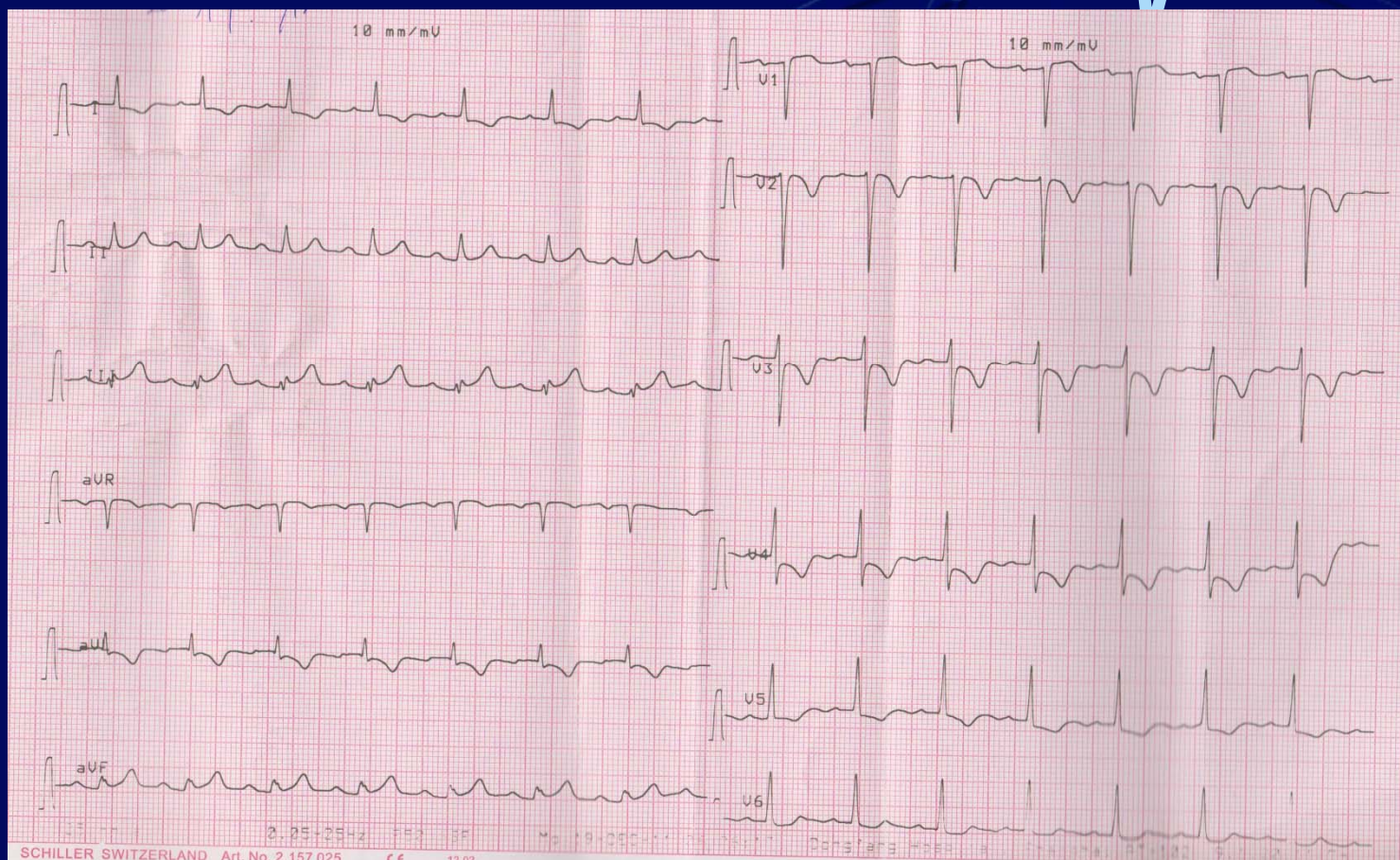


CSA is enough



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ECG after PCI



Take Home Message



- 1.6F guiding catheter is enough for us to perform kissing
- 2. Microcatheter can help to identify true lumen. Vasoactive agent (like sodium nitroprusside) can be injected through it
- 3. IVUS can help to identify false lumen or true lumen, can help to choose stent