



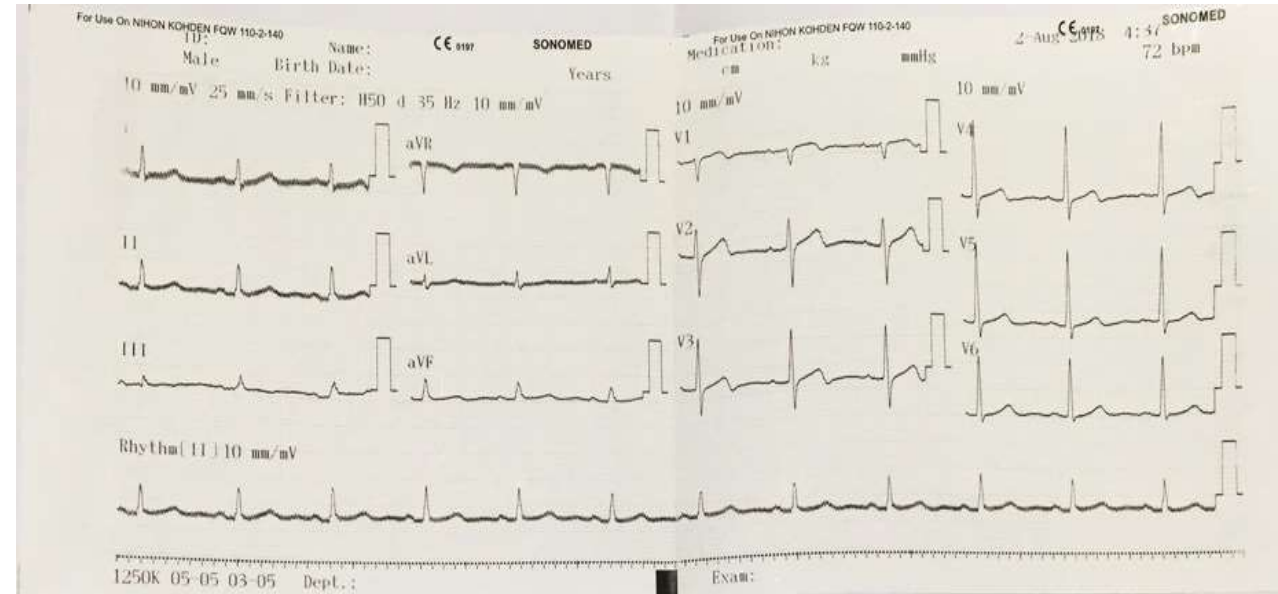
IVUS guided PCI for a Left Main Trifurcation Case

Vietnam Nation Heart Institute, Bach Mai Hospital

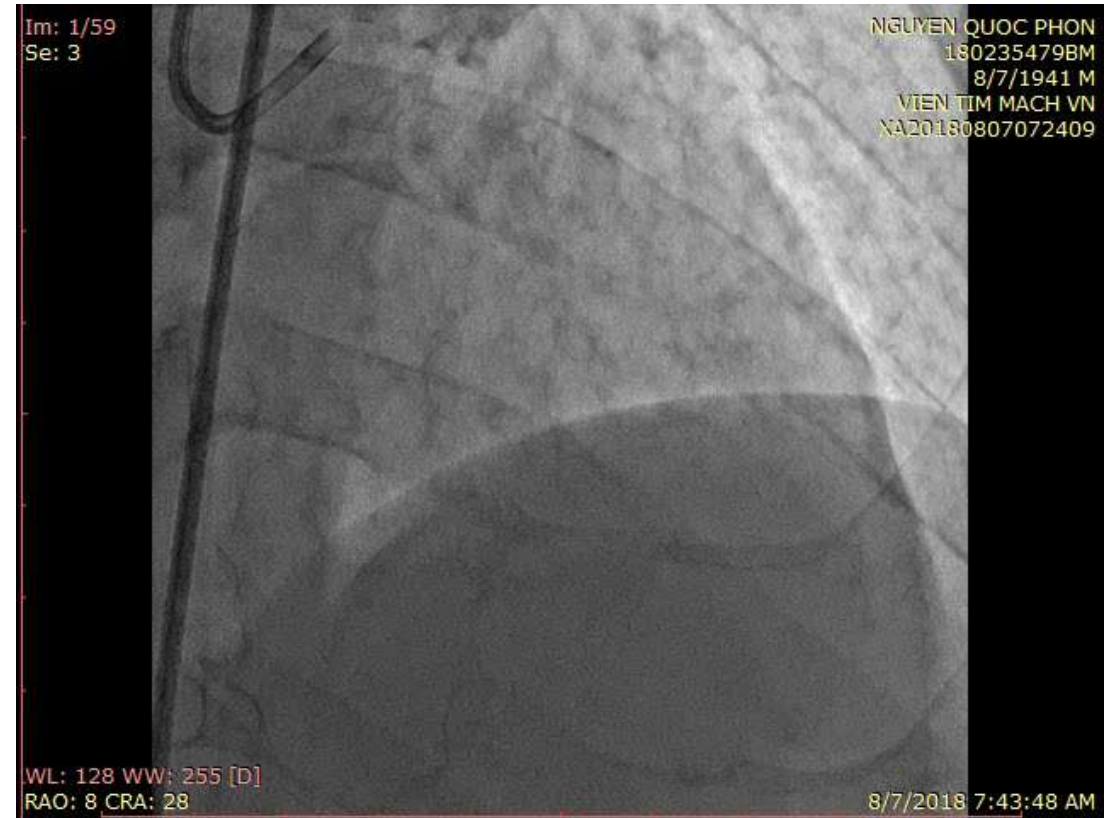
Bui Nguyen Tung M.D

Case summary

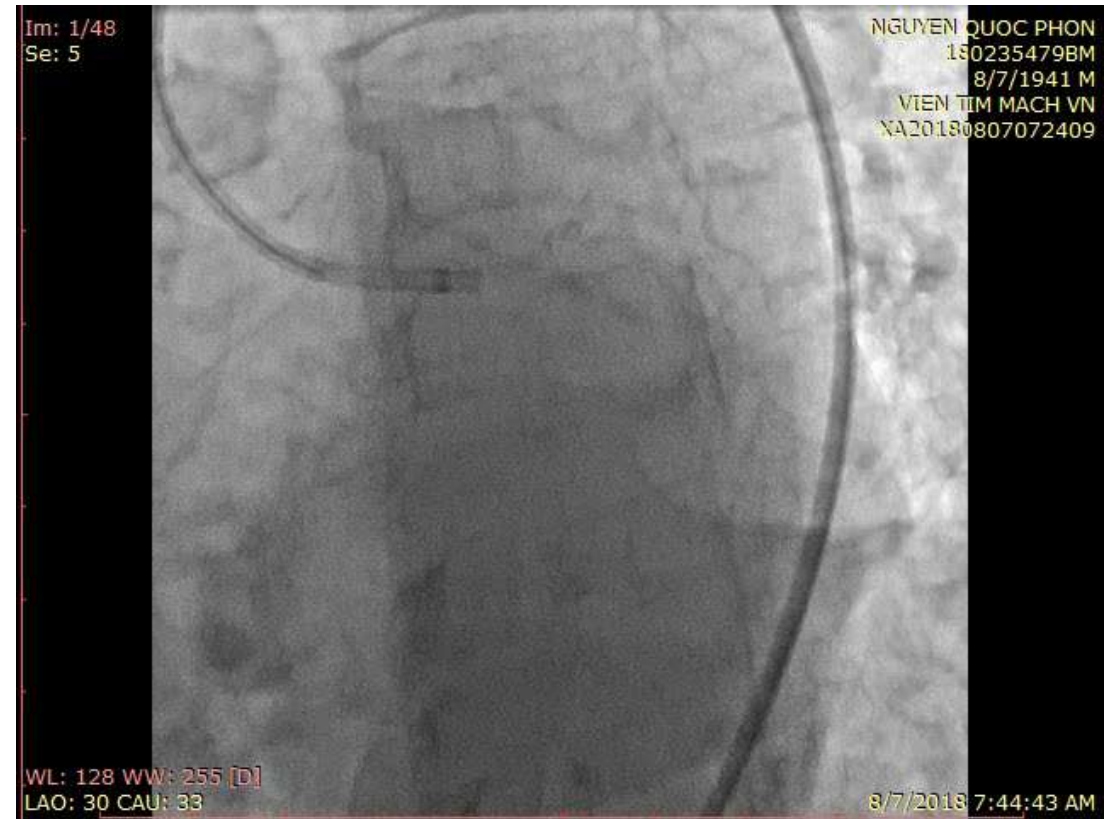
- Male 77 years old
- Hospitalized because of chest pain at rest
- Risk factor: hypertension, Diabetes
- Prior MI or revascularization: no
- cTnT: 220 ng/L
- Echo: LVDd 48mm, EF 74%
- Diagnosis: Non- STEMI



Baseline Angio



Baseline Angio



Lesion Characteristics

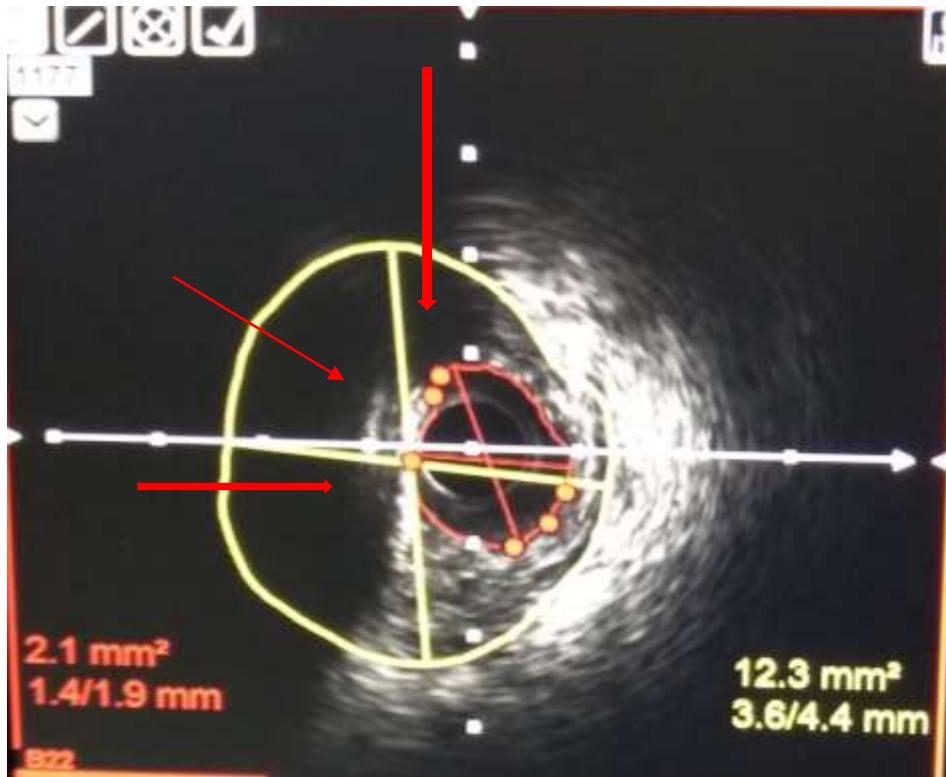
- Non- significant stenosis RCA
- LM trifurcation with very tight stenosis of distal LM, ostial LAD, LCx and Ramus
- Syntax score II: 35
- Euro Score II: 5.64 %
- Decline CABG

PCI Strategy

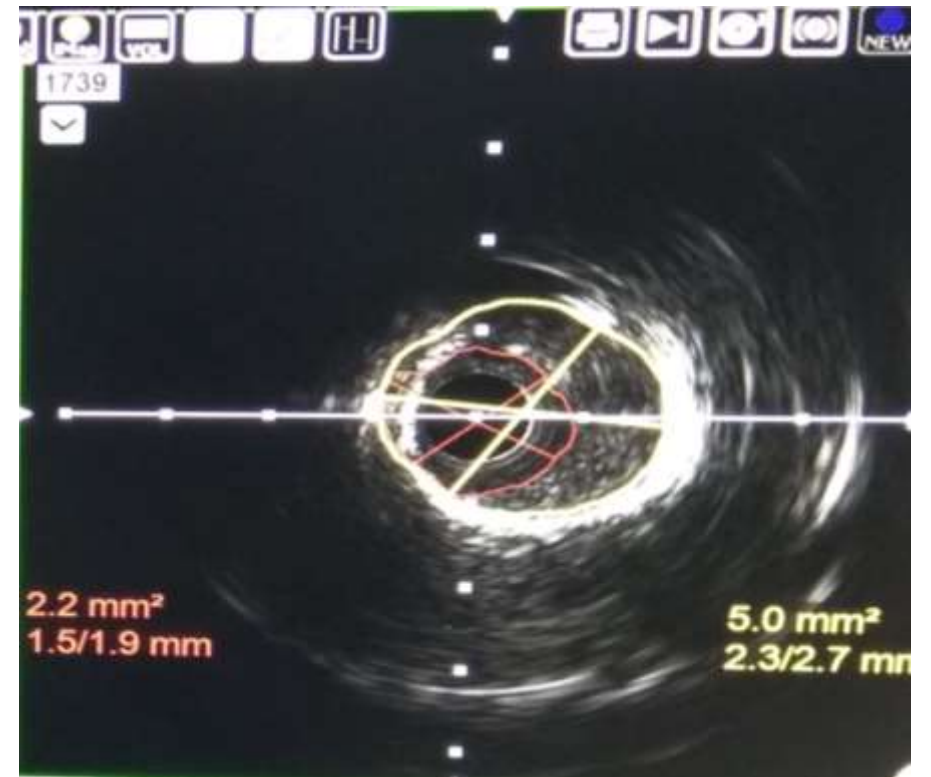
- Transfemoral Approach
- EBU 3.75 8F
- IVUS pre- evaluation for PCI strategy and post- evaluation for optimization
- Rotablator and IABP back up

IVUS images

LAD: MLA 2,1 mm², Arc of calcium ~180 °



LCx: MLA 2,2 mm²



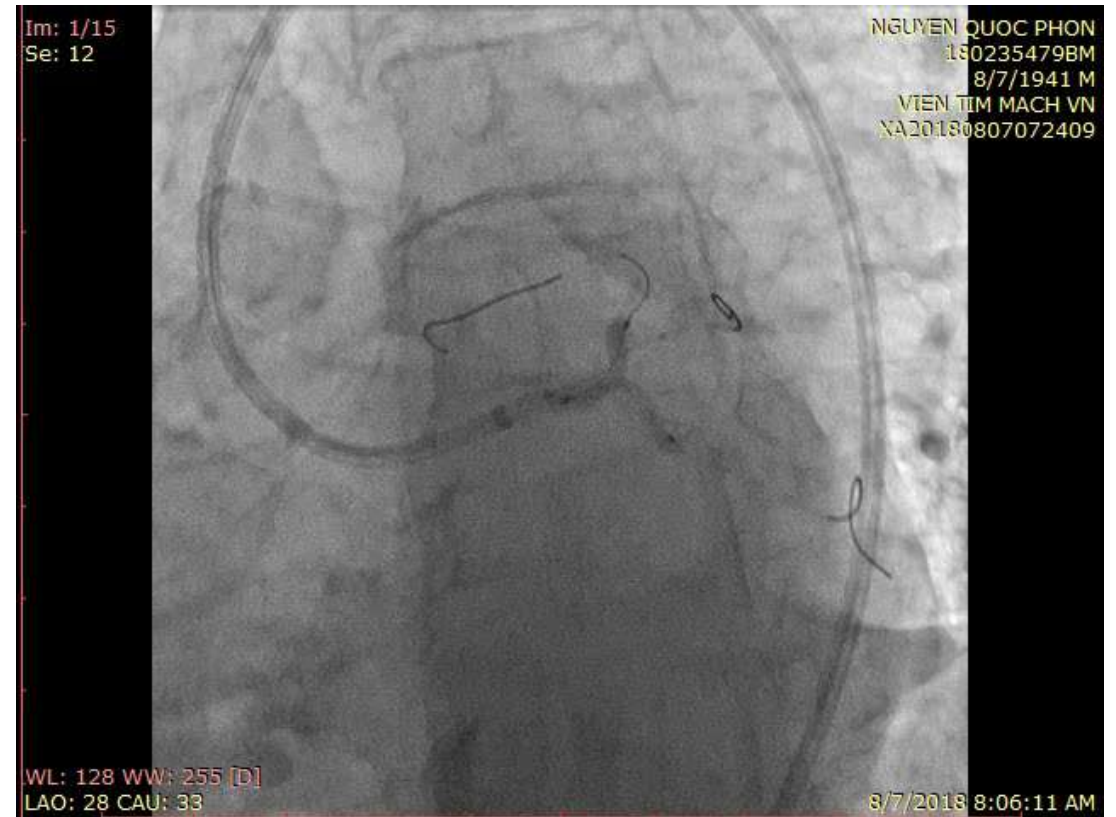
IVUS Images

- Ramus: MLA 2,7 mm²
- Diameter : 2,5 – 2.75 mm



PCI strategy

- Firstly, Culotte technique for LM- LAD – Lcx
- Secondly, Reverse Crush for LM – LAD – Ramus
- Pre- dilatation by sequence KB LAD- LCx, LAD - Ramus

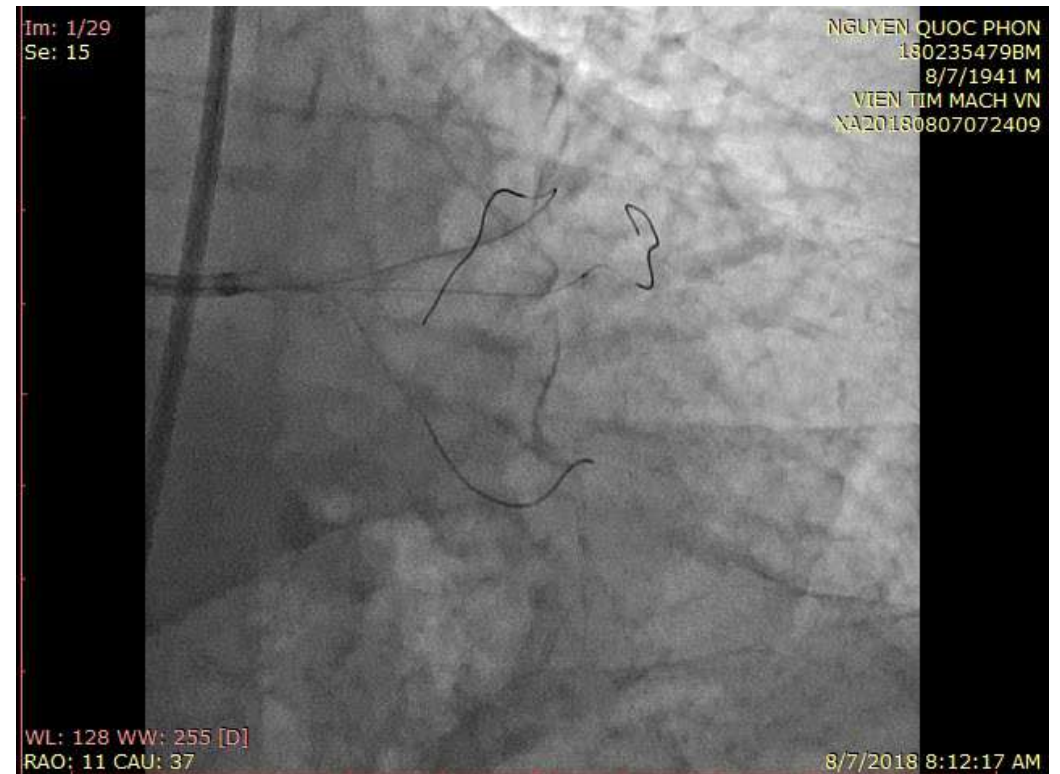


Cullote LM – LAD- LCx

KB: LAD, Ramus

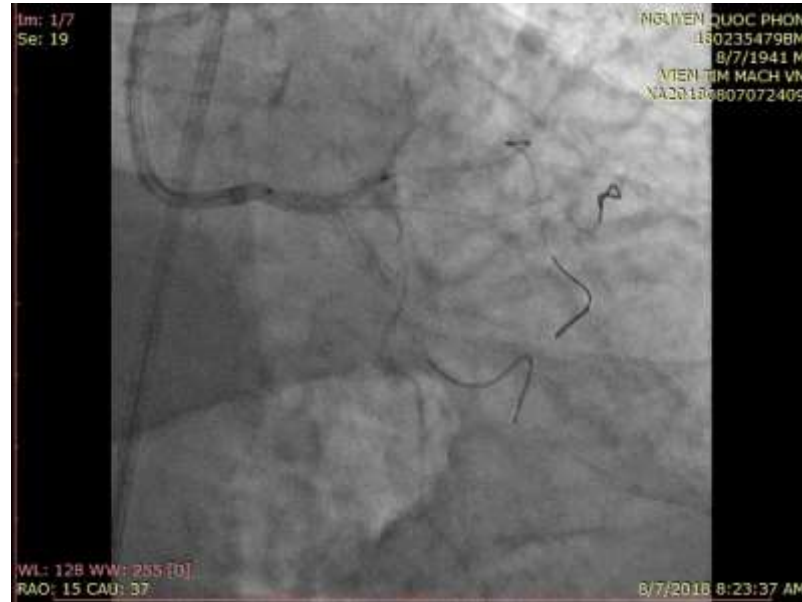


CA after 2 turns KB



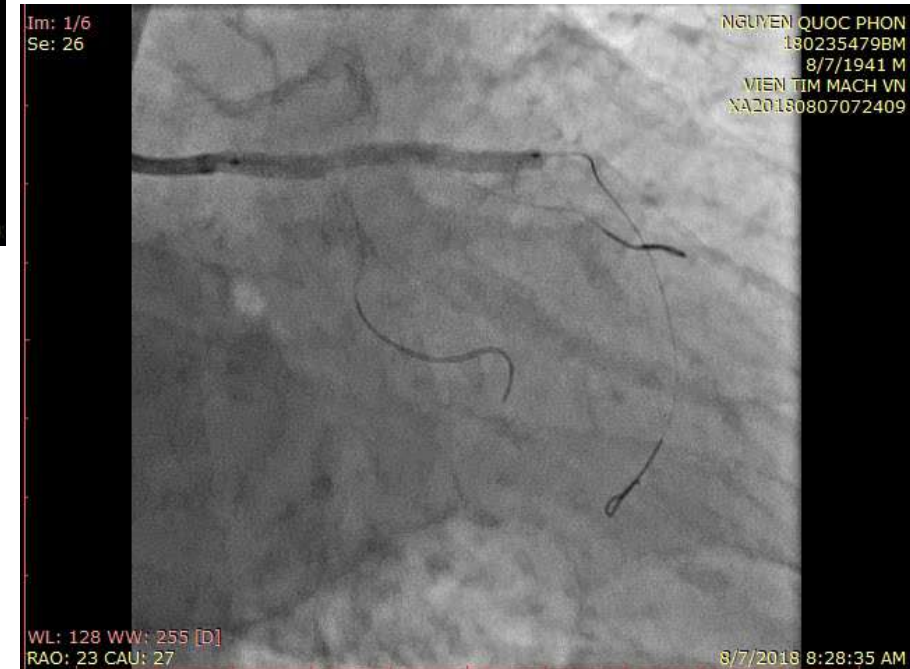


stent LCx: 3.5 x 28 mm



Open strut by tazuna balloon: 2.5 x20

Stent LAD : Xience 3.5 x48 mm



Im: 1/5
Se: 37

NGUYEN QUOC PHON
180235479BM
8/7/1941 M
VIEN TIM MACH VN
XA20180807072409

WL: 128 WW: 255 [D]
RAO: 16 CAU: 33

8/7/2018 8:47:17 AM

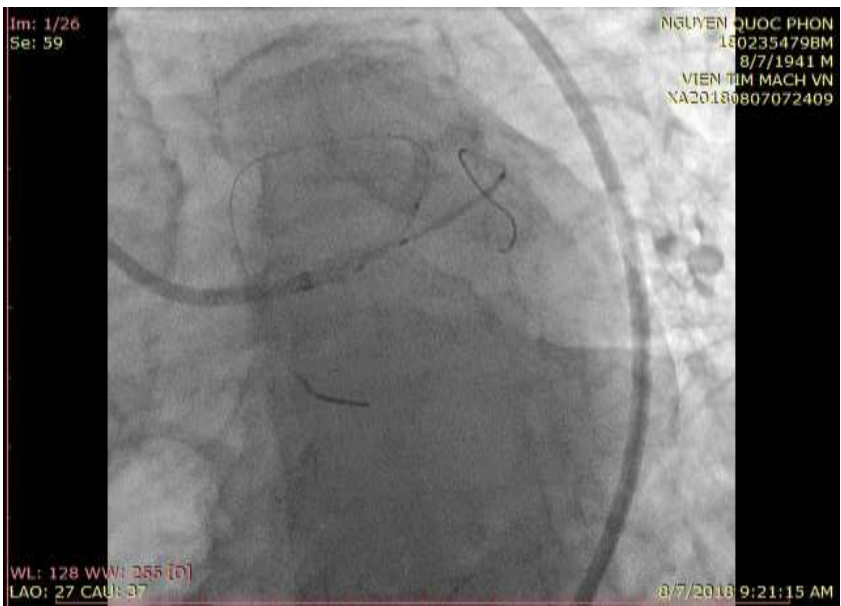
- Rewire Lcx, Ramus
- KB: 3.5 x20 mm , 3.5 x20 mm , 12 atm

Im: 1/48
Se: 54

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WL: 128 WW: 255 [D]
LAO: 38 CAU: 33

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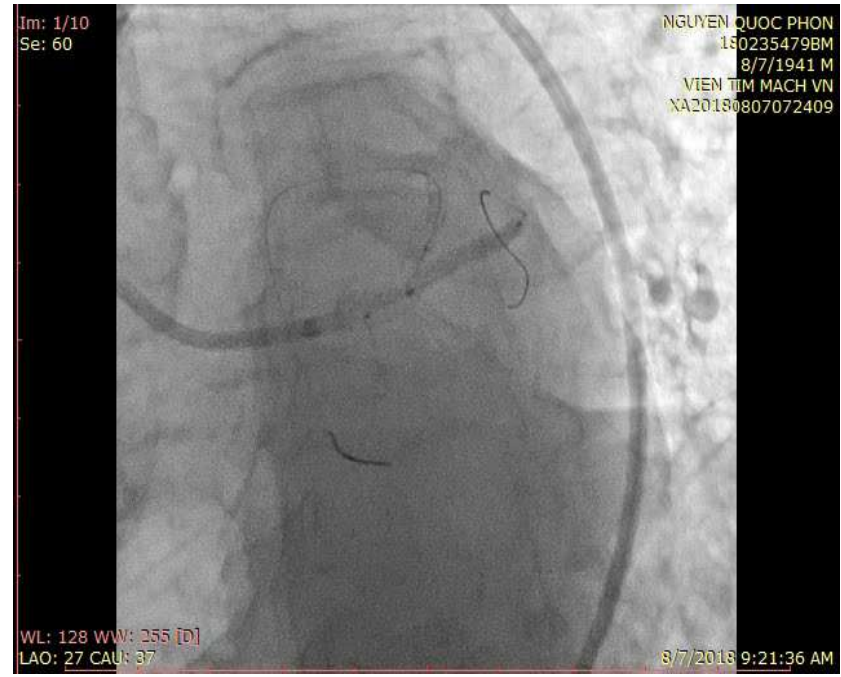


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Reverse crush LM- LAD -
Ramus



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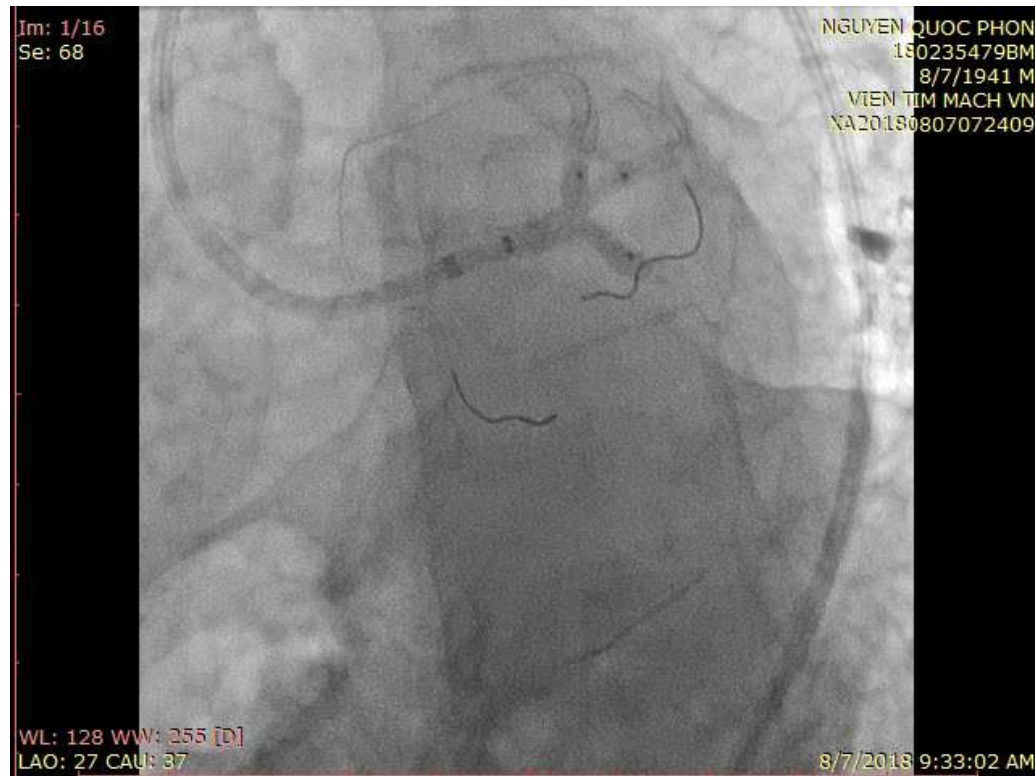
Ramus stent : 2,75 x33mm
LAD NC balloon:3.5 x20 mm



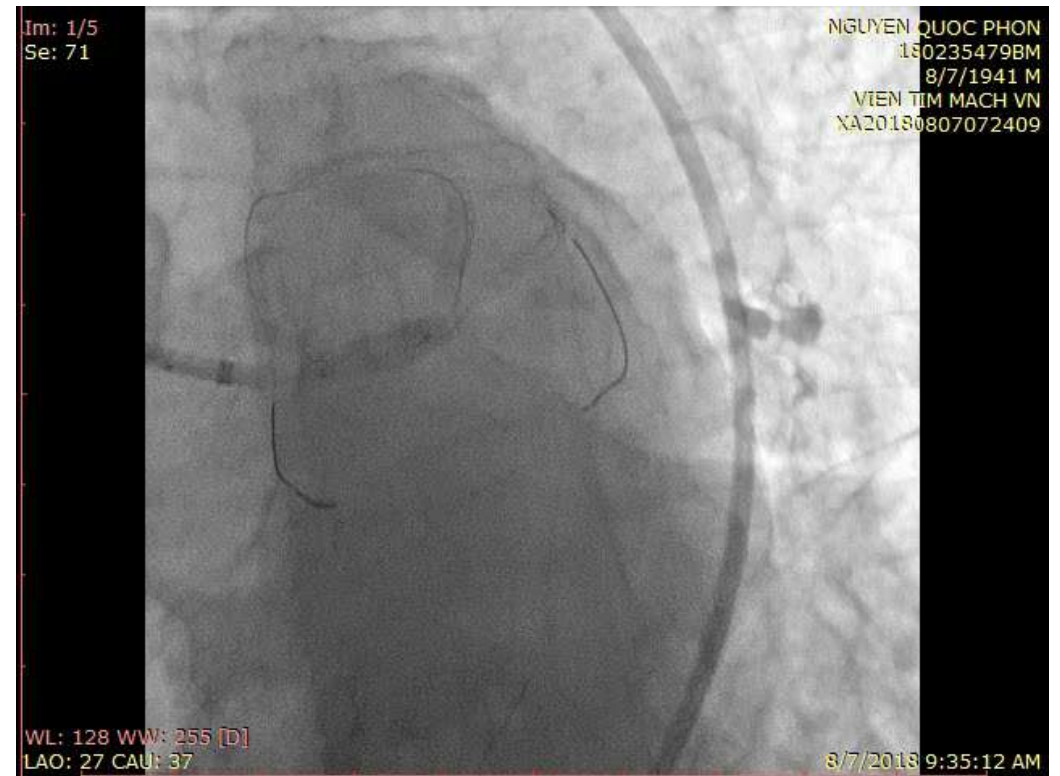
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FKB and POT

**FKB: NC Baloon 3.5 x20,3.5 x20,2,75
x20 12atm**

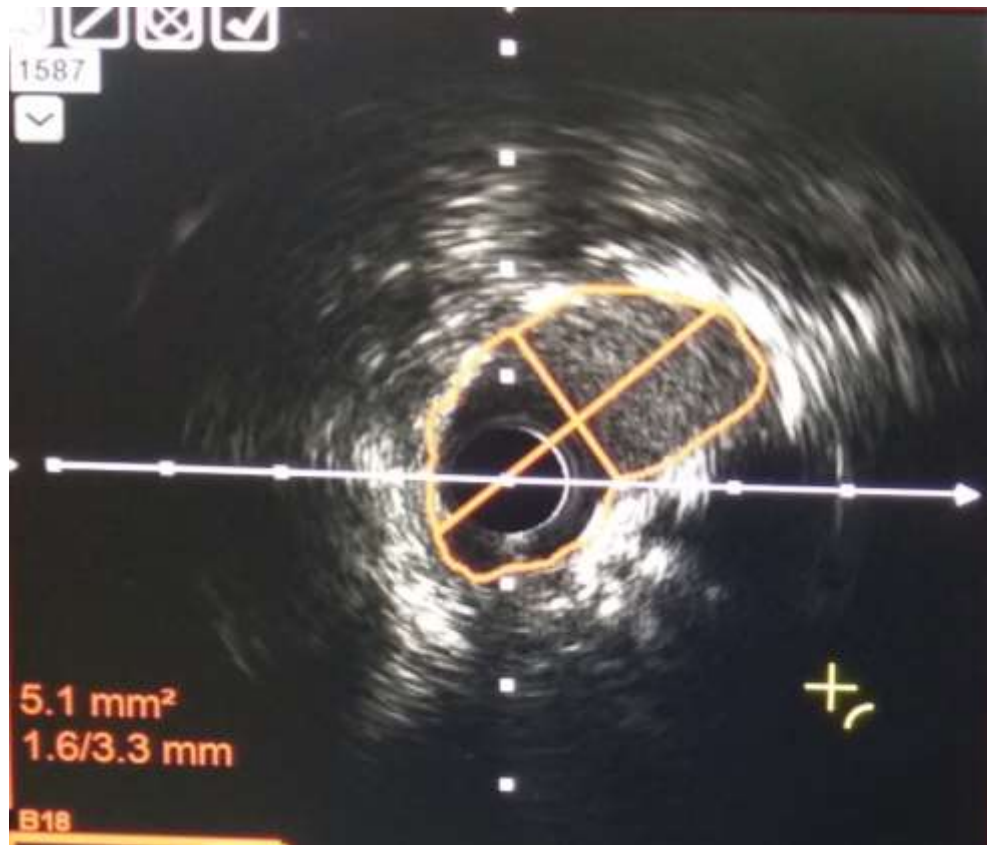


POT : NC Baloon 4.0 x 15

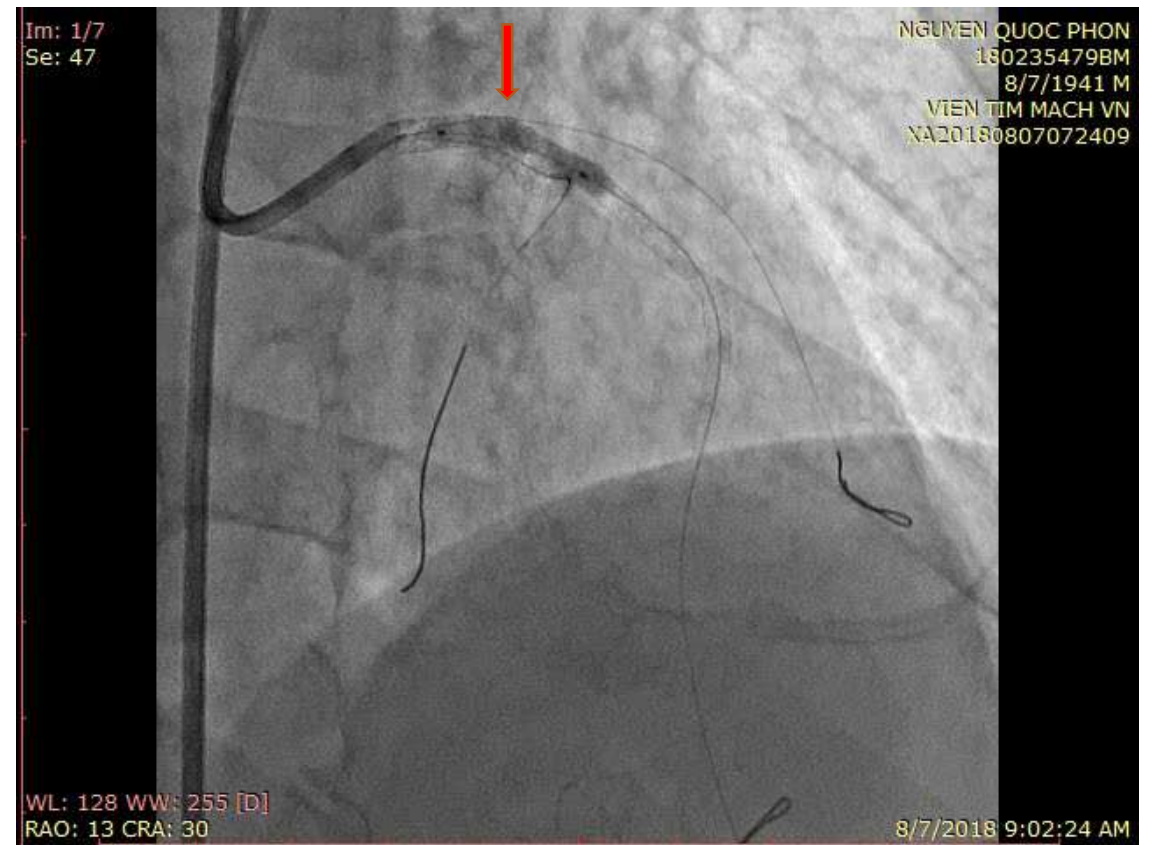


Re- check IVUS

MLA – Pro : 5,1 mm²

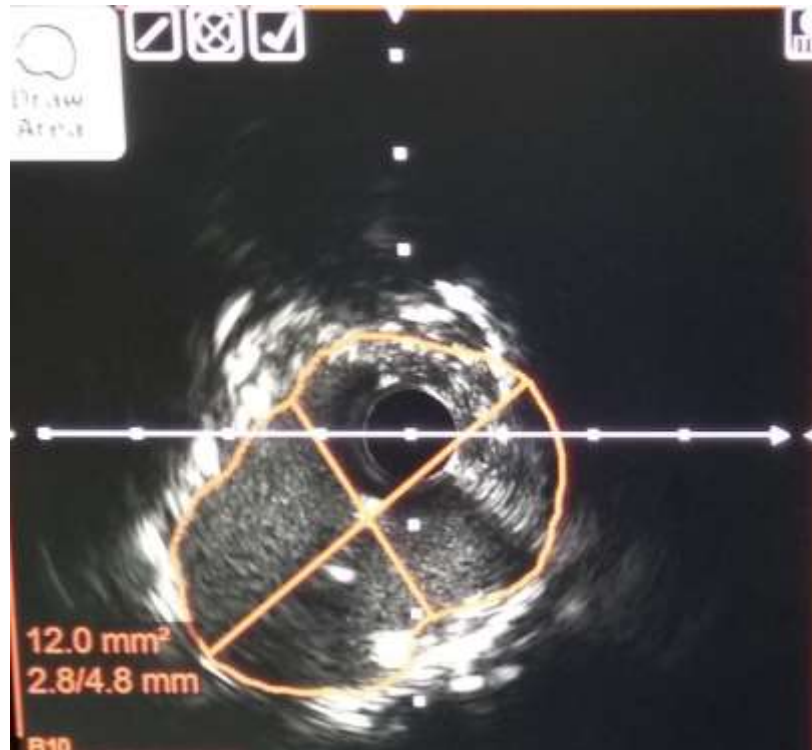


NC – Balloon: 3.5 x15 mm, 20 -24 atm

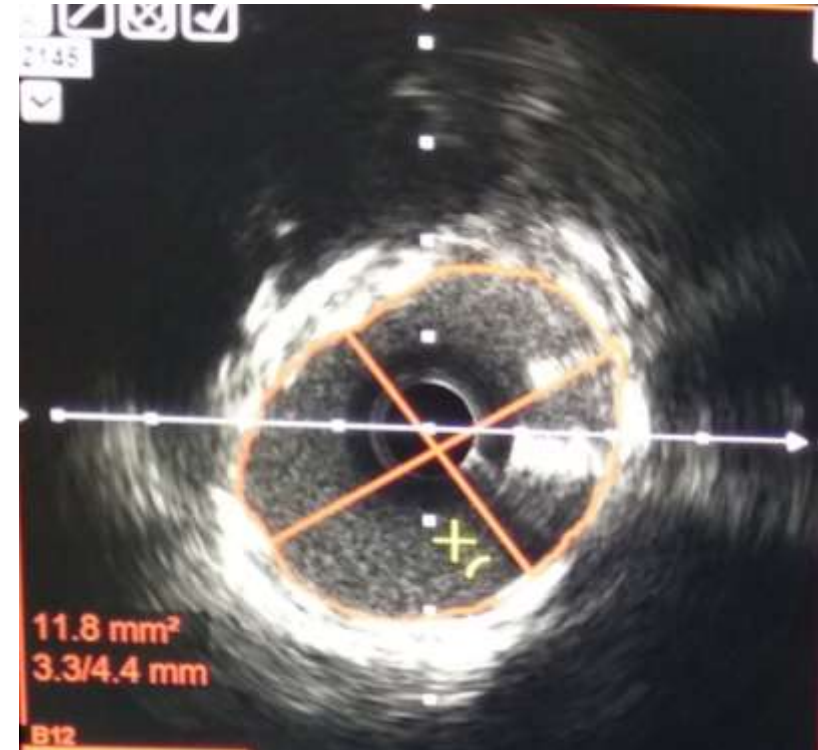


IVUS Images

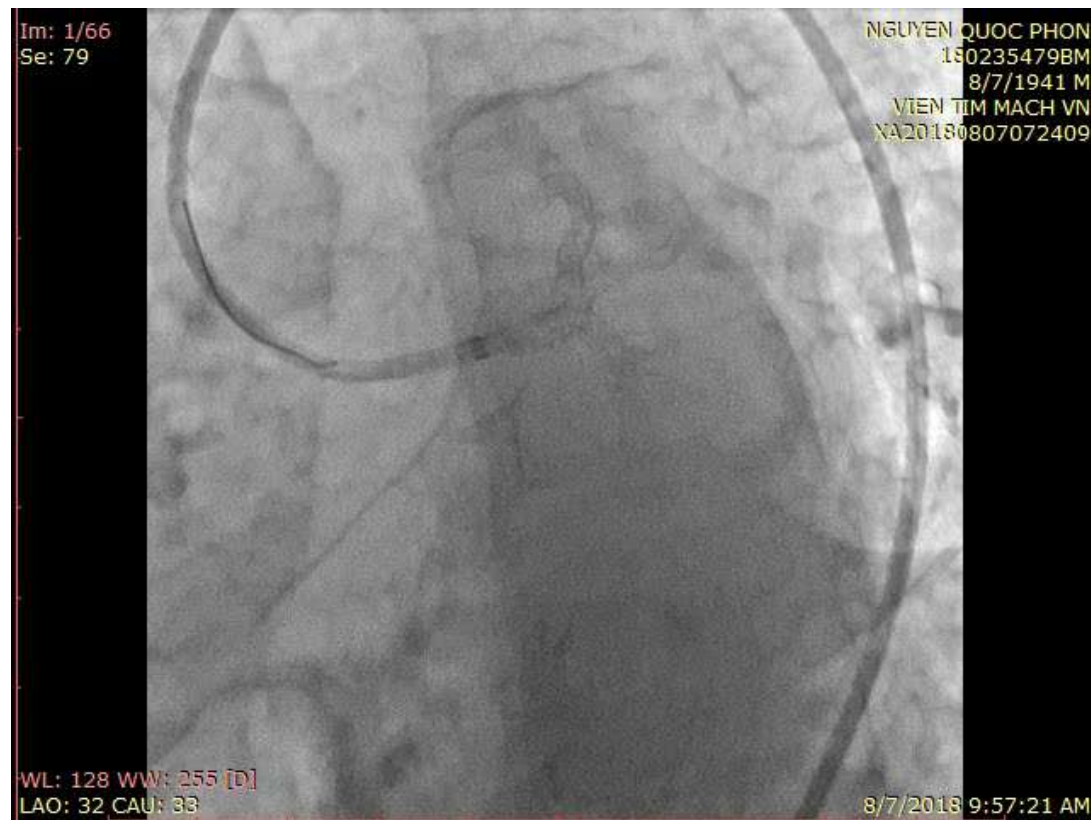
POC area



LM area



Final Result



Thank for your attention