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AMI with Multi-vessel Disease

How to Treat ?

Zhang Qi, MD

**RuiJin Hospital, Shanghai Jiaotong University
School of Medicine**



Case Introduction

- A 47y male patient, presented to ER with persistent chest pain for 3 hours
- *PE: sweating, BP=150/95mmHg, HR=90bpm*
- *With history of hypertension and cigarette smoking, no histories of DM, family CAD or hypercholesterolemia*
- EKG in ER showed acute ST-segment elevation myocardial infarction involved in inferior wall

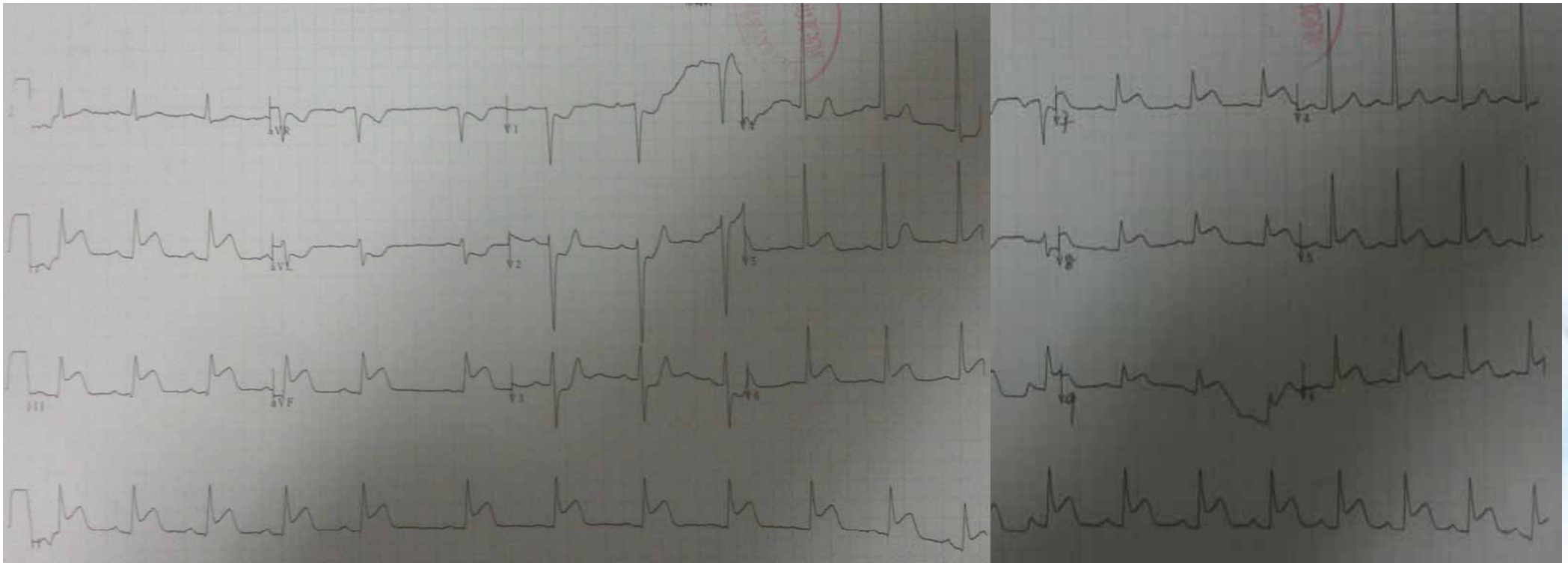


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EKG Findings @ ER





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Diagnosis and Treatment in ER

- **Acute STEMI (Inferior+Posterior), Killip I**
- **ASA 300mg**
- **Clopidogrel 300mg**
- **Tirofiban IV bolus, continued with IV infusion (upstream use)**
- **Nitroglycerin IV infusion**
- **STEMI chain for primary PCI activated**



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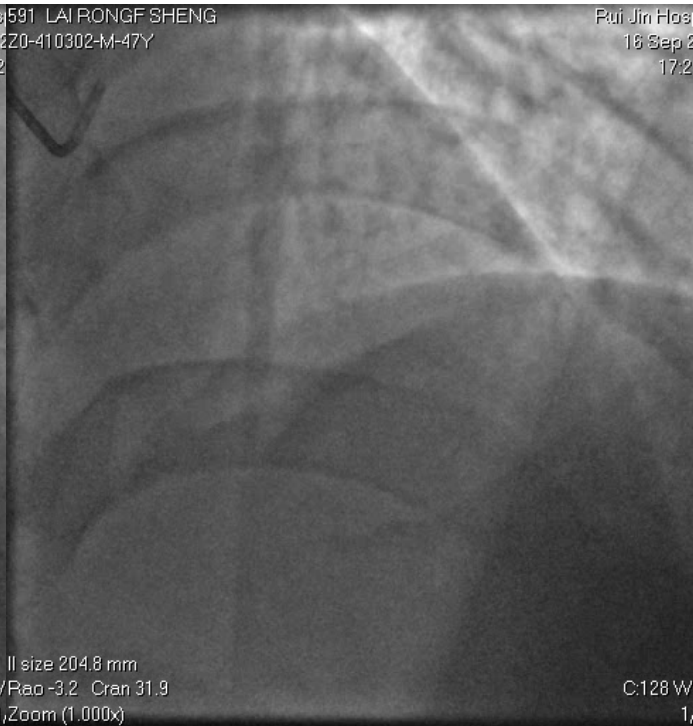


CAG Findings

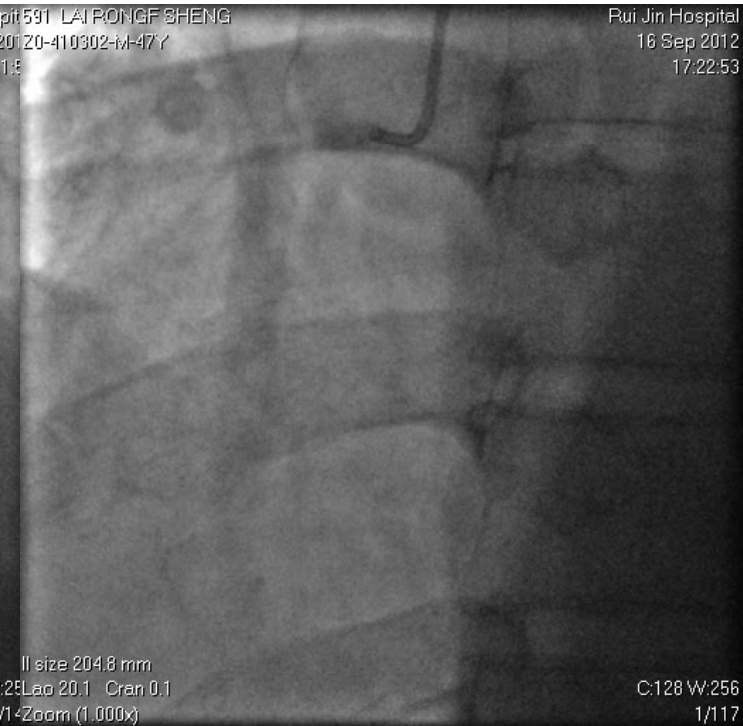
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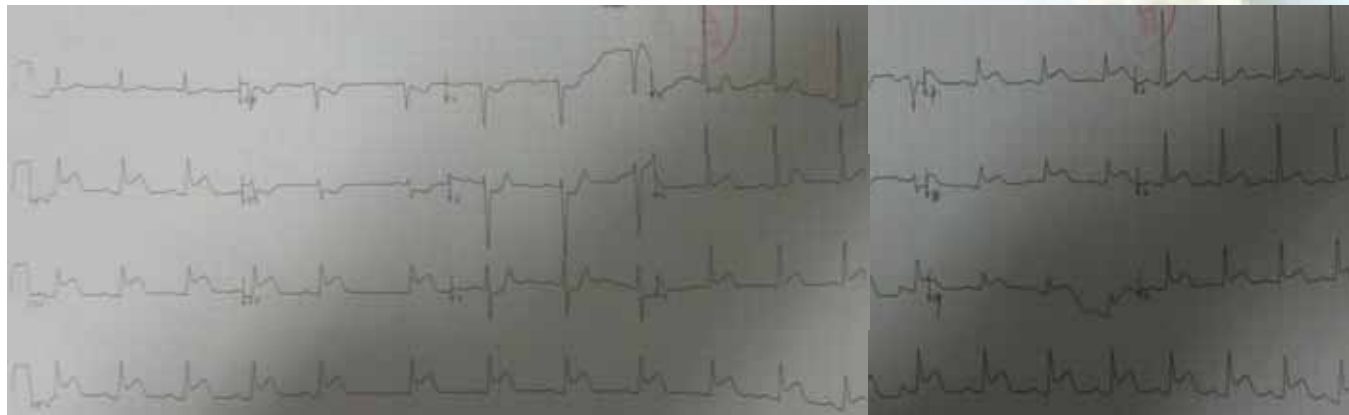
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Acute Inf/Post STEMI, with LCX/RCA total occlusion and LAD severer stenosis

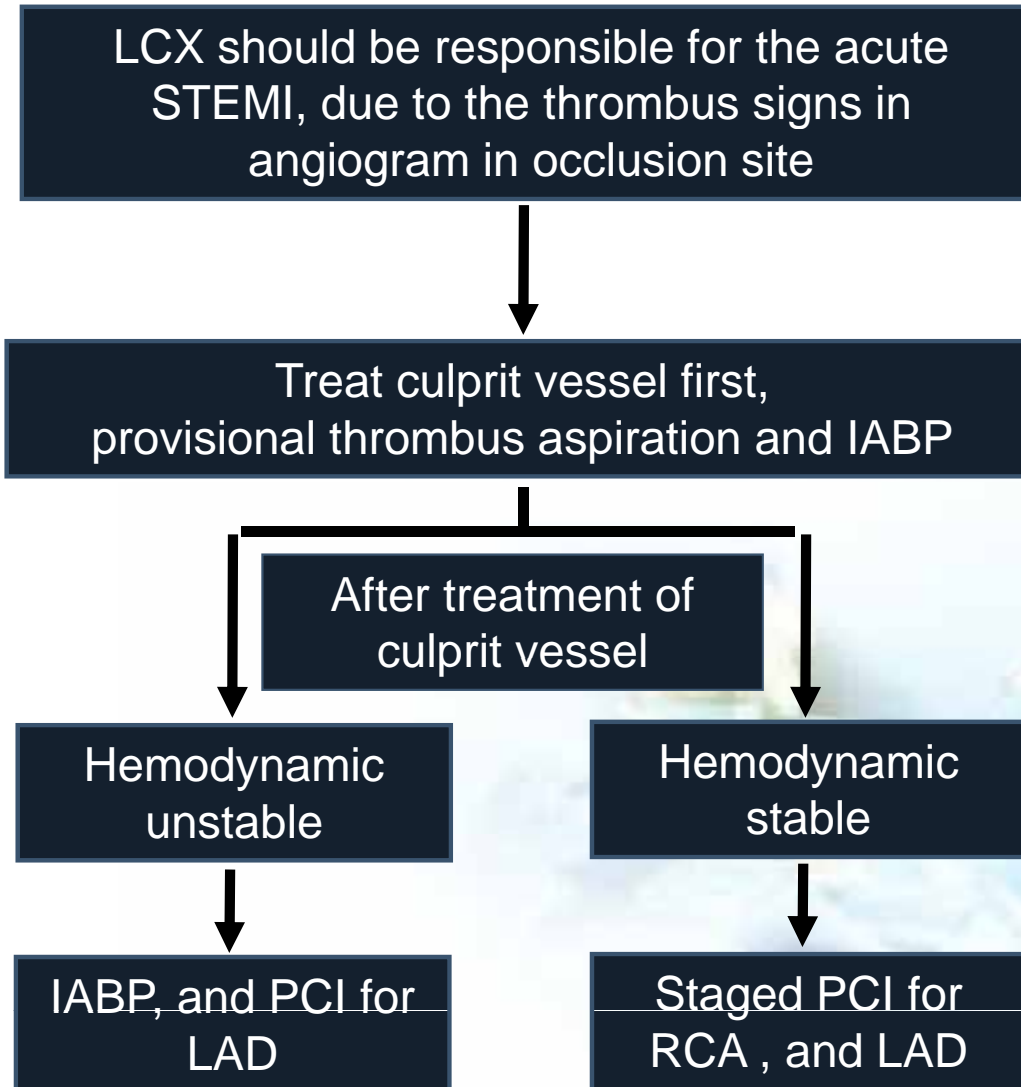
What to do next ?

- Which is culprit vessel, LCX or RCA ?
- Treat culprit only, or as more as possible during acute procedure ?
- Thrombus aspiration / IABP ?





My Decisions



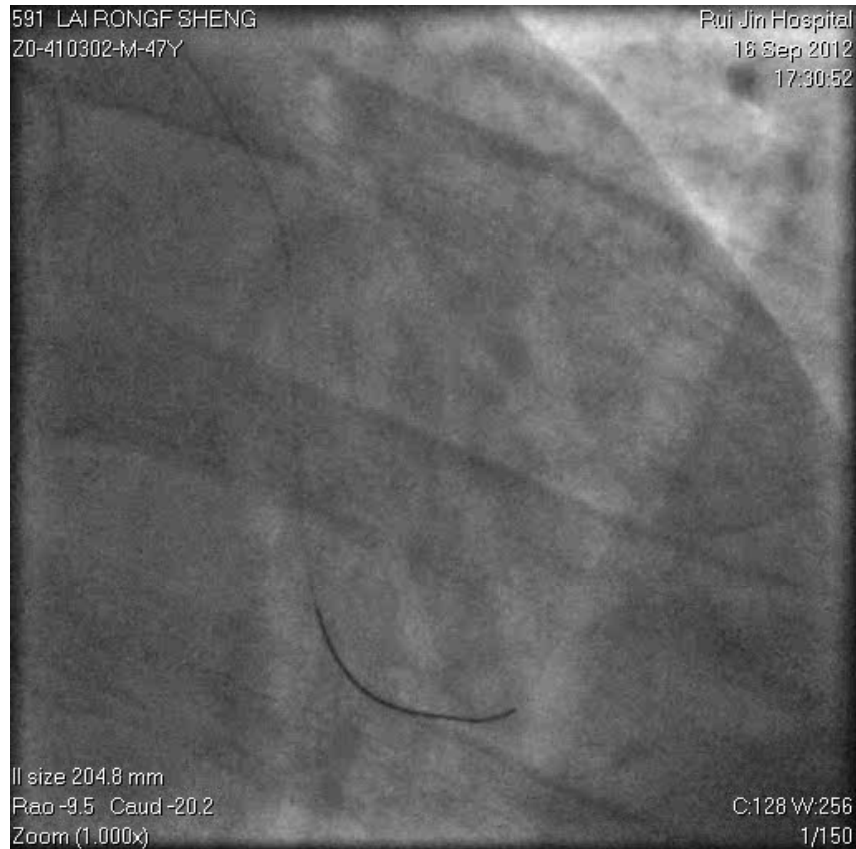


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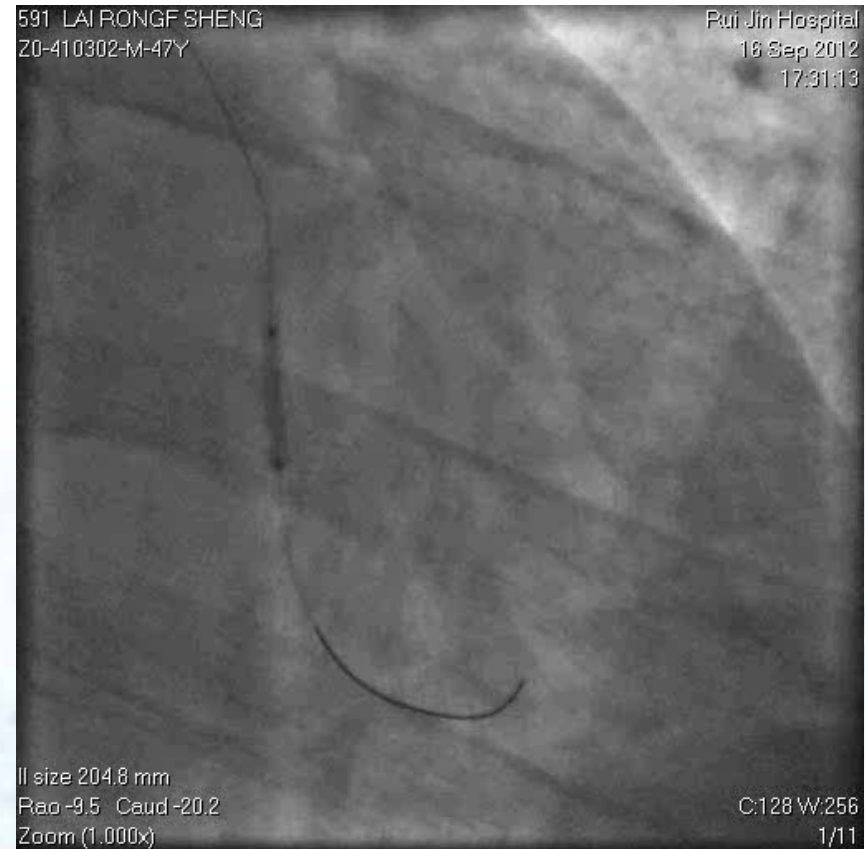
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PCI for LCX



Runthrough wire



2.0x15mm balloon dilation

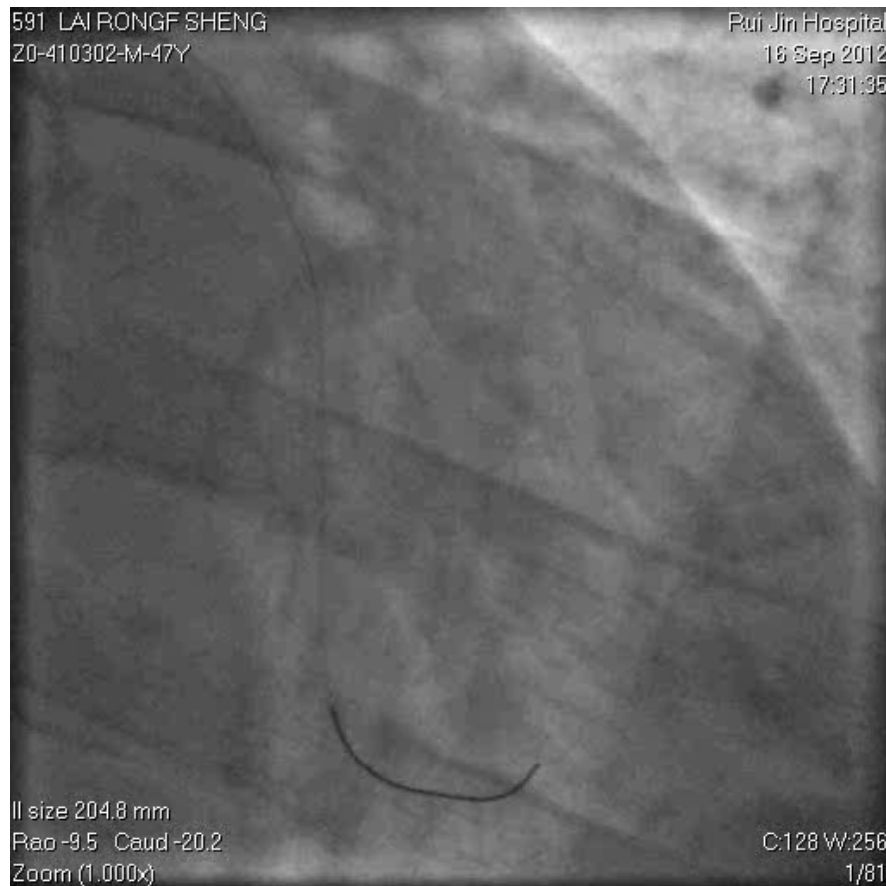


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After Balloon Predilation



Reperfusion Arrhythmia
AV block and hypotension



Reversed by
IV atropine and dopamine

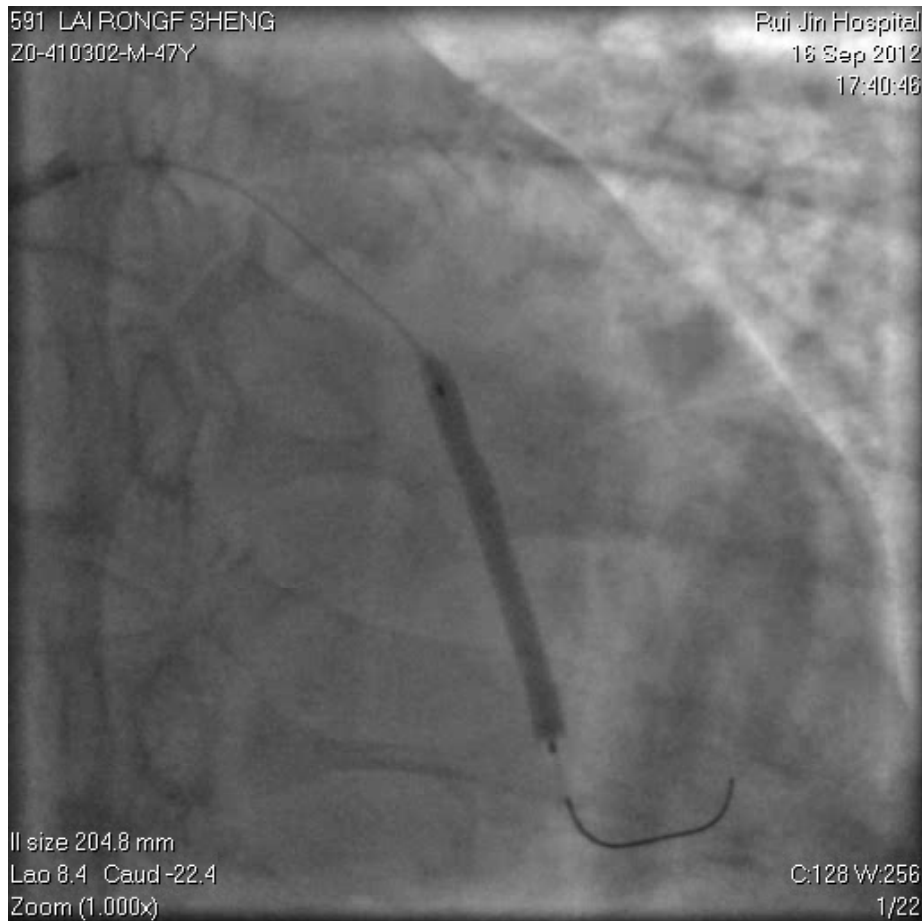


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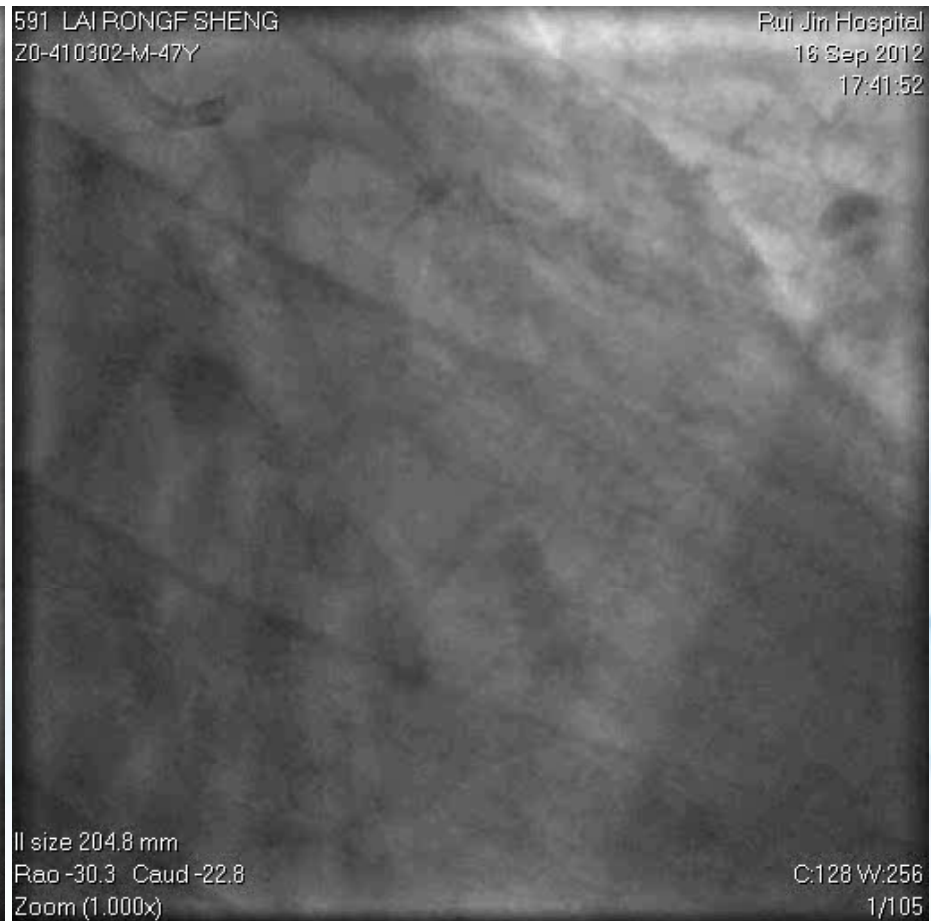
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Stent Implantation



2.75x33mm SES, 14atm



Final Results



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Post Primary PCI Management

- **Stable Hemodynamics, w/ BP 130/80mmHg, HR 100bpm**
- **Symptom improved**
- **Stop the acute procedure, and back to the ward**
- **continued with tirofiban IV for 36h**
- **Routine DA therapy, LMWH, Statin, ACEI, Beta-BLOCKER, etc**
- **Keeps stable hemodynamics, and symptom free**
- **PCI FOR RCA was scheduled before discharge**

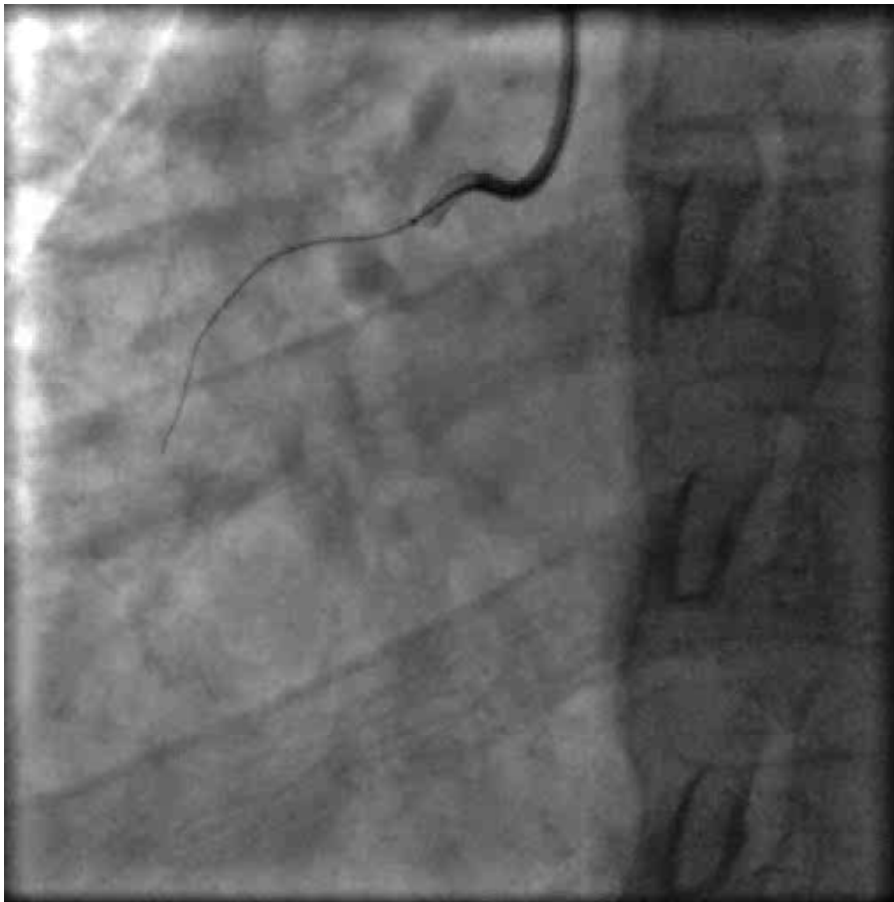


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PCI for RCA @ 10-day later



AL 1.0+MC+Field-XT



Failed in Crossing



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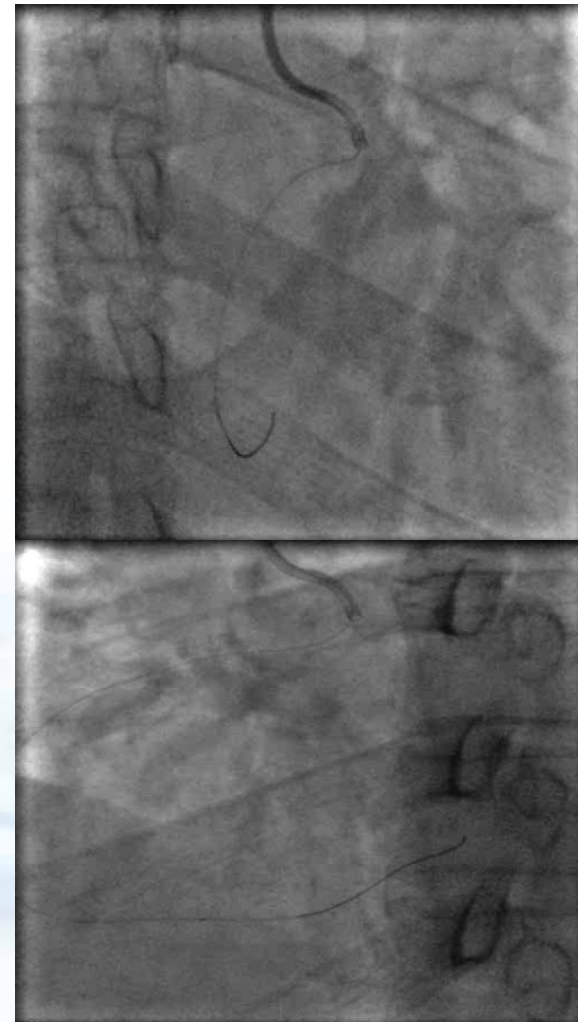
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PCI for RCA



Pilot-150



Position proved by different projection and contralateral angiogram by same catheter



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PCI for RCA



1.2x15mm balloon



2.0x20mm balloon



After PTCA

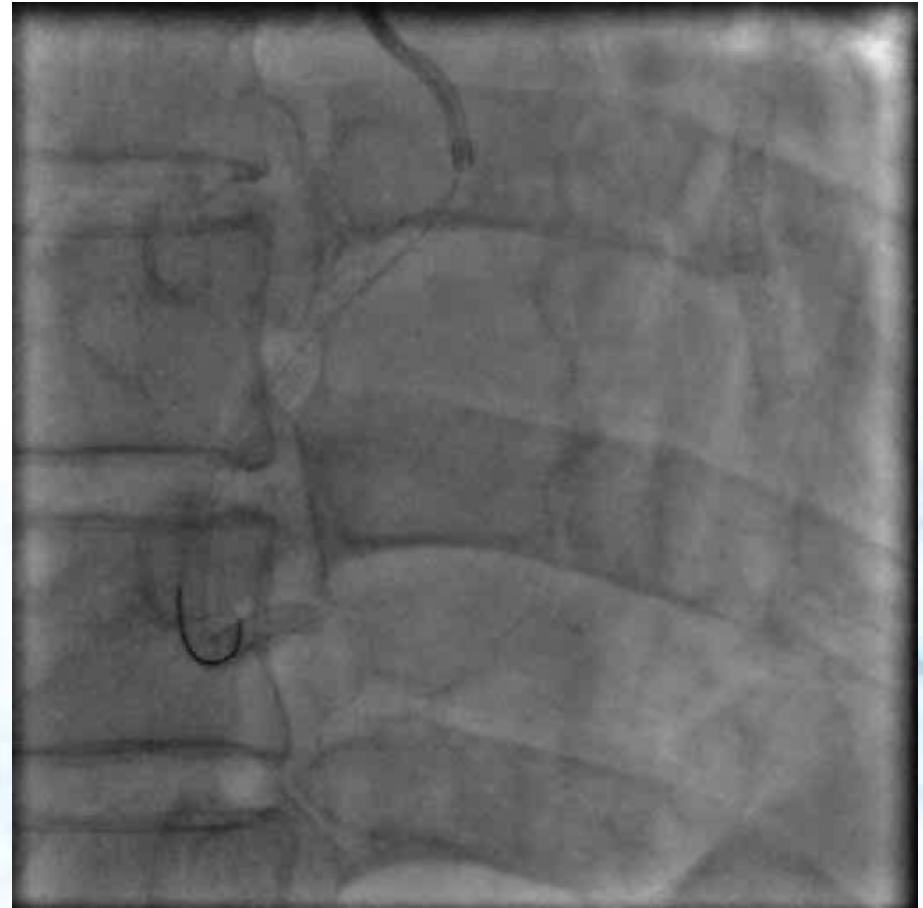
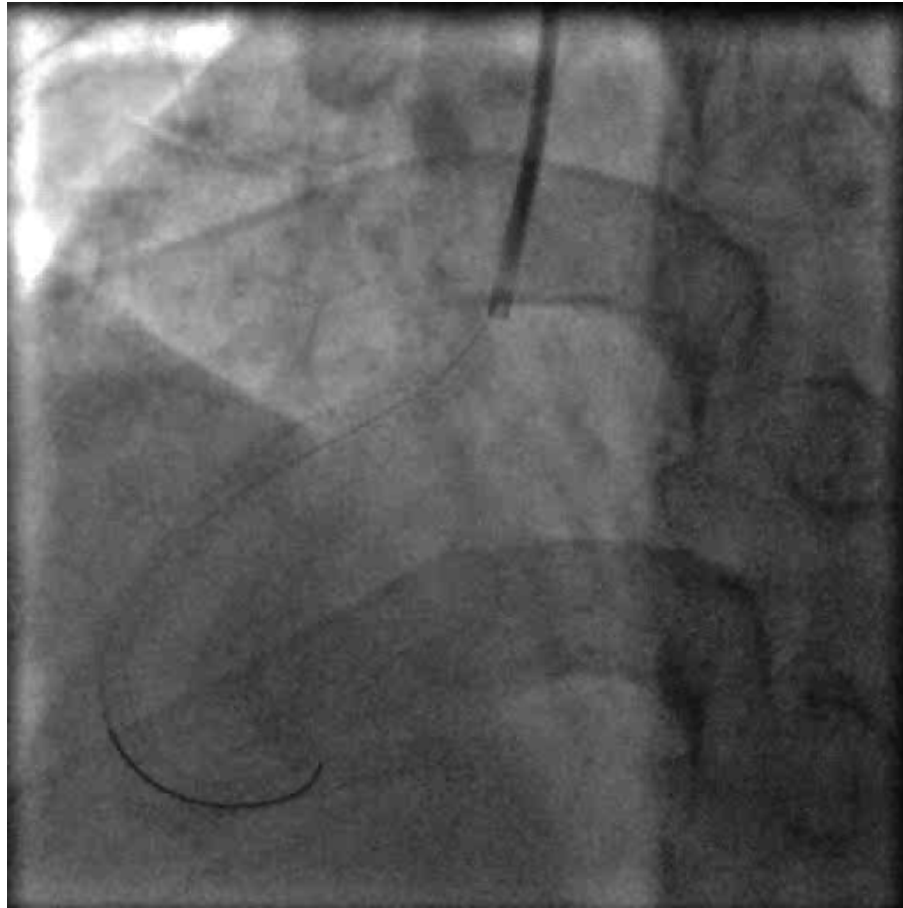


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Final Results after Stenting



2.75x33mm+3.0x33mm+3.0x36mm SES



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Case Conclusion

- **Patient was discharged 2 days after PCI for RCA**
- **Secondary prevention medications were prescribed (DA, statin, Beta-BLOCKER, etc.)**
- **LAD lesions was staged, and treated after two-month**



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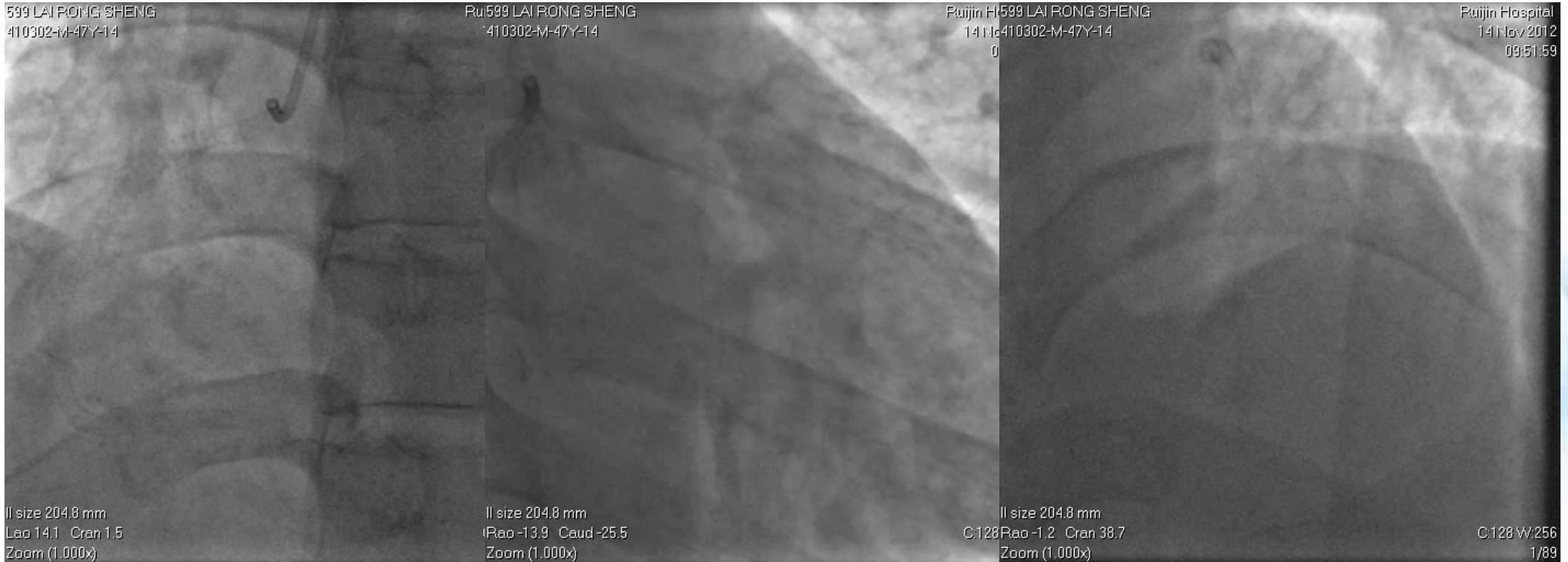
Angiographic Follow-up @ 2-month later

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Lao 14.1 Cran 1.5
Zoom (1.000x)

Il size 204.8 mm
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Il size 204.8 mm
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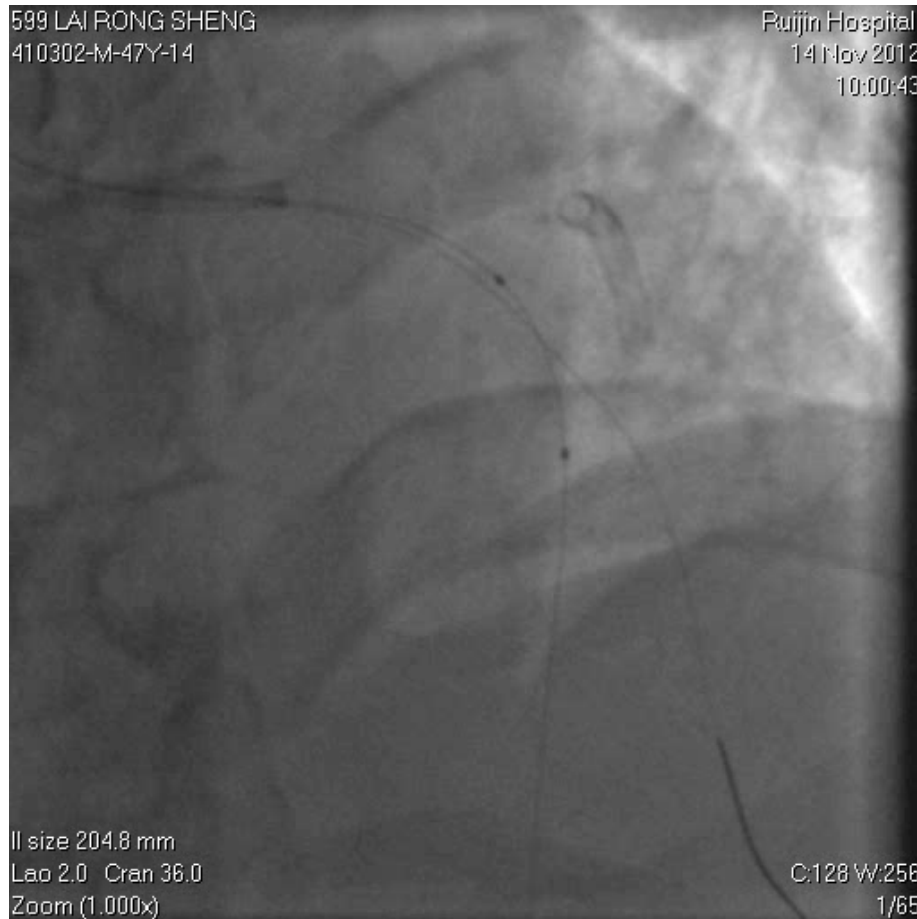


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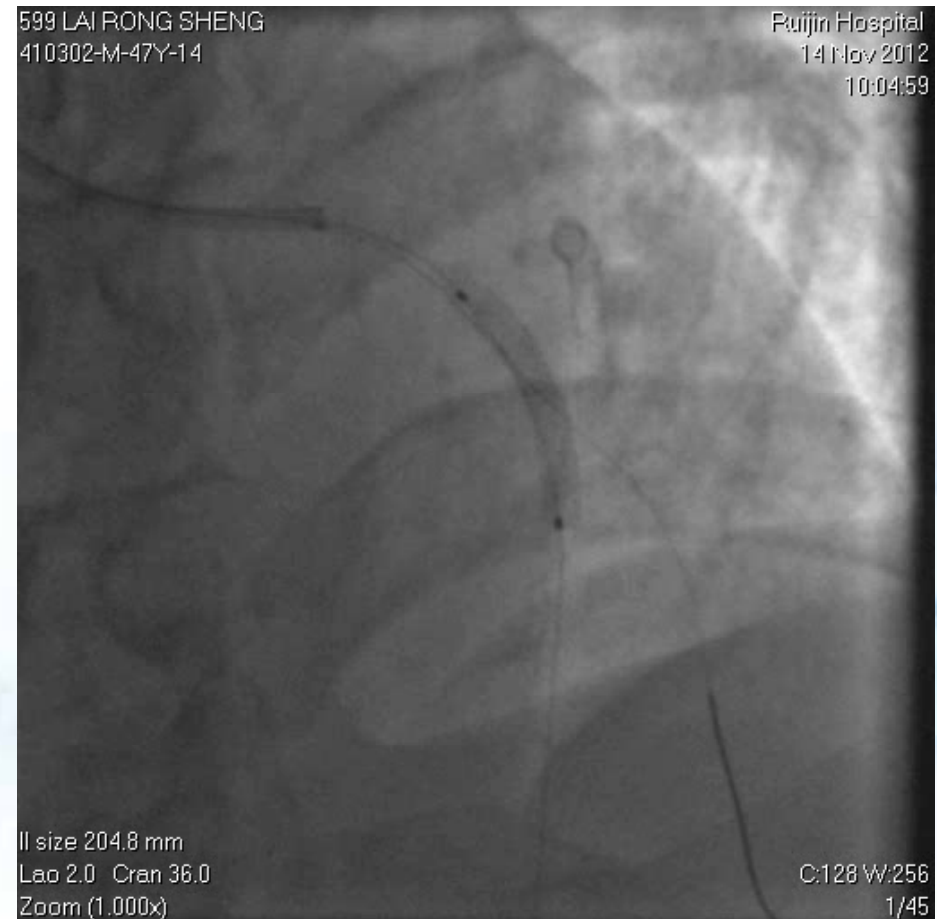
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PCI for LAD



2.0x20mm balloon



3.5x23mm SES

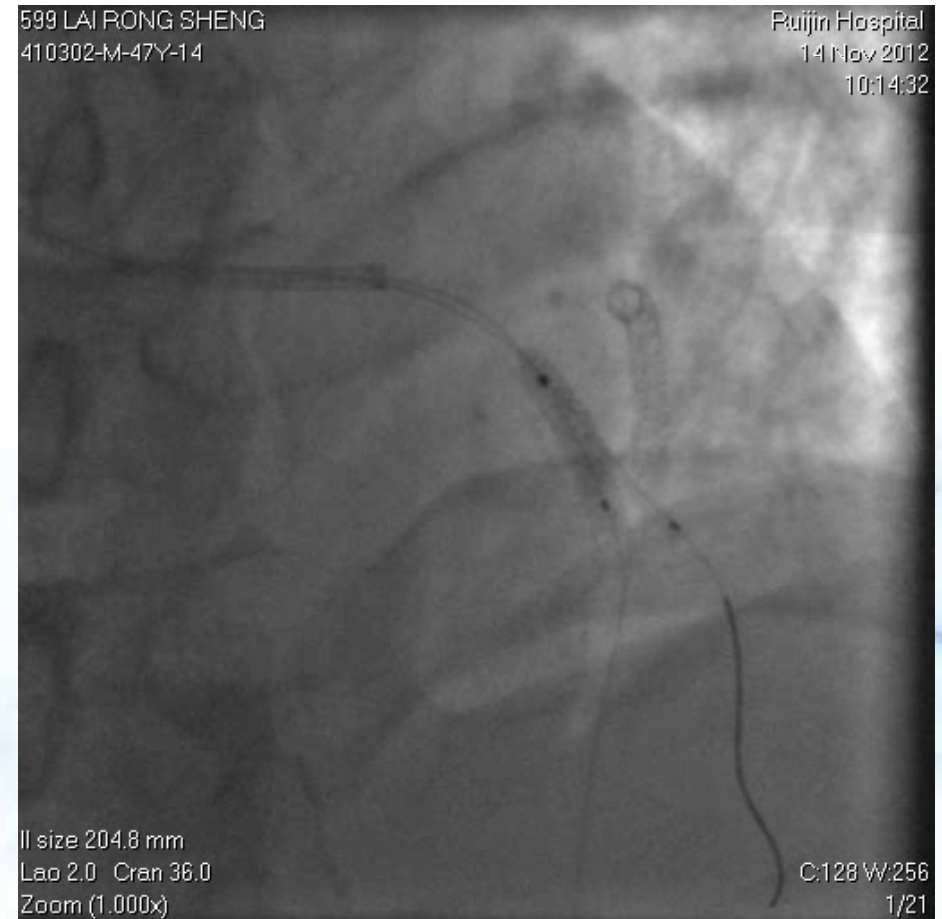
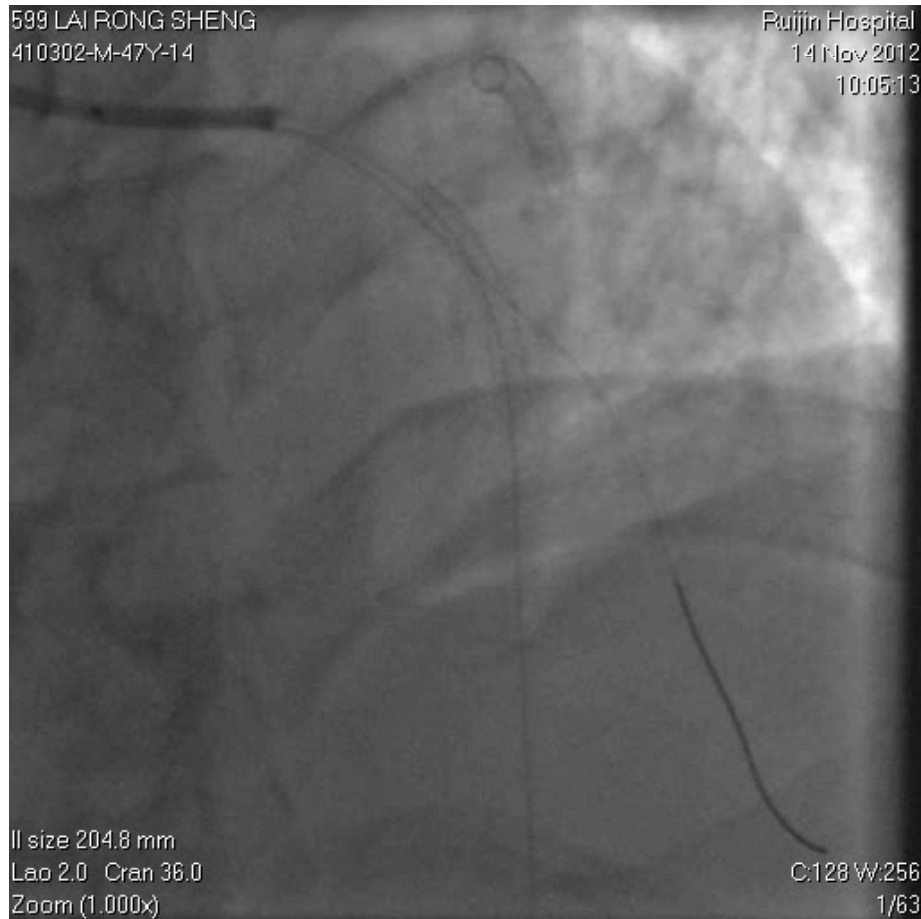


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PCI for LAD



3.5x15mm NC+2.0x20mm balloons

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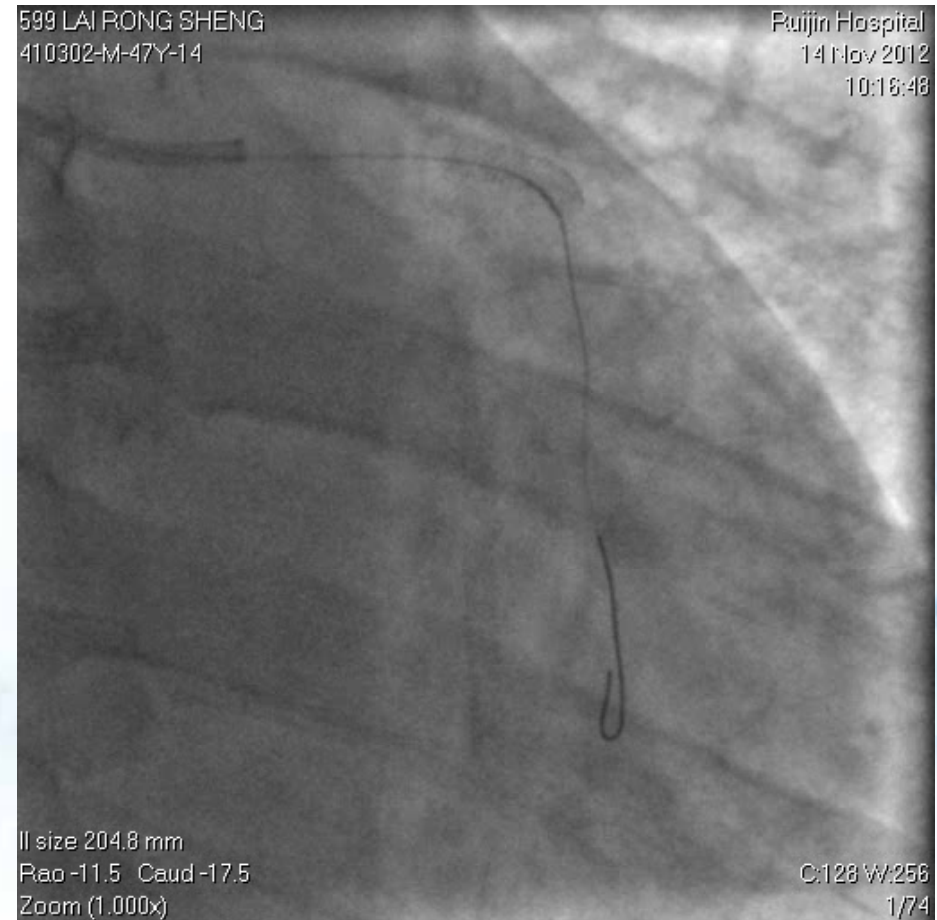
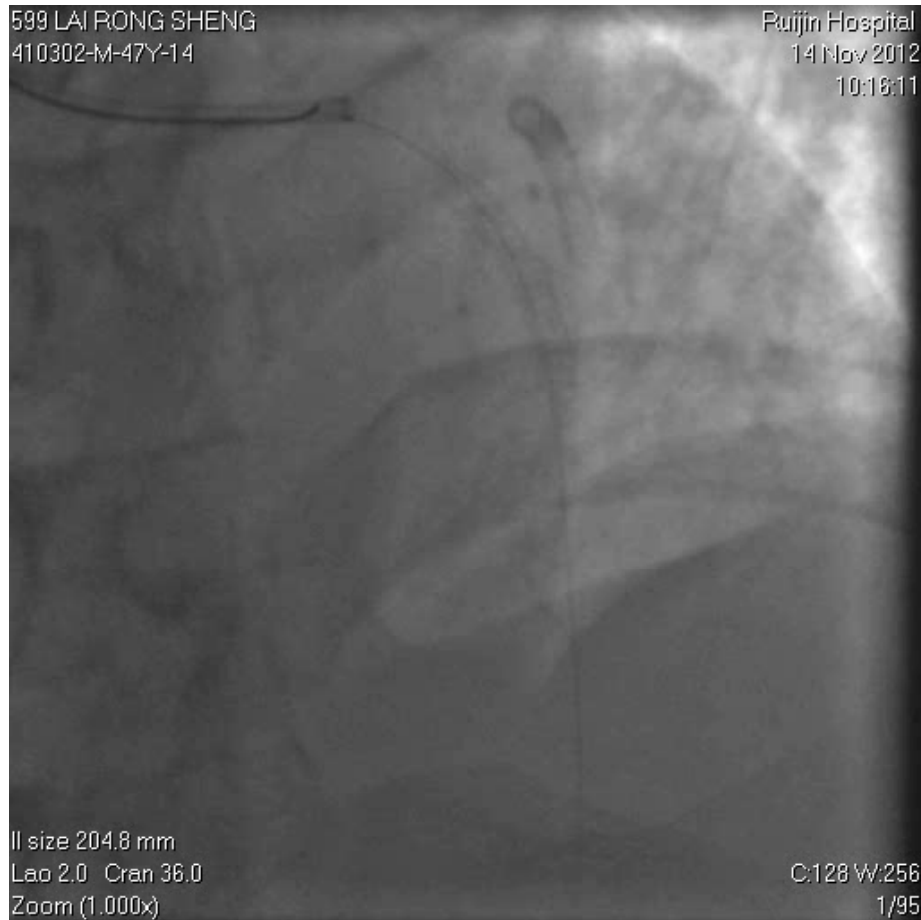


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Final Results





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Case Conclusions & RuiJin Experience

- 6-month clinical follow-up: no adverse events
- Our principle of Primary PCI : **less is more**
- ✓ Simplified procedure with effective results in acute phase, leave the remaining non-fatal lesion to be treated selectively
- ✓ Finish Primary PCI as quick as possible, combined with aggressive anti-thrombotic therapy in beginning 24-36 hours (ASA, Clopidogrel, LMWH, GP IIb/IIIa)