BIFURCATING CTO LESION

By

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P. History

- 49 years old, male patient
- Hypertensive
- Not diabetic
- Not smoker
- With P.H of IHD since 2009 with PCI to RCA & LAD

Present History

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- 6 months ago Presented with exertional chest pain
- Resting ECG : non specific T-wave changes
- Stress ECG test : Positive (ST segment elevation in III & AVF)
- Echo : Normal LV dimensions, EF=71% with RSWMA
  (basal inferior hypokinesia)

Labs

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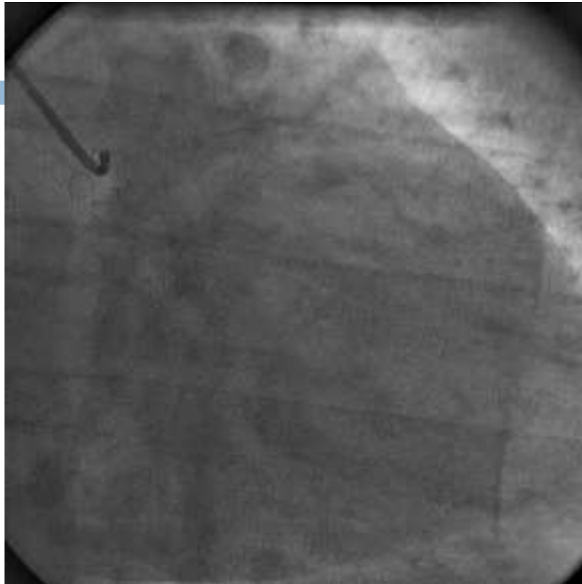
- S.Creat. : 1.2 mg/dl
- Urea : 16 mg/dl
- Hb: 18.4 g/dl
- PLT: 238 thousand/cmm

CA was done and revealed



RAO caudal showed normal bifurcating LM, LCX is totally occluded after long diseased stump

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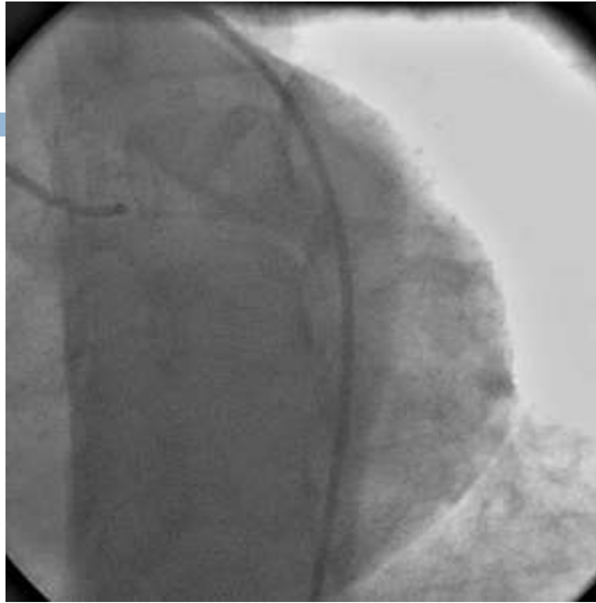

Spider View showed normal proximal LAD, normal ramus intermedius with retrograde flow to PDA

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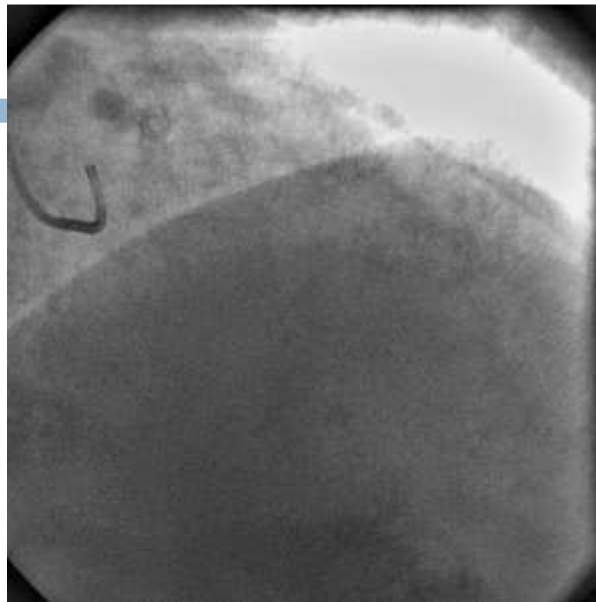

RAO cranial showed patent LAD stent with normal mid and distal segments

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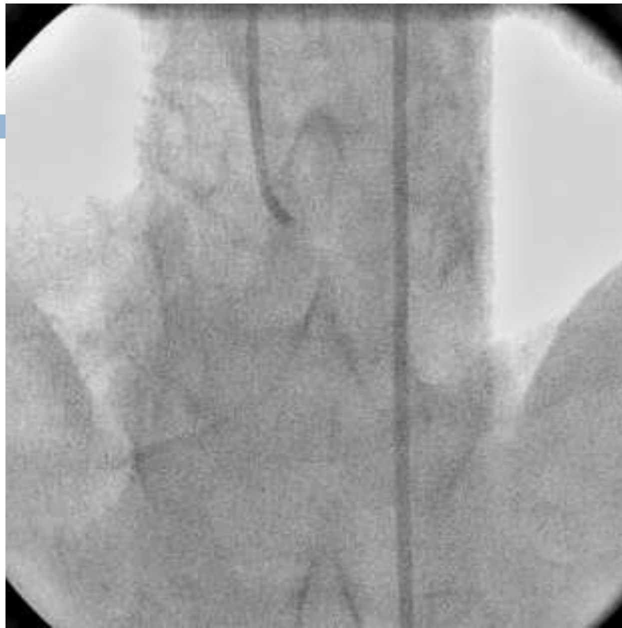

RCA is totally occluded after severely folded proximal long segment

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So what is the

PLAN ????

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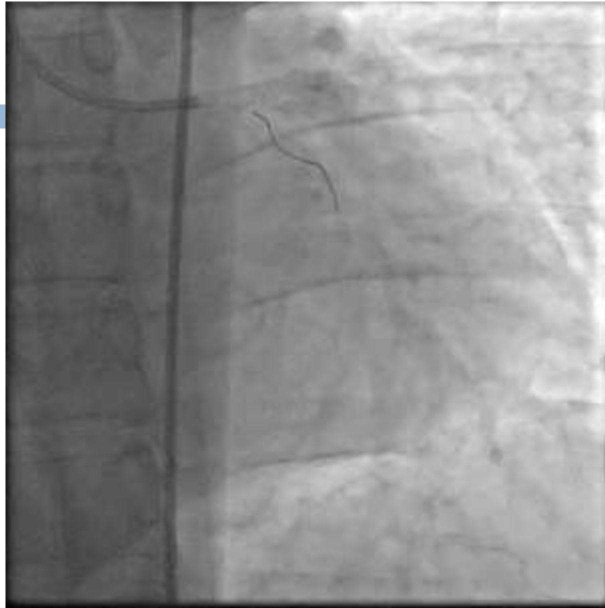

LM was engaged by XB4 6F GC, Fielder XT wire was used to pass the OM lesion

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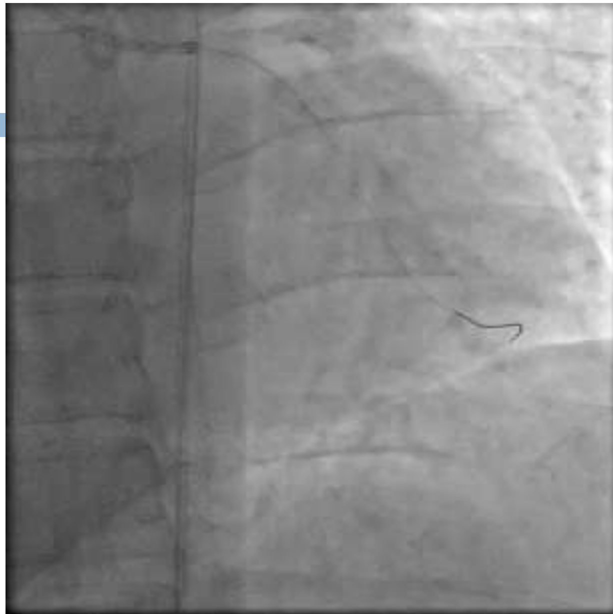

Fielder XT wire passed successfully through the OM lesion with aid of fine cross MC

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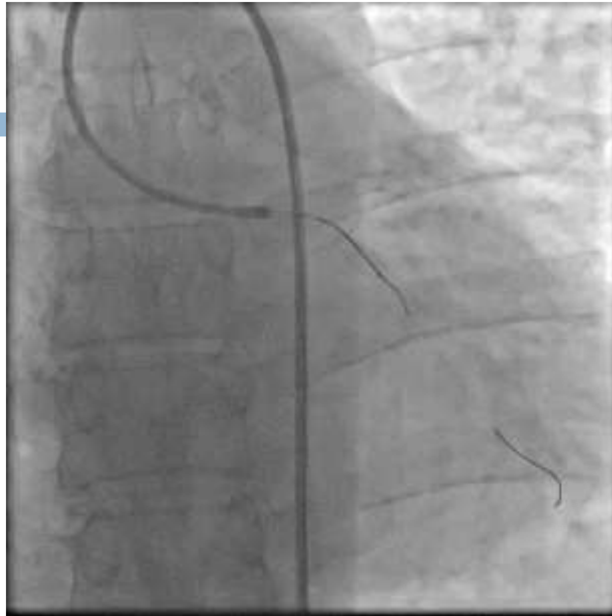

Another Fielder XT wire was used to pass the proper LCX lesion

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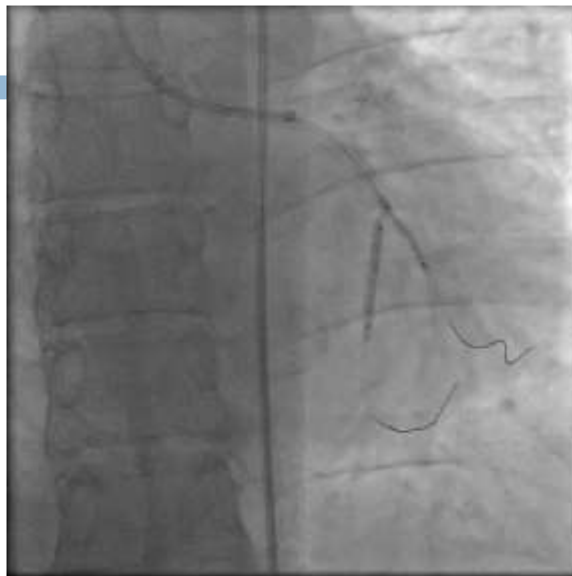

PTCA to LCX and OM lesion by Ryujin balloons (2x15mm)

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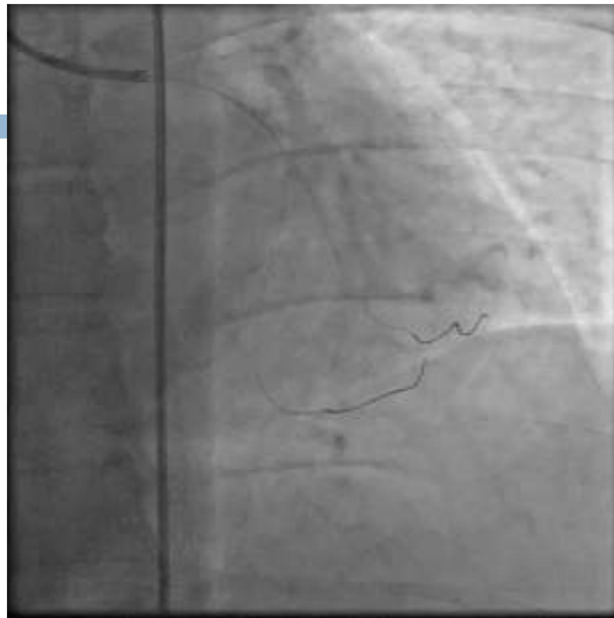

Control Angiography after dilatation

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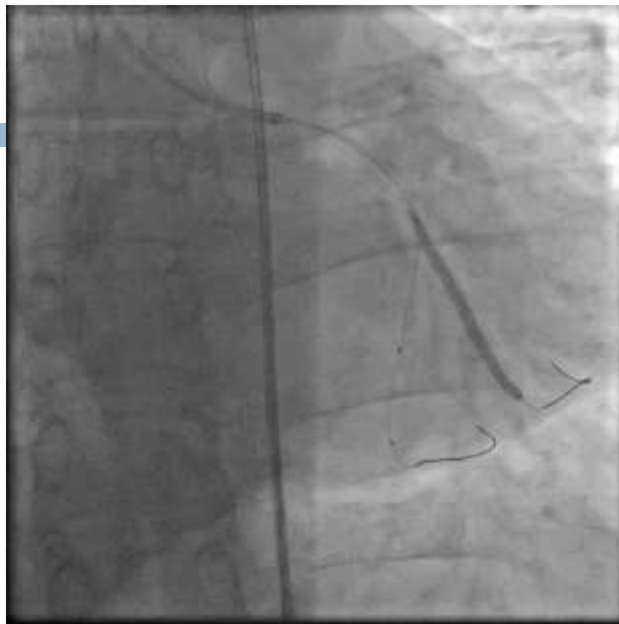

Fixation of OM lesion by Ultimaster (2.25x38mm)

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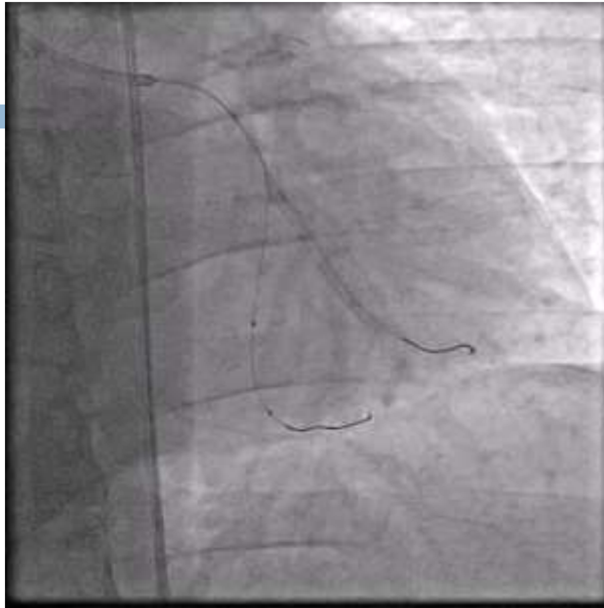

Control Angiography

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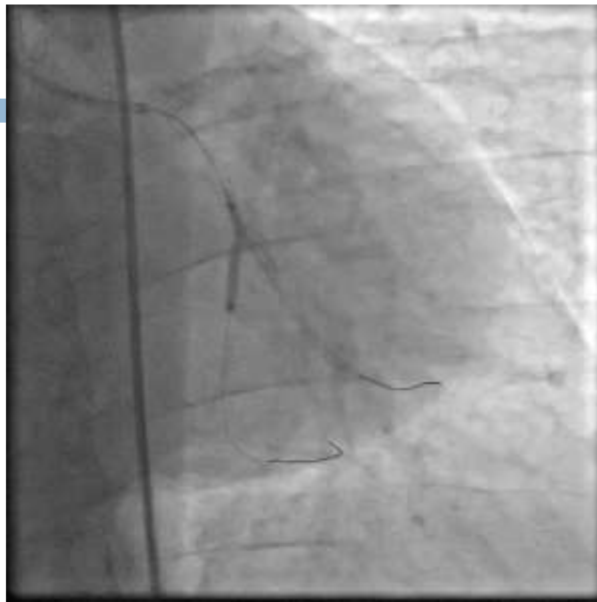

Crushing the proximal end of the OM stent

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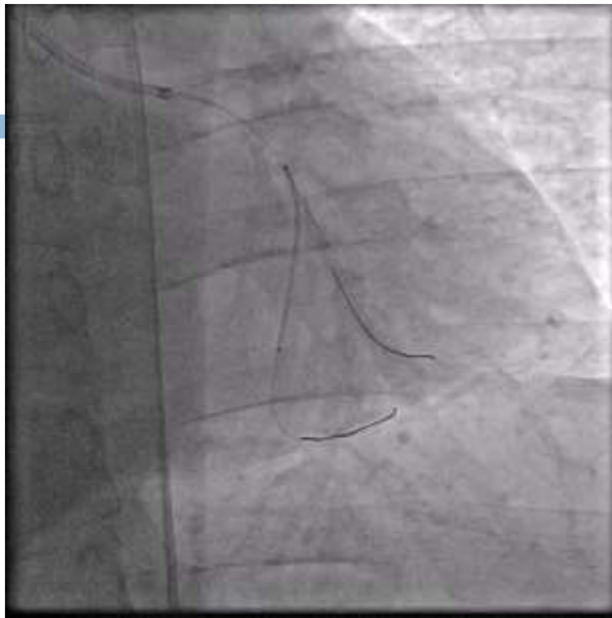

Fixation of LCX lesion by Ultimaster 2.5x33mm

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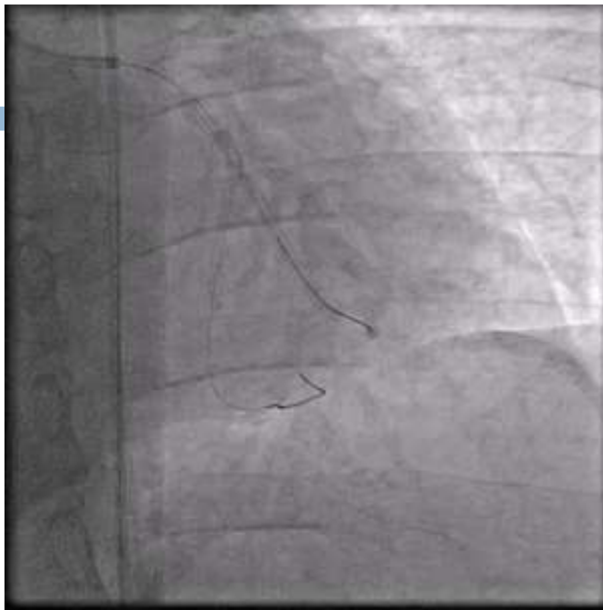
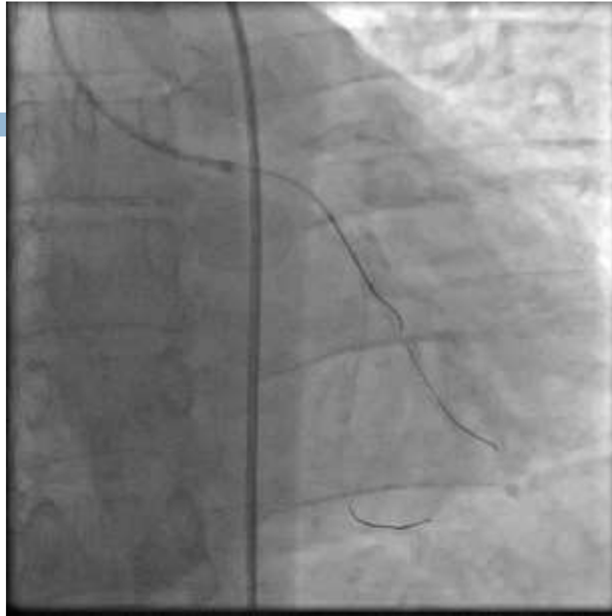
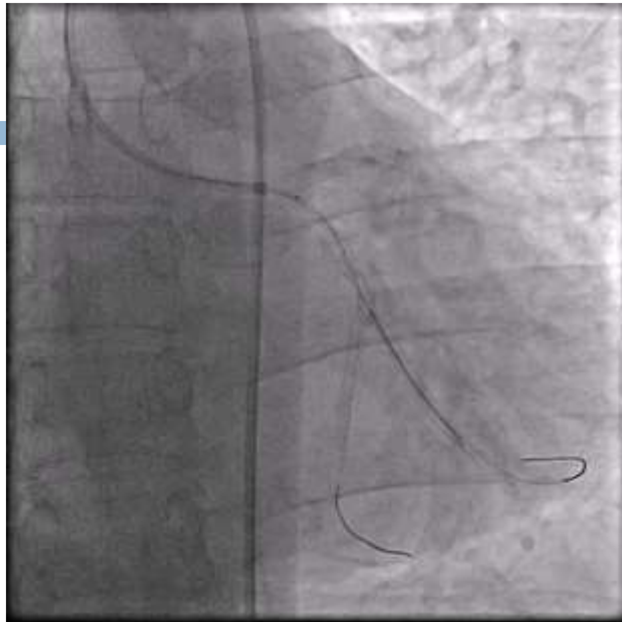


Control Angiography



Re-crossing to the OM by run-through intermediate wire



Withdrawal of the jailed wire in the OM

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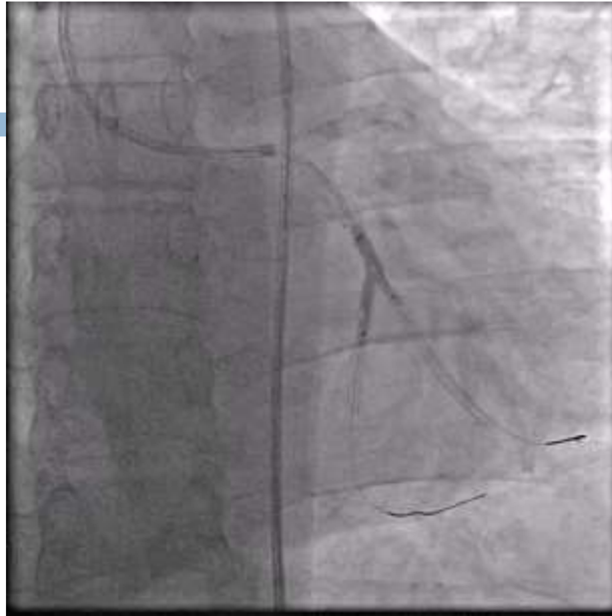

KBT was done by 2 high pressure balloons .

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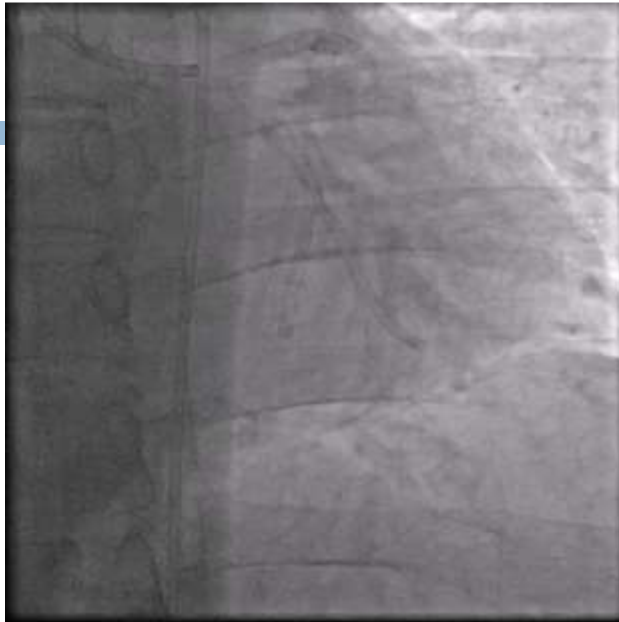

Final Result of the left system

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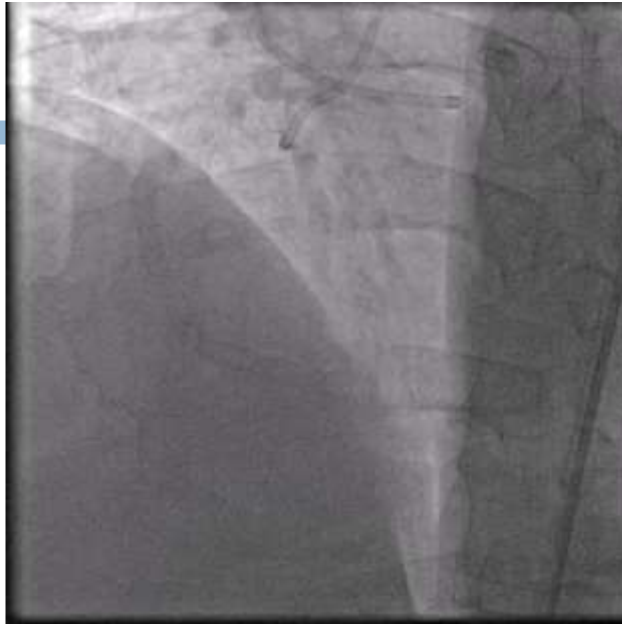

RCA was engaged by AL1

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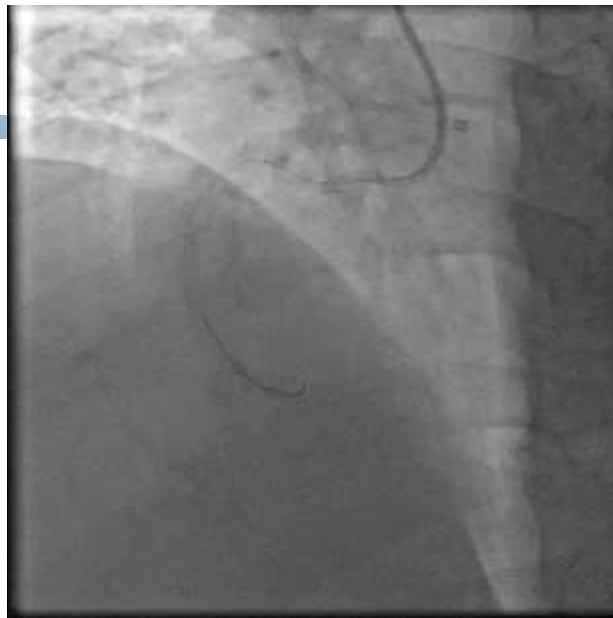

Runthrough hypercoat wire succeeded to pass the RCA lesion with the aid of fine cross MC

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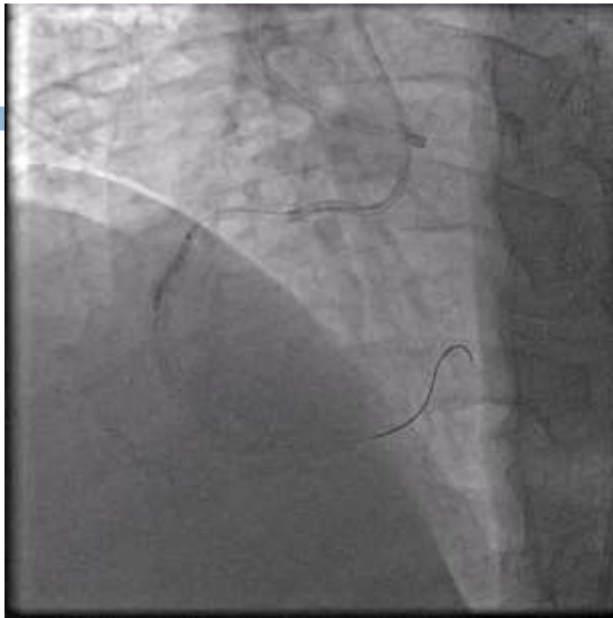

Multiple PTCA to RCA ISR

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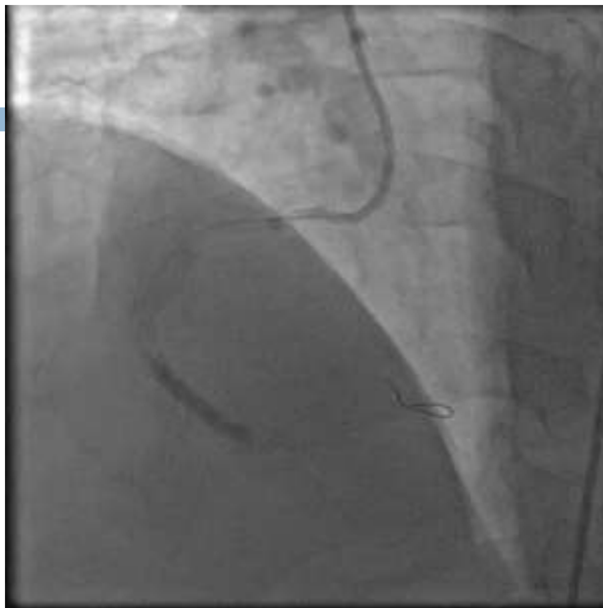

PTCA to RCA ISR with larger balloon

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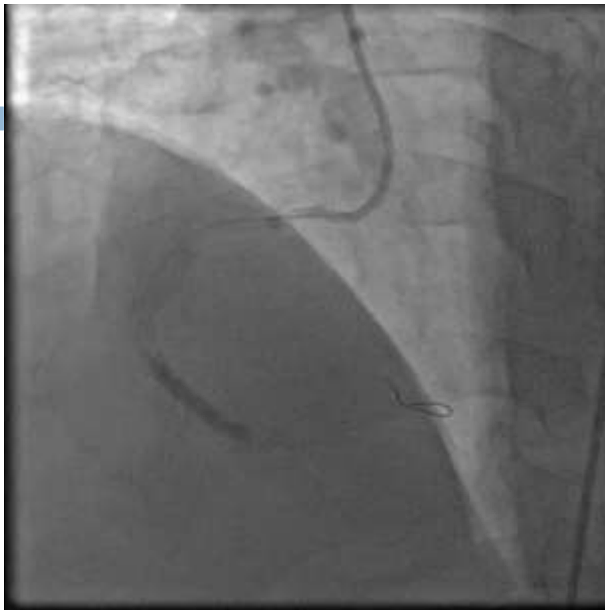

PTCA with Drug Eluting Balloons

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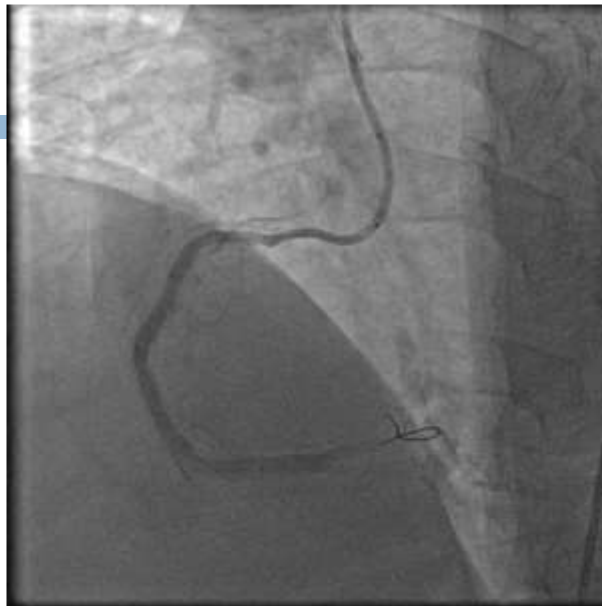

Final Result of the right system

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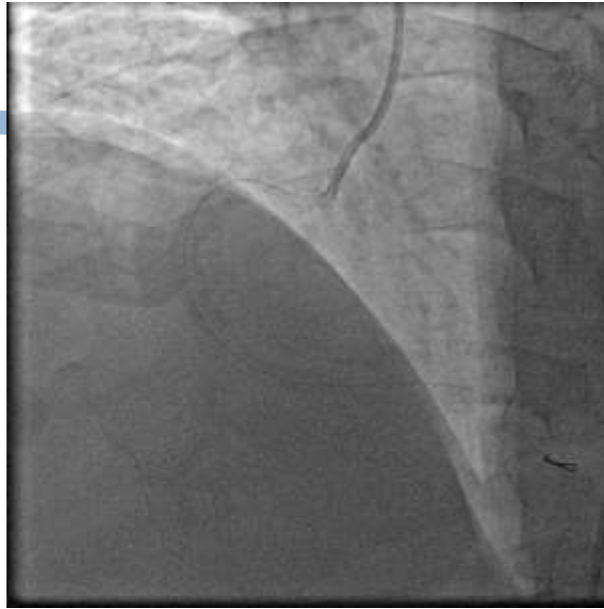

✓Improvement in the techniques and devices has resulted in increasing success rate of CTO Intervention.

✓Techniques of CTO recanalization adds to the success rate of the centre in CTO Intervention.

✓Every advanced CTO PCI center should dedicate a special team for the retrograde approach

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Thank You