

Case of Retrograde approach

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Retrograde Wire Technique

Guidewire cross from CTO distal site through collaterals channels supplied from contralateral vessel.

Basic concept for retrograde approach

1st step

GW channel crossing

proper choice of channel
correct reading angiogram
Fielder FC, Sion blue GW

2nd step

off course, learning curve

CTO crossing after channel pass through

Fielder XT → ultimate → conquest

retrograde GW crossing, KWT

r-CART

IVUS guide

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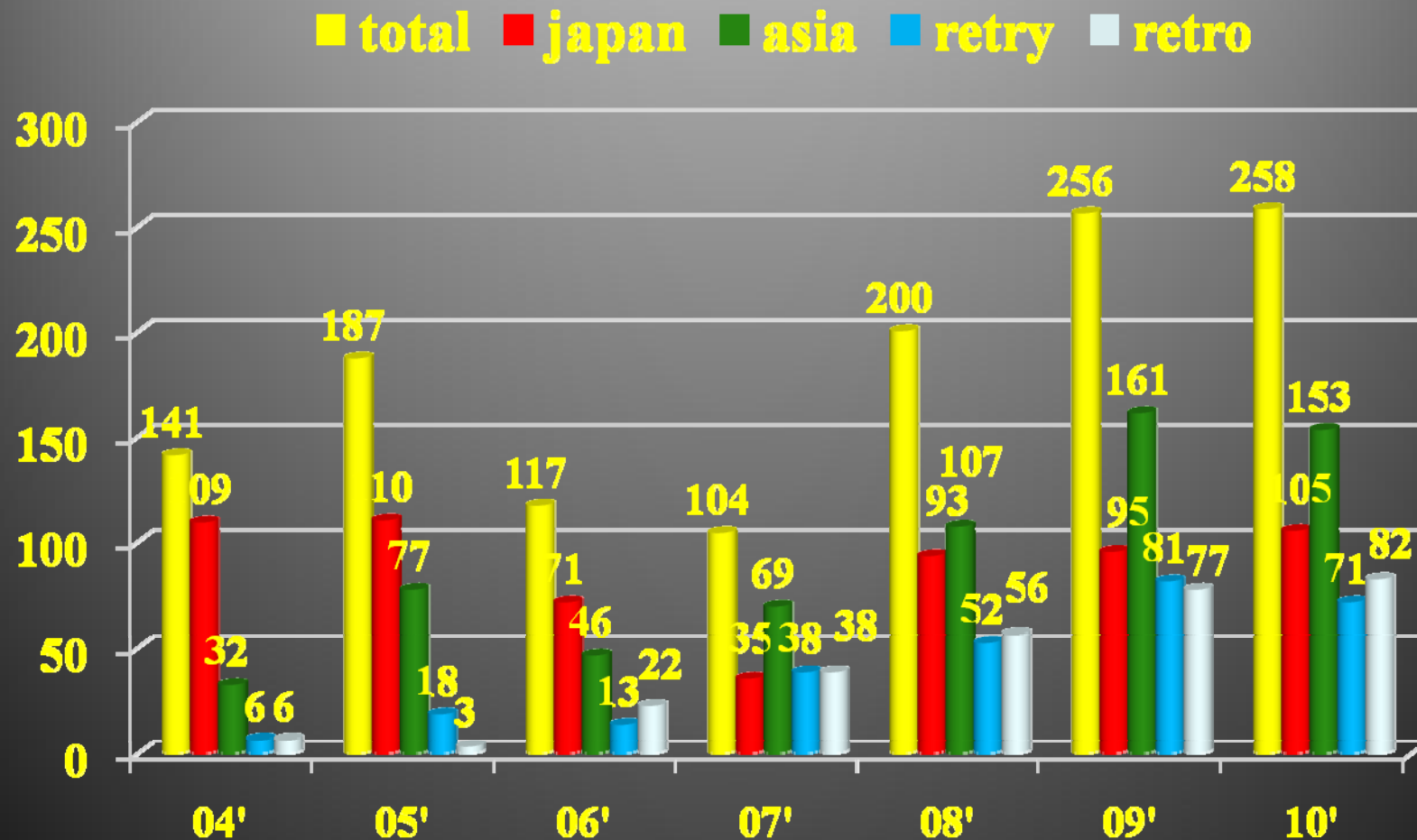
Indication of Retrograde Approach

- Failed Antegrade Approach
- Hopeless Antegrade Approach
 - Unknown Entry Point
 - Long CTO(>40mm)
 - Heavy Calcium
 - RCA Bent Point CTO
 - Ante GW into Subintimal Space
- Good Collaterals
 - Straight, Big, Visible

Background of retrograde approach

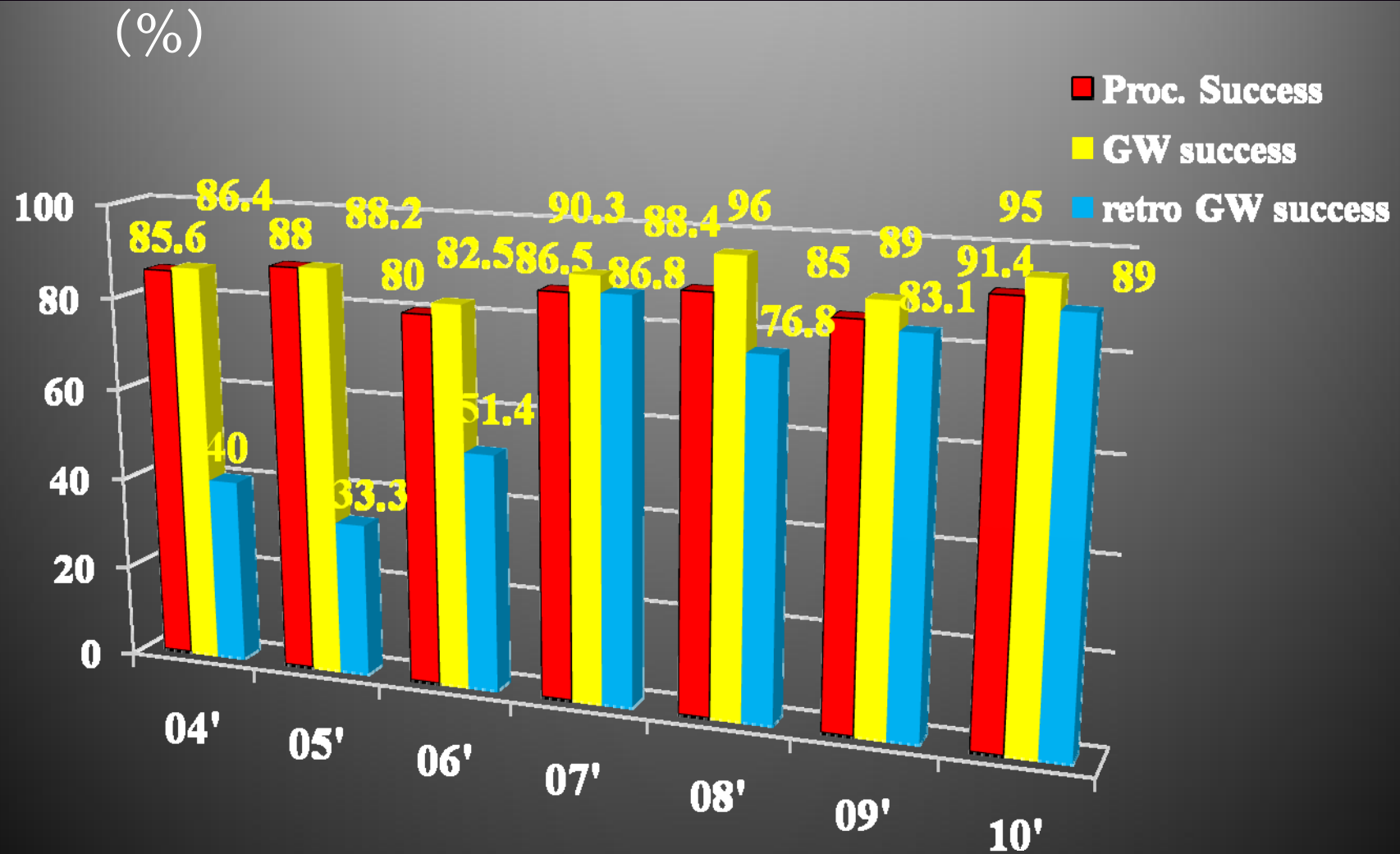
N	281
Re-try	191
Unknown entry	74
Abrupt	9
Diffuse	7
Septal channel	224
Epicardial channel	57

Number of CTO lesion



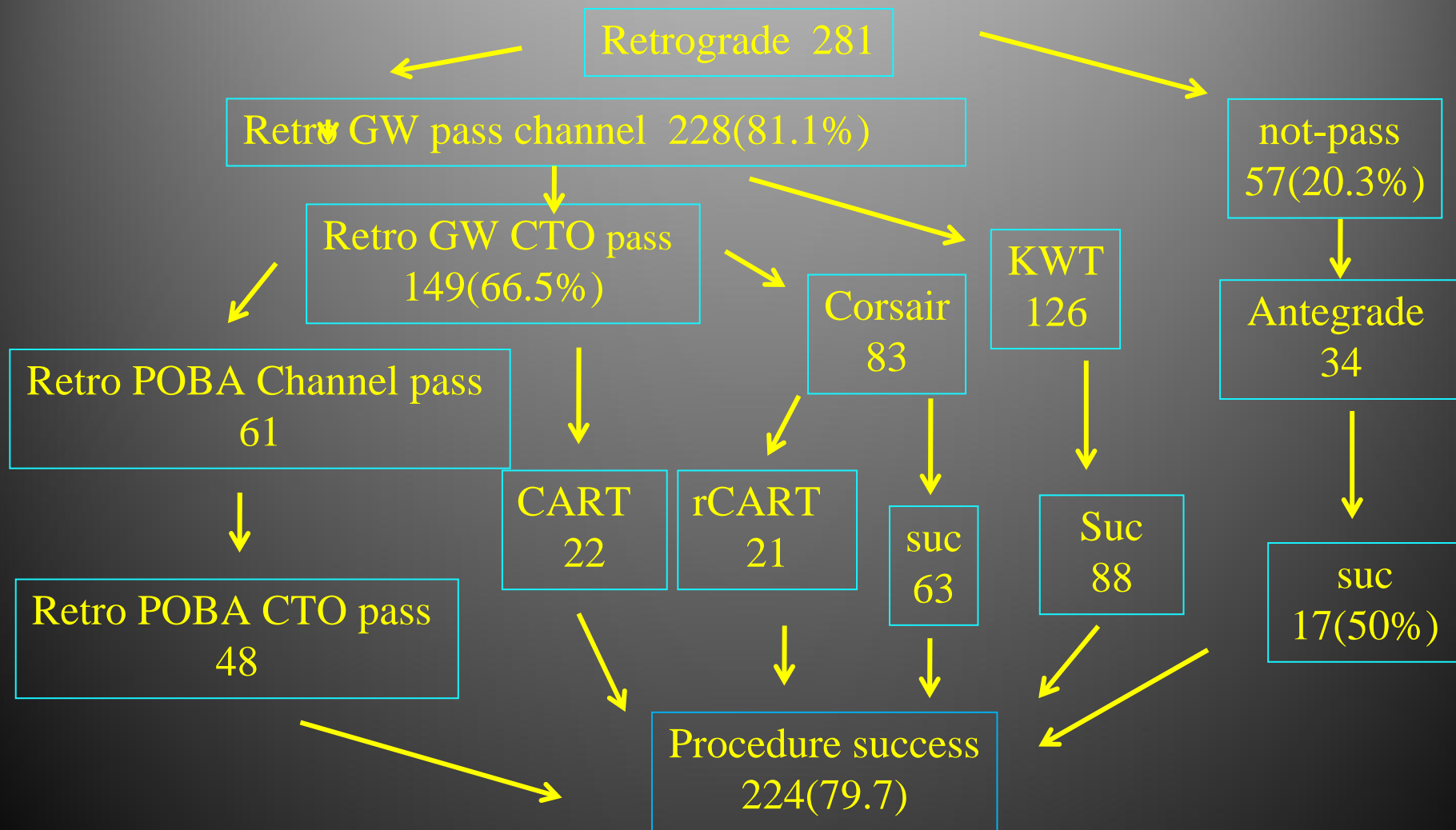
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Success rate and retrograde approach for CTO

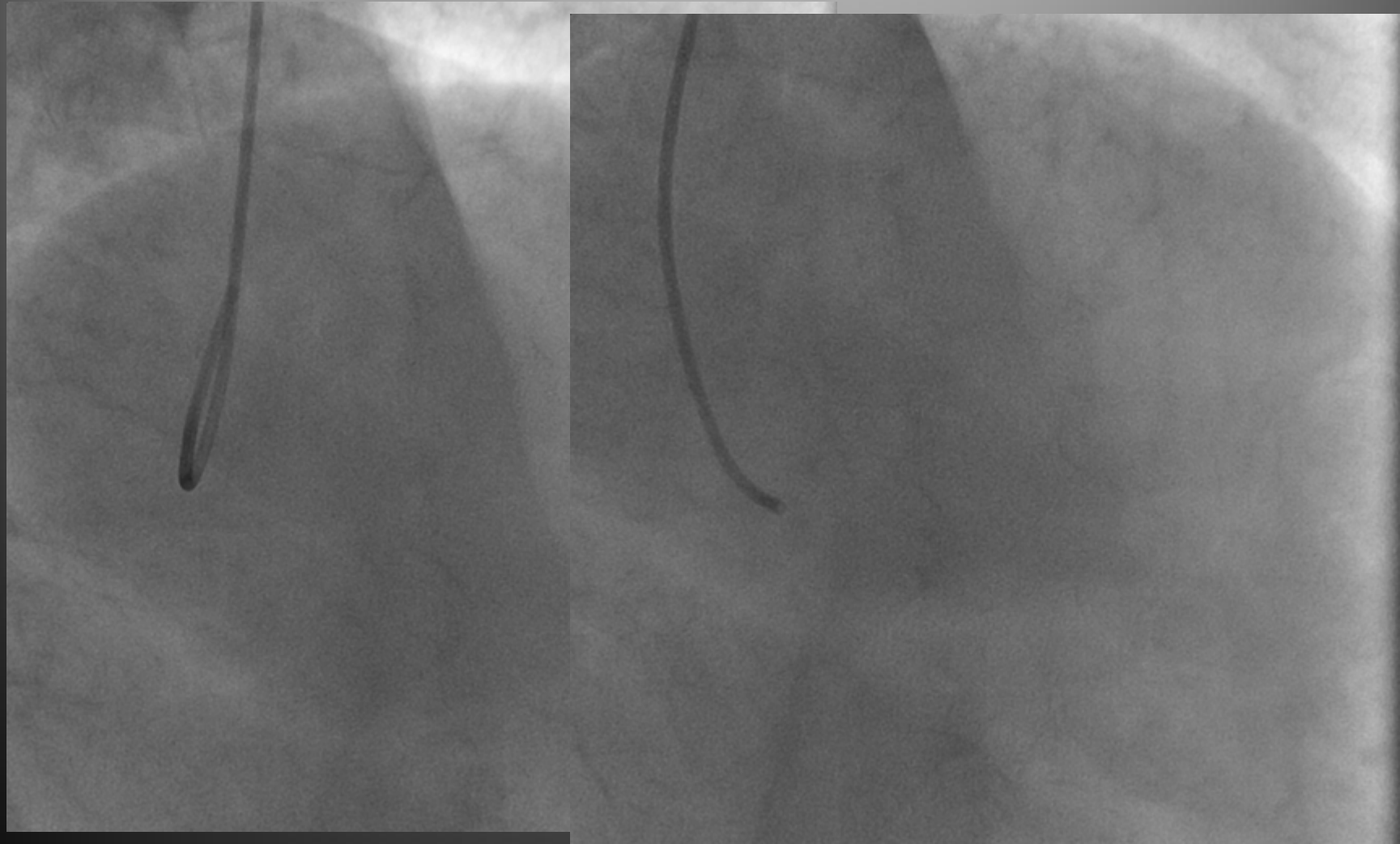


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Flow chart of retrograde approach for CTO

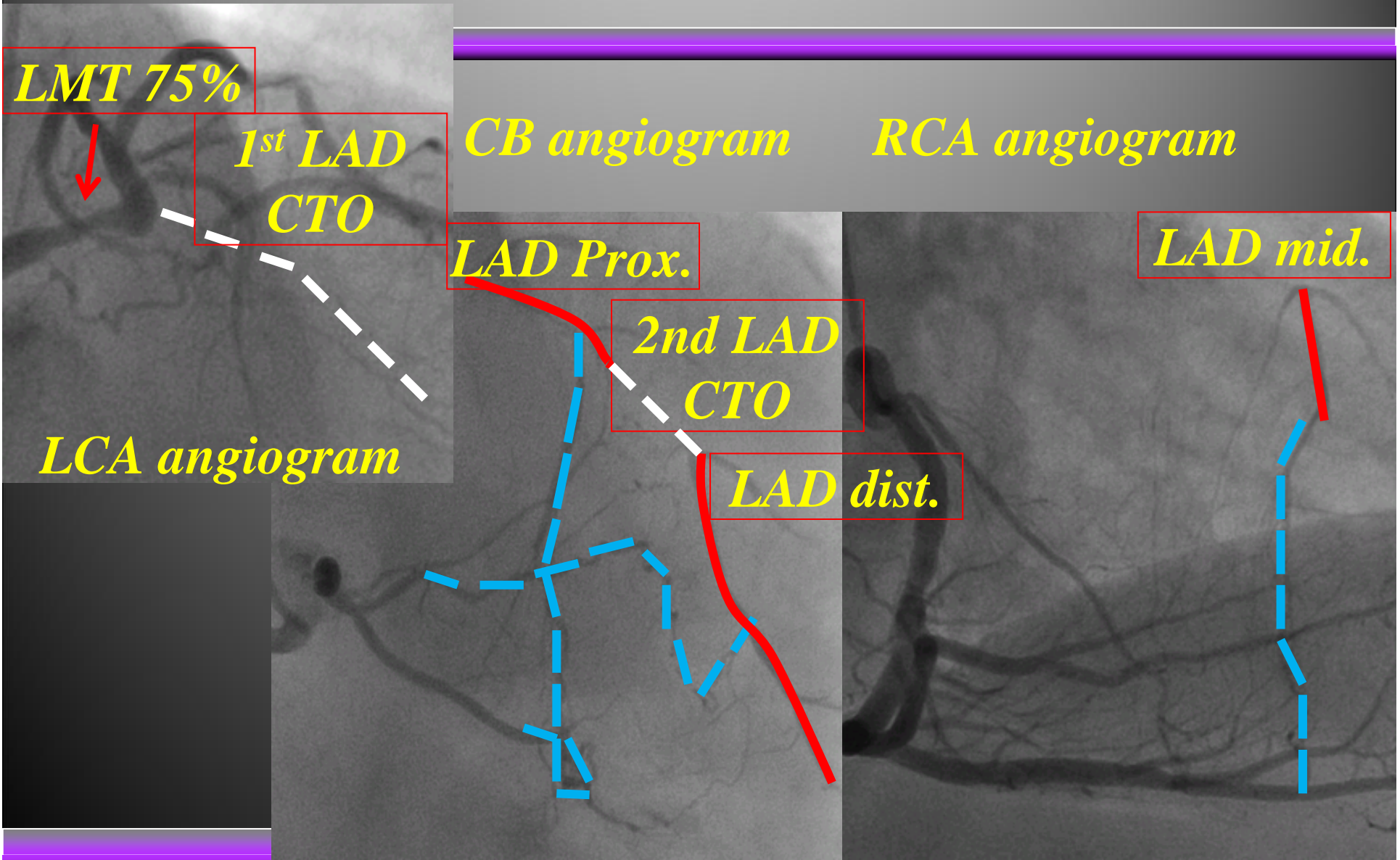


Case 1; Double routes of collaterals for LAD CTO



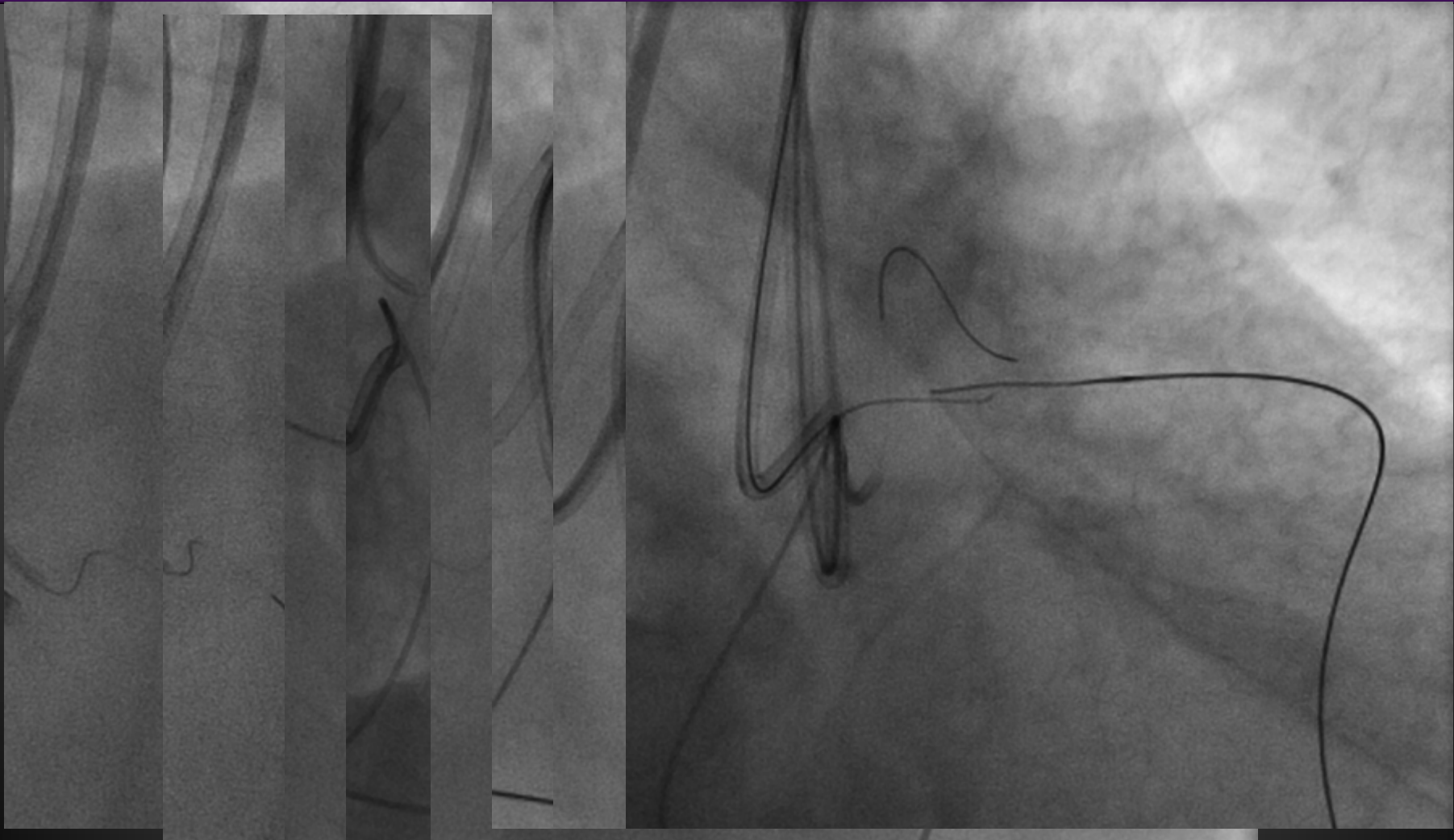
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LMT+Double LAD CTO retry case



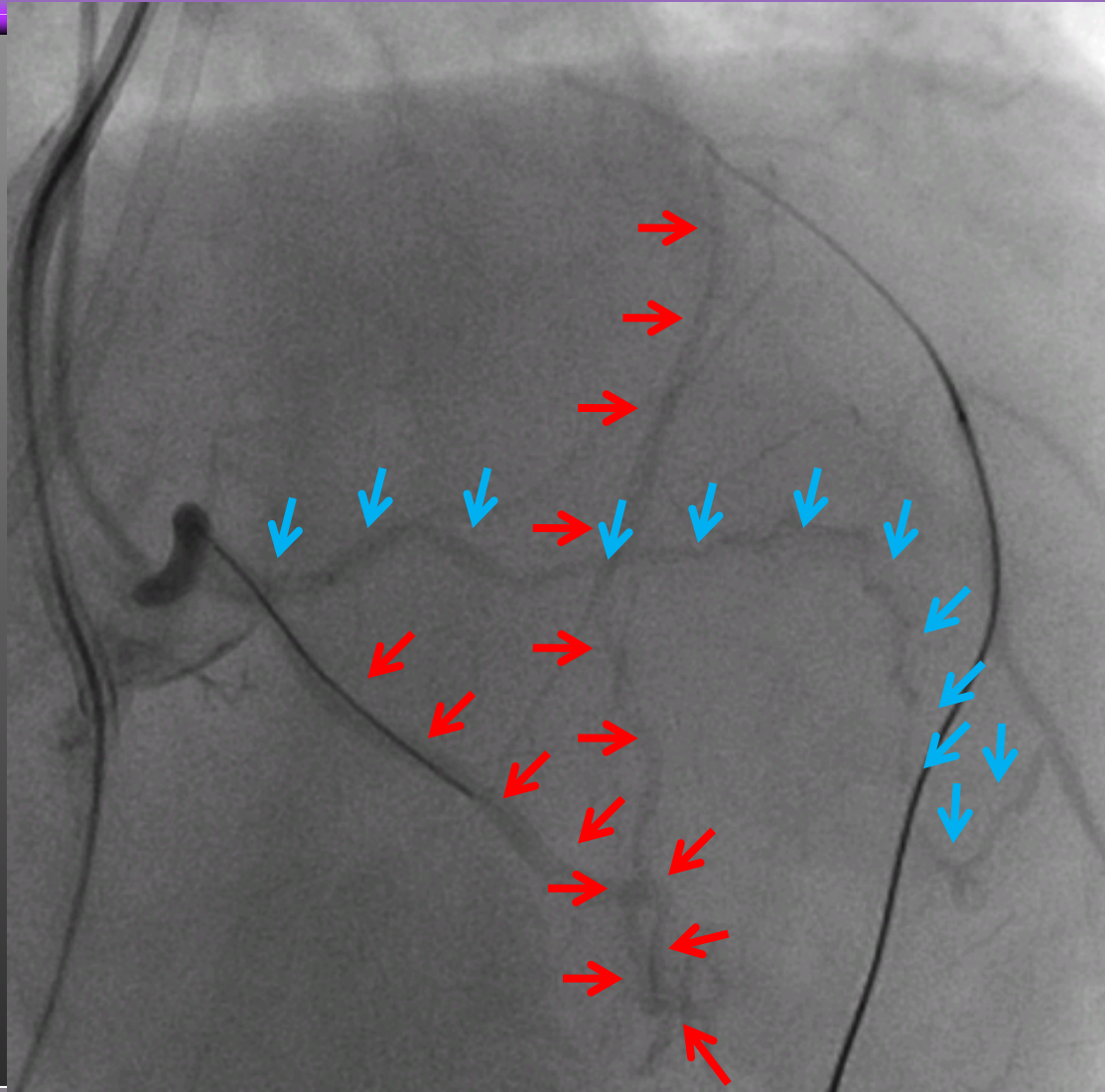
Planned PCI for LAD CTO

20th, Aug, 10'



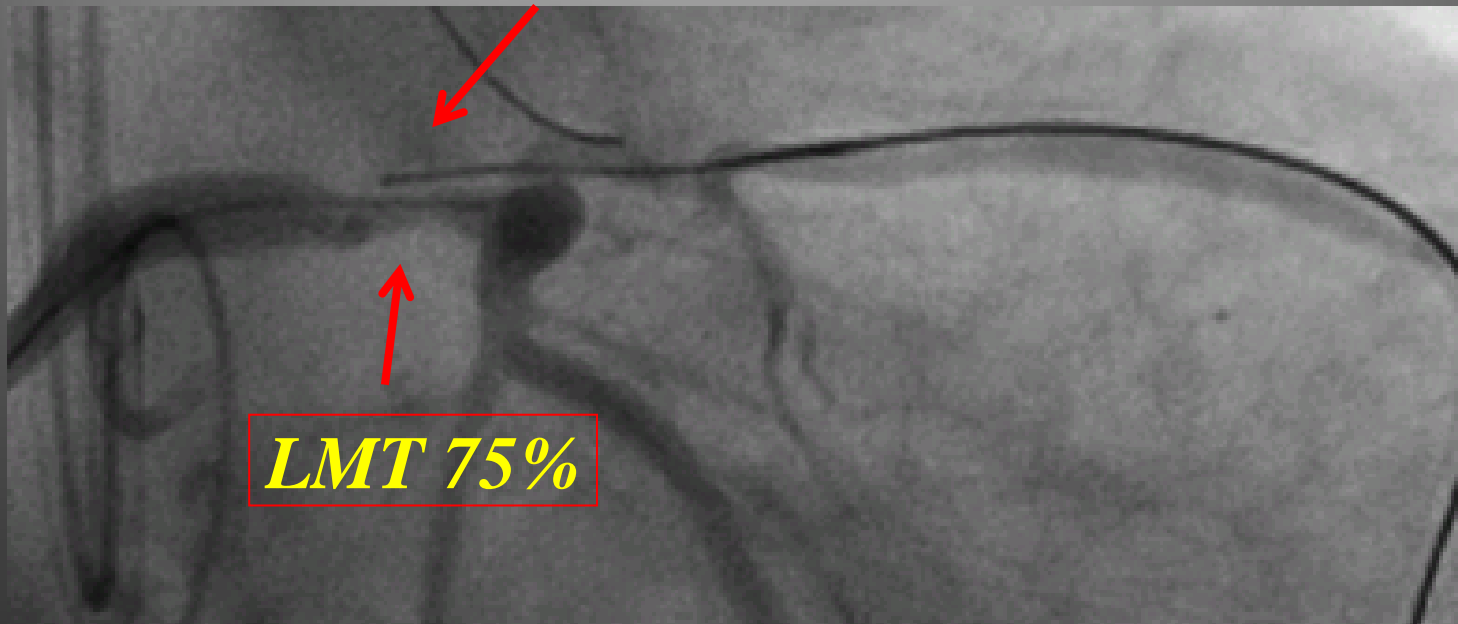
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Selective injection from CB to mid LAD CTO

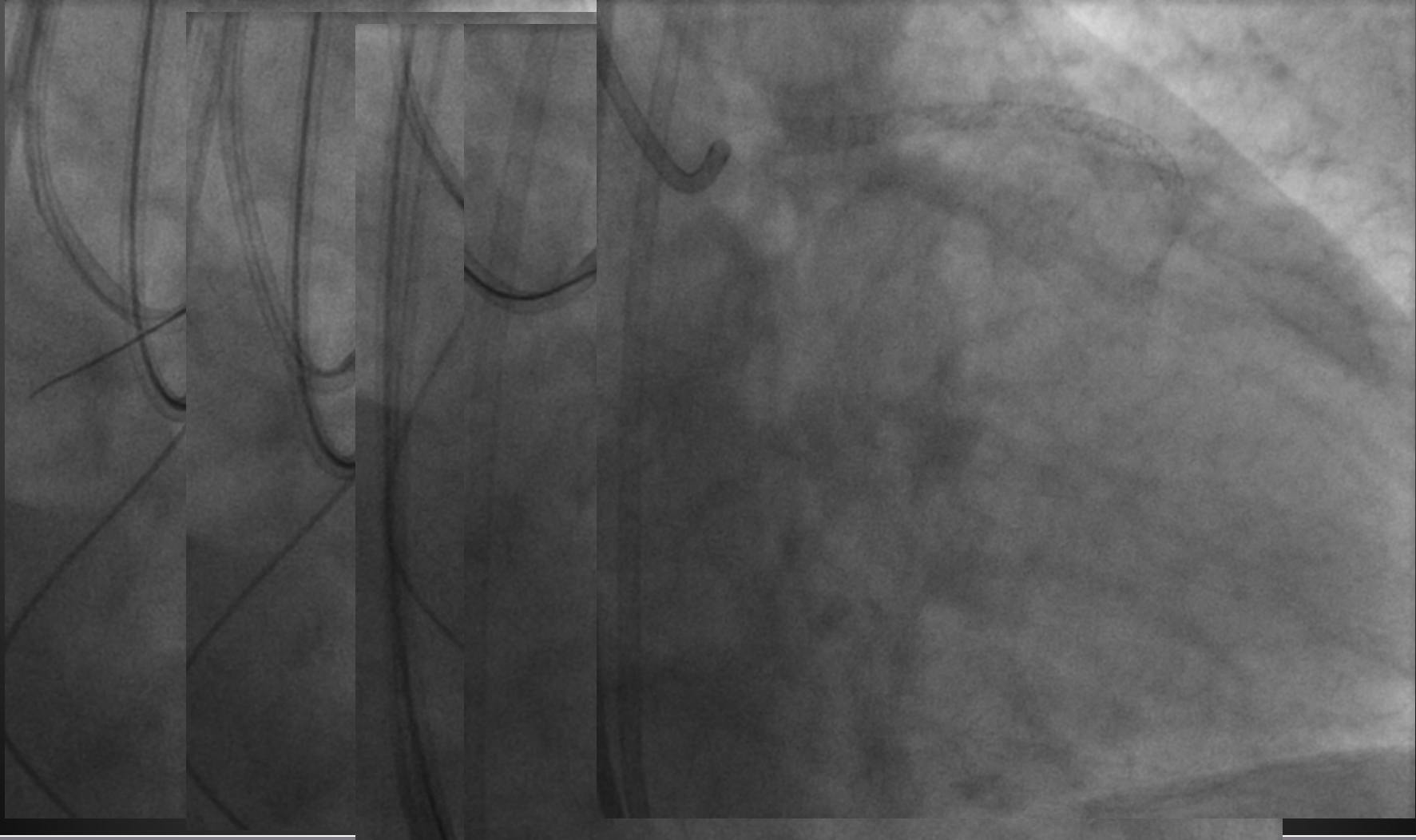


Ultimate go in subintima at LMT

GW into subintima



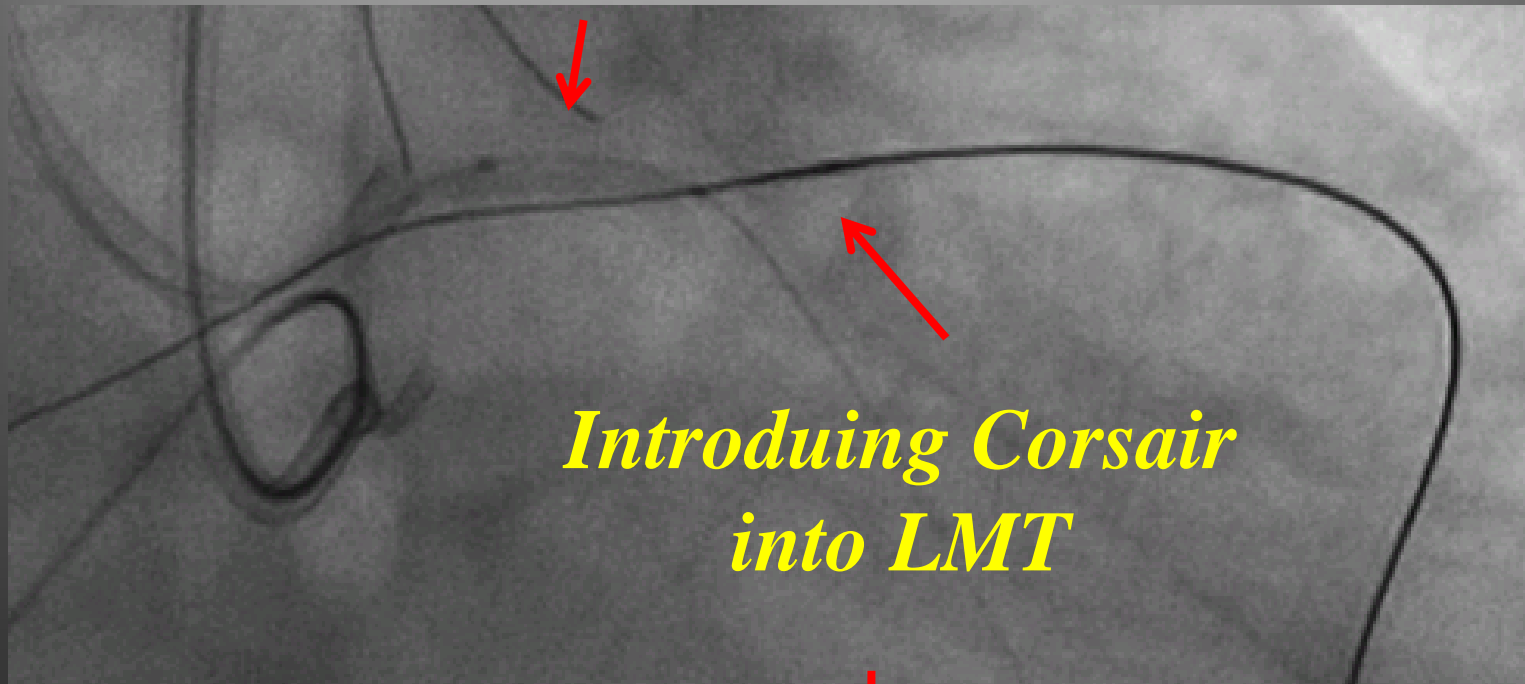
Planned PCI for LAD CTO



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Anchoring in LMT makes introducing Corsair

Anchor balloon

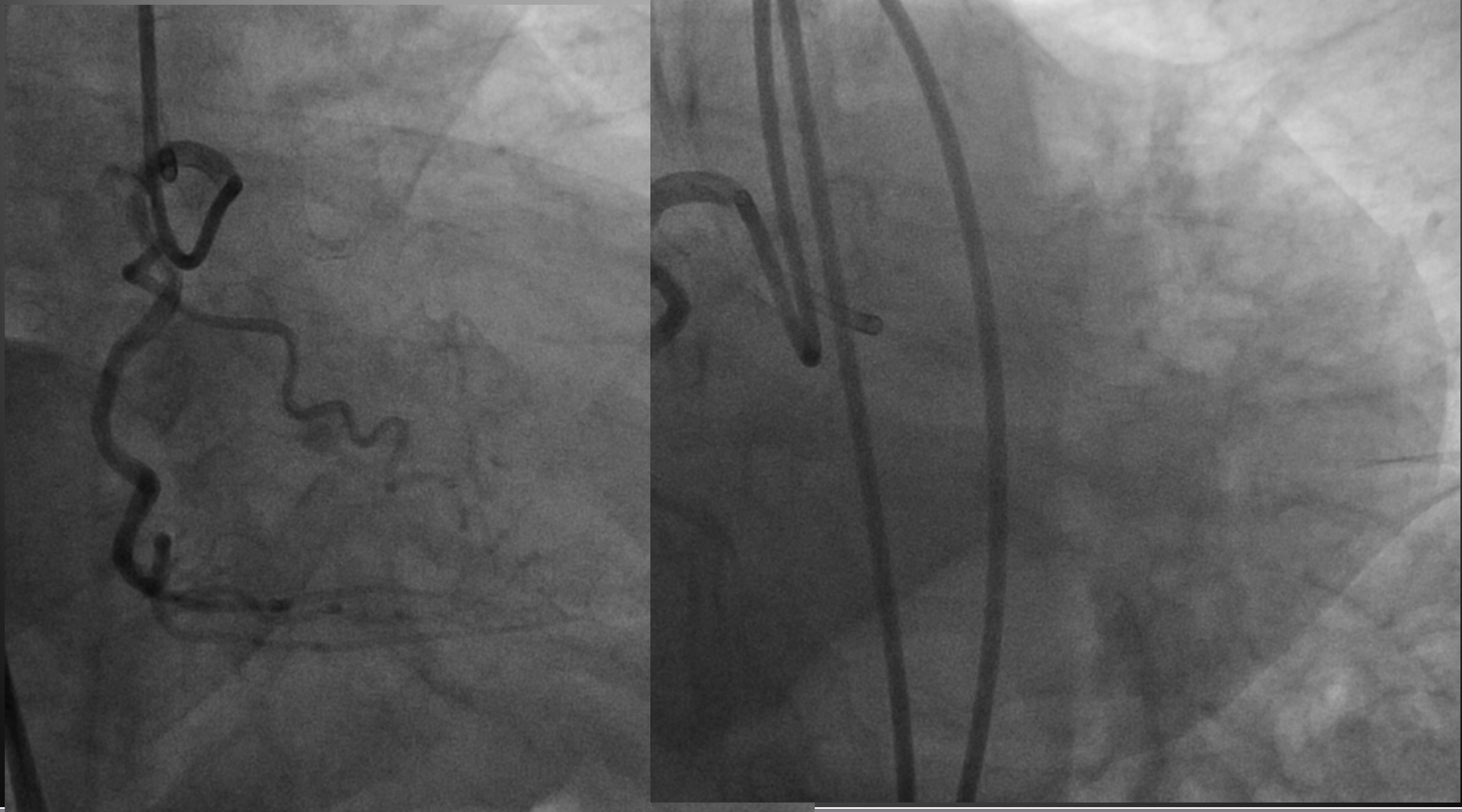


*Introducing Corsair
into LMT*

*And change Fielder XT from Confianza
GW, and easy to insert into GC*

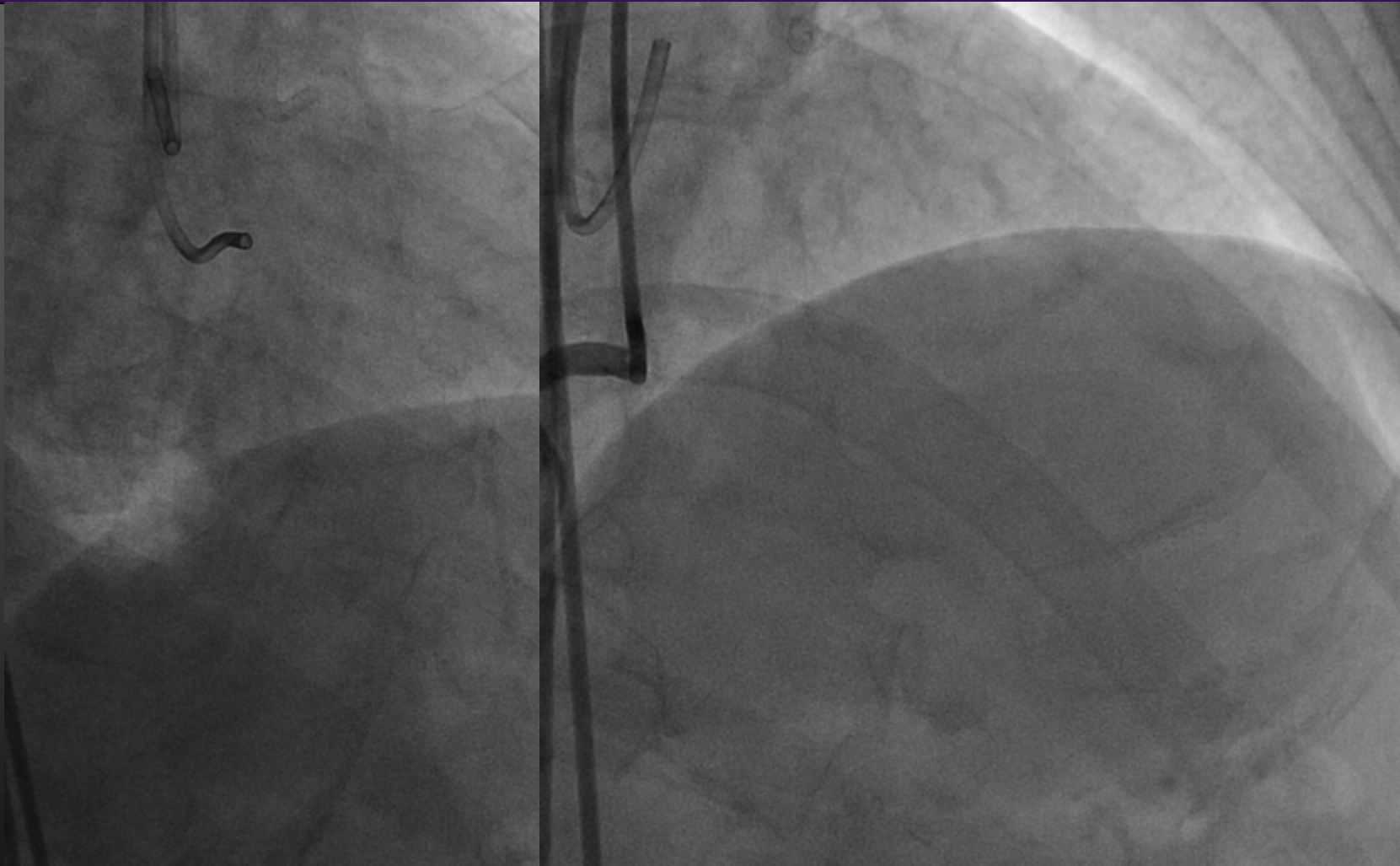
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Case 2: Unknown entry LAD CTO with LMT



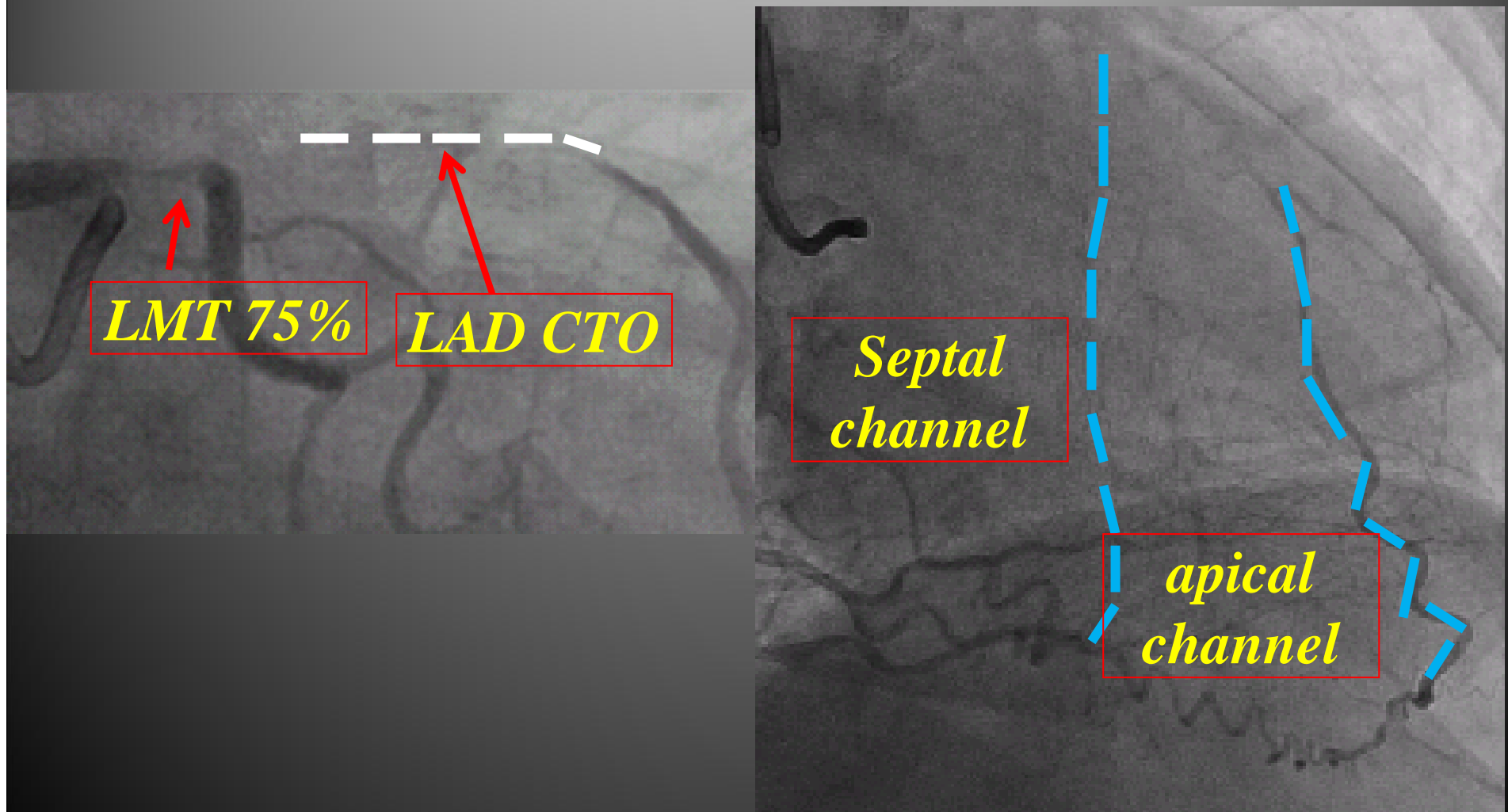
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Collateral route for LAD CTO

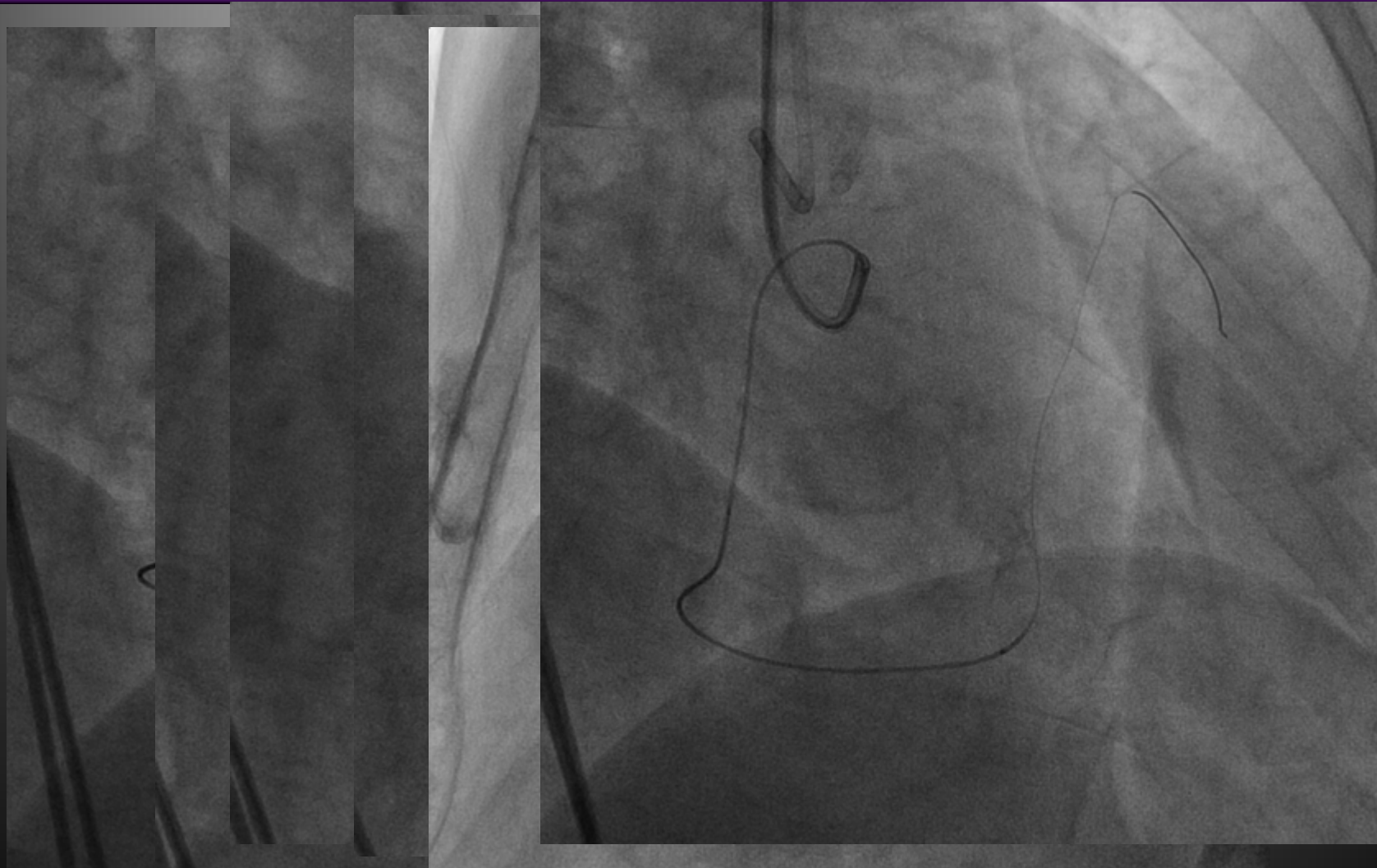


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Unknown entry LAD CTO with LMT

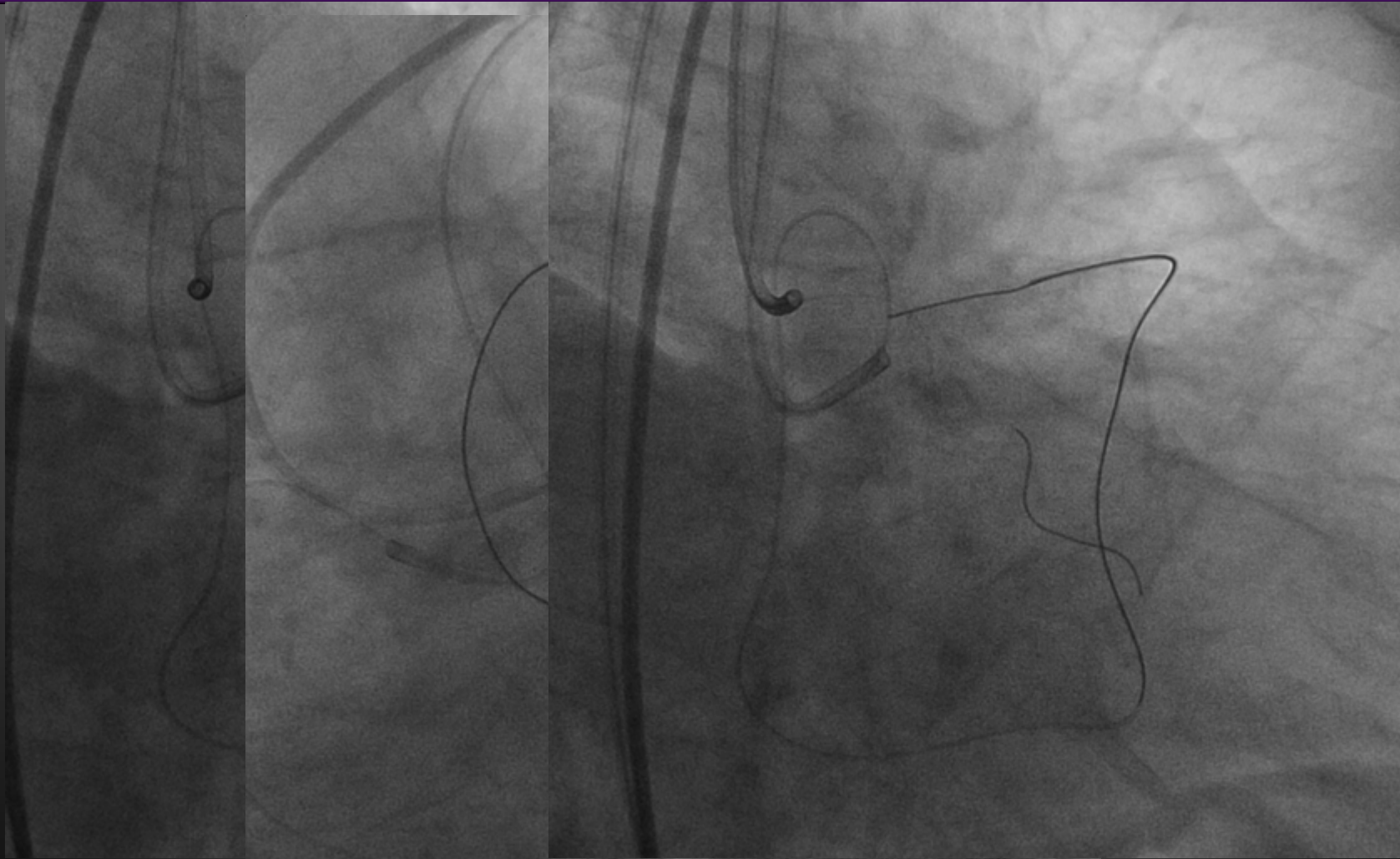


Septal channel tracking



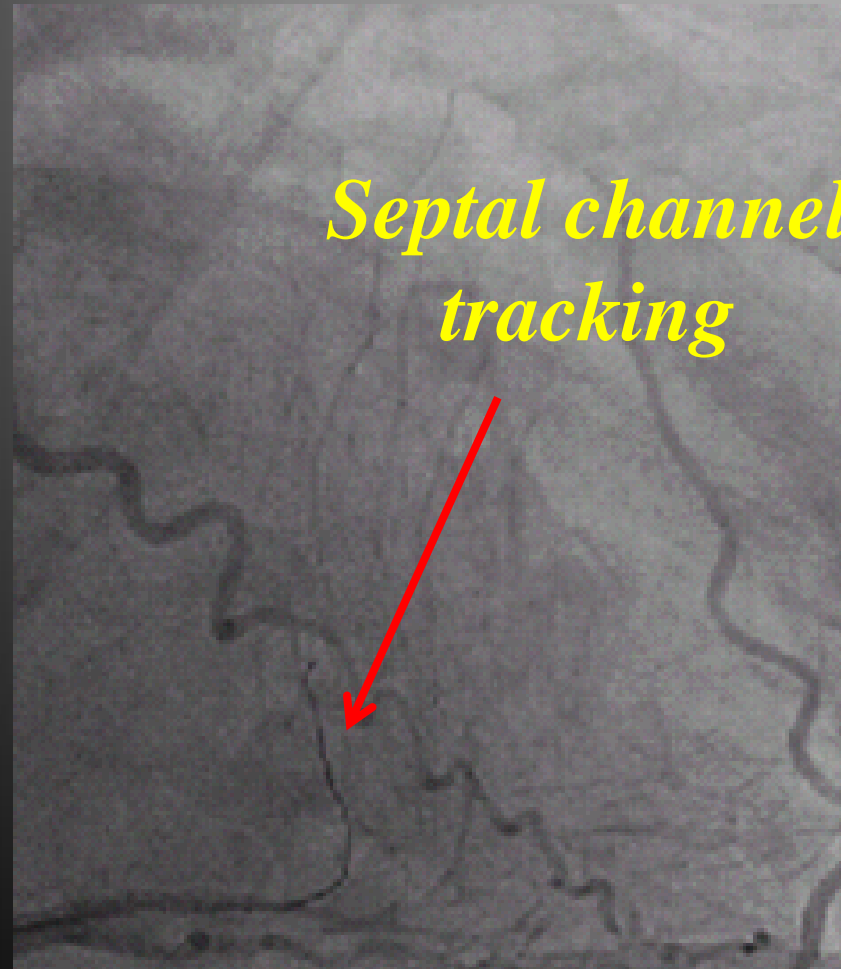
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Retrograde wiring to LAD CTO with LMT

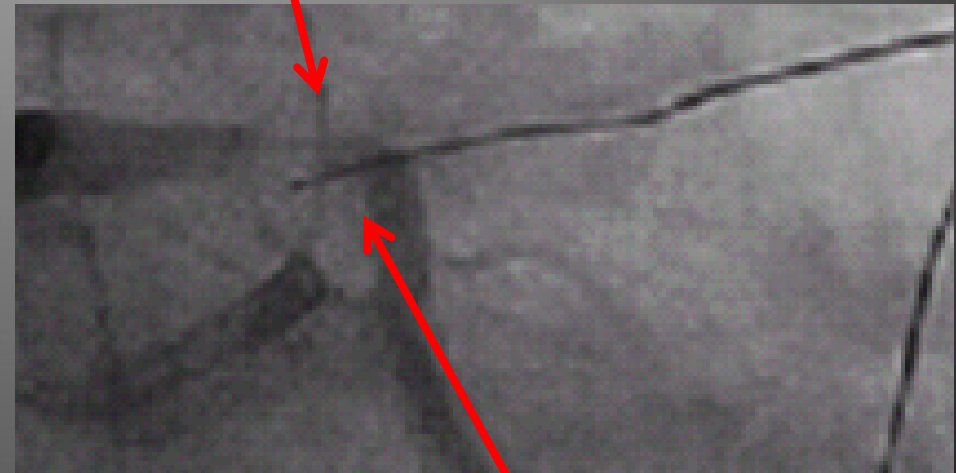


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Retrograde GW into subintima at LMT



LMT 75%



GW into subintima

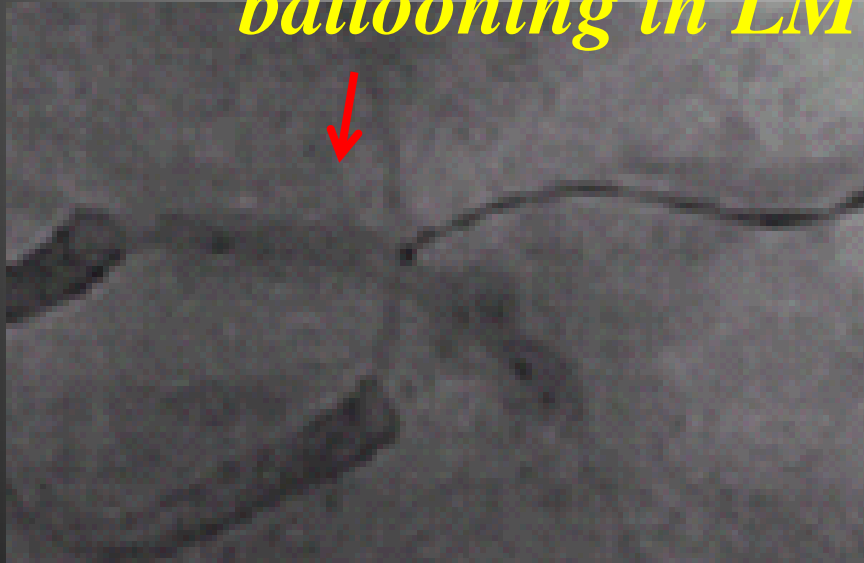
Ballooning in LMT makes introducing GW



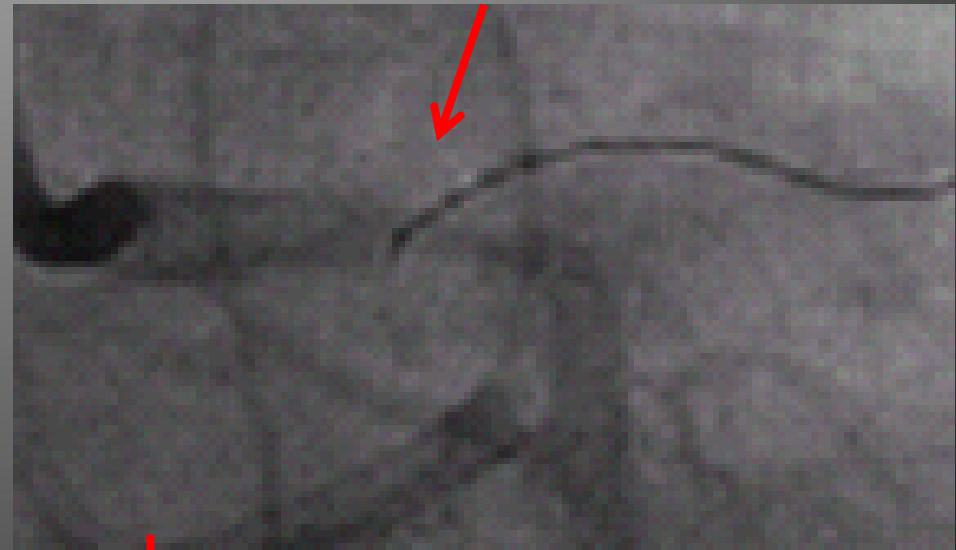
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r-CART in LMT makes introducing GW

ballooning in LMT



*Introducing GW
into LMT true lumen*



*R-CART in LMT makes a retrograde
GW introducing true lumen*

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Conclusion

1. PCI to CTO has progressed based on the advance treatment technology, devices and strategy.
2. Retrograde approach is one of epic making new approach for tough CTO.
3. Retrograde approach is safer and reasonable for CTO combined with LMT disease.