

When is the best time to try retrograde channel tracking?

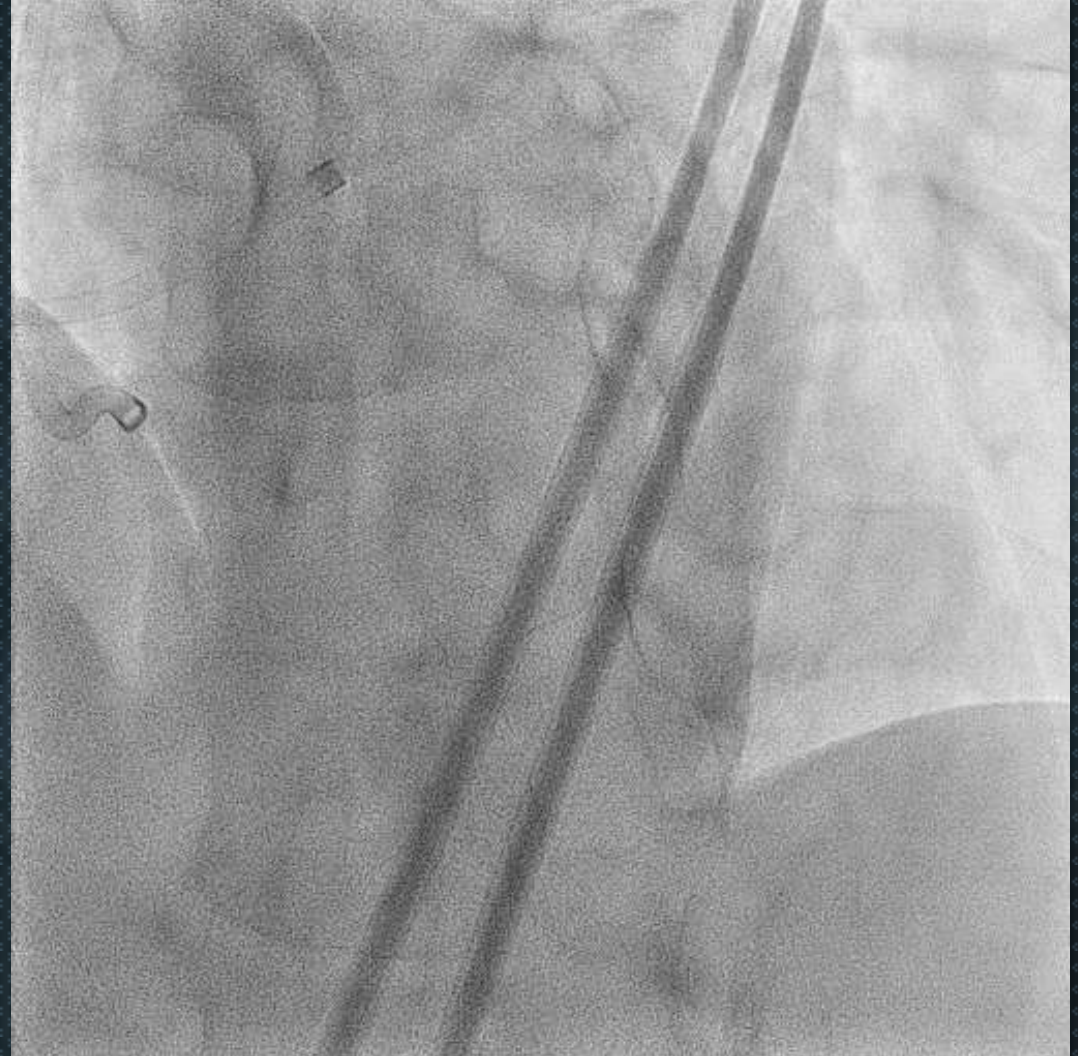
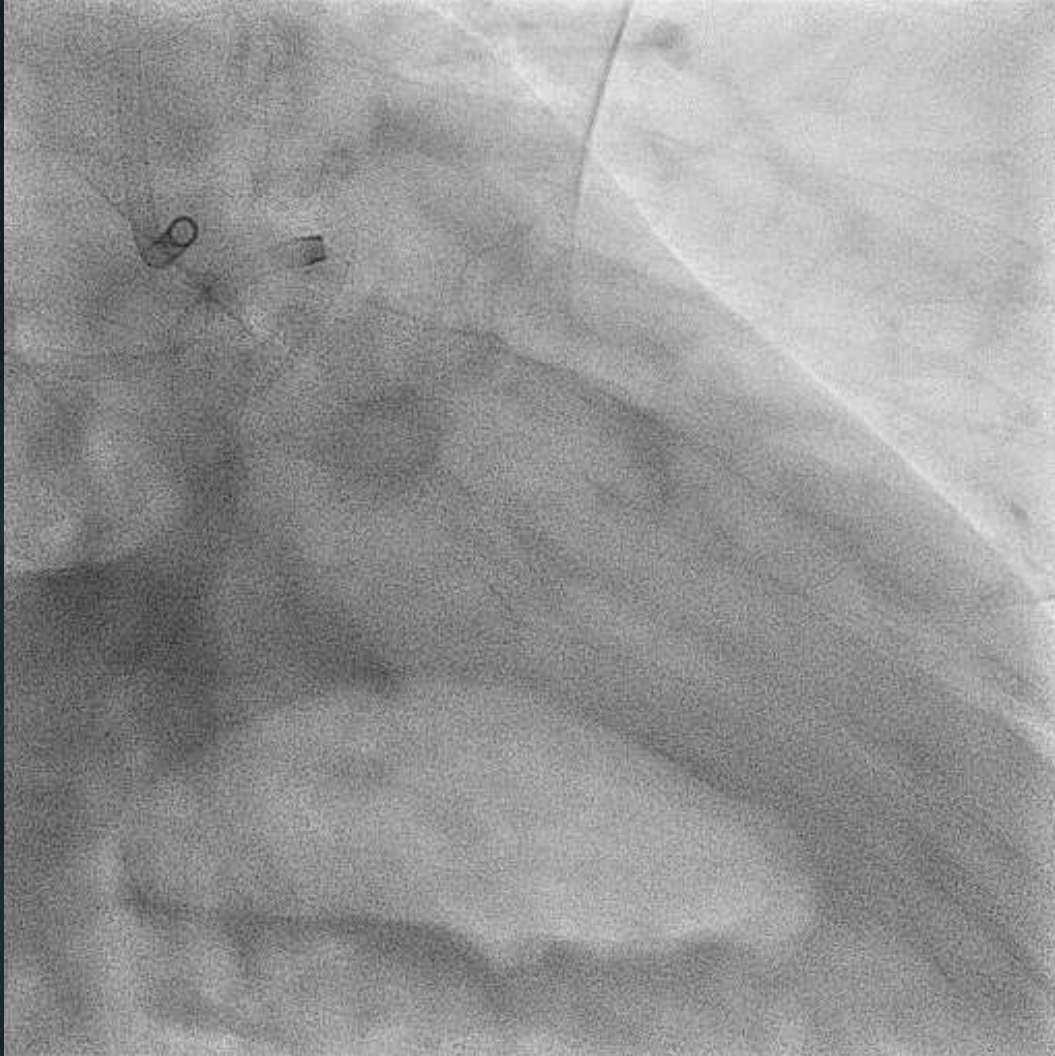
Kenya Nasu, MD, FACC
Toyohashi Heart Center, Japan

Case: LAD CTO

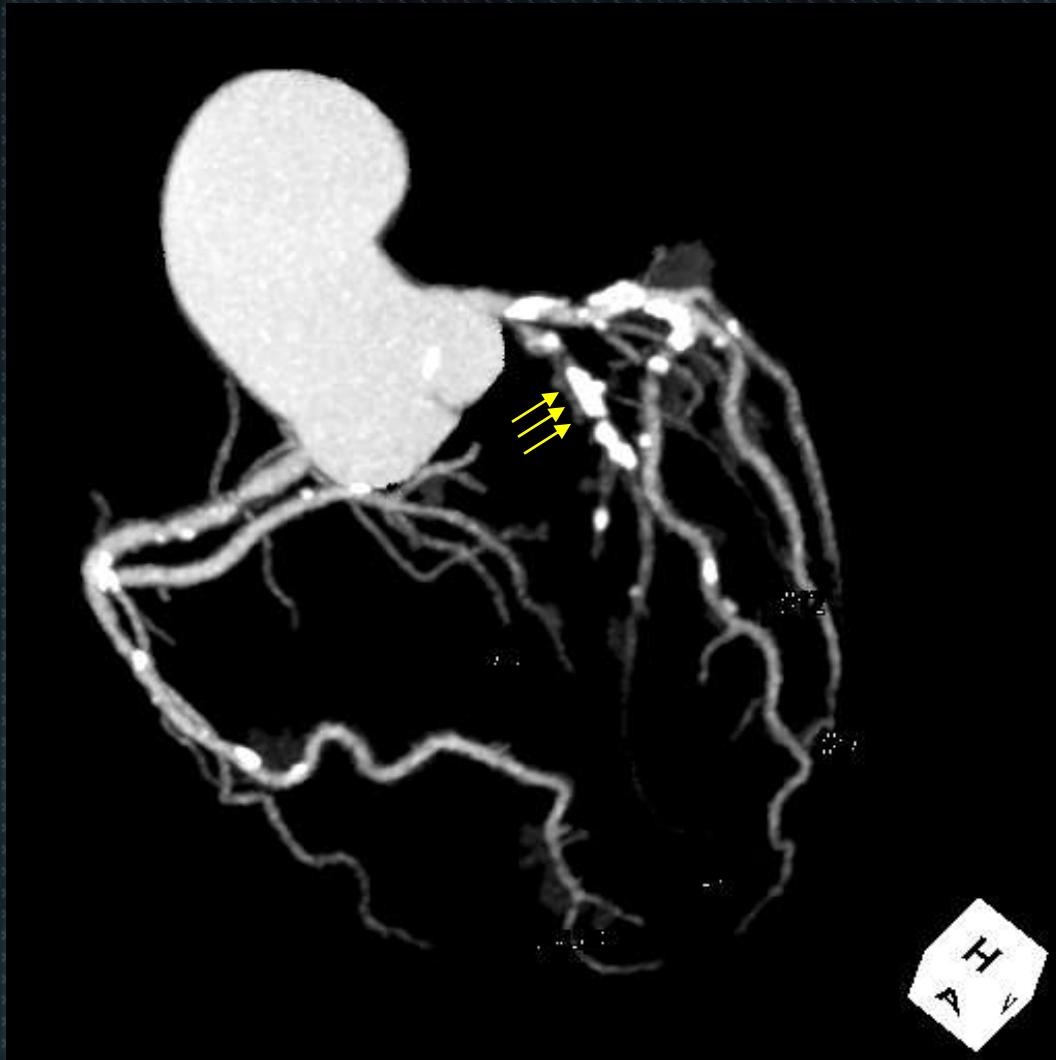
- **Male in his 60's**
- **Clinical presentation: Angina pectoris**
- **Coronary risk factors: HT, HL, Ex smoker**
- **Past history**
 - 2012.9 Failure of LAD CTO PCI (antegrade)**
 - 2013.3 Failure of LAD CTO PCI (Both approaches)**
 - 2013.6 Failure of LAD CTO PCI (Both approaches)**
- **LV wall motion EF 55%**
- **SCr 1.0 eGFR 60**
- **Syntax score 24.5**

Case: LAD CTO

Simultaneous angiography

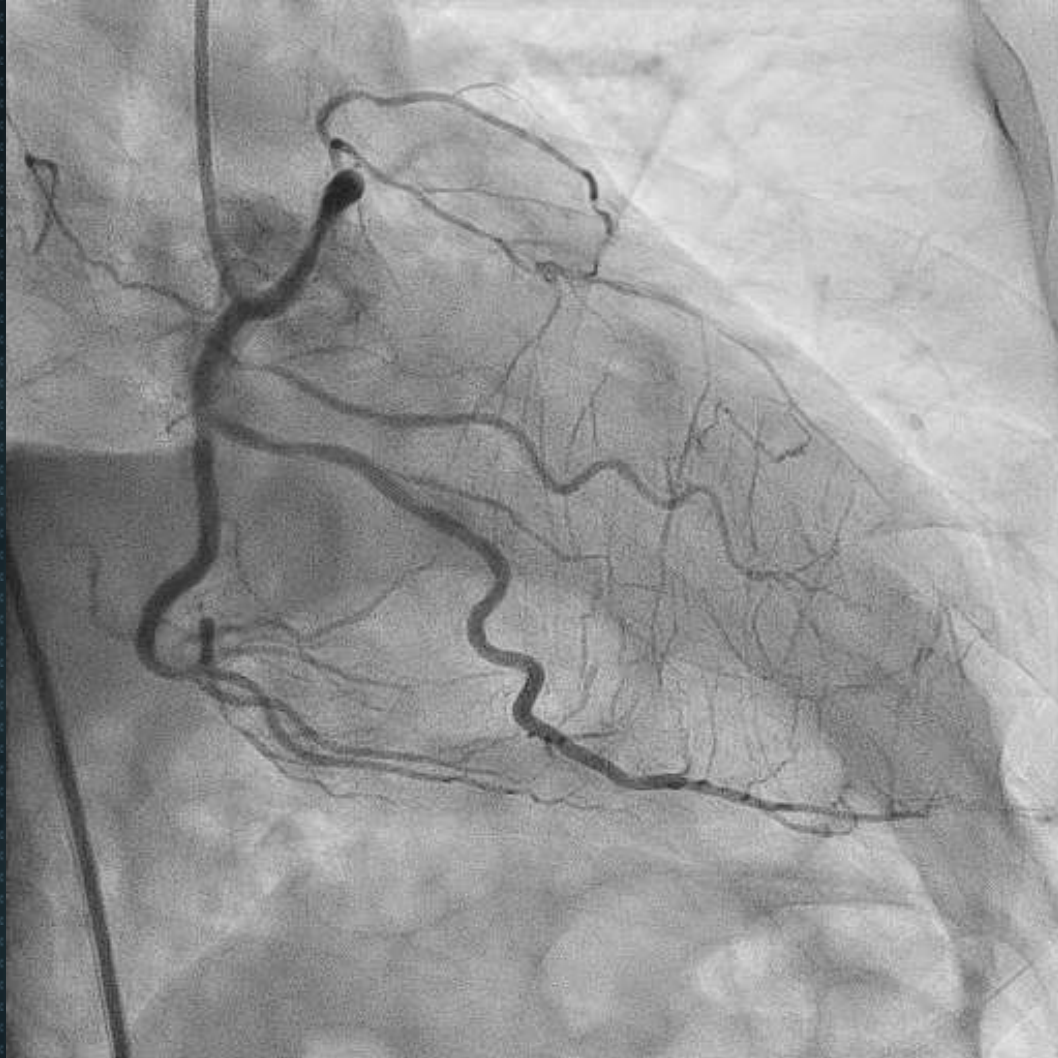


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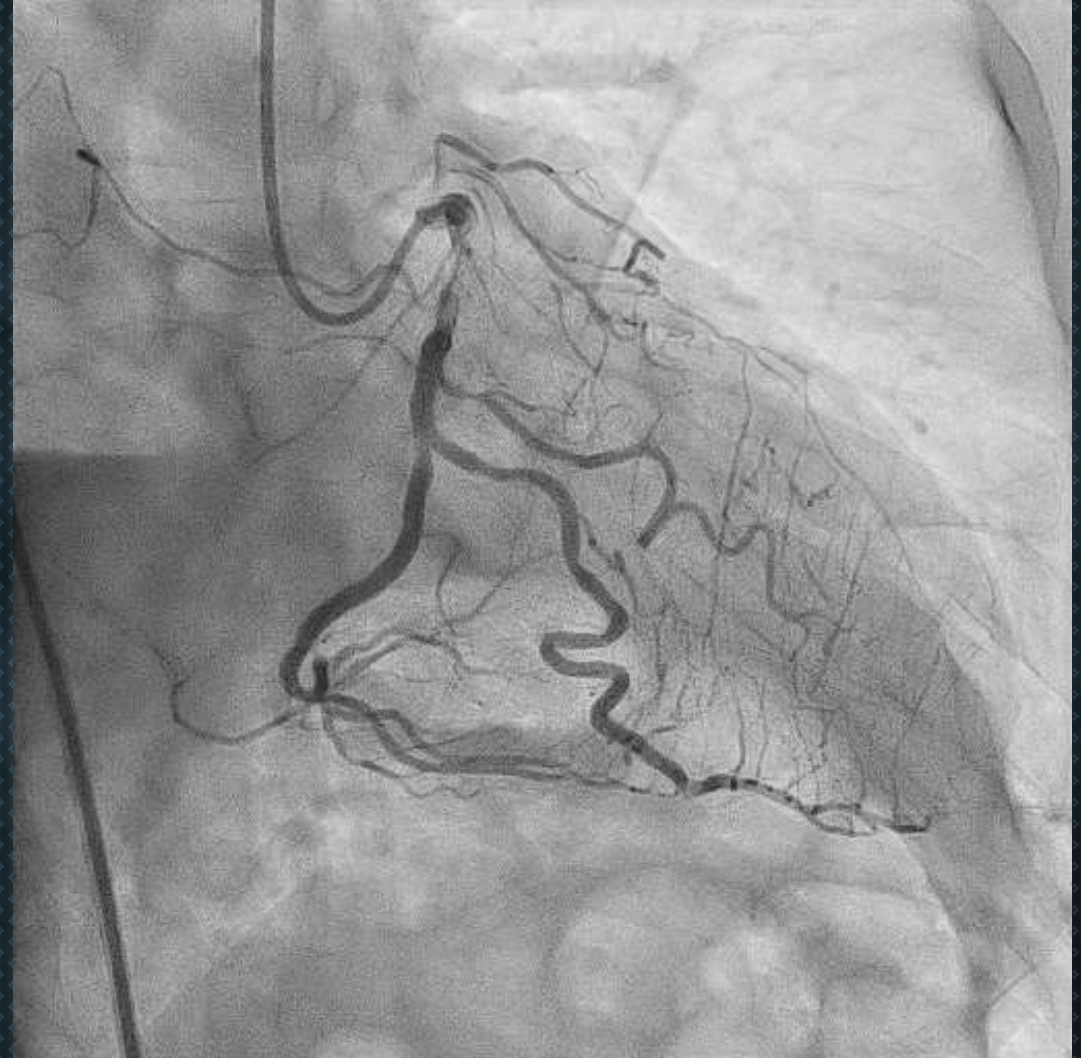


Severe calcification in CTO segment

Case: LAD CTO



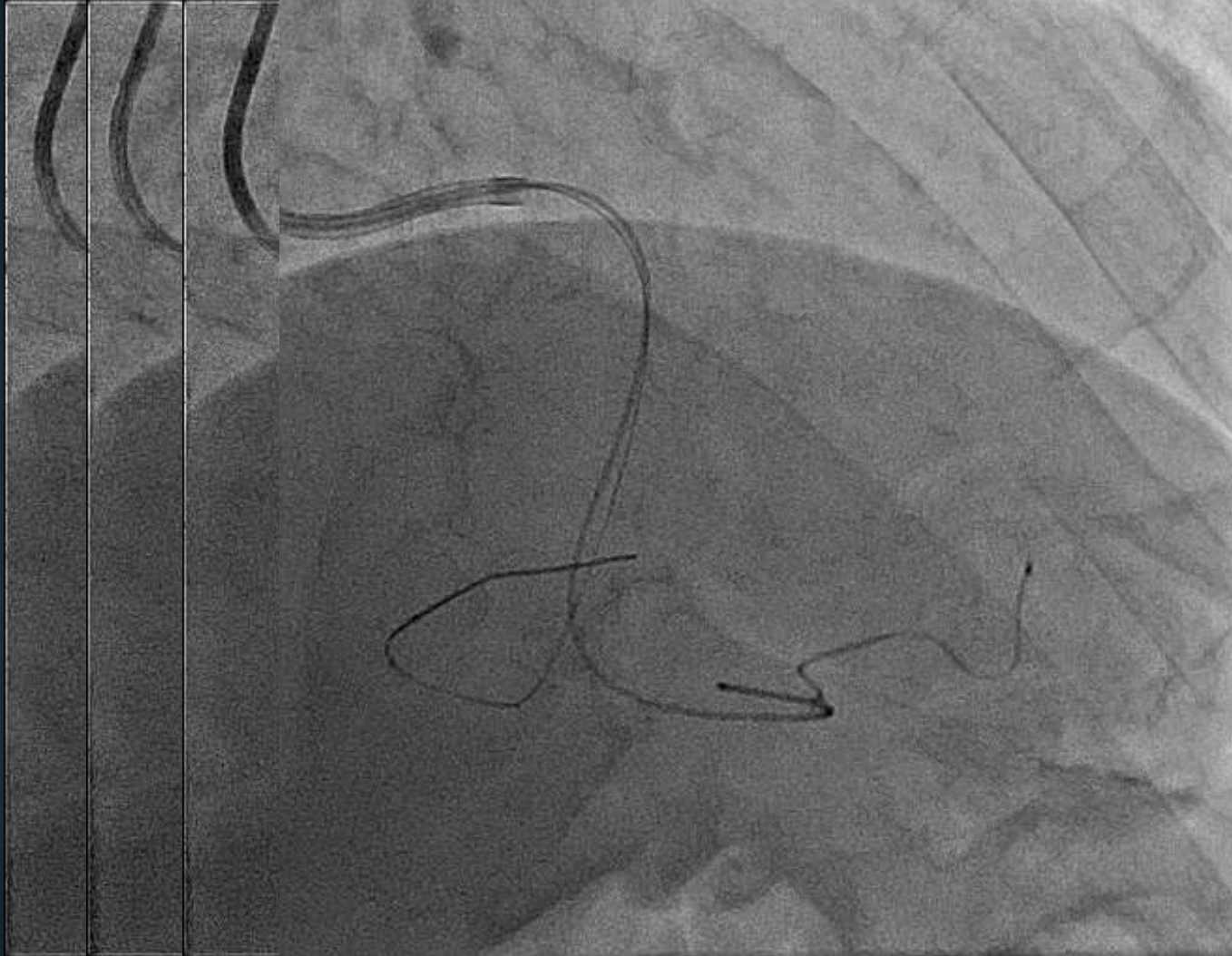
Diastolic



Systolic

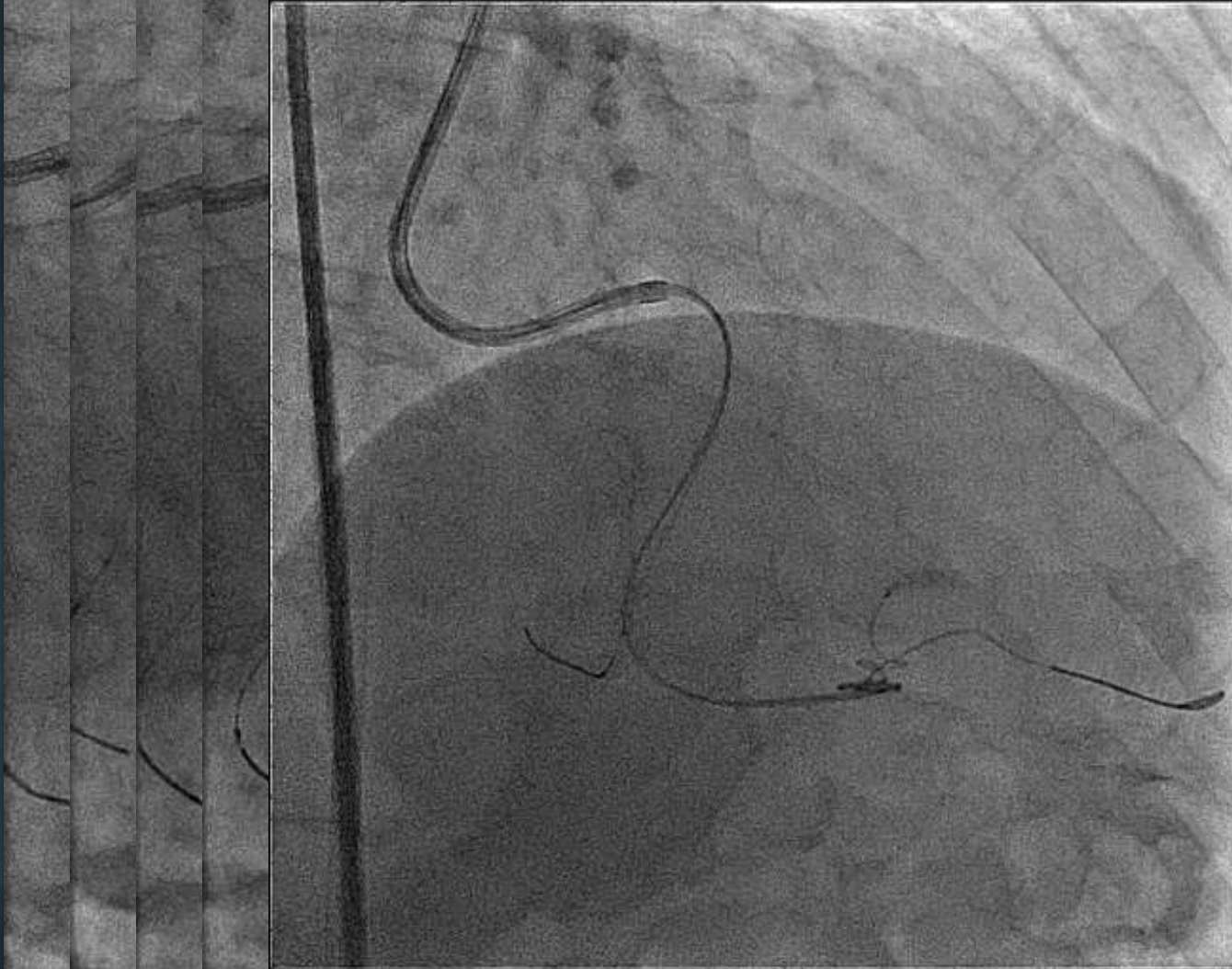
Case: LAD CTO

✓ 2013. Sep. 2nd attempt
Retrograde channel negotiation from RCA

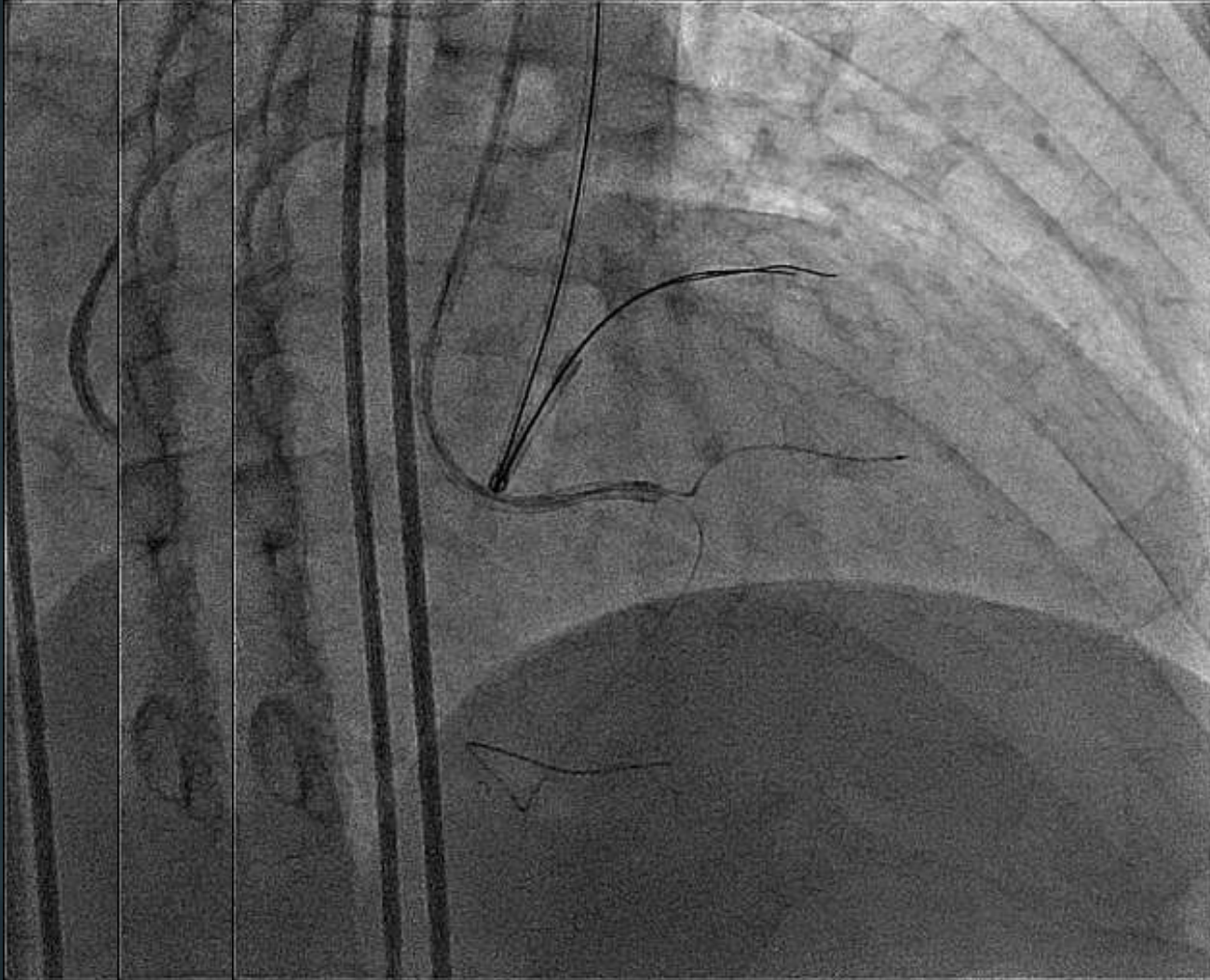


Case: LAD CTO

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Retrograde channel negotiation from RCA
2.5 hours channel tracking had been failed.

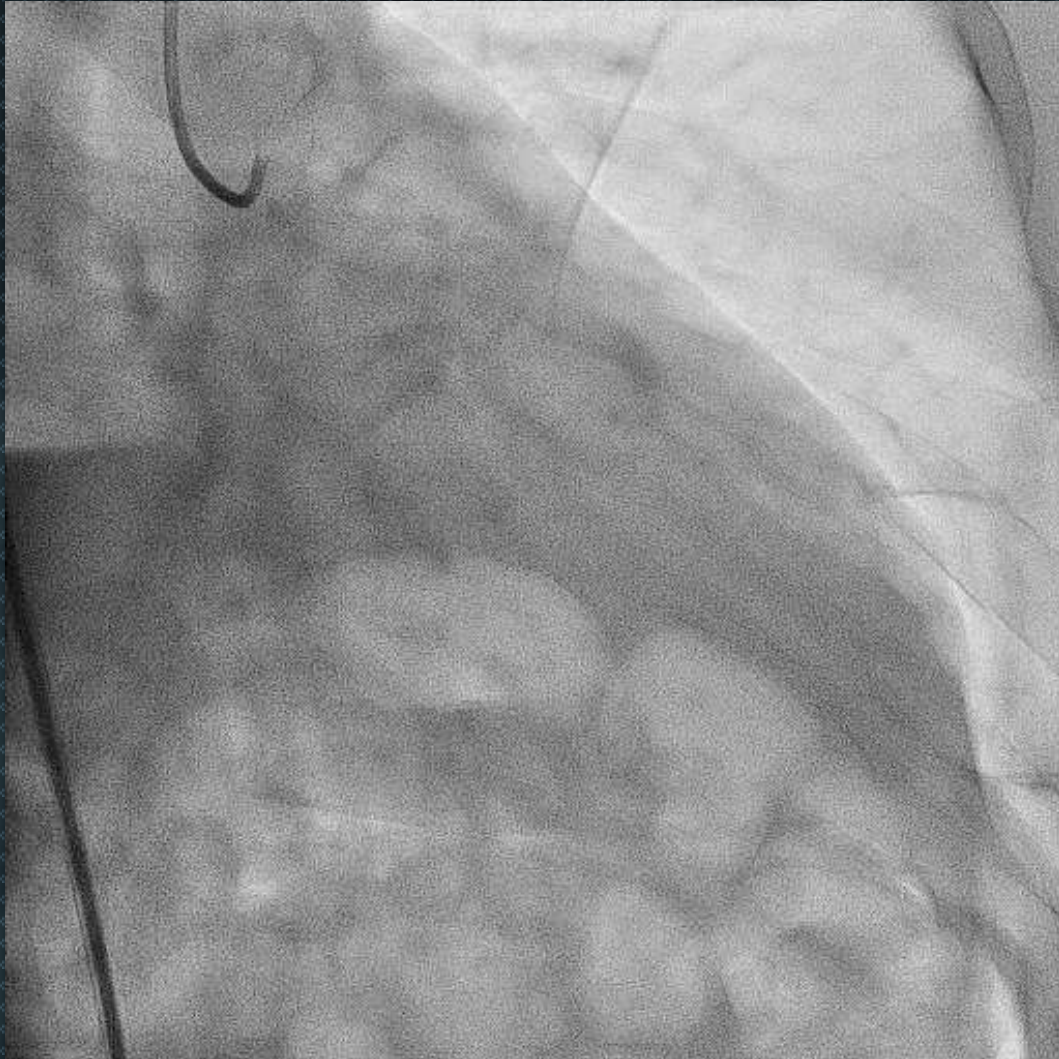


Case: LAD CTO

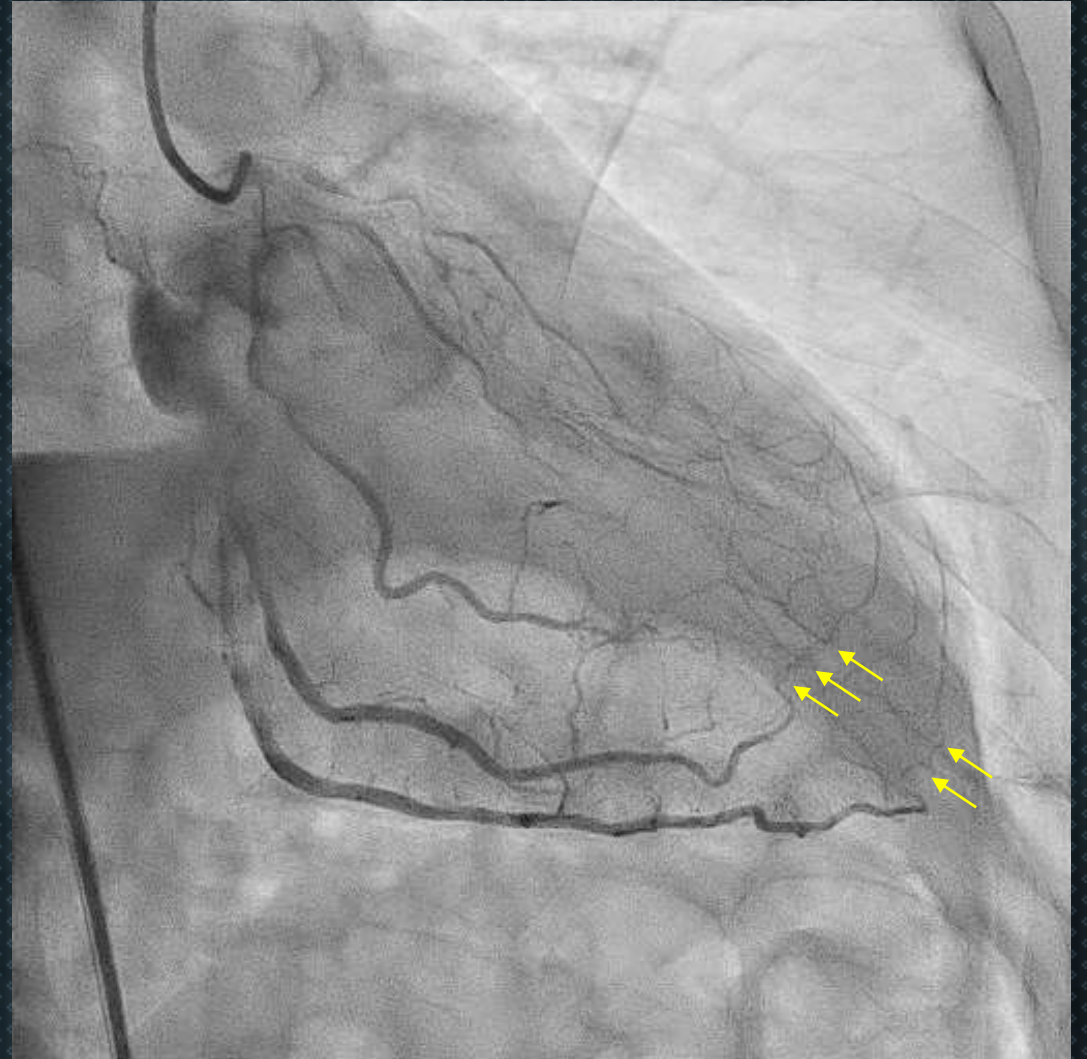


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Antegrade approach also had been failed.

Case: LAD CTO

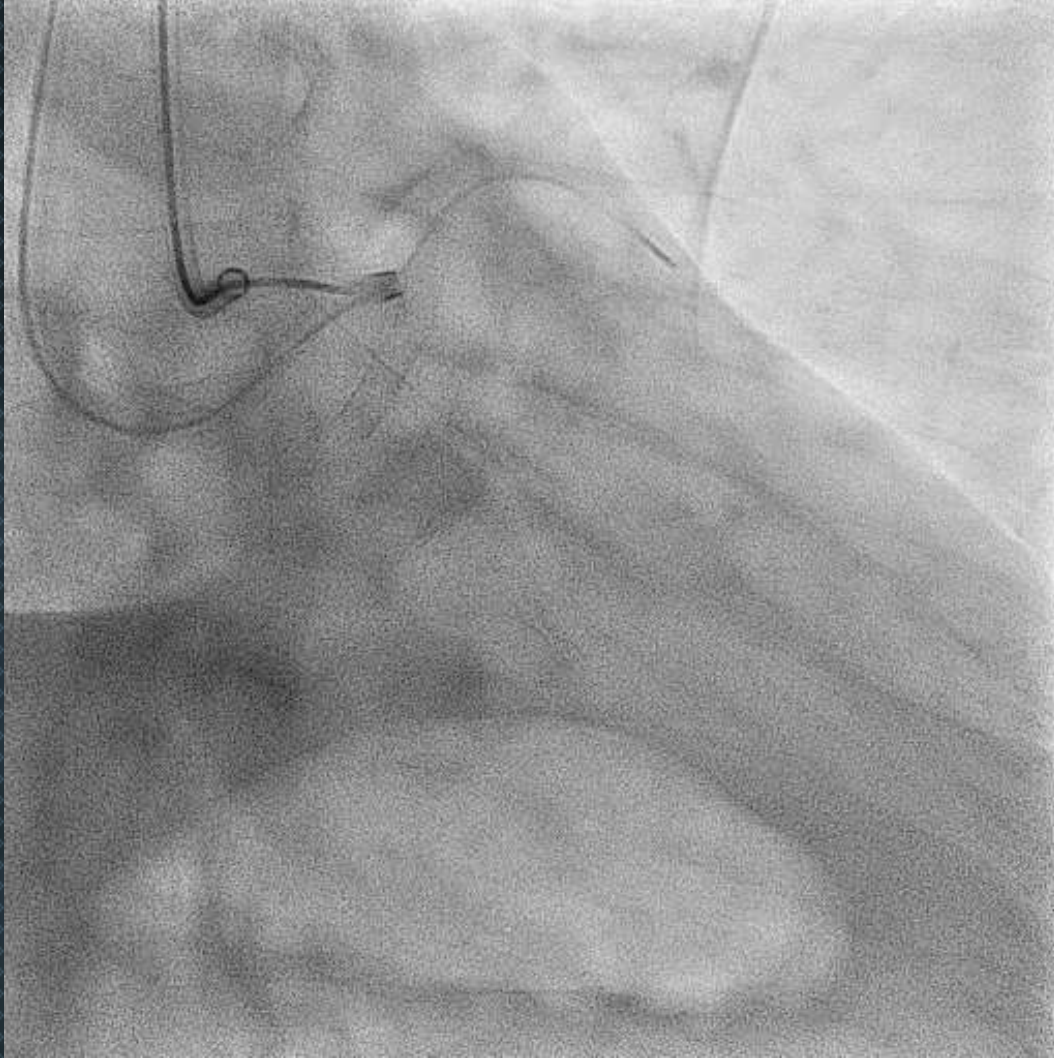


Epicardial channel form LCX



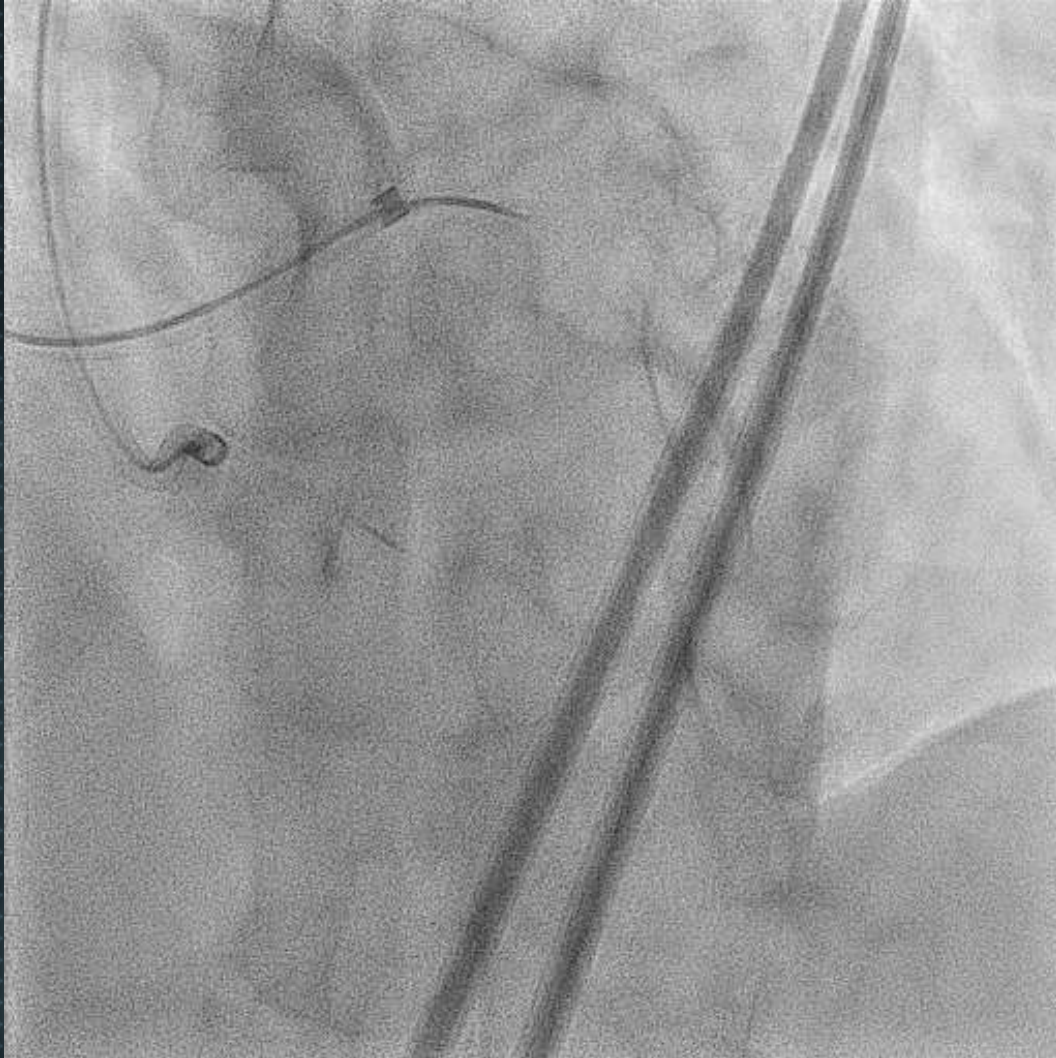
- **Retrograde channel tracking via RCA must be difficult.**
- **CTO site has severe calcification.**
- **Retrograde wiring for calcified CTO is not easy.**
- **GW control from antegrade approach must be better to negotiate calcified CTO.**
- **Primary antegrade approach will be better (at least “preparation” will be mandatory) .**

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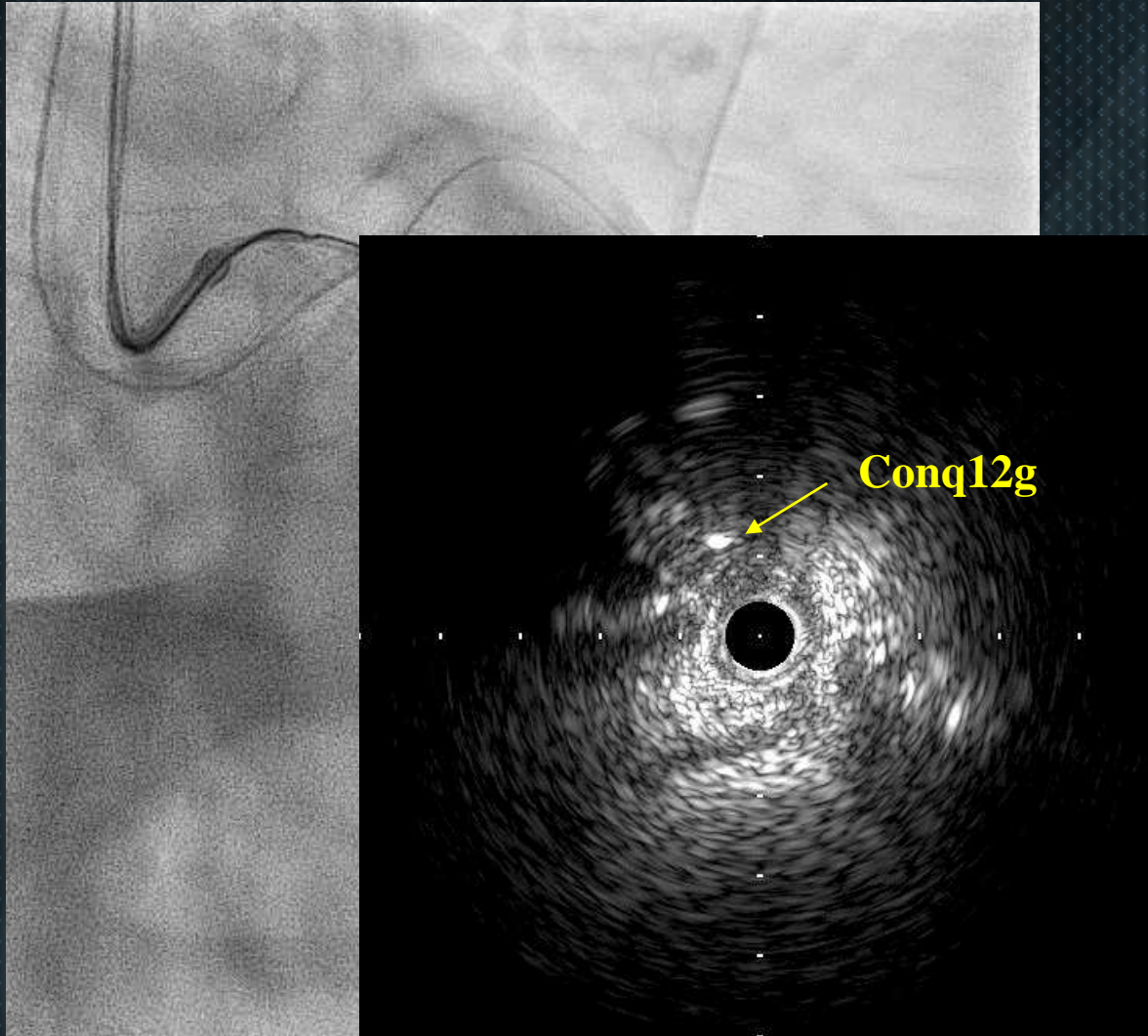
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- ✓ 2017/9/2 4th attempt
Primary antegrade approach

Case: LAD CTO



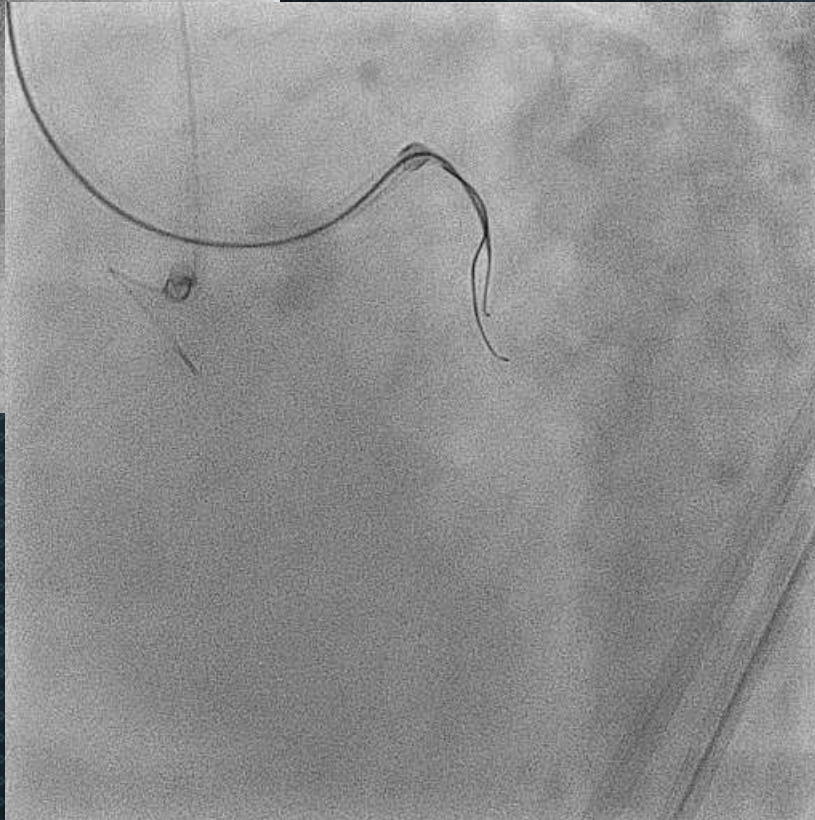
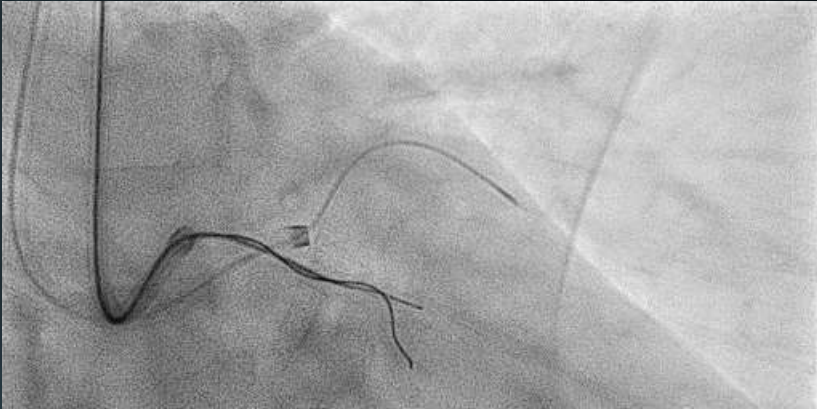
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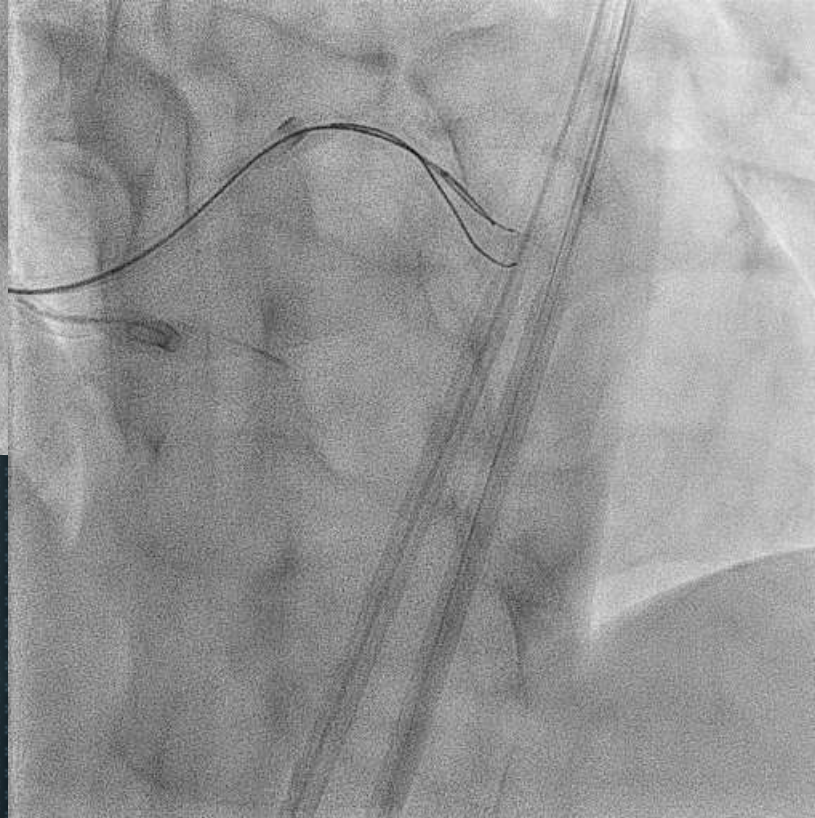
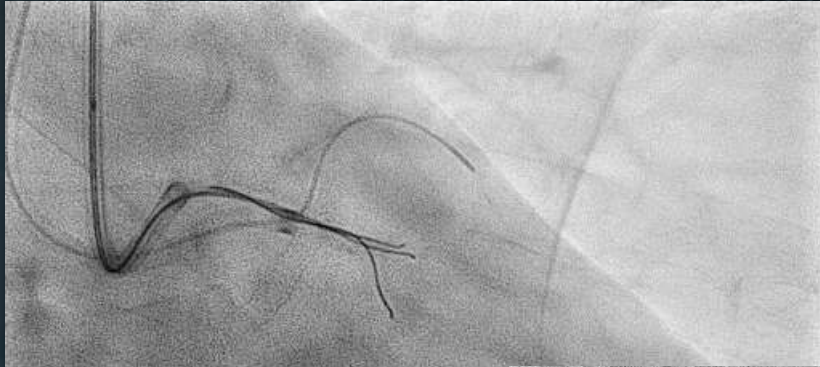
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- ✓ 13:25 Proximal cap penetration with IVUS
guidance by Conq12g.

Case: LAD CTO



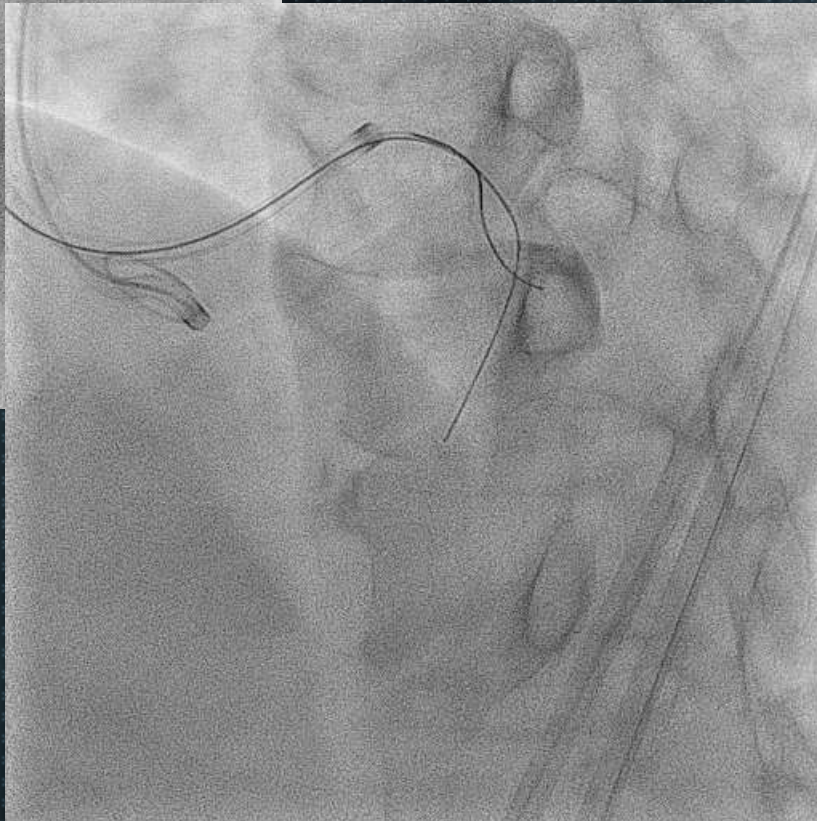
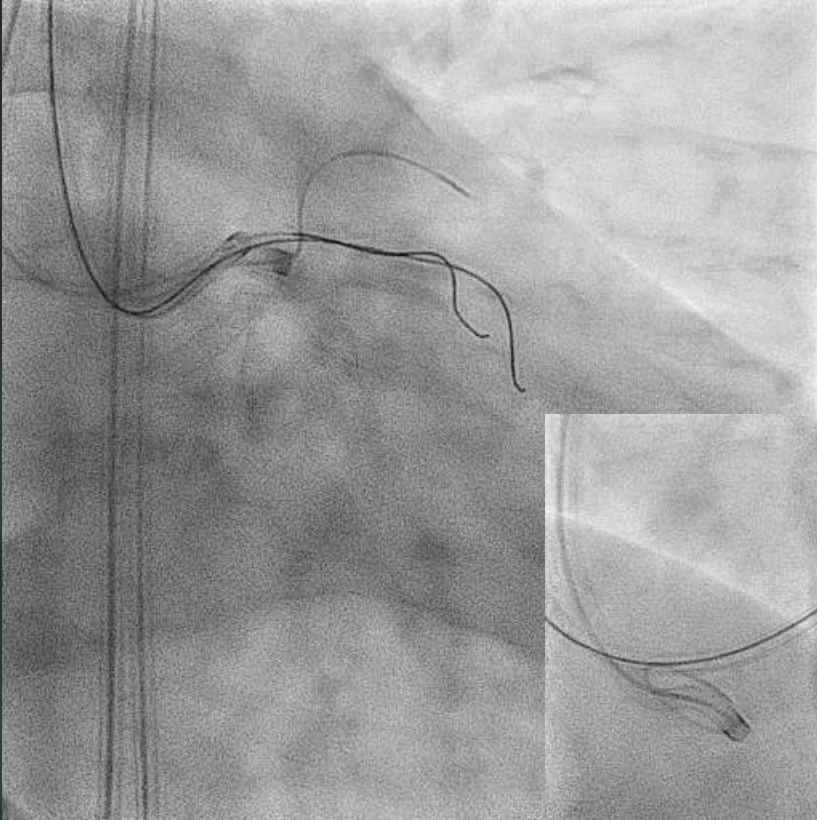
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- ✓ Step down to GAIA Next1→GAIA Next 2
- ✓ 14:14 Failure of penetration at distal cap

Case: LAD CTO



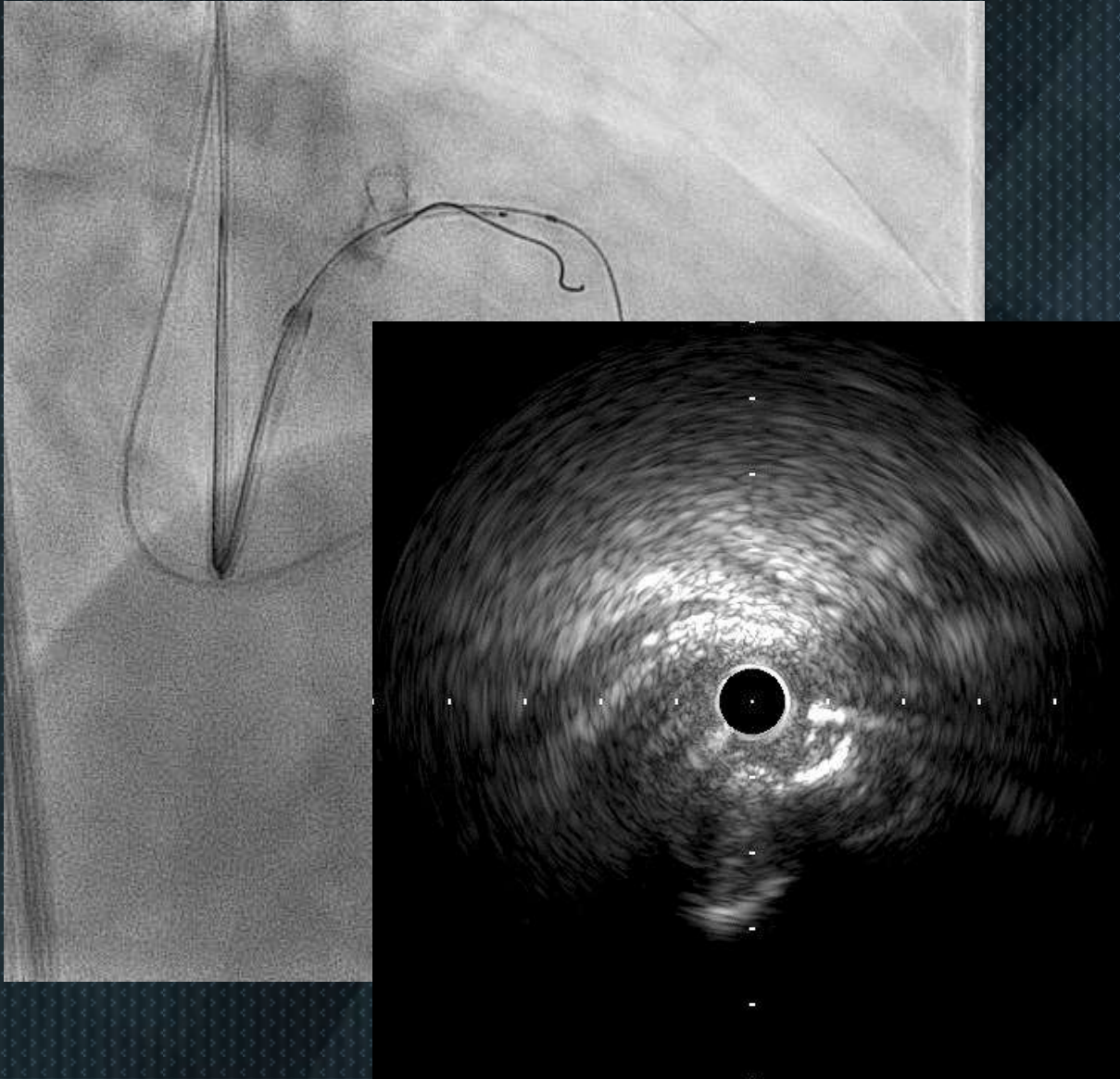
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single wire
- ✓ Parallel wire by GAIA Next3 →Conq12
- ✓ 14:47 Failure of penetration at distal cap by
parallel wire

Case: LAD CTO



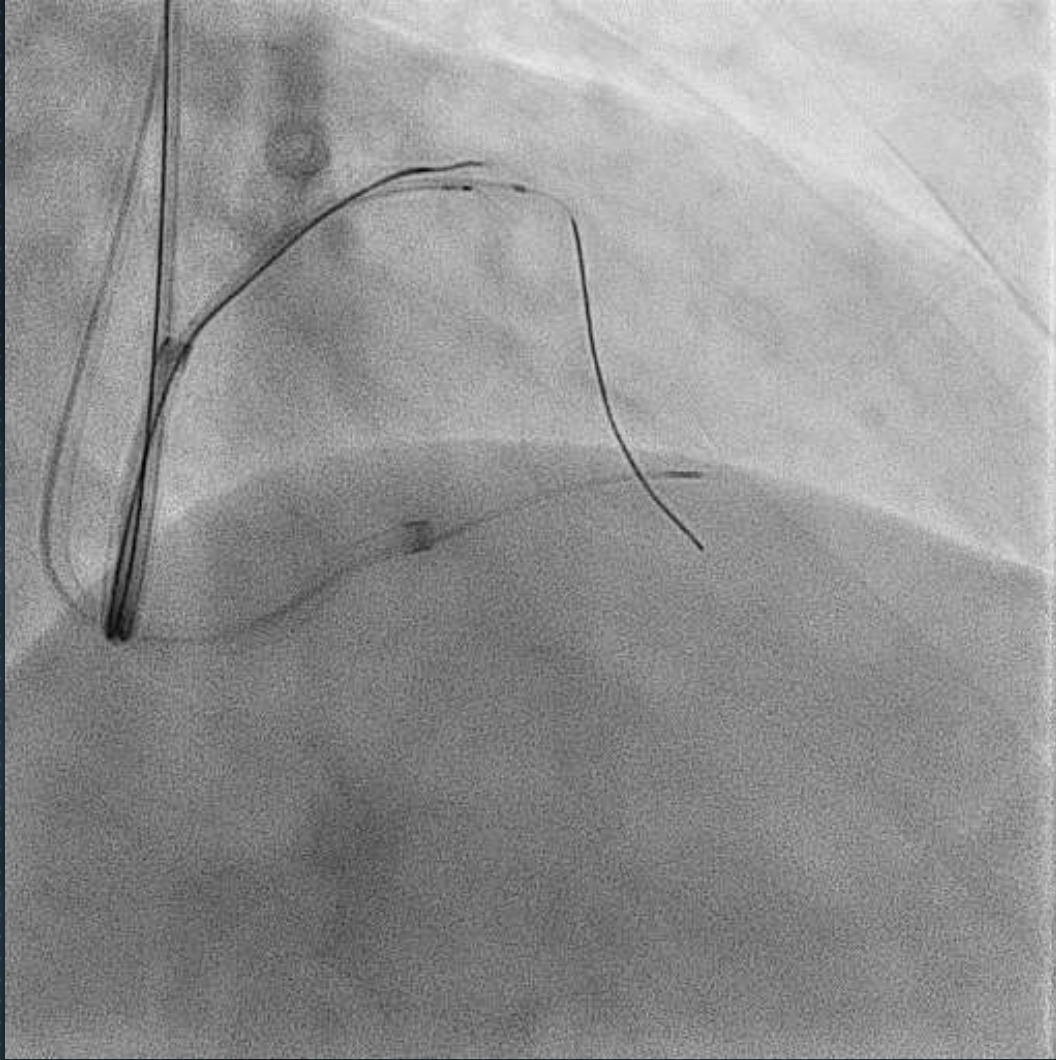
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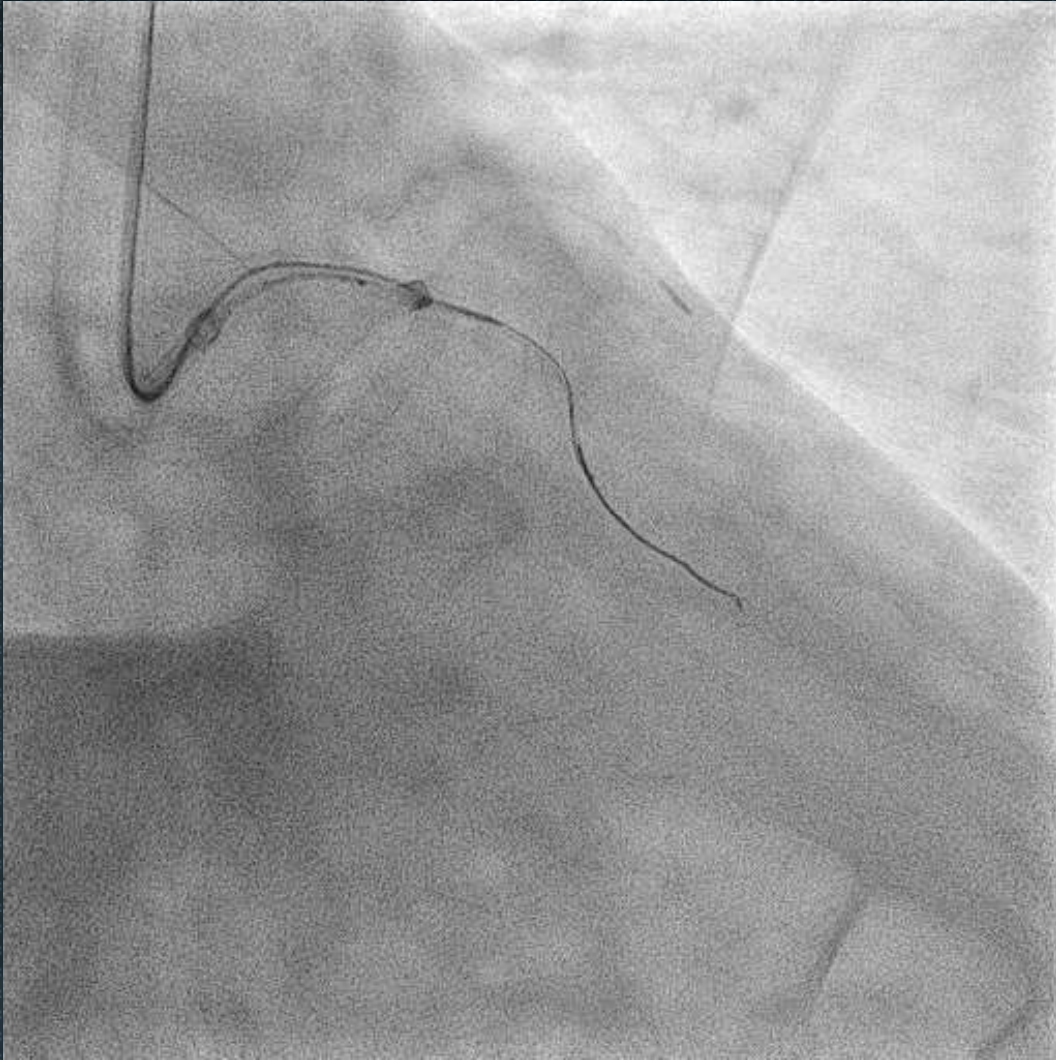
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- ✓ POBA 1.25mm in CTO site
- ✓ IVUS examination

Case: LAD CTO



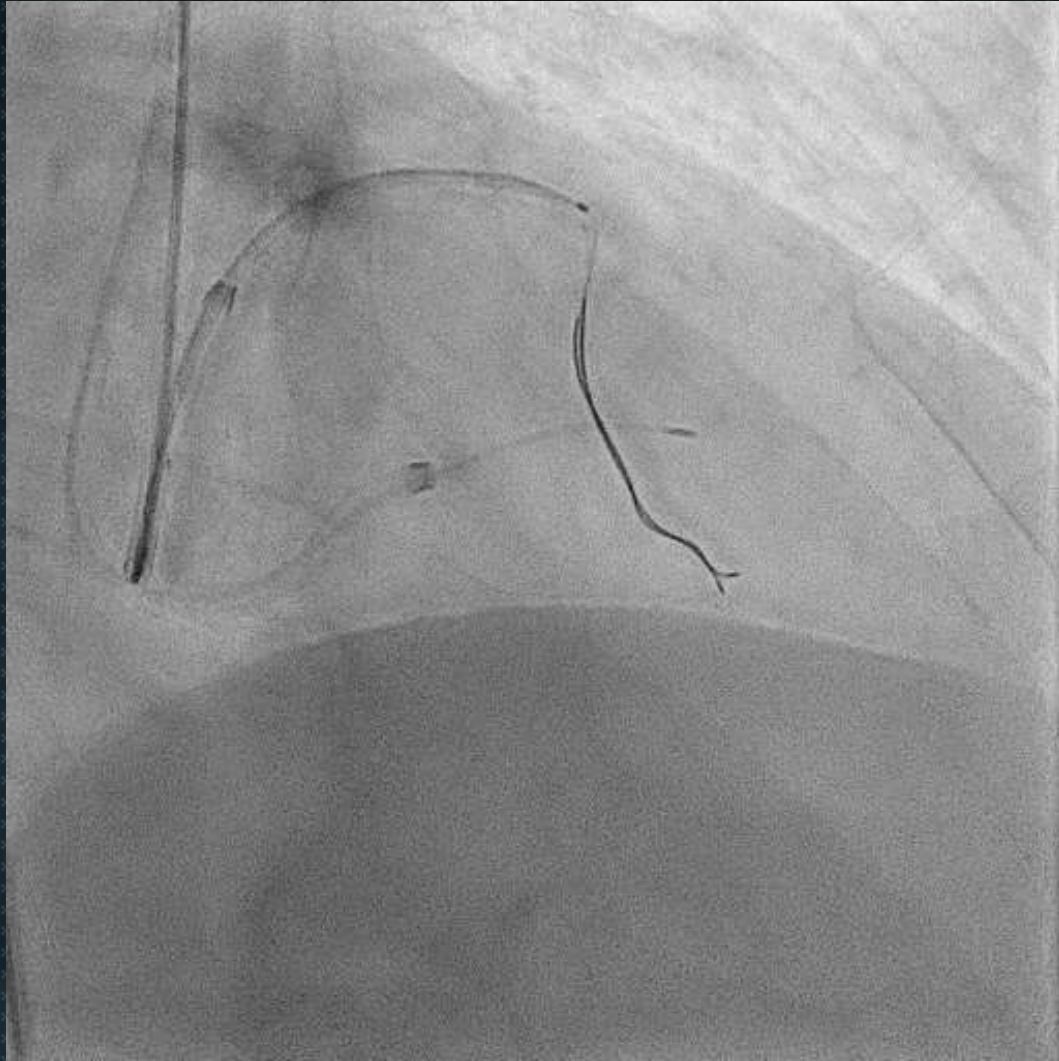
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- ✓ 16:41 Next3 in septal

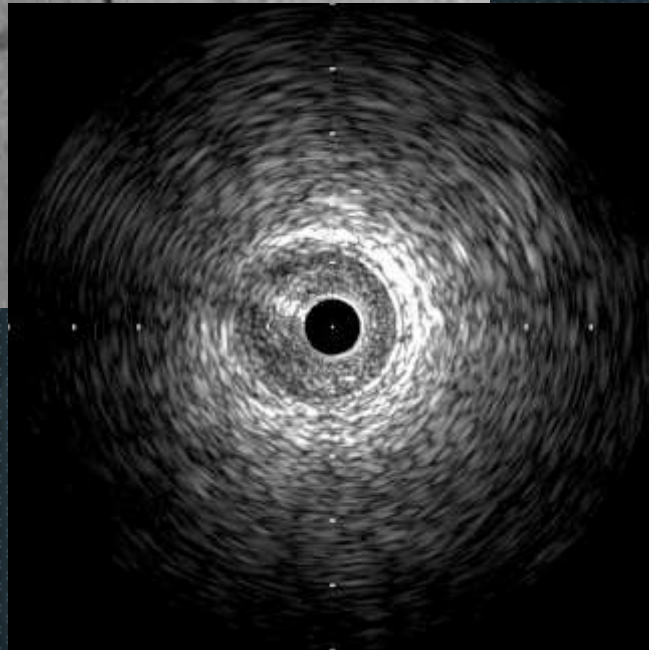
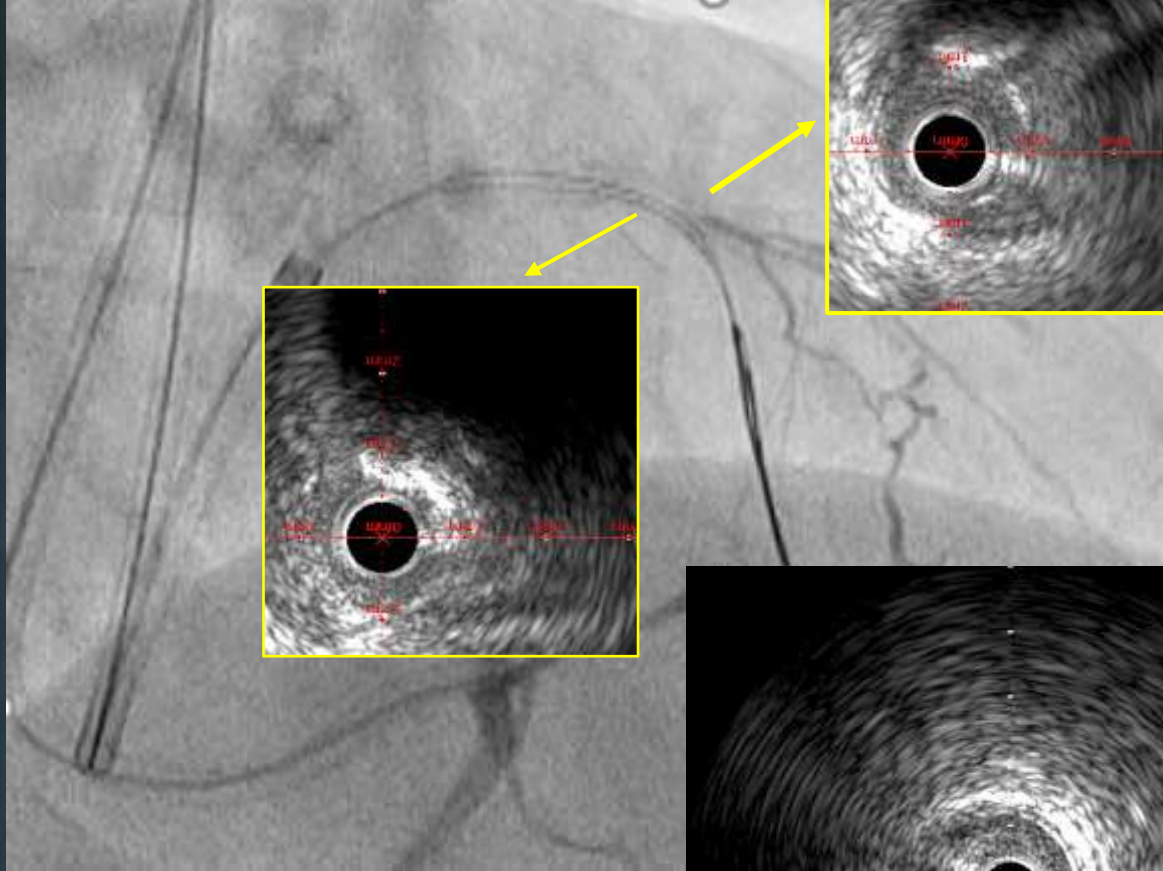
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- ✓ Any balloon could not be crossed
- ✓ 16:55 Tornus crossed

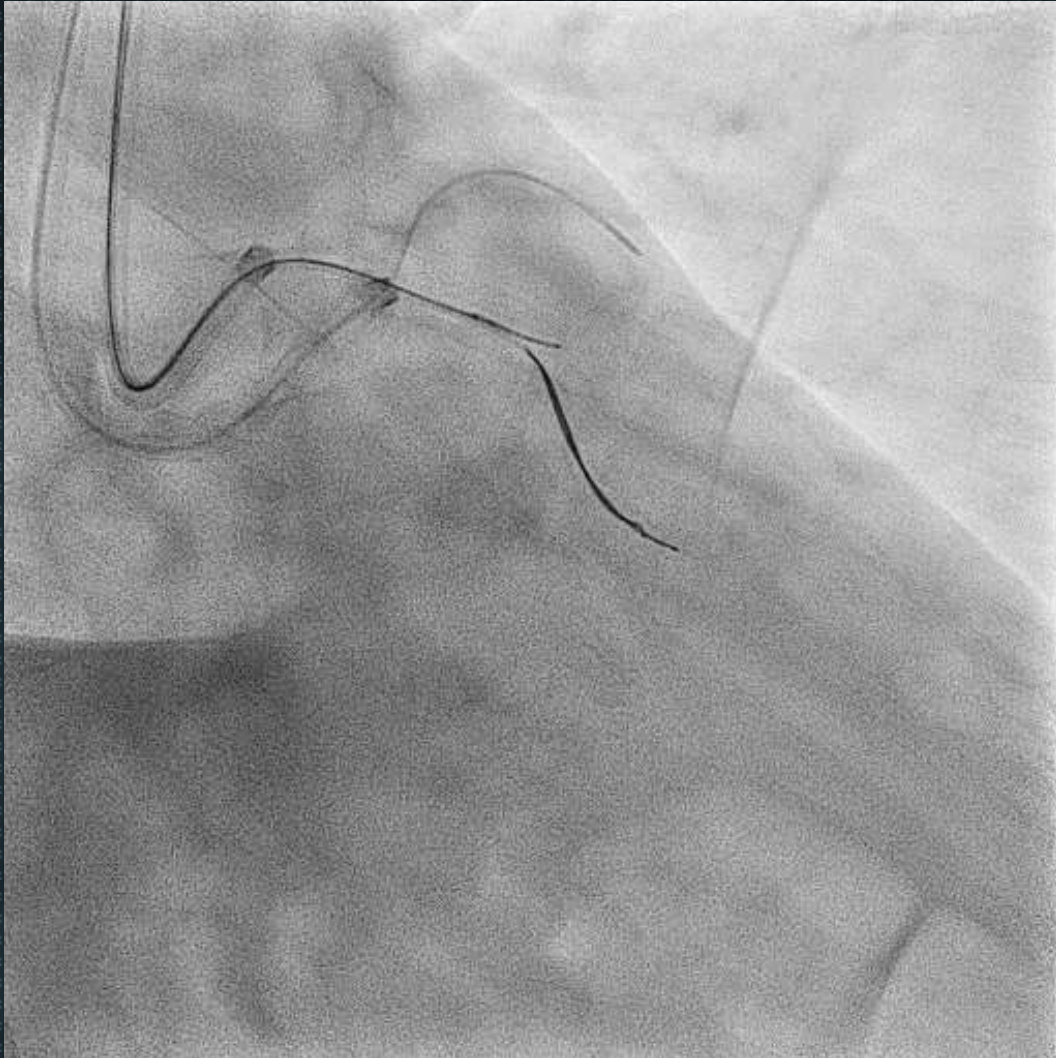
Case: LAD CTO

✓ 17:00 IVUS in septal branch



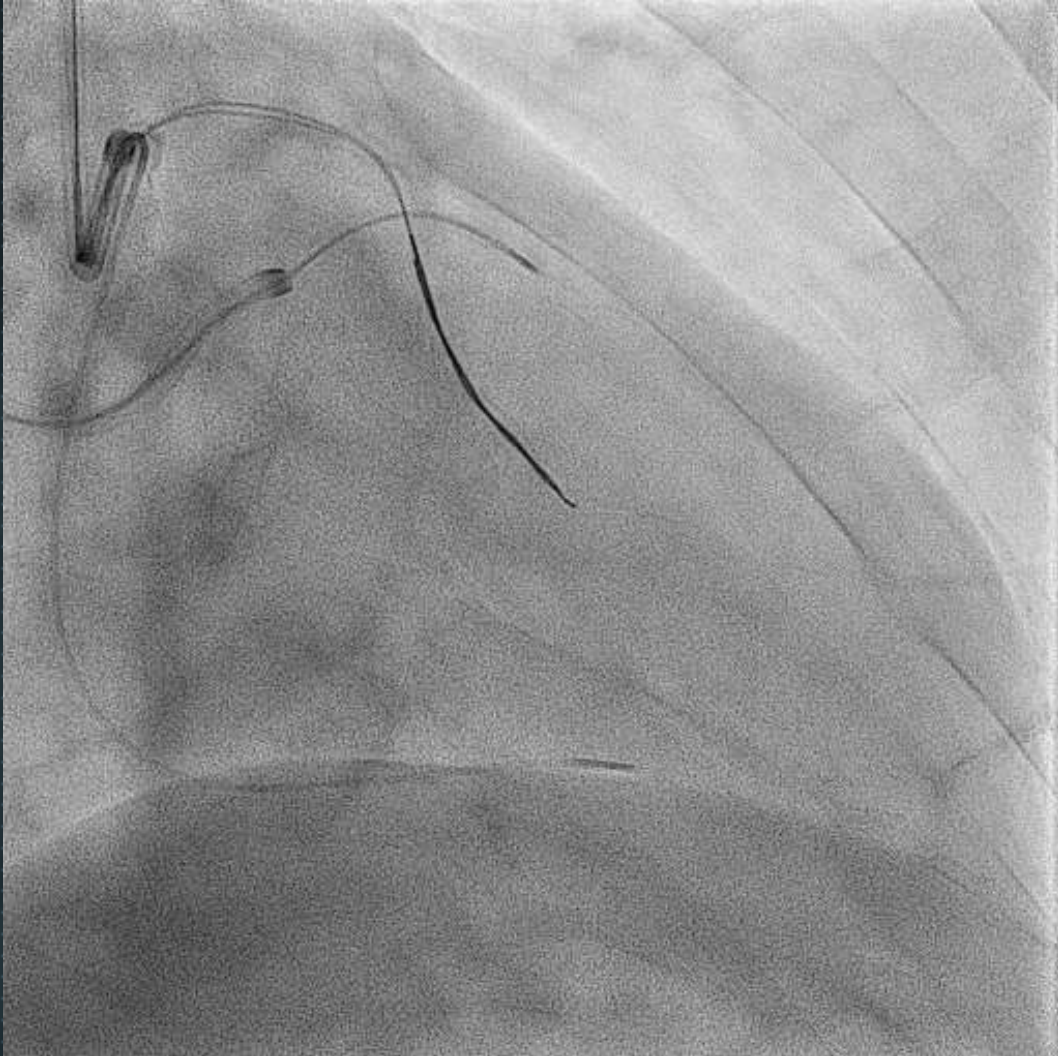
Case: LAD CTO

- ✓ 17:00 IVUS in septal branch
- ✓ 17:11 Failure of bifurcation selection



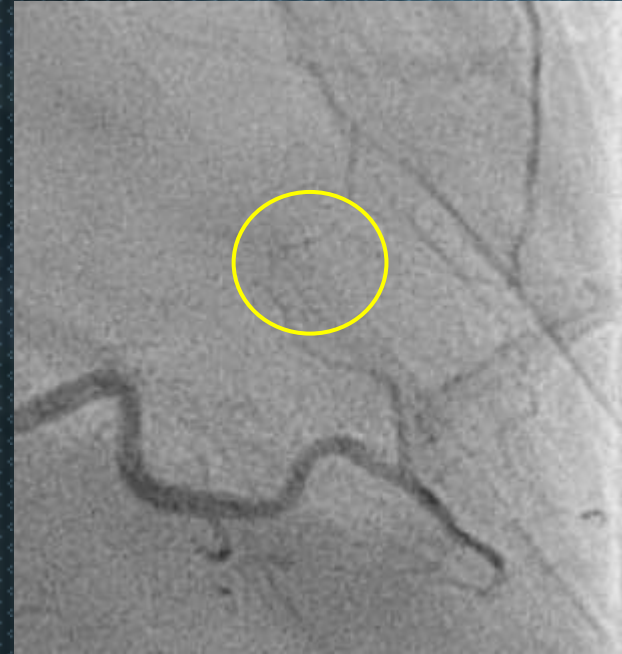
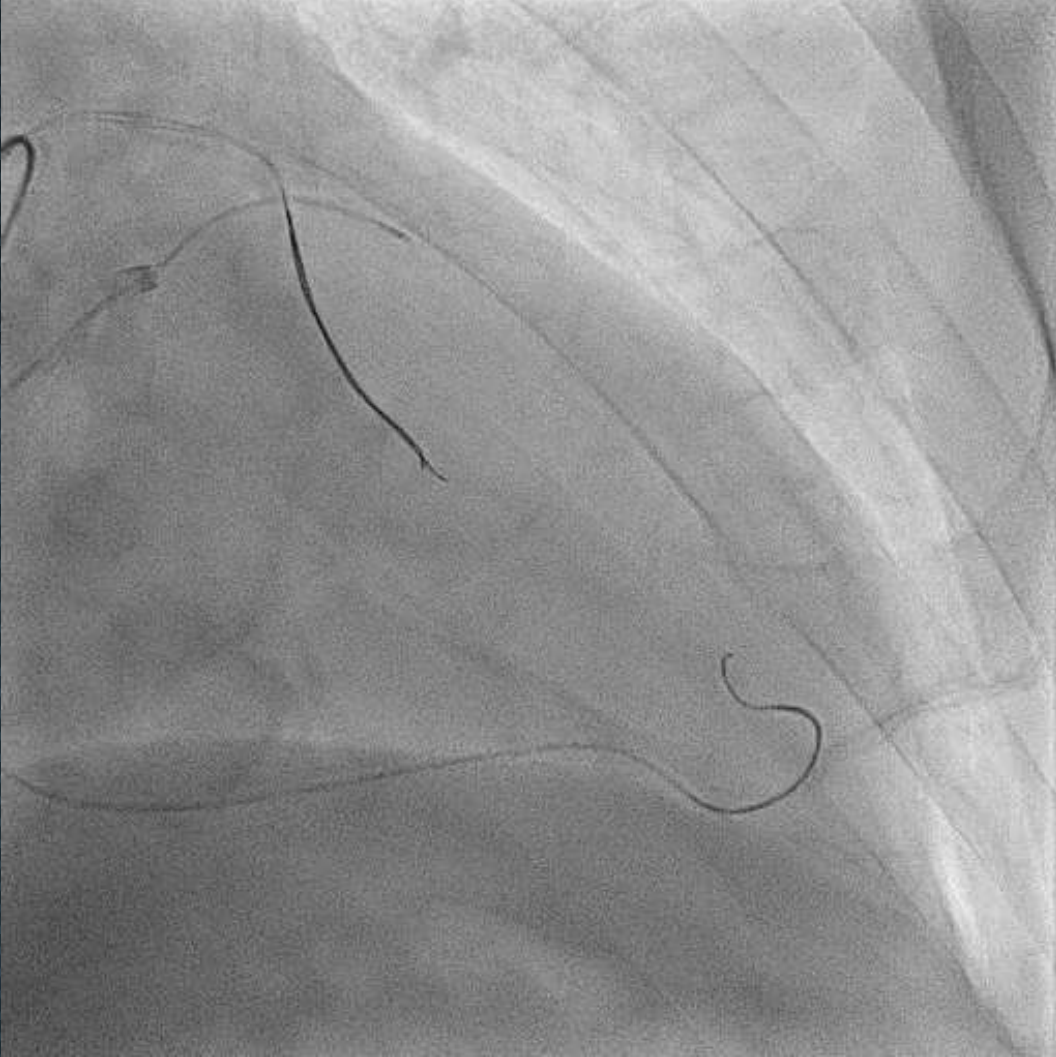
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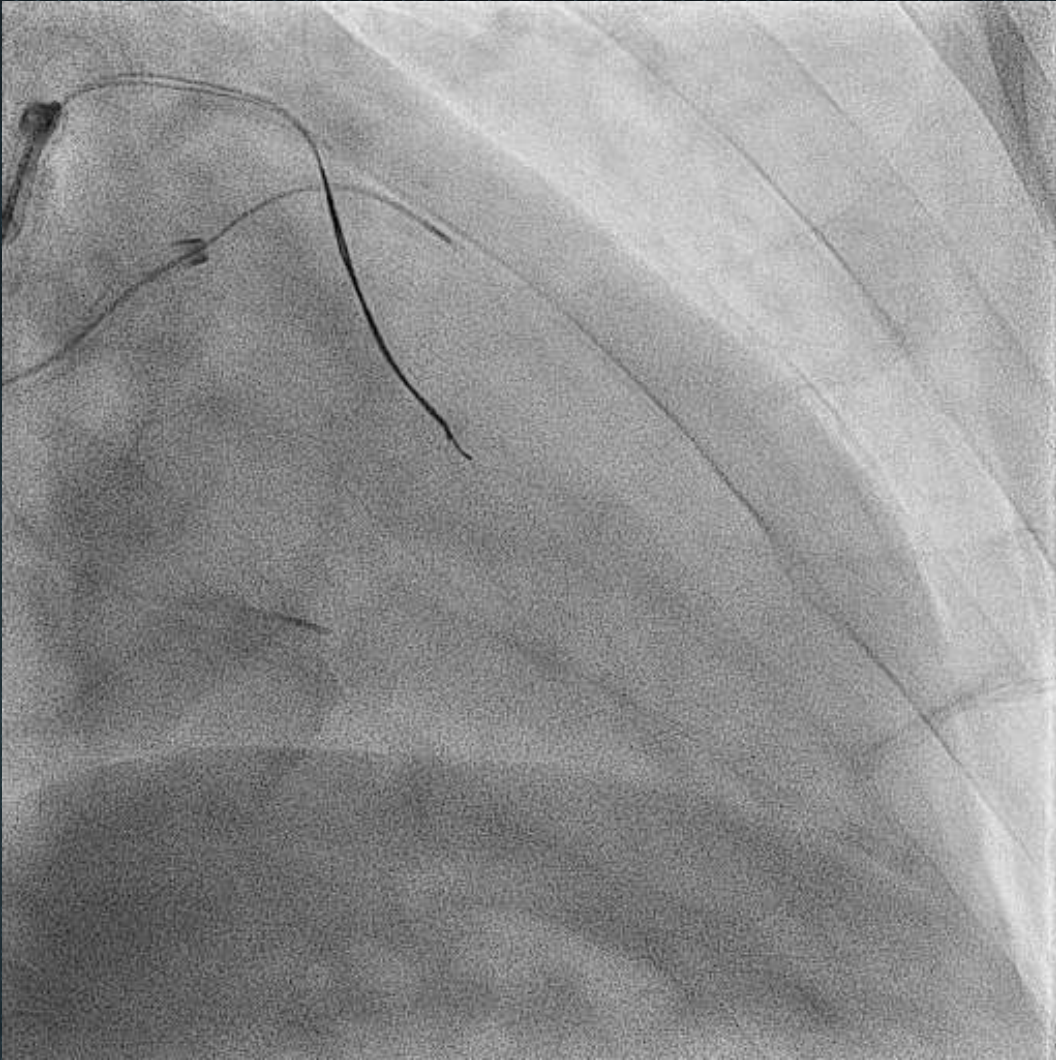
Case: LAD CTO

- ✓ 17:00 IVUS in septal branch
- ✓ 17:11 Failure of bifurcation selection
- ✓ 17:28 Failure of channel tracking from distal LCX by SUOH03

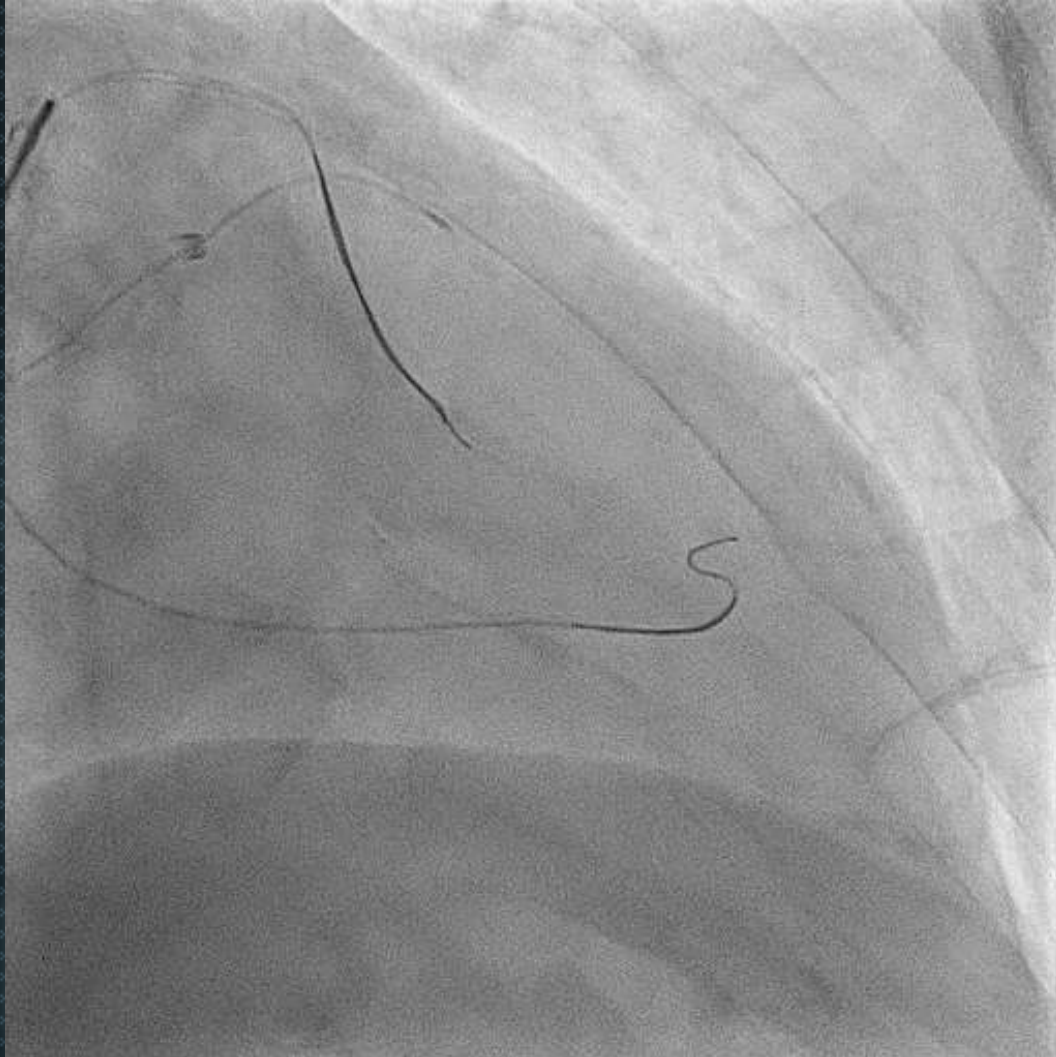


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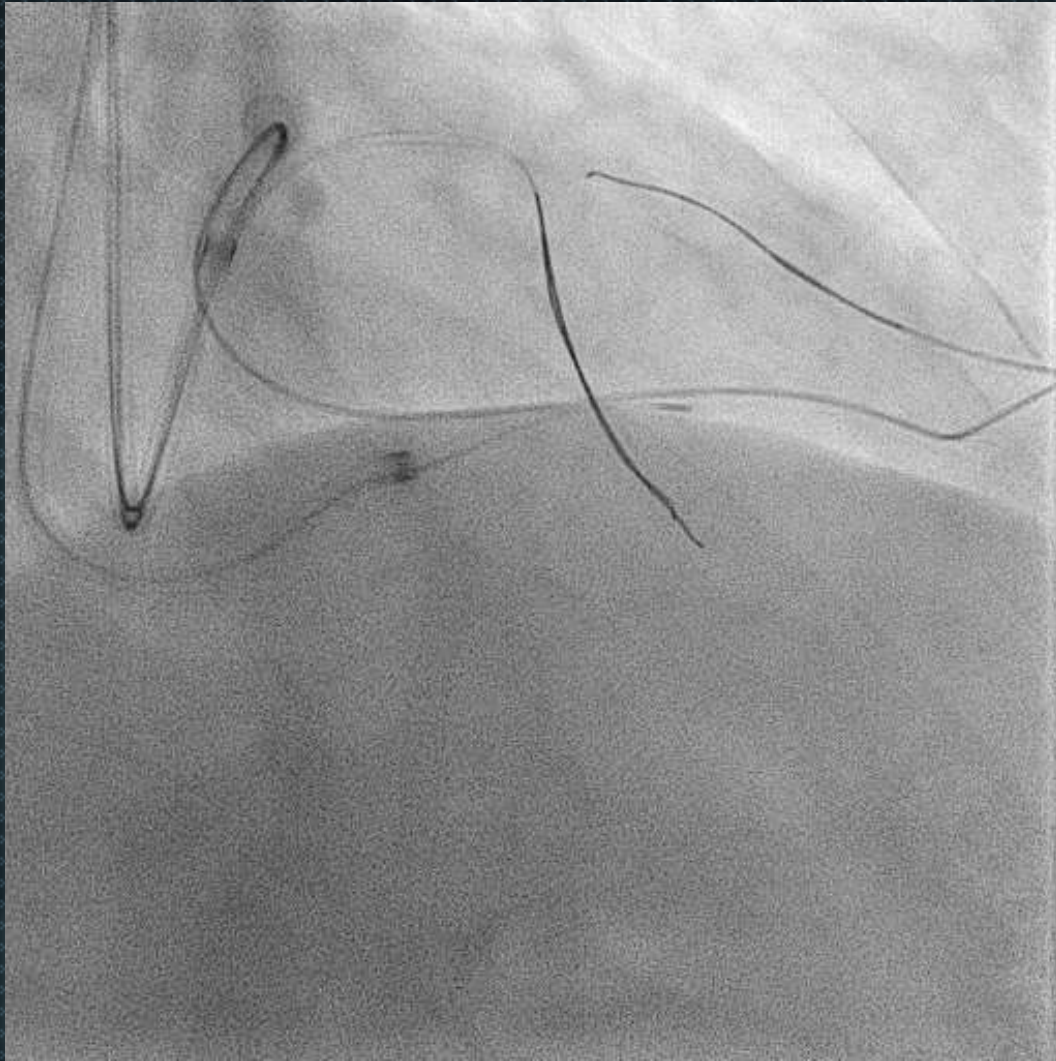


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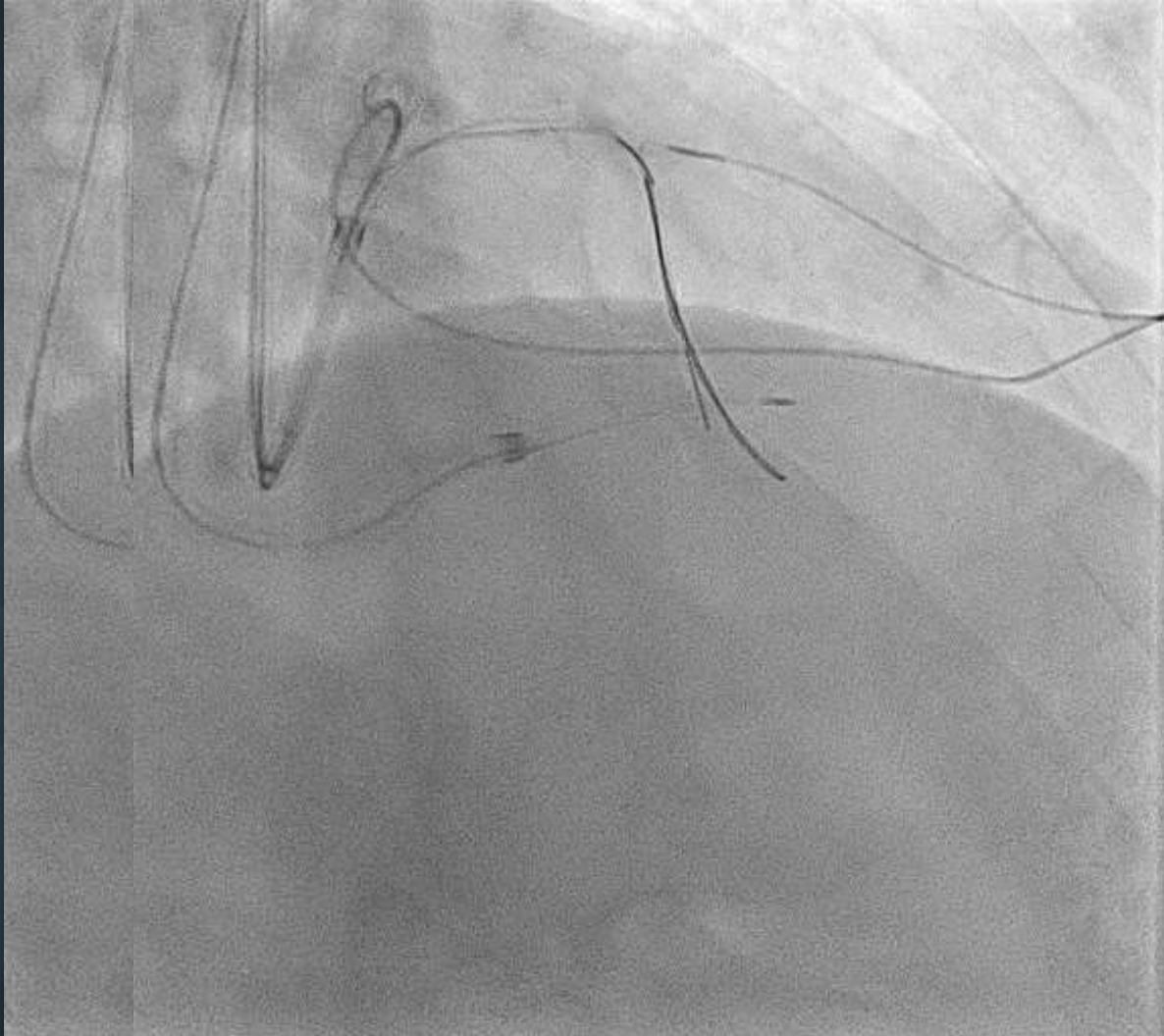
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Case: LAD CTO

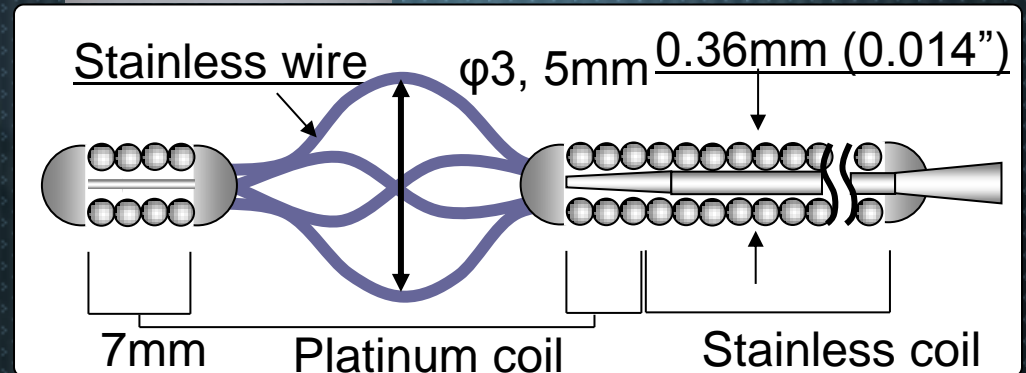


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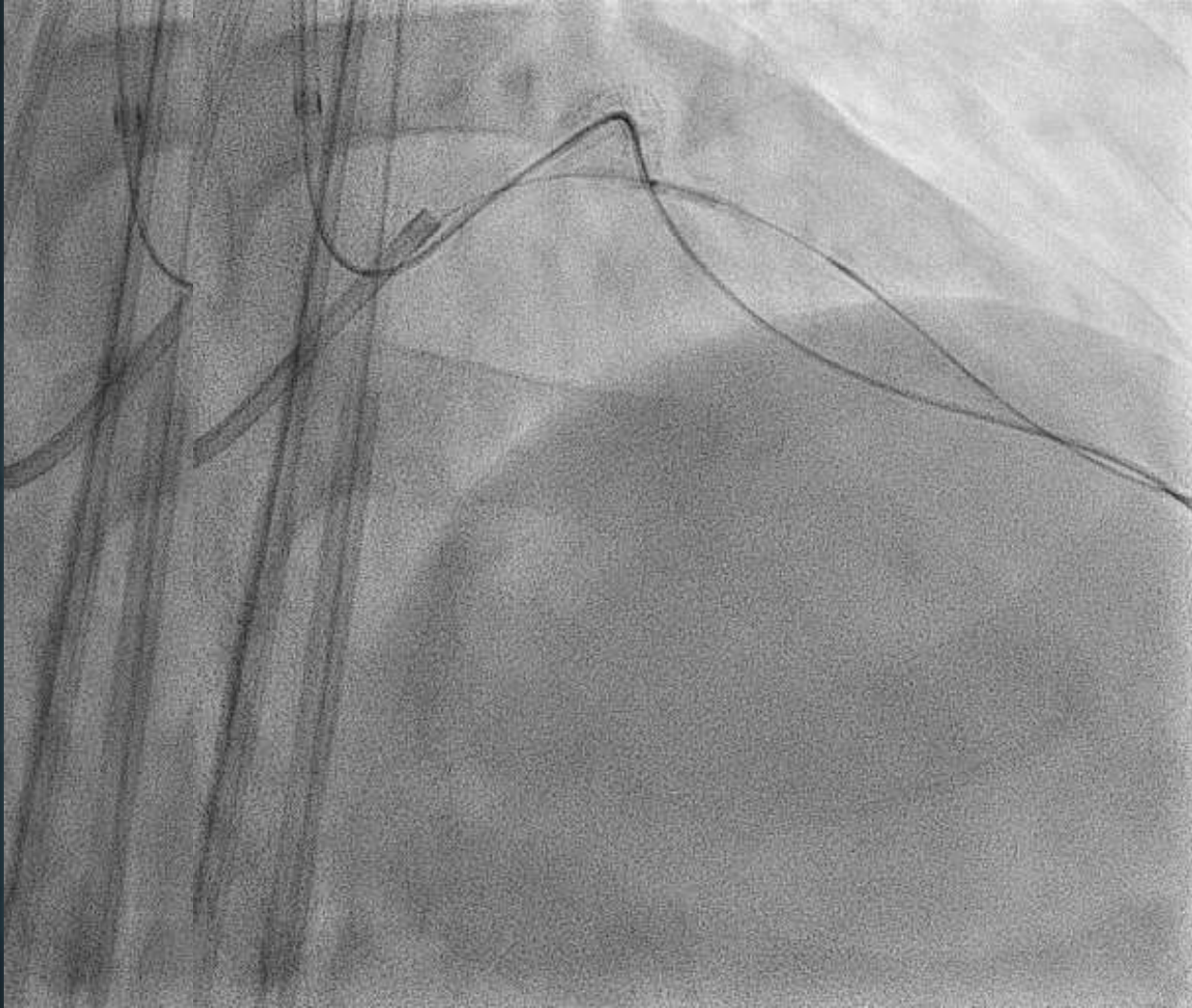
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- ✓ 17:48 Retrograde SUOH03 was caught by antegrade Soutenir snair wire

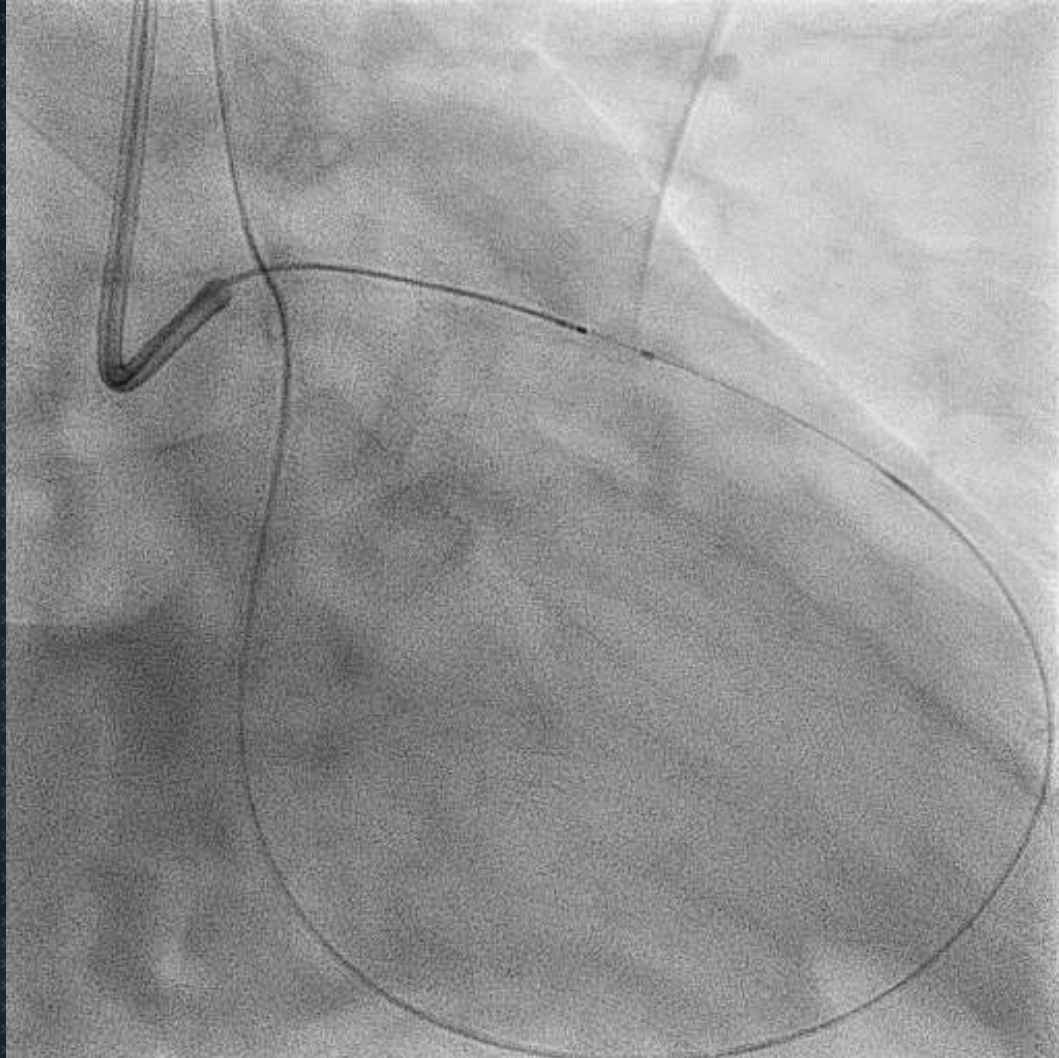


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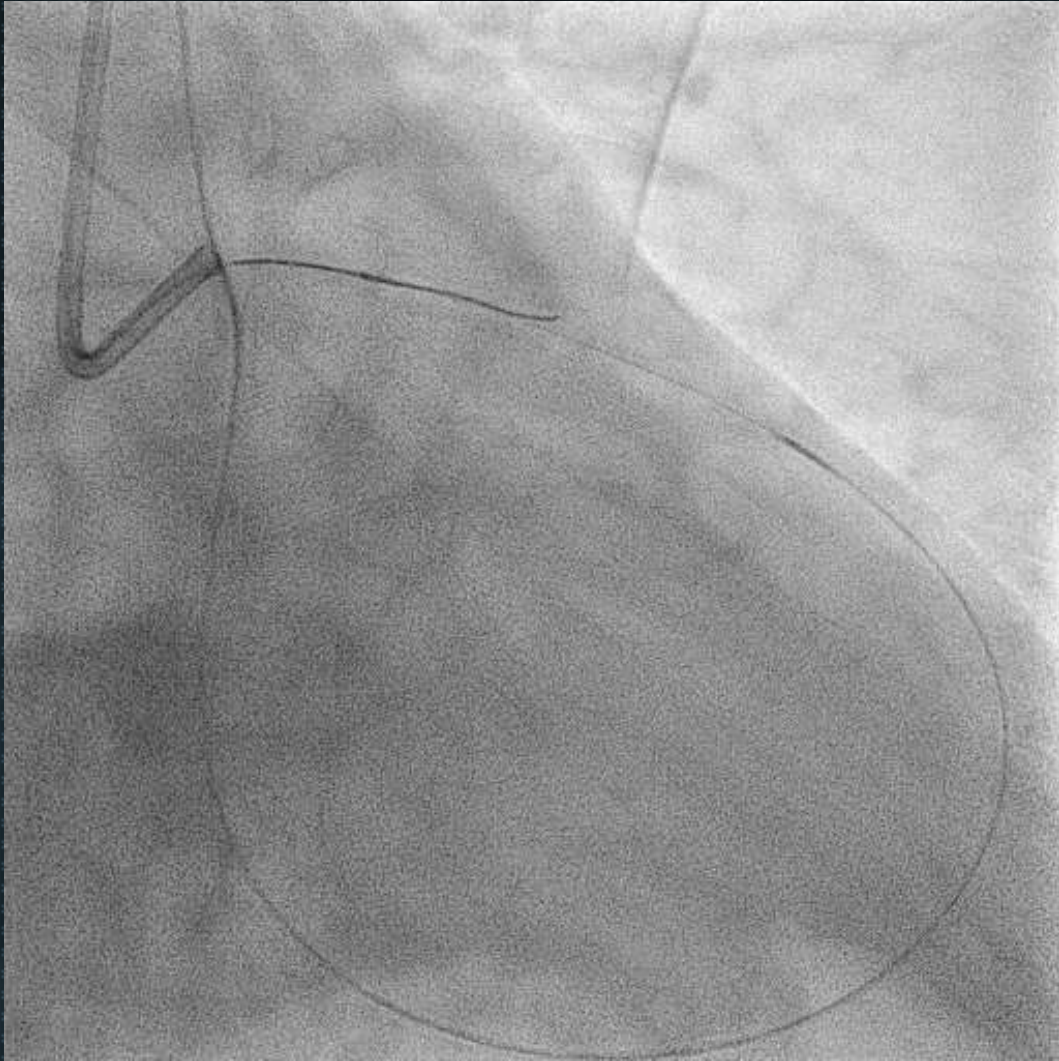
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- ✓ 1.5mm POBA

Case: LAD CTO



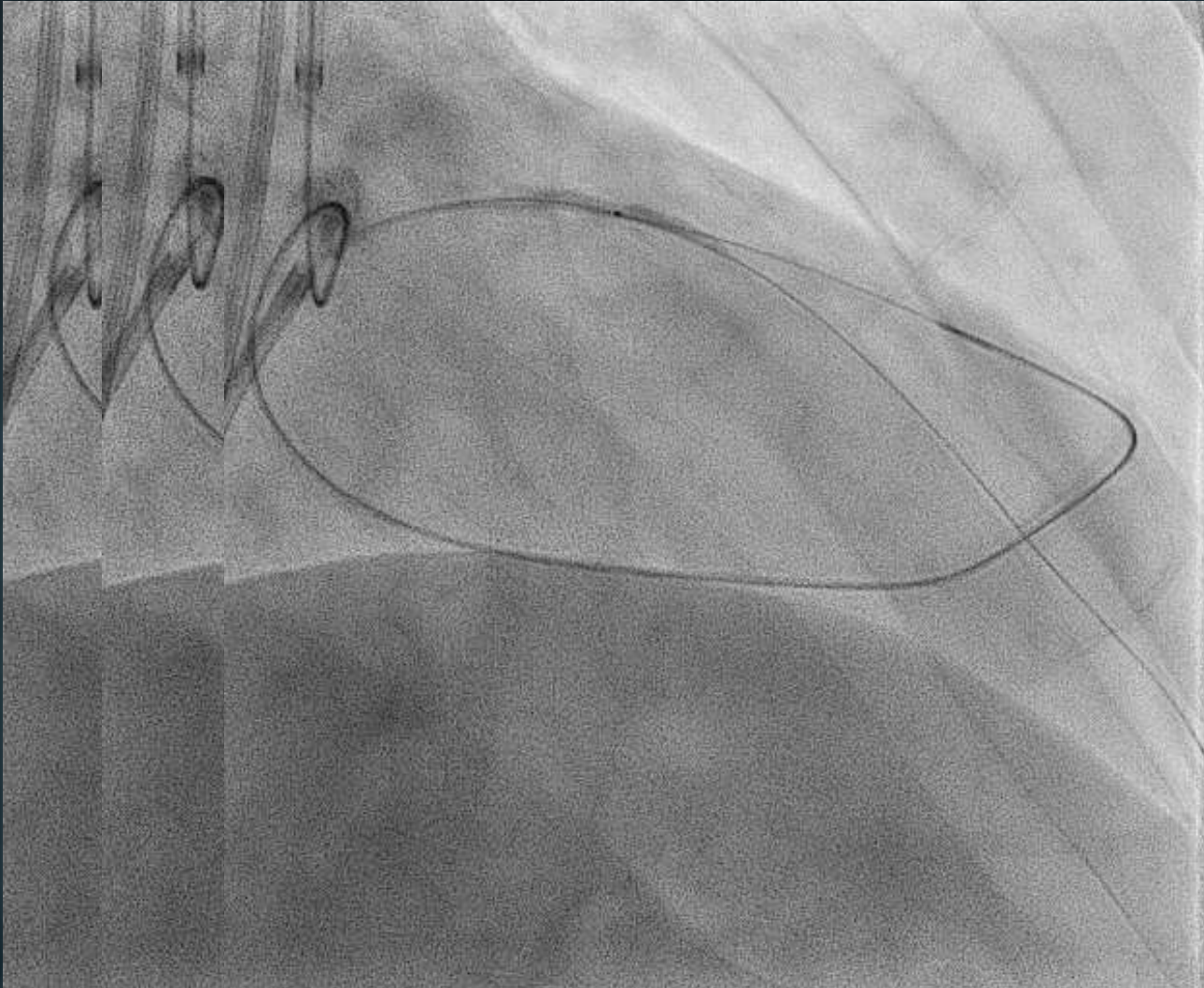
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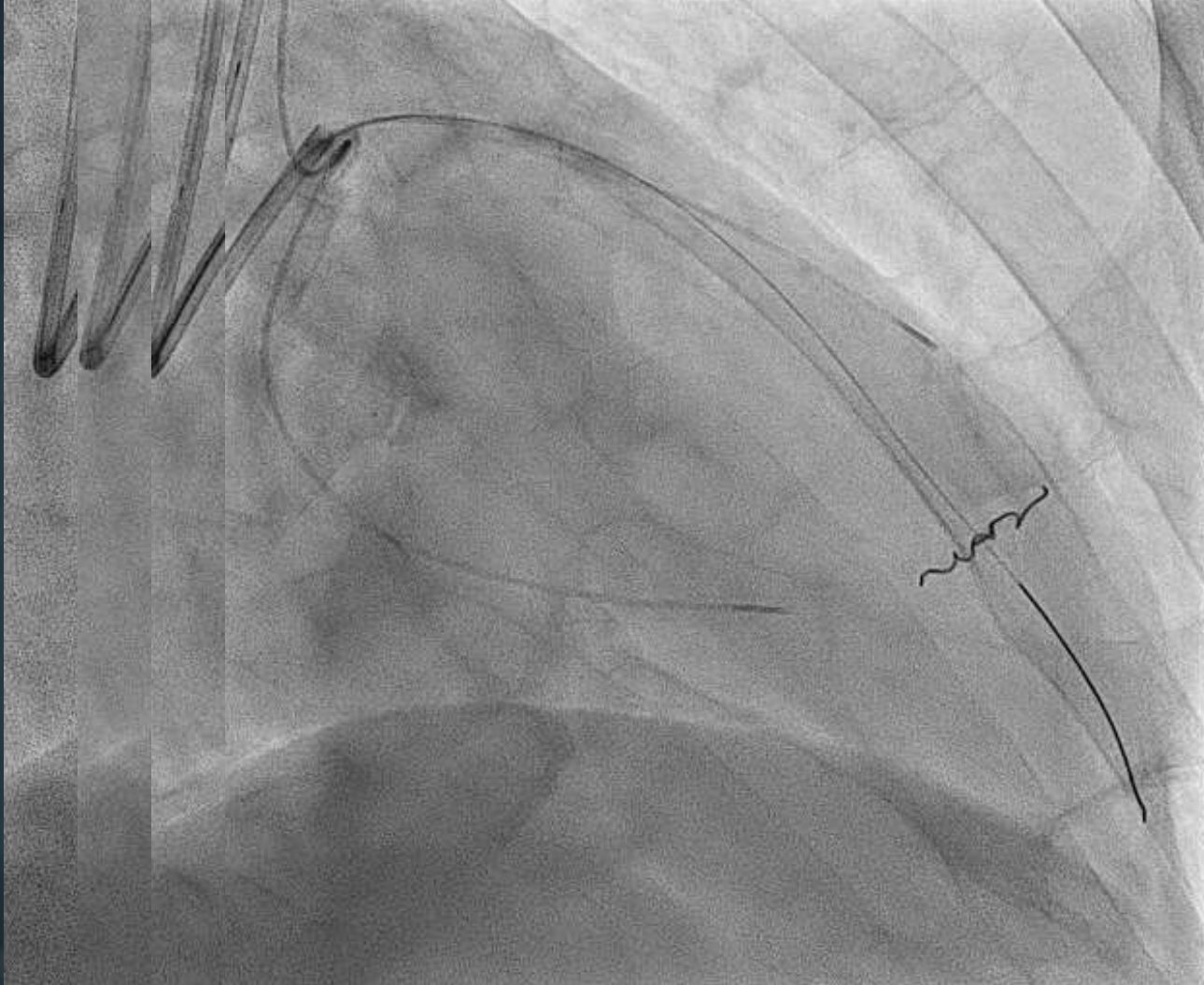
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Case: LAD CTO



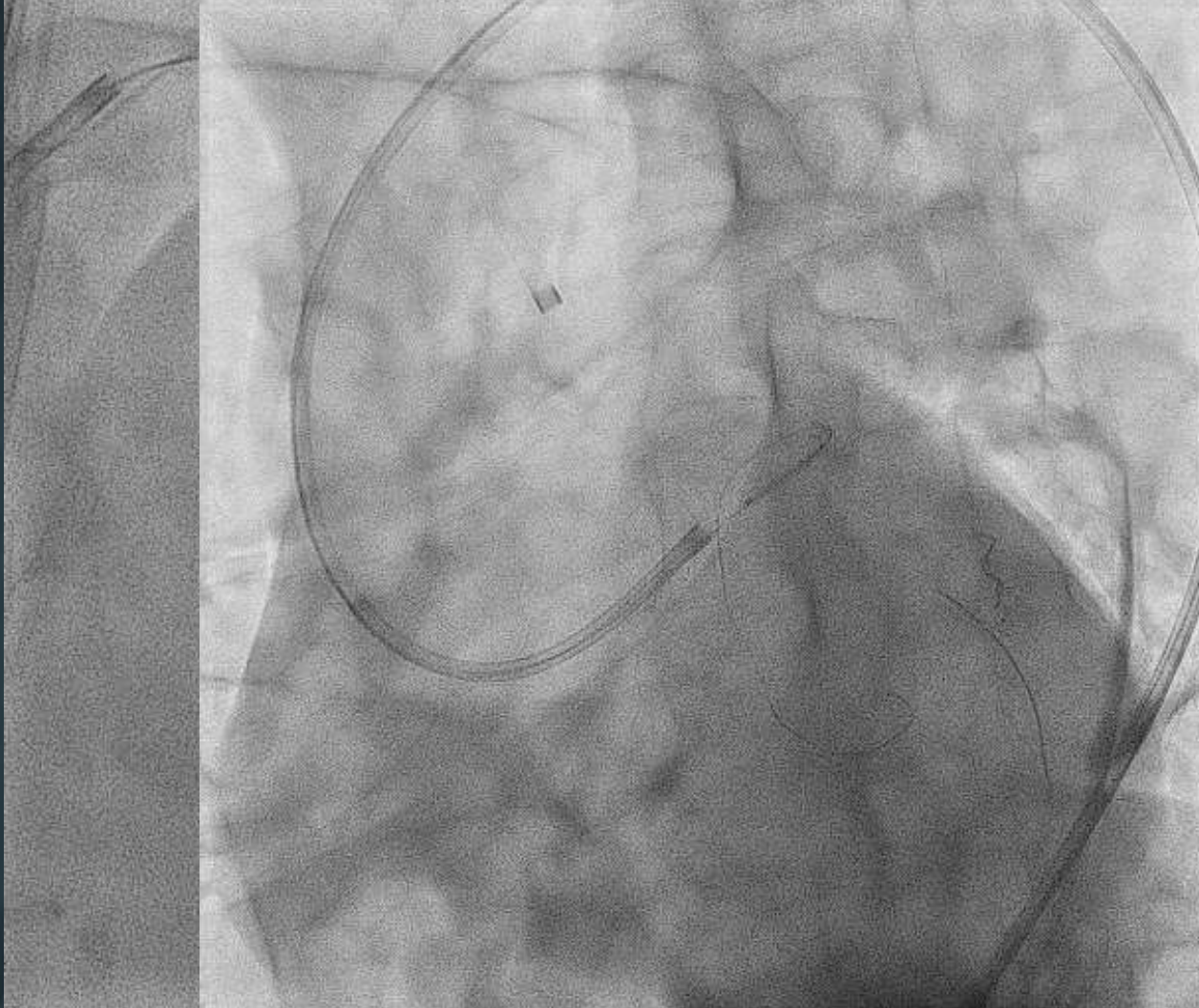
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- ✓ IVUS from Diagonal
- ✓ LAD main vessel selection by SION with SASUKE
- ✓ 2.0mm POBA for LAD

Case: LAD CTO



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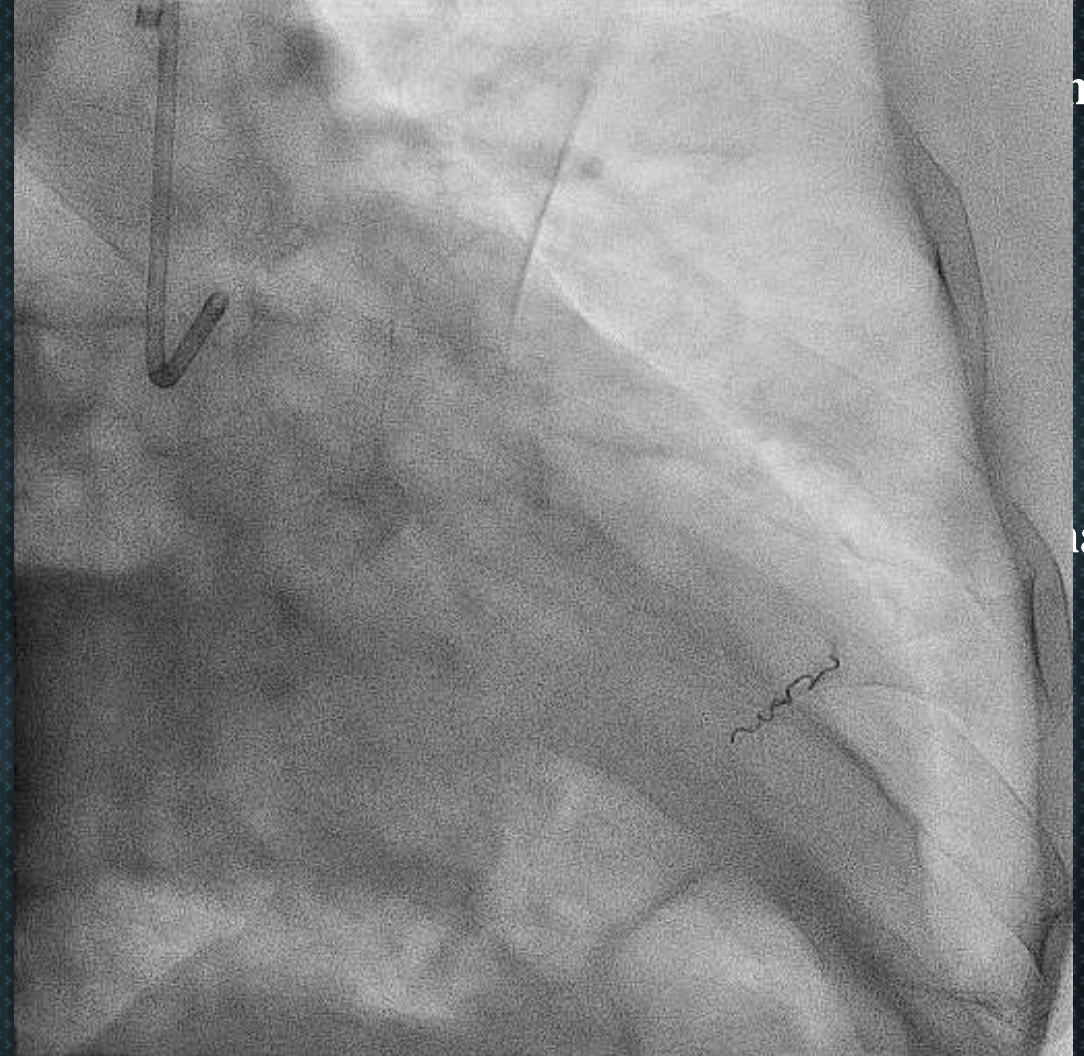
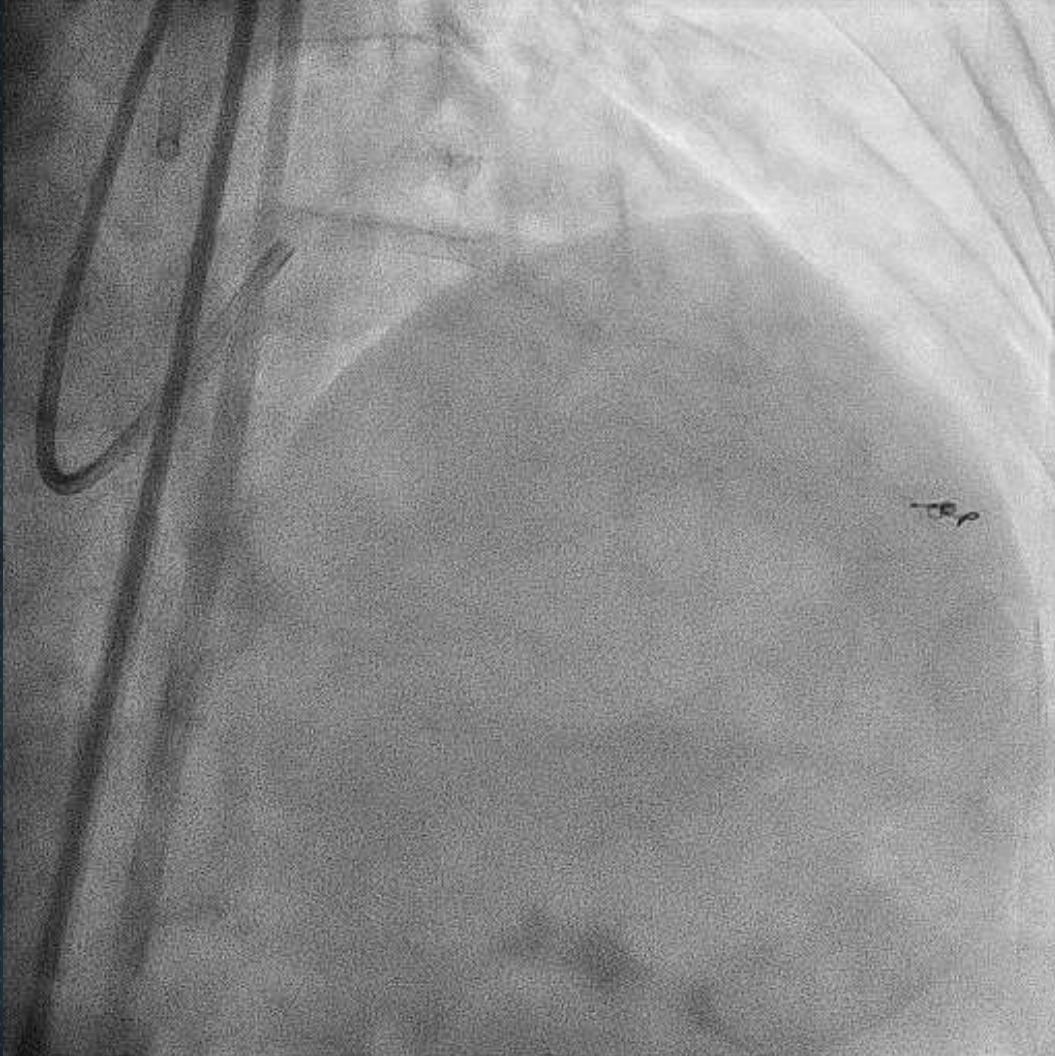
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- ✓ Xience Alpine 2.25*28
- ✓ Xience Alpine 3.0*23

Case: LAD CTO

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Summary

- **Calcified CTO is always difficult.**
- **It is not easy to identify the best time to change strategy from antegrade to retrograde approach.**
- **However, GW control in antegrade approach is better than it in retrograde for calcified lesion.**
- **For this case, septal selection from antegrade approach is associated with smart retrograde GW crossing.**

CTO Club

The 19th Seminar of Angioplasty of Chronic Total Occlusions

Dates June 15 Fri. – 16 Sat., 2018

Venue WINC AICHI, Nagoya, Japan