Case 1

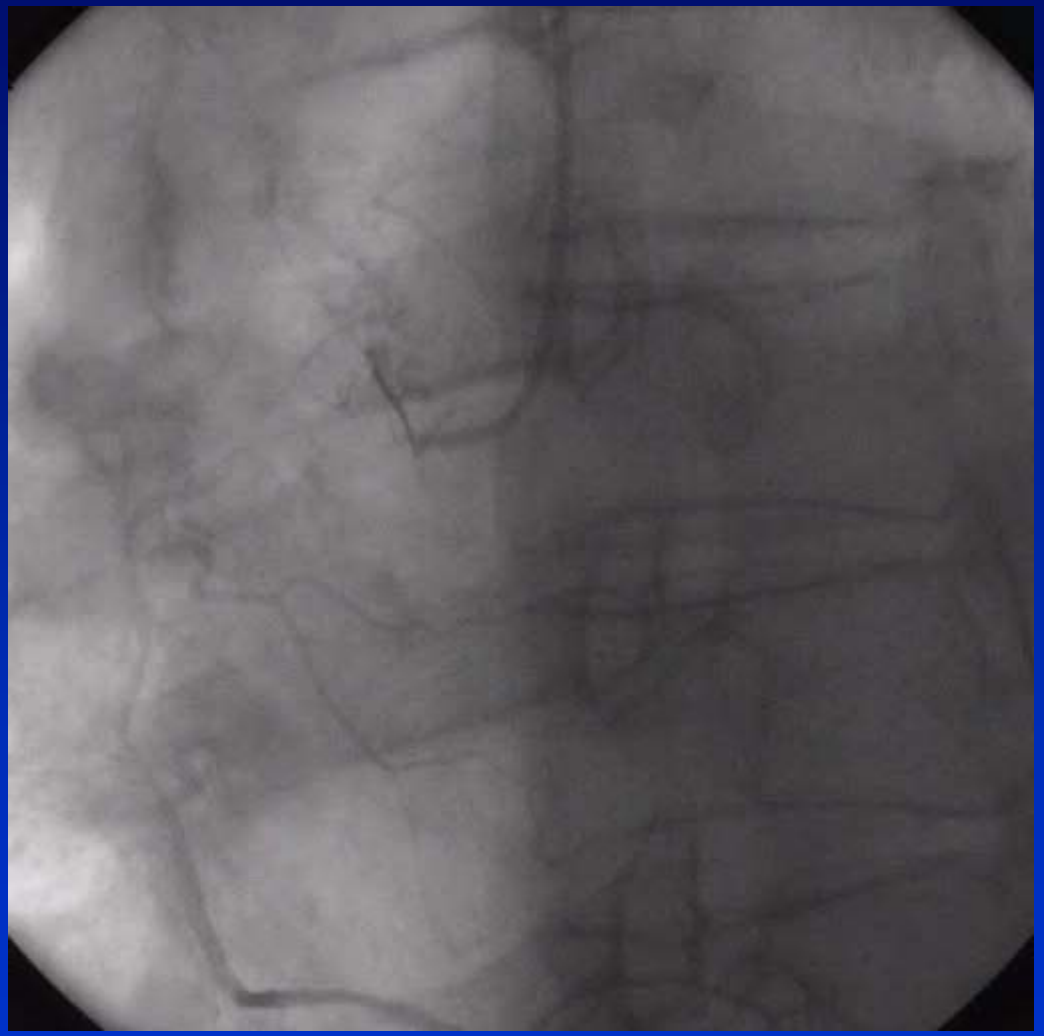
Calcified mLAD lesion

Jae-Hwan Lee, MD, PhD

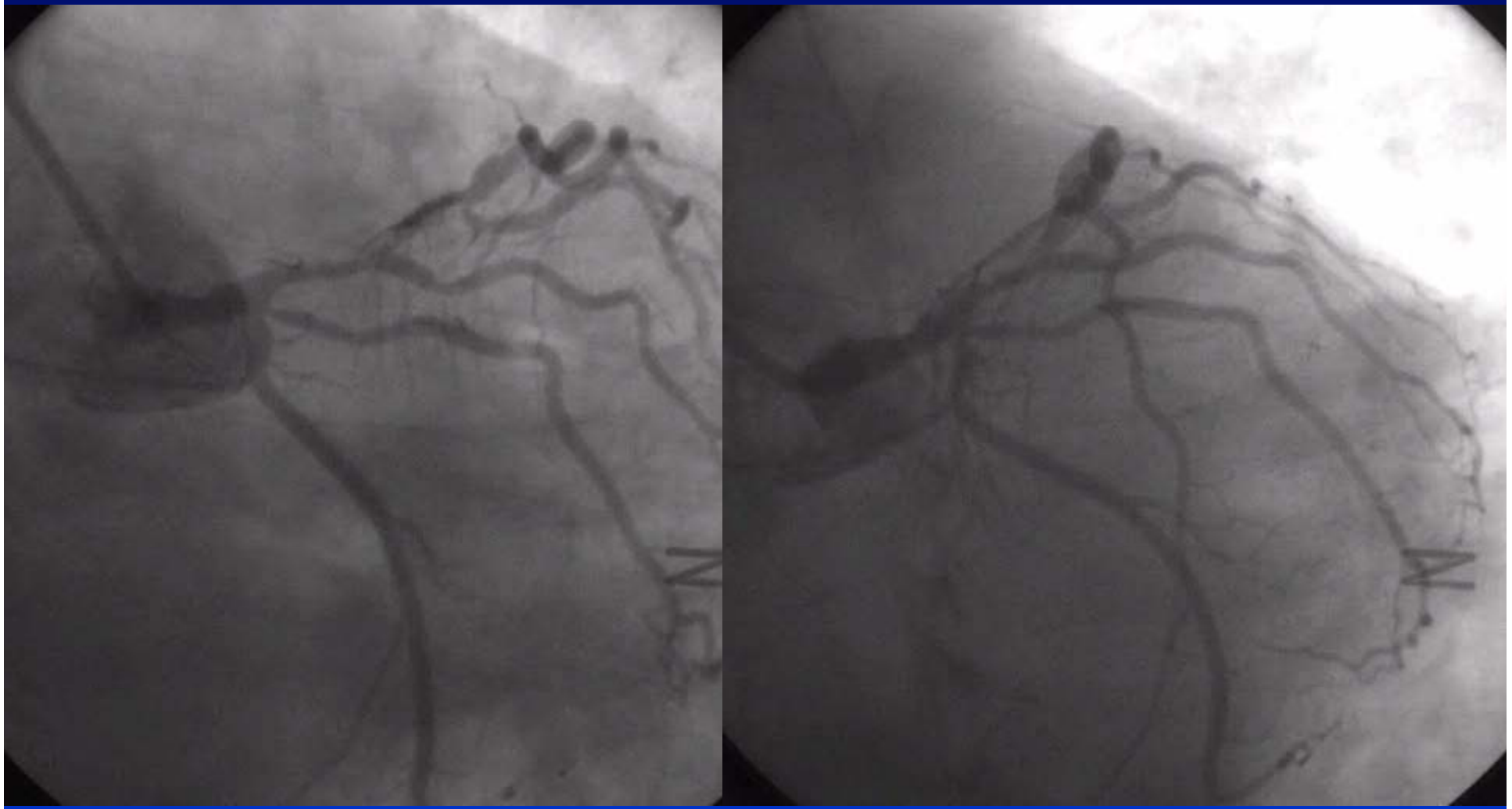
Cardiovascular Center in Chungnam National University Hospital, Daejeon, Korea

- 59 YO man, 40 PY exsmoker
- Antihypertensive medications for 2 yrs
- Effort angina for 10 days, CCS 3
- ECG; LVH
- Treadmill; Stage 2 positive
- TTE; Borderline concentric LVH

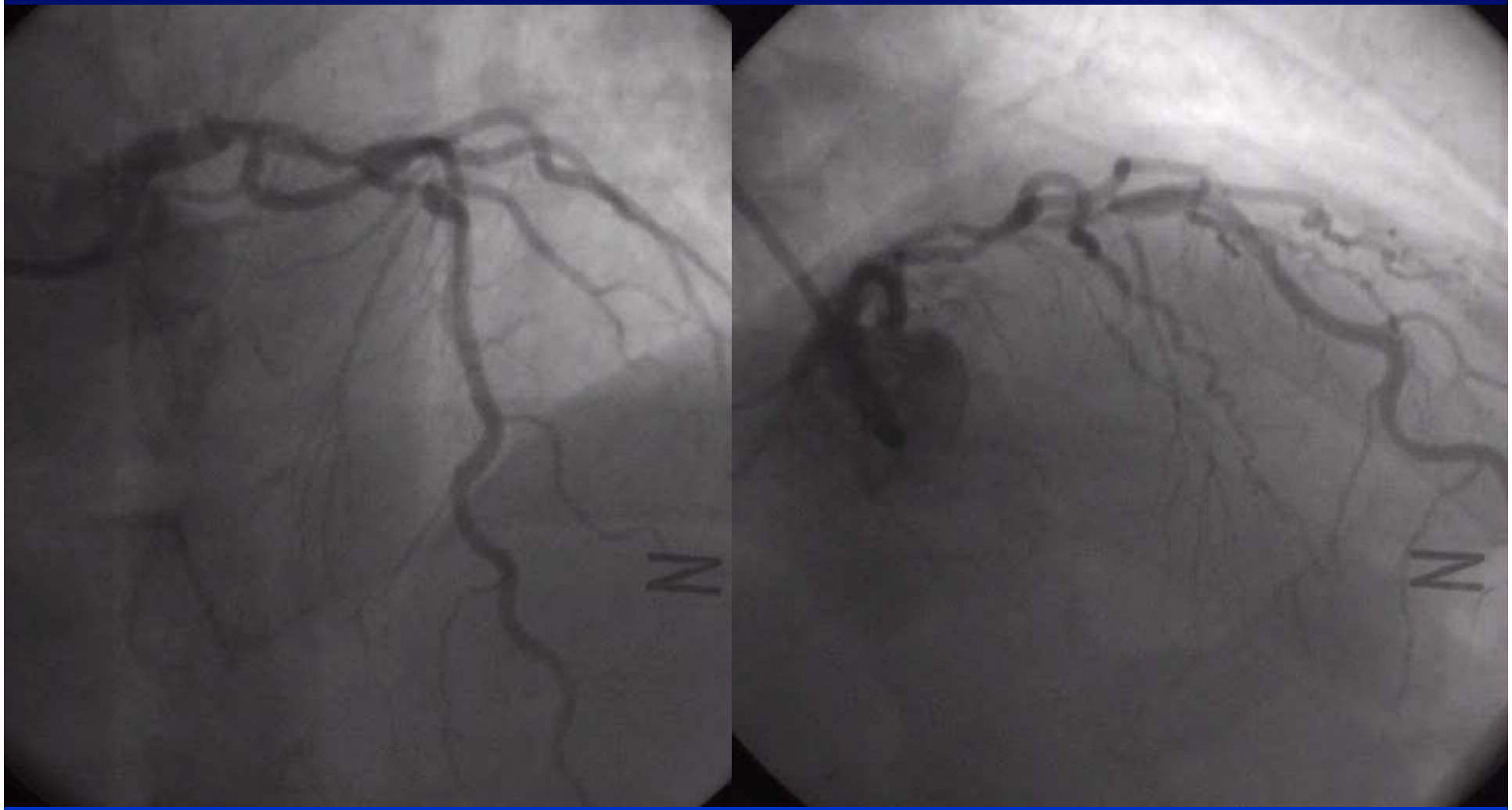
RCA



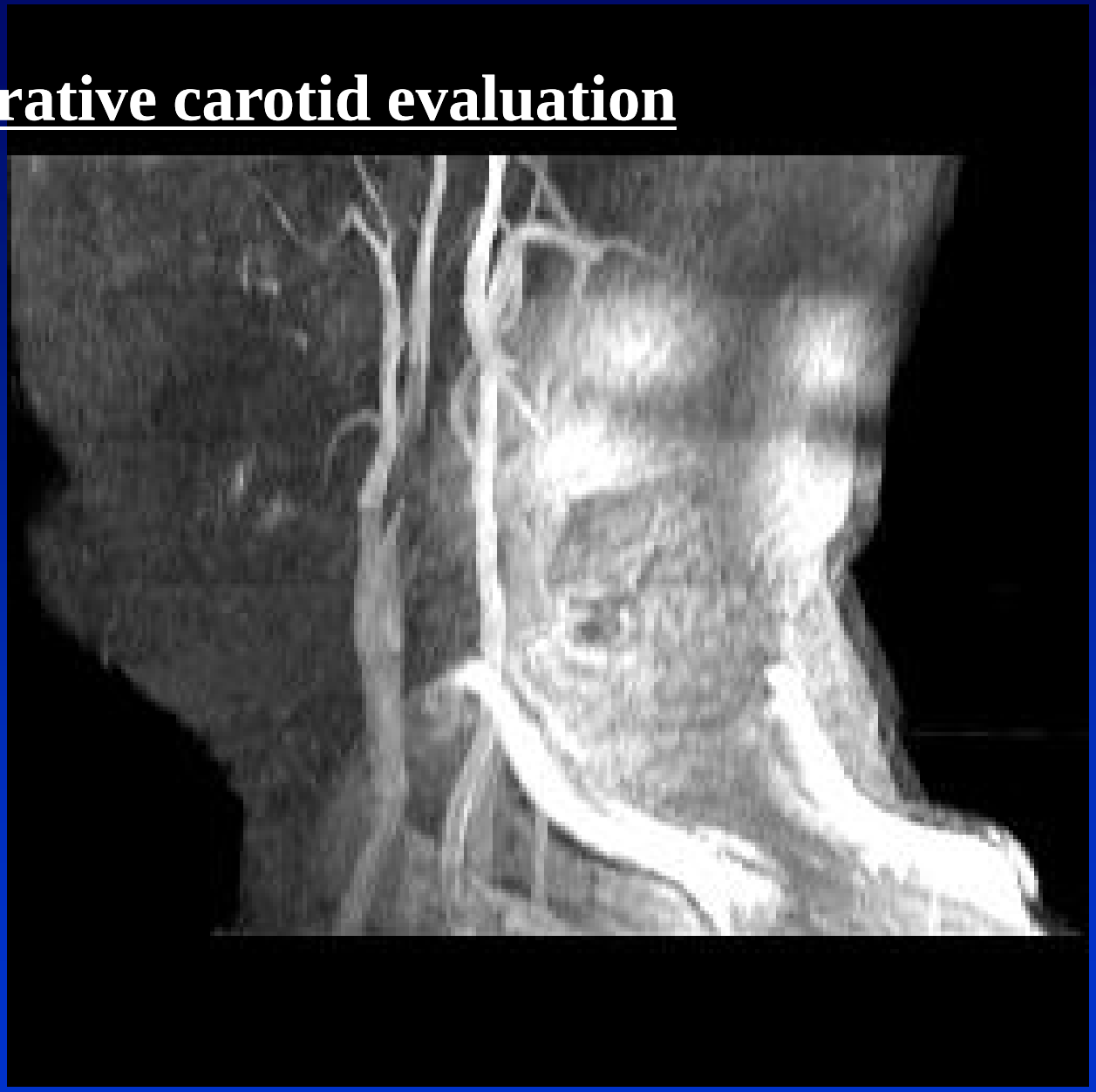
LCA



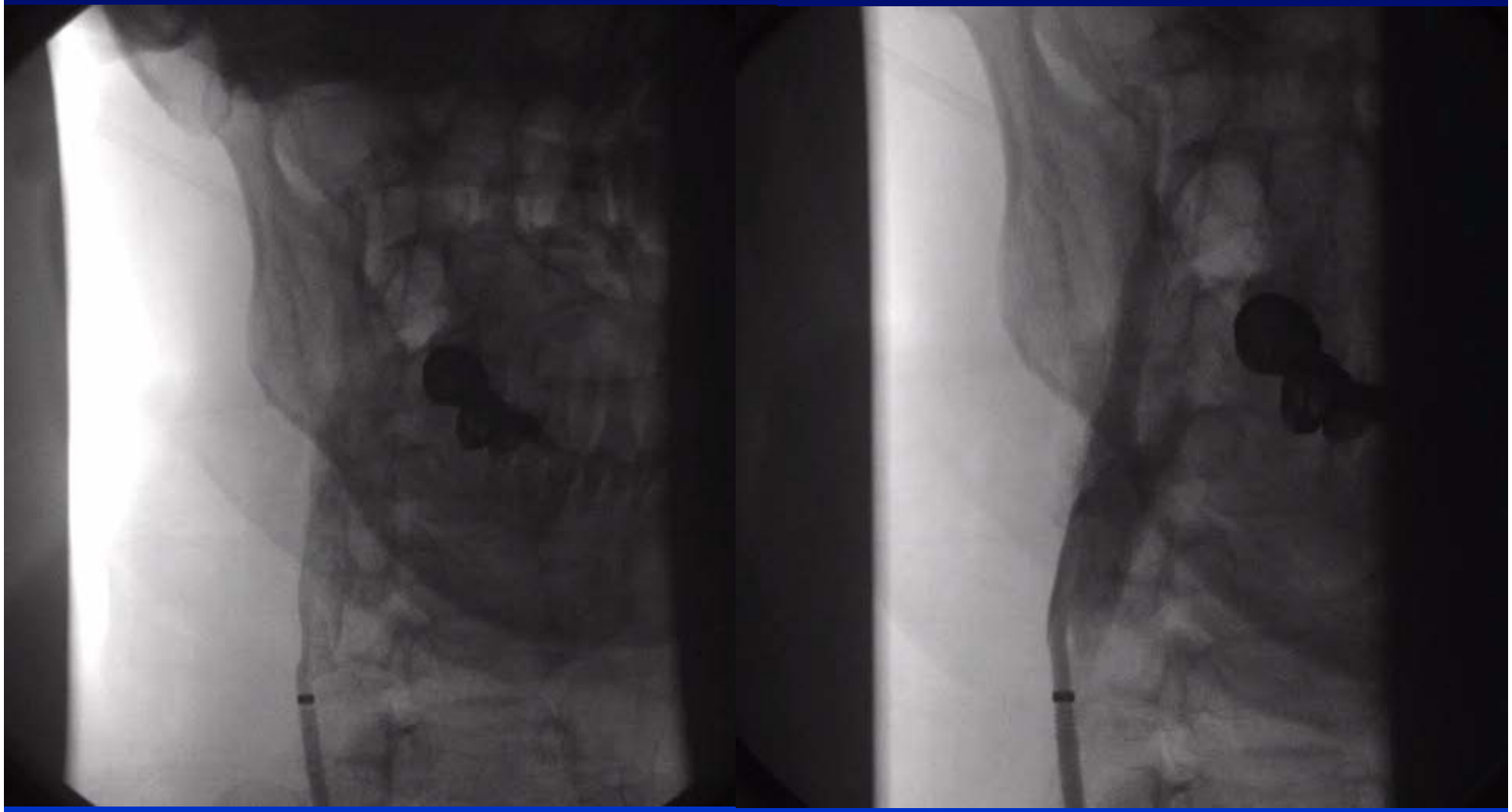
LCA



Preoperative carotid evaluation



Carotid stenting

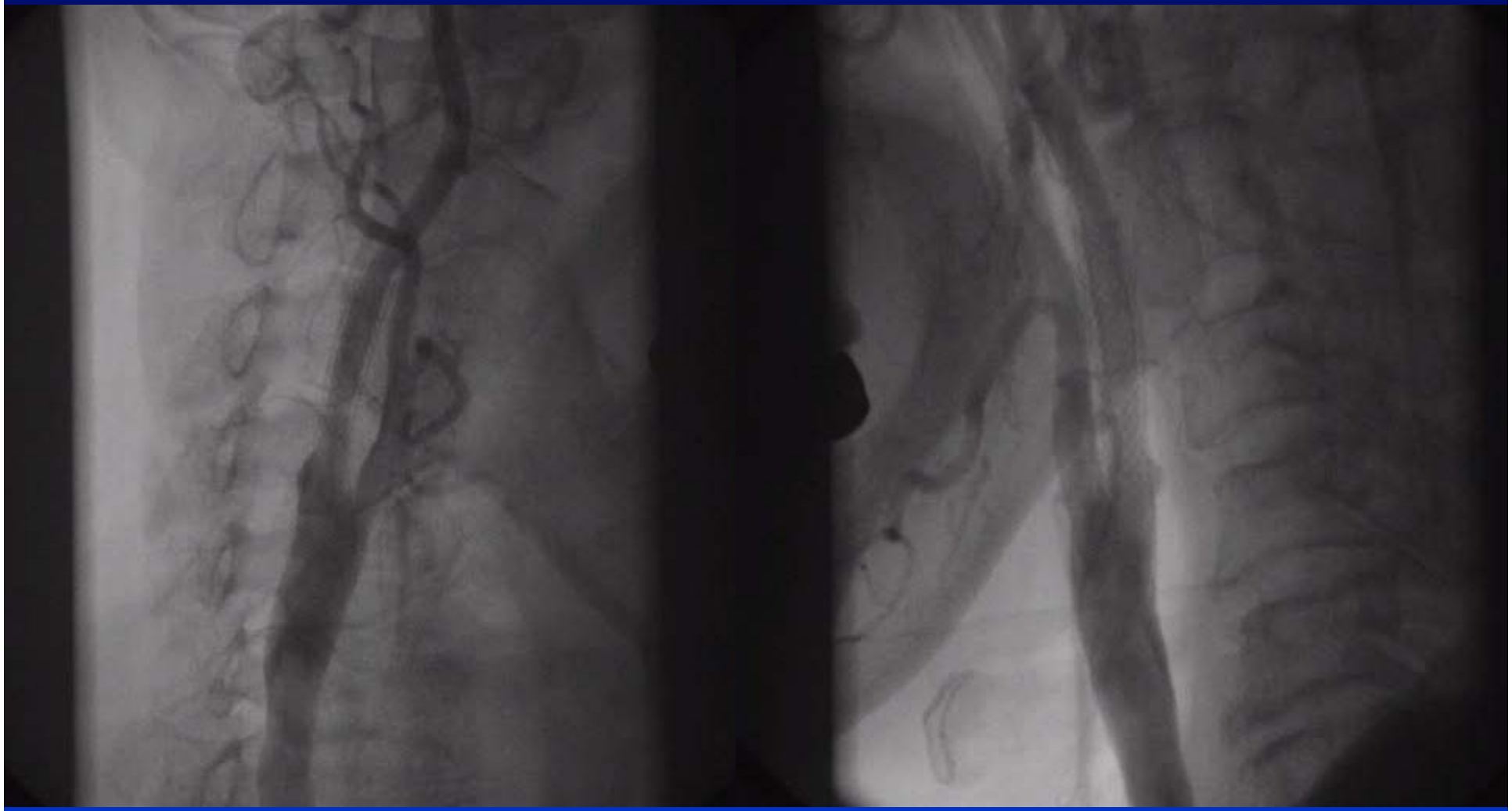


- **1 month later, he admitted to perform CABG**

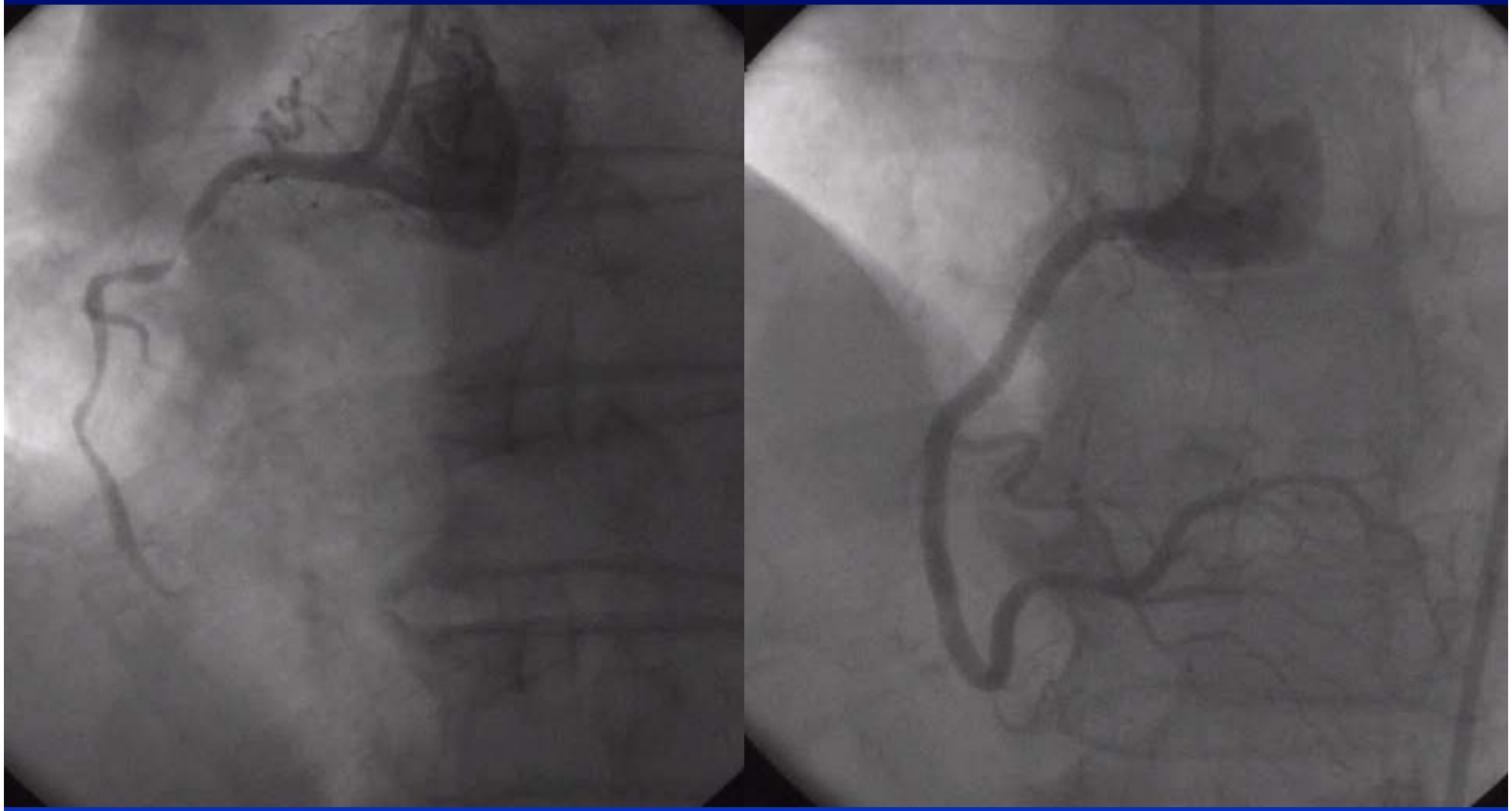
  → Refused surgery

- **Exertional angina (CCS 3) on full antianginal medications**

5 months later



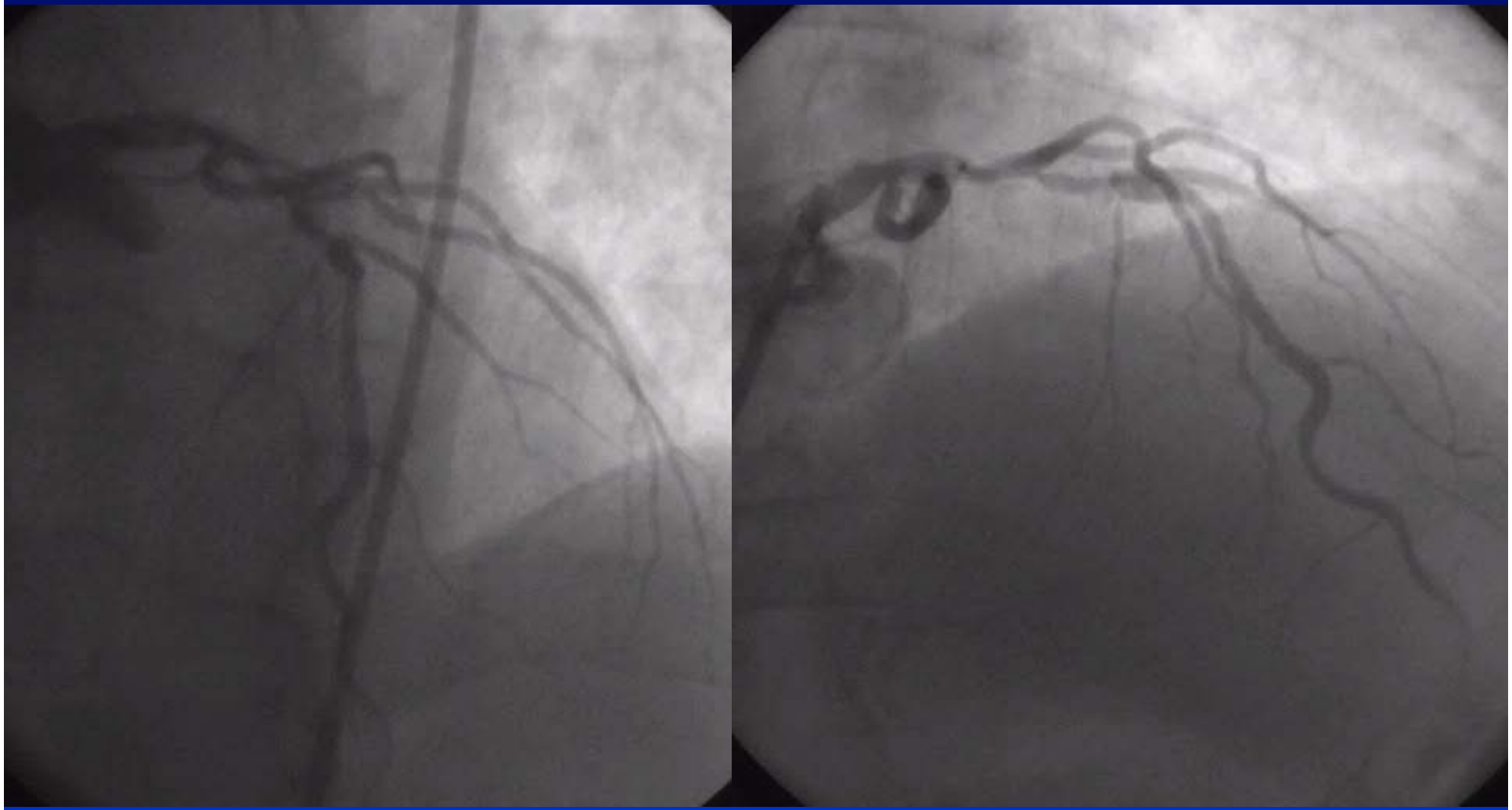
5 months later



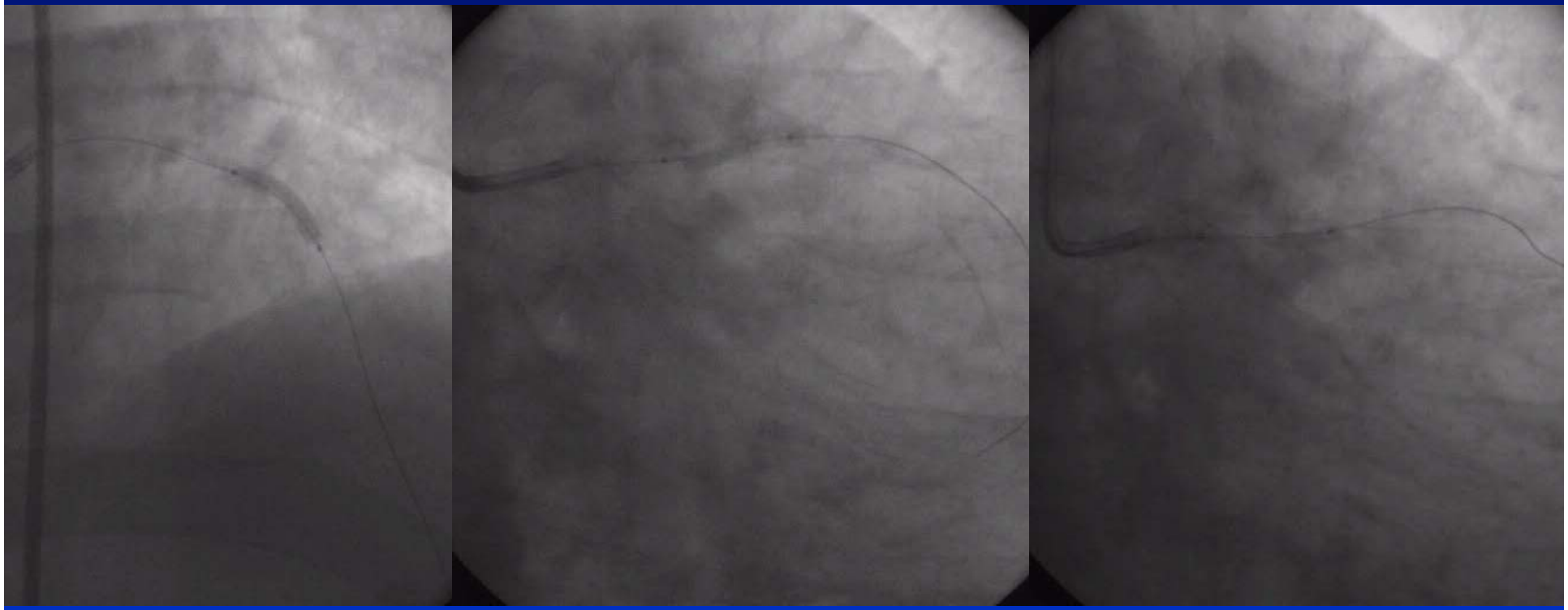
TAXUS Liverté™ 3.0×32 & 3.5×20 mm

LCA

LCA

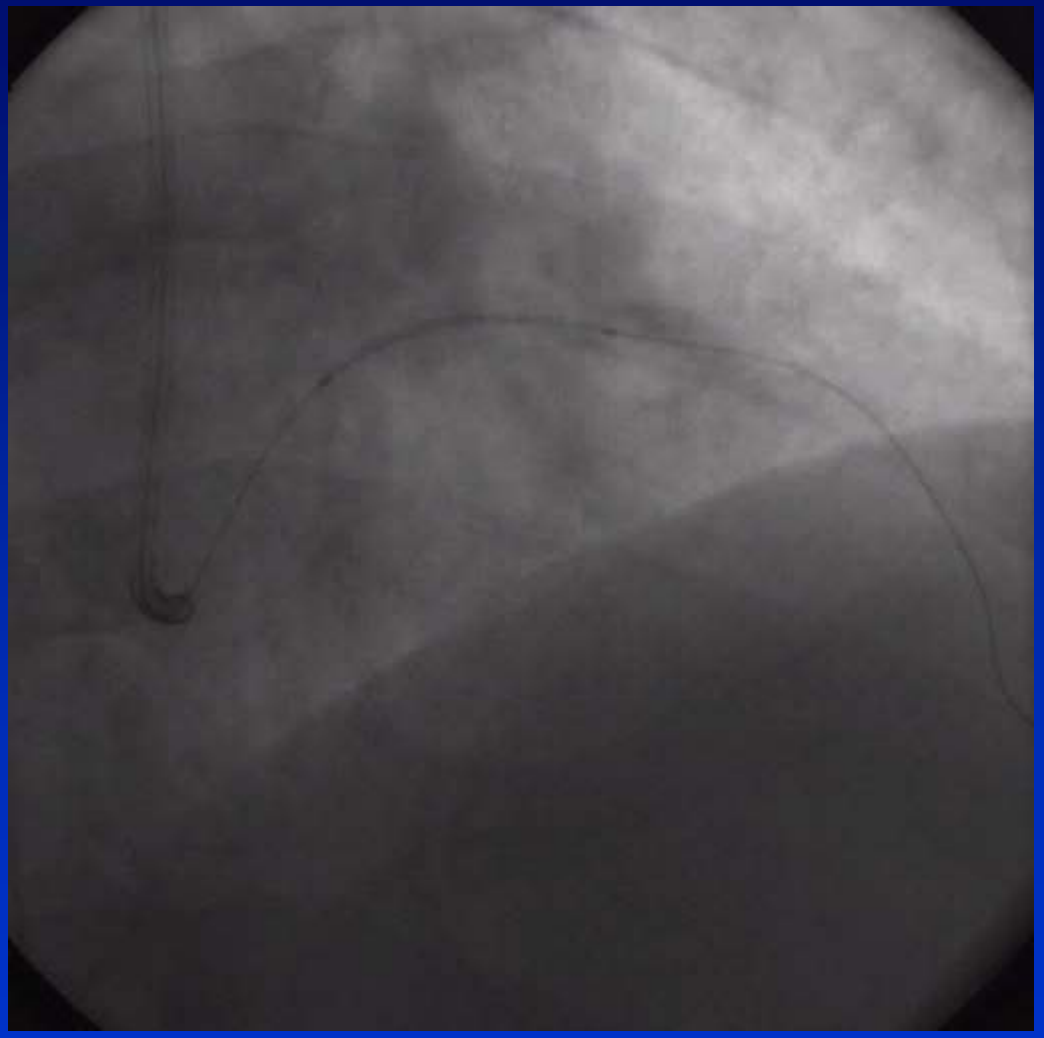


Predilation with 3.0 mm Maverick

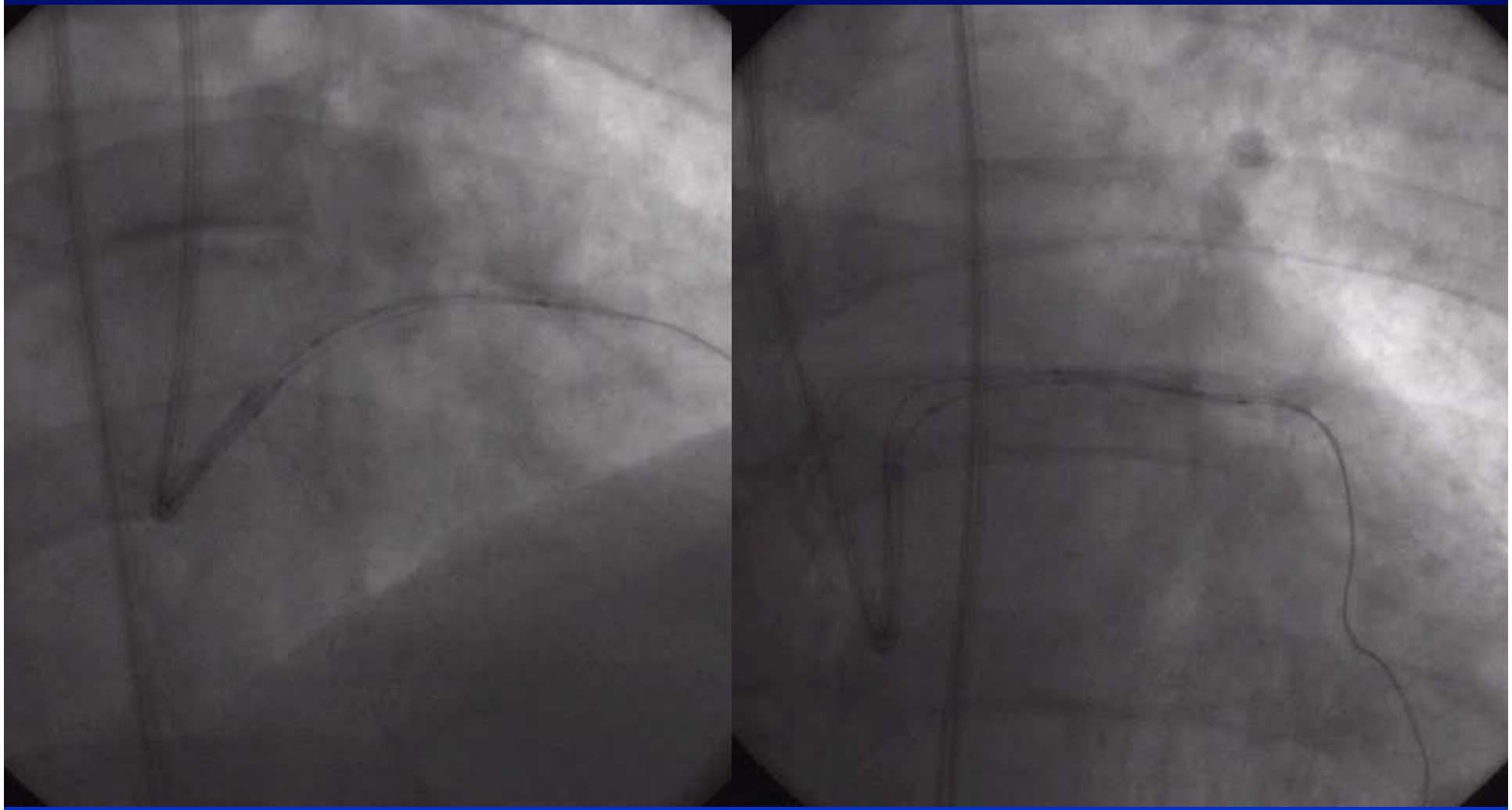


After predilation

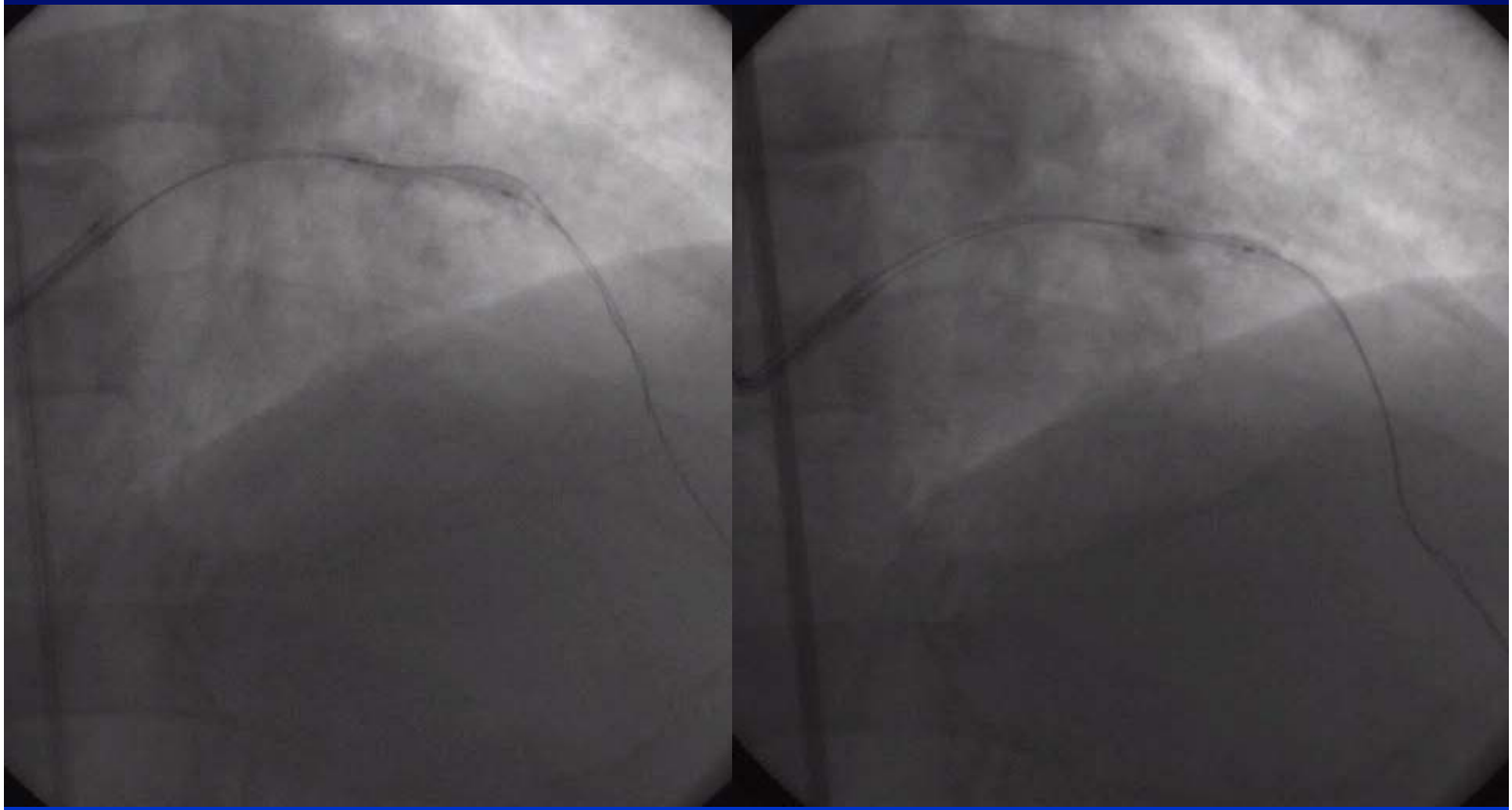
TAXUS Liverté™ 3.0×24 mm

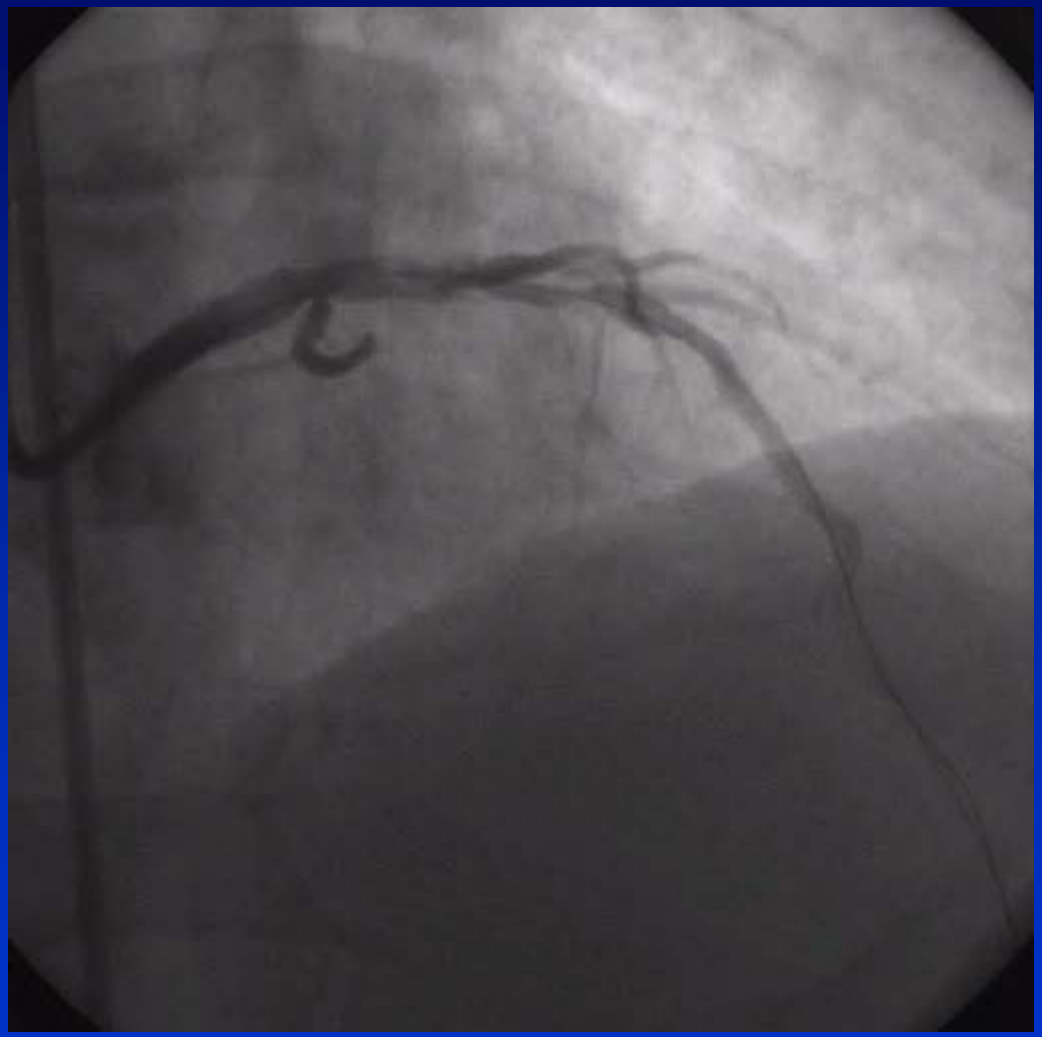


TAXUS Liverté™ 3.0×24 mm

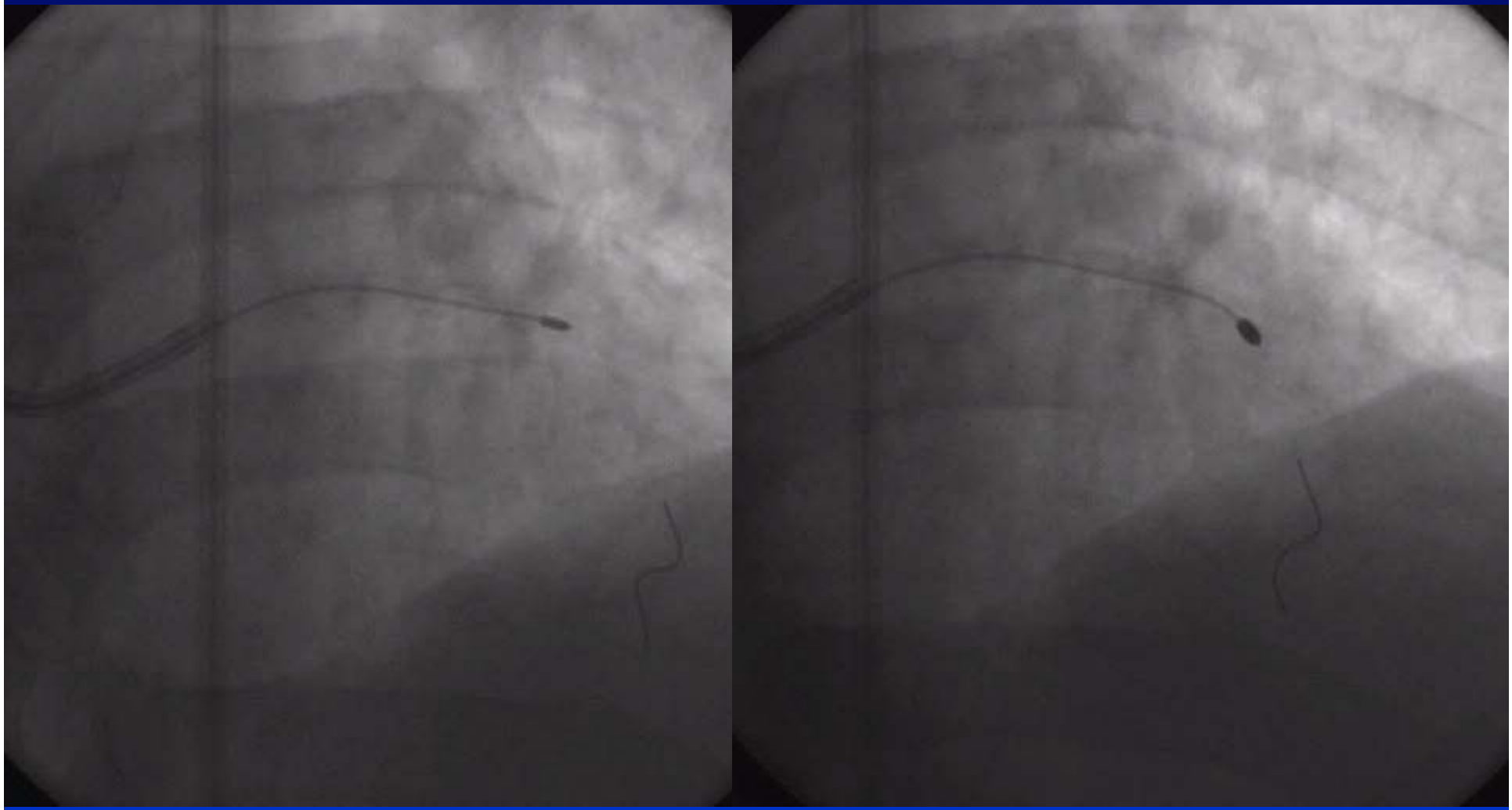


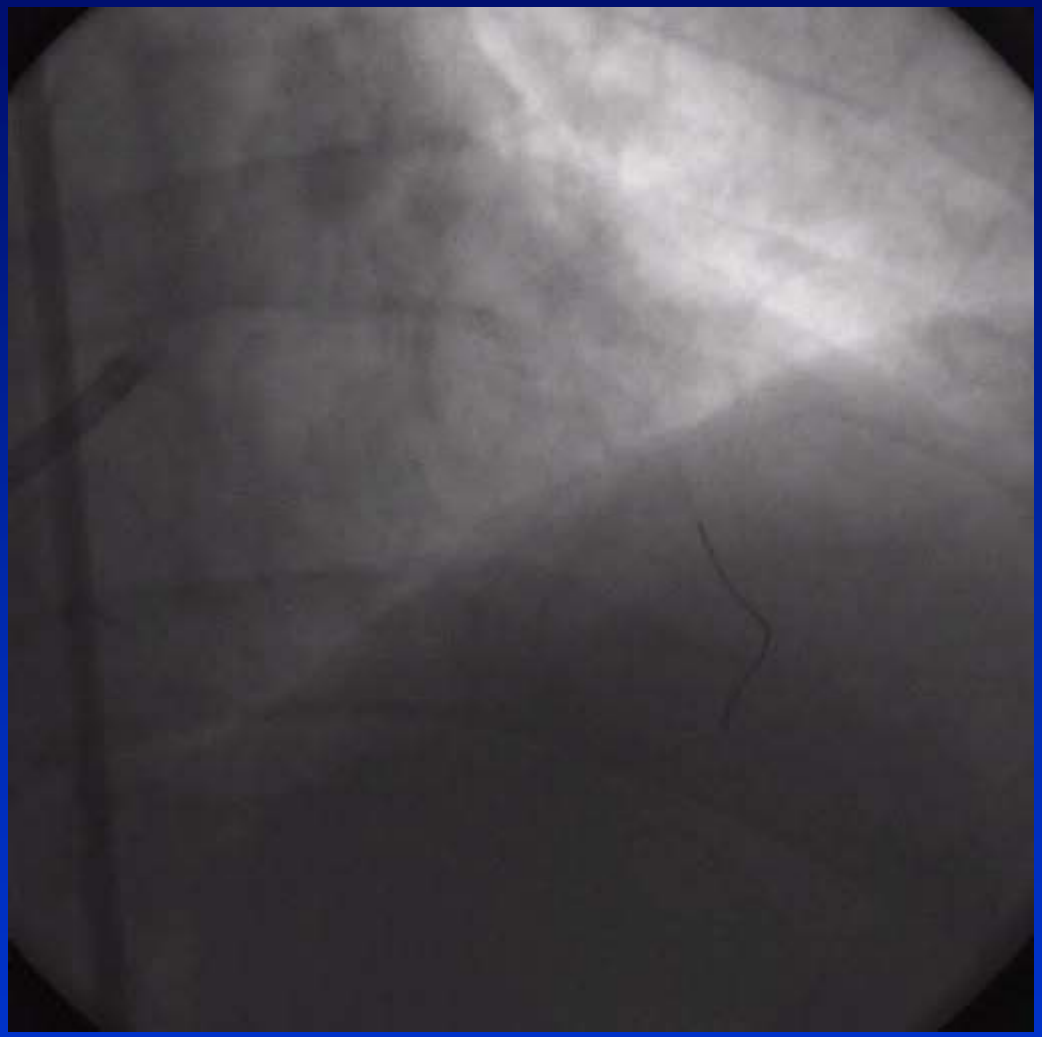
Repeated ballooning (Maverick → Quantum)



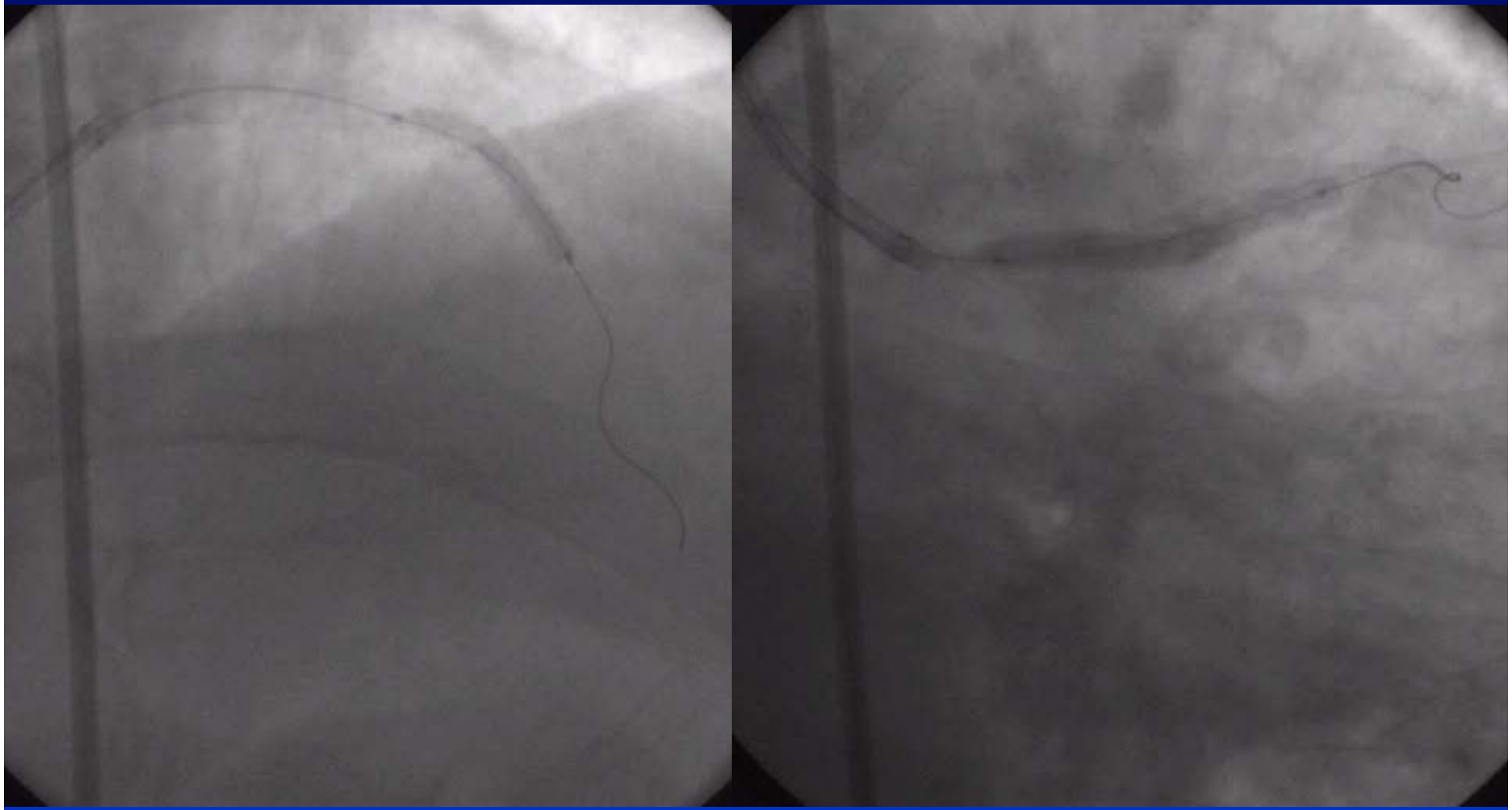


Rotablation with 1.25 & 2.25 burrs

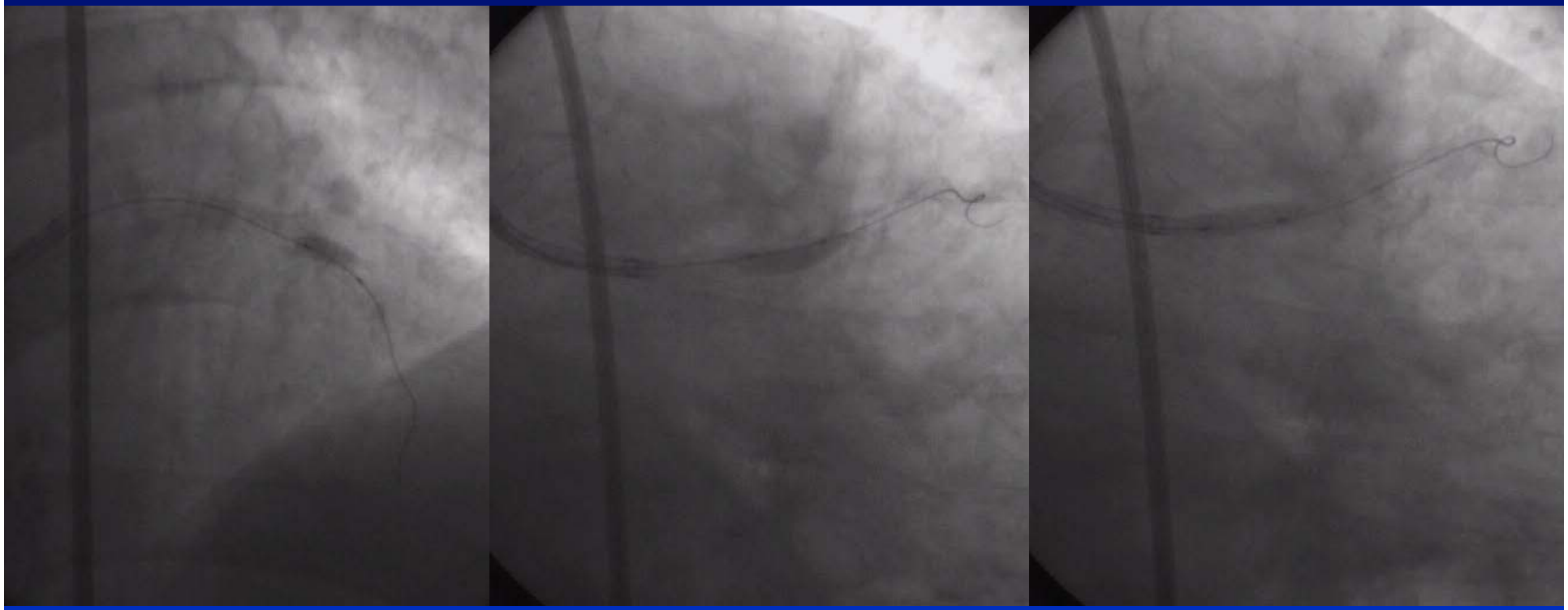




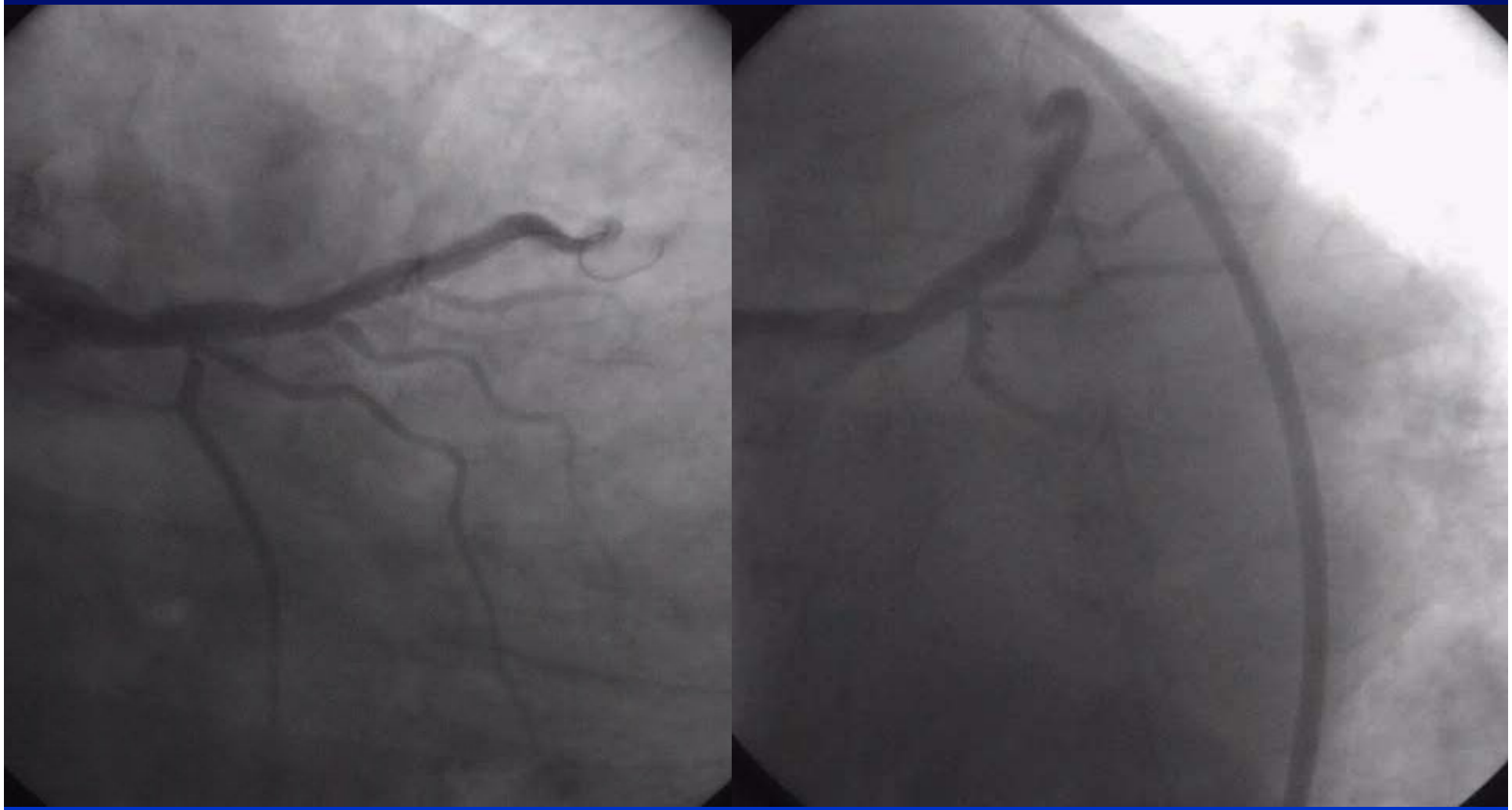
TAXUS Liverté™ 3.0×24 & 3.5×32 mm



High pressure dilatation with 3.5 mm Quantum



Final angiogram



Final angiogram

Case 2

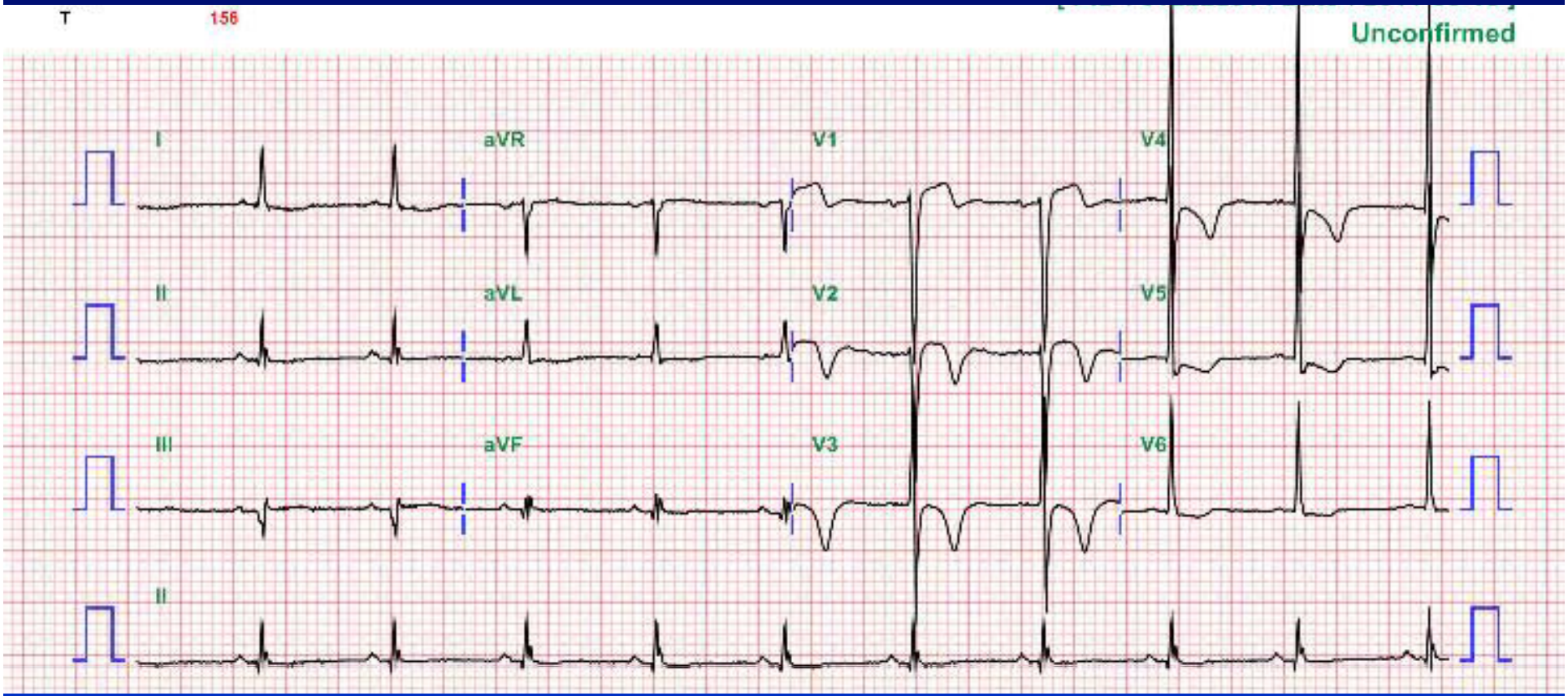
Calcified mLAD lesion

Treated with mother-child technique with rotablation

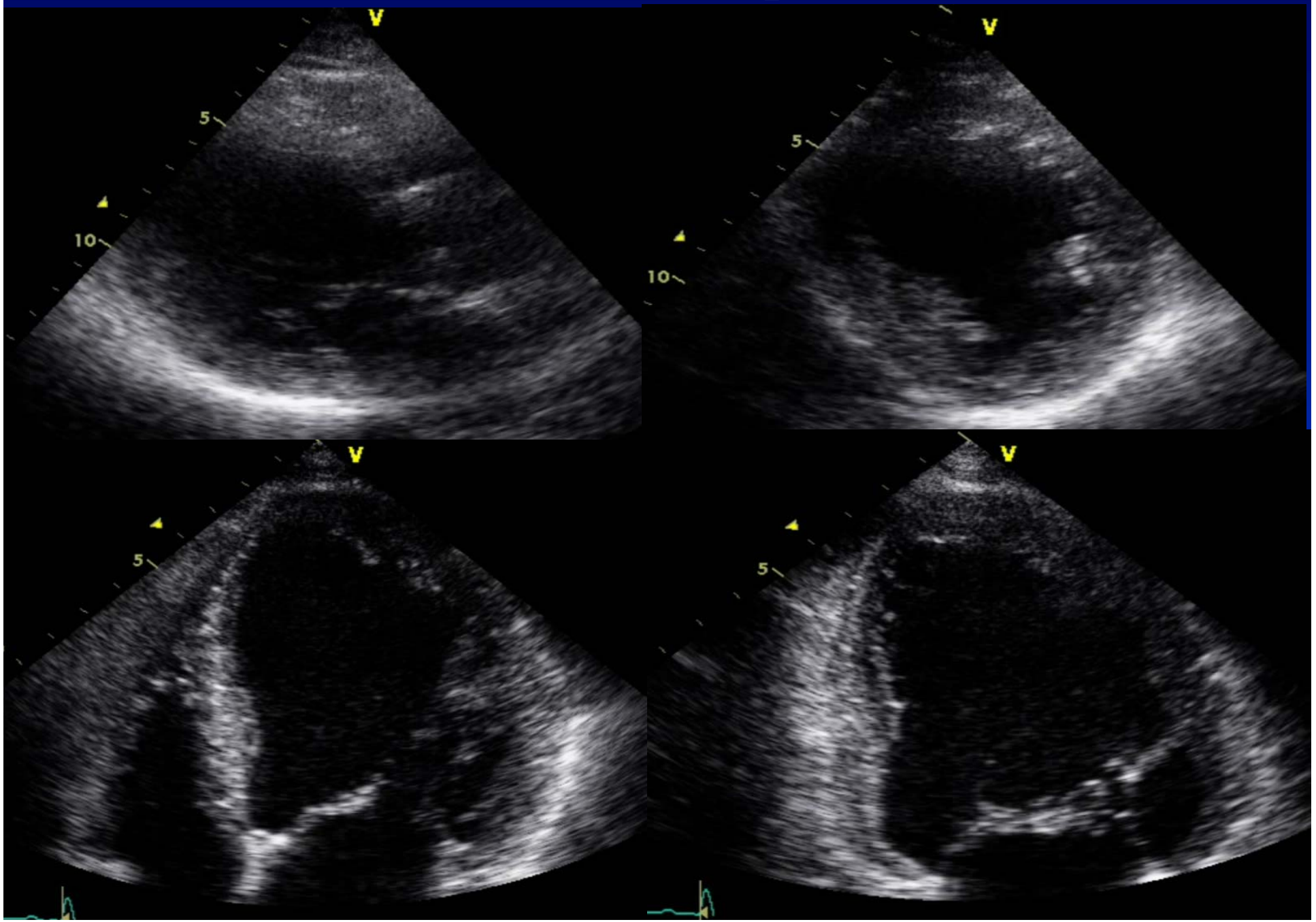
Jae-Hwan Lee, MD, PhD

Cardiovascular Center in Chungnam National University Hospital, Daejeon, Korea

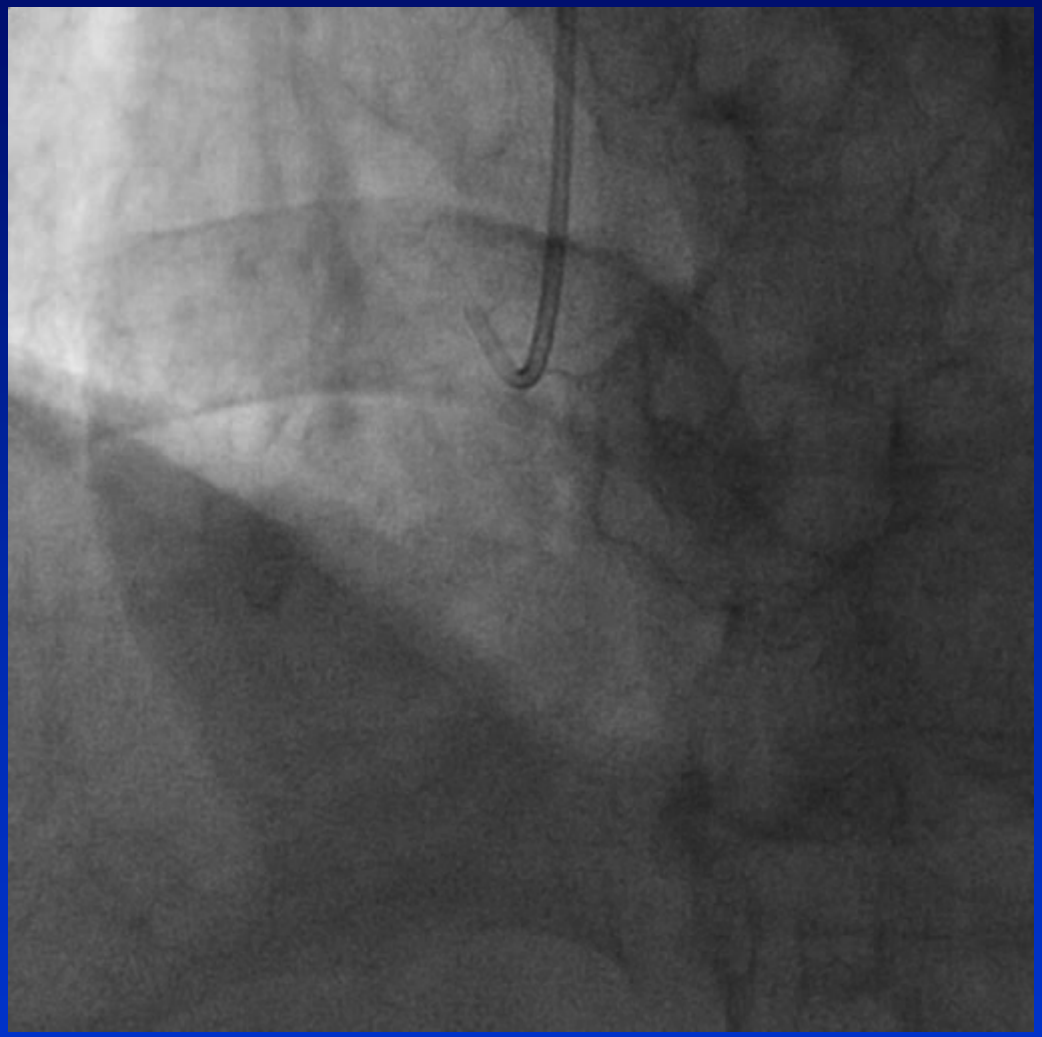
- 75 YO man
- Effort angina & DOE III for 3 months
- Unstable angina I_B
- Hypertension, 30 PY exsmoker
- ECG; Q inferior, T-inv at V1-V5
- EF 33%, Multiple RWMA
- S/P RCA stenting (3DA)


T
156
Unconfirmed
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
II

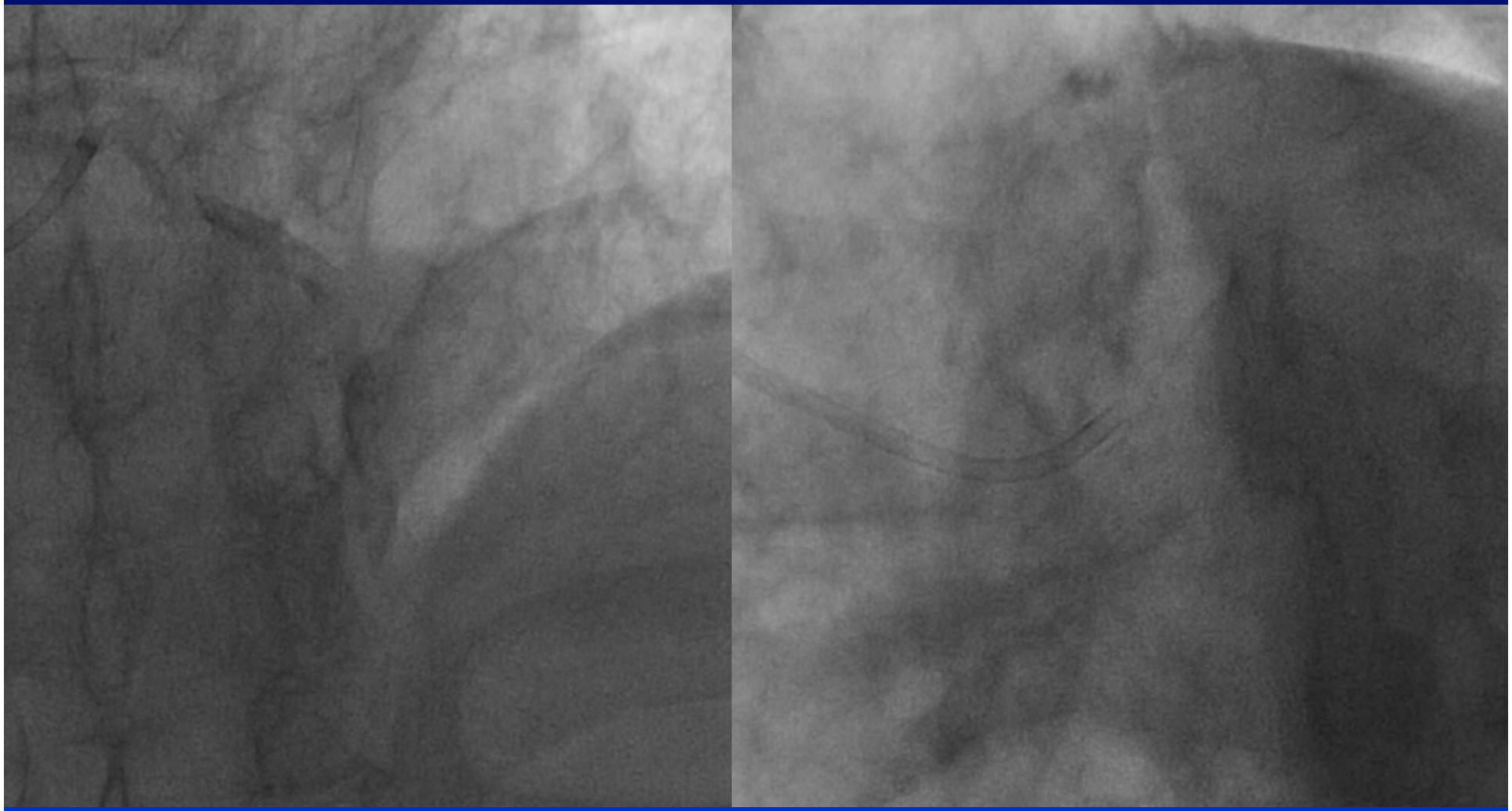
•EchoCG; LV EF=33%, Multiple RWMA



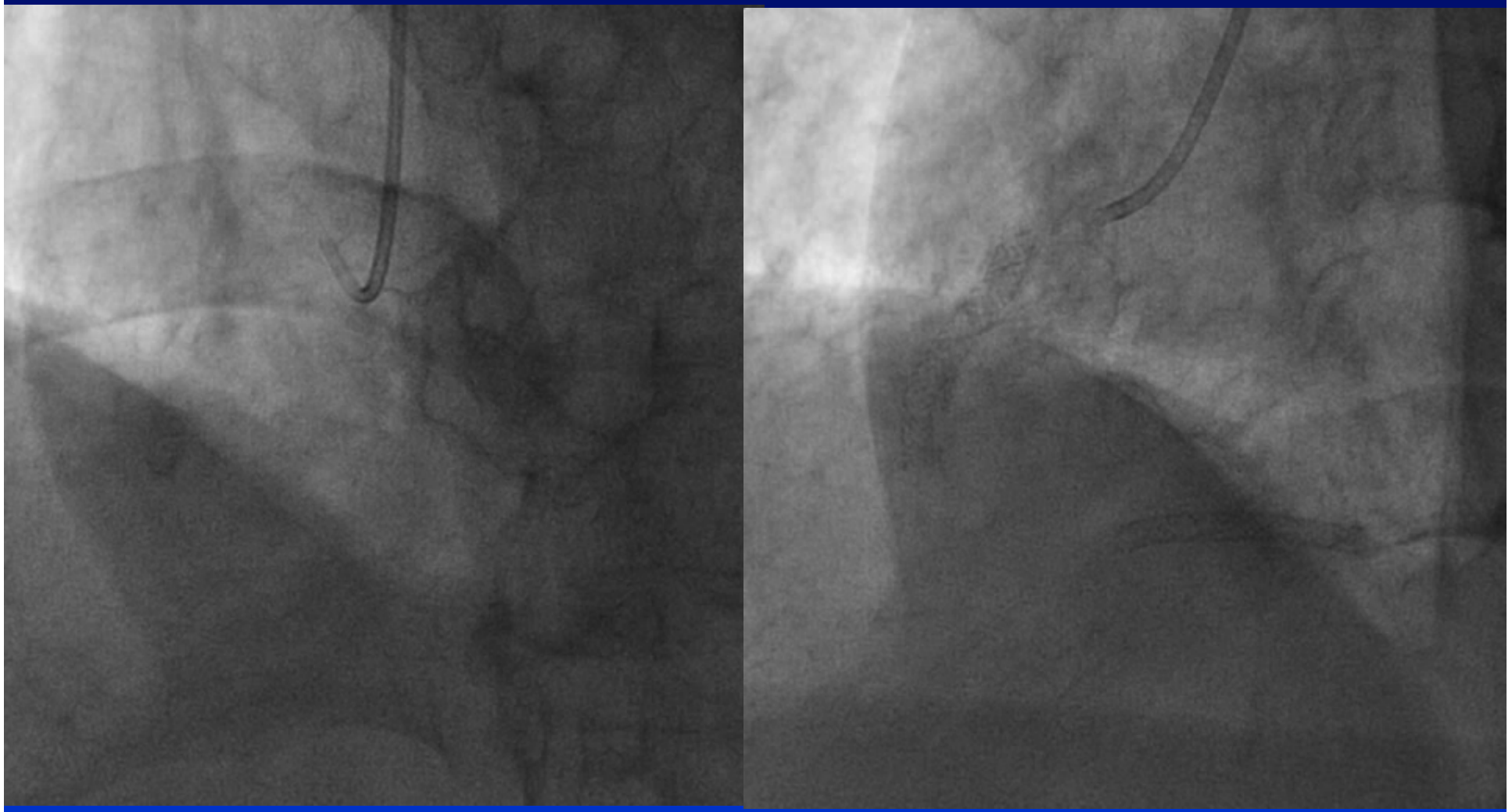
Baseline RCA



Baseline LCA

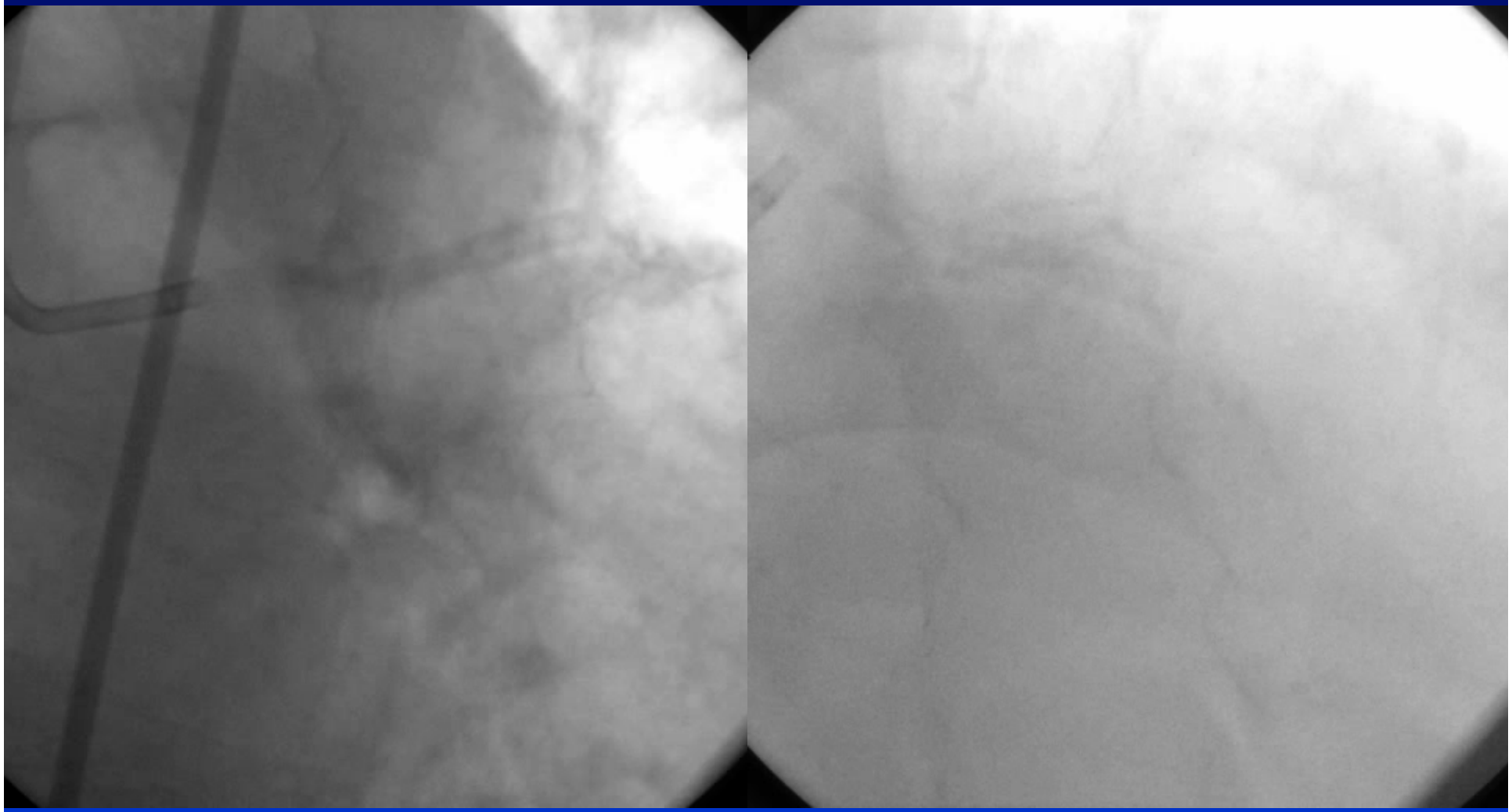


RCA intervention

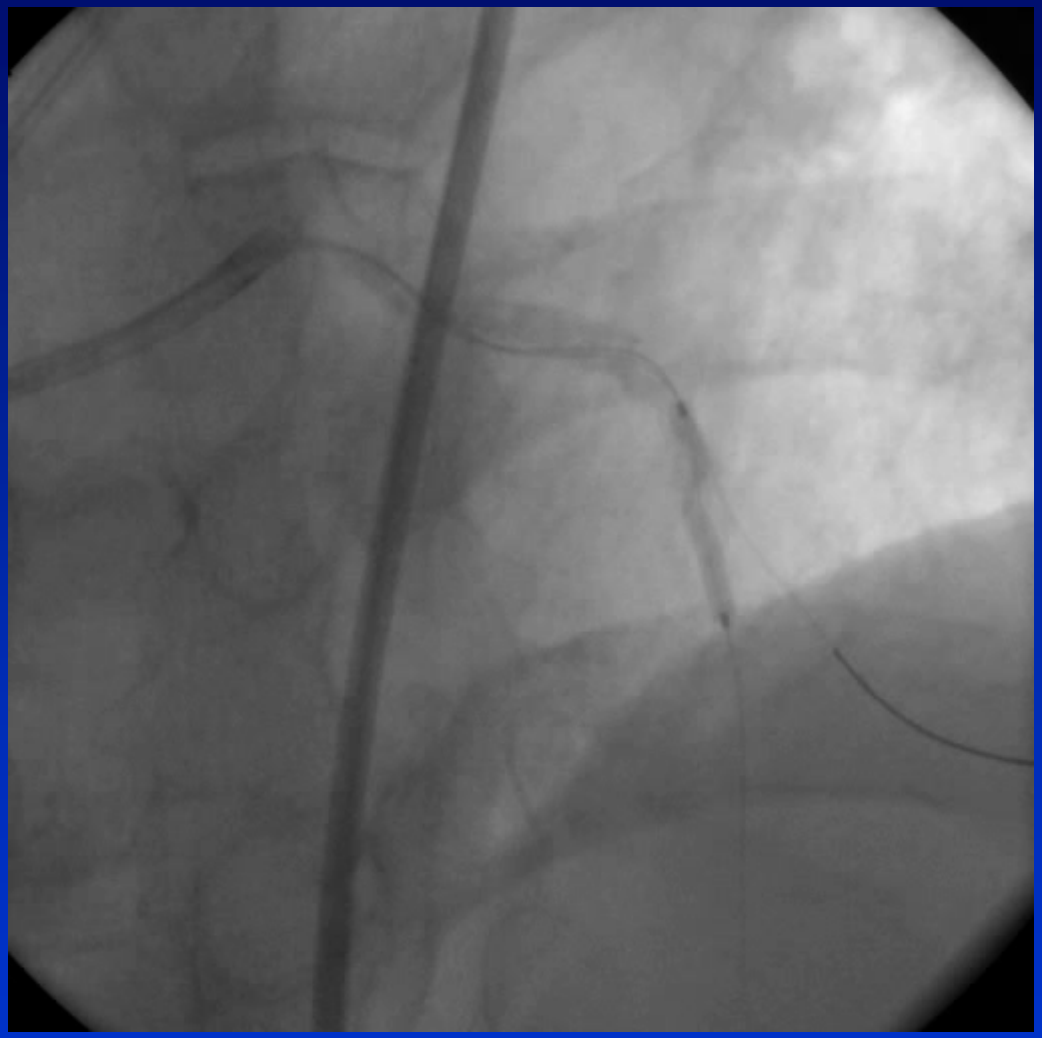


Promus 3.5×28 mm and 3.0×28 mm

Transfemoral 8Fr, JL4

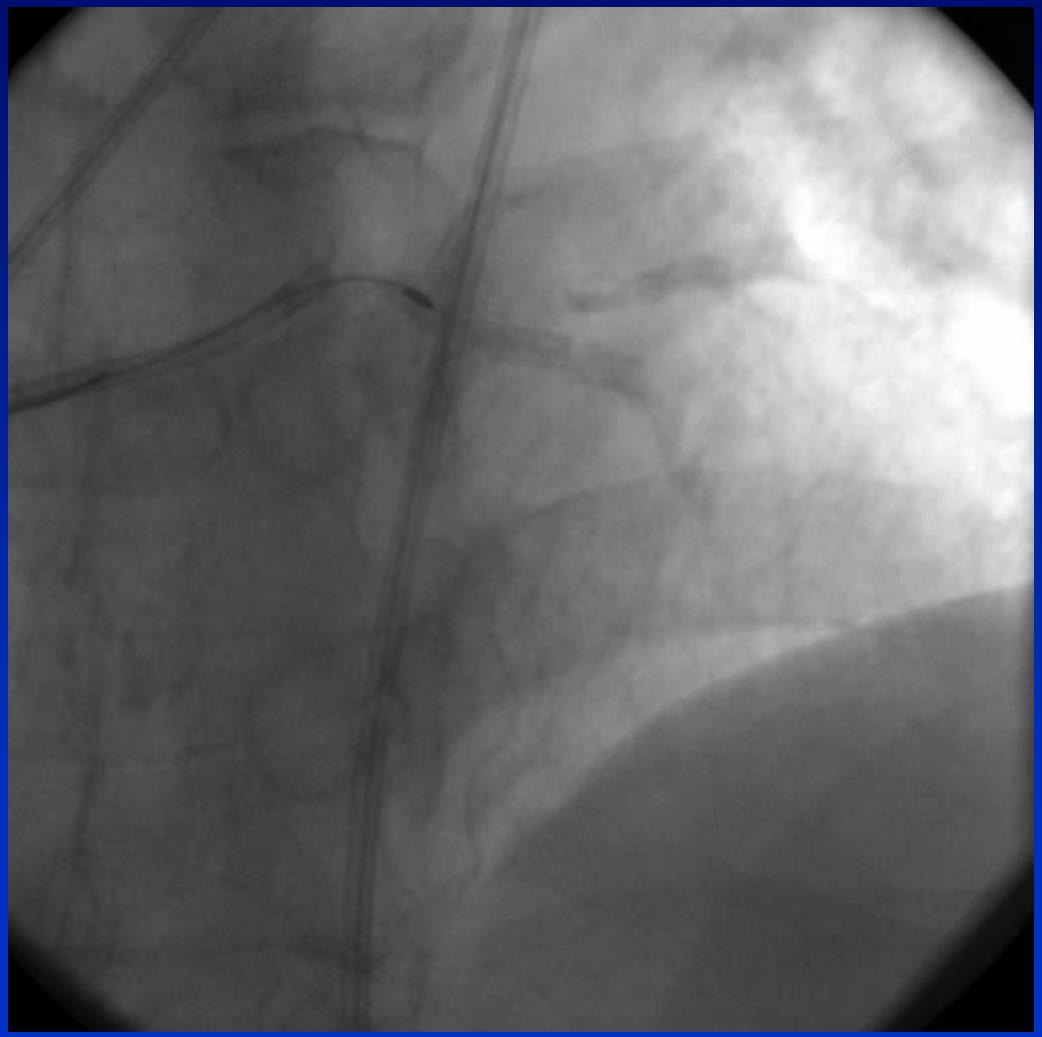


2.5mm balloon at p-mLAD



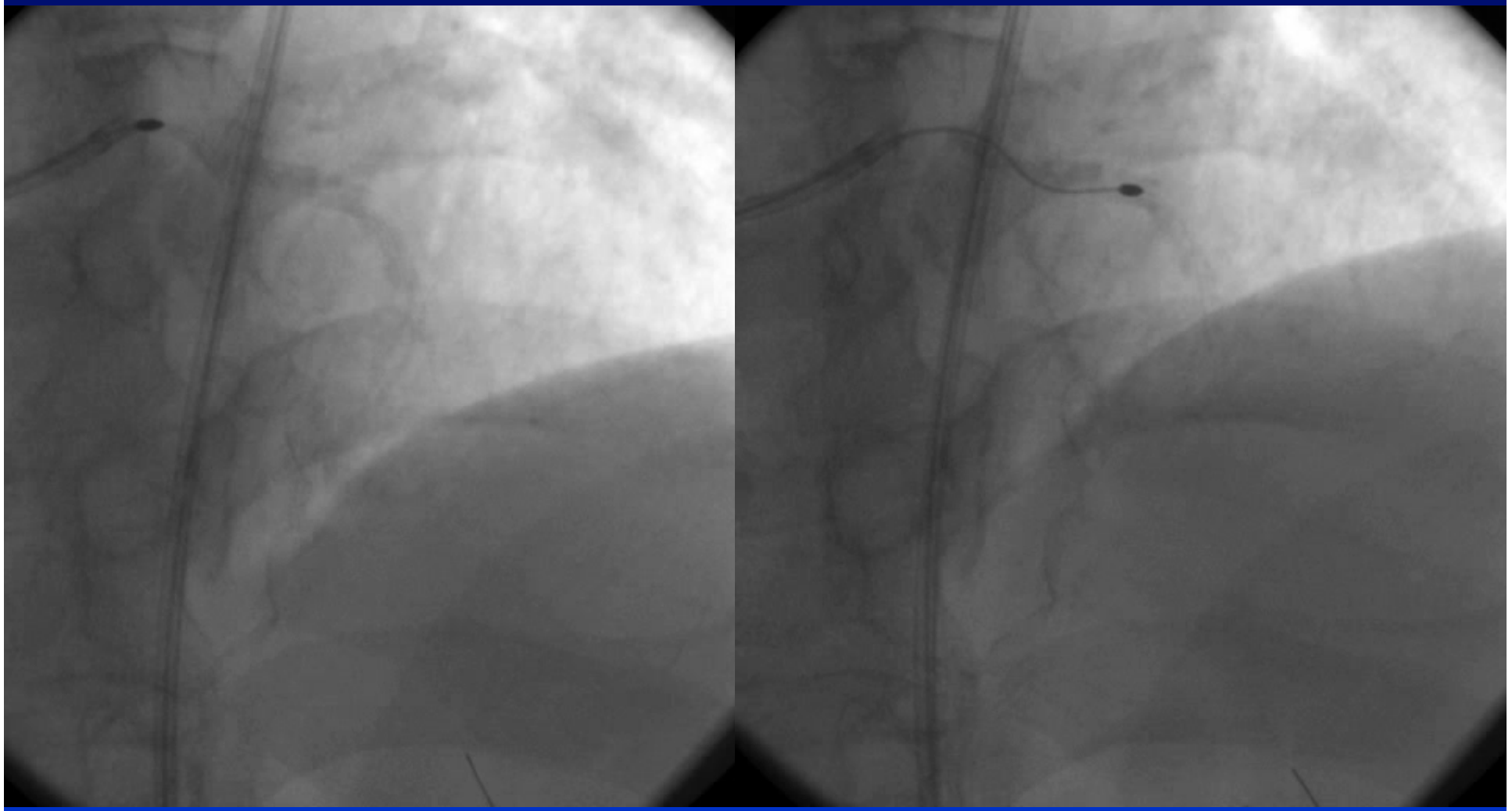
Undilatable

Rotablation



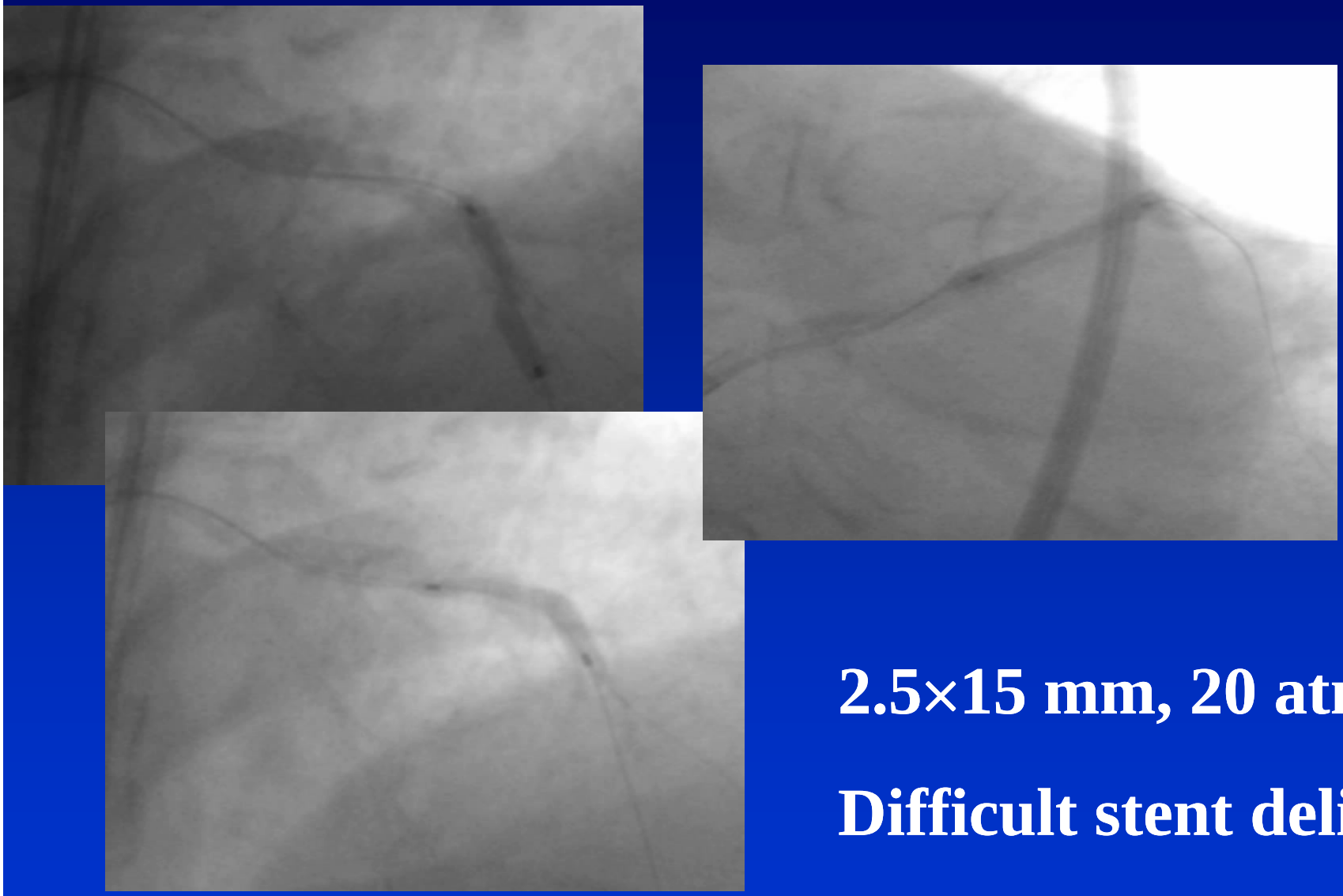
1.25 mm burr

Rotablation



1.75 mm burr

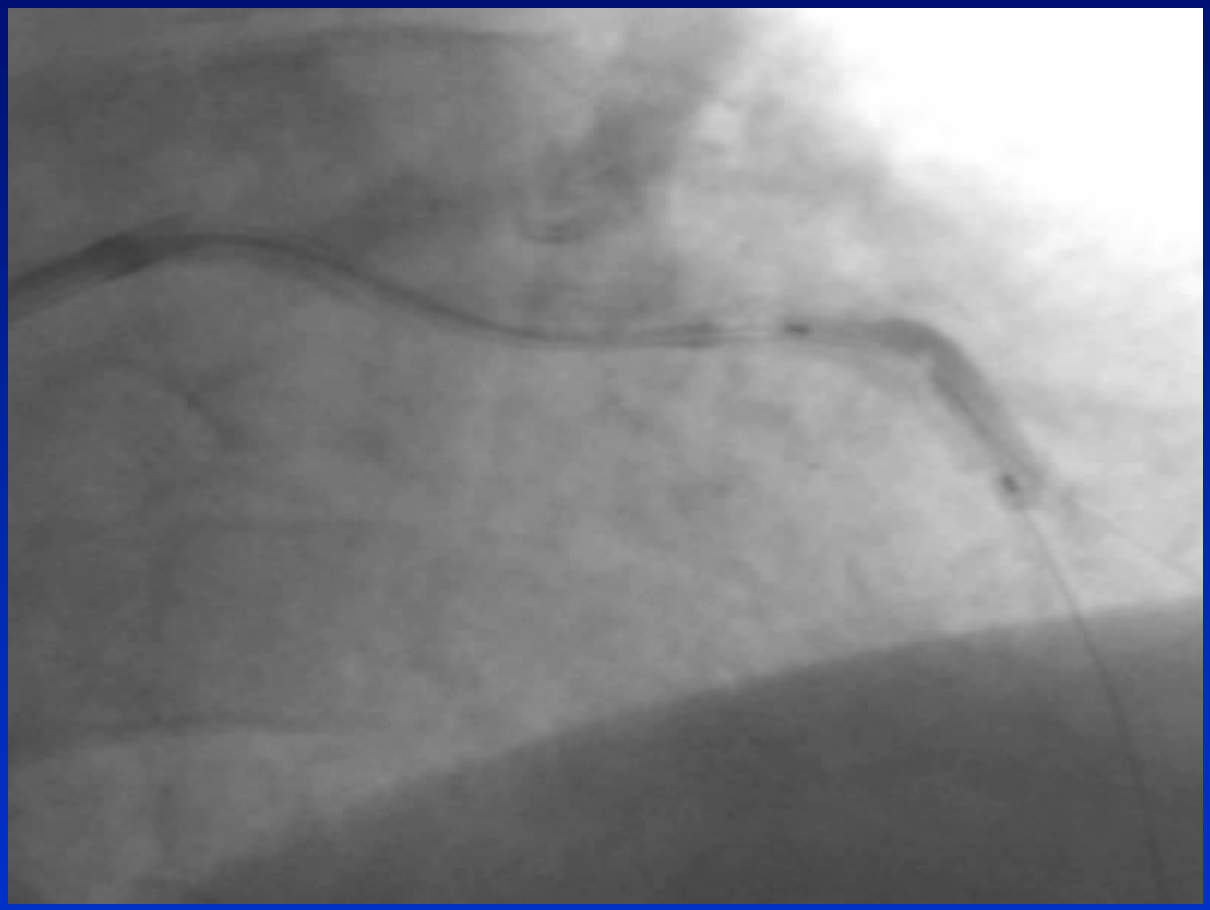
Balloon dilatation



2.5×15 mm, 20 atm

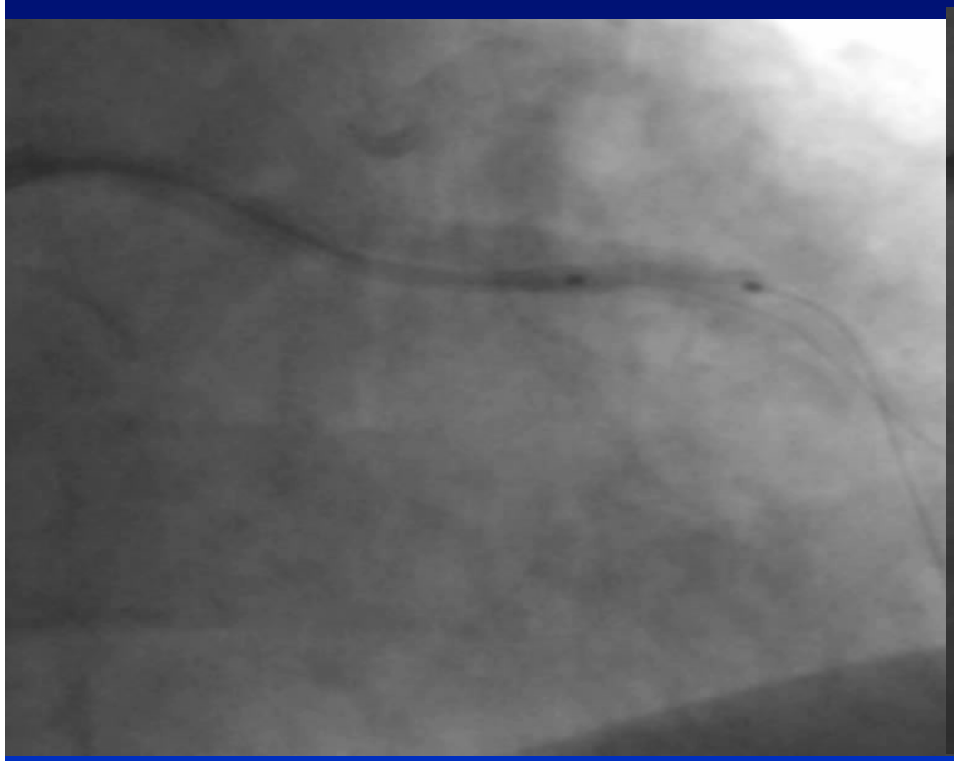
Difficult stent delivery

Mother-Child Technique



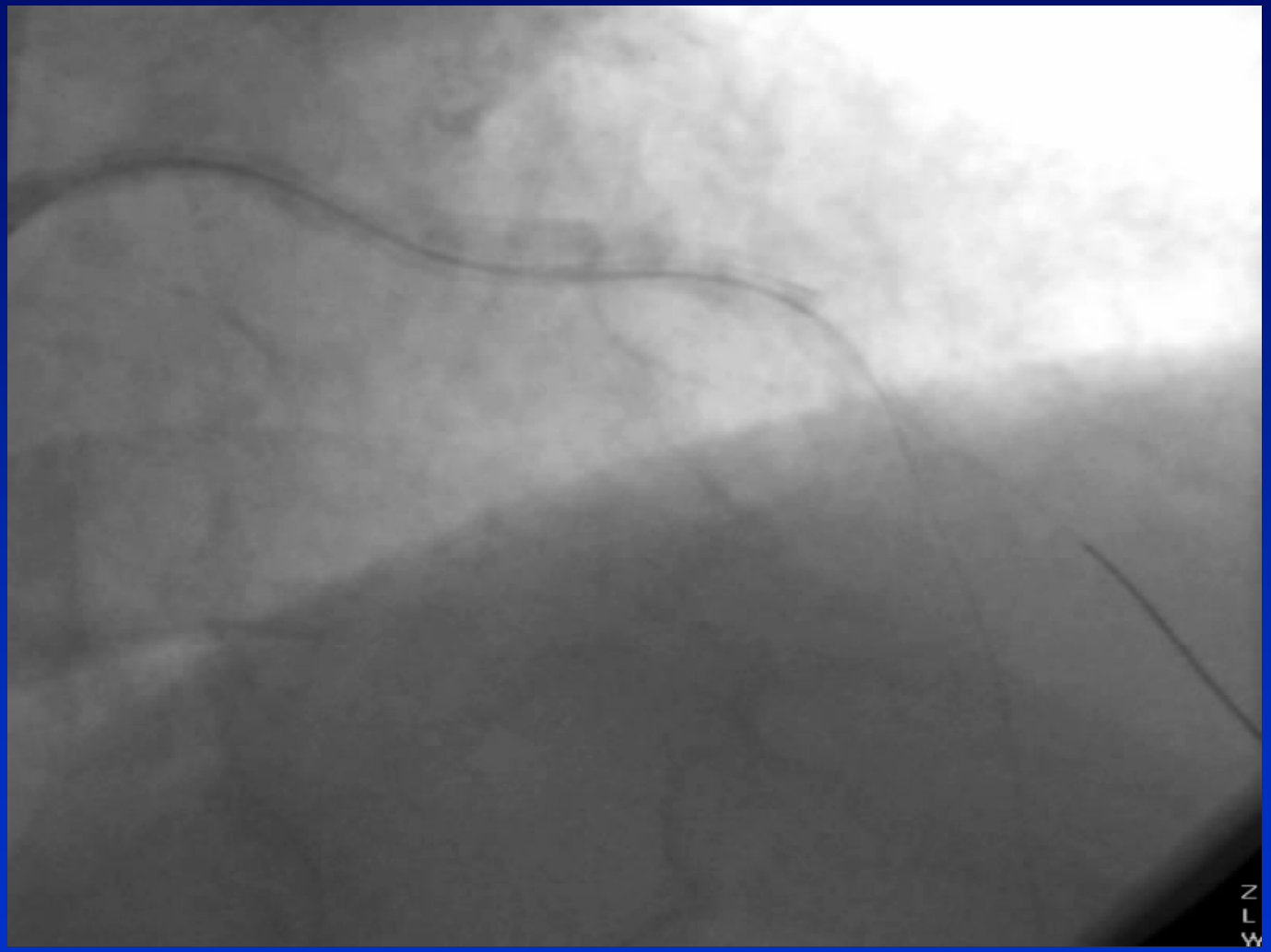
Quantum 3.0×15 mm 20 atm
Still underexpanded

Mother-Child Technique



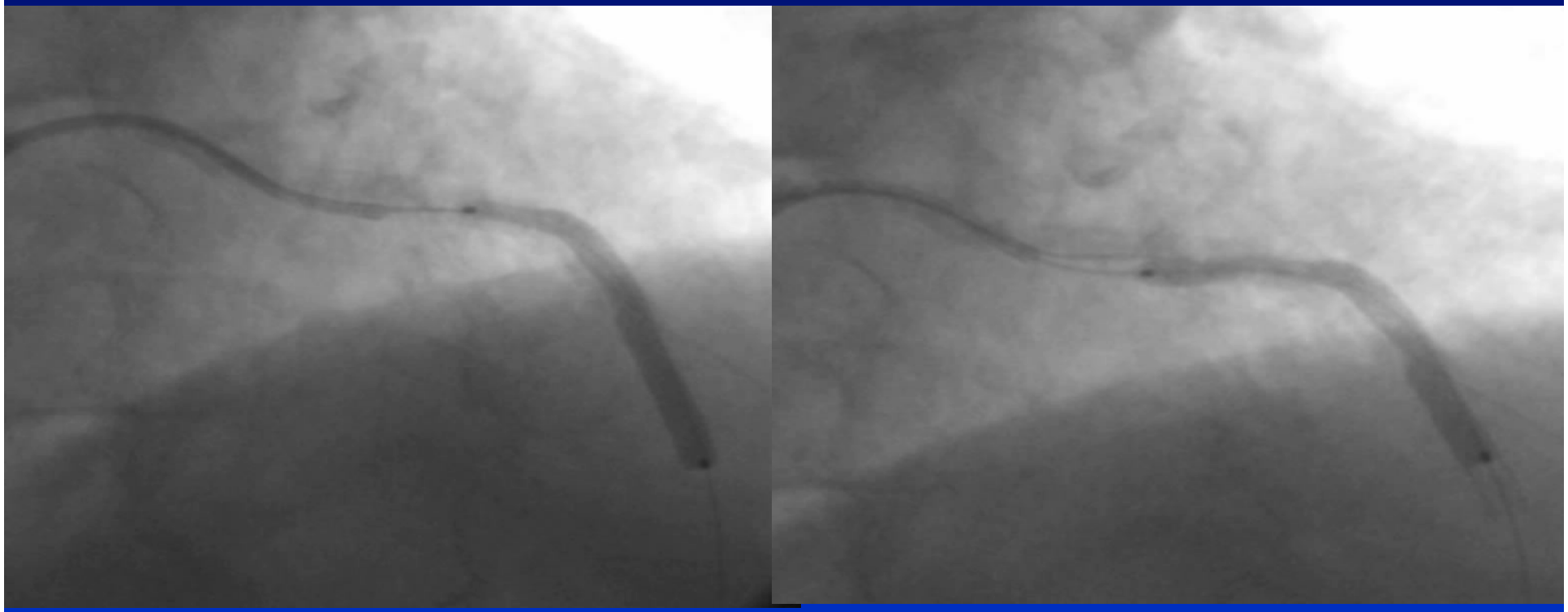
Cutting balloon 3.0, 10 atm
Ruptured

Mother-Child Technique



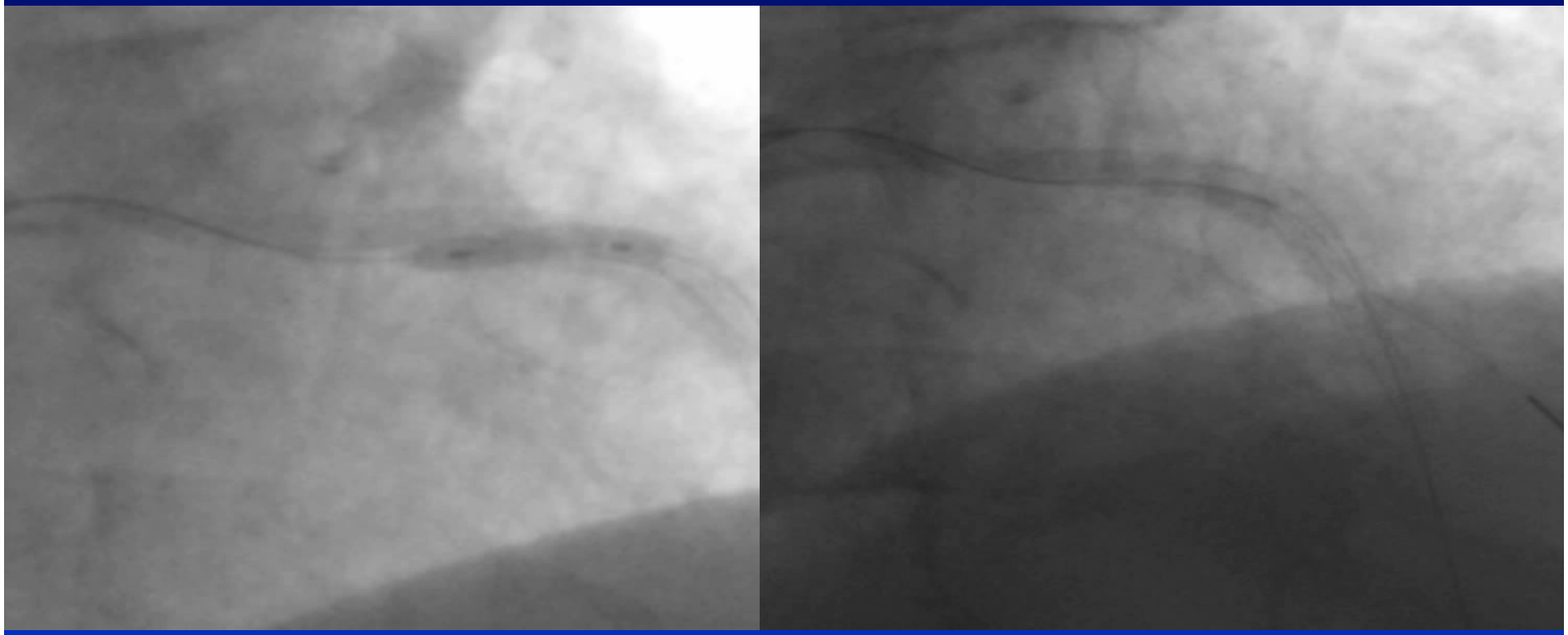
After Cutting balloon 3.0 mm

Mother-Child Technique



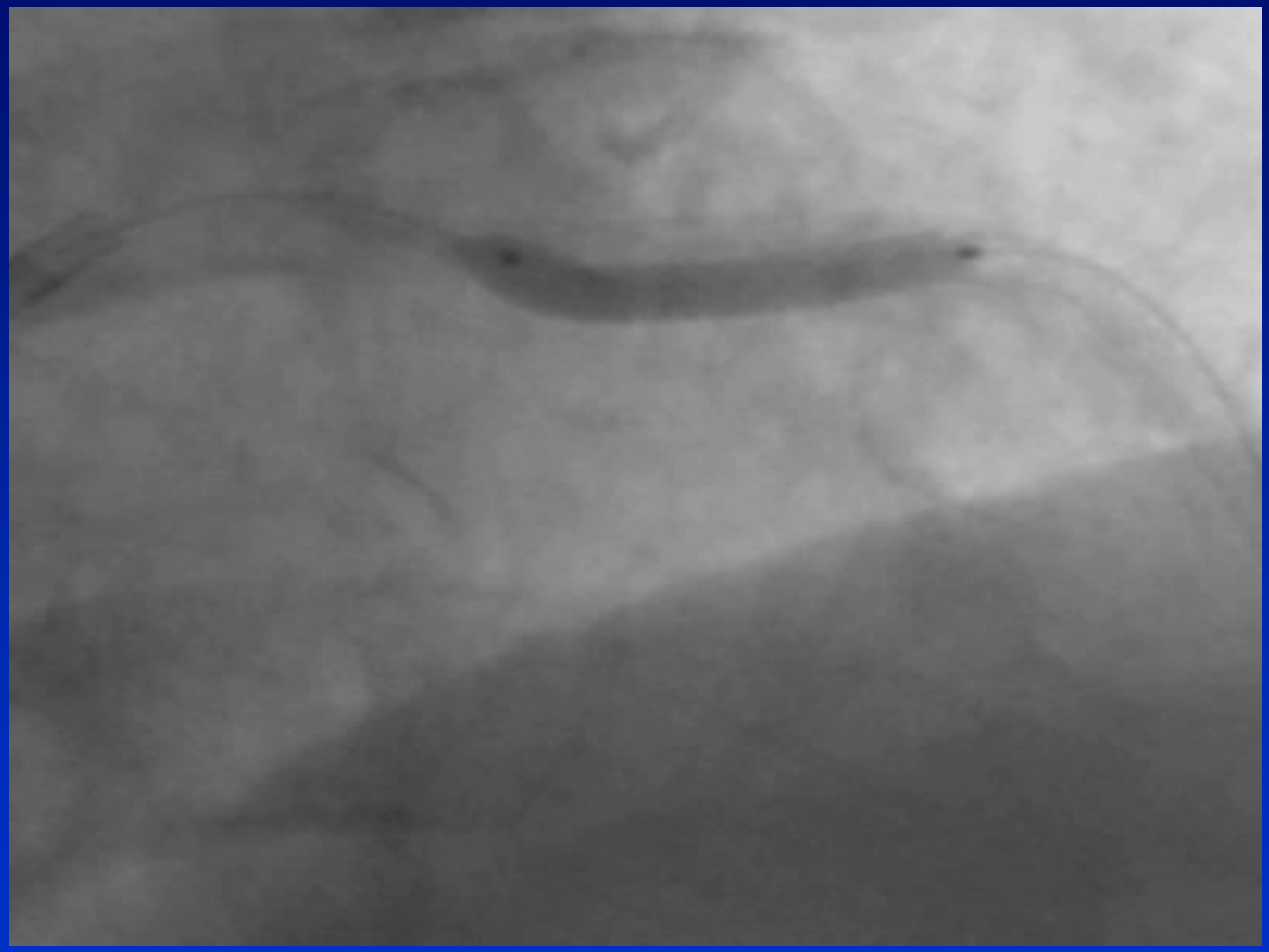
Cypher 3.0×33mm, 10 → 16 atm

Mother-Child Technique



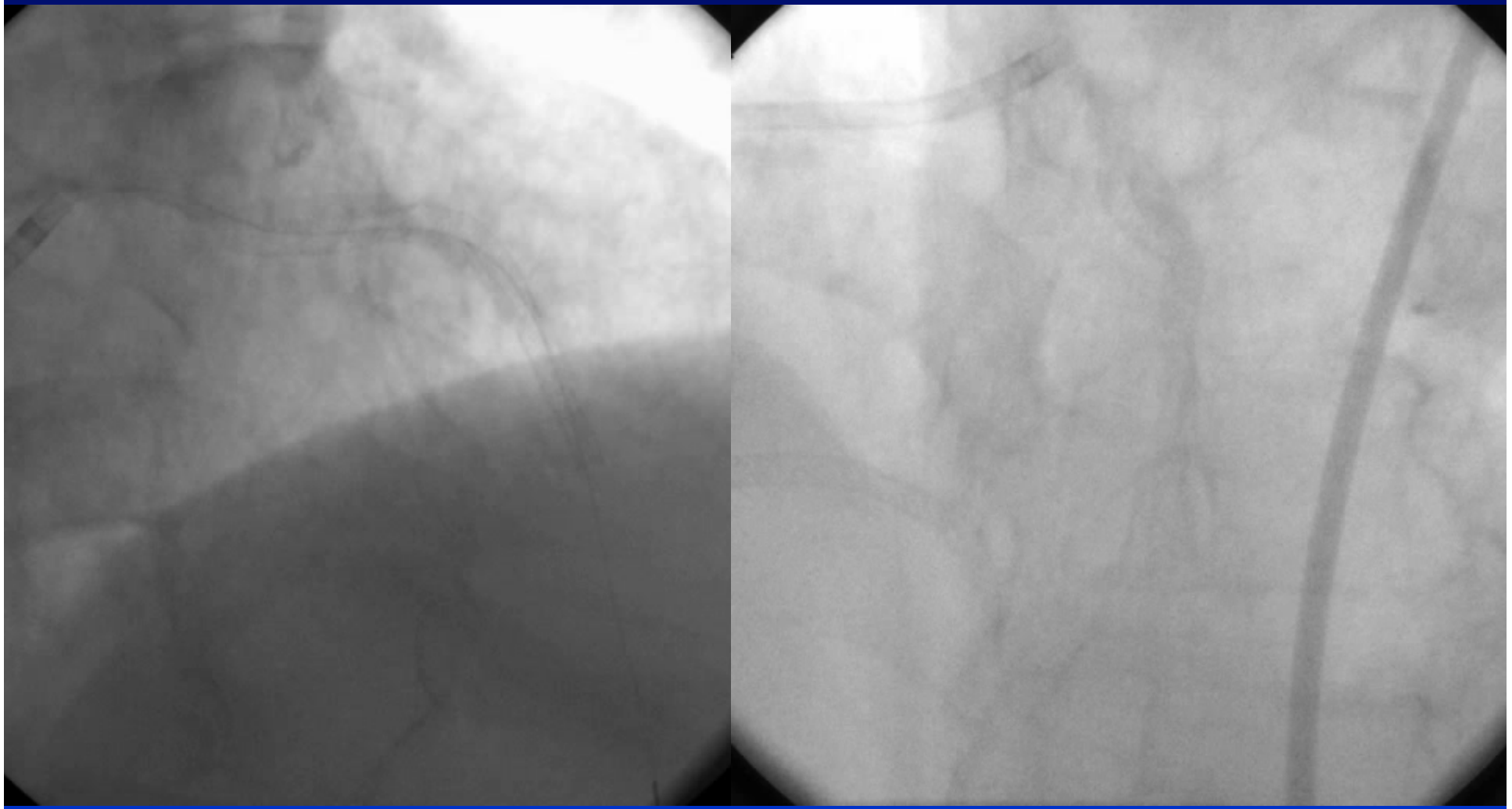
Quantum 3.0×12mm, 24 atm

Mother-Child Technique

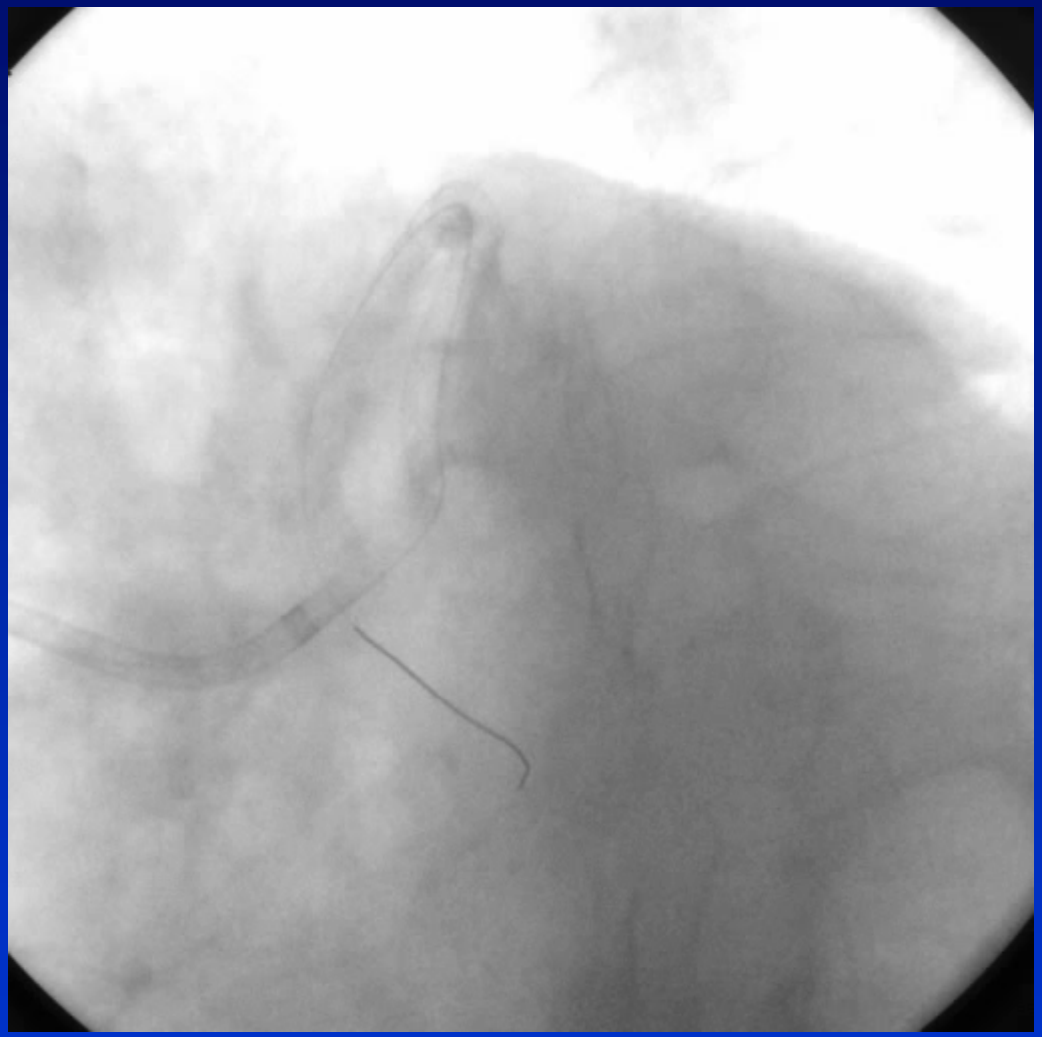


Cypher 3.5×23mm, 16 atm

Final Angiogram



Final Angiogram



Case 3

A Fractured Balloon Interrupts the Proximal LAD Flow

Jae-Hwan Lee, MD

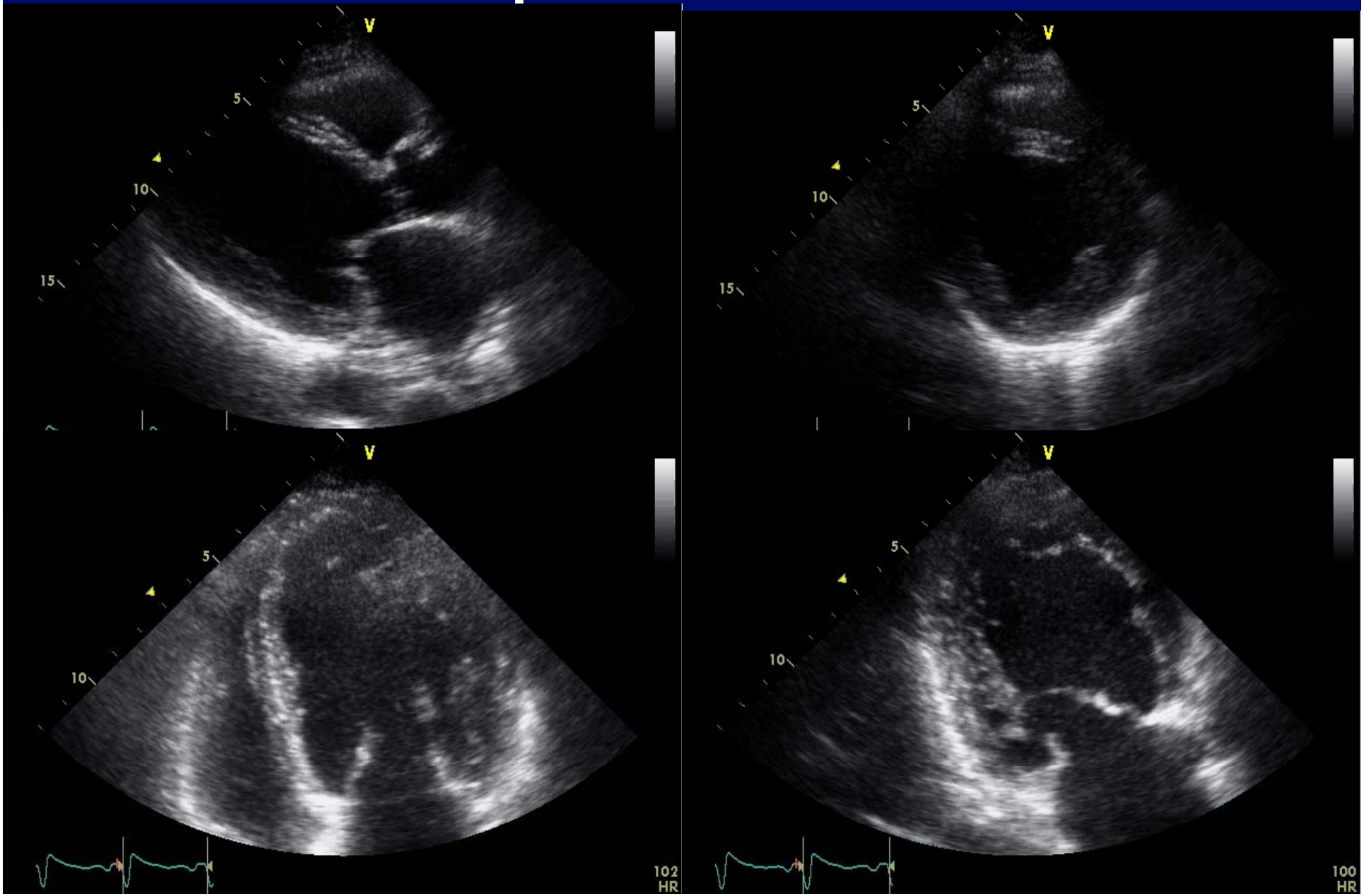
Cardiovascular Center in Chungnam National University Hospital, Daejeon, Korea

- 70 YO woman
- Hypertension for 10 years
- DOE NYHA Fc II for several years

  → Abrupt dyspnea (Fc III-IV) for 7 days
- ECG; LVH with strain pattern
- CK – MB - TnI 250 U/L - 6.9 ng/mL - 3.1 ng/mL
- EchoCG; LV EF=25%

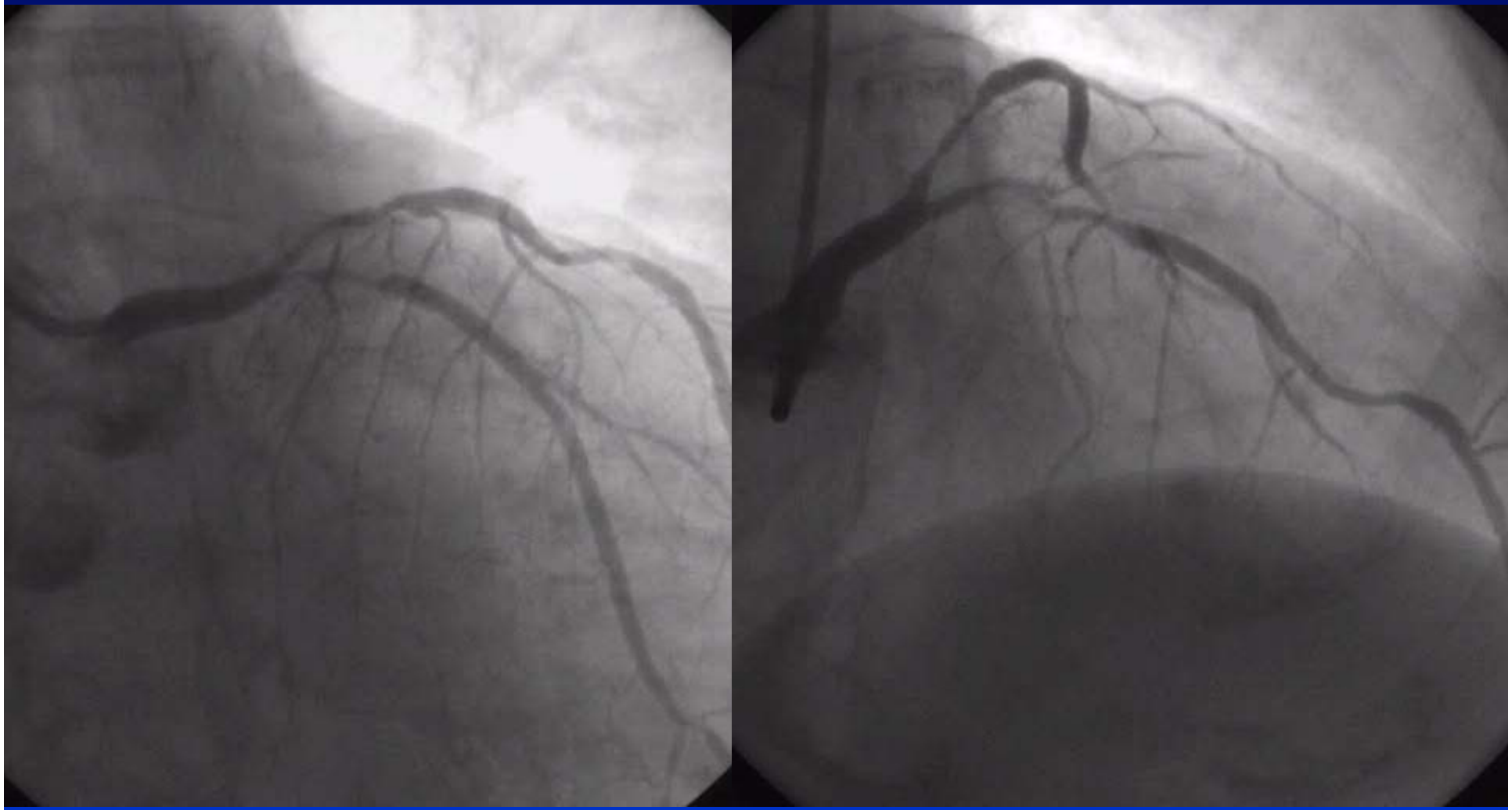
  Mid to apical lateral akinesia

•EchoCG; LV EF=25%
Mid to apical lateral akinesia

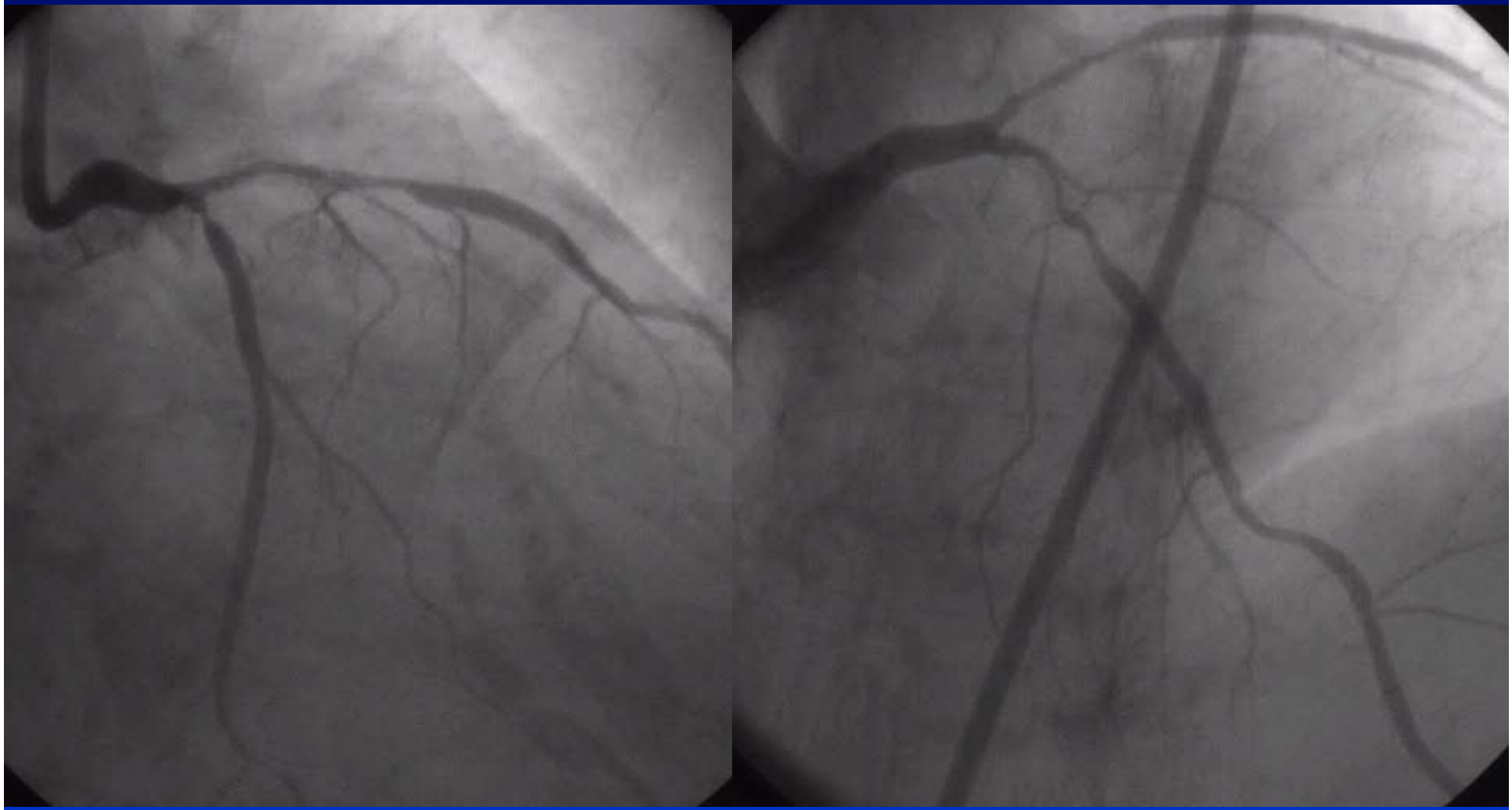


Baseline RCA

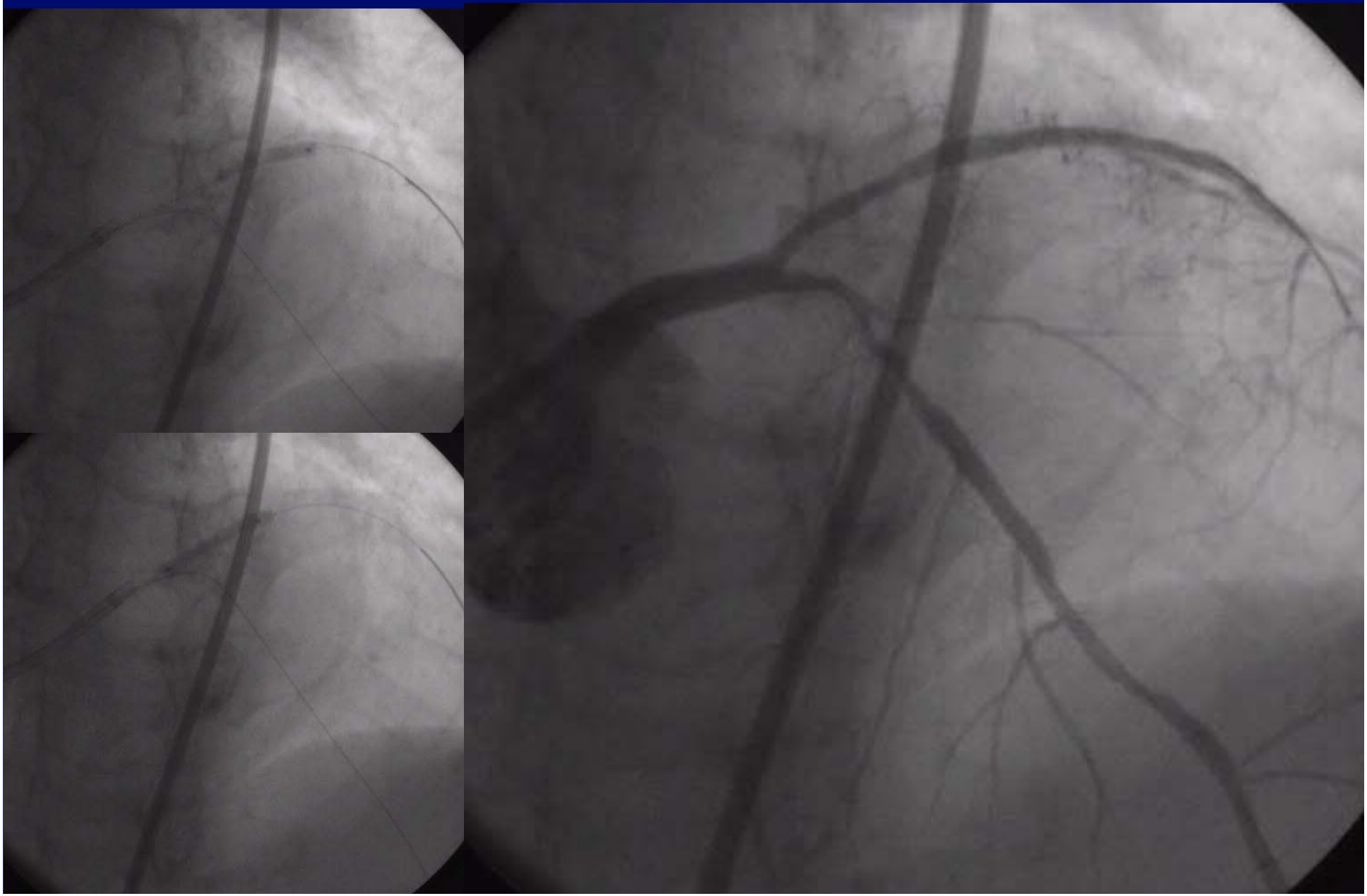
Baseline LCA



2 weeks later, 8 Fr EBU Engagement



pLCx predilation with 3.0 mm Splinter, 14 atm



pLAD predilation with 3.0 mm Splinter

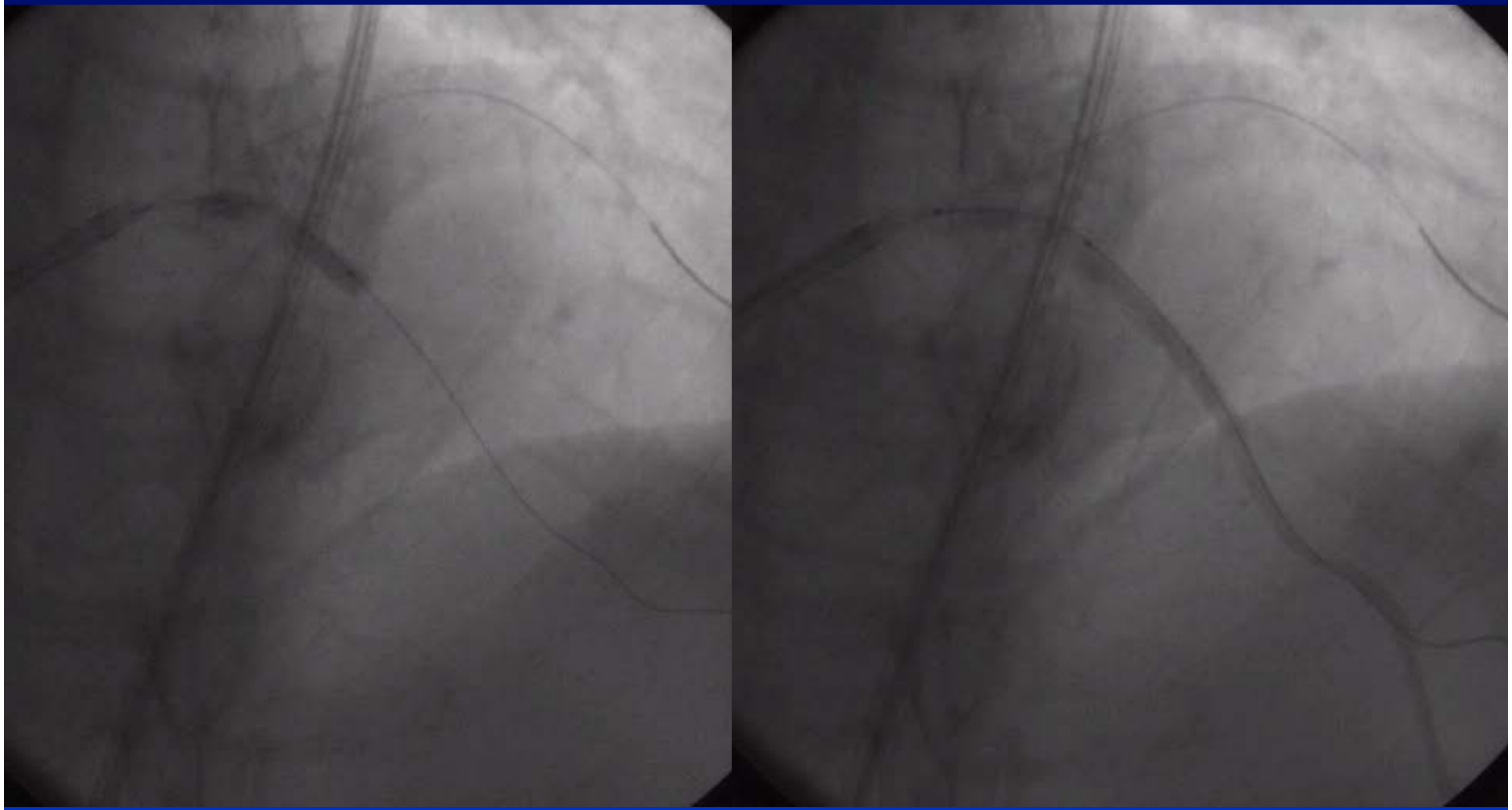
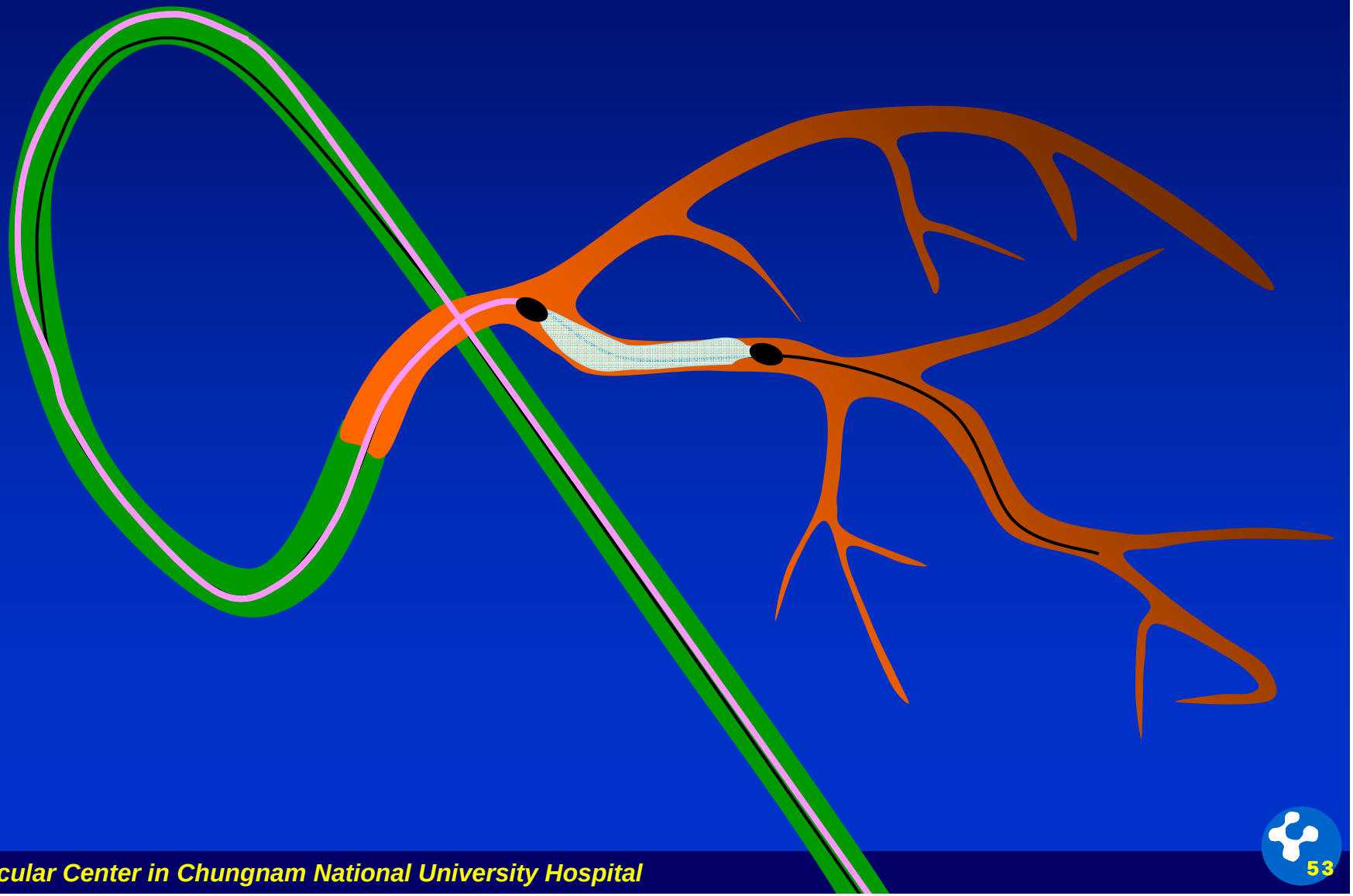
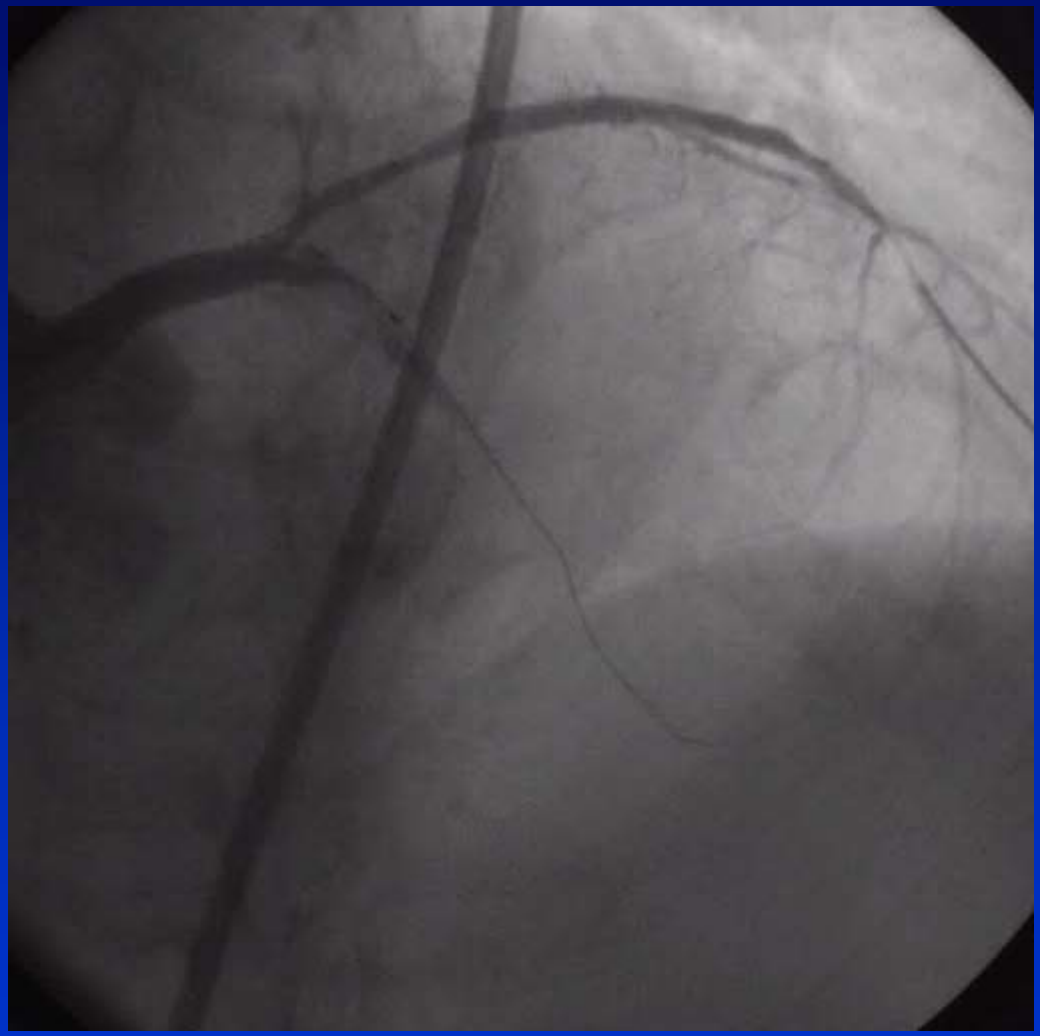


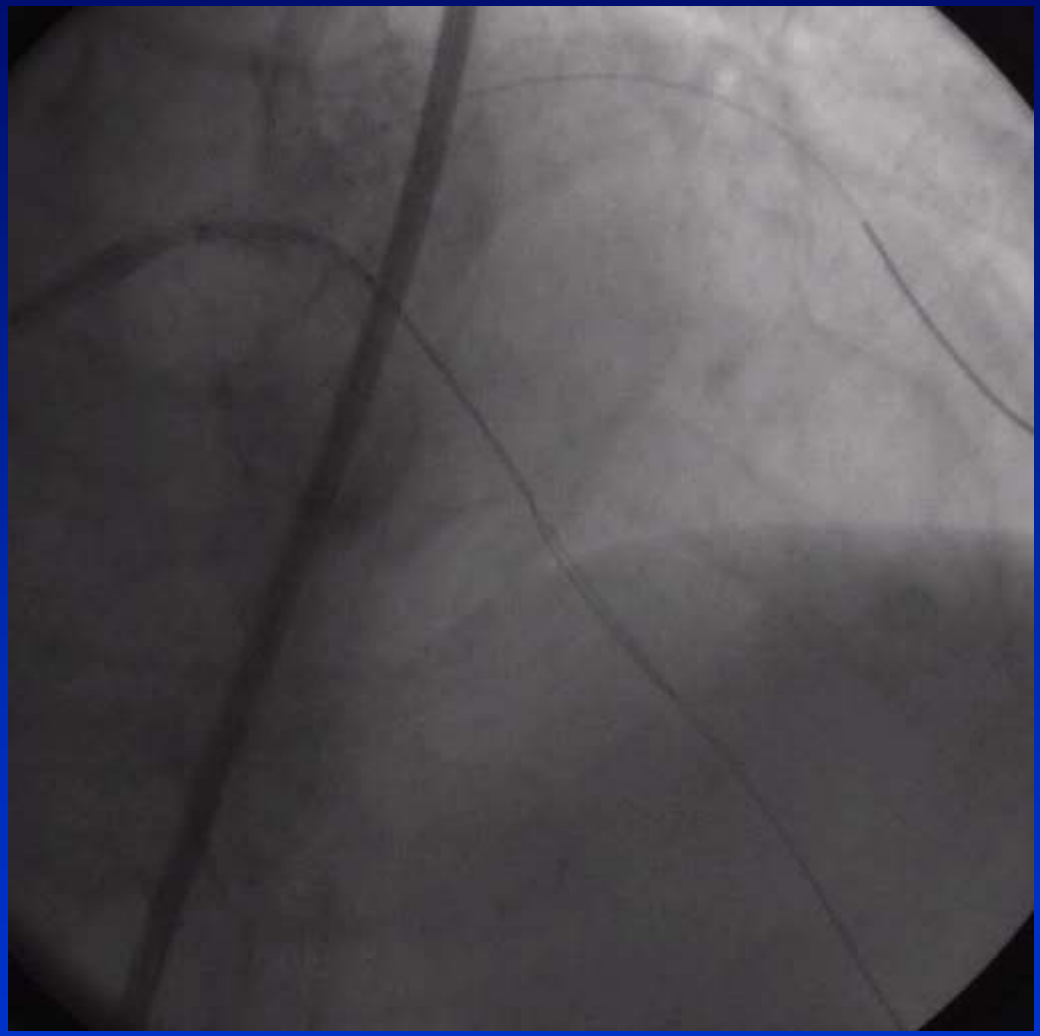
Illustration of Current Situation



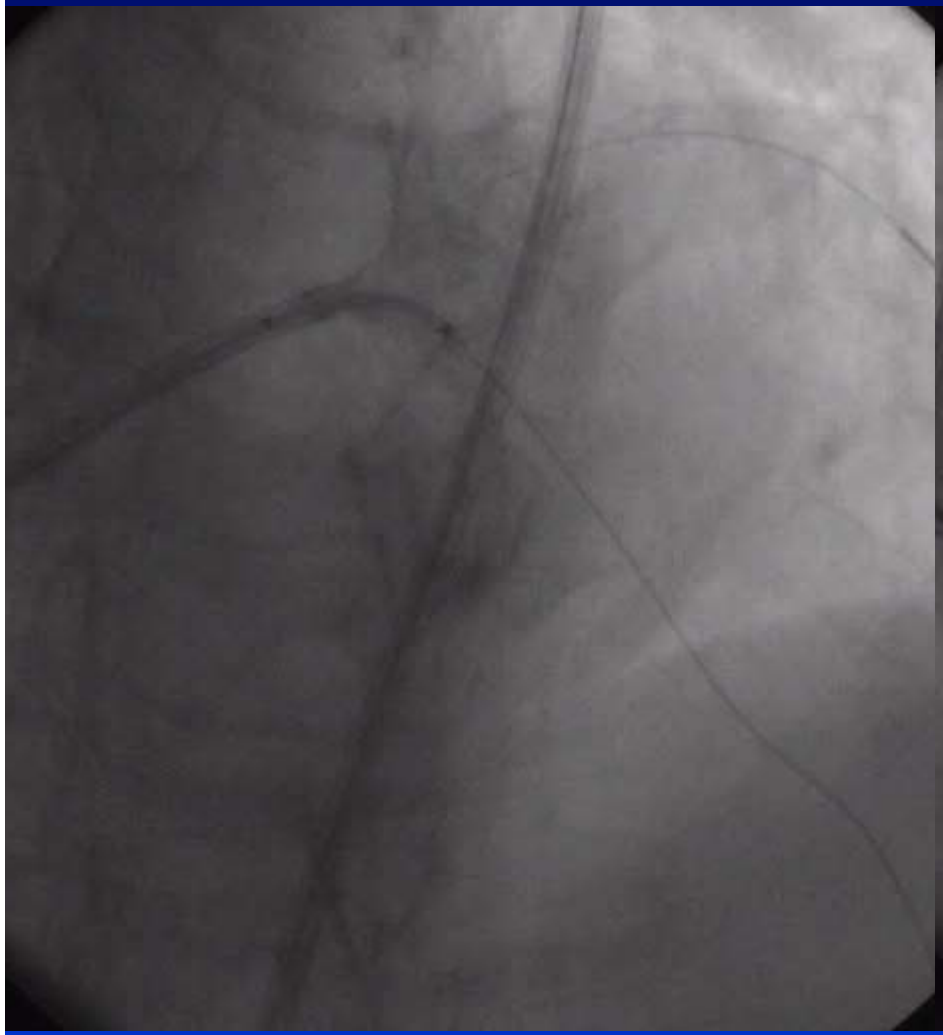
The Broken Balloon Trapped in the Proximal LAD

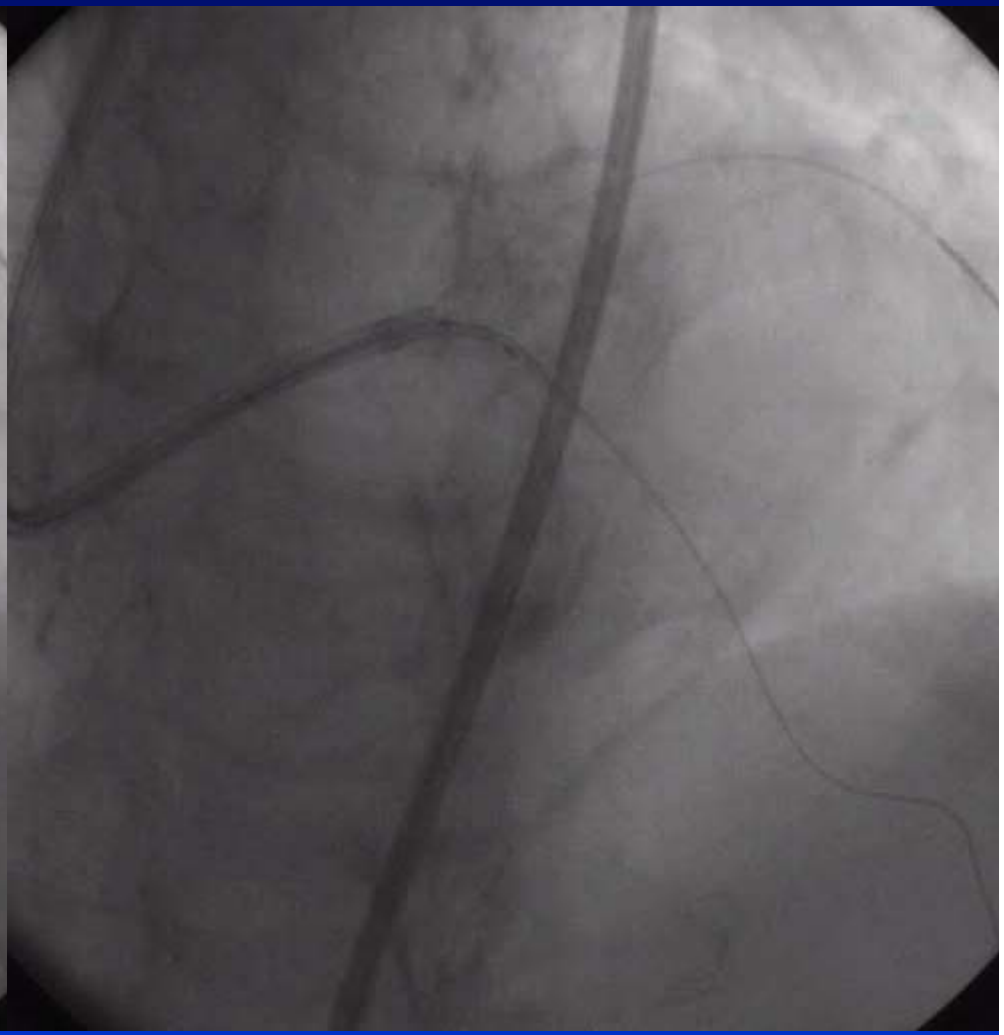


Additional Guidewire Insertion

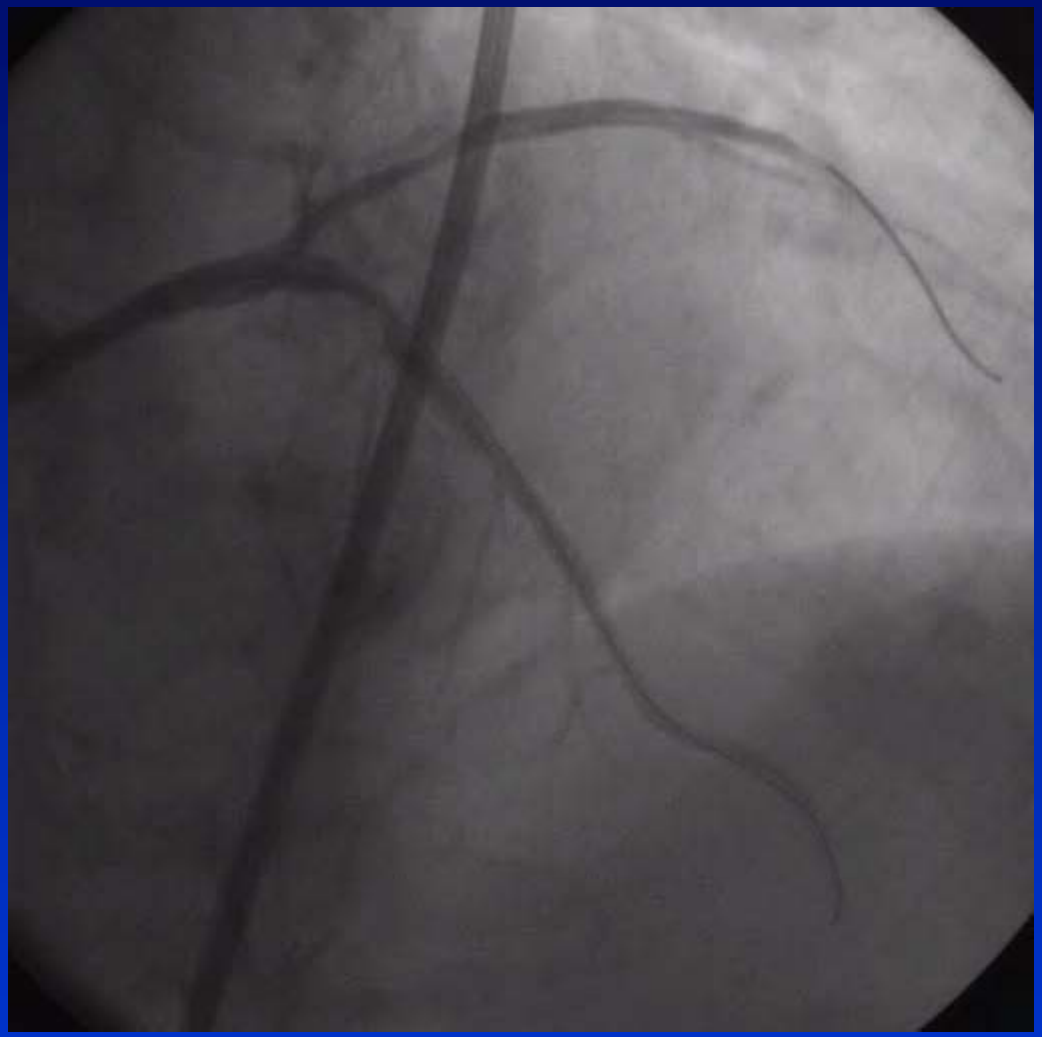


Taking Out the Fractured Balloon By 1.5 mm Balloon

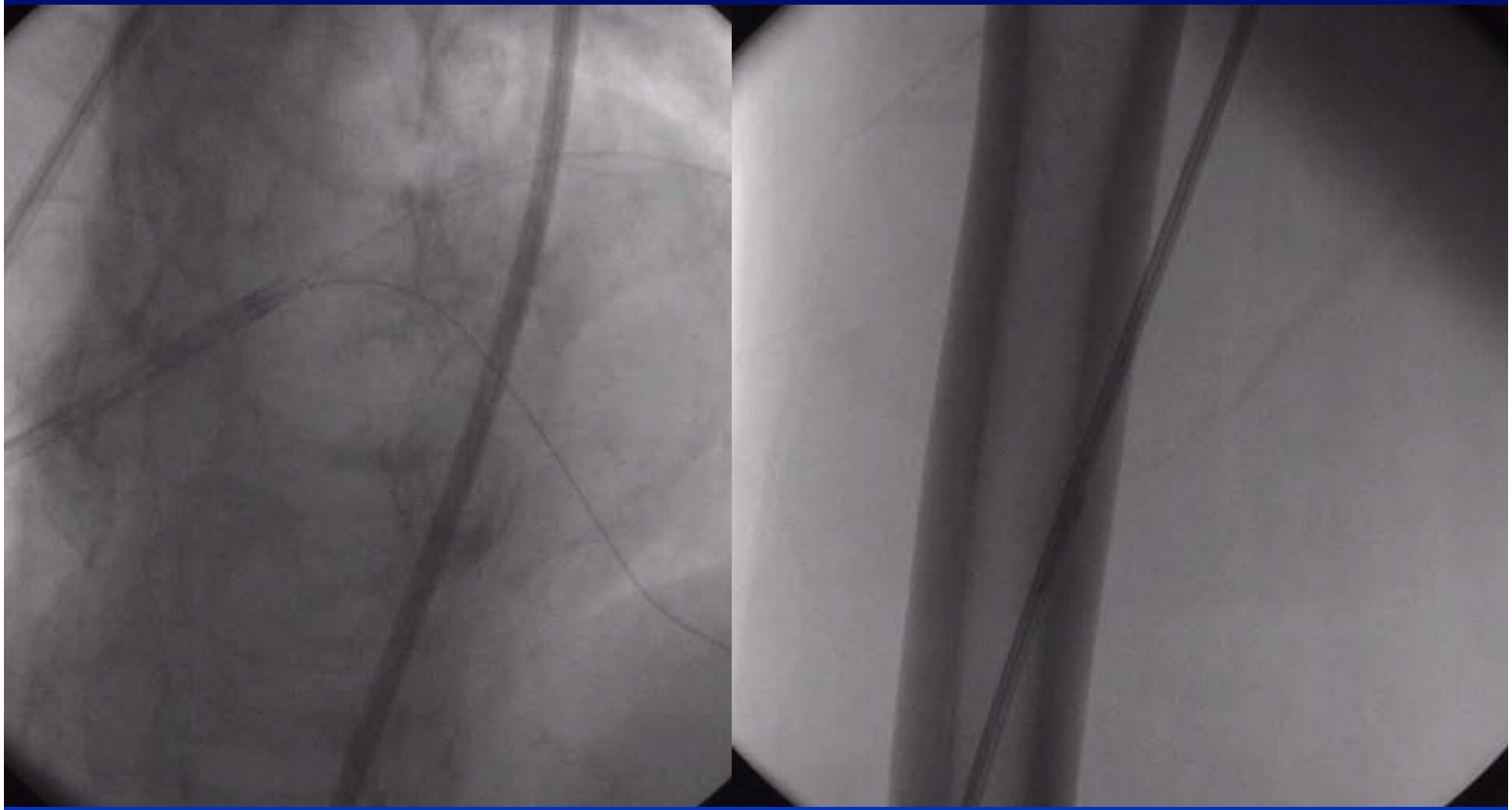




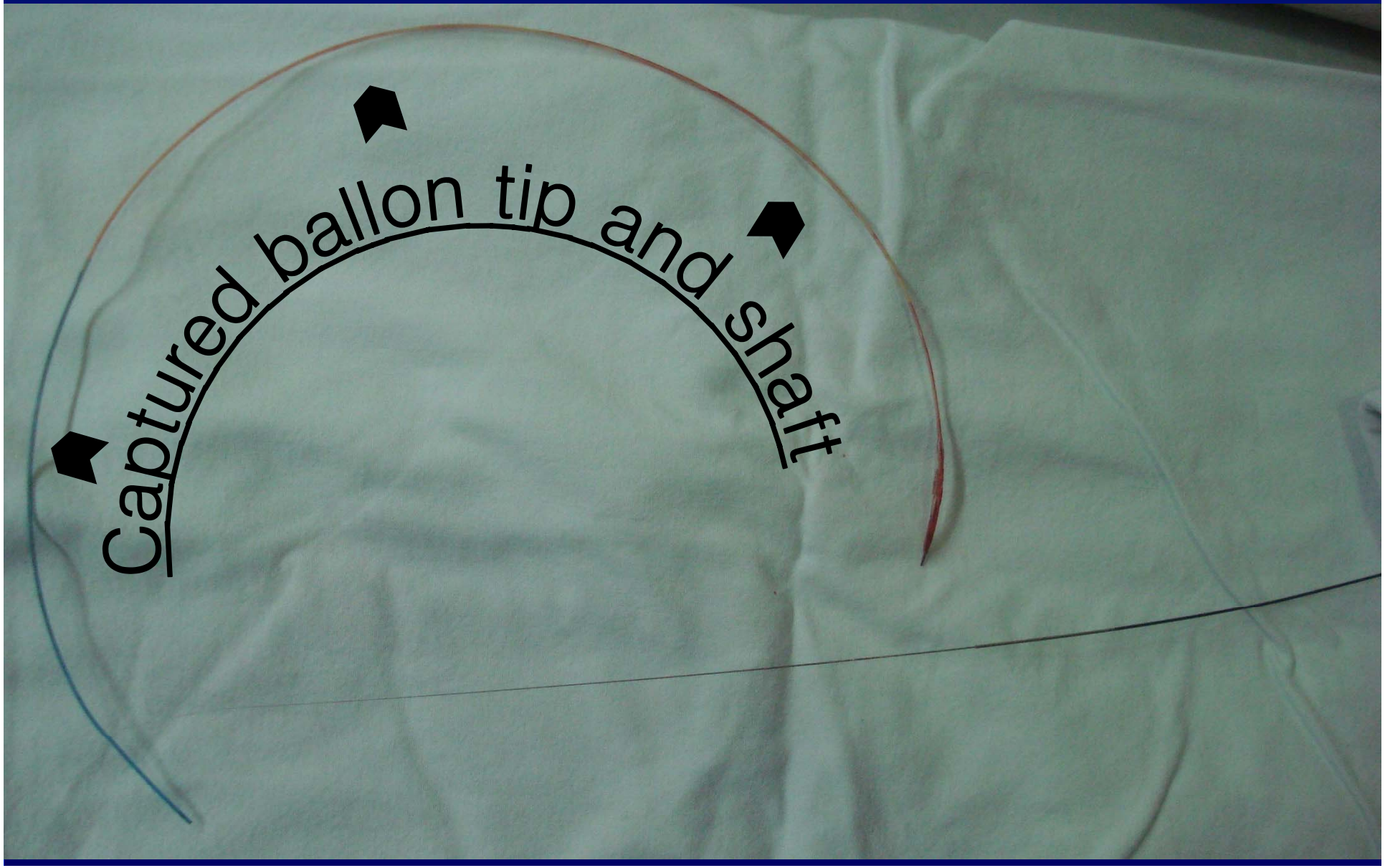
Regained Antegrade Flow



Taking Out the Fractured Balloon By 1.5 mm Balloon

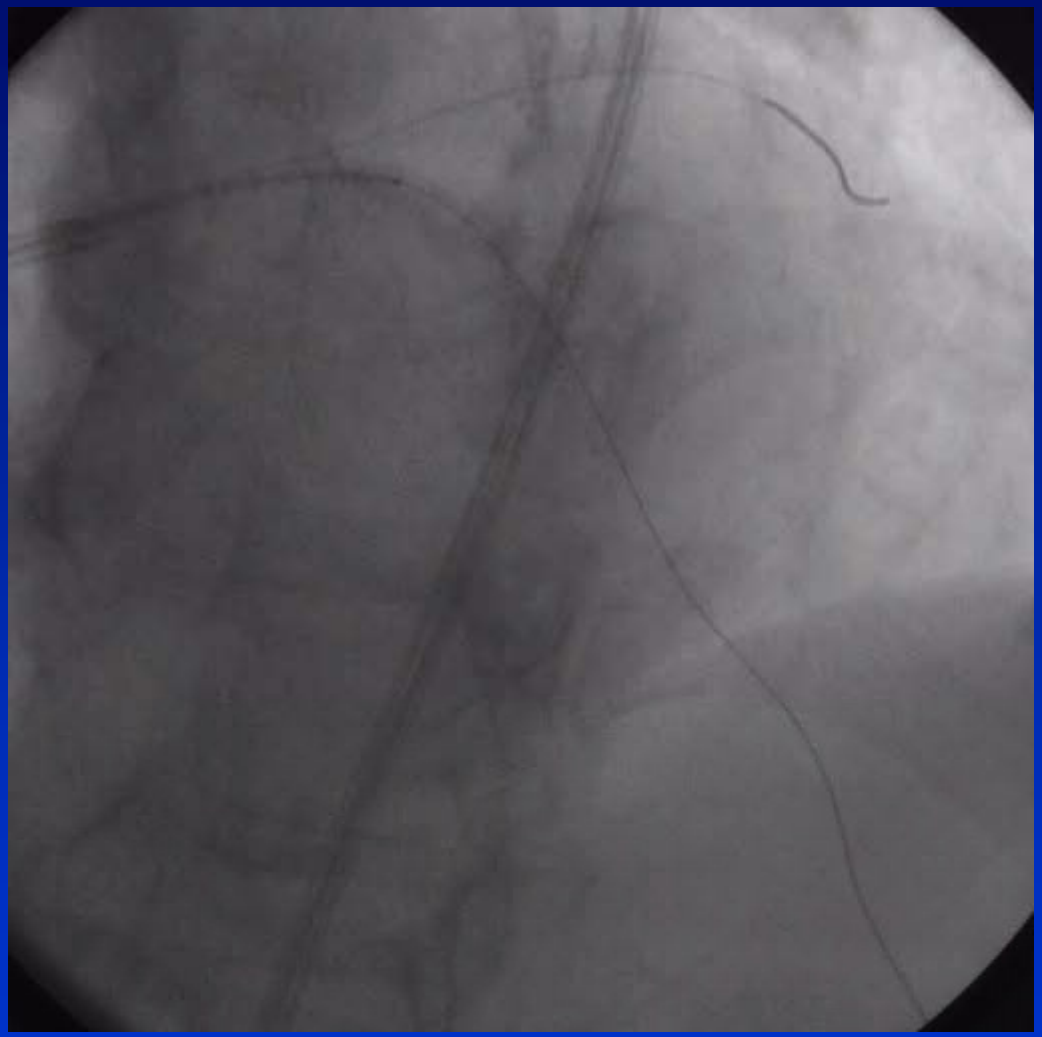


Extracted Broken Balloon

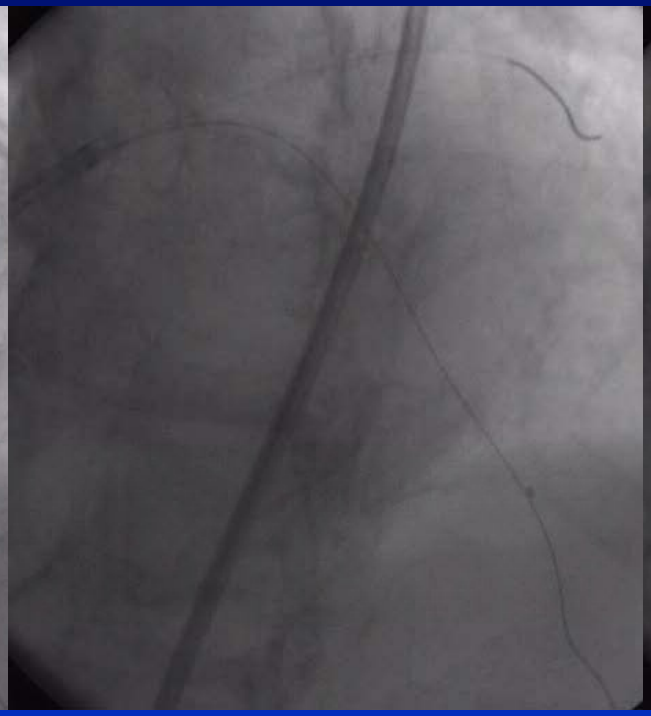


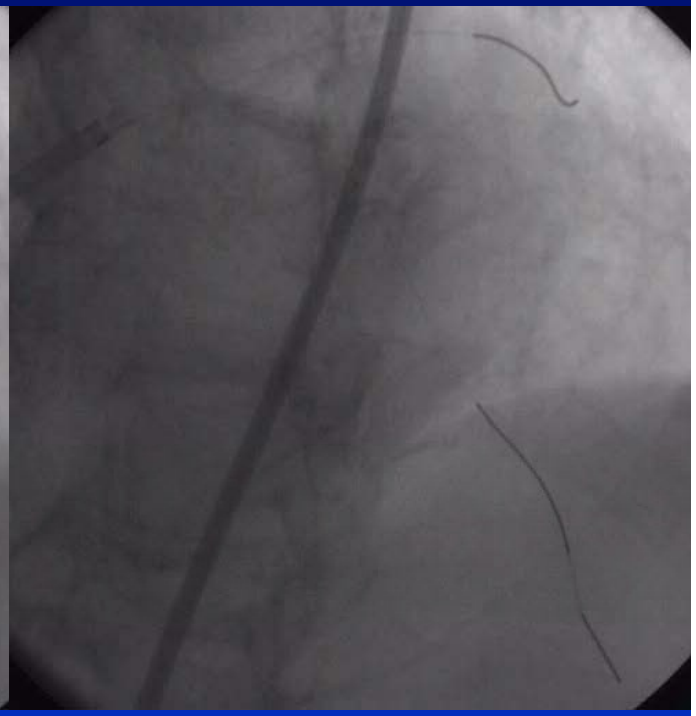
After Removal of the Fractured Balloon

Stent Delivery Was Tried to Seal mLAD Dissection



Rota Wire Insertion

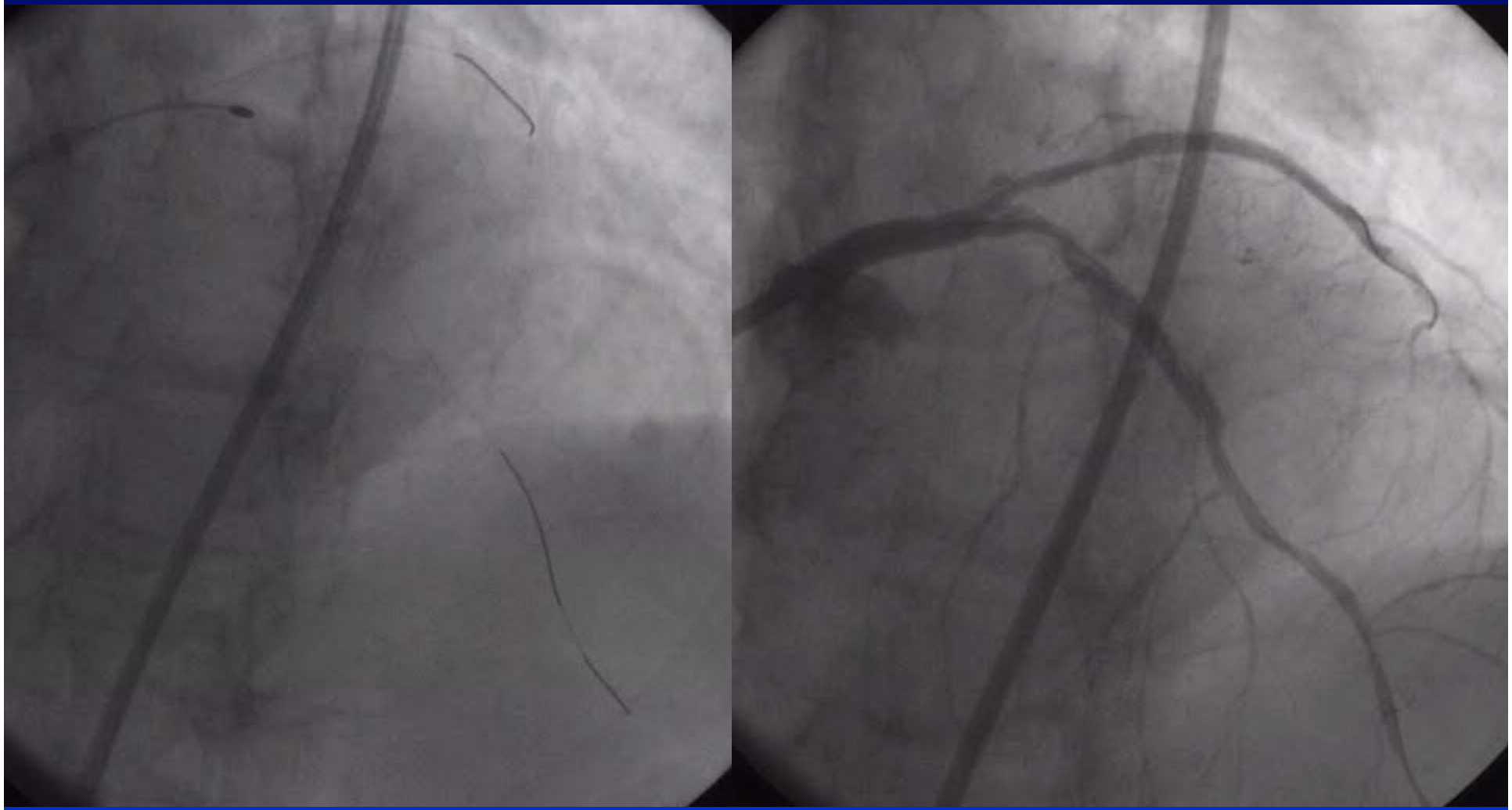




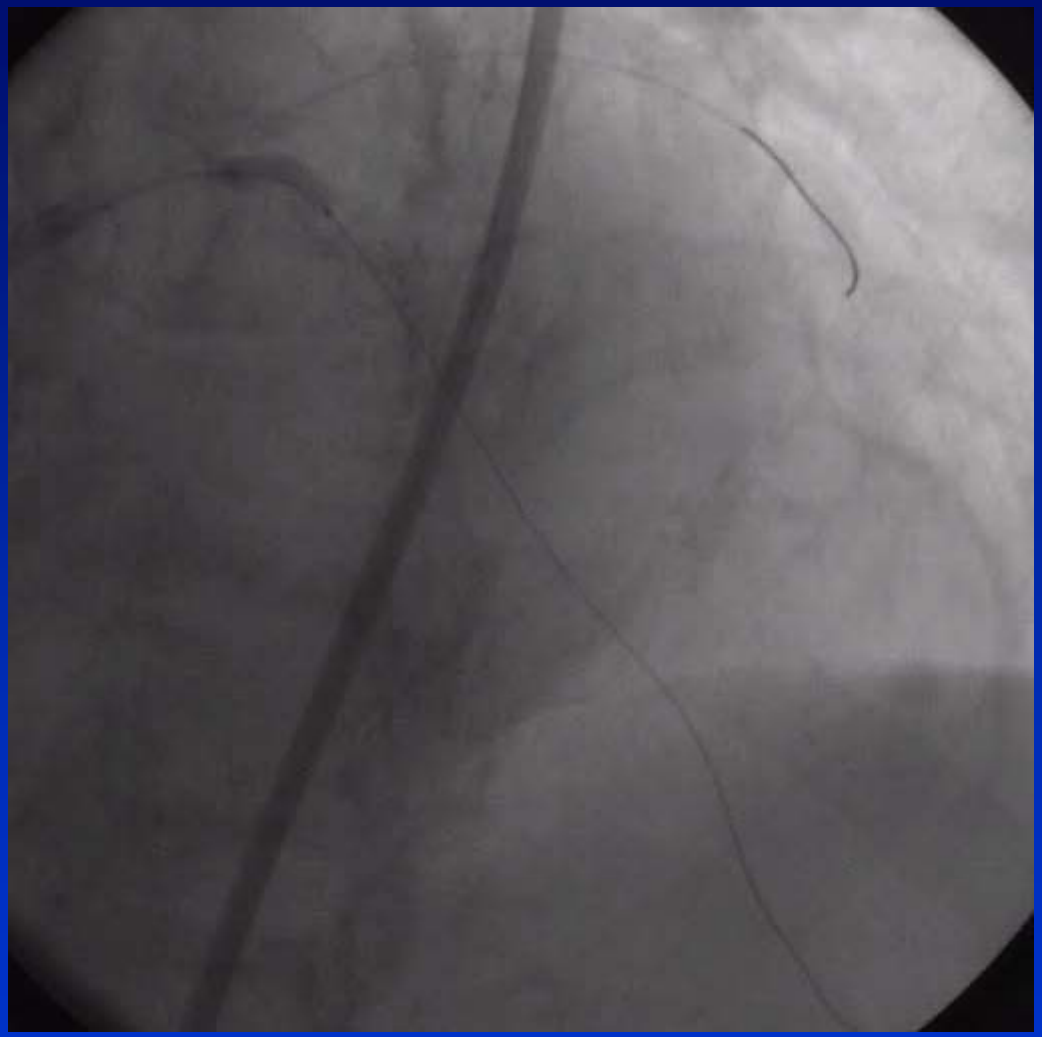
Microcatheter

Change to Rota wire

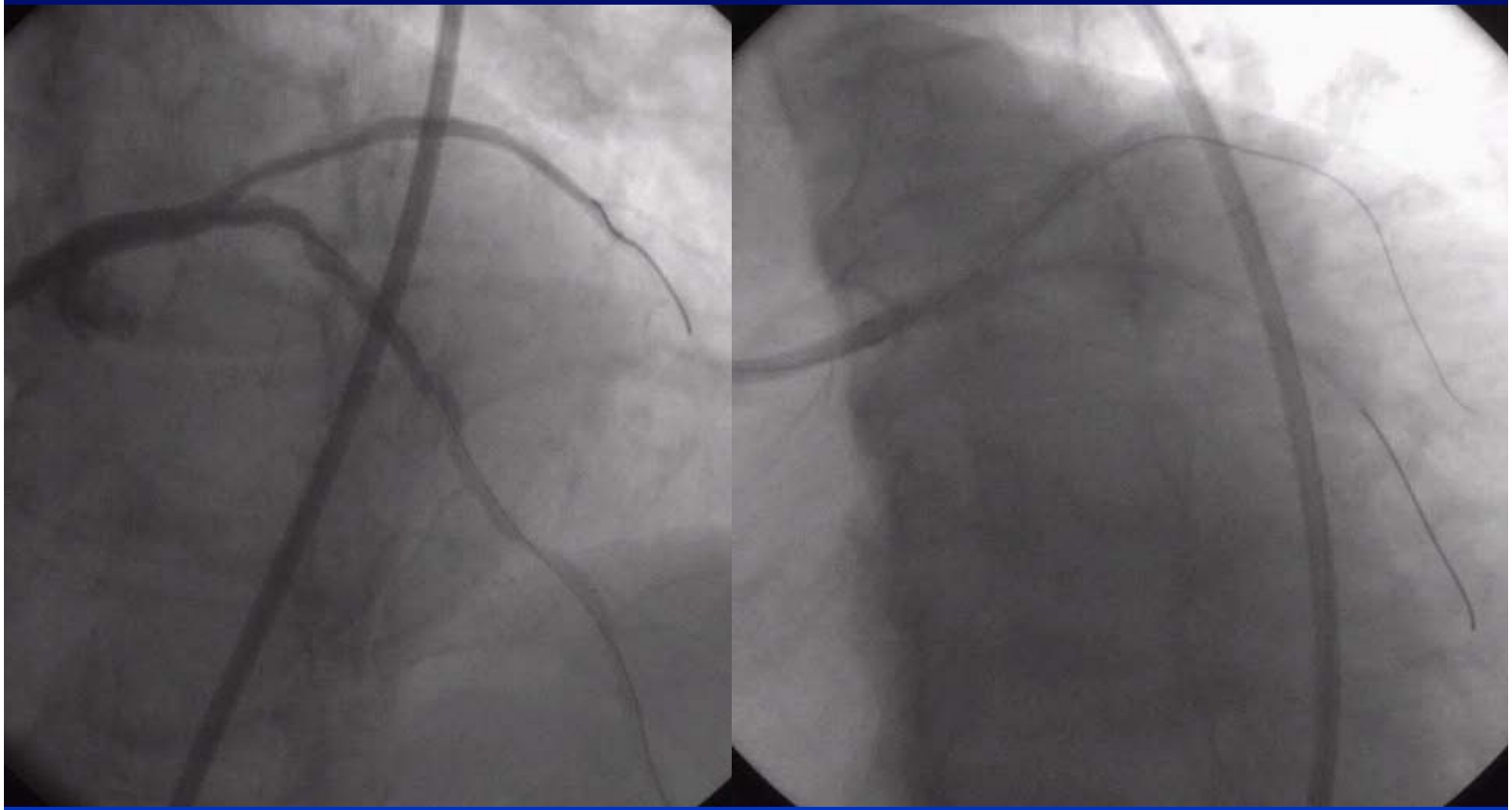
Rotablation with 1.5 mm Burr



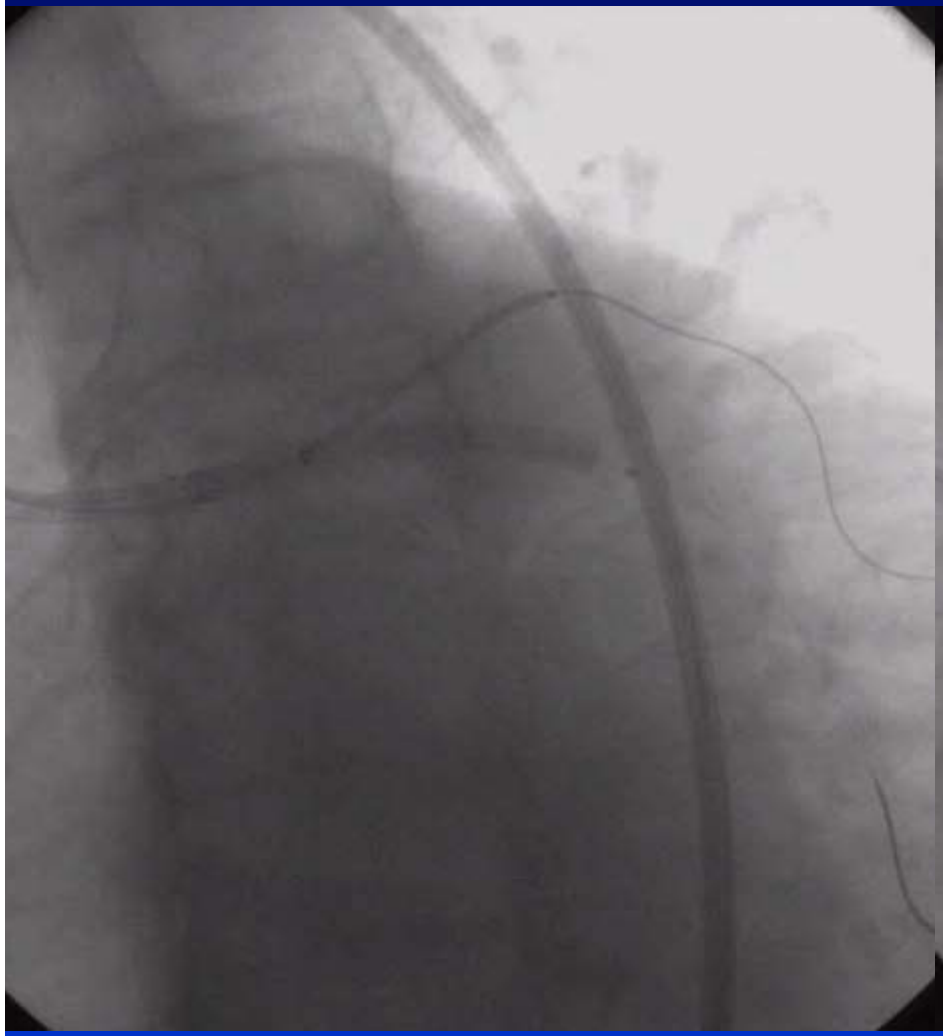
High Pressure Dilatation with Quantum 3.0 mm

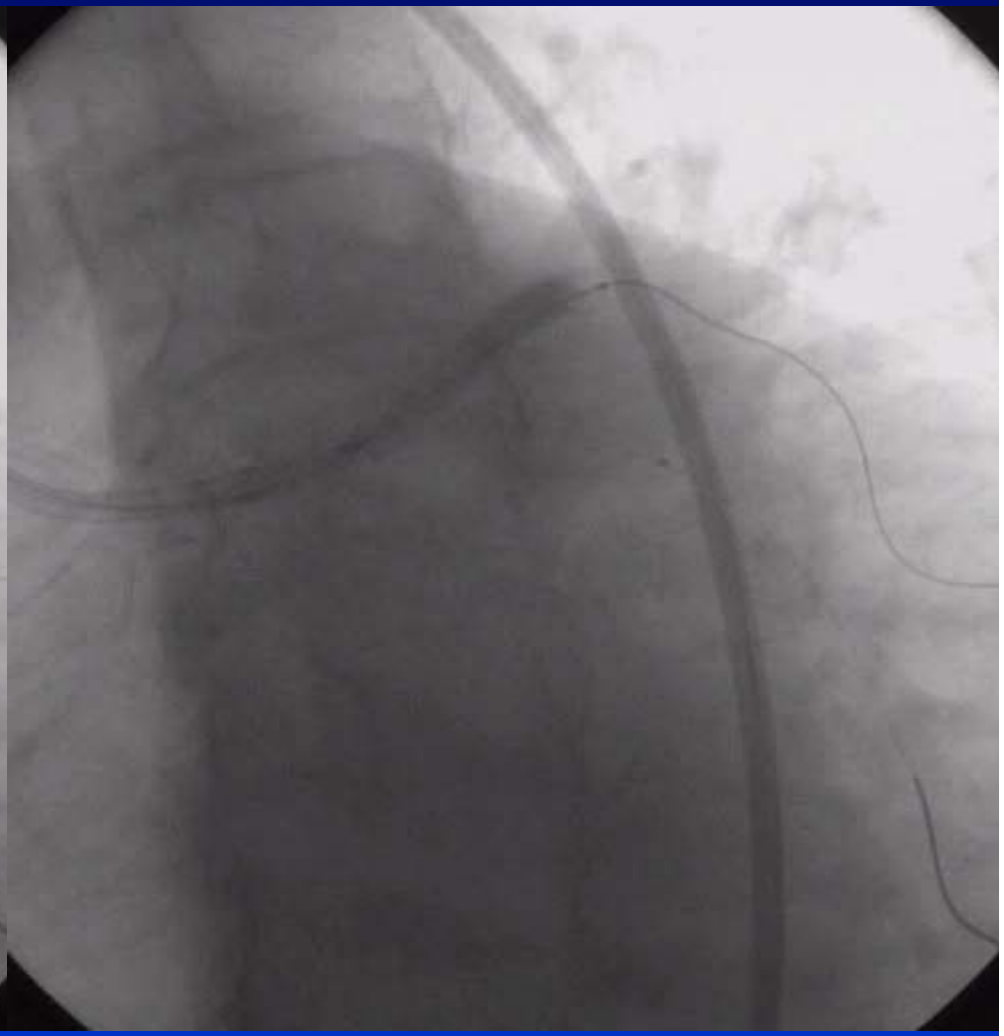


High Pressure Dilatation with Quantum 3.0 mm



Kissing Stenting

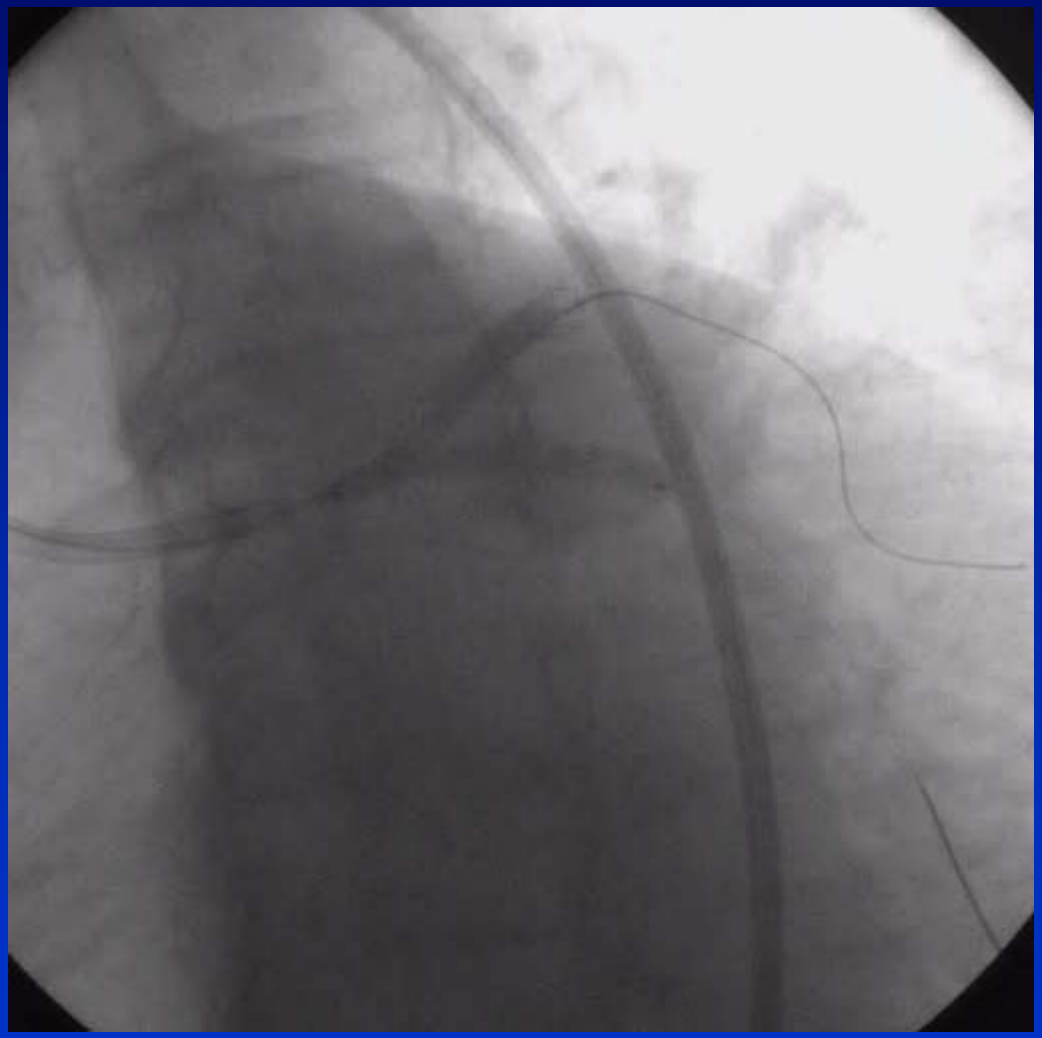




LM-pCx; Cypher 3.0 × 28 mm, 16 atm

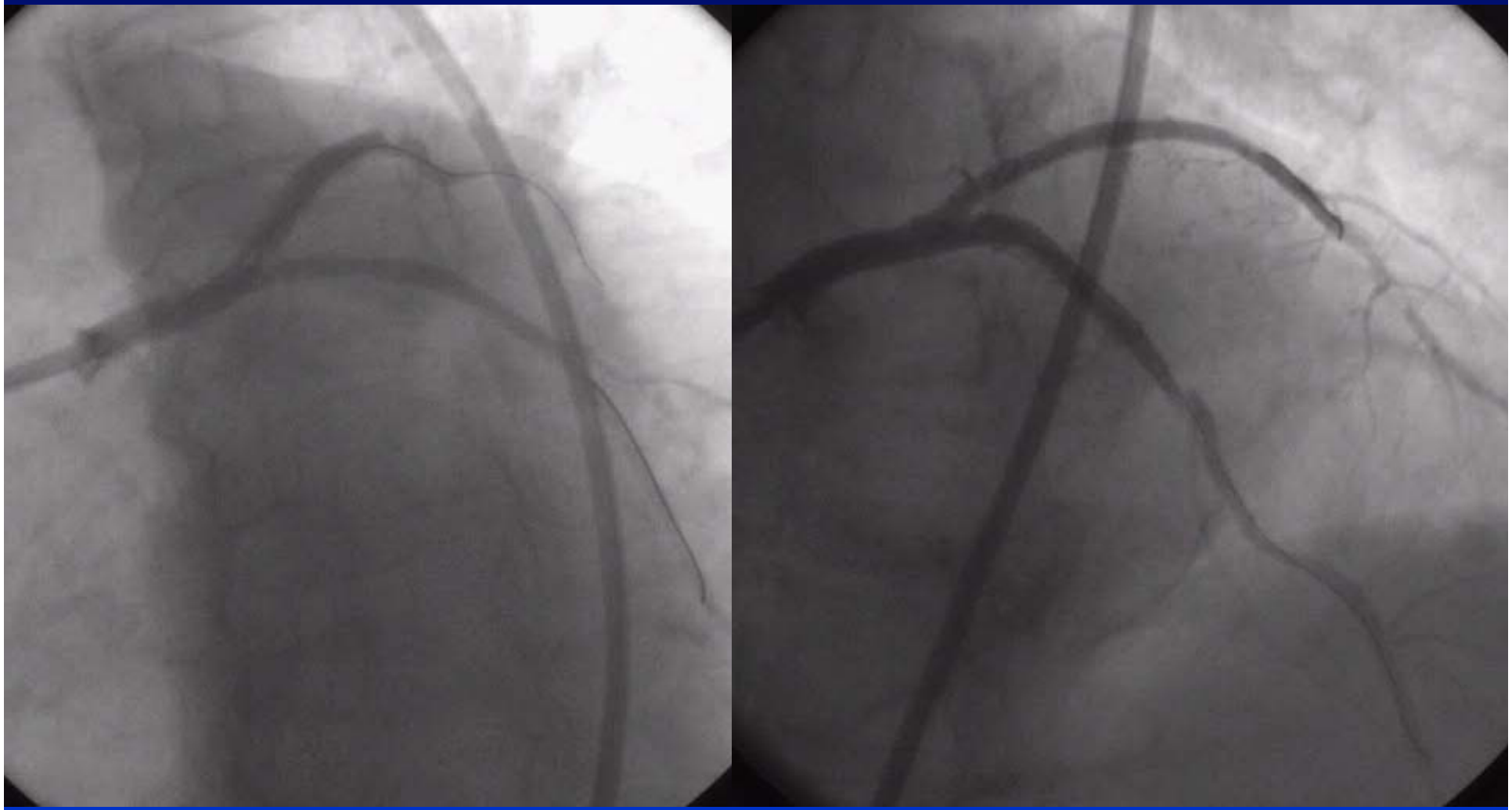
LM-pLAD ; Cypher 3.5 × 33 mm, 16 atm

Kissing Stenting

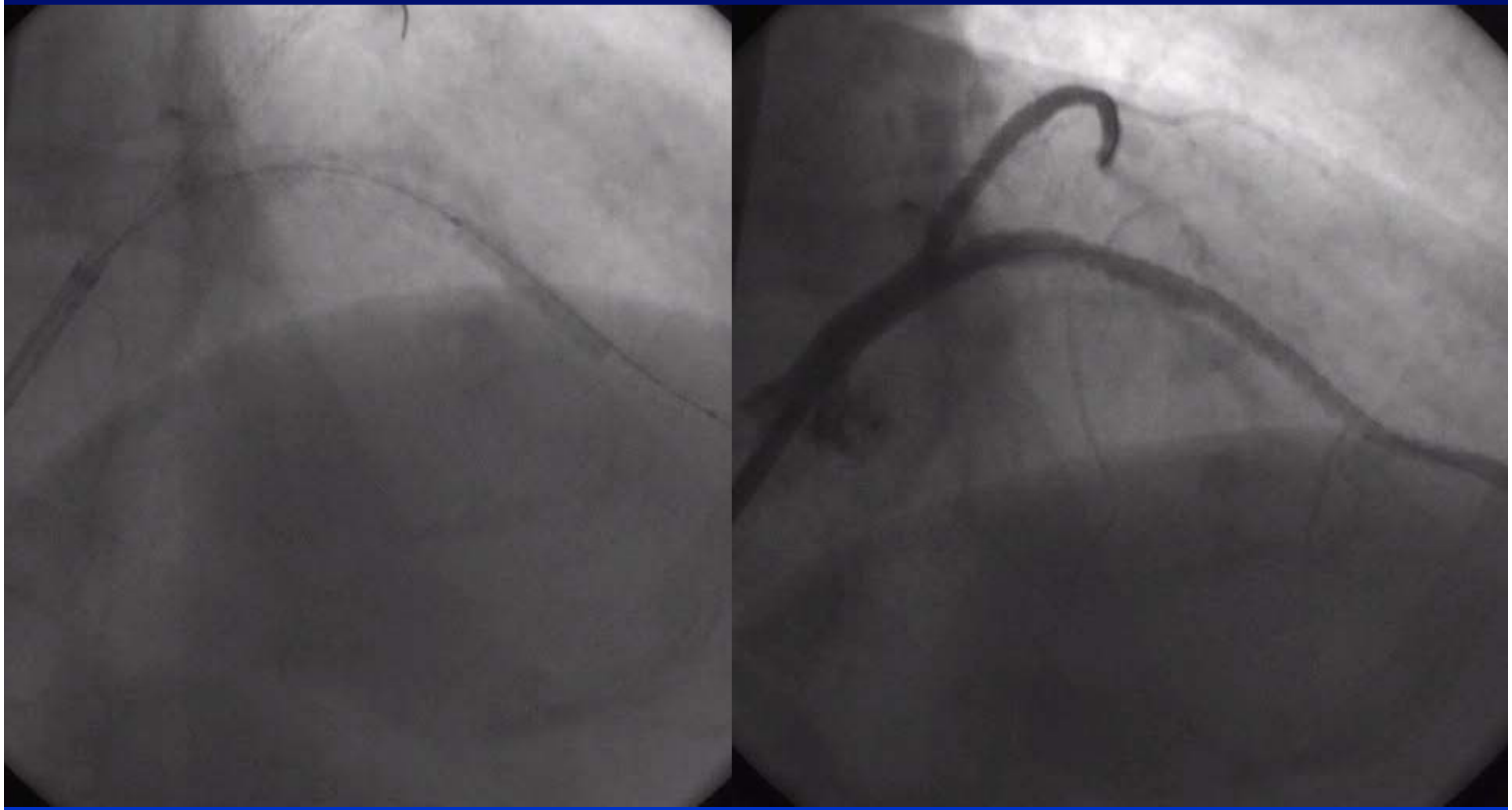


Kissing balloon dilatation using stent balloon, 12 atm

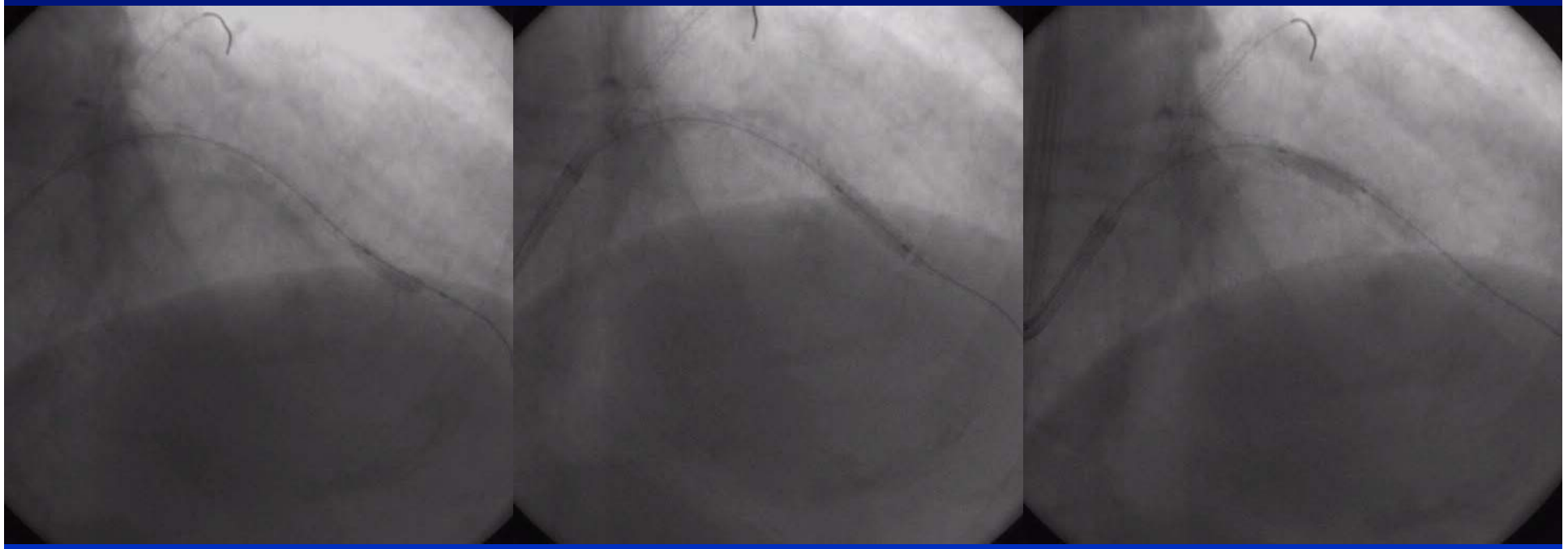
After Kissing Stenting



Mid LAD, Cypher 3.0×33mm

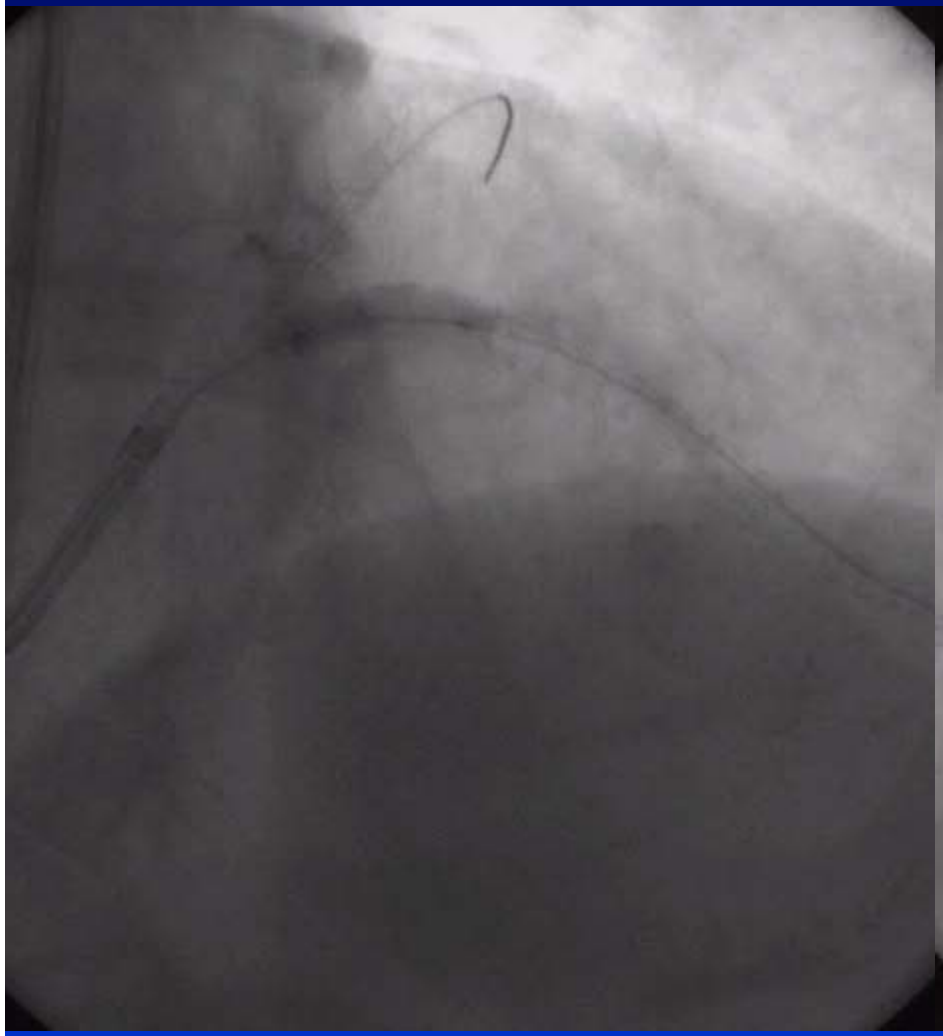


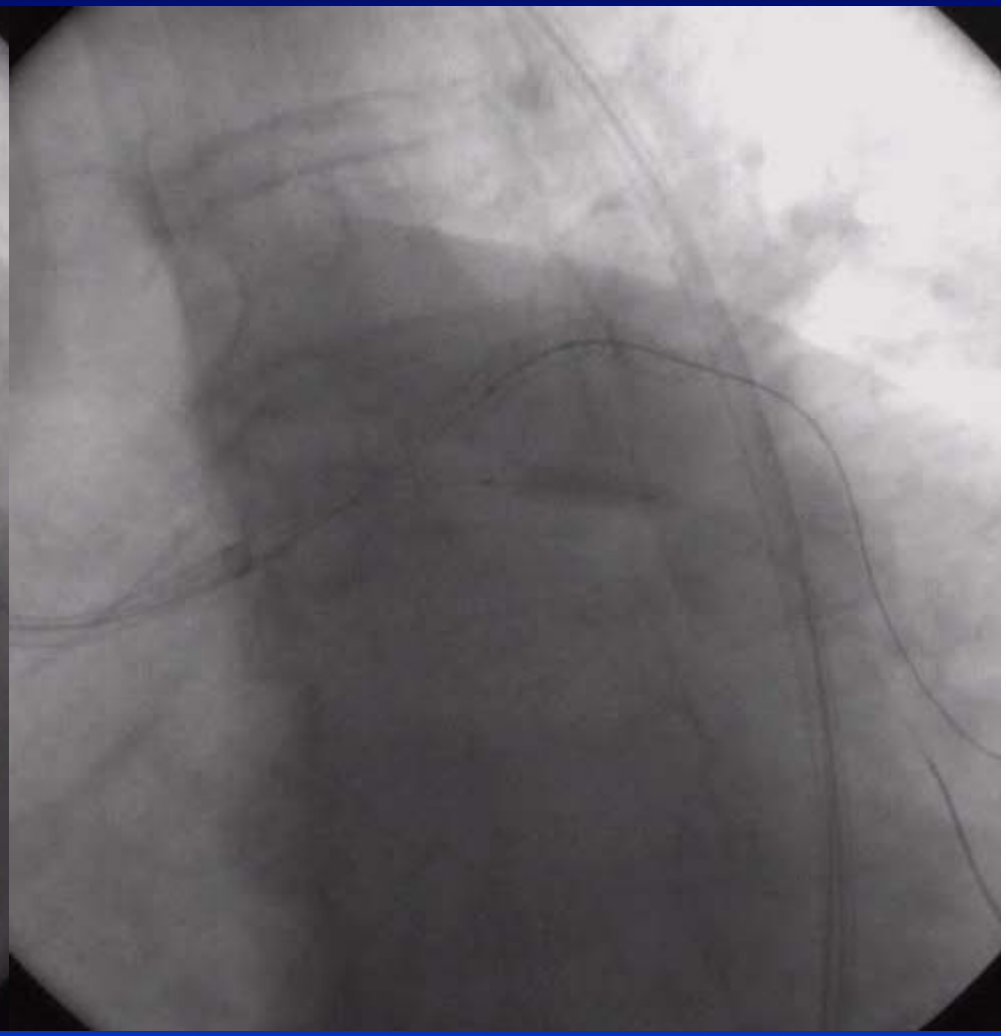
In-Stent Dilatation, mLAD



Quantum 3.0 × 15 mm, 20 atm

In-Stent Dilatation, pLAD and pLCx

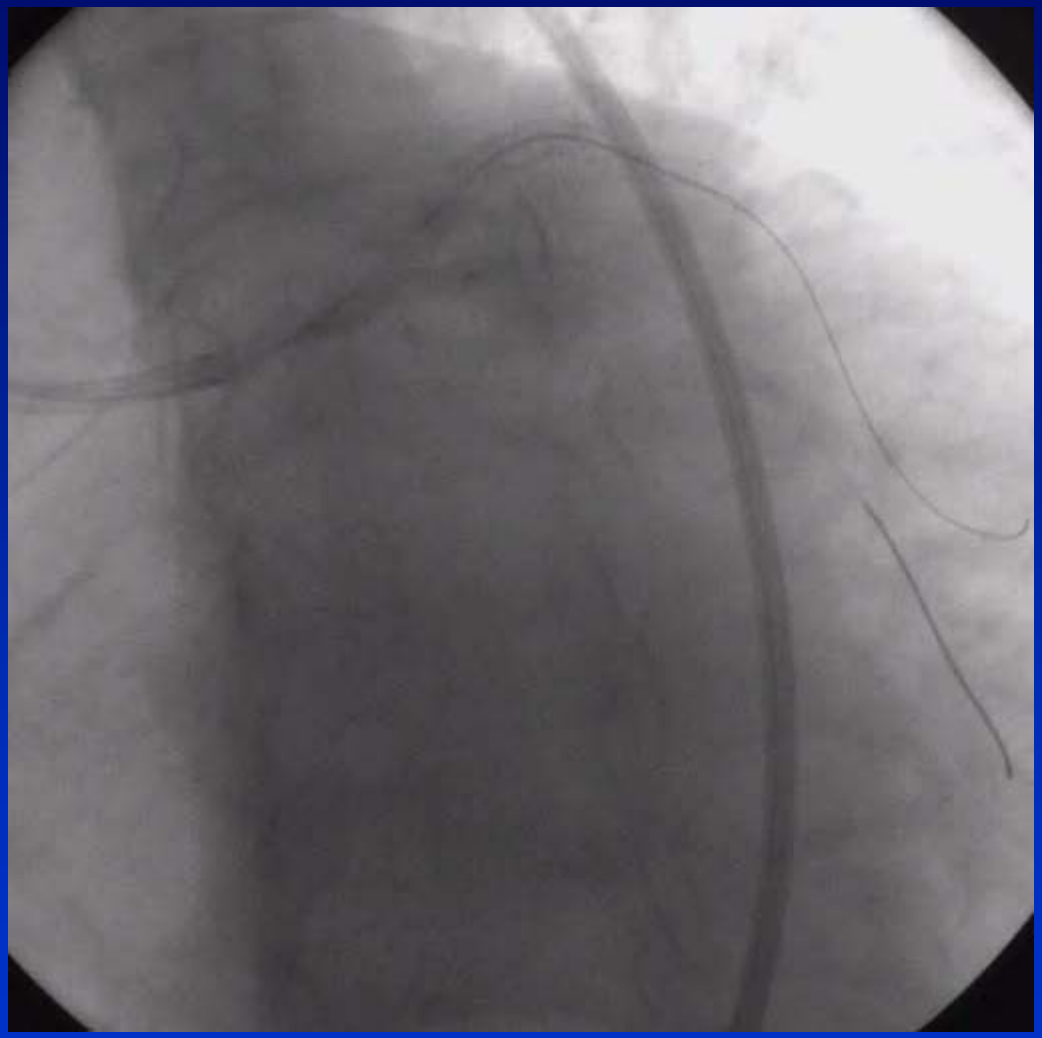




pLAD; Quantum 3.5 × 15 mm, 20 atm

pLCx; Quantum 3.0 × 15 mm, 20 atm

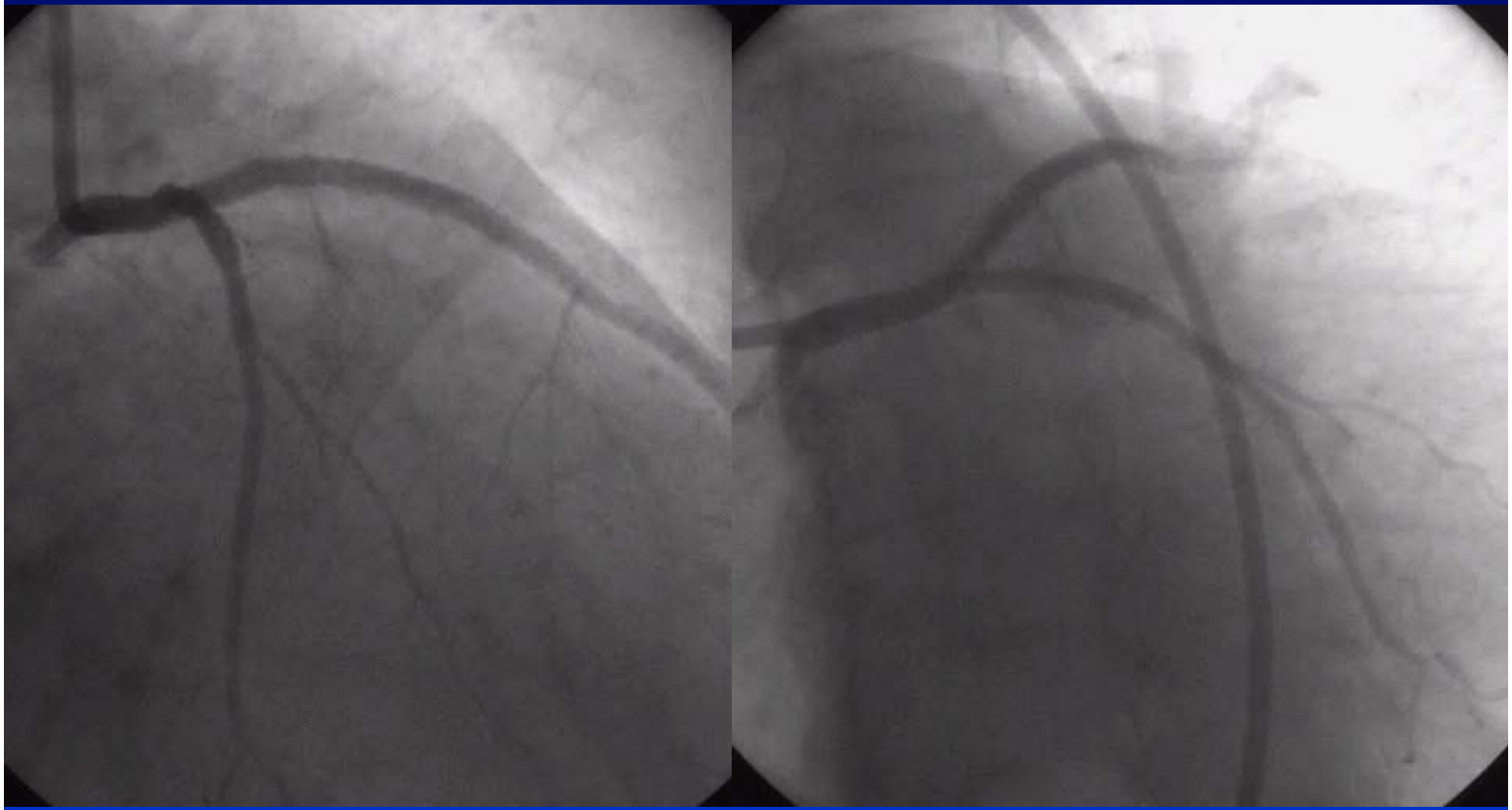
Final Kissing Balloon Dilatation



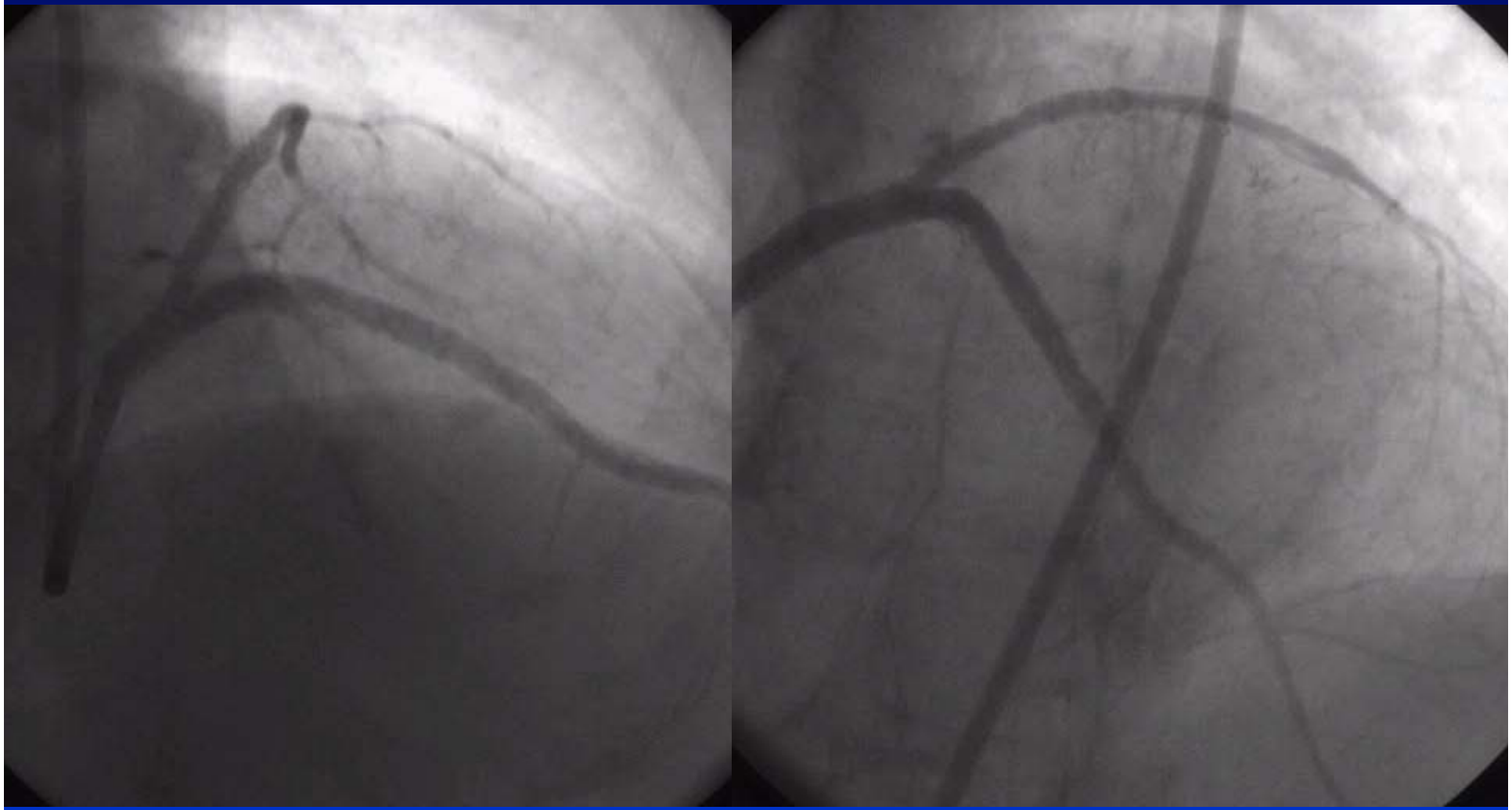
pLAD; Quantum 3.5 × 15 mm, 14 atm

pLCx; Quantum 3.0 × 15 mm, 14 atm

Final Angiogram



Final Angiogram



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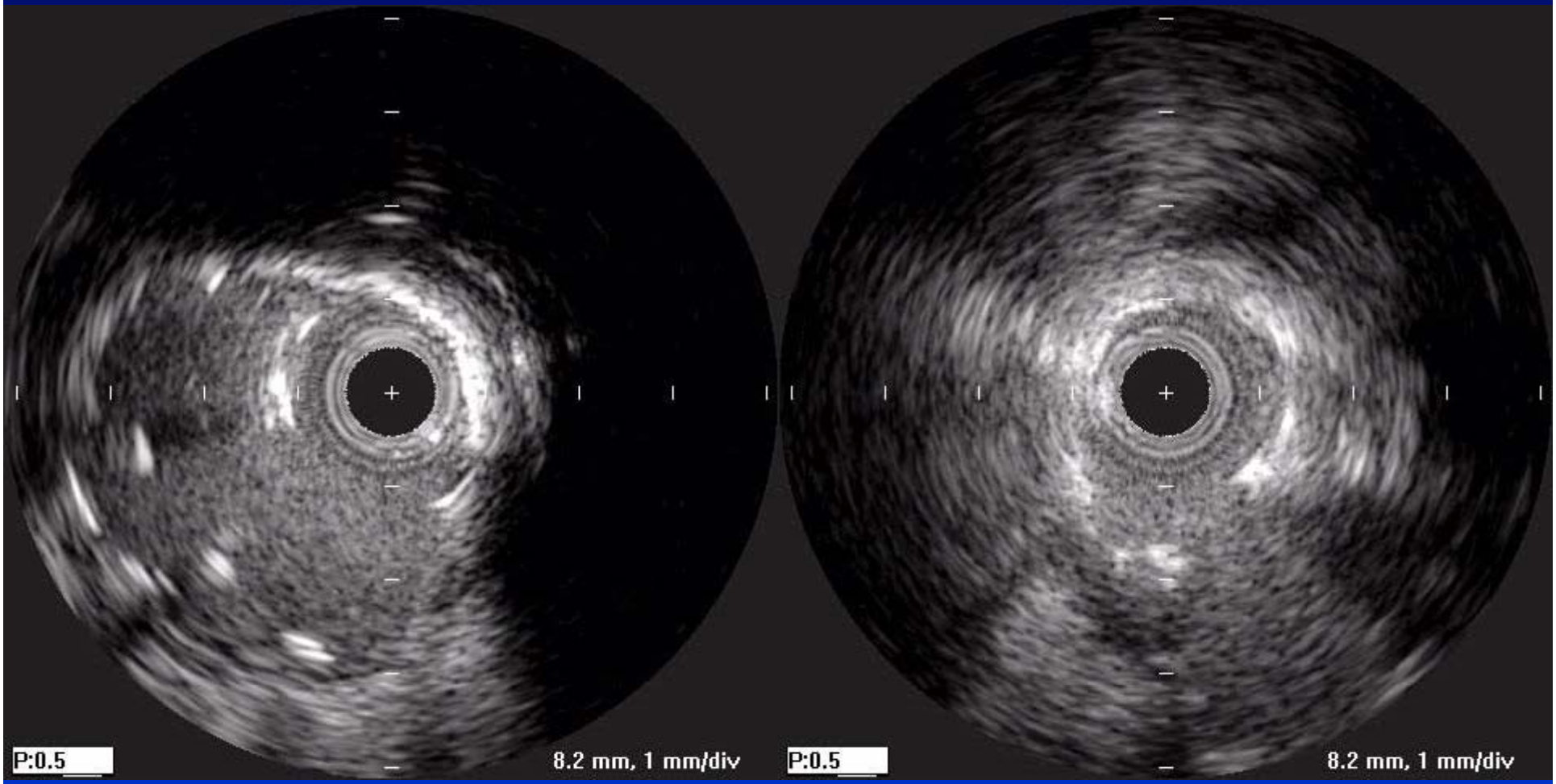

From pLAD **From pLCx**