

Various Techniques in Managing Complex Left Main Lesions

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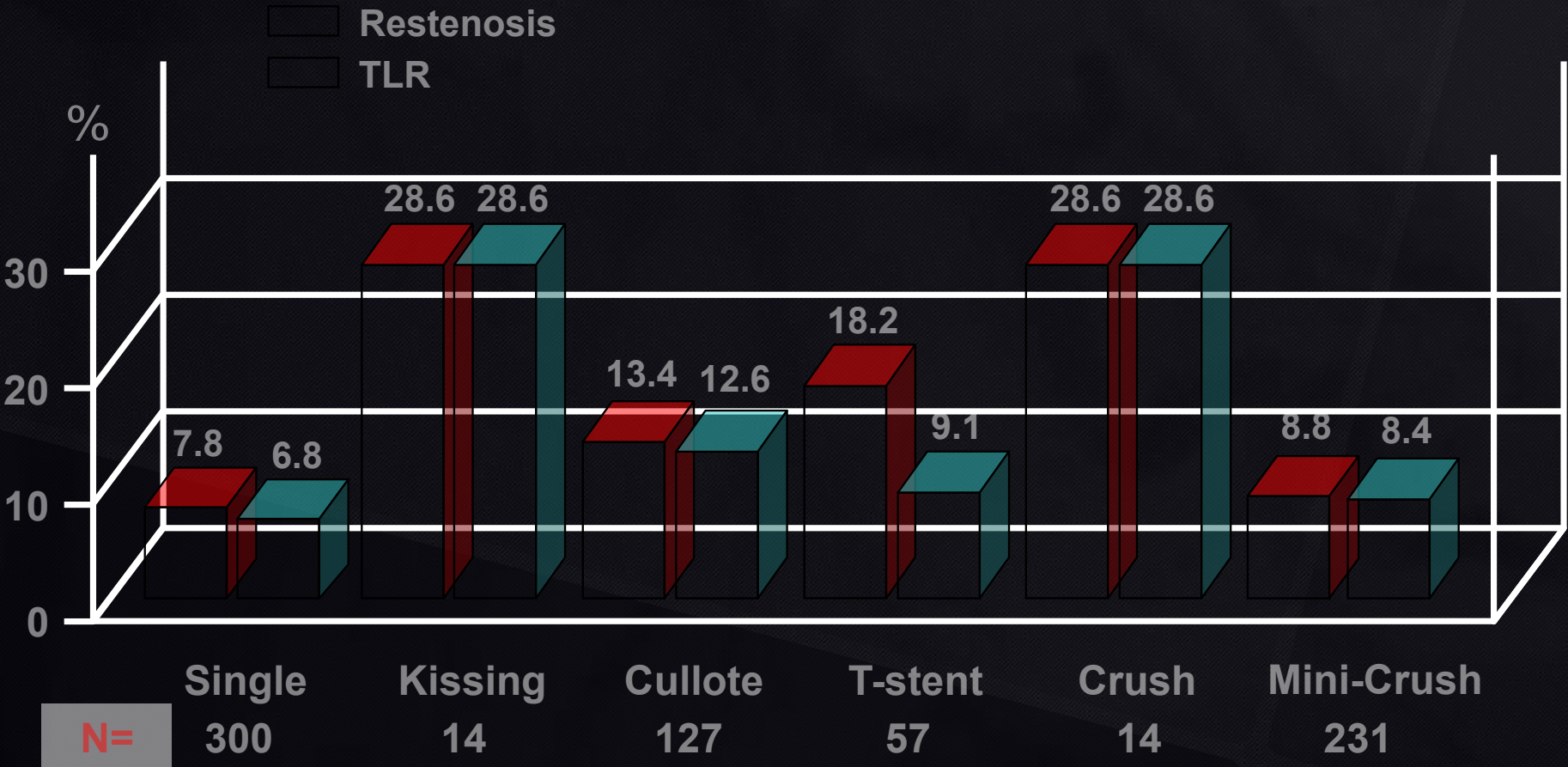
How to Do Two stents

- EBC: Cullote > Crush (general population)
- CBS: DK Crush > Provisional T (High risk)
- MV-SB > 70° : mini crush, TAP
- MV-SB < 60°: Cullote; DK crush

-Long-Term Clinical Result: LMT stenting at Bifurcated Lesion-

Restenosis / TLR in Each Stenting Technique

But LM is another story.....



By Dr. S Nakamura

Case Discussion – History

- 53 ♂
- CAD risk factors: HTN, DM, Smoking.
- Dyspnea, chest pain on exertion
- 2013-1. First PCI for LM → LAD
- CAG, 2013-4 → LM 85% stenosis, LAD 99%, ISRS, LCX 90% stenosis, ostium
- CABG on 4/2 (LIMA → LAD, SVG → RI → OM1 → PDA)

Case Discussion - Angiography

- Chest tightness, severe
- CAG (20013-8-13):
- LAD: 100% ISRS
 - LCX: proximal 90% stenosis
 - RI: ostium 95% stenosis
 - RCA : proximal 50% stenosis
 - Graft: failure

CAG

Lesion Compression - not labeled for diagnosis

LAD

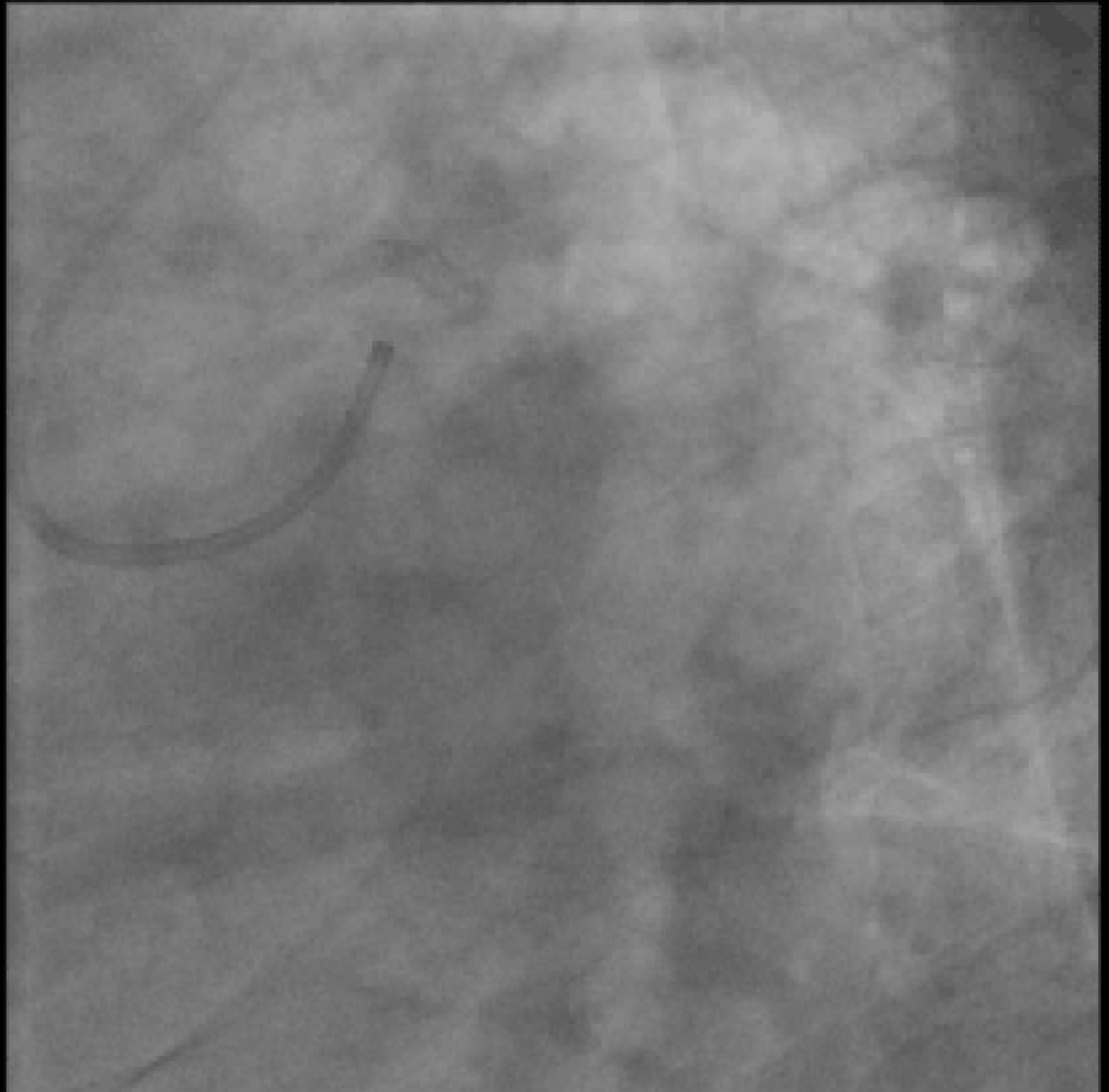
100%

ISRS

LCX

ostium

lesion



CAG

Lossy Compression - not intended for diagnosis

LAD

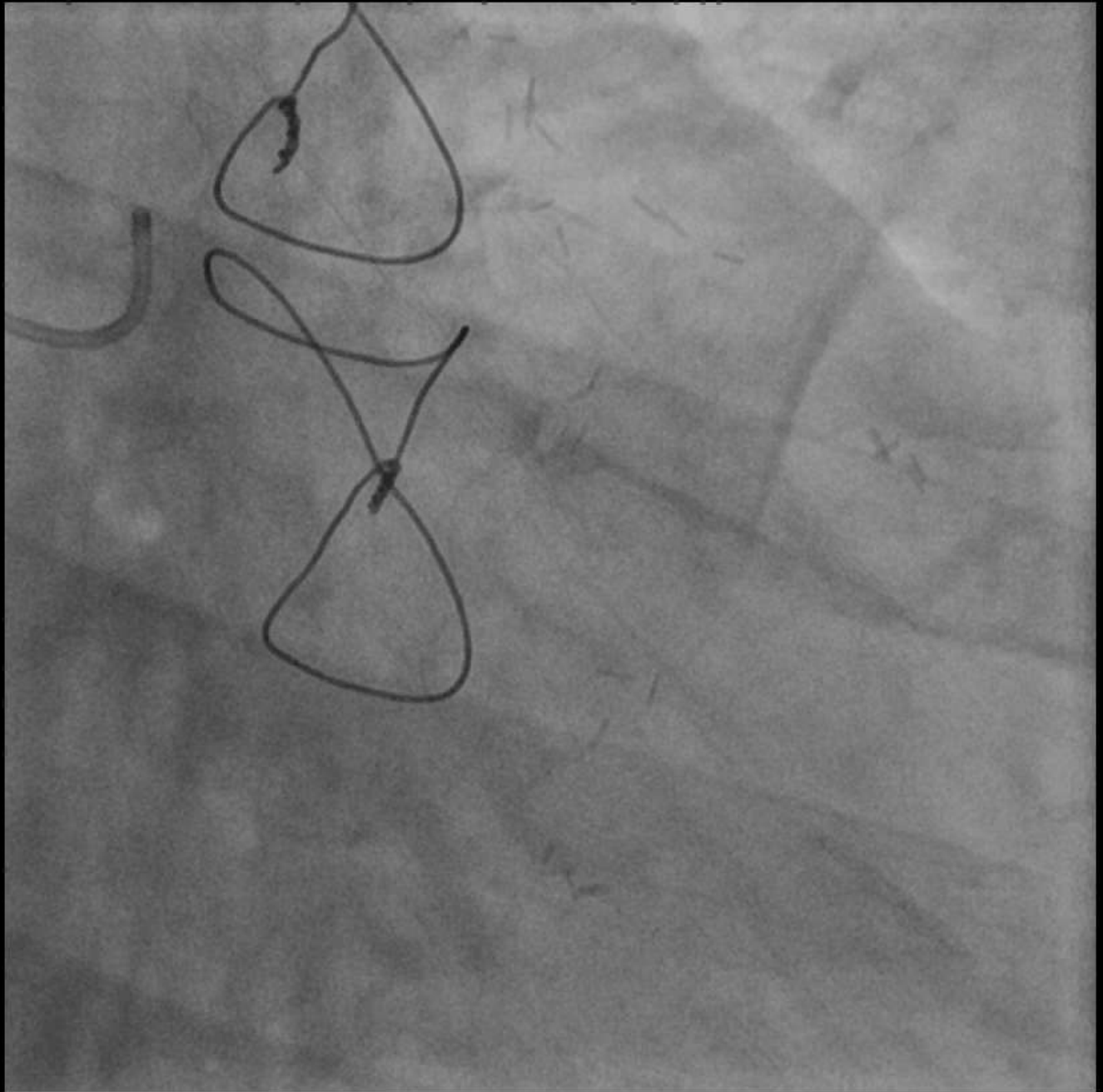
100%

ISRS

LCX

ostium

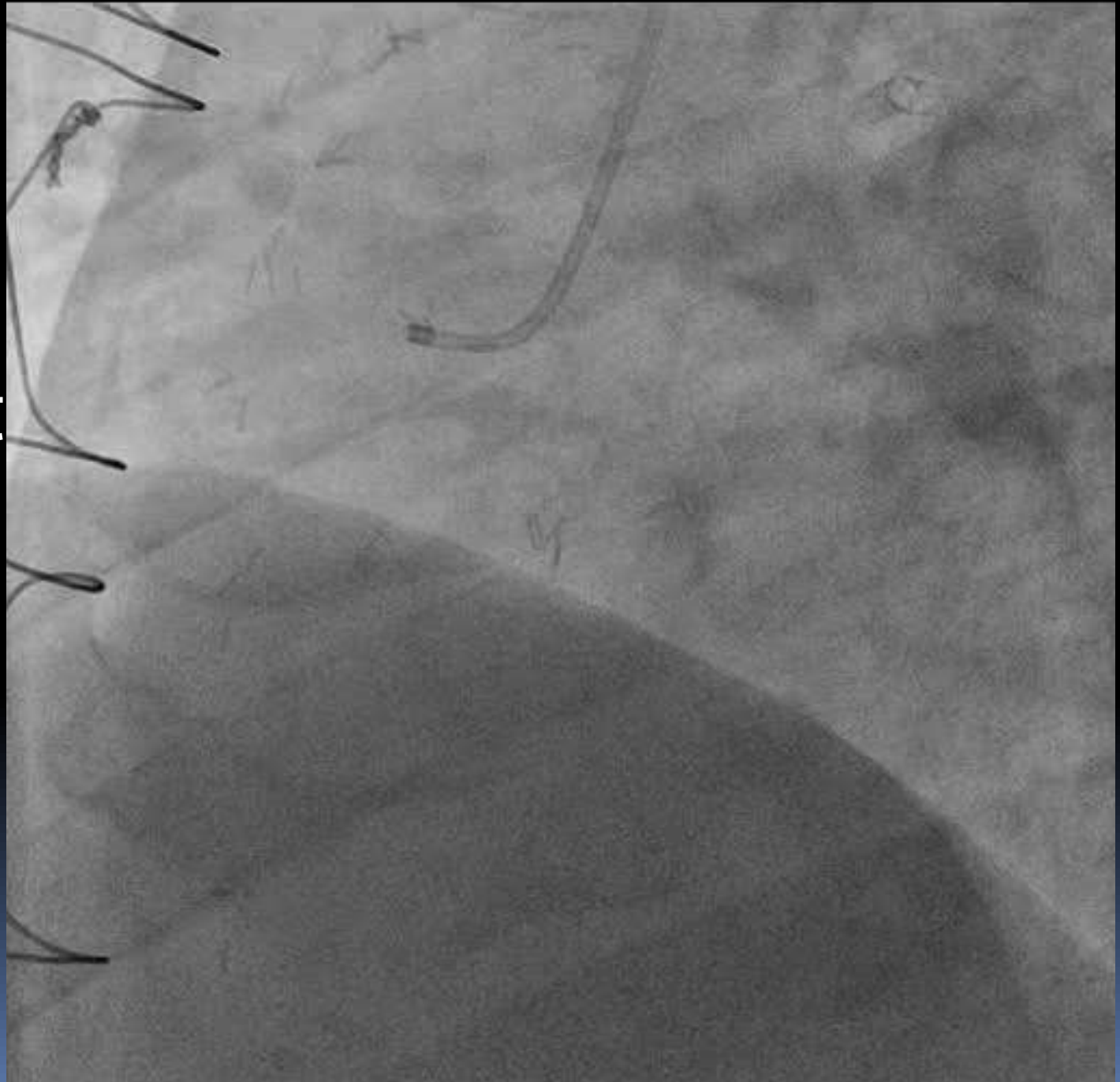
lesion



CAG

Lesion compression - not intended for diagnosis

RCA
non-
significant
lesion



CAG

Low Compression - not intended for diagnosis

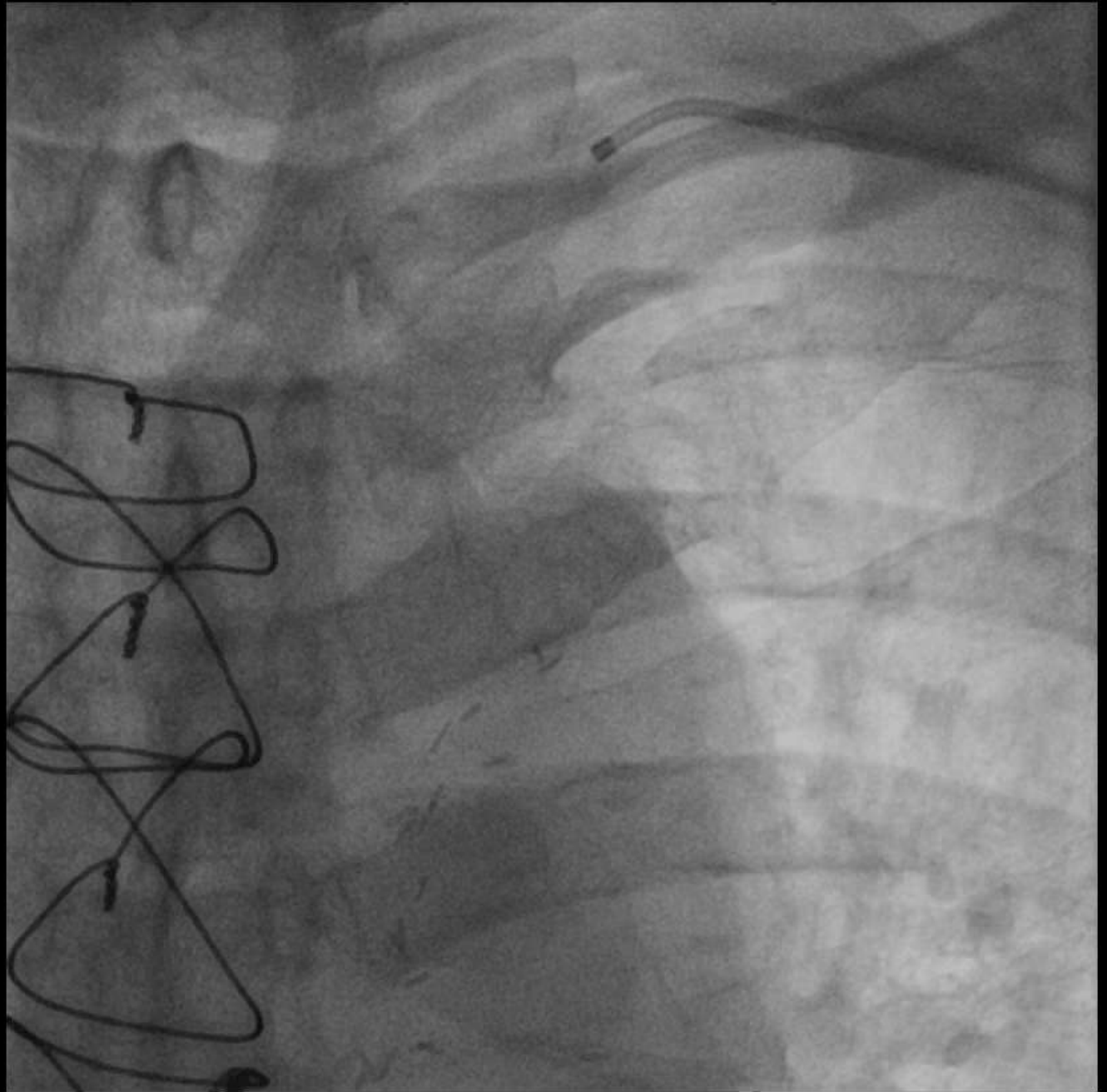
Graft: failure



CAG

Lossy Compression - not intended for diagnosis

LIMA: failure



1

Further plans

- (1) 2 stents technique for LM lesion ?
- (2) R-CABG?
- (3) Mini-CABG + LCX stenting ?
- (4) Cutting BC, Kissing BC ?
- (5) DEB ?

The Debiut Trials

- DIOR[®] DEB in Bifurcations – Registry
- and Randomized Multicenter Study

The Debiut trial – Summary I

- Strong trends for a favourable outcome combining DEB with a BMS in MB and using a DEB in SB with regards to late loss (primary endpoint) and binary restenosis rates
- In secondary endpoints (TLR, TVR, total MACE) there is a strong trend favouring DEB/BMS compared to POBA/BMS
- Comparable or better outcome could be shown for DEB/BMS compared to DES/POBA regarding TLR and TVR
- No stent thrombosis occurred in DEB/BMS arm although only 3 month DAT

CAG

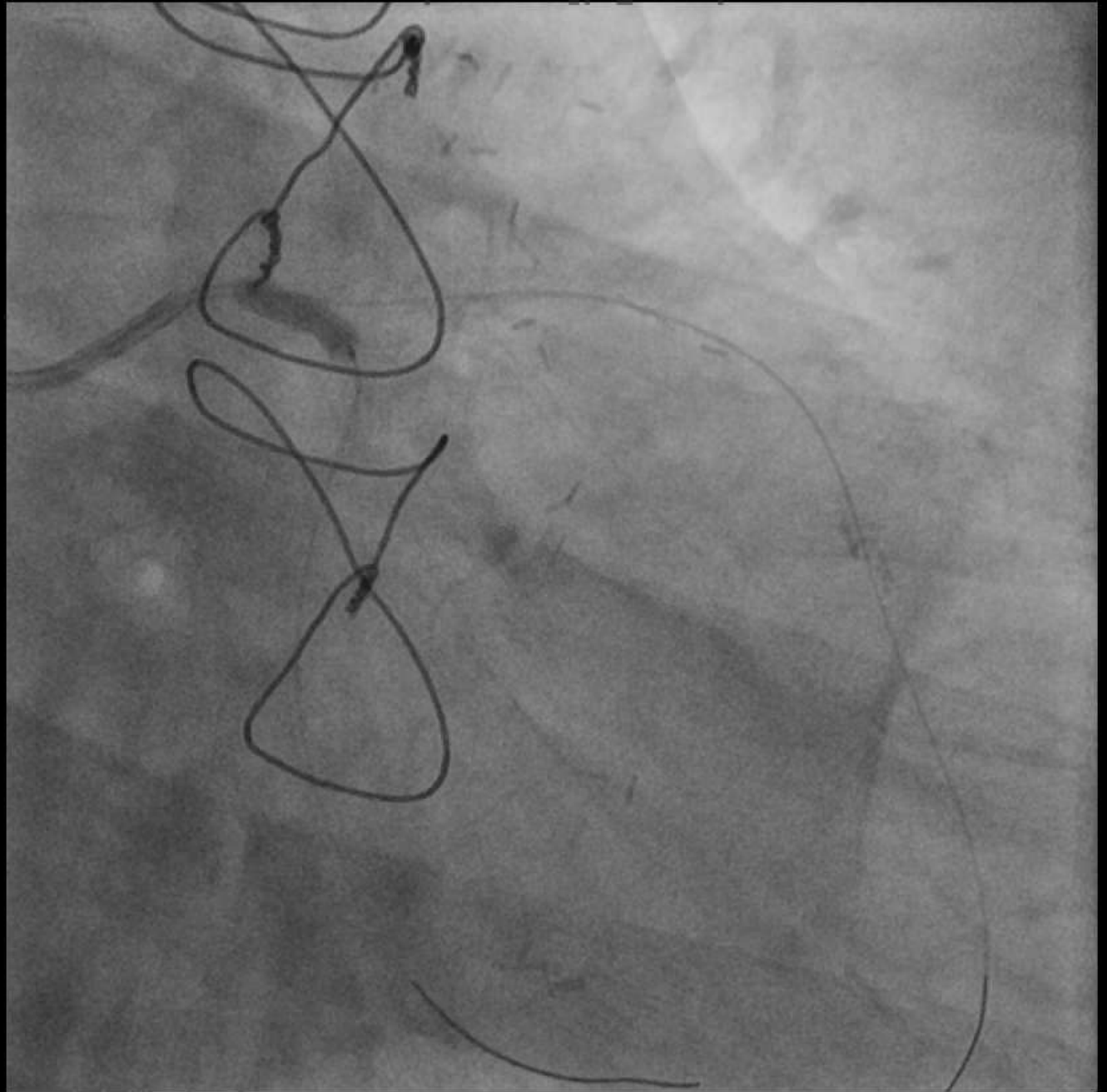
Lossy Compression - not intended for diagnosis

LM-LCX

:

DES

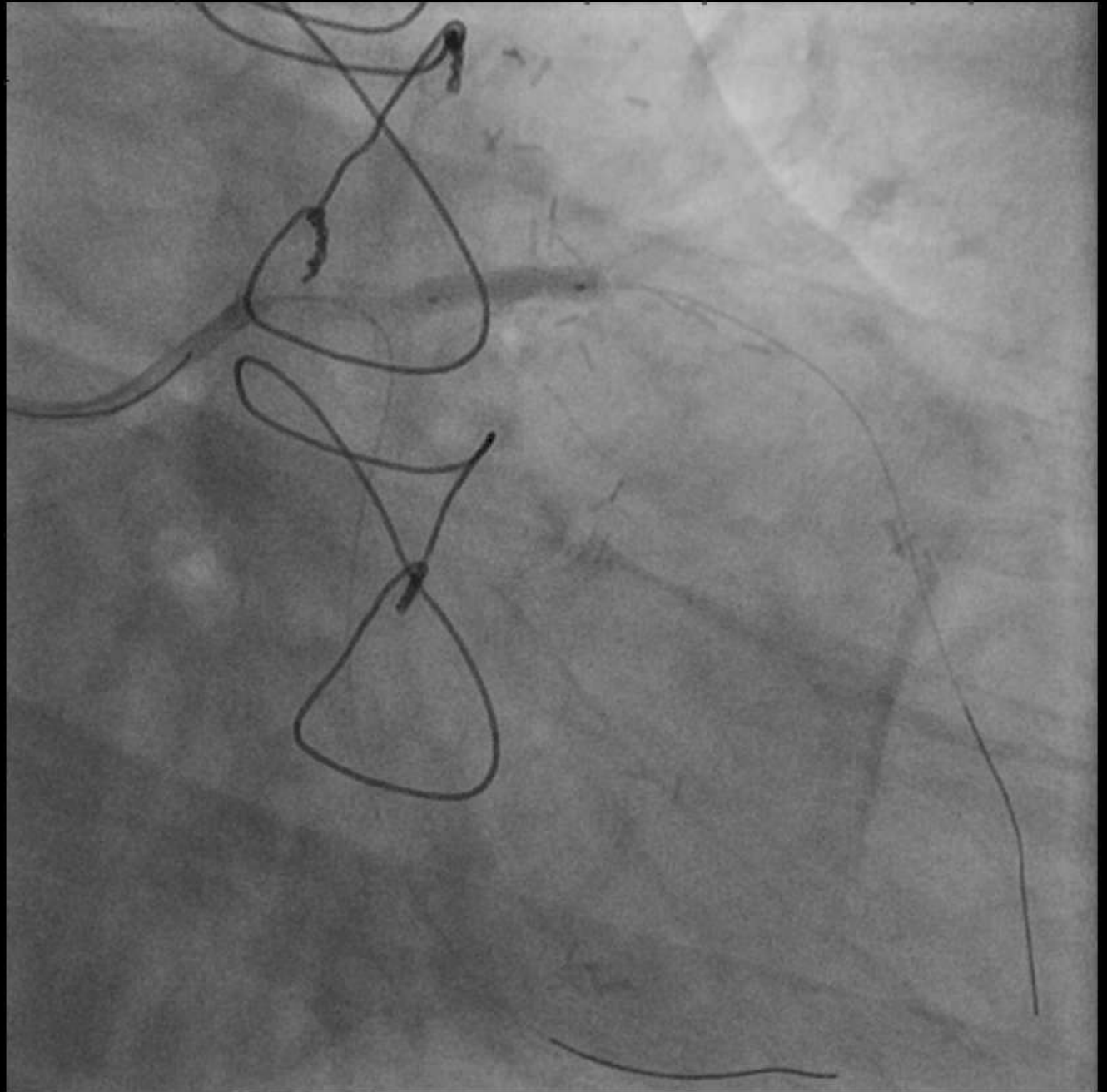
POBAS



CAG

Lossy Compression - not intended for diagnosis

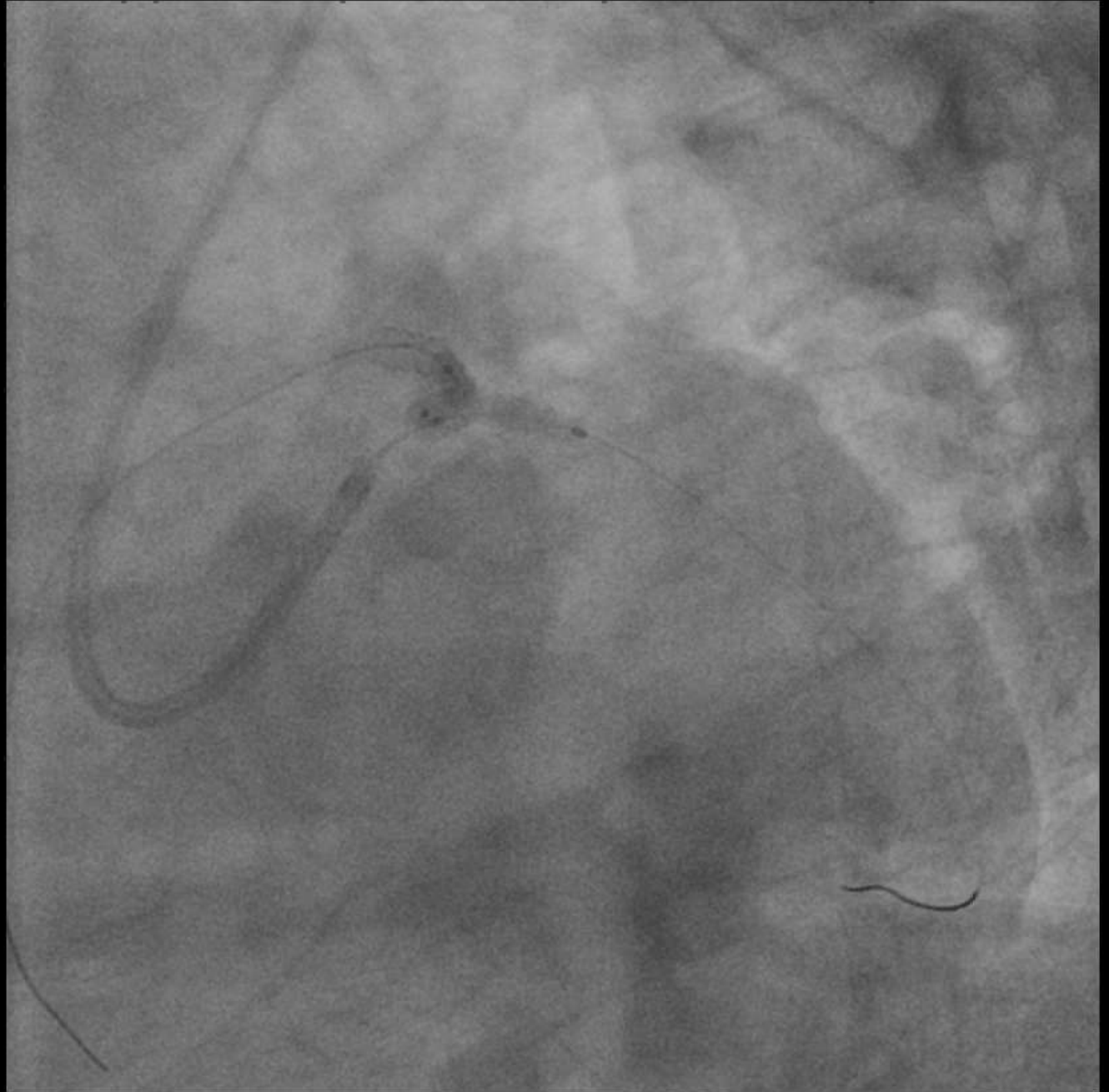
LAD:
NC-
POBA



CAG

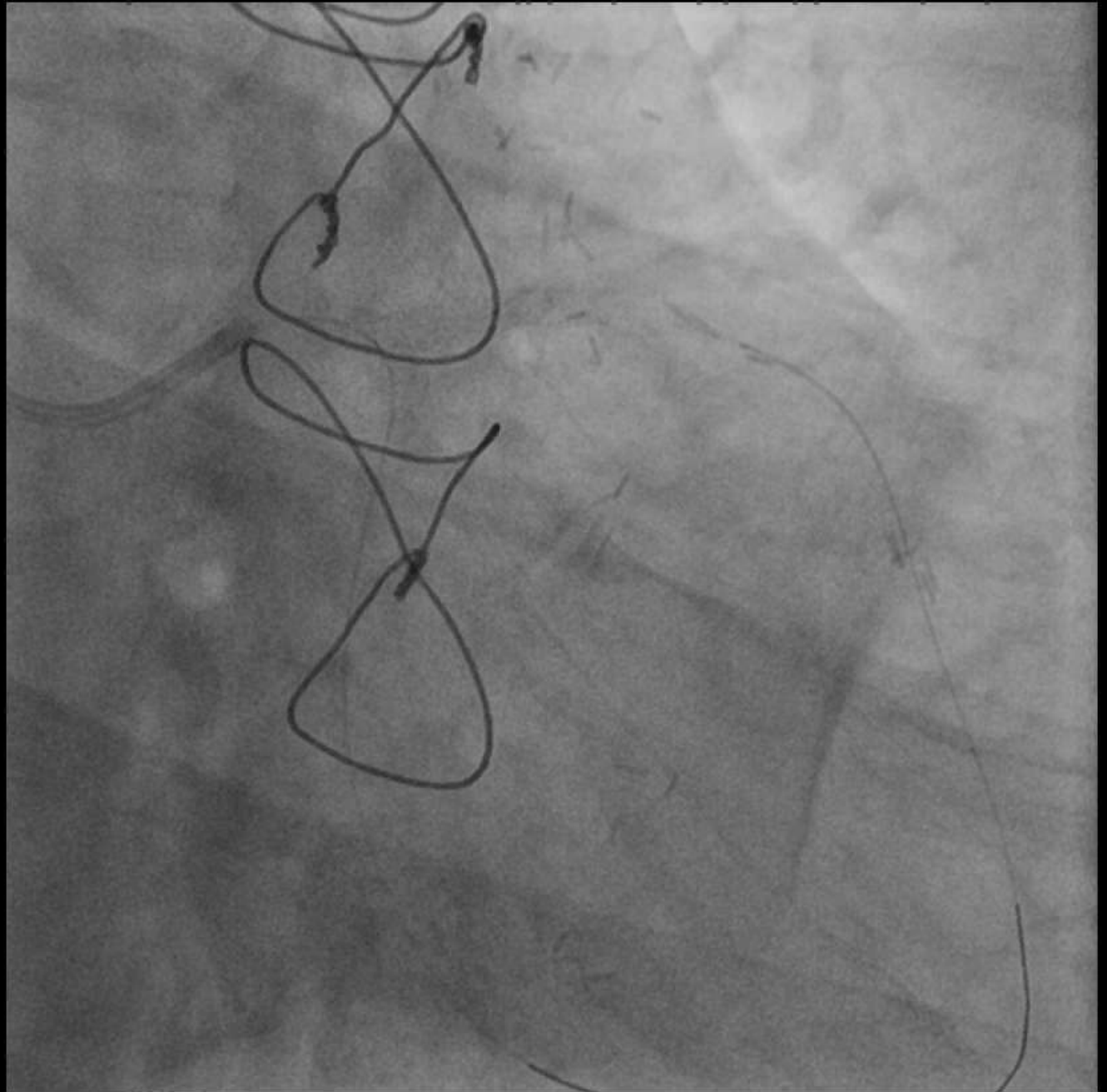
Lossy Compression - not intended for diagnosis

LAD
LCX:
Kissing
with
NC-BCs



CAG

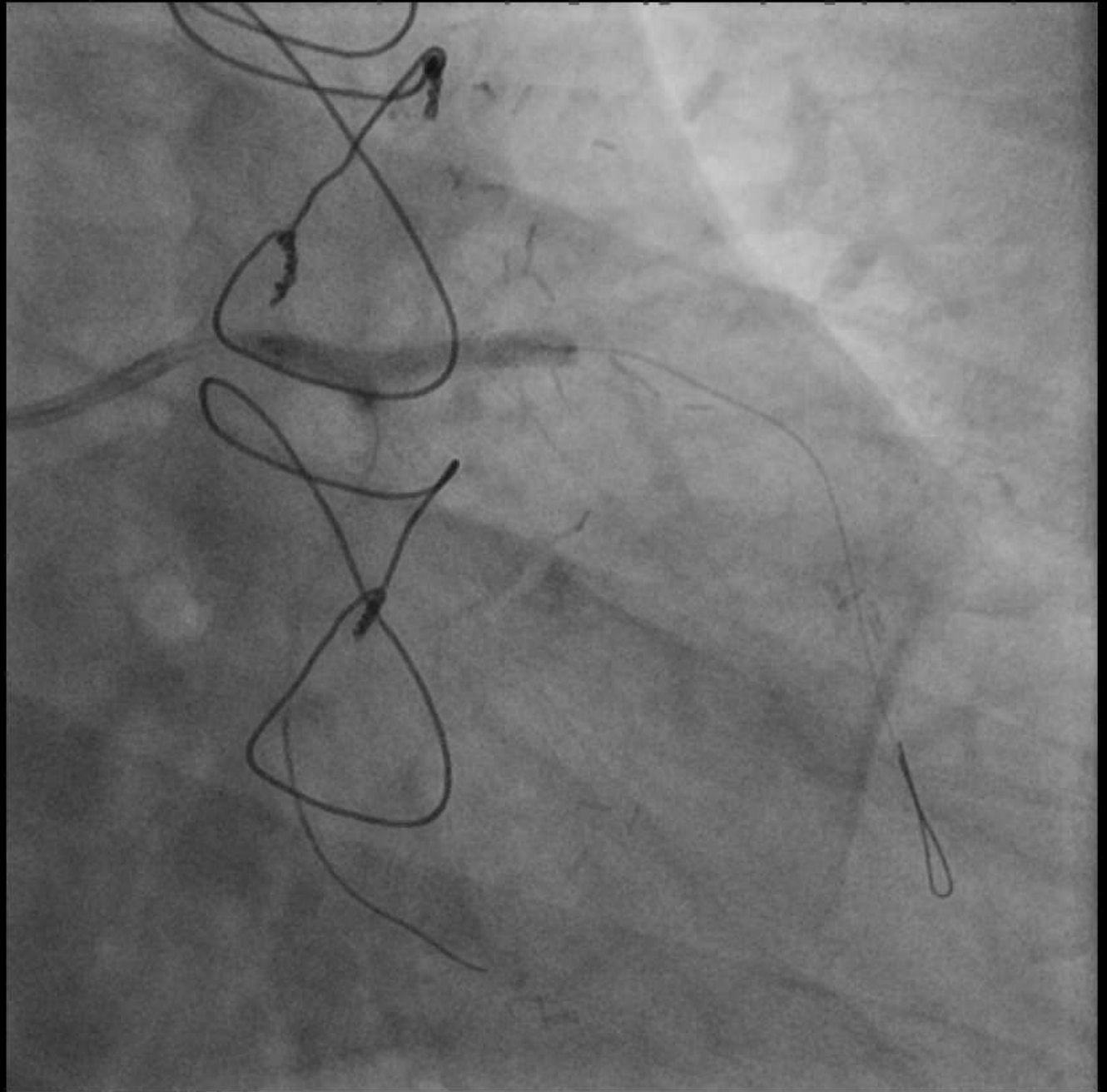
Lossy Compression - not intended for diagnosis



CAG

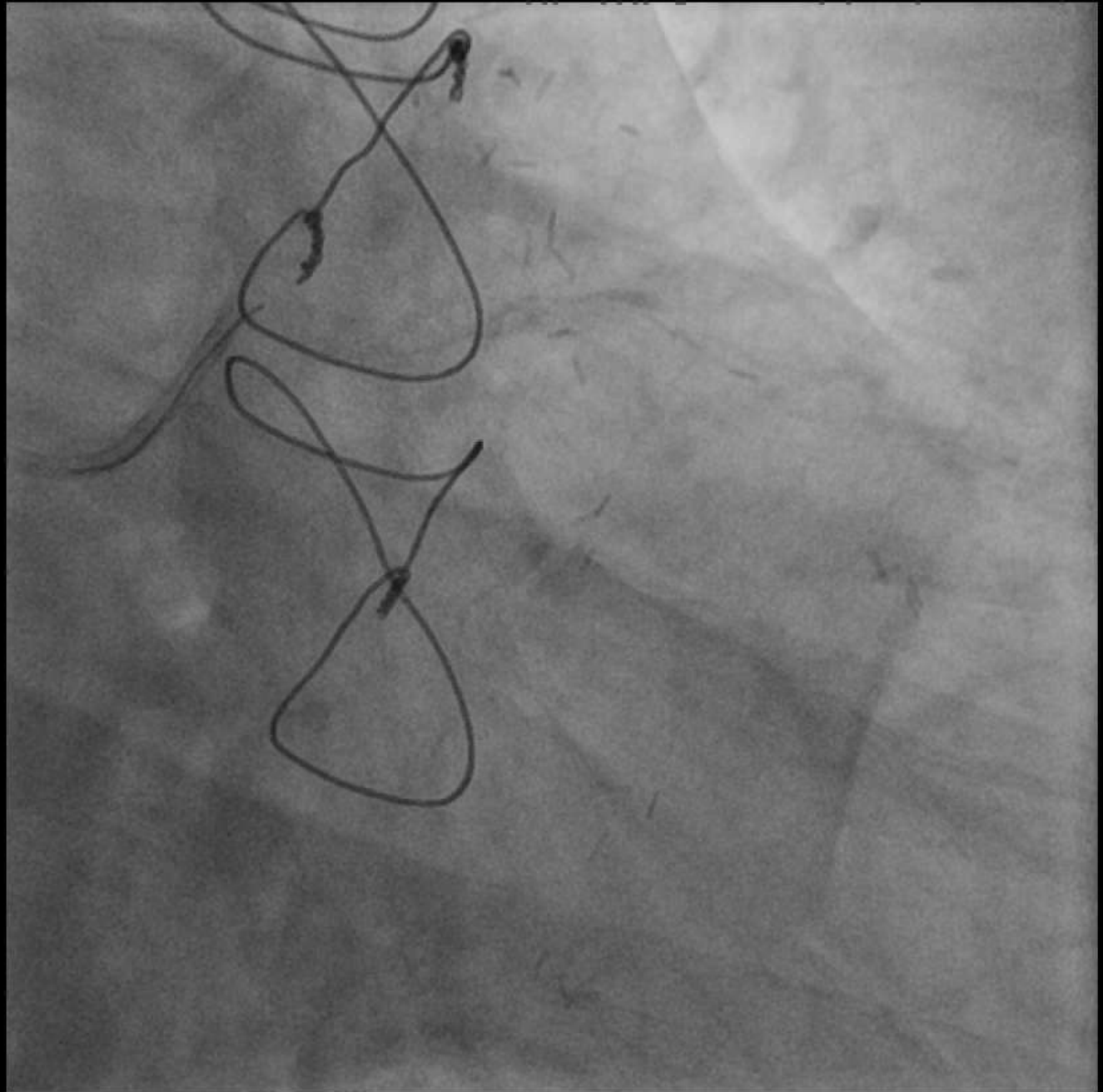
Lossy Compression - not intended for diagnosis

LAD
LCX:
Kissing
with
DEB
and
NC-BC



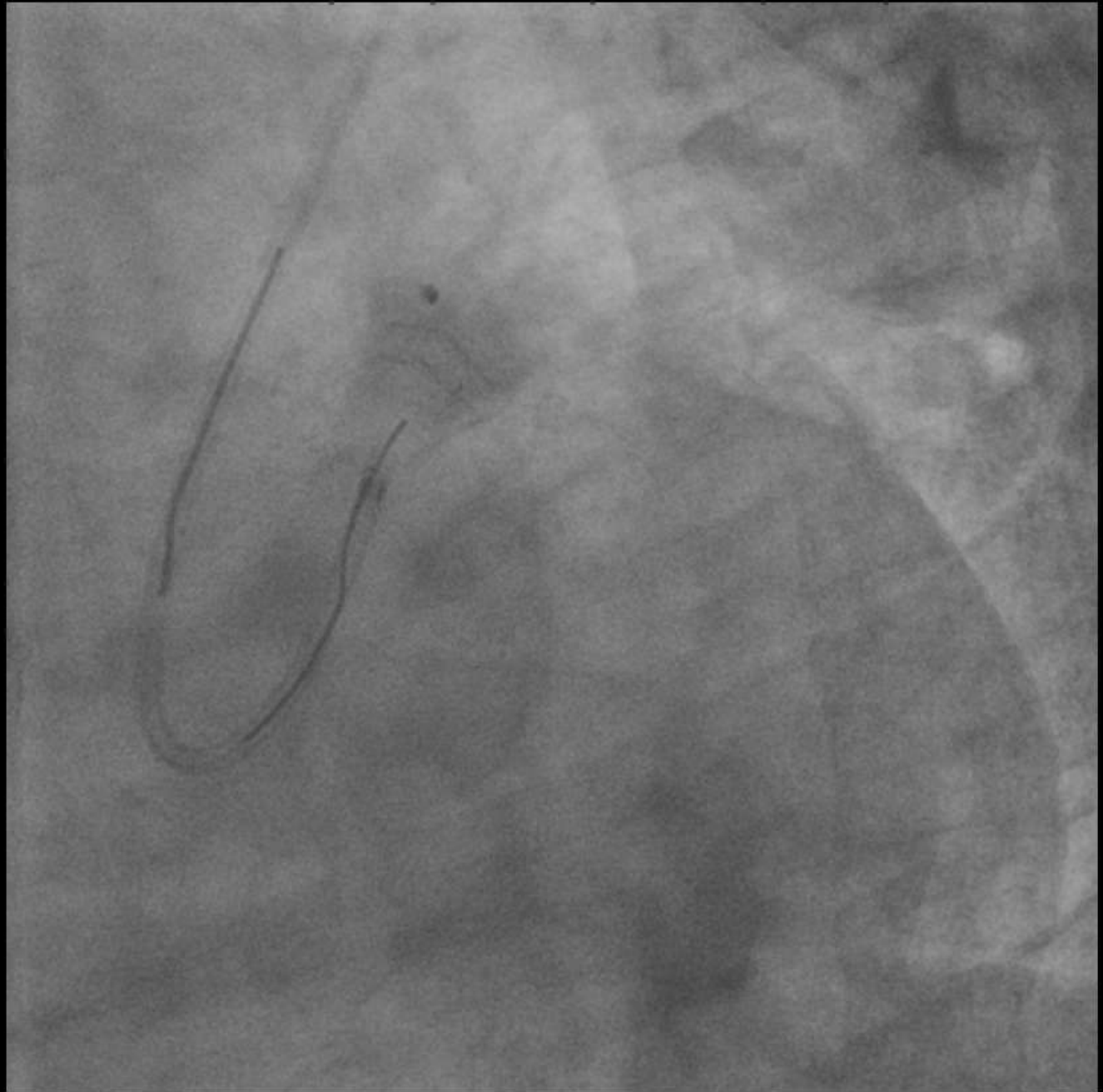
CAG

Lossy Compression - not intended for diagnosis



CAG

Lossy Compression - not intended for diagnosis



Case Discussion – History

- 96 y/o lady
- CAD risk factors: Age
- Chest pain with ACS → lung edema, s/p intubation
- Discharge
- ECG: ST elevation over avR, ST depression over V4~V6

Case Discussion - Angiography

- CAG (2013-7-24): CAD 3 -V-D
 - LAD: Diffuse calcified lesion up to 80% stenosis
 - LCX: Ostial critical lesion
 - RCA: Diffuse lesion with small caliber
 - Failed POBA over LCX lesion.

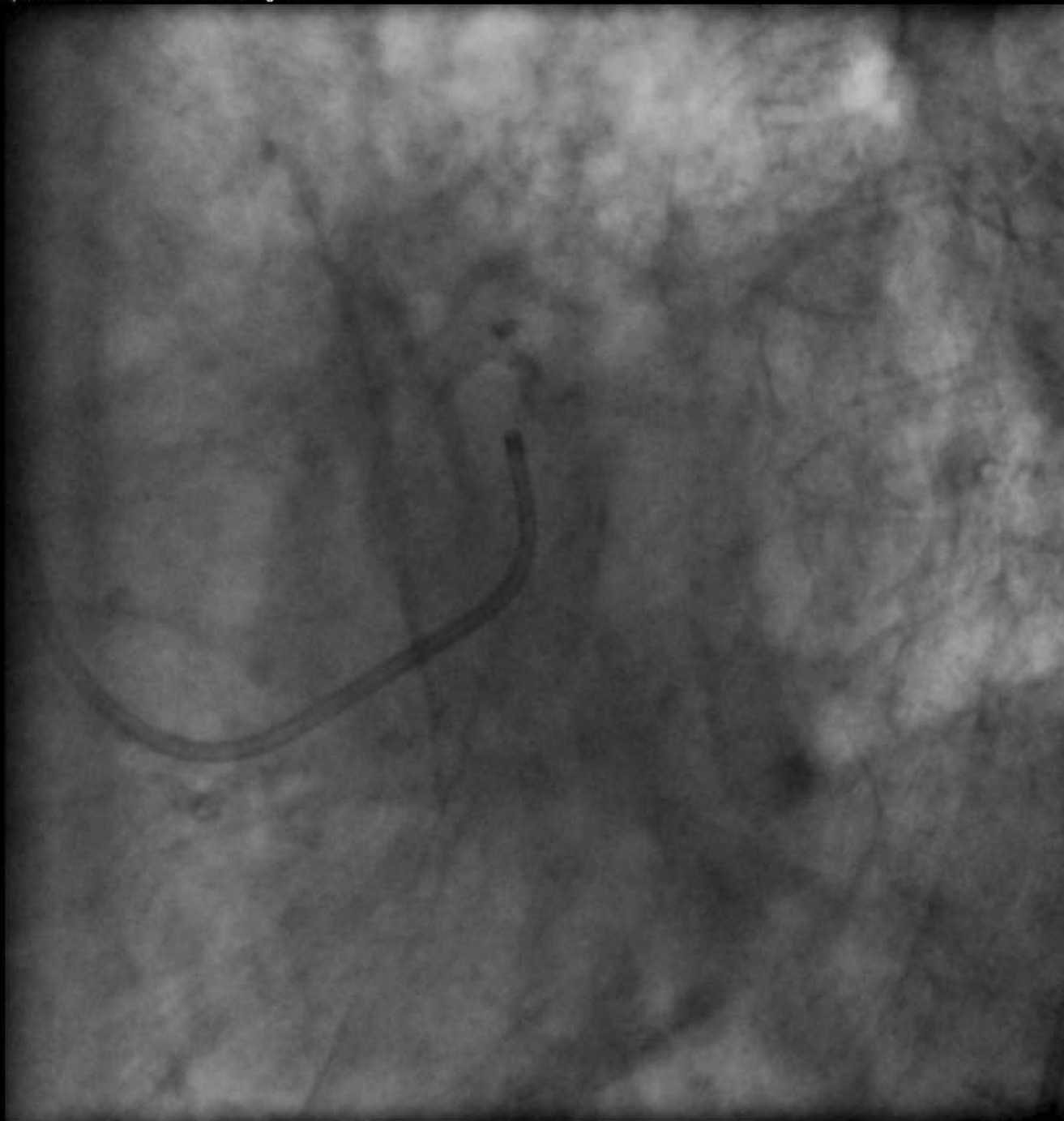
CAG

LAD:

Diffuse
calcified

LCX:

prox
critical
lesion



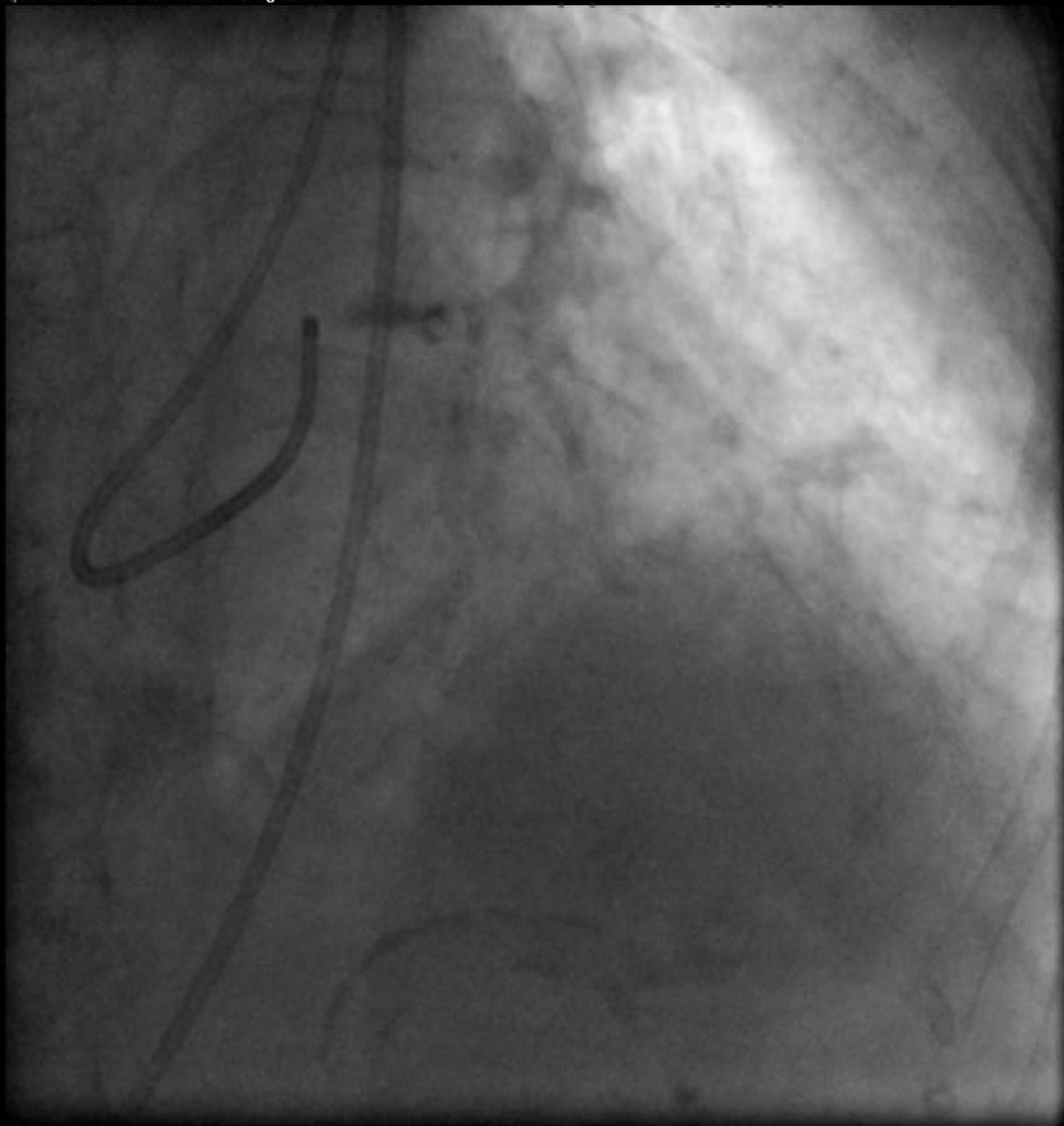
CAG

LAD:

Diffuse
calcified

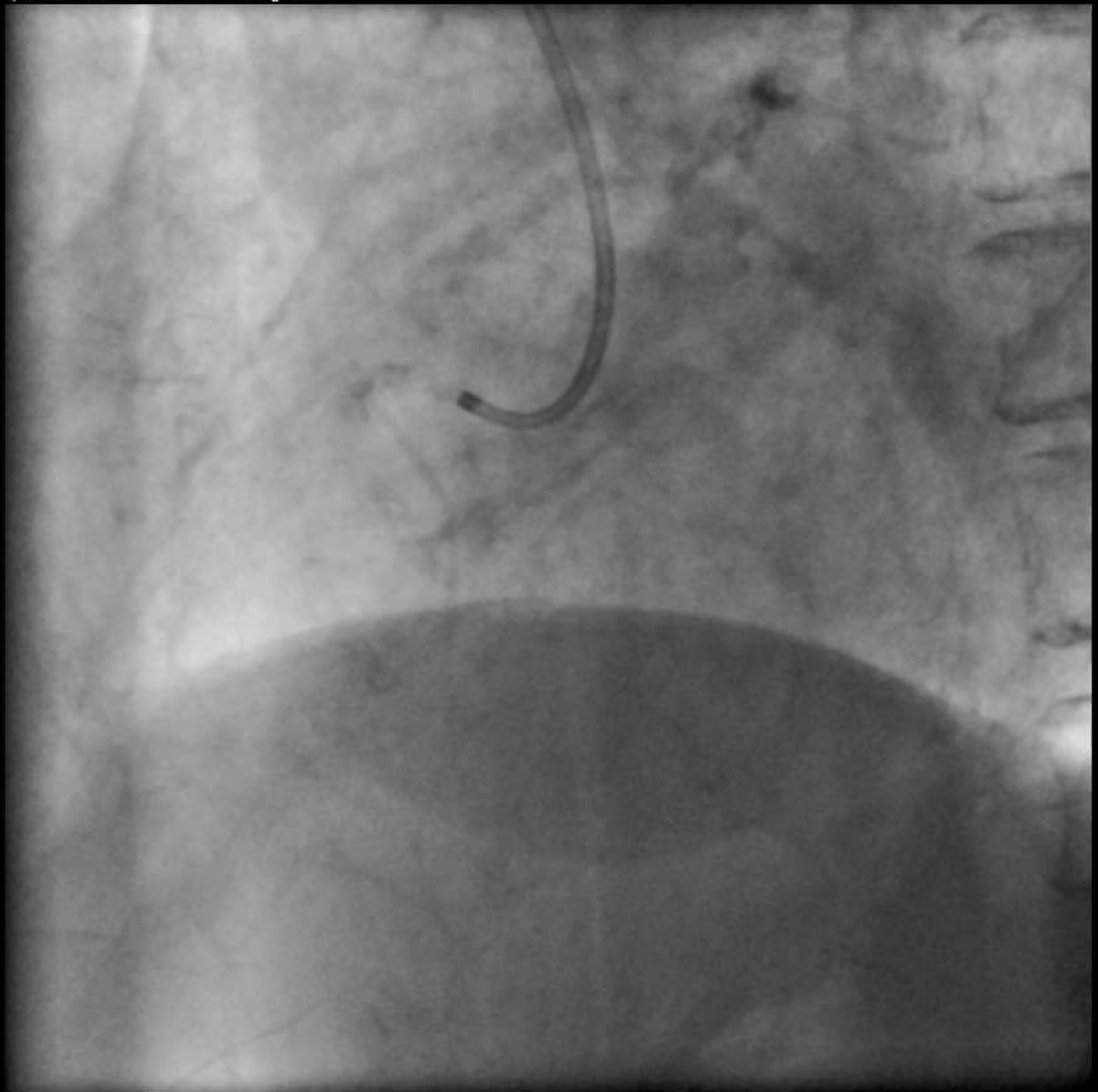
LCX:

prox
critical
lesion



CAG

RCA:
Diffuse
lesion
small
caliber



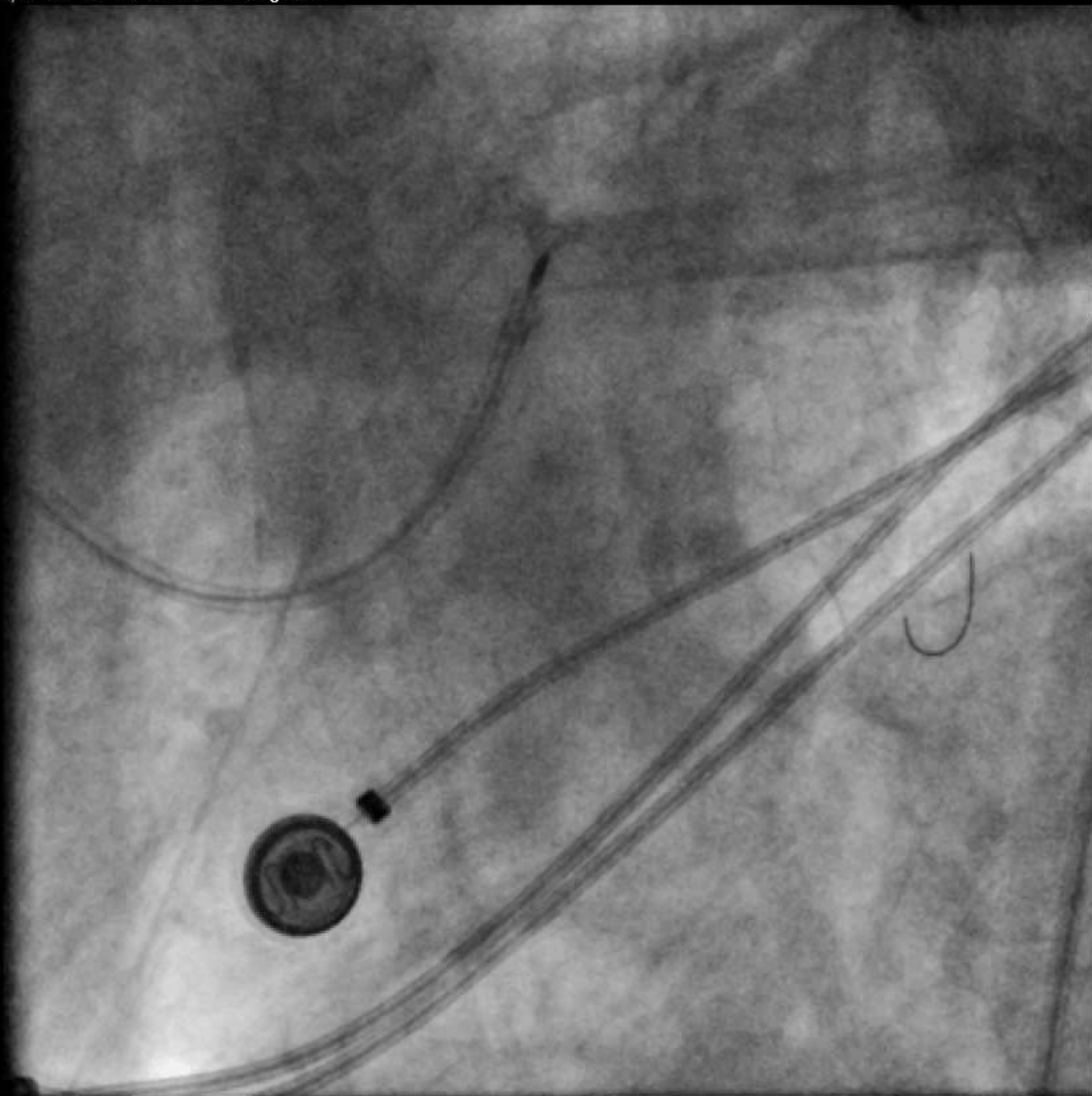
Further plans

- (1) CABG? → 96 y/o
- (2) Cutting BC, Kissing BC ?
- (3) DEB ?
- (4) 2 stents or 1 stent ?

Evaluating by IVUS after rotablation

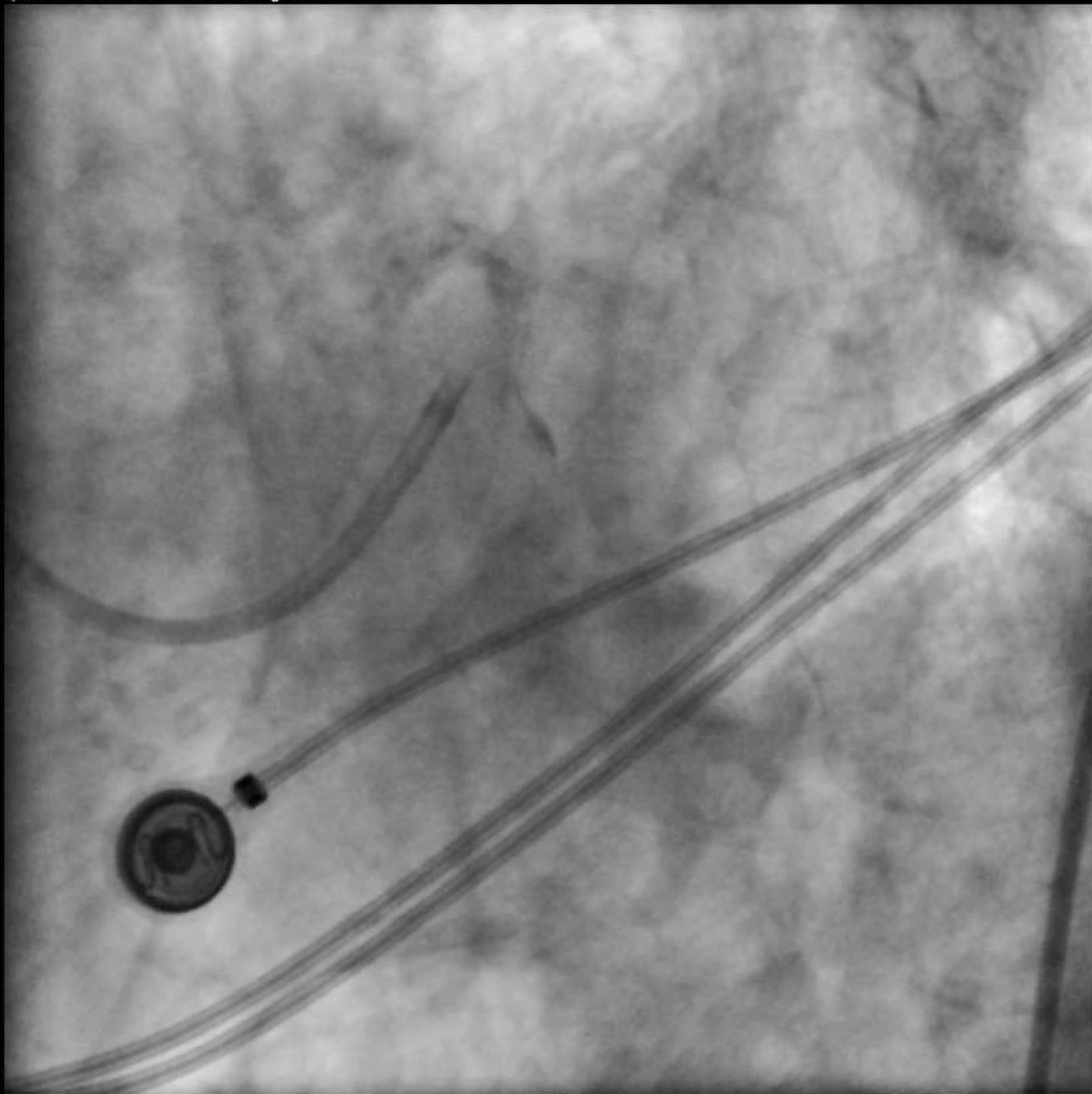
CAG

Rota
over
LCX
with
1.25mm
burr
Under
IABP

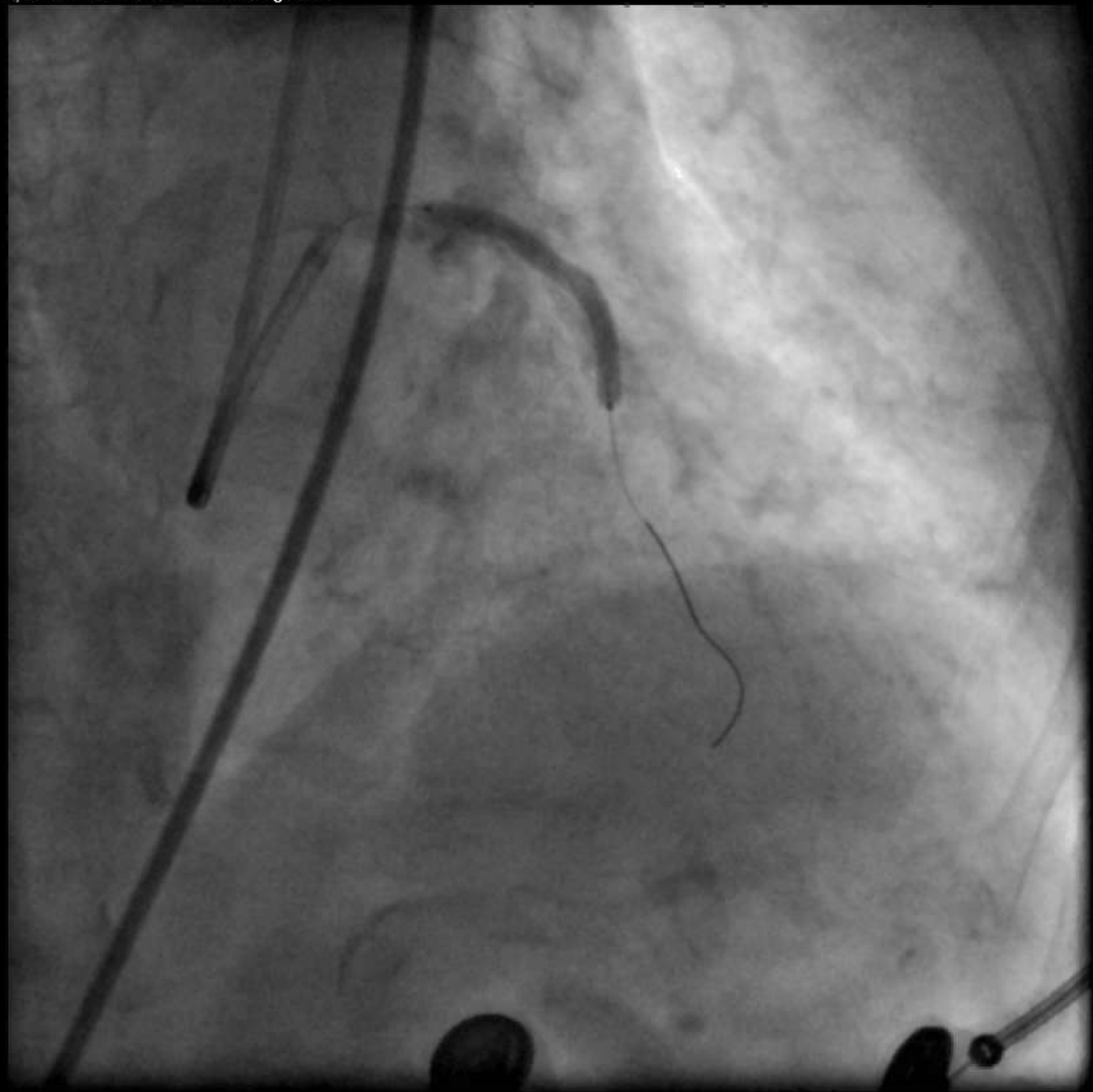


CAG

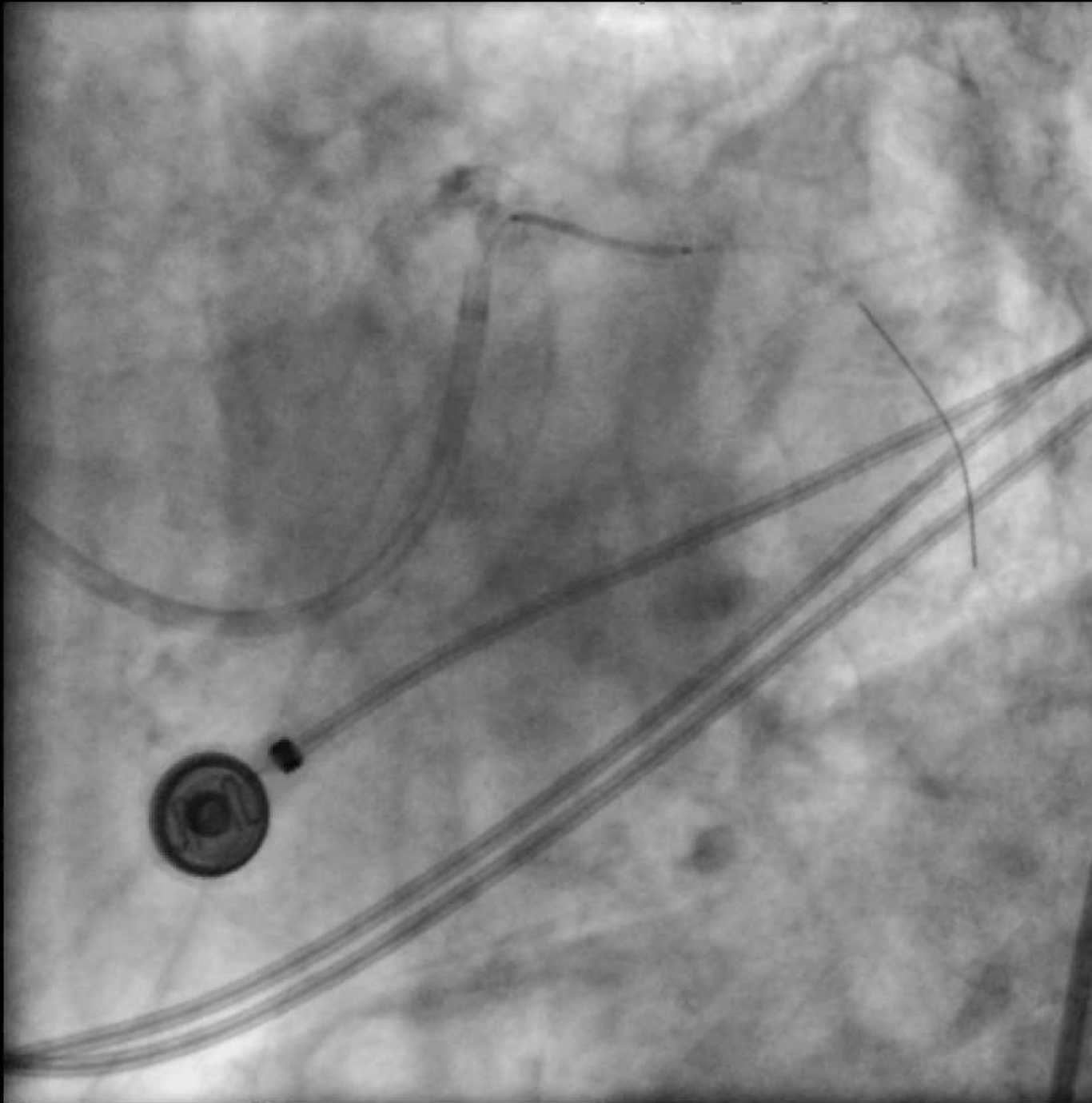
s/p
rota



CAG
LAD:
Stenting
with
2.75x 32
element
stents
s/p
3.0 NC
BC

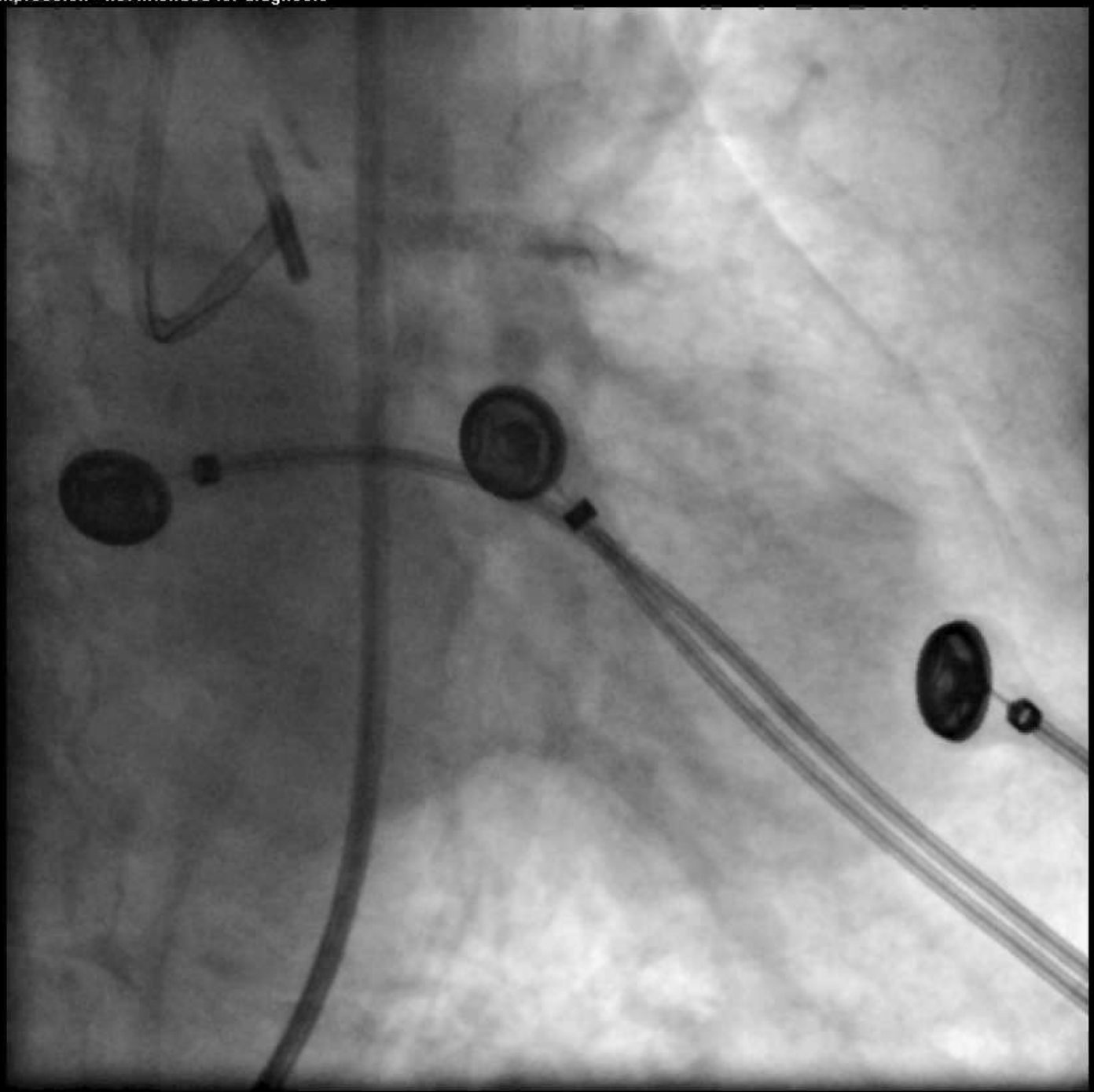


CAG
LCX:
Stenting
with
2.75x 16
element
stents

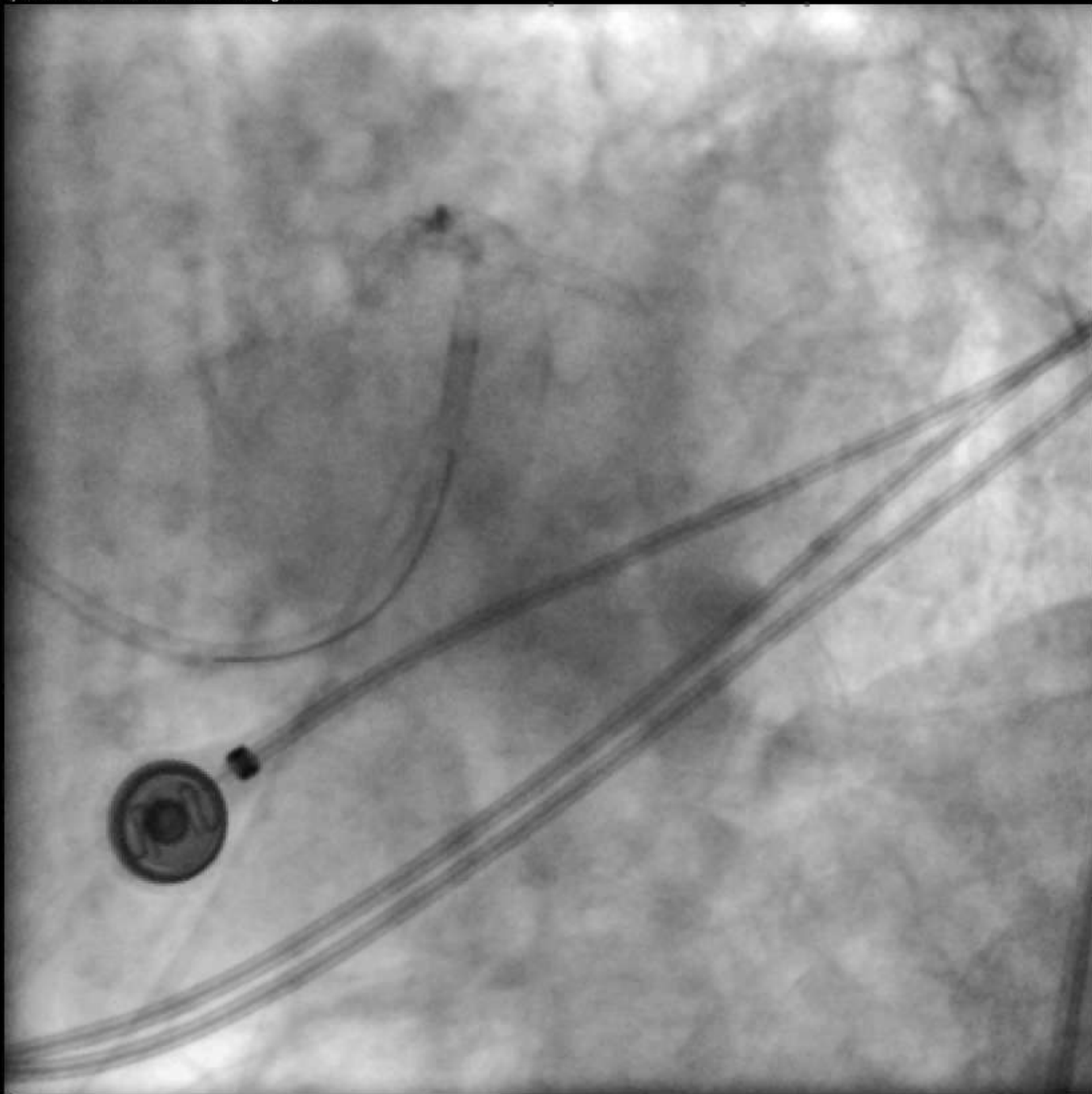


Lossy Compression - not intended for diagnosis

CAG



CAG



Conclusion

Not always 2 stents techniques in complex LM lesions

Considering the combination of DEB, Debulking, precise single stent stenting, Evaluating by IVUS or OCT

Reduce metal burden may bring favorable long-term outcomes



Taiwan
Formosa, Beautiful Island

Thank You for Your Attention

