Expert Case Review:
Transradial PCI for CHIP Patients

- If you are not familiar with... You will lost some case –

President / Director of Cardiology / New Tokyo Hospital

Professor of Department of Advanced Cardiovascular Medicine:
Kumamoto University

Consultant / National Cardiovascular Center / Osaka

Sunao Nakamura M.D. Ph.D

FACC, FAHA, FESC, FSCAI

First TRI for PCI done in 1992 Aug. 14 in OLVG: Netherland

Percutaneous transradial artery approach for coronary stent implantation. Cathet Cardiovasc Diagn 1993
Kiemeneij F, Laarman GJ: 173–178

30 Years relationship

25 years TRI

100 times bigger energy

He is still activated ... Doing !!

Efficacy of TRI

CAD Patients

ACS Patients

Determination of the RAdial versus GrOiN coronary angioplasty

The Result of DRAGON Trial

Shigeru Saito, MD

Department of Cardiology and Catheterization Laboratory
Shonan Kamakura General Hospital, Kamakura, Japan

on behalf of Dragon Trial investigators

Results From The Minimizing Adverse Haemorrhagic Events By Transradial Access Site And Systemic Implementation of Angiox-MATRIX Access Program

MATRIX

NCT01433627

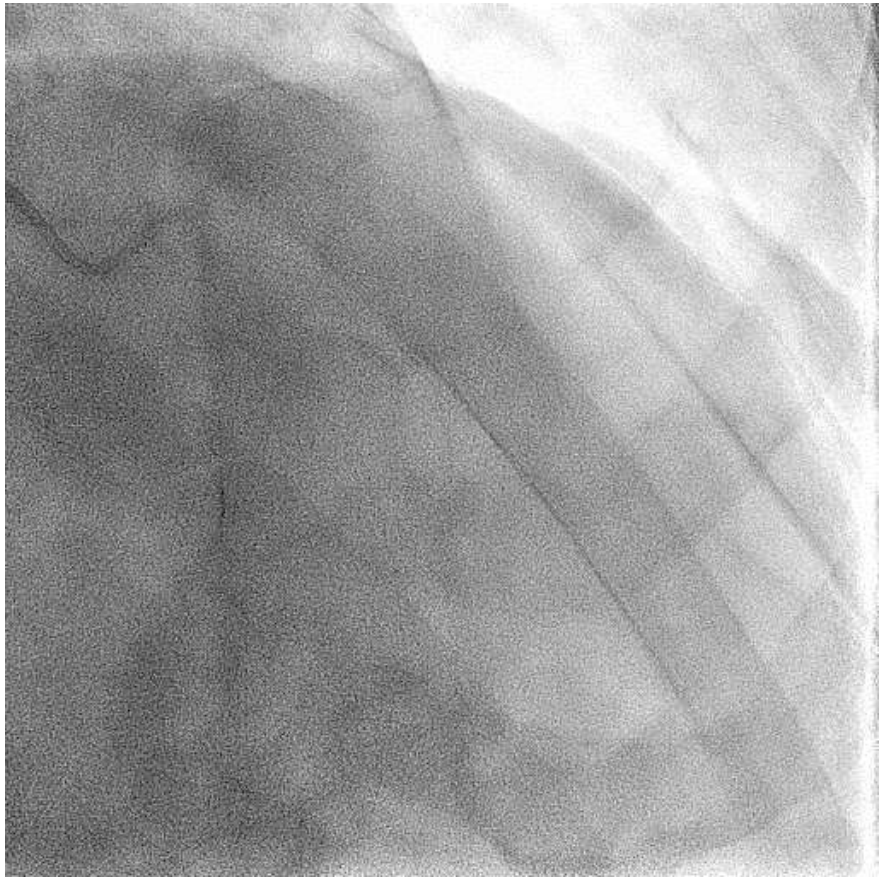
M. Valgimigli, MD, PhD
Erasmus MC
Rotterdam, The Netherlands
*on behalf of the **MATRIX Group***

TRI in CHIPS

- LMT -

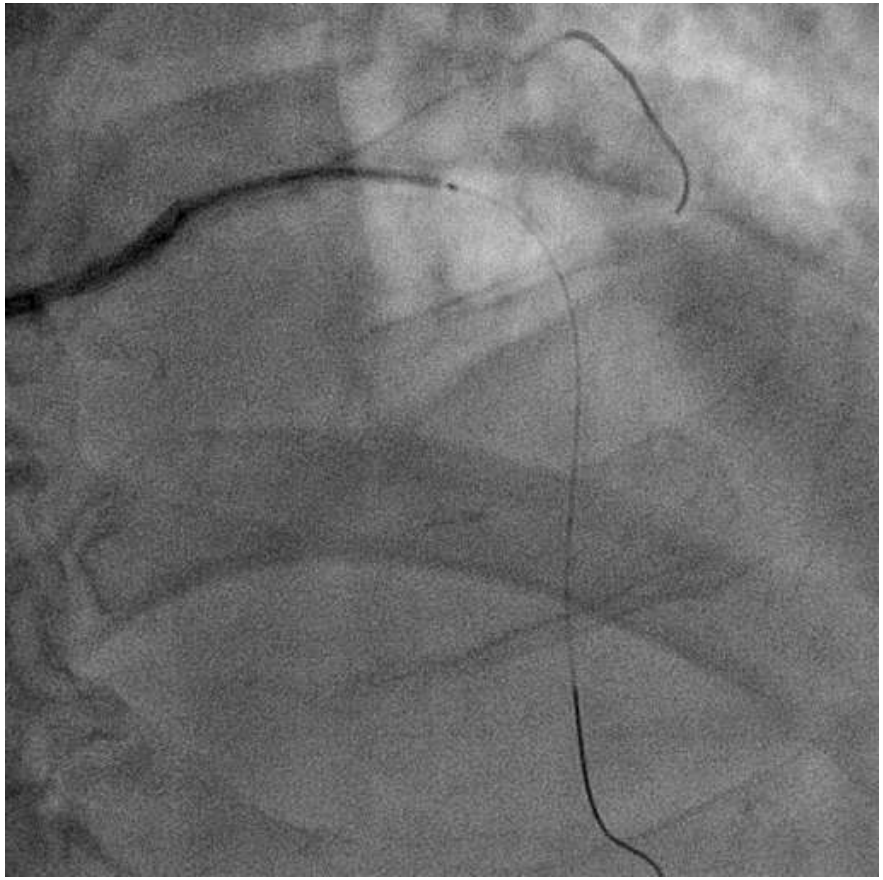
Case 1: Very Complex LMT disease

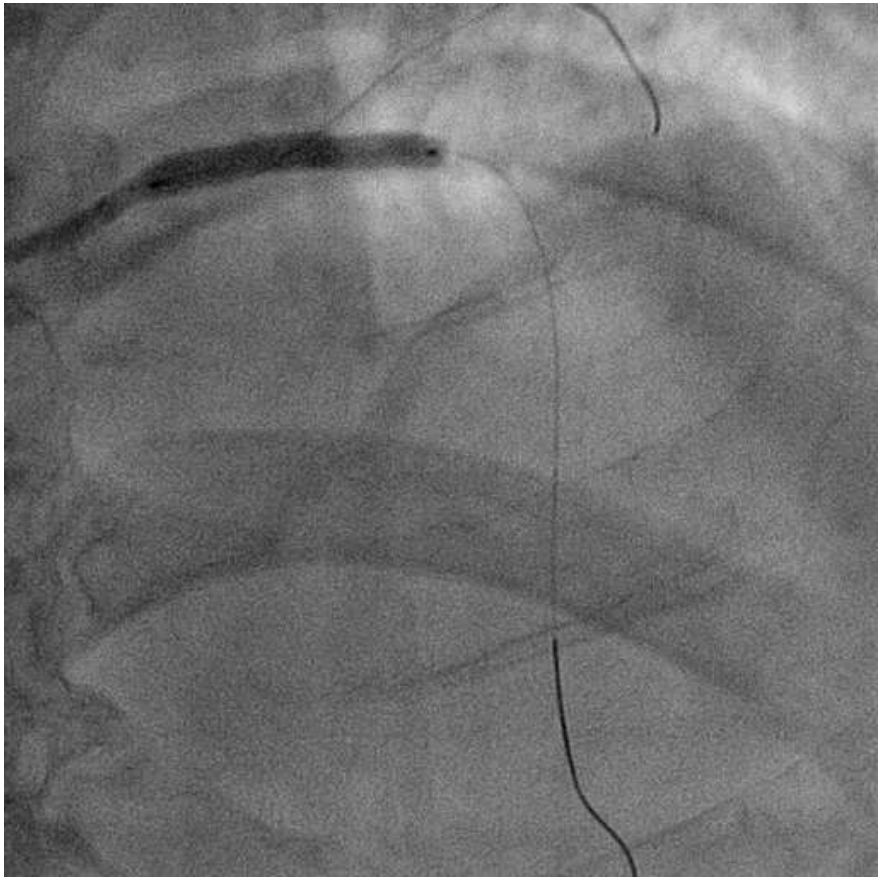
Very complex LMT disease



Case 1: Very Complex LMT disease

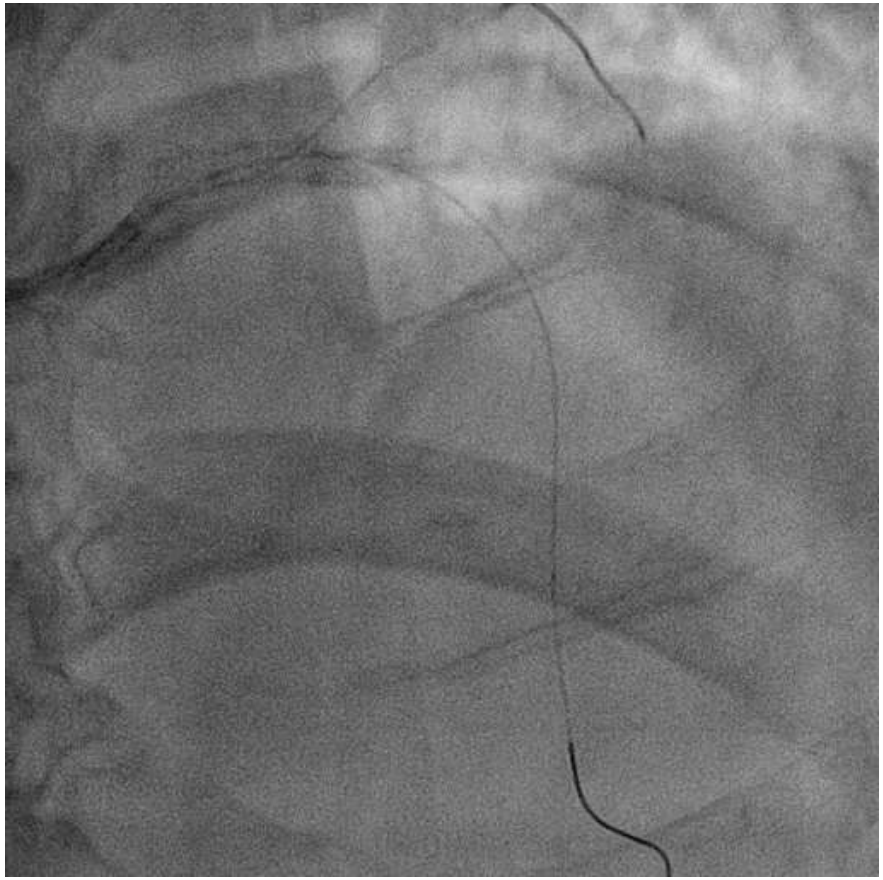
LMT stenting following GW-ing in LCX as a protecting GW

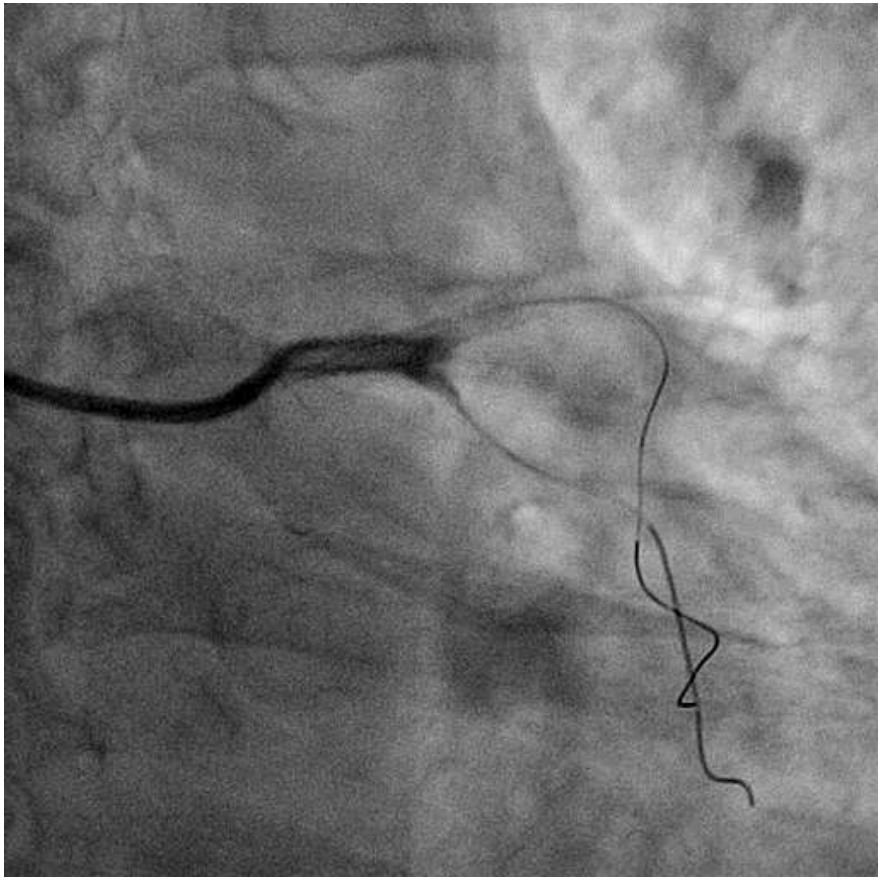




Case 1: Very Complex LMT disease

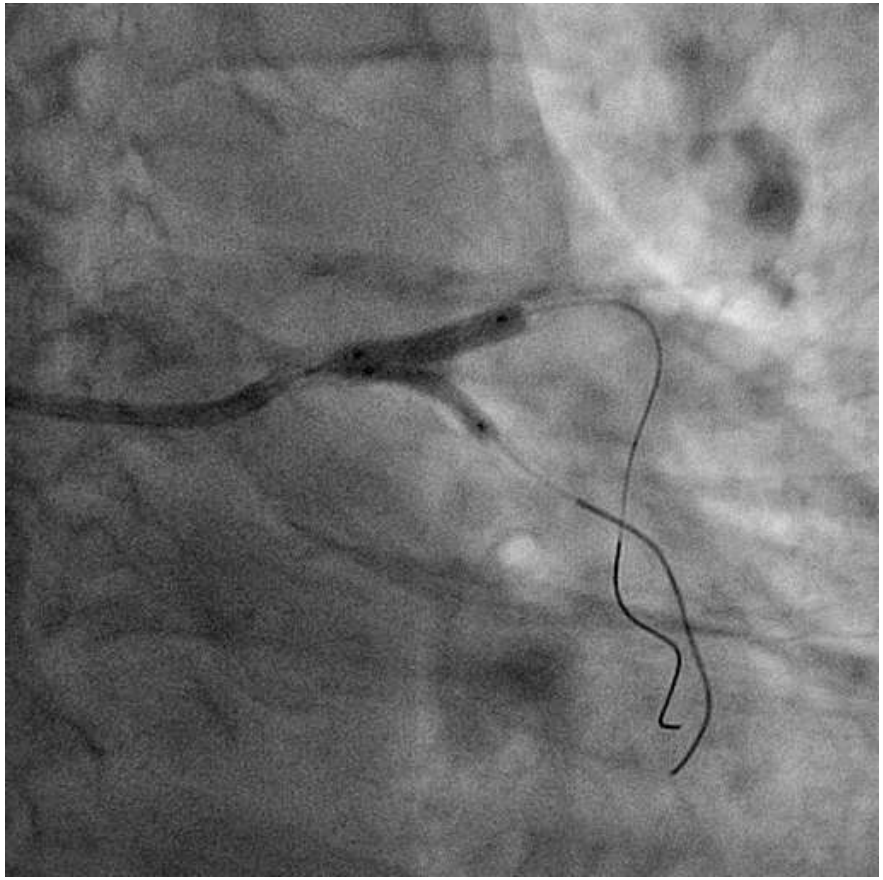
After Stenting and POT with 4.5mm HP Balloon

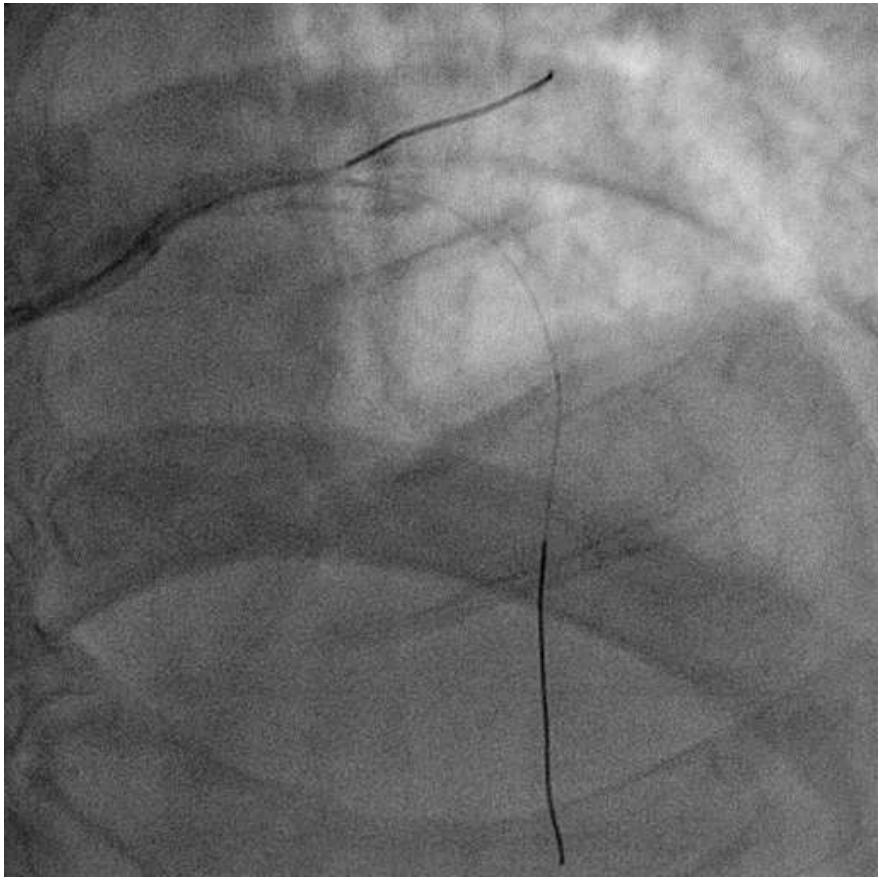




Case 1: Very Complex LMT disease

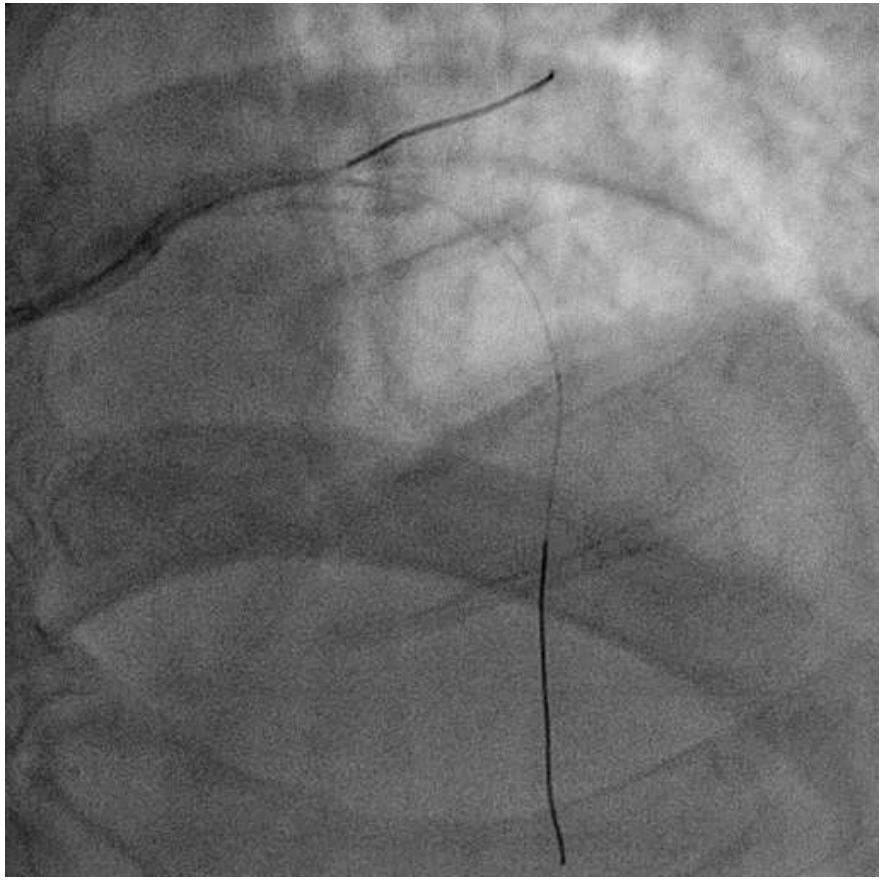
After KBT with 3.0mm＋3.5mm HO balloon

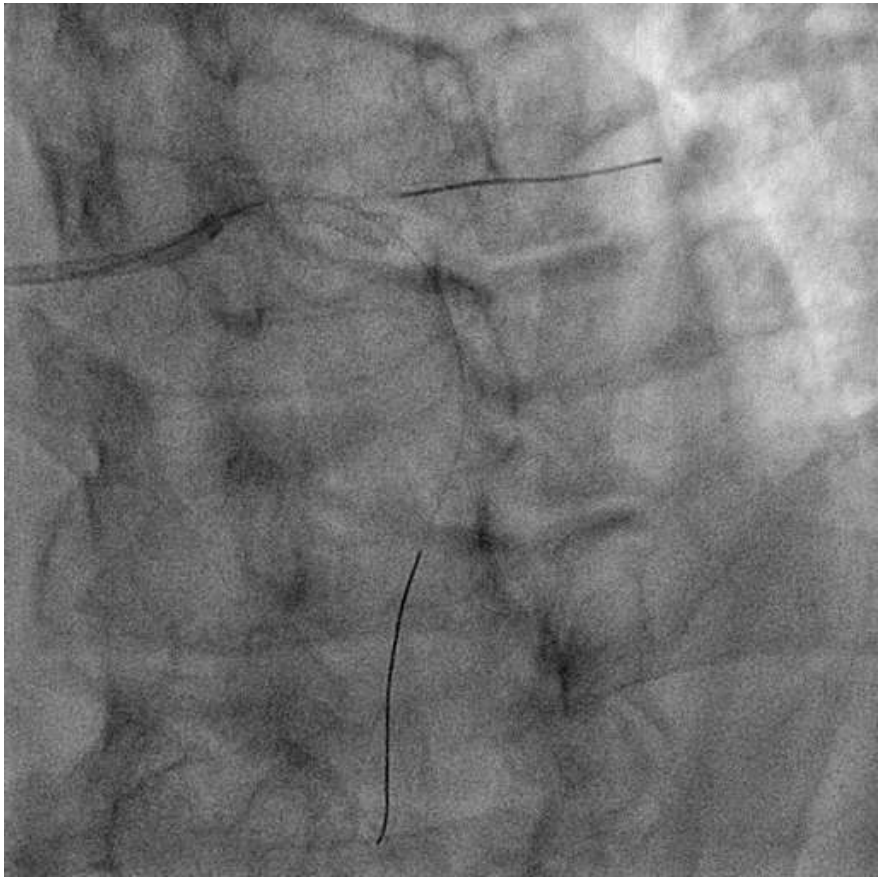




Case 1: Very Complex LMT disease

Final Angio. after KBT ; Checking FFR in LCX – mid to LMT＝0.8



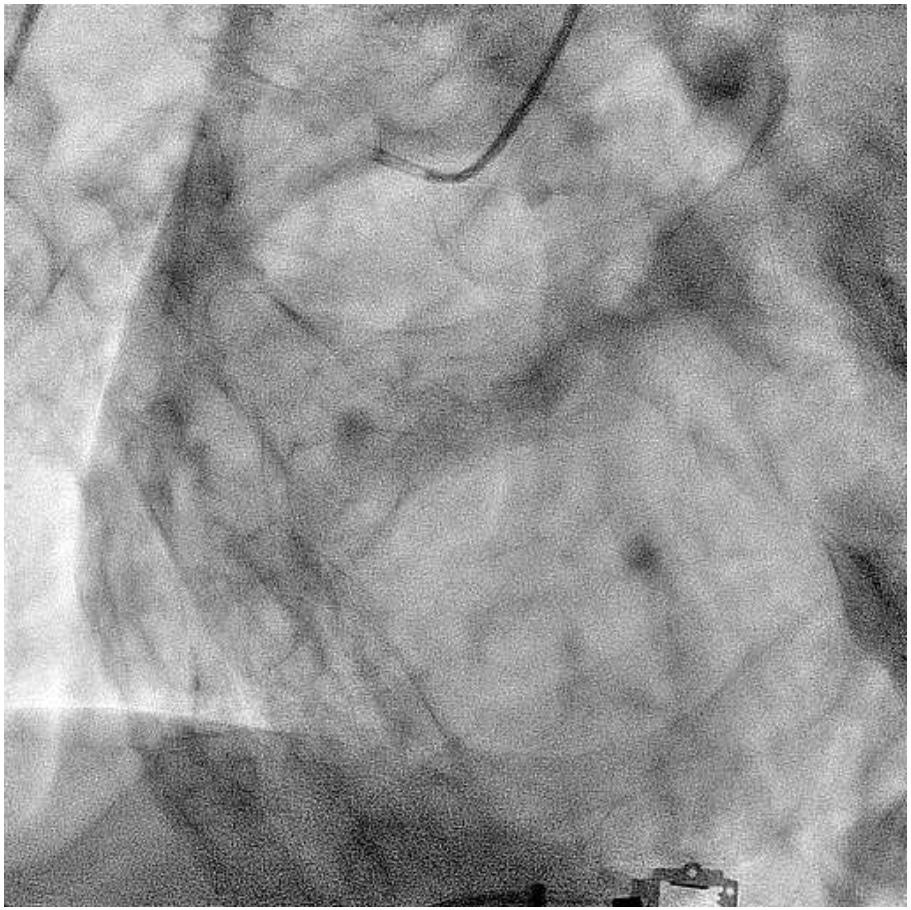


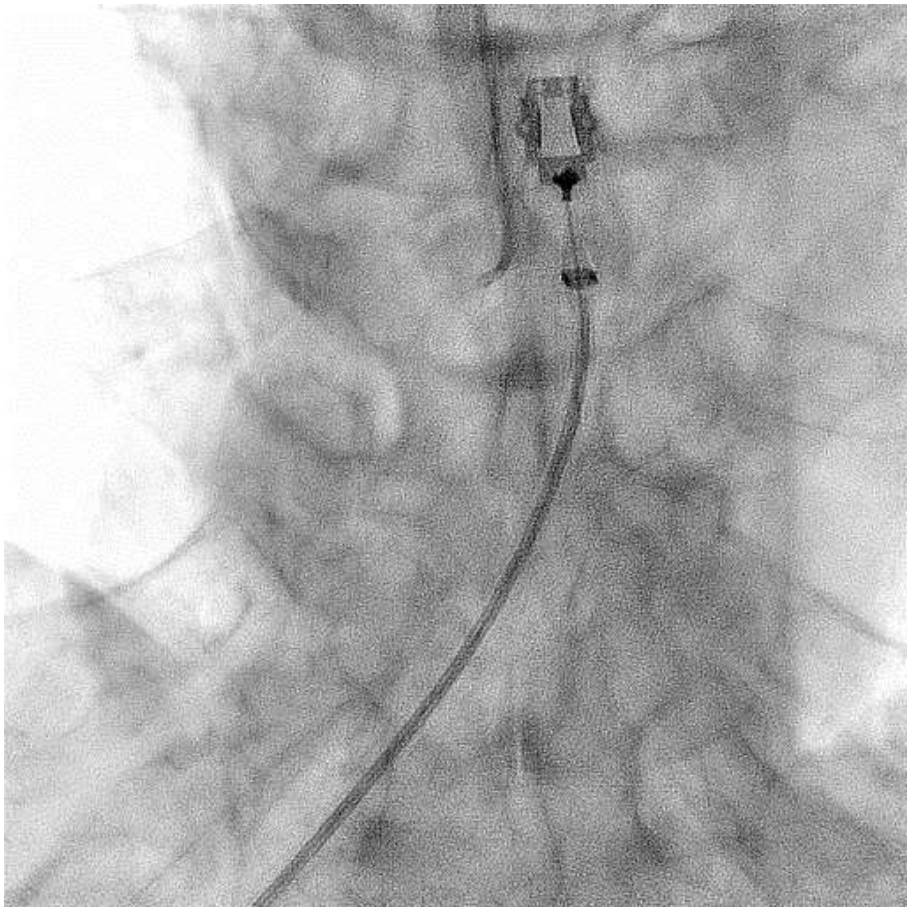
TRI in CHIPS

- 3VD with CTO , LMT -

Case 2 : 3VD; RCA CTO with LMT disease

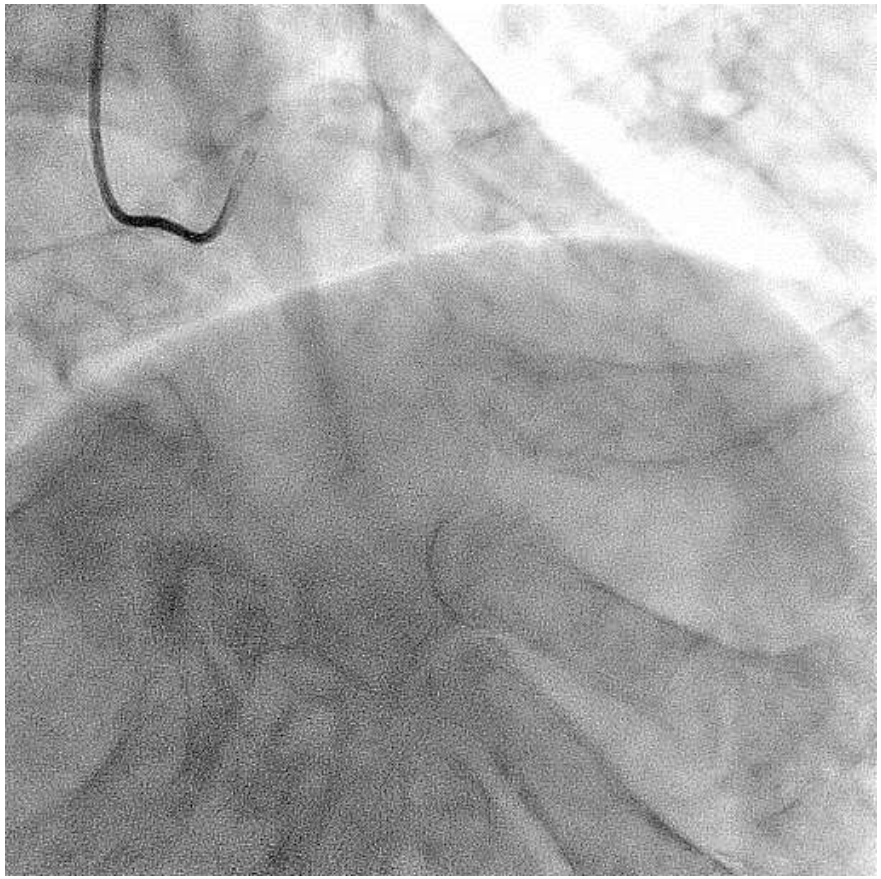
RCA CTO with bridge collateral

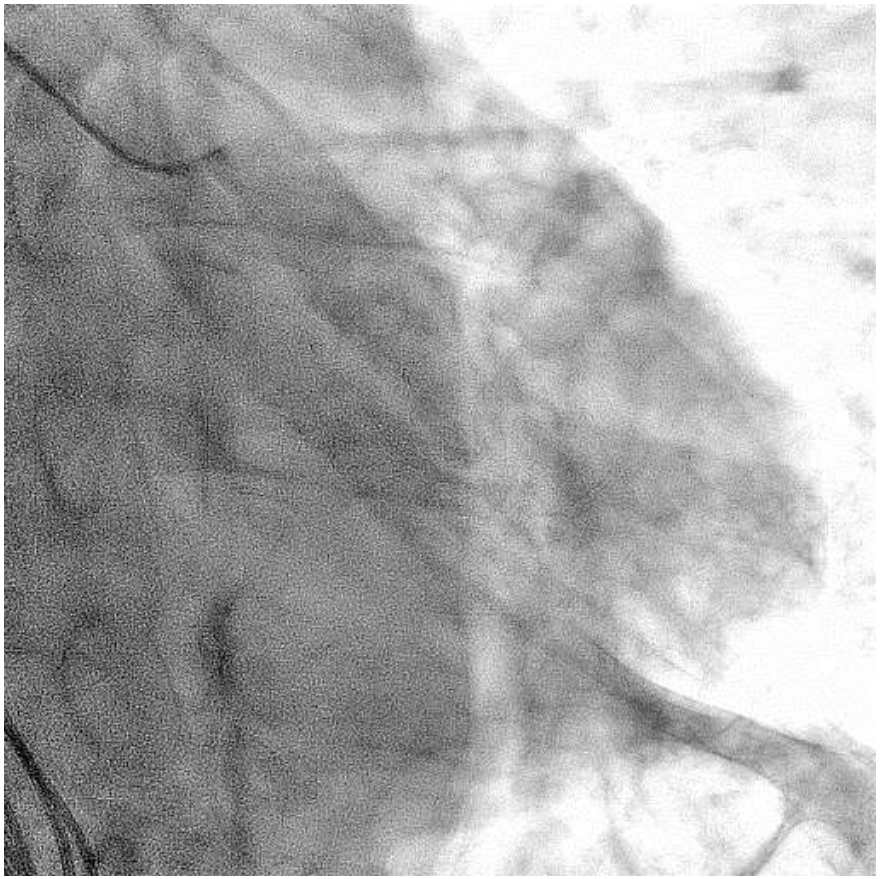




Case 2 : 3VD; RCA CTO with LMT disease

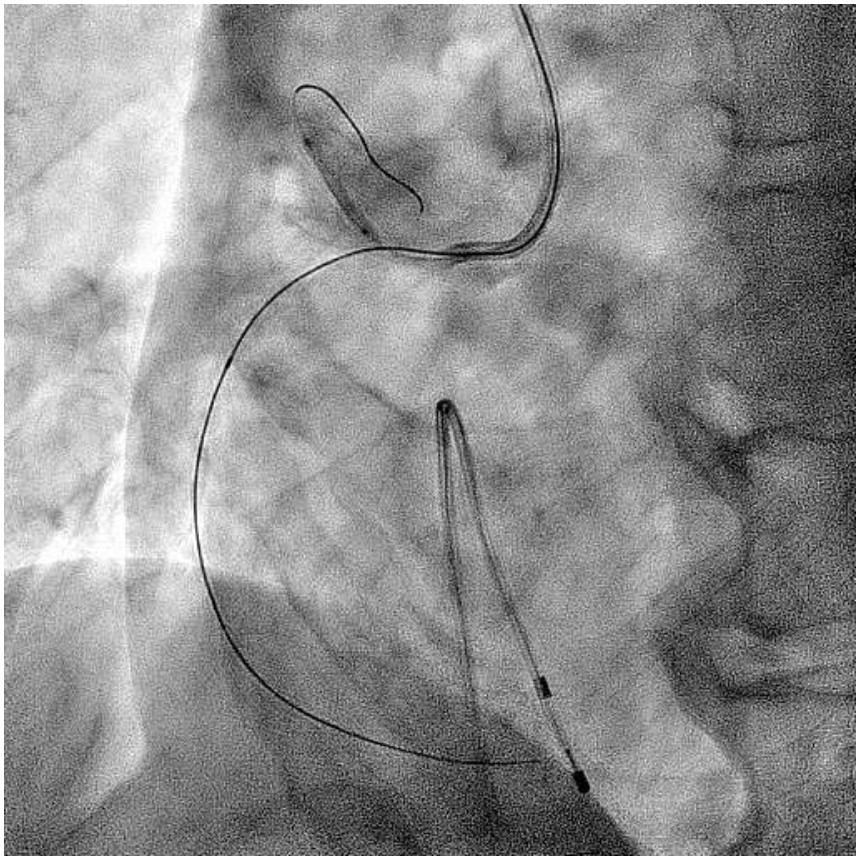
3 VD, Mid-LCX, Mid-LAD and LMT disease

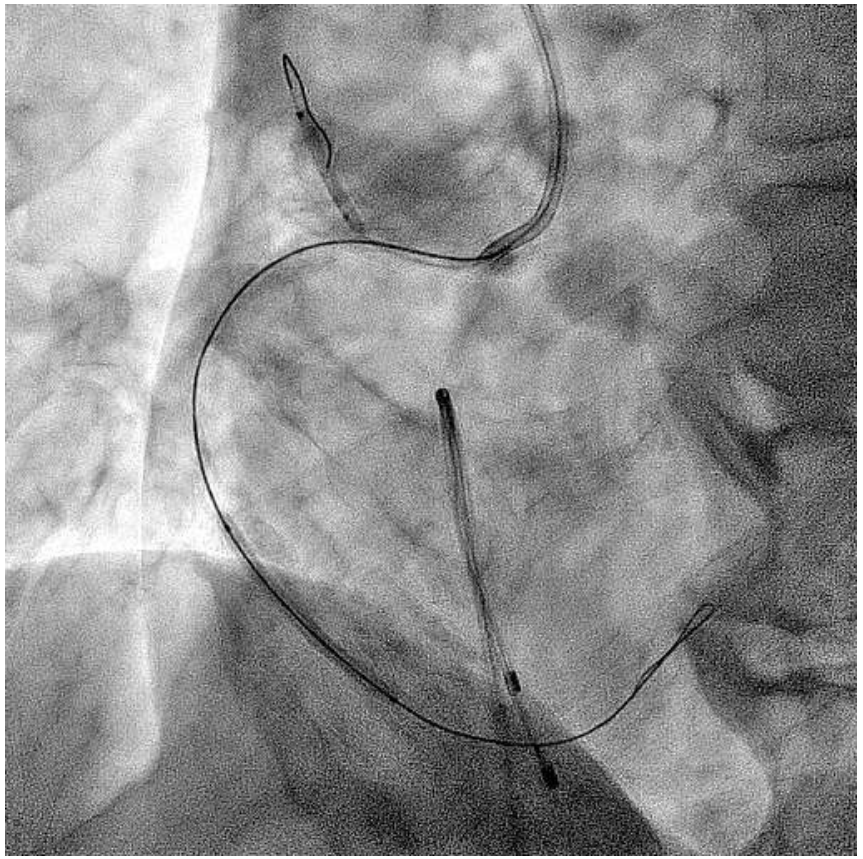




Case 2 : 3VD; RCA CTO with LMT disease

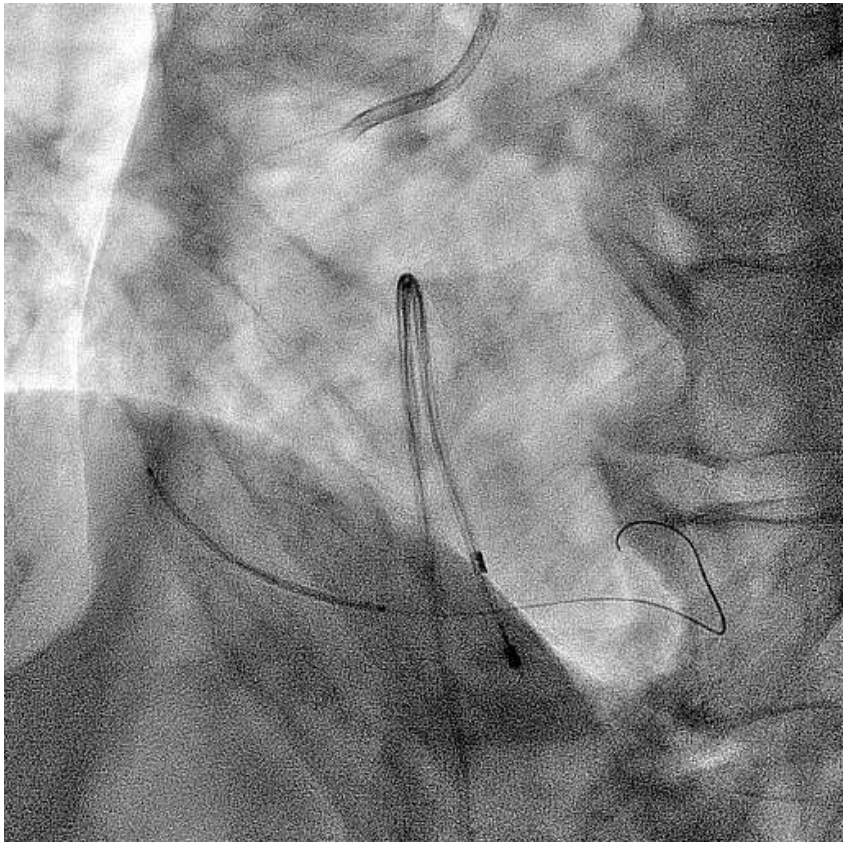
At first, Opening Up RCA CTO with Antegrade A: with anchoring balloon I conus br.

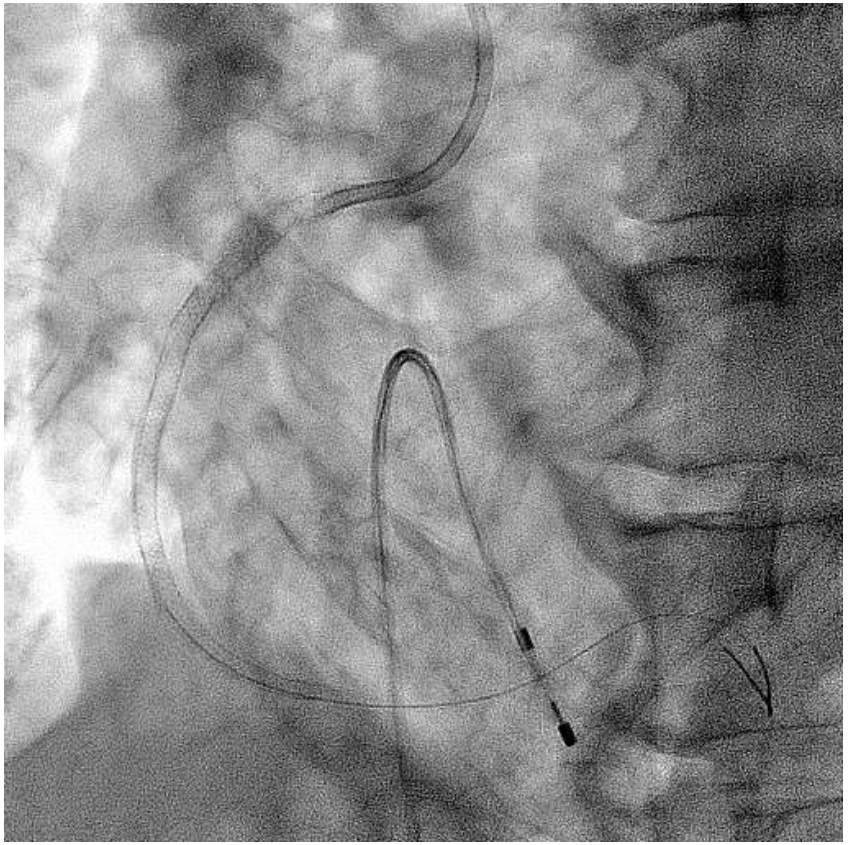




Case 2 : 3VD; RCA CTO with LMT disease

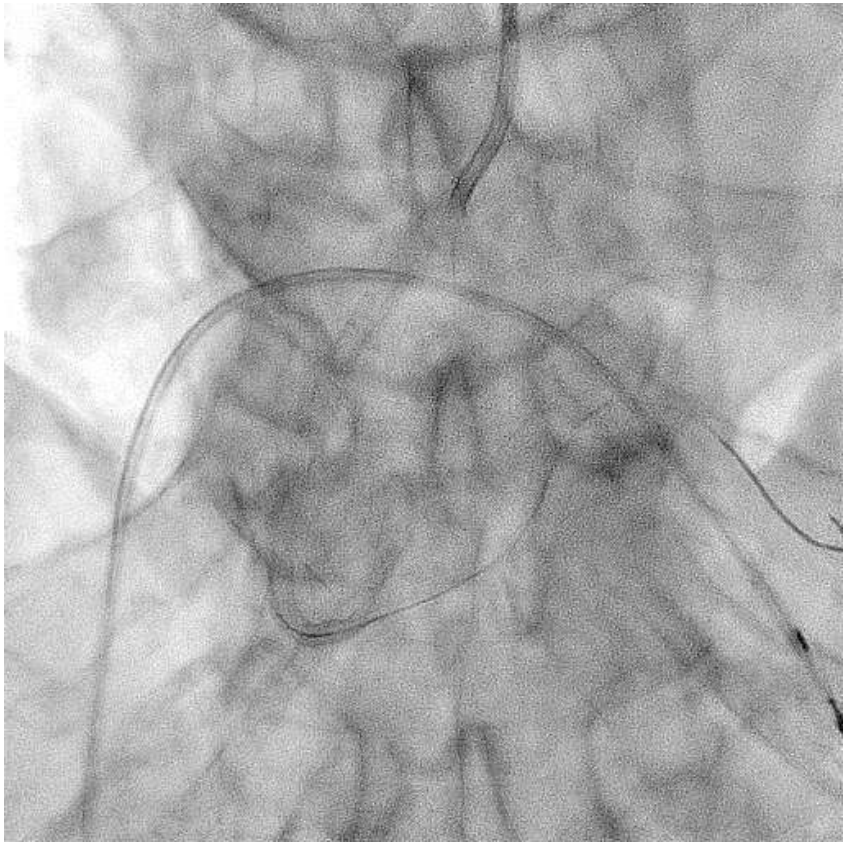
After ballooning, Implanting 3 DES in RCA with covering up to RCA ost.

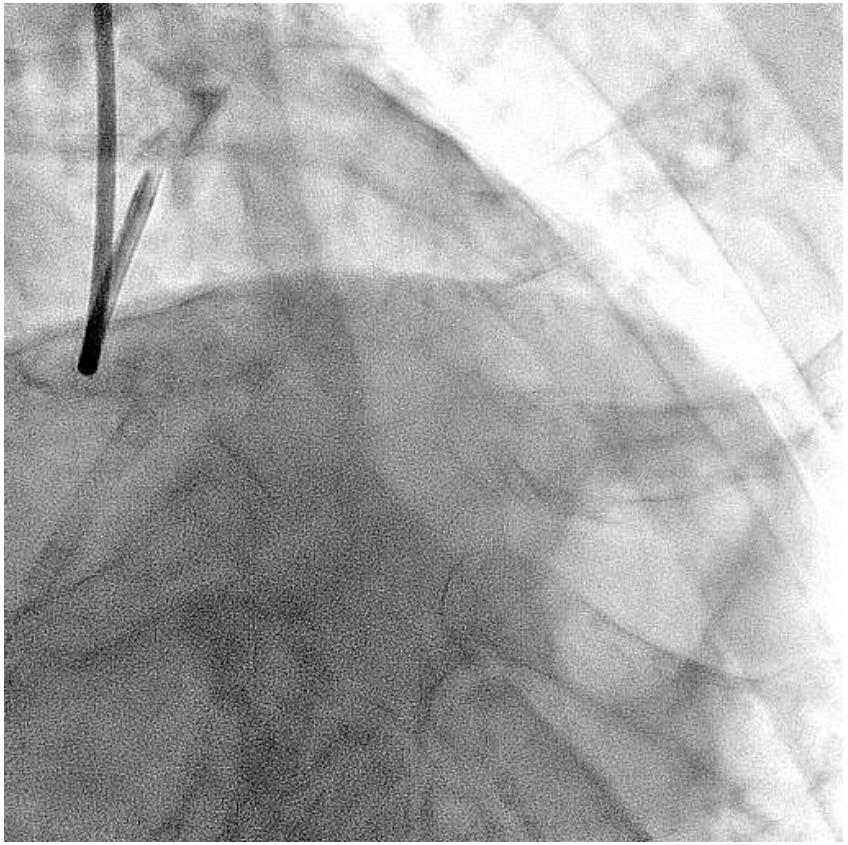




Case 2 : 3VD; RCA CTO with LMT disease

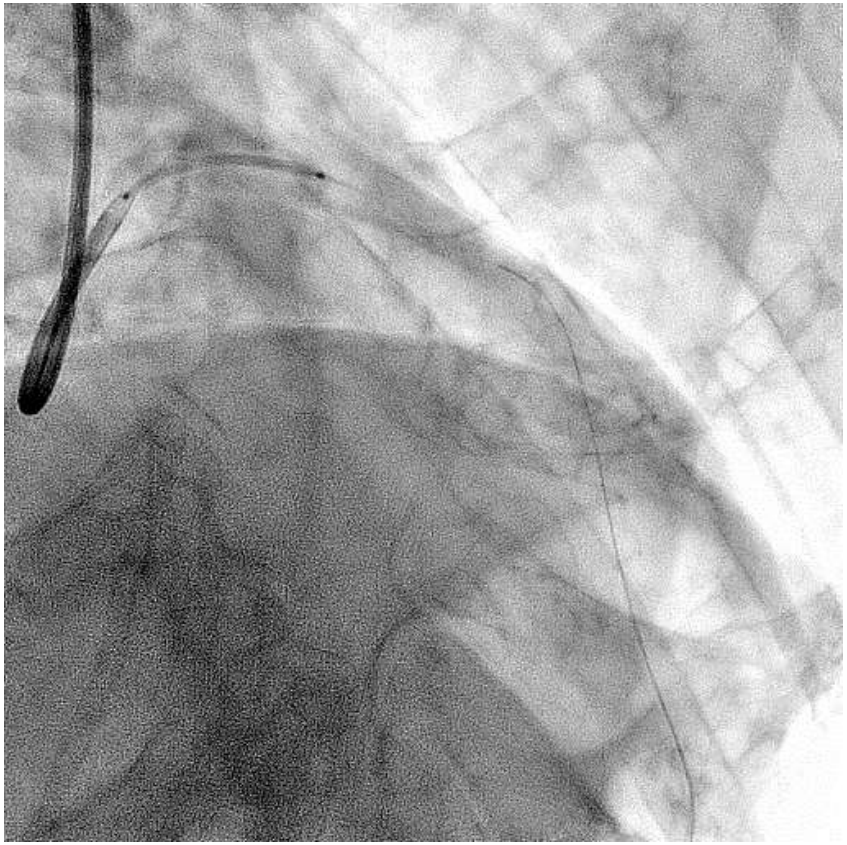
After checking RCA with several projection, proceeded to Left System.

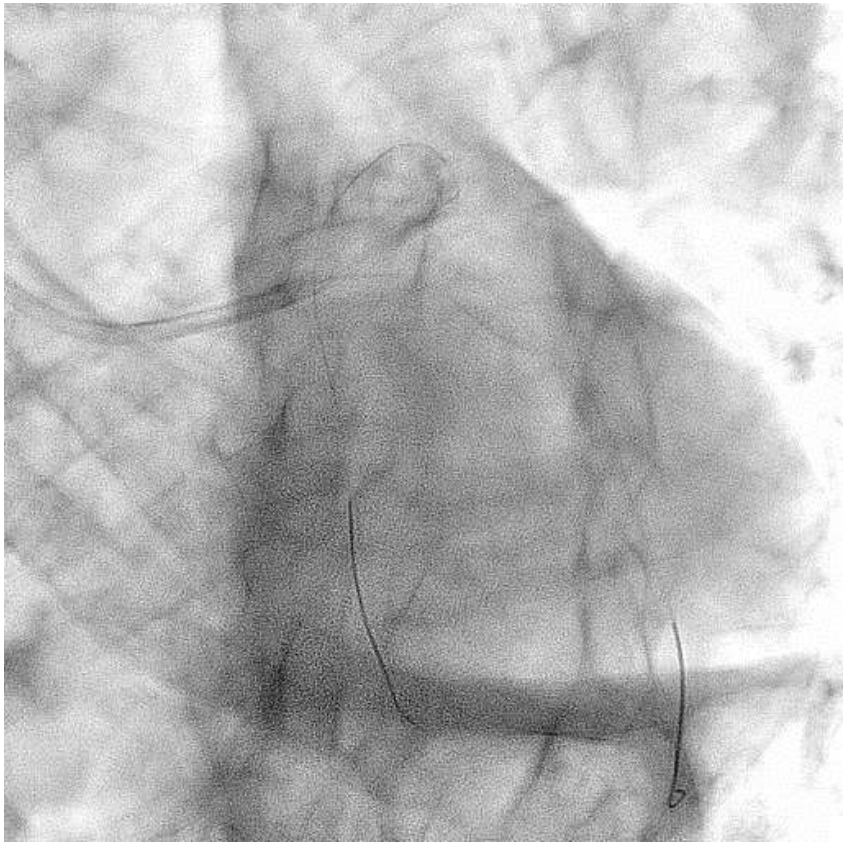




Case 2 : 3VD; RCA CTO with LMT disease

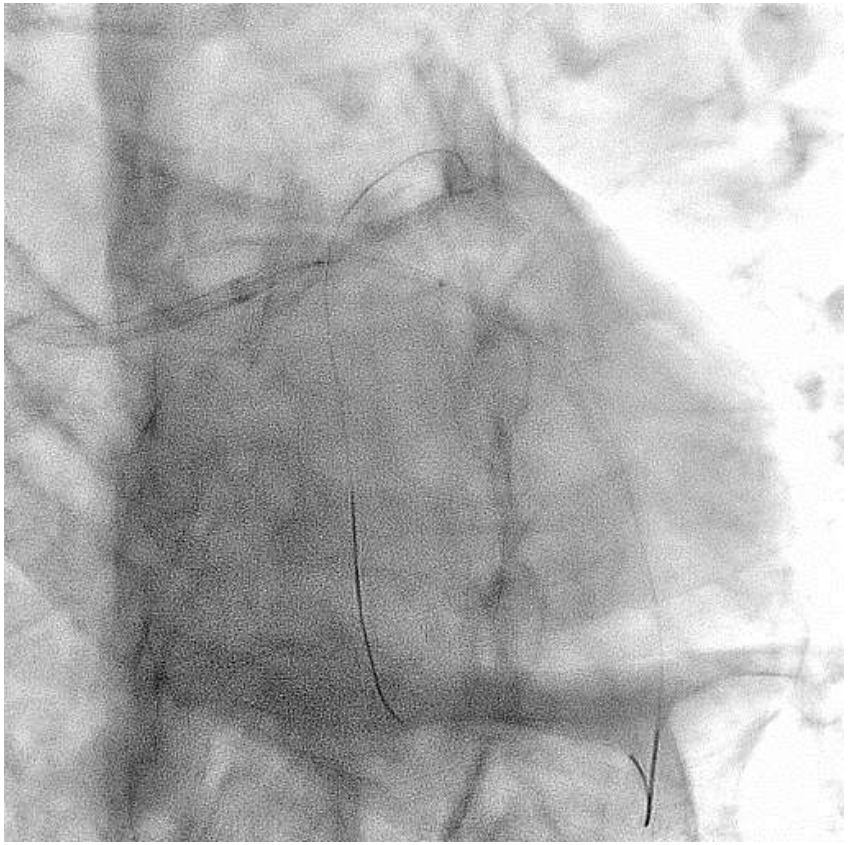
Then proceeded to implant a DES in LMT with single stenting technique.





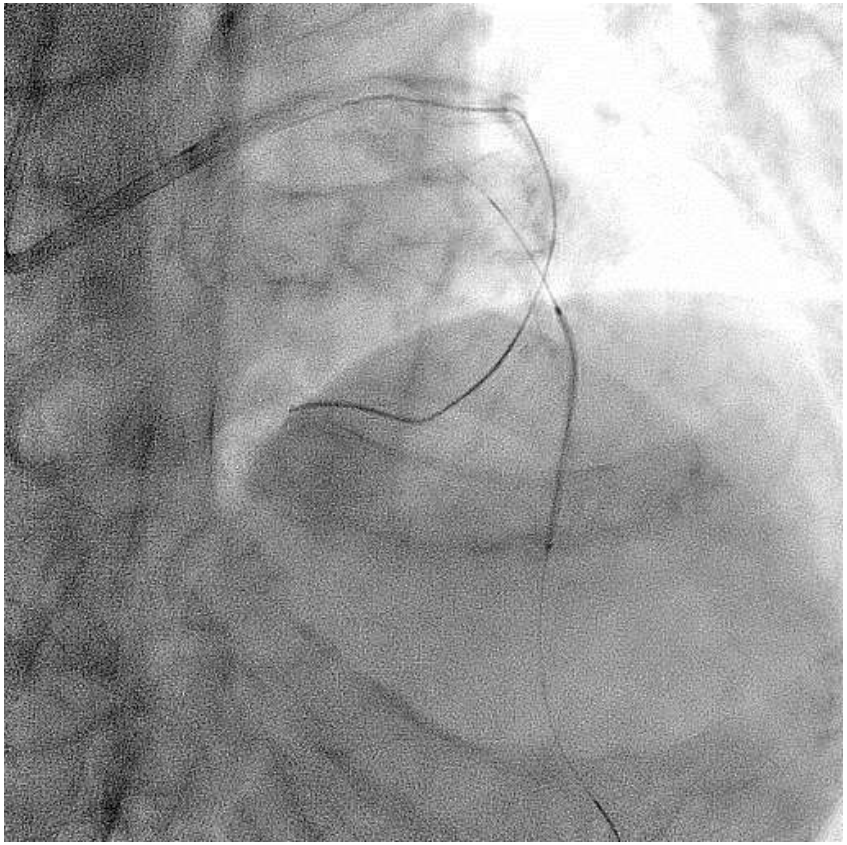
Case 2 : 3VD; RCA CTO with LMT disease

Next, ballooning in LCX ost. To secure the space which DES implanting.



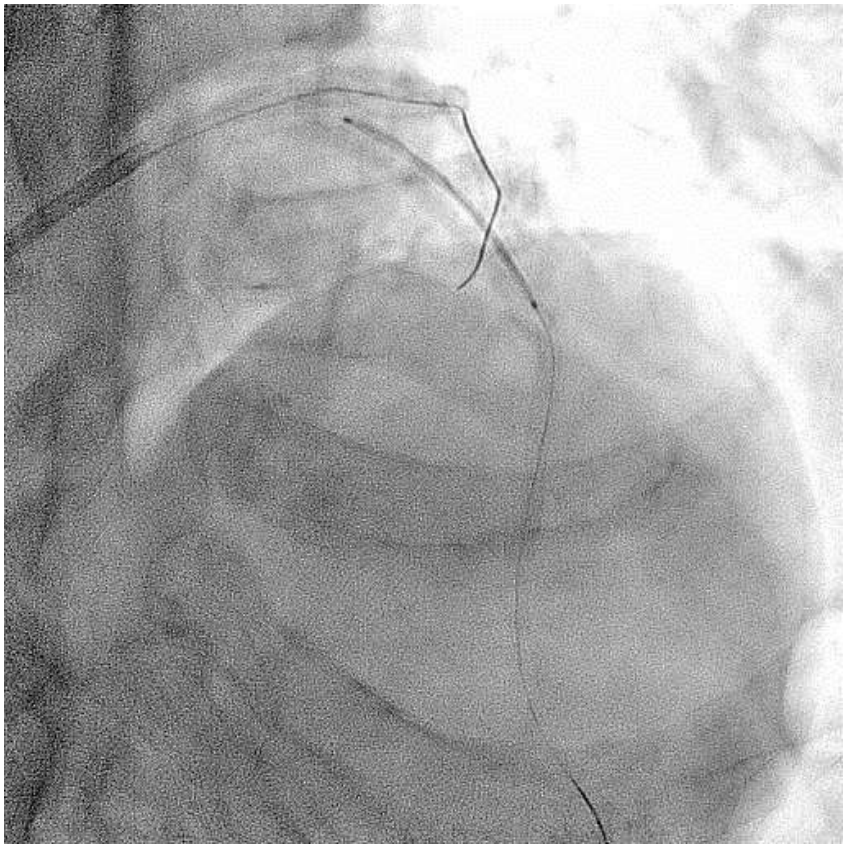
Case 2 : 3VD; RCA CTO with LMT disease

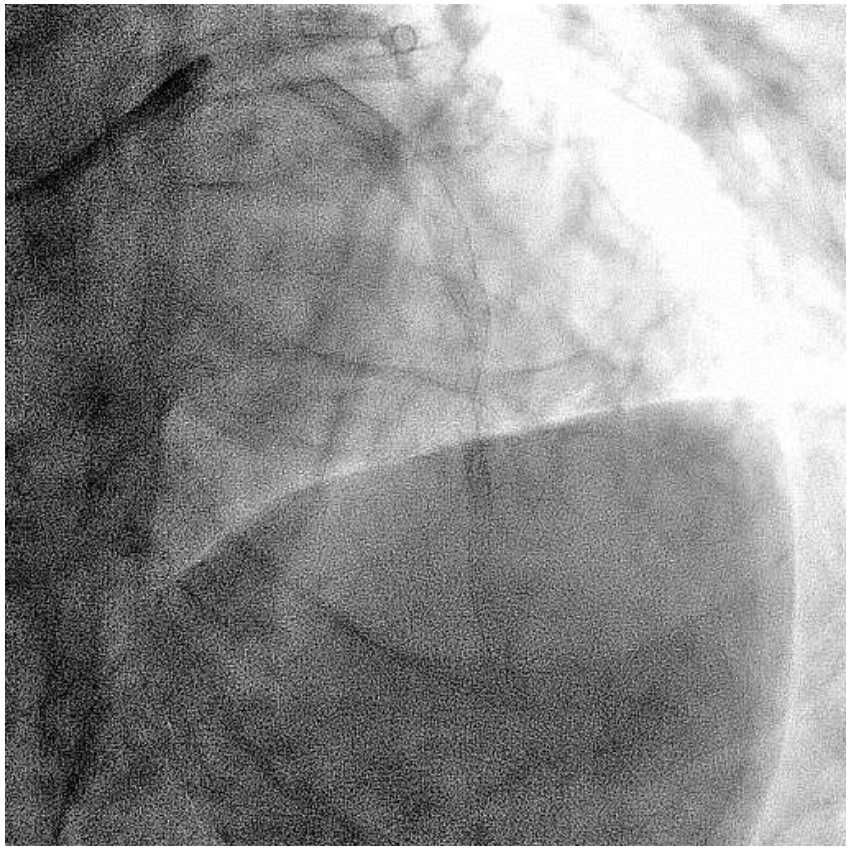
Then KBT in LMT, And Stenting with DES in Mid-LAD



Case 2 : 3VD; RCA CTO with LMT disease

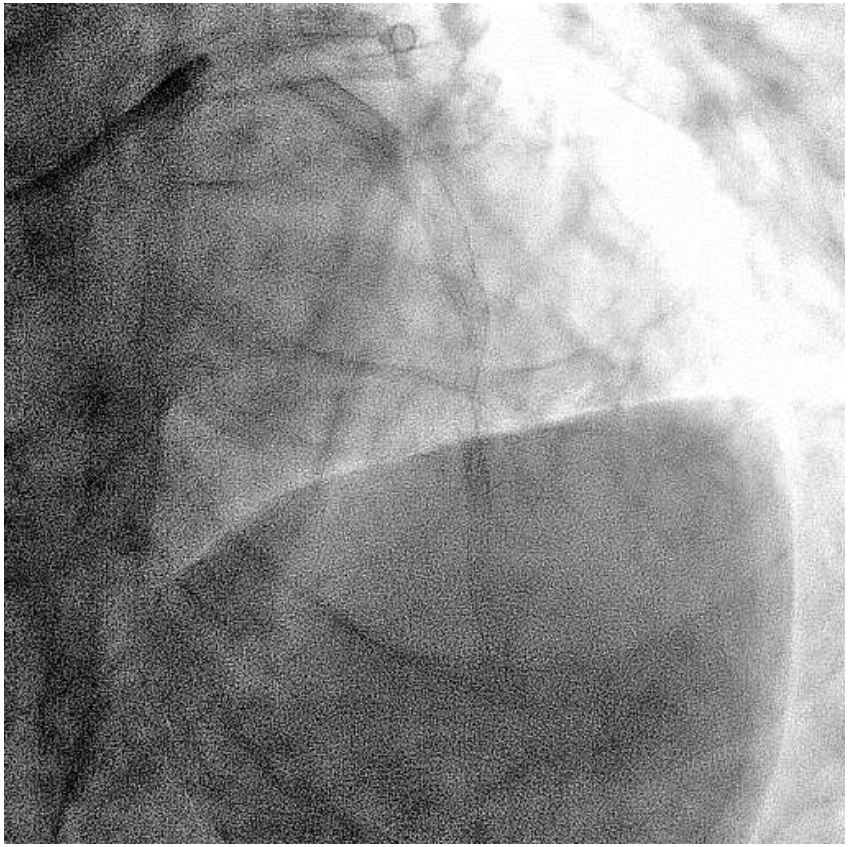
Then Stenting in prox. LAD with overlapping in previous stenting in LMT

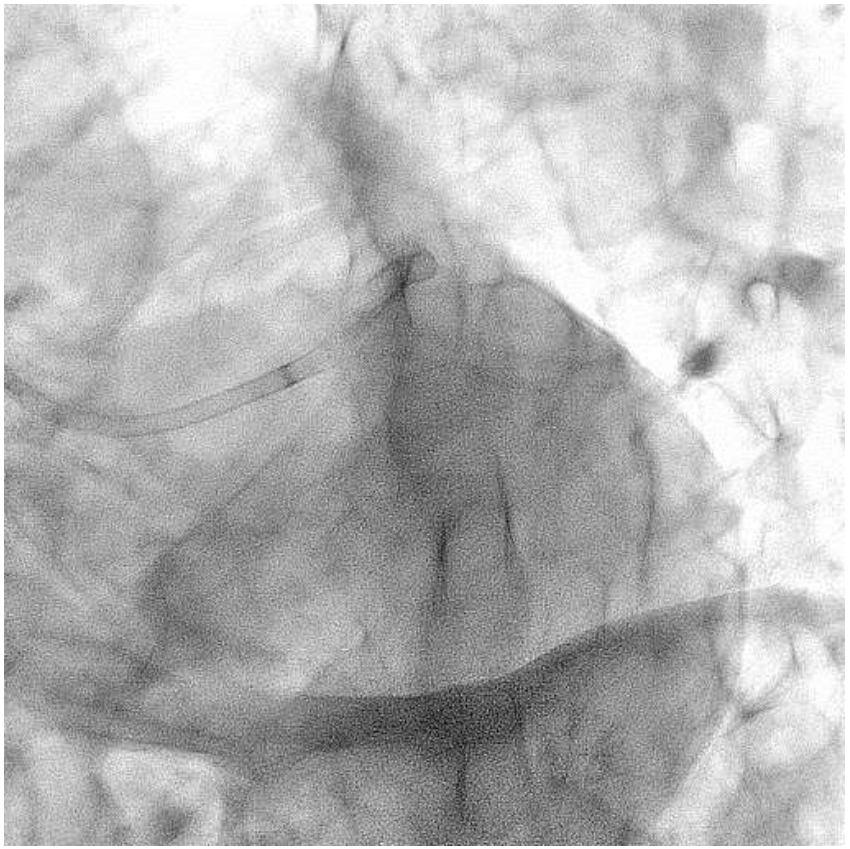




Case 2 : 3VD; RCA CTO with LMT disease

Final Figure





1. Issue of TRI for CTO

- Reason for avoiding TRI ?? -

Not stable GC back-up which is essential for CTO PCI

Smaller GC not allows 2-tube cath.

Need 2 Access Site ... Relatively not easy for patients

Each Preference... urban legends, superstition

Rocket Launch Pad

2. How to negotiate ??

- Sometimes, really we need to do -

Should be familiar in any situation as a professional

Anchor balloon technique.... Etc. some.

Guiding - Sheath cath.

Something New... Later...

Rocket Launch Pad

3. If you are not familiar with...

- Sometimes, you have really challenging case -

"Insurance as a professional Interventional Cardiologist "

You can never be too prepared.

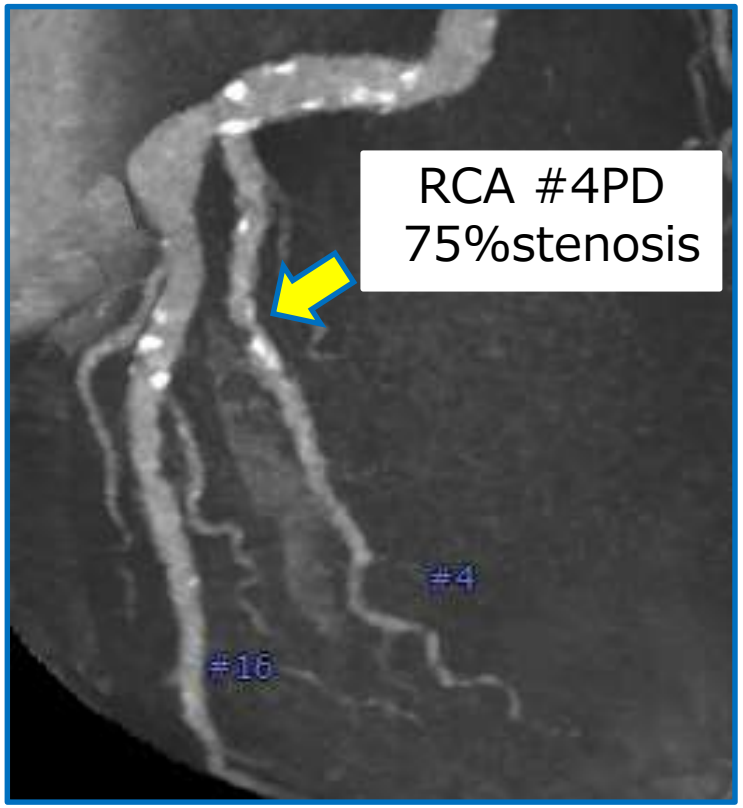
Perfect Preparation Prevents Poor Performance.

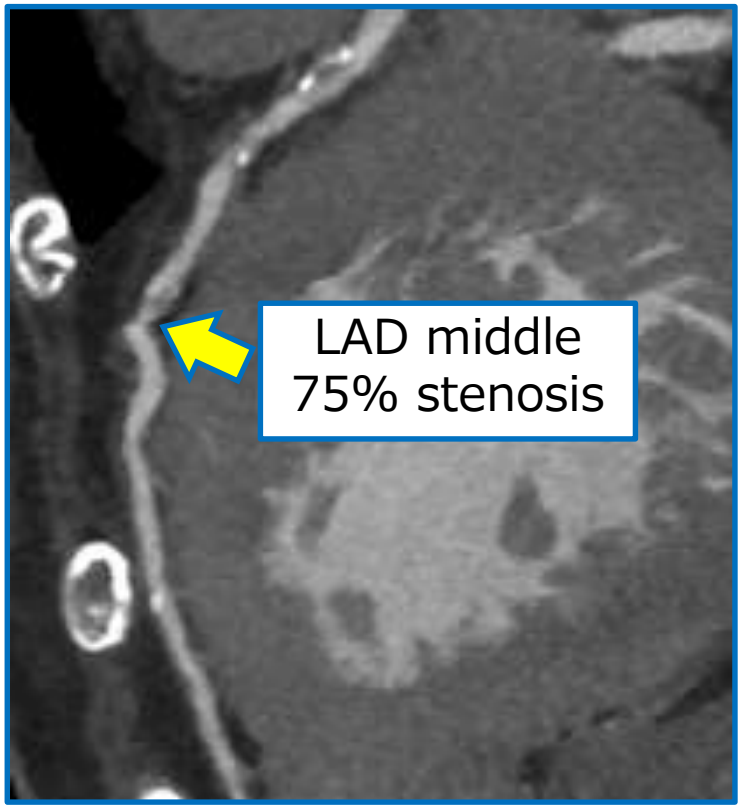
If you are not familiar with... You will lost some case.

A case of angina complicated with Aortits Syndrome occluding all 4 limbic arteries and causing renal artery stenosis

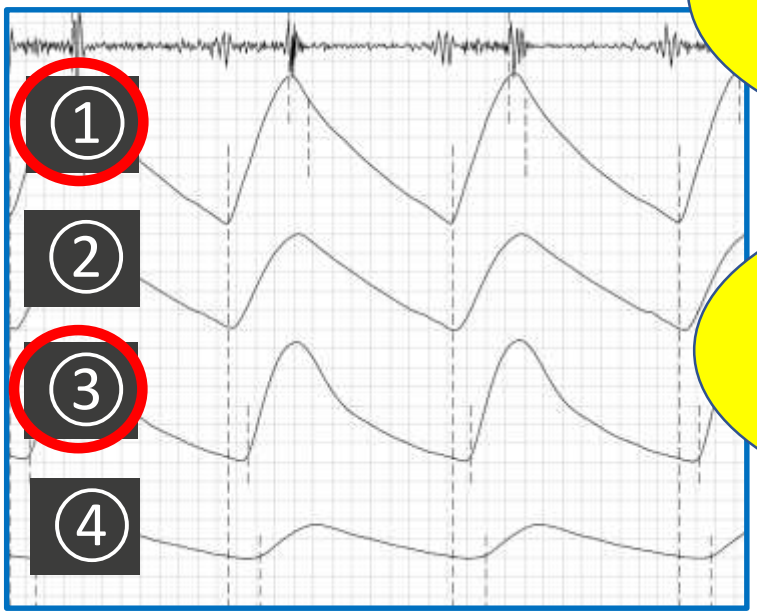
Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

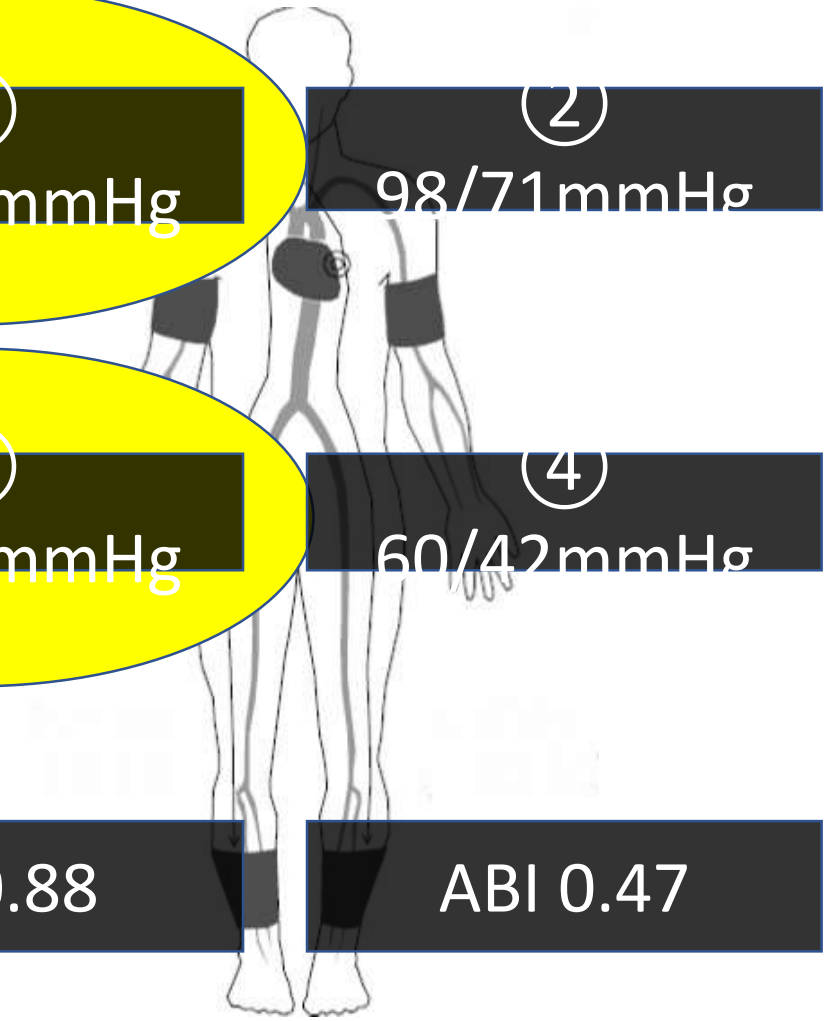
77 y.o. M. Aortits Syndrome more than 50 years. 2 years history of Angina, Nothing has been done because of NO accessible route. A small ECG change, UCG: EF was 58 %, moderate decreased anterior wall motion.



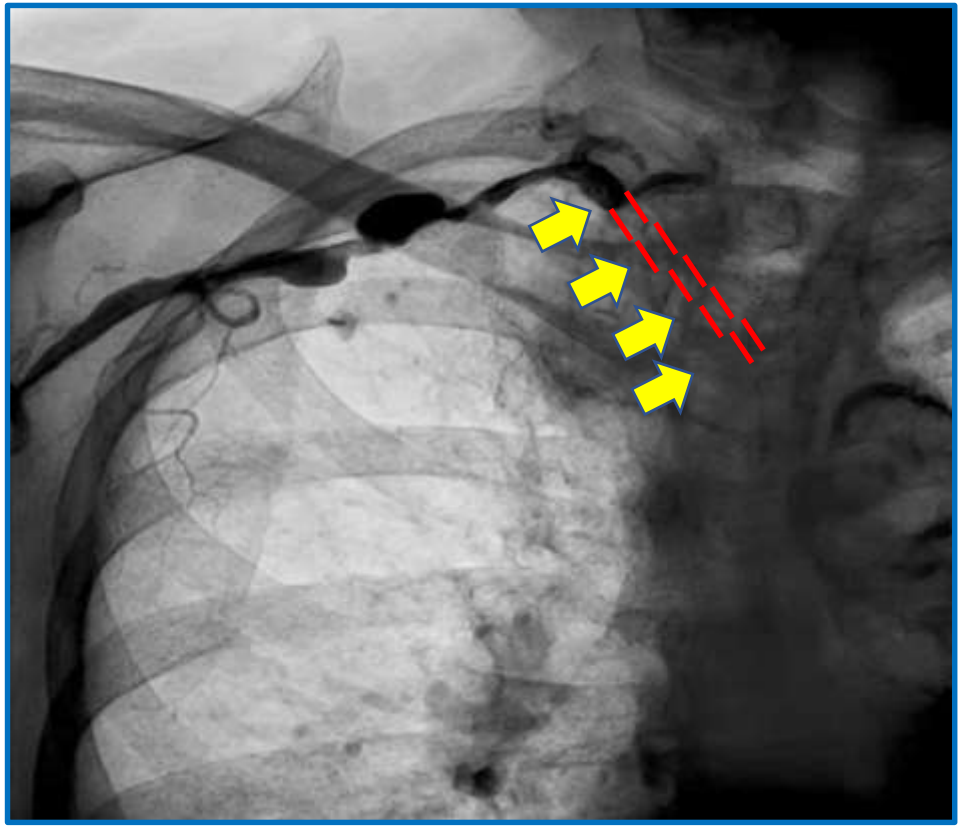


ABI in 4 Limbic Artery



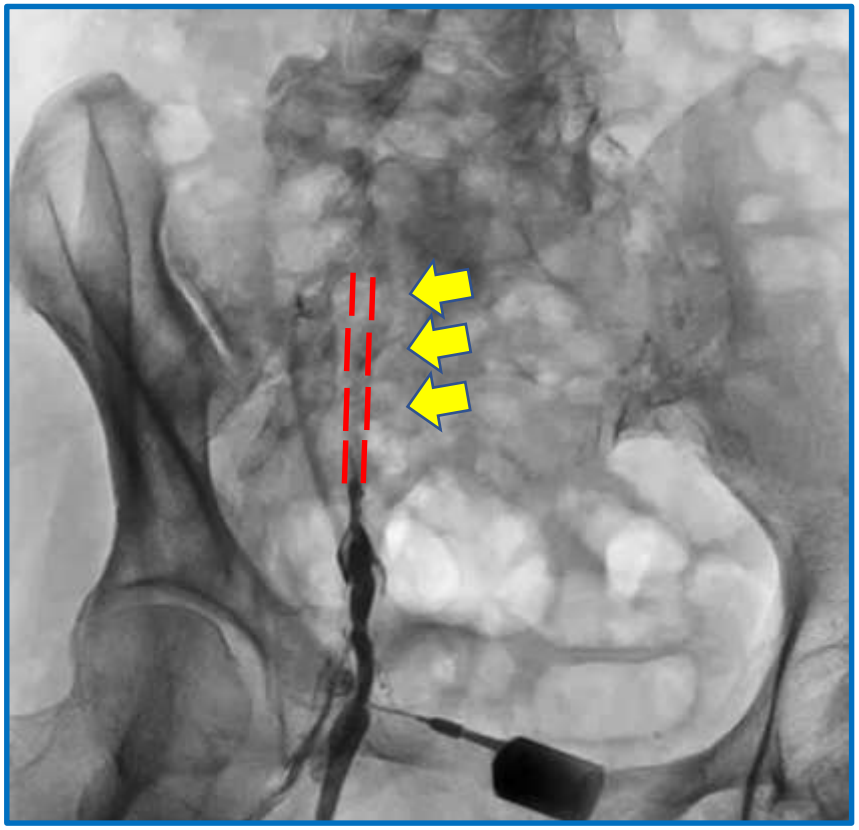


Checking 2 possible candidate for access



Right Subclavian artery

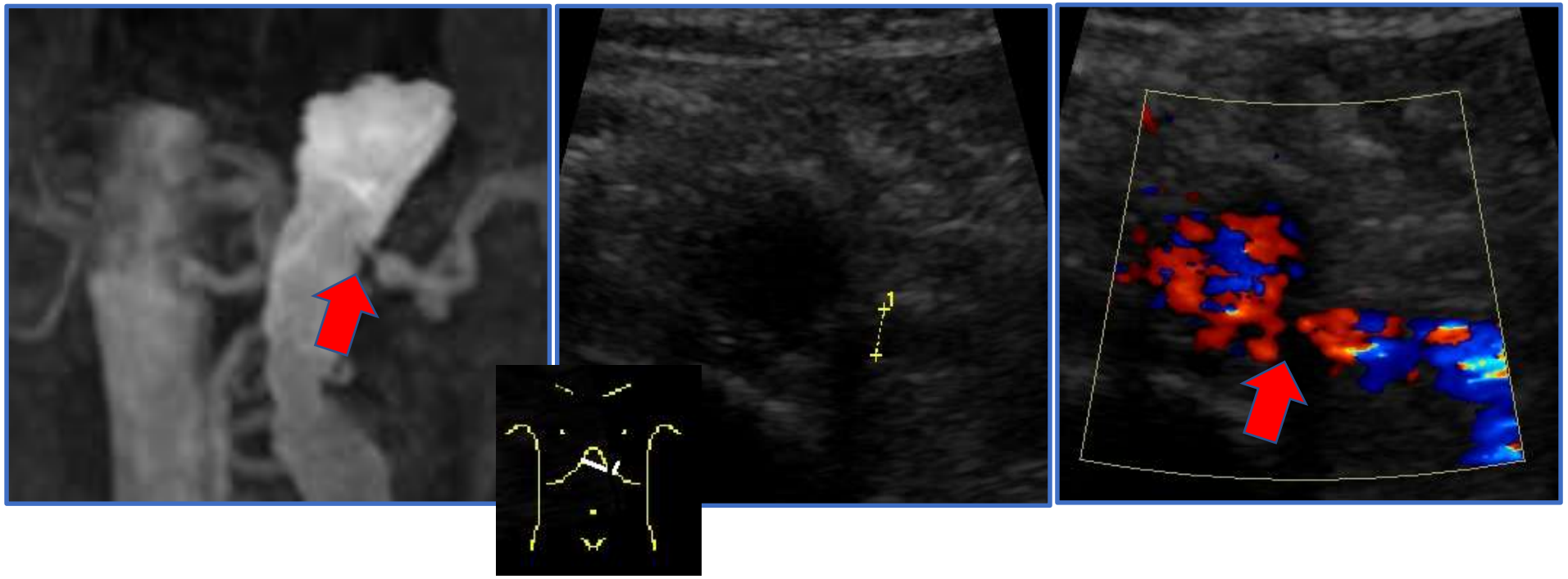
Diffuse, severe stenosis and CTO



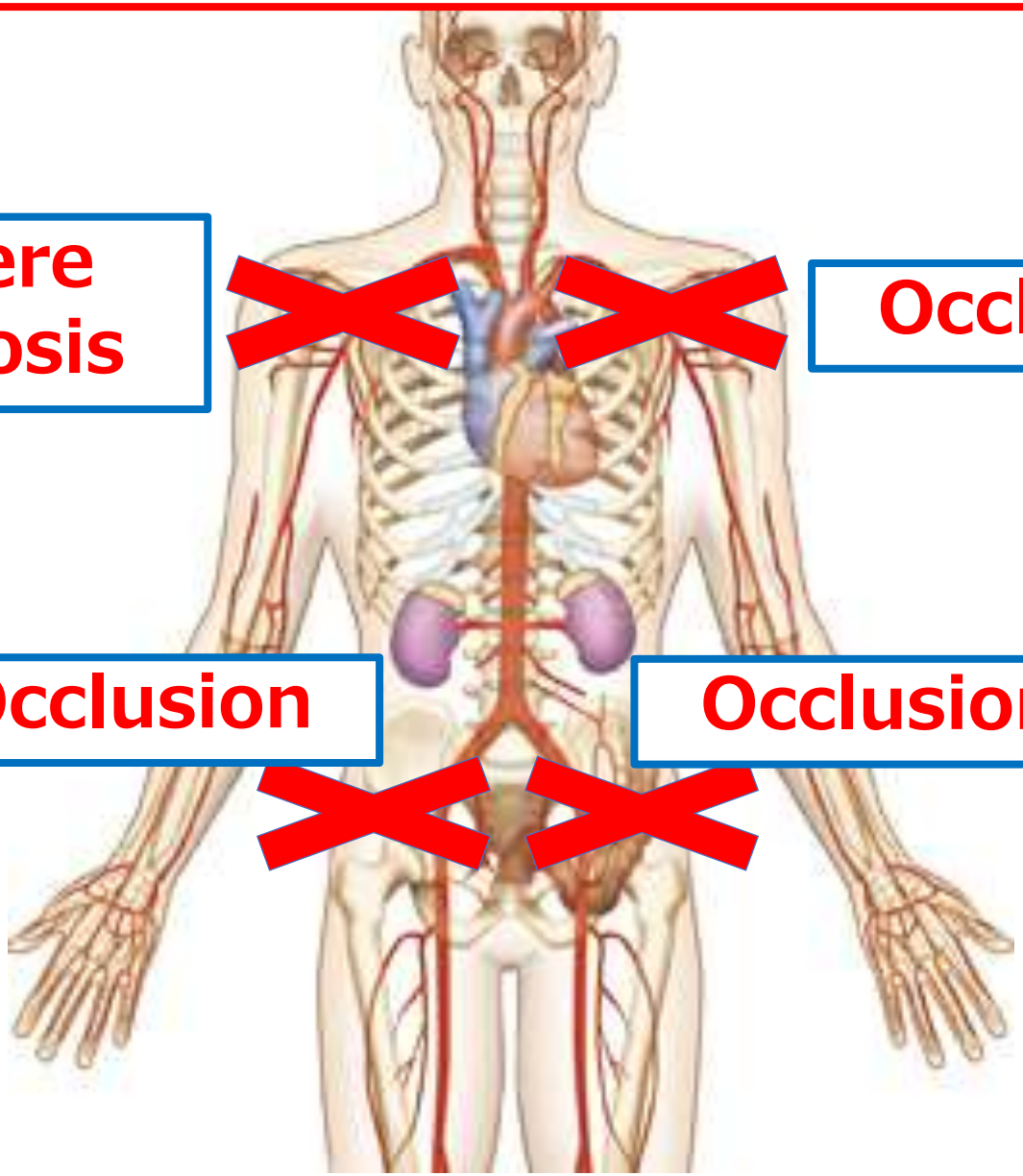
Right Femoral Artery

CTO

Renal Artery Stenosis ; Left



No Possible Access Site



Important Point of Strategy

Strategy based on estimated succeccibility

1. EVT for Right External Iliac Artery to reach coronary artery (for CAG and PCI)

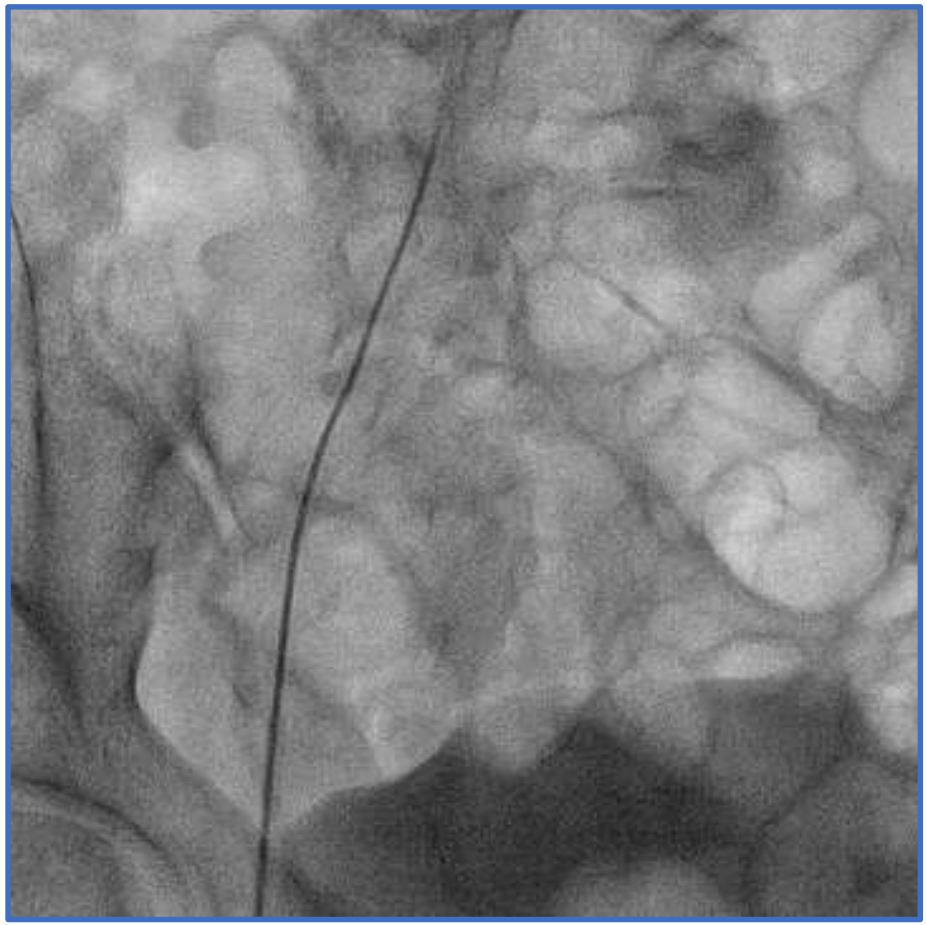
With stenting (DES)

2. EVT for right subclavian artery to reach renal artery. then EVT for left renal artery.

Withut stenting (DES)

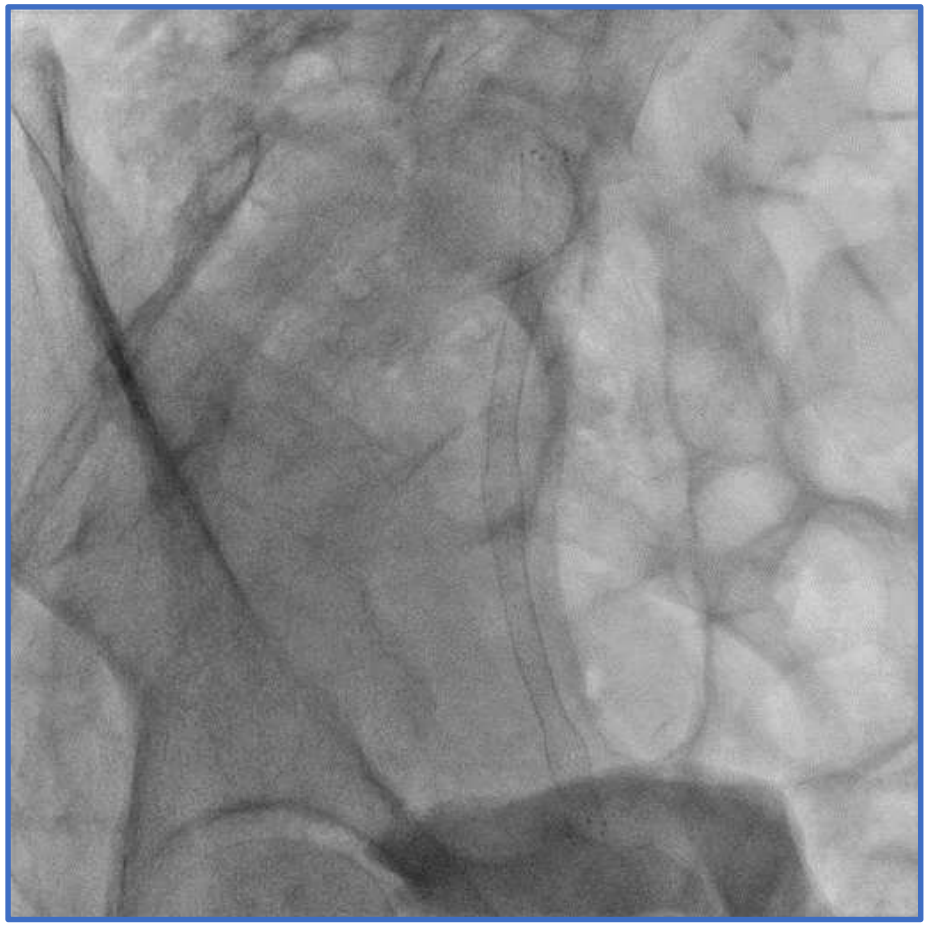
Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

EVT for right external Iliac artery



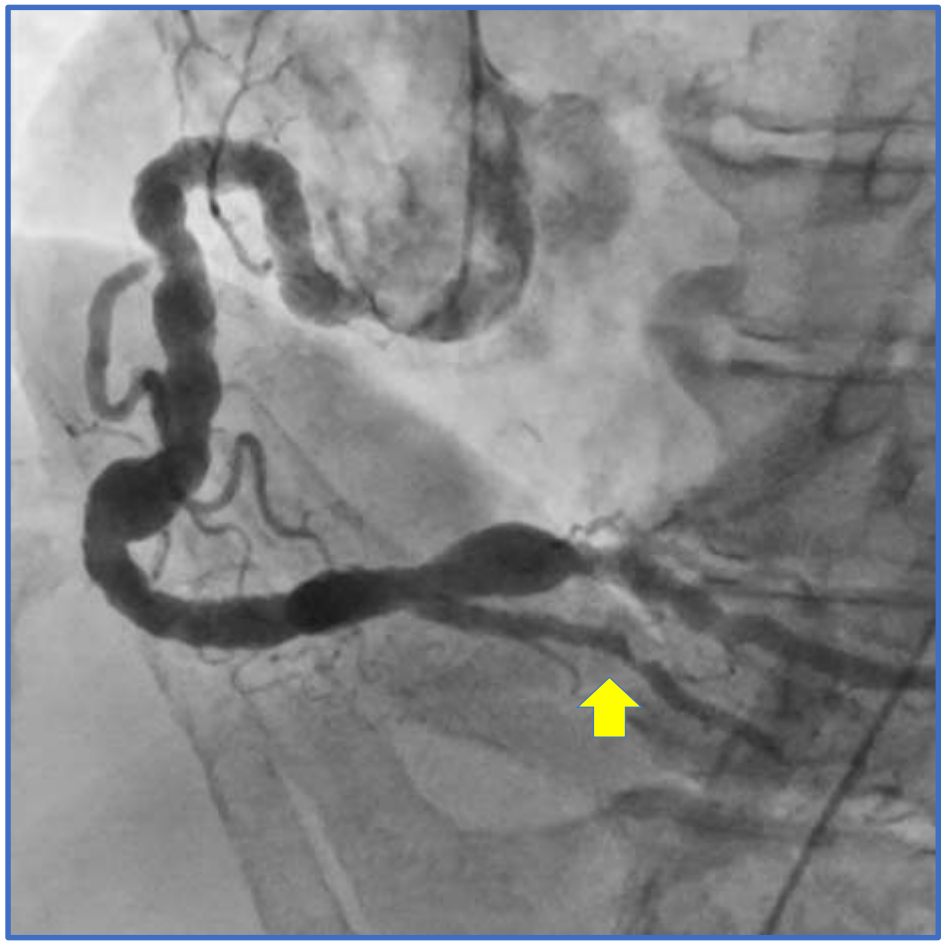
Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

Final Angiogram : Implanted SMART Stent 7.0mm×10 cm



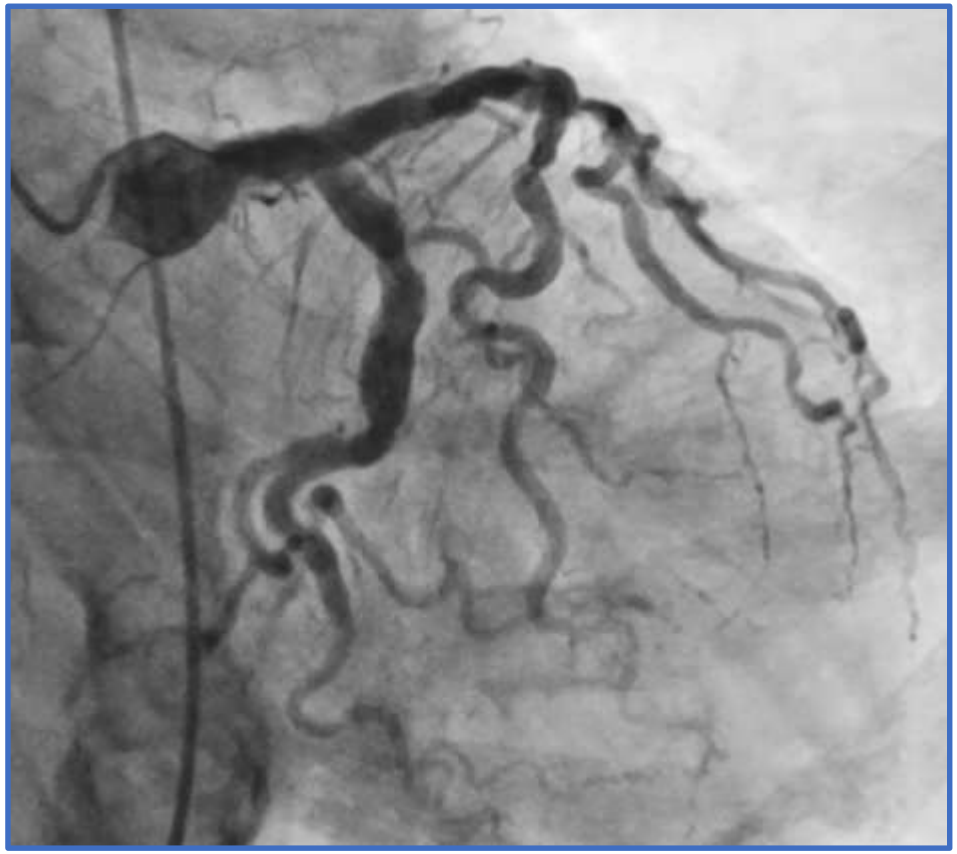
Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

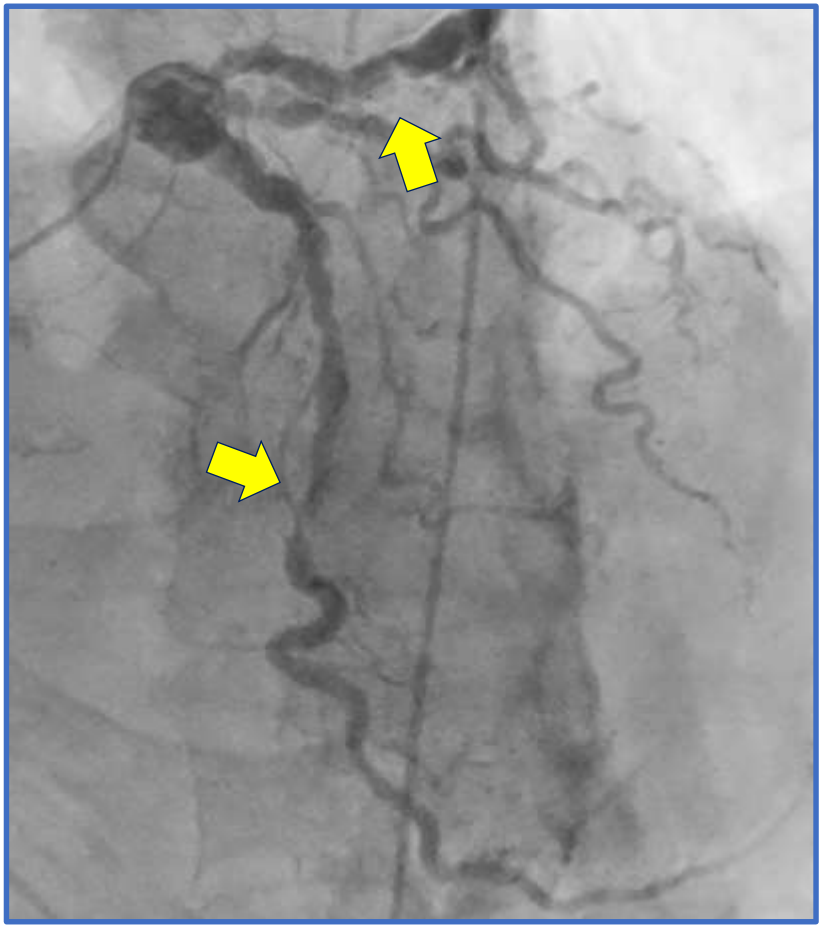
75% stenosis in RCA distal

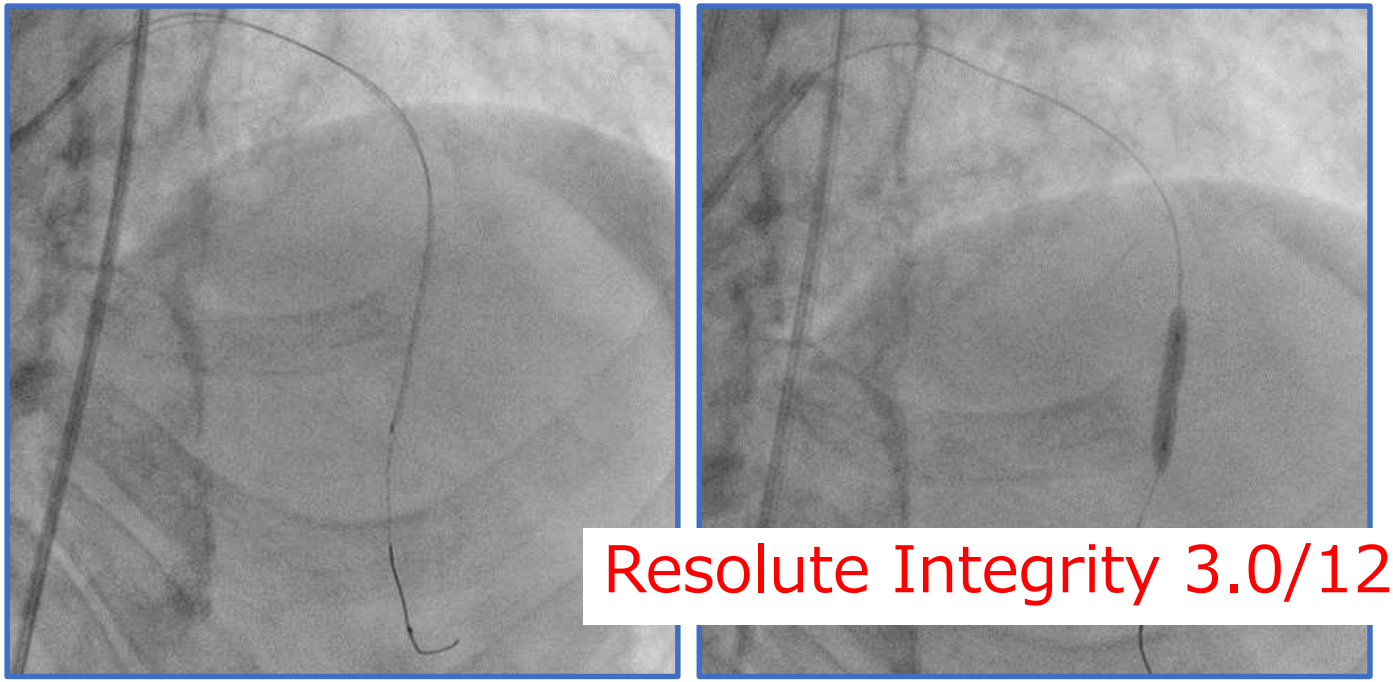


Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

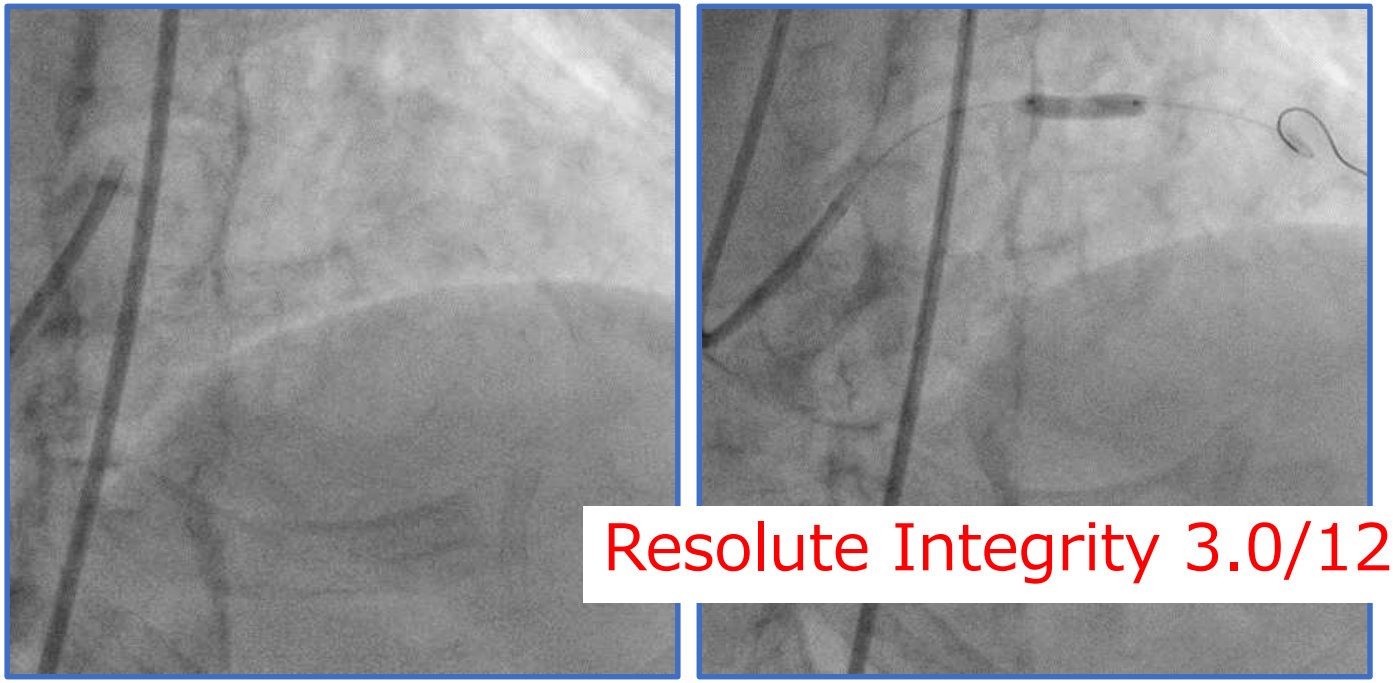
75% stenosis in mid LAD and Mid OM







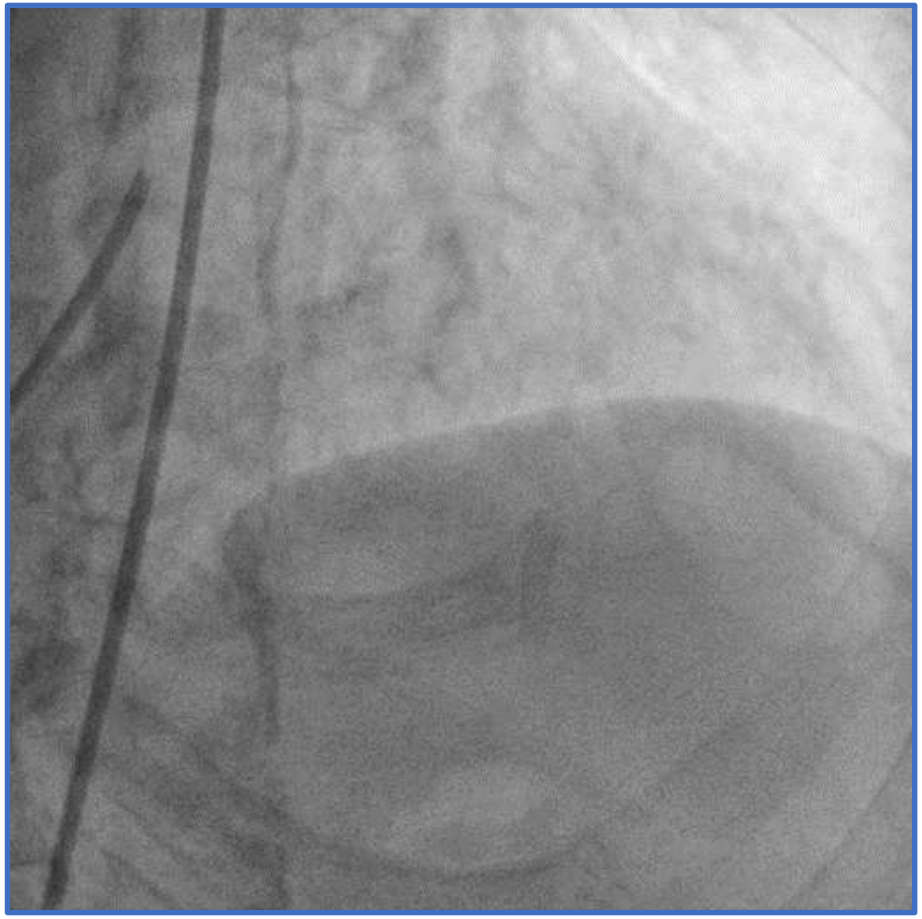
Resolute Integrity 3.0/12mm

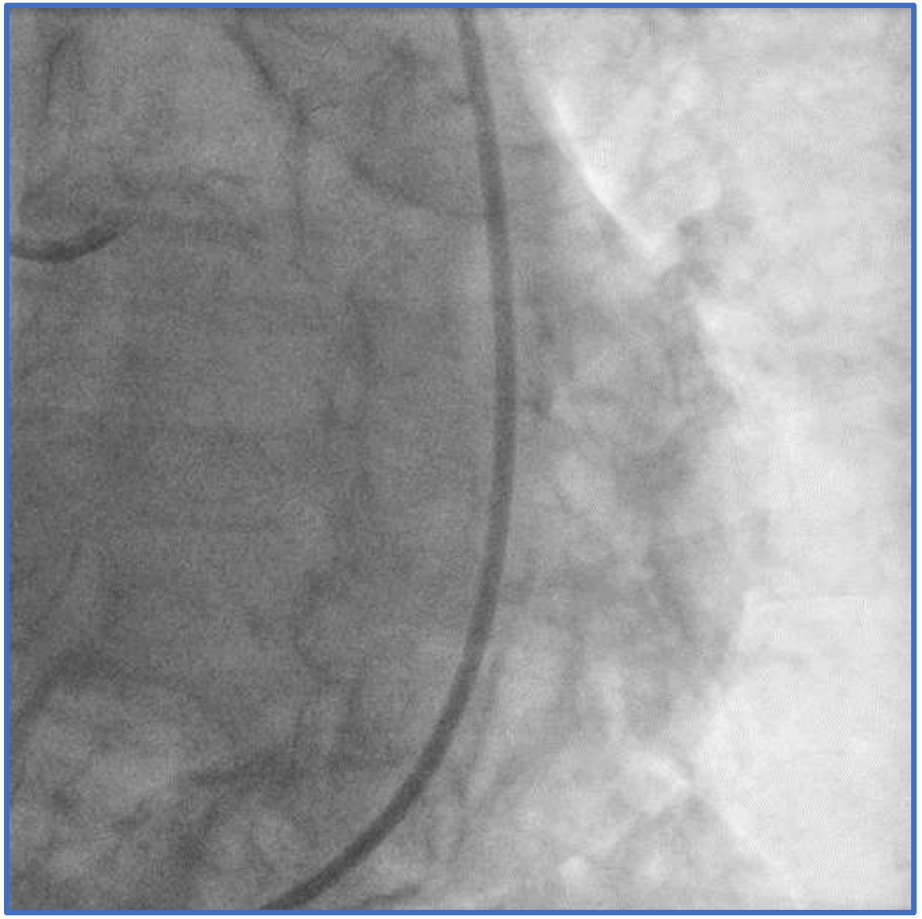


Resolute Integrity 3.0/12mm

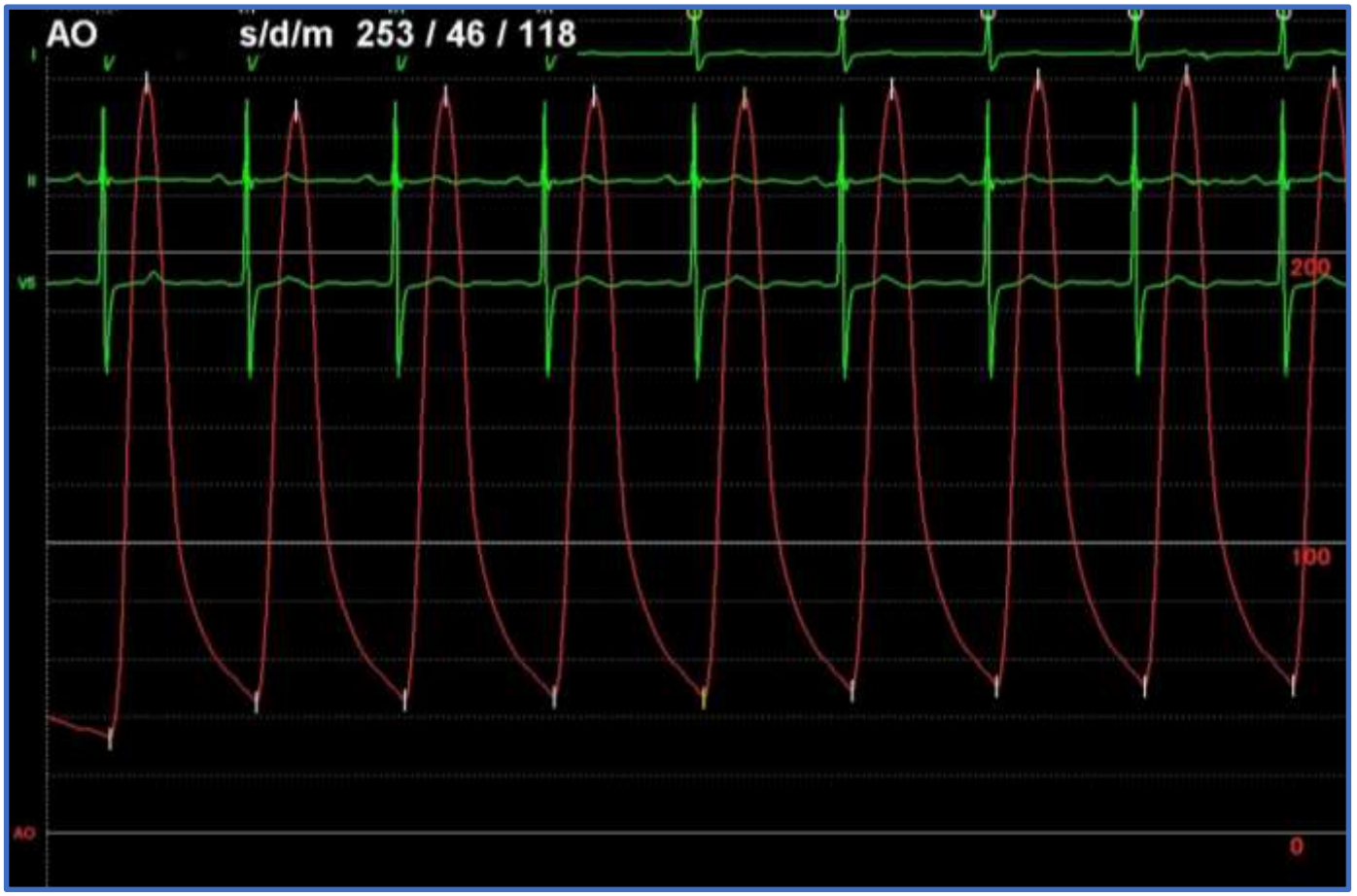
Case 3 : AP with Aortits Syndrome occluding all 4 limbic arteries and renal artery angina

Final Angiography

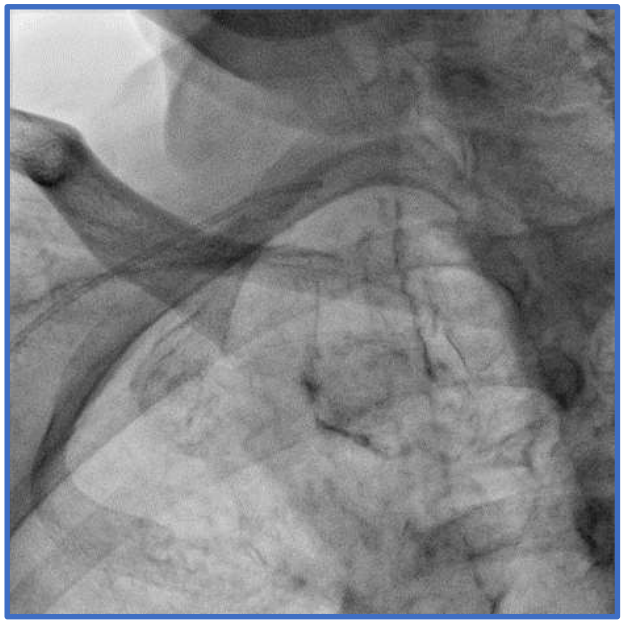
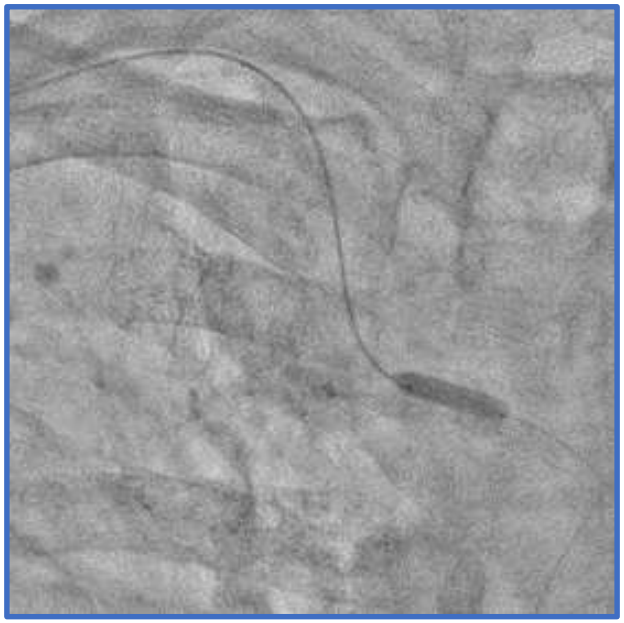
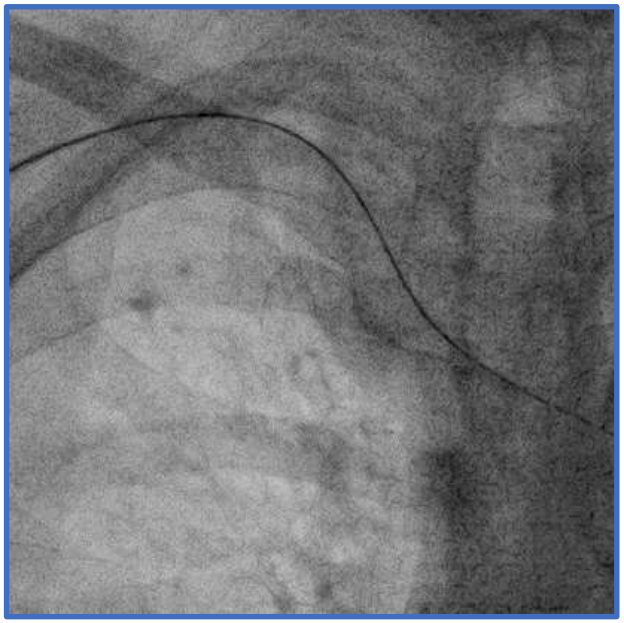




Central Blood Pressure



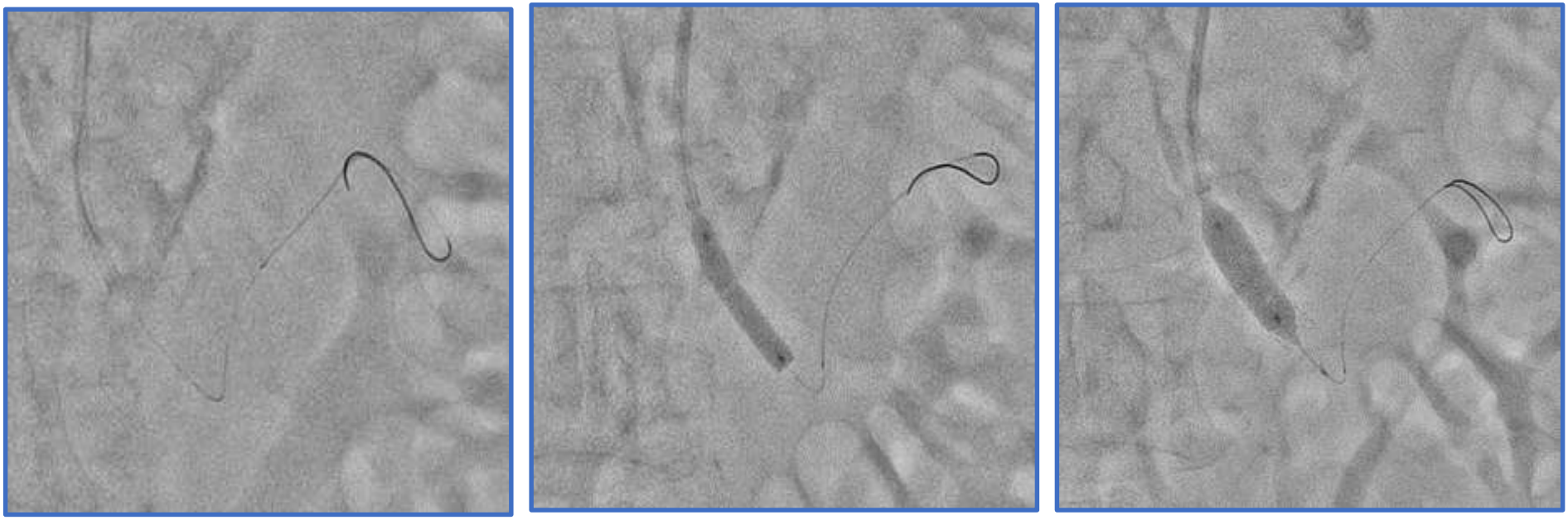
EVT for right subclavian artery

- Balloon ; Ballona 4.0/20mm
- System exchange; stiff wire, 6Fr Destination 90cm

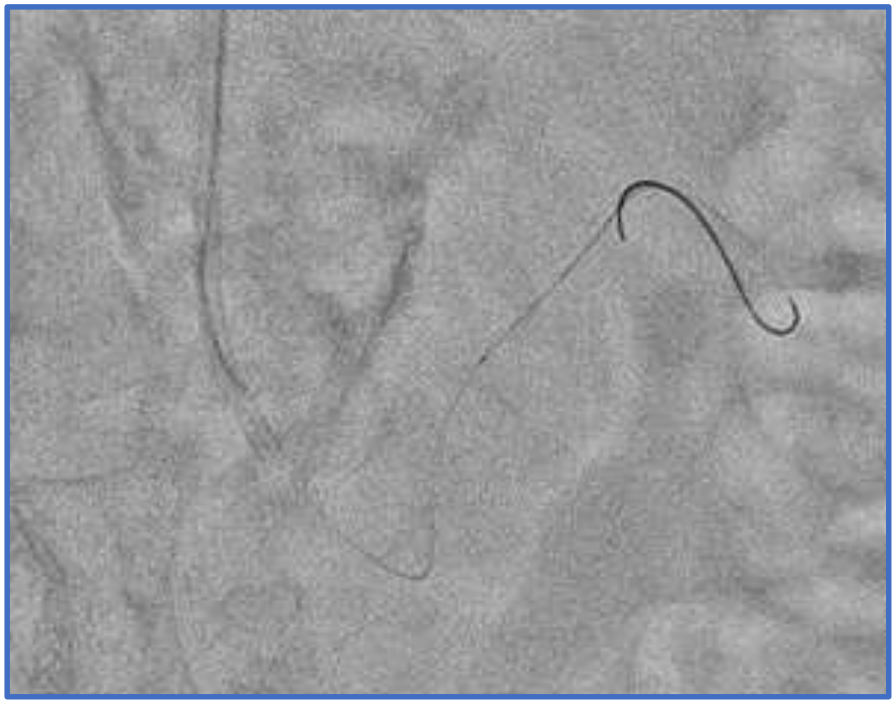
In order to reach renal artery, we simply dilated subclavian artery without stenting due to concern it’s occlusion.

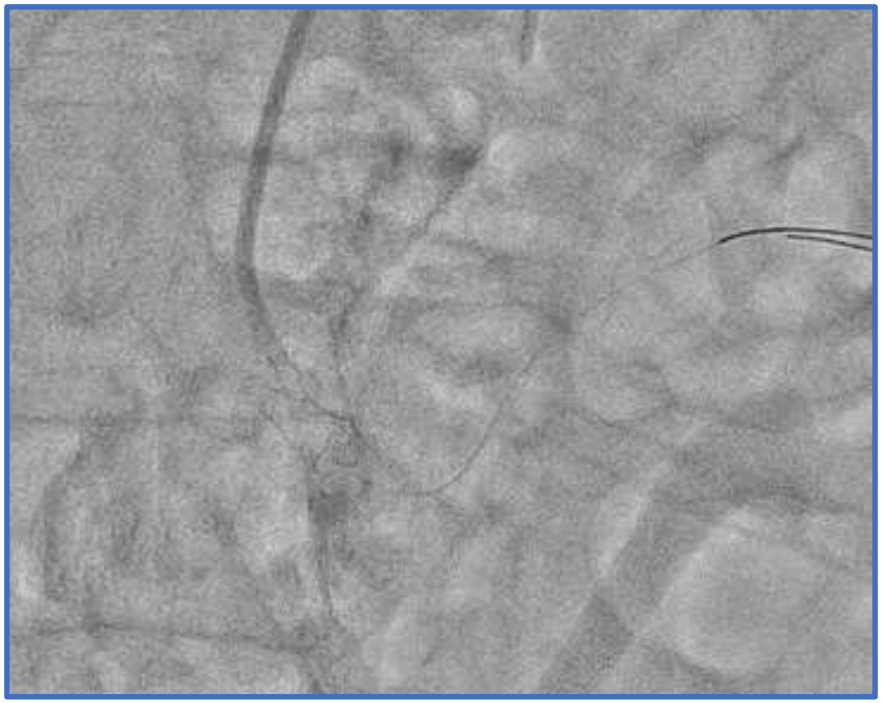
EVT for left renal artery



- Balloon ;　Ballona 4.0/20mm
- Stent ;　　Express 6.0/14mm

Final Angiogram



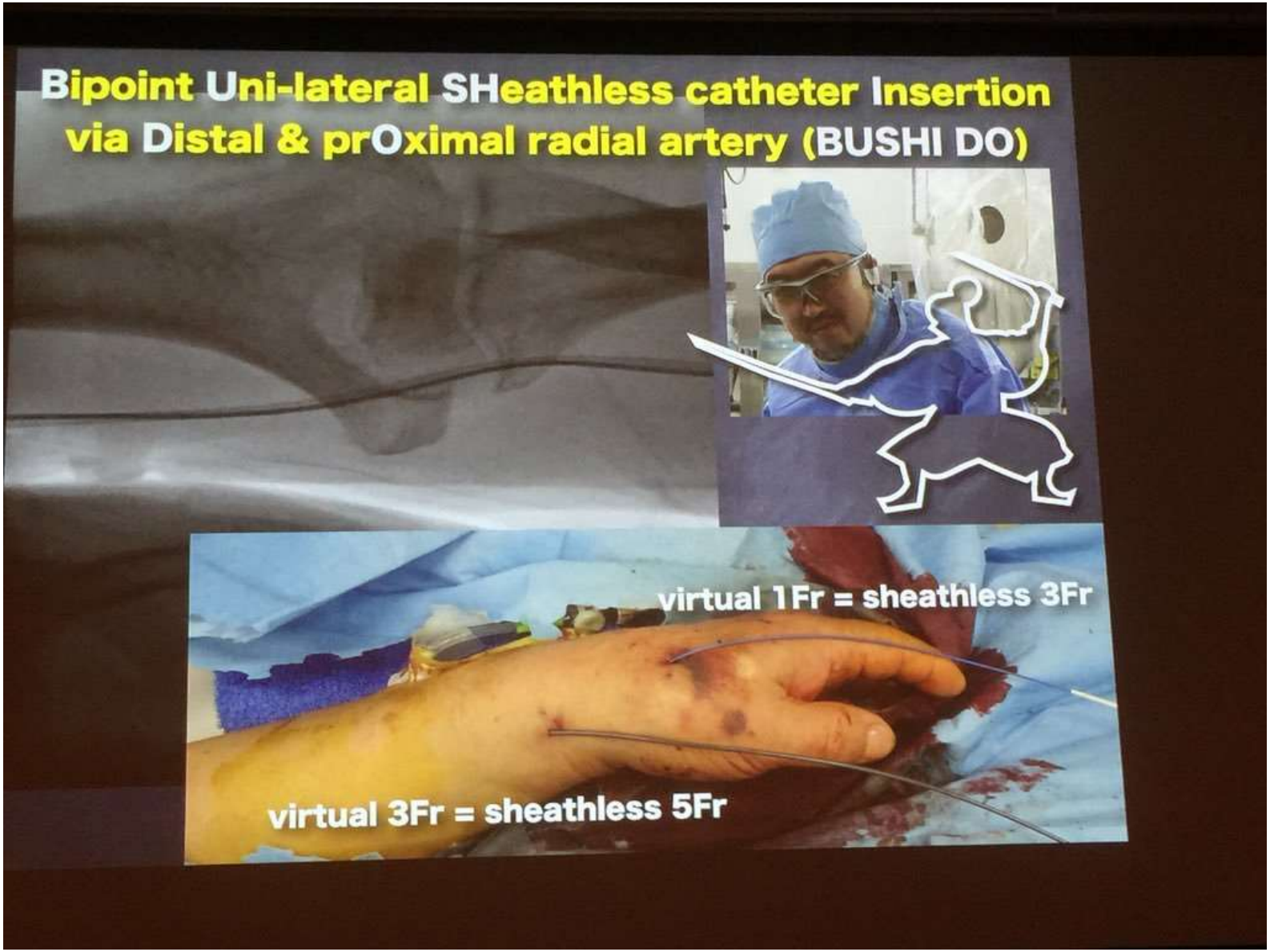


Perfect Preparation Prevents Poor Performance.

If you are not familiar with... You will lost some case.

SLENDER Club Japan

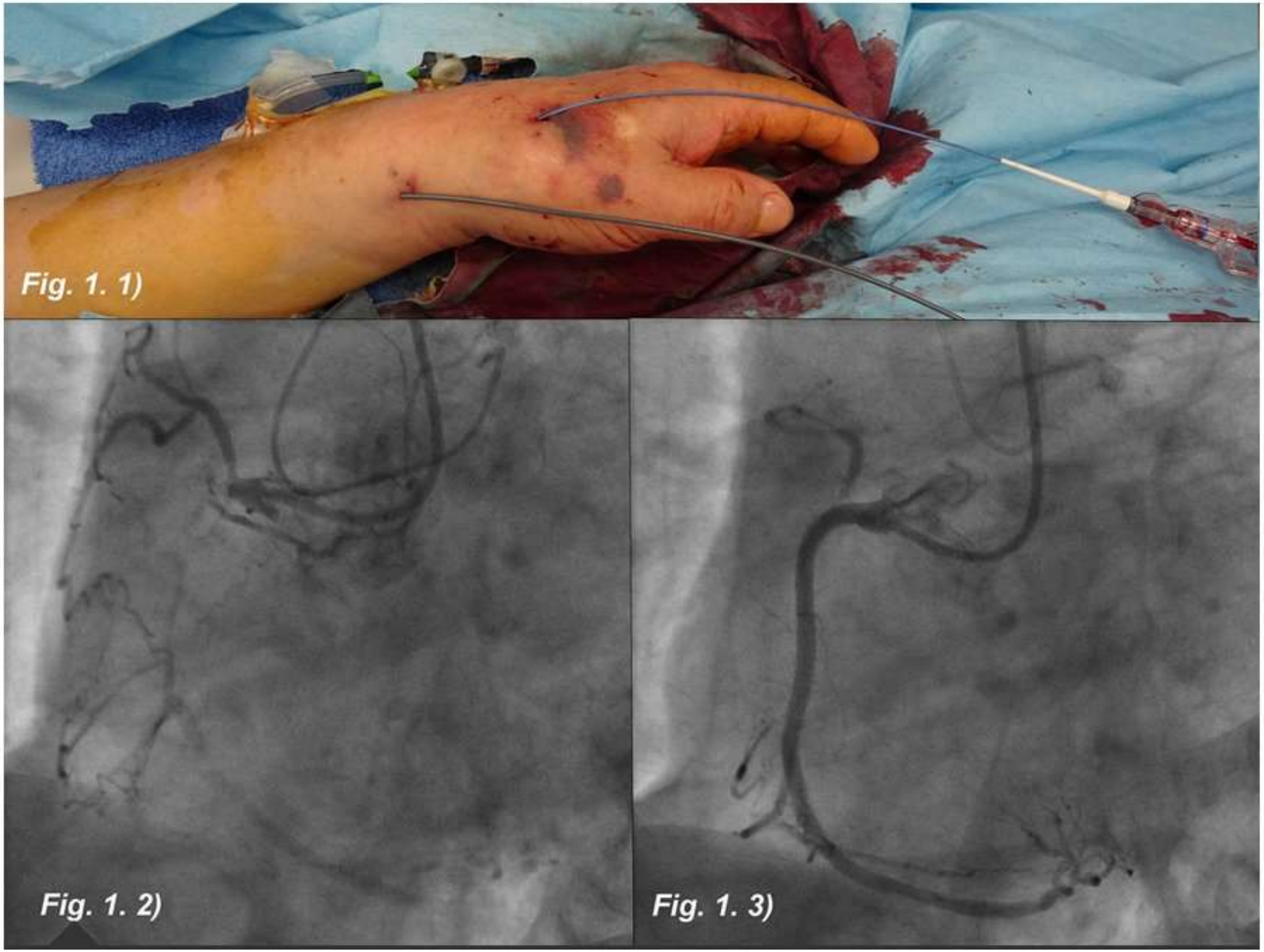
“BUSHI DO”


Bipoint Uni-lateral SHeathless catheter Insertion
via Distal & prOximal radial artery (BUSHI DO)
virtual 1Fr = sheathless 3Fr
virtual 3Fr = sheathless 5Fr

“BUSHI DO”

“BUSHI ”＝SAMURAI

CTO by “BUSHI DO”



There is never that practicing
witchcraft and sorcery was simple

- Harry Potter

There is never that PCI was simple

- Sunao Nakamura