

CASE

Another Option of Retrograde Approach for the Treatment of Chronic Total Occlusion in Bifurcation Area

Daegu Catholic University Medical Center



Presenter: Hong Seung Pyo

Physical Exam

➤ **Vital sign**

BP 120/70mmHg, PR 76bpm, RR 20bpm, BT 36.4°C

➤ **General appearance : Acute ill appearance**

➤ **HEENT: Non-pale conjunctiva, Neck vein distension (-/-)**

➤ **Chest**

- Clear breathing sound

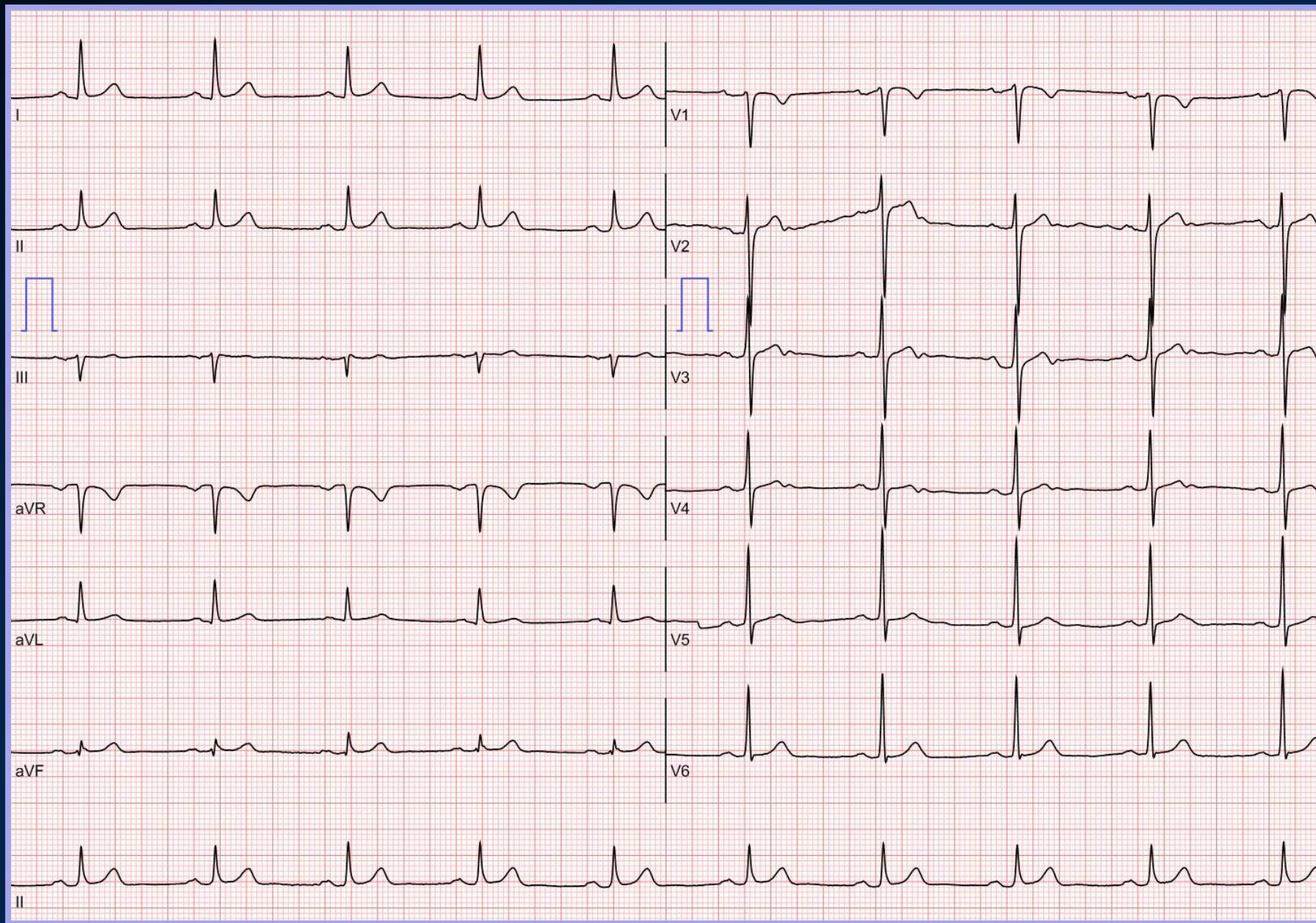
- Regular heart beat

➤ **Abdomen : Soft**

➤ **Extremity : Pretibial pitting edema (-/-)**

Chest X-ray





Laboratory finding

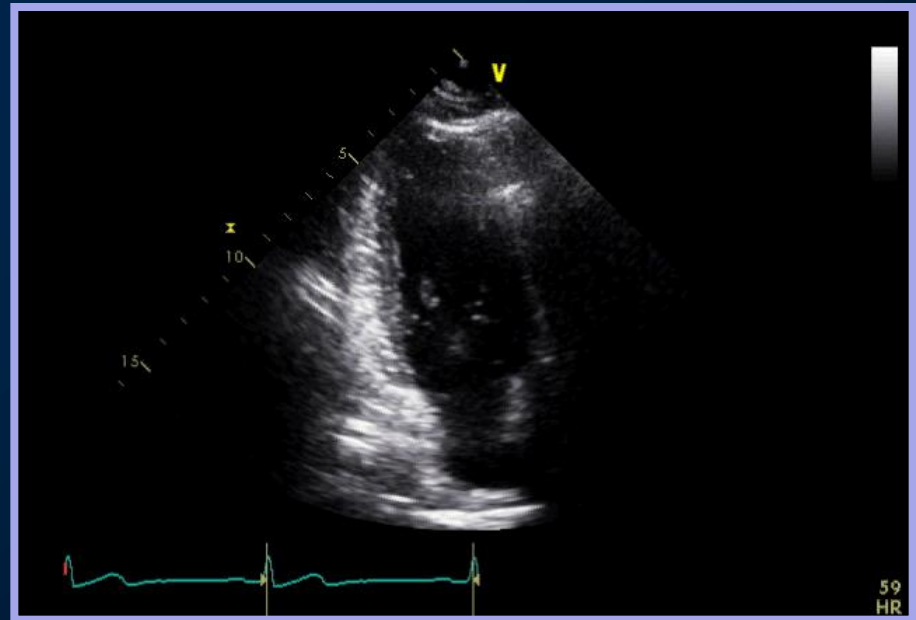
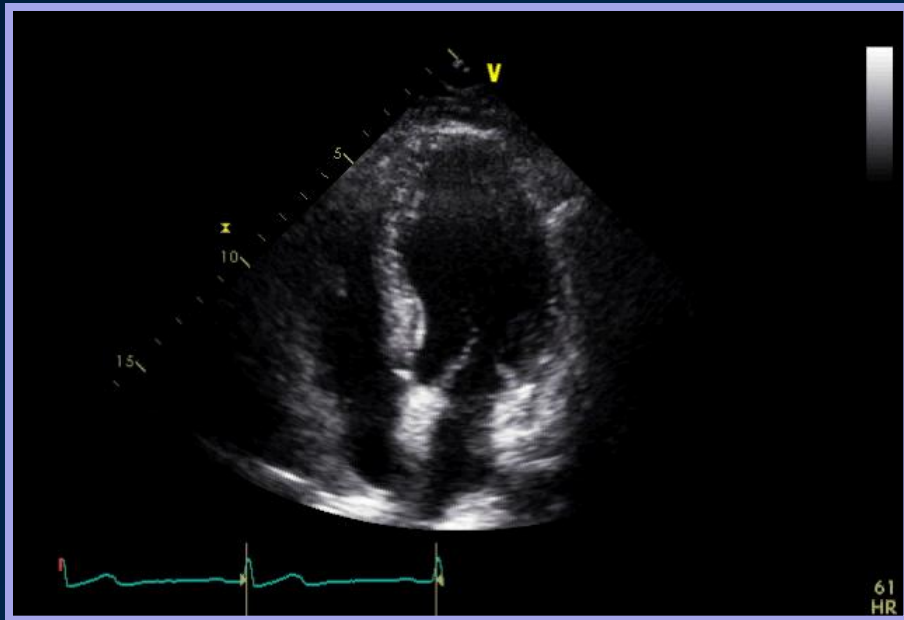
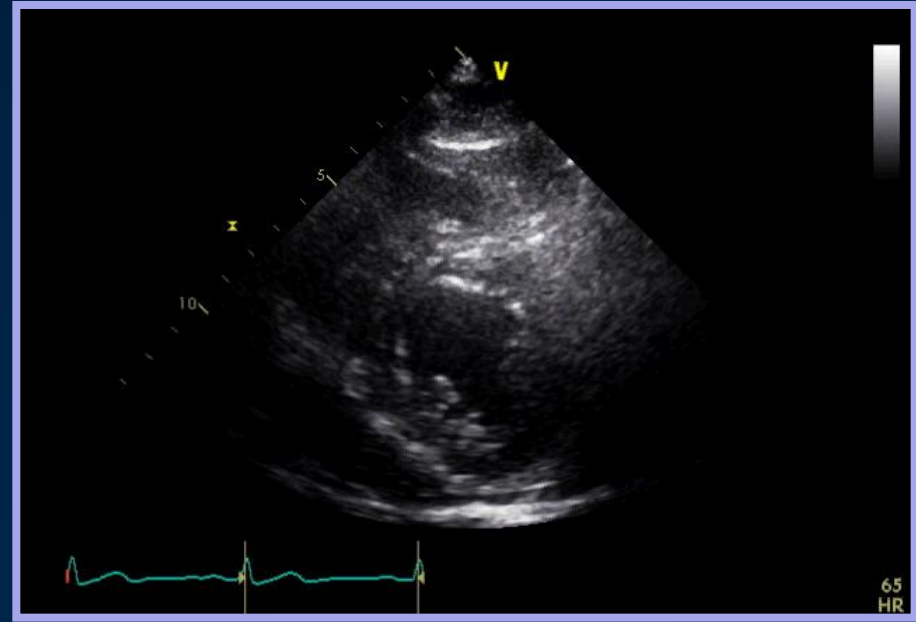
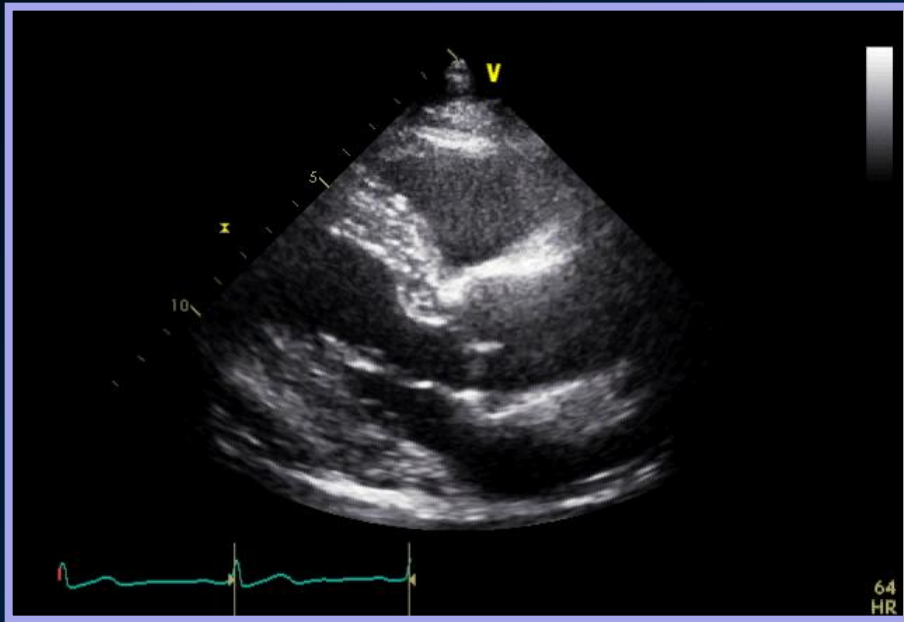
Cardiac profile

CK-MB (ng/ml)	1.7
Tn-I (ng/ml)	0.1
CRP (mg/l)	0.6
D-dimer (μ g/ml)	0.34
Pro-BNP (pg/ml)	7.7
eGFR	98

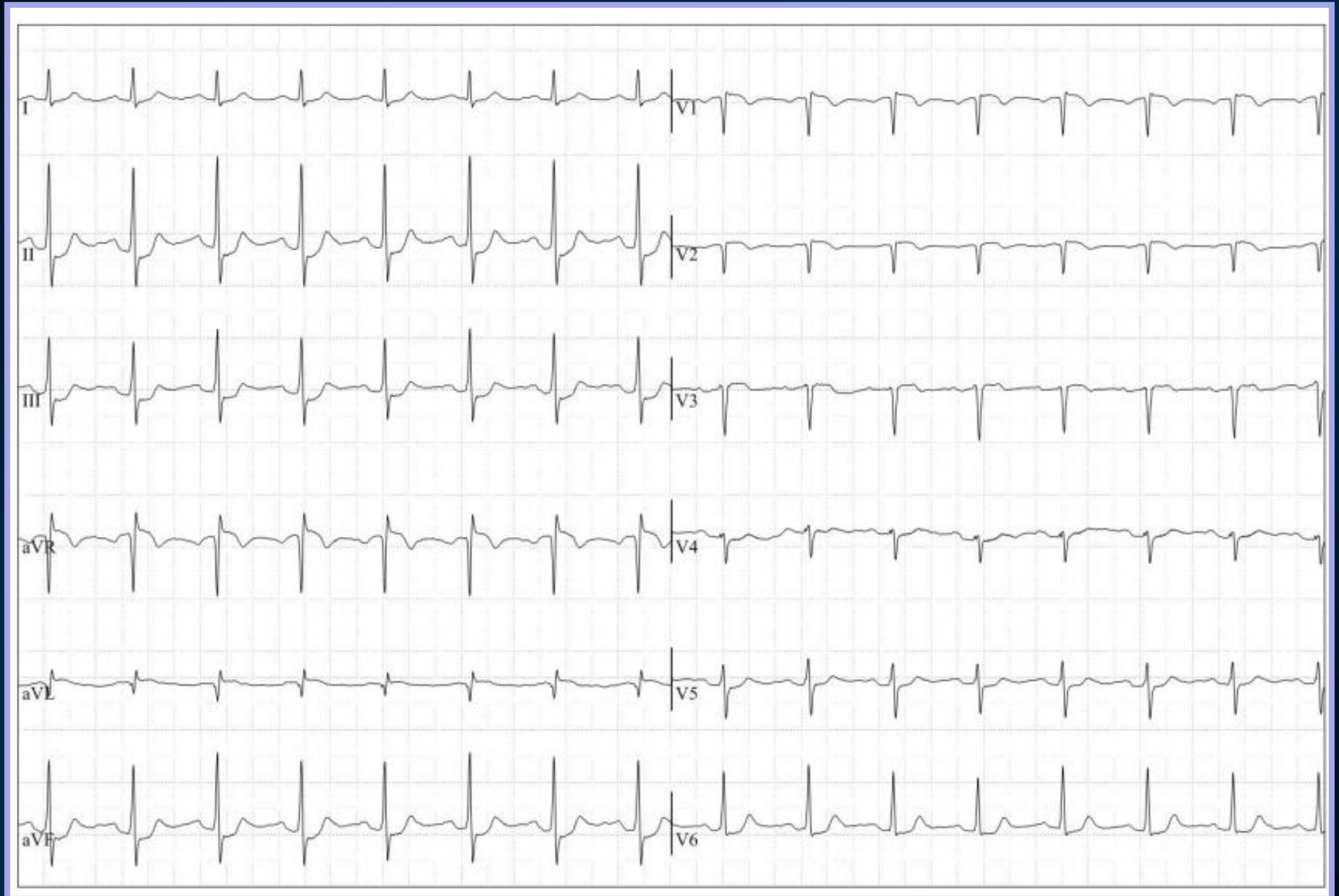
Lipid profile

T-chole (mg/dl)	168
TG (mg/dl)	91
HDL-C (mg/dl)	42
LDL-C (mg/dl)	111
Apo A1 (mg/dl)	118.2
Apo B (mg/dl)	96.7
LP (a) (mg/dl)	24.9

Echocardiography



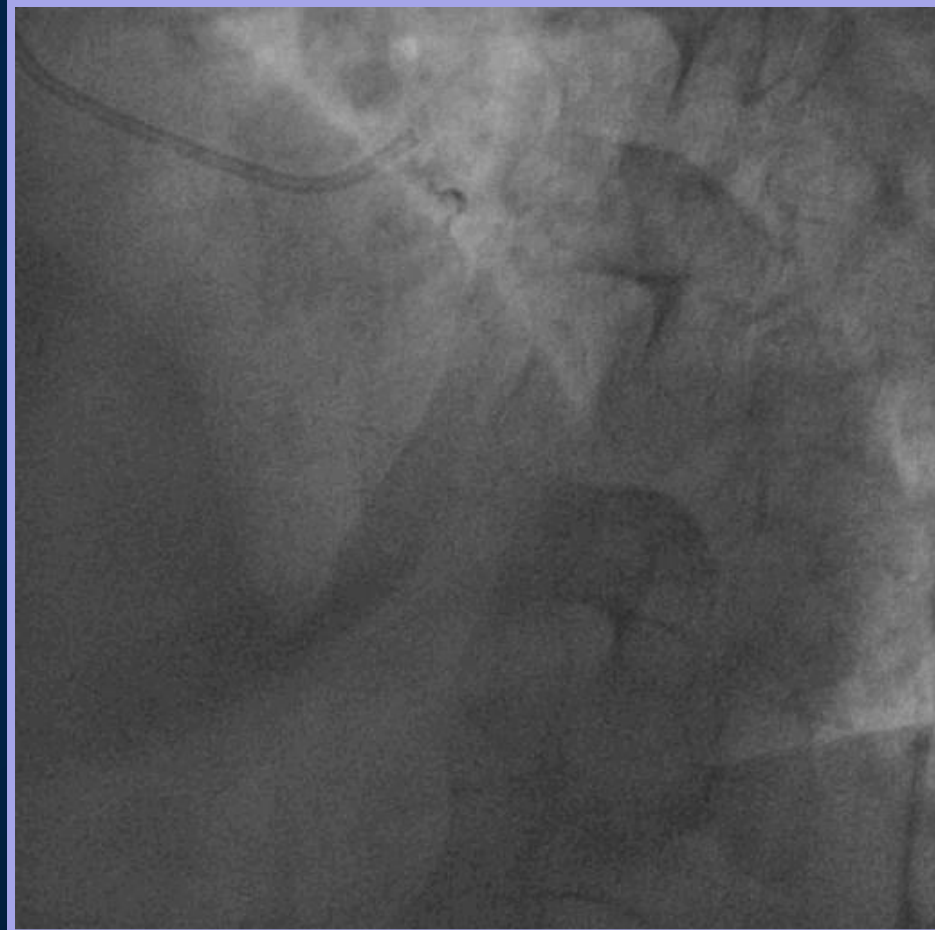
Exercise treadmill test



Coronary angiography

LCA – Spider

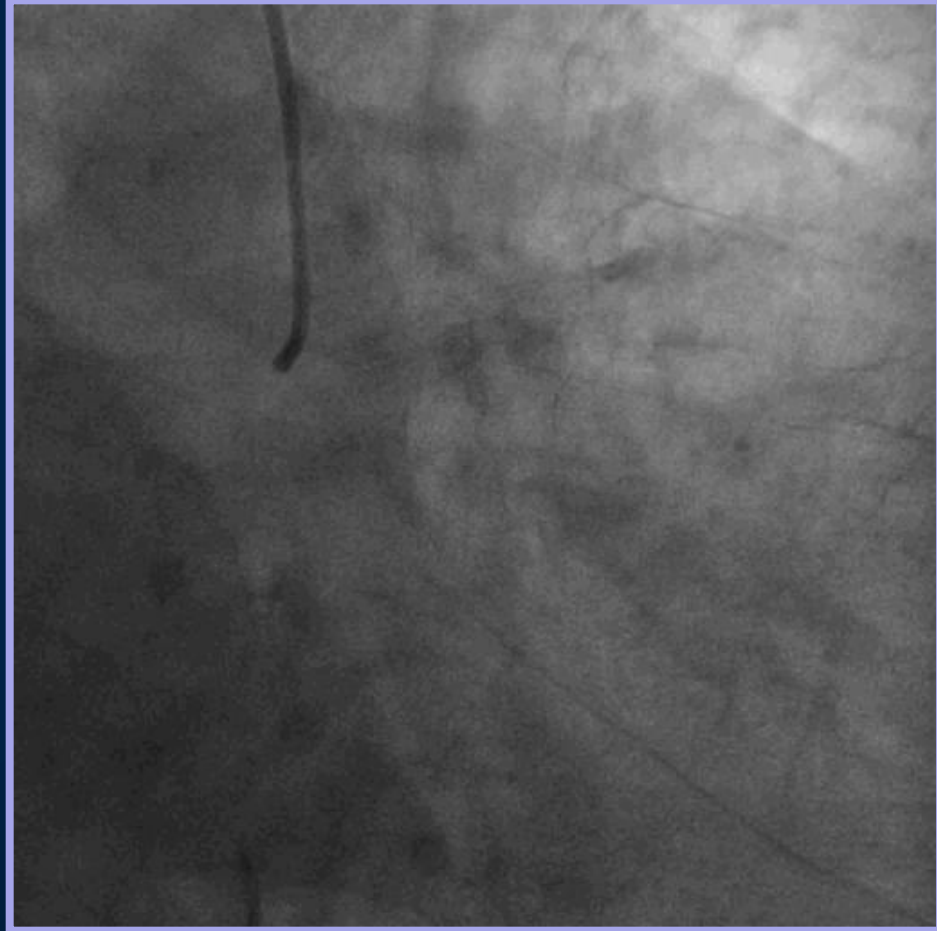
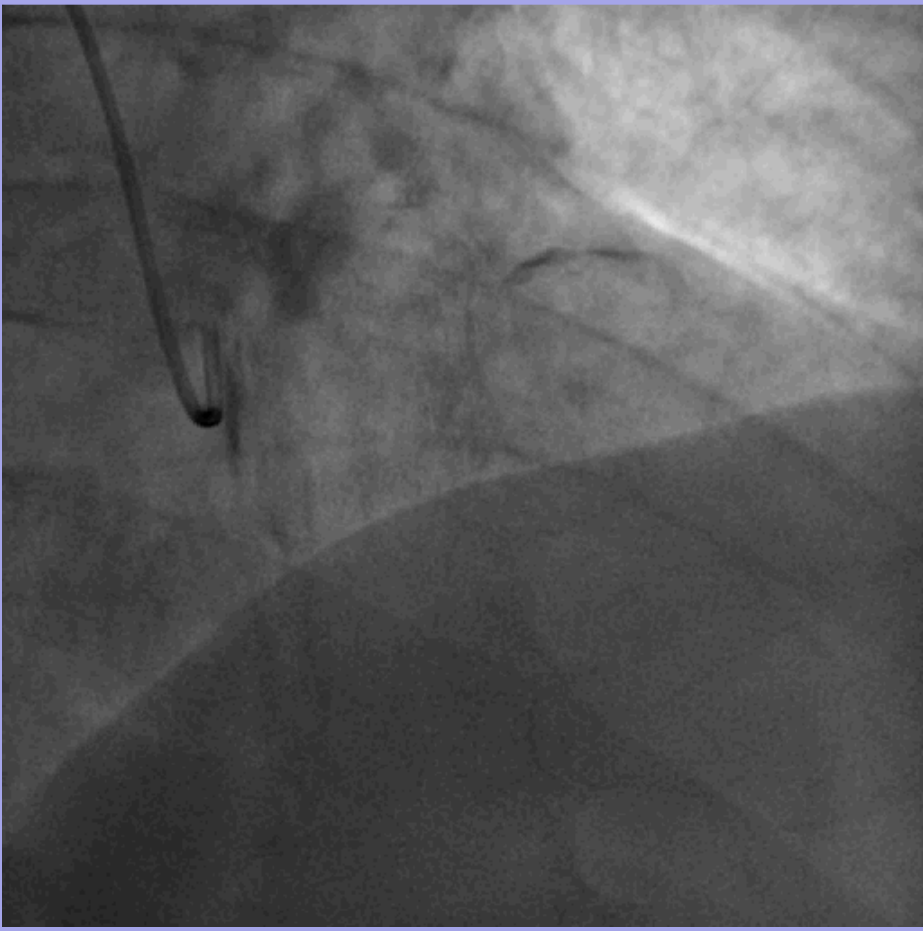
LCA – LAO Cranial



Coronary angiography

LCA – RAO Cranial

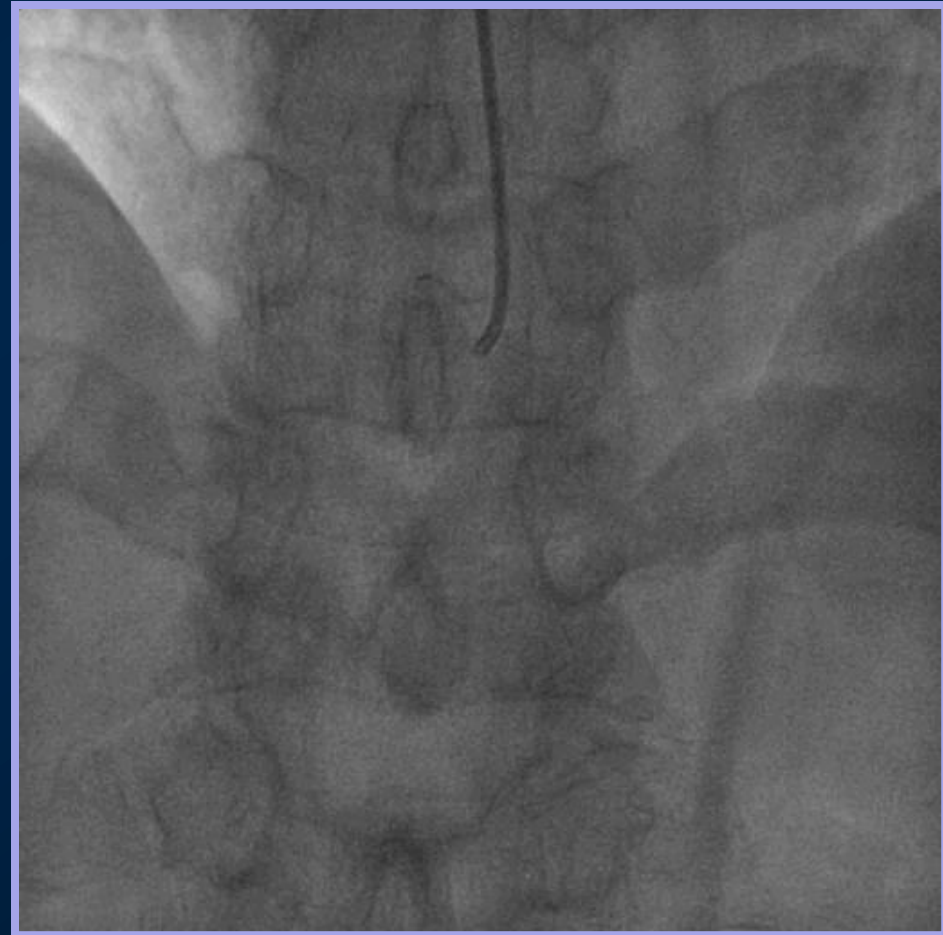
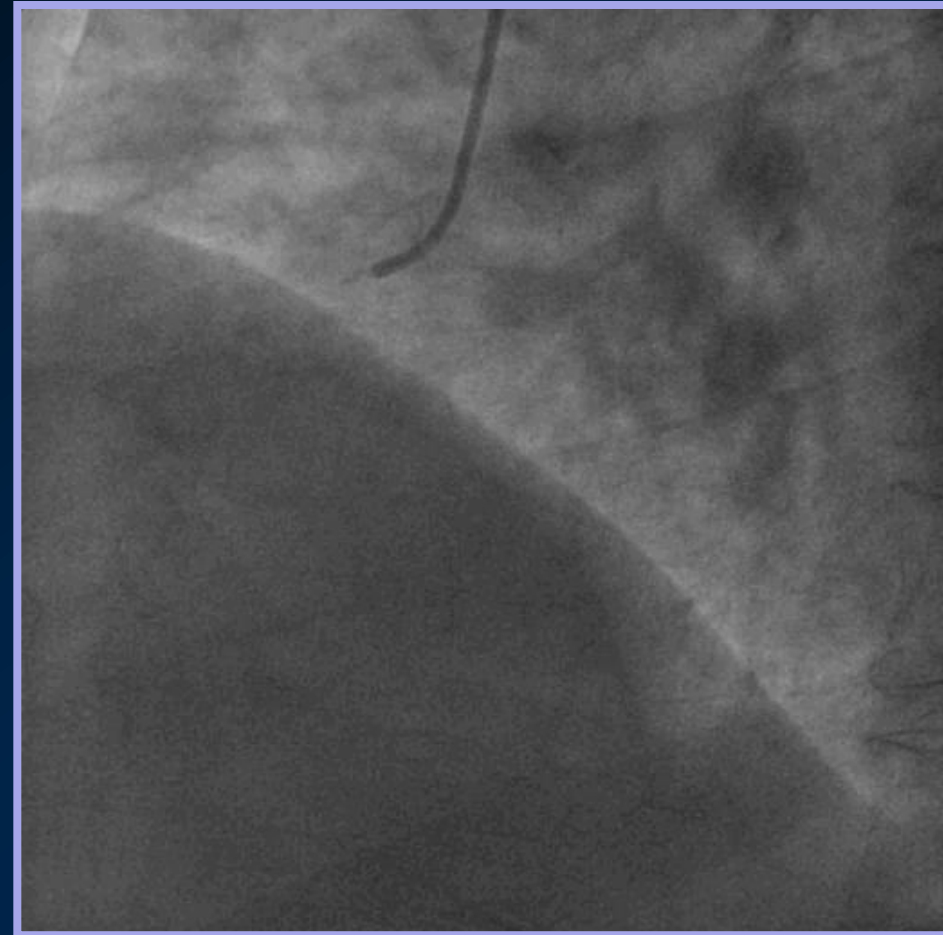
LCA – RAO Caudal



Coronary angiography

RCA - LAO

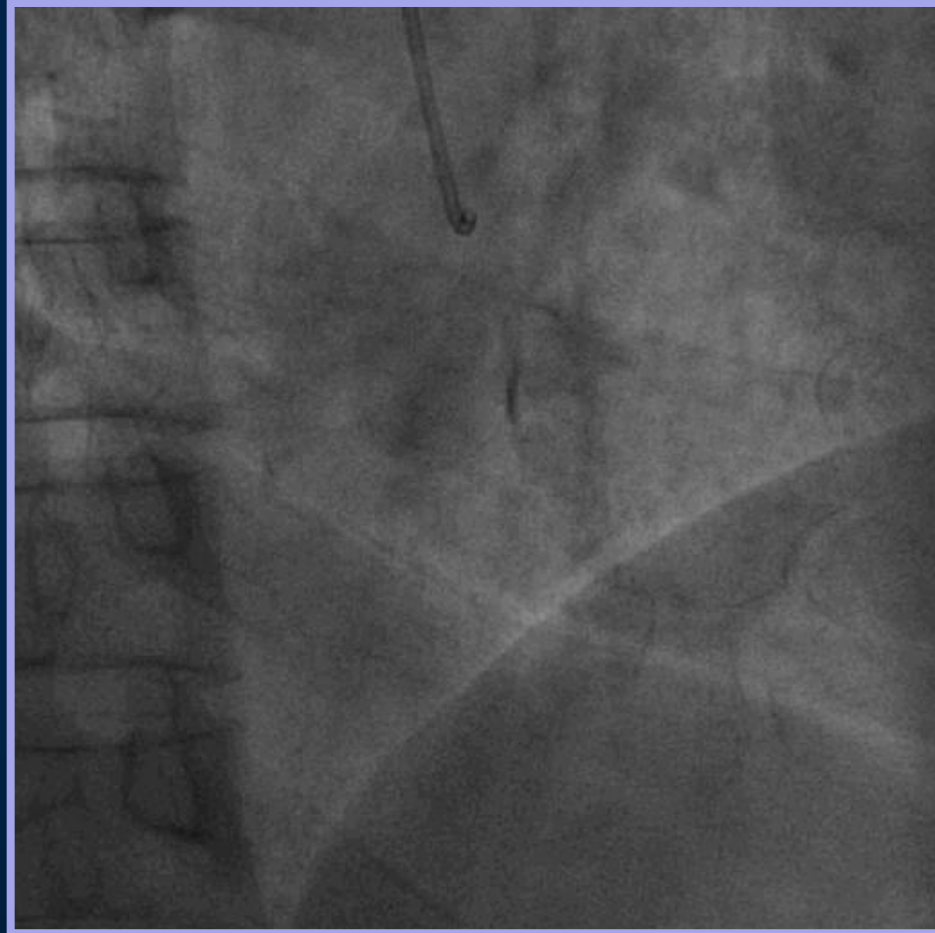
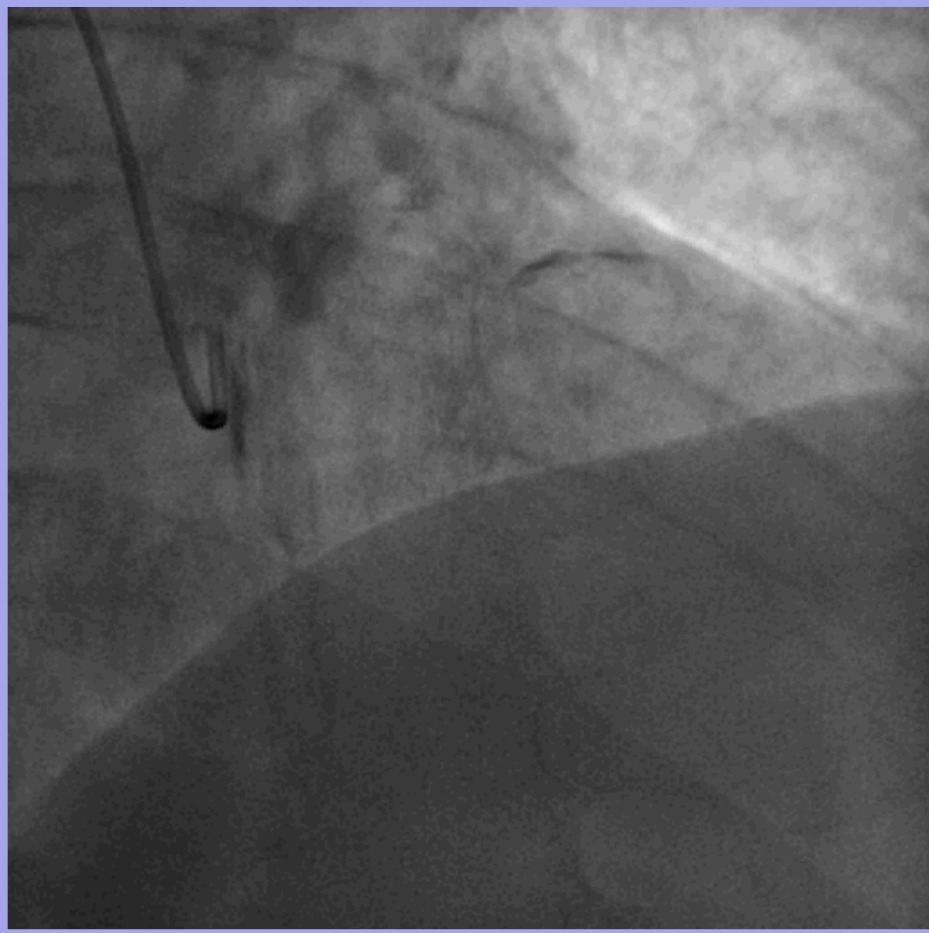
RCA – AP Cranial



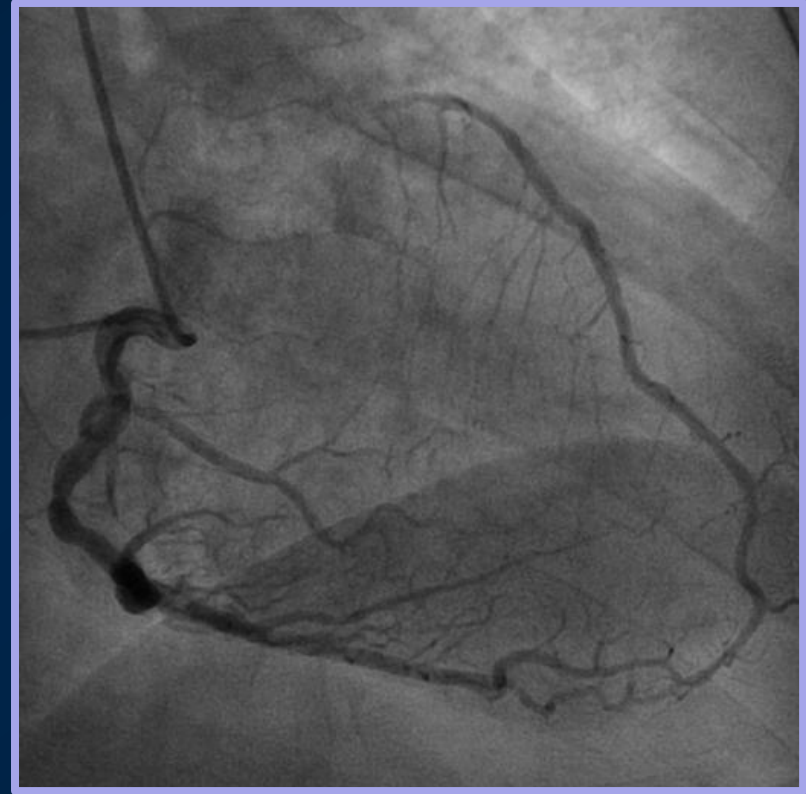
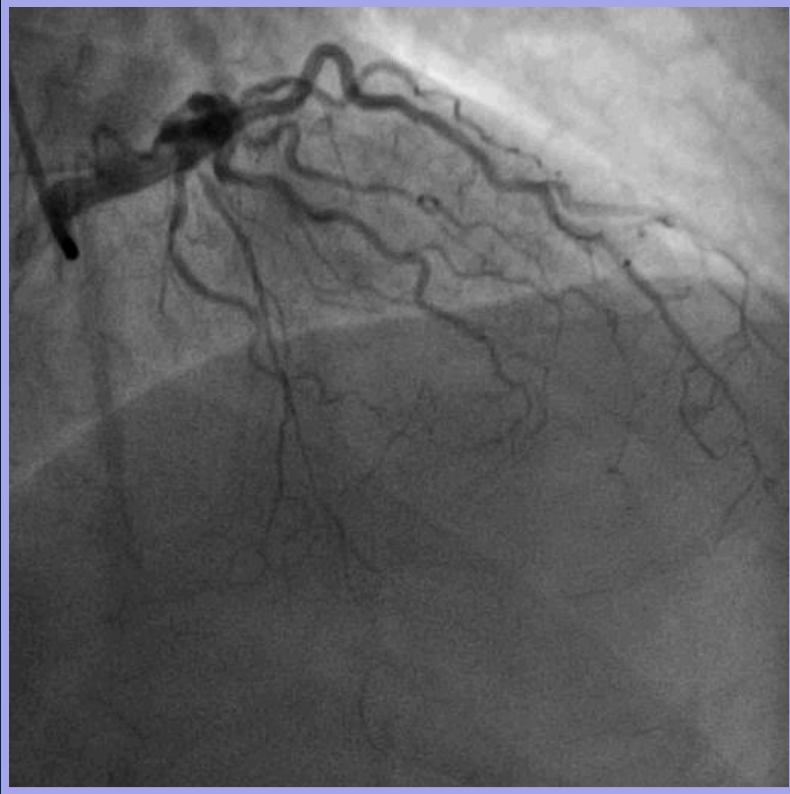
Coronary angiography

LCA – RAO Cranial

RCA – RAO Cranial



Approach to patient



**Typical chest pain
Stress test (+)**

PCI for CTO lesion

Approach to patient

**Ante-grade approach via
Trans-radial intervention**



Cather support

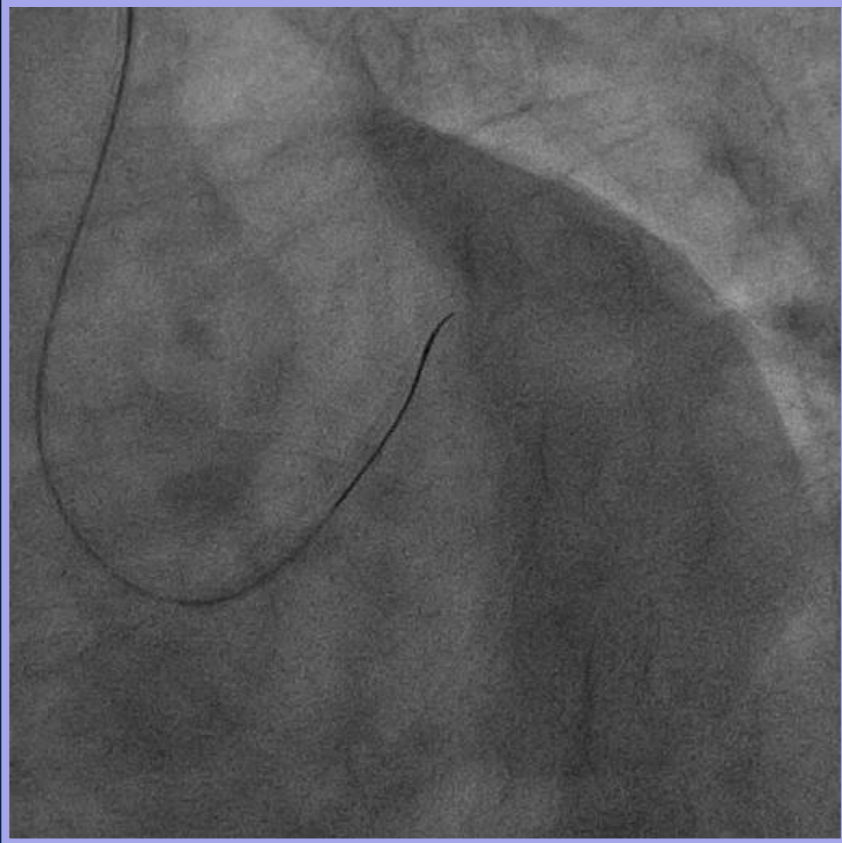
- **Passive Support : 6Fr XB3.5 SH**

Guidewire-Support Devices

- **Corsair microcatheter**

Guidewire

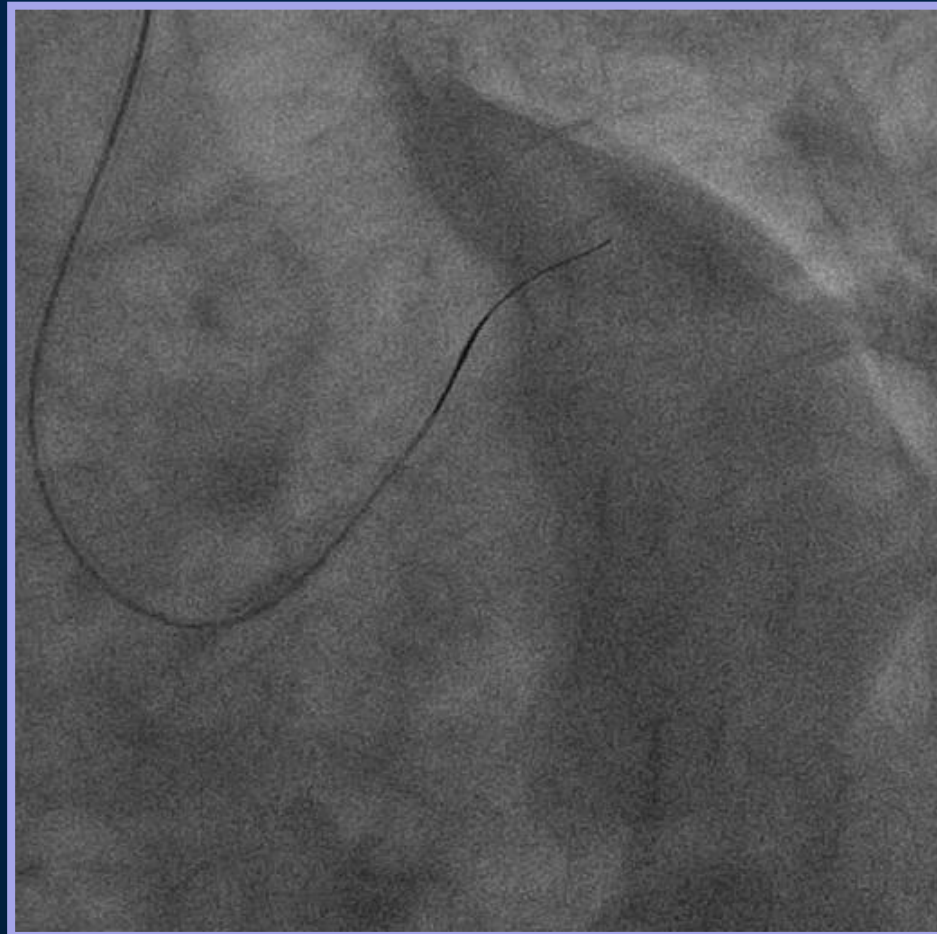
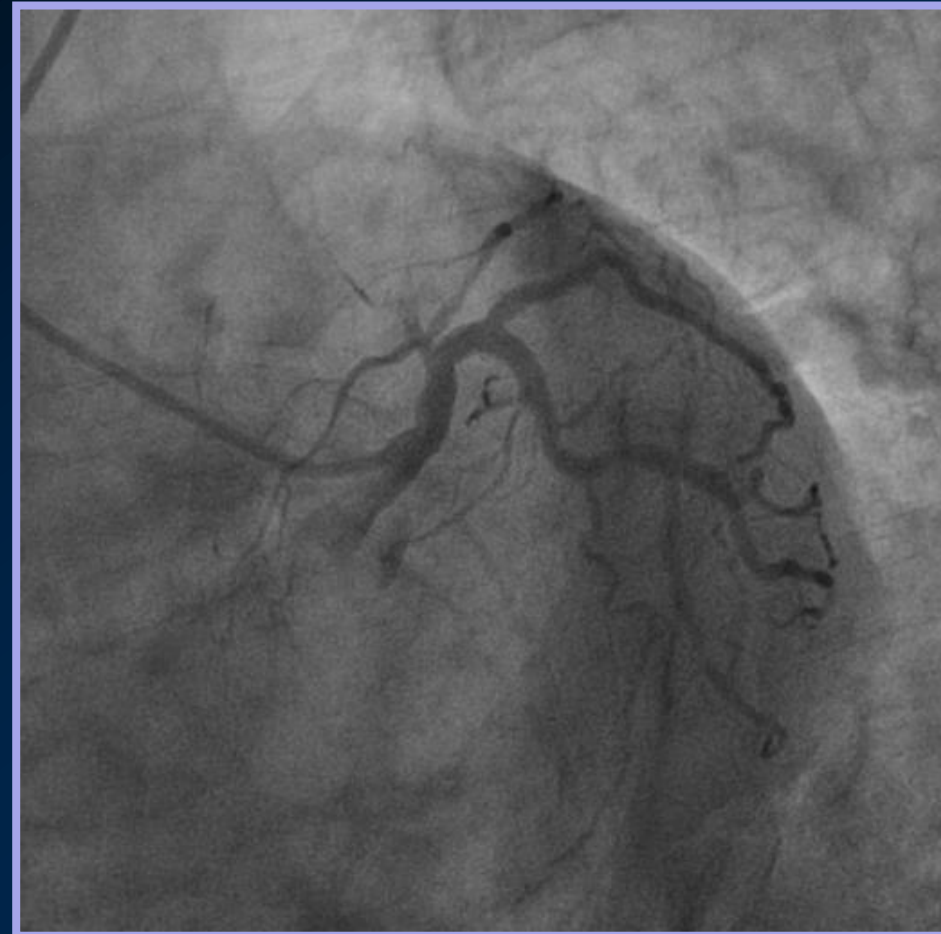
- **Fielder-FC**



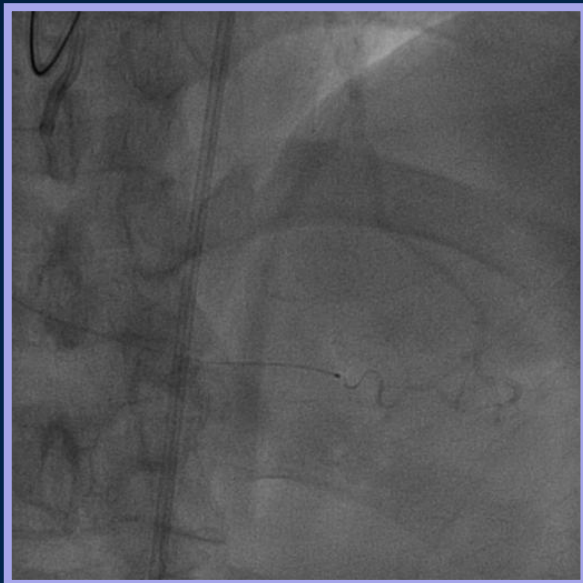
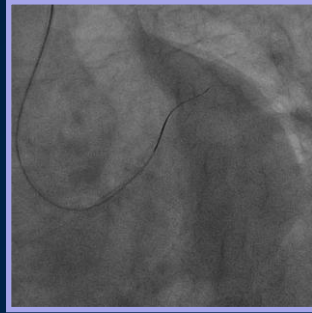
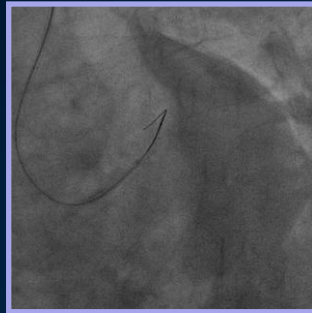
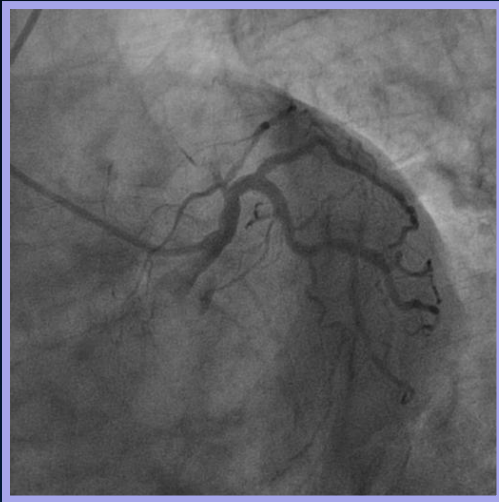
Percutaneous coronary intervention

Reference view

Ante-grade approach



Approach to patient



**Retro-grade approach
Trans-femoral intervention**



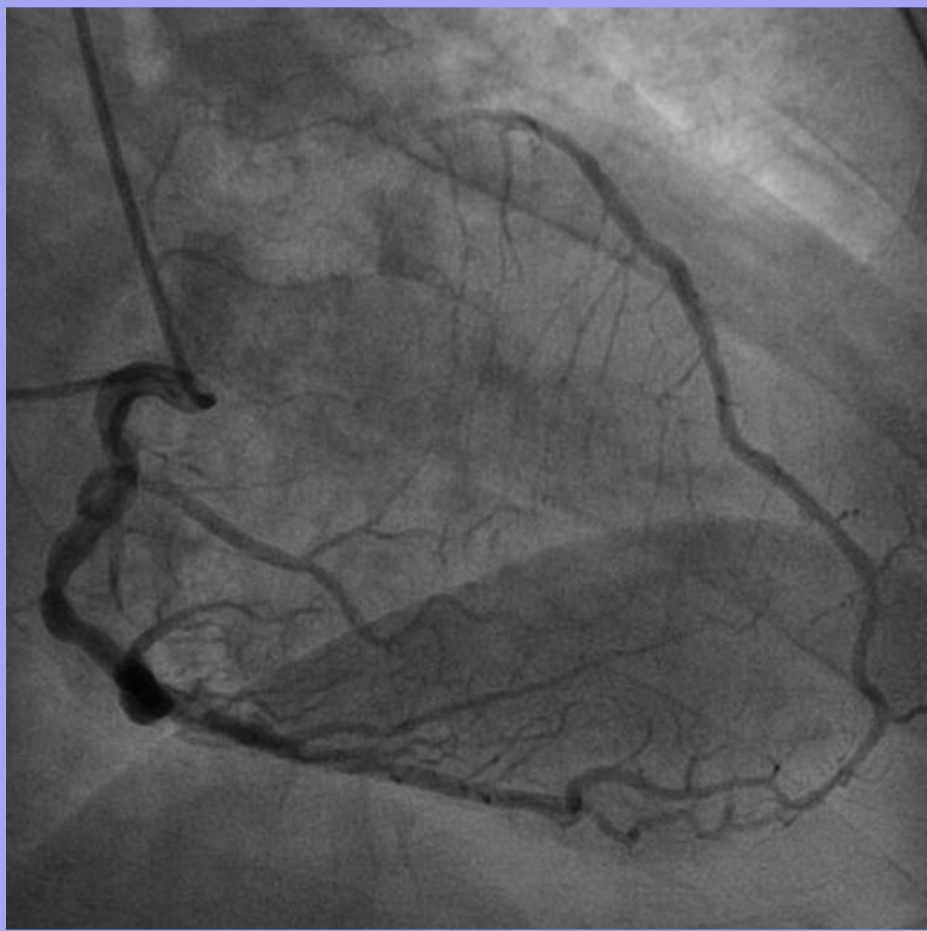
**Cather support
Passive Support : 7Fr AL1 SH**

**Guidewire-Support Devices
- Corsair microcatheter**

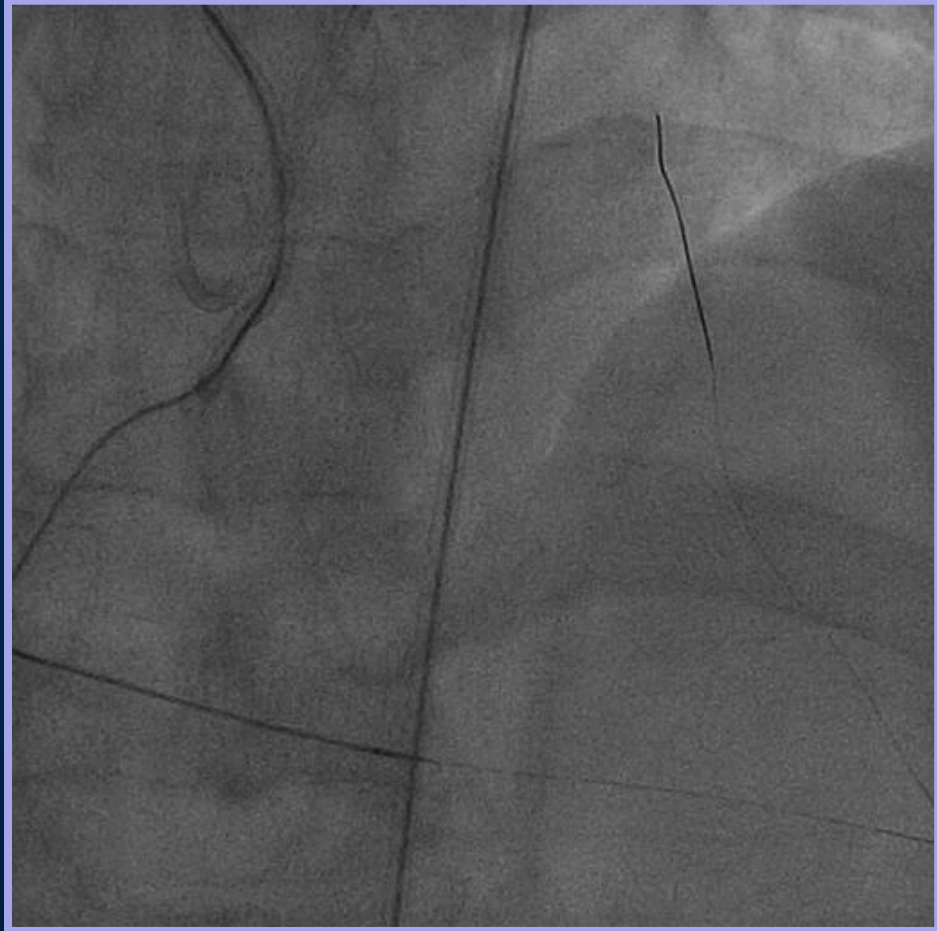
**Guidewire
- Fielder-XT**

Percutaneous coronary intervention

Reference view



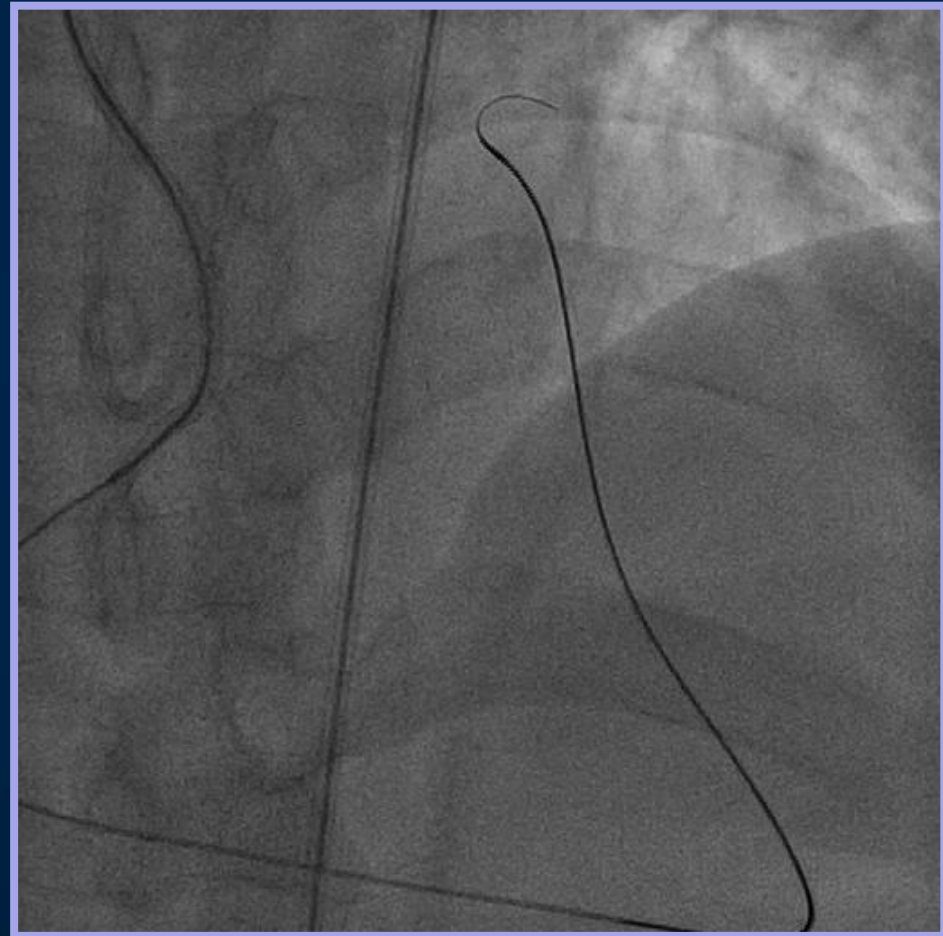
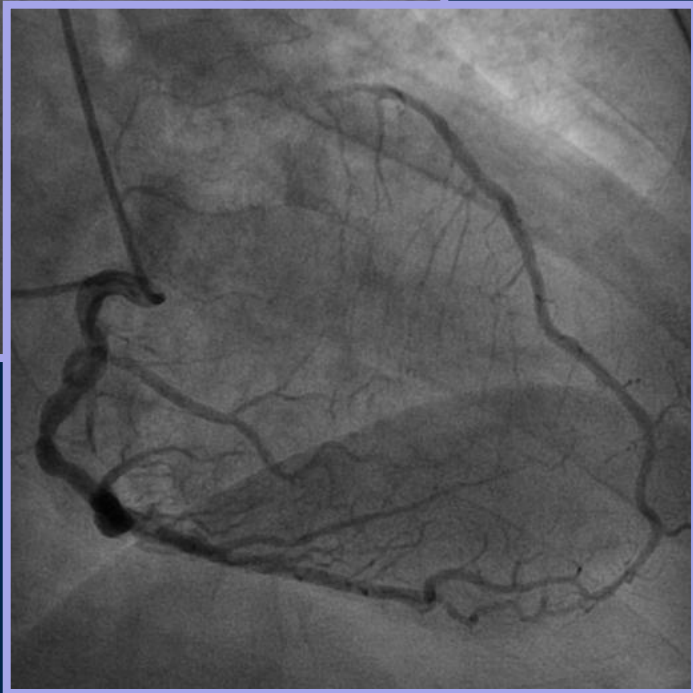
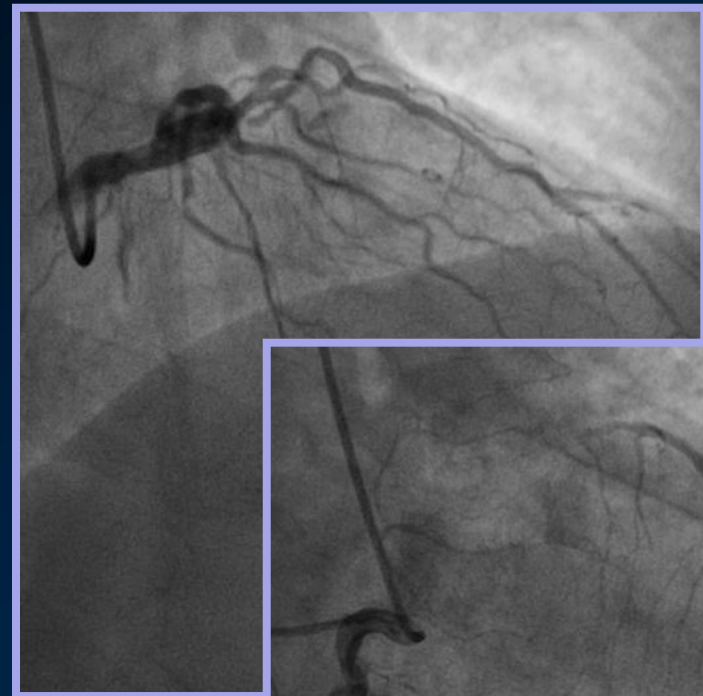
Retro-grade approach



Percutaneous coronary intervention

Reference view

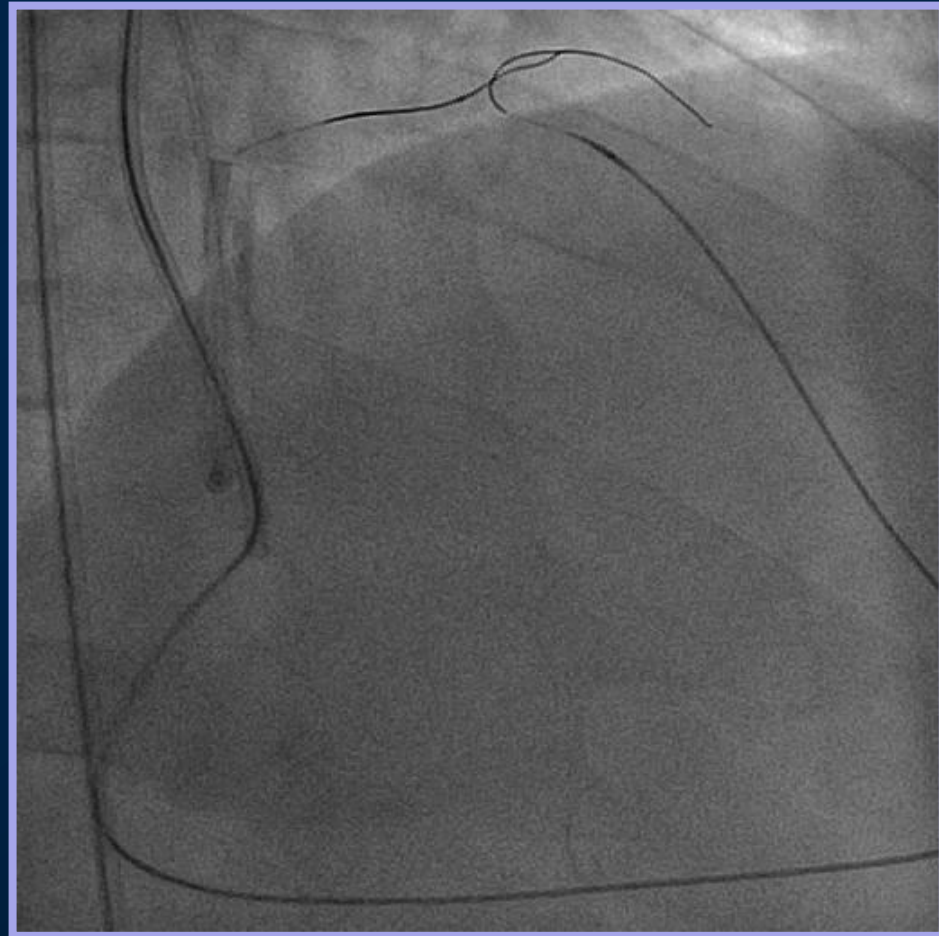
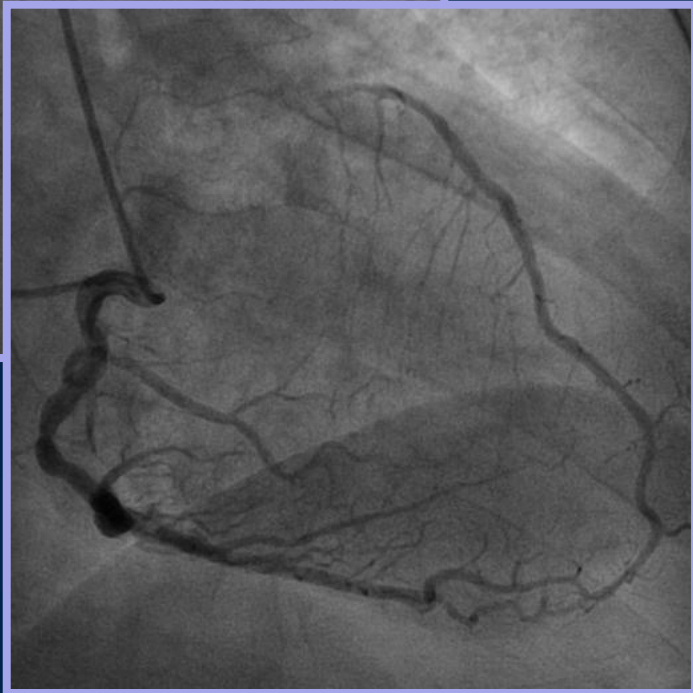
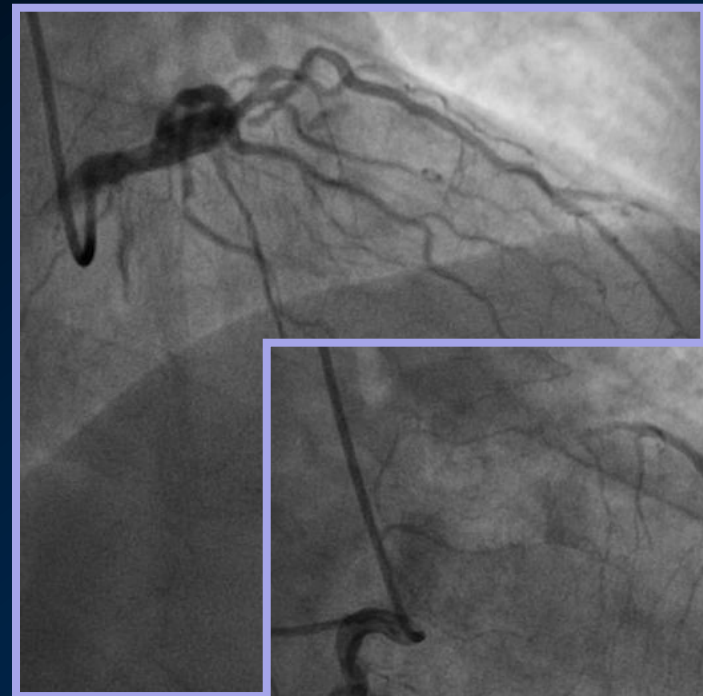
Retro-grade approach



Percutaneous coronary intervention

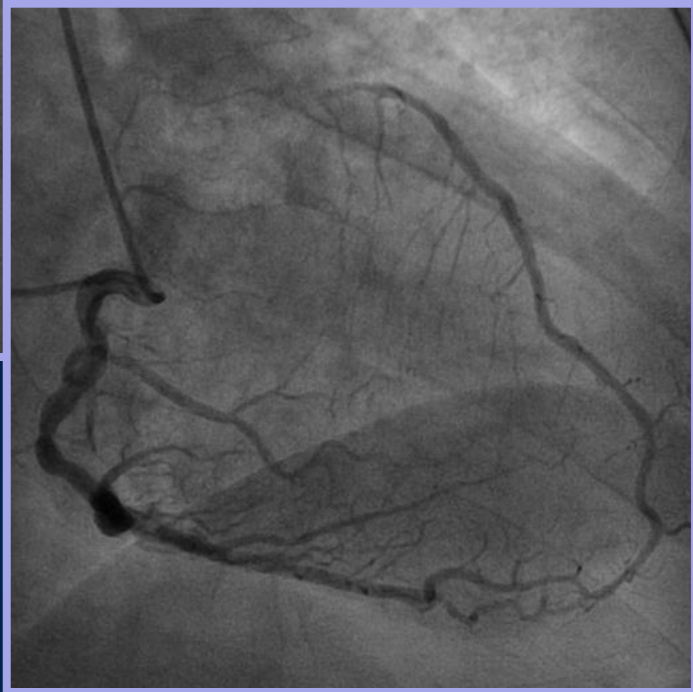
Reference view

Ante-grade approach

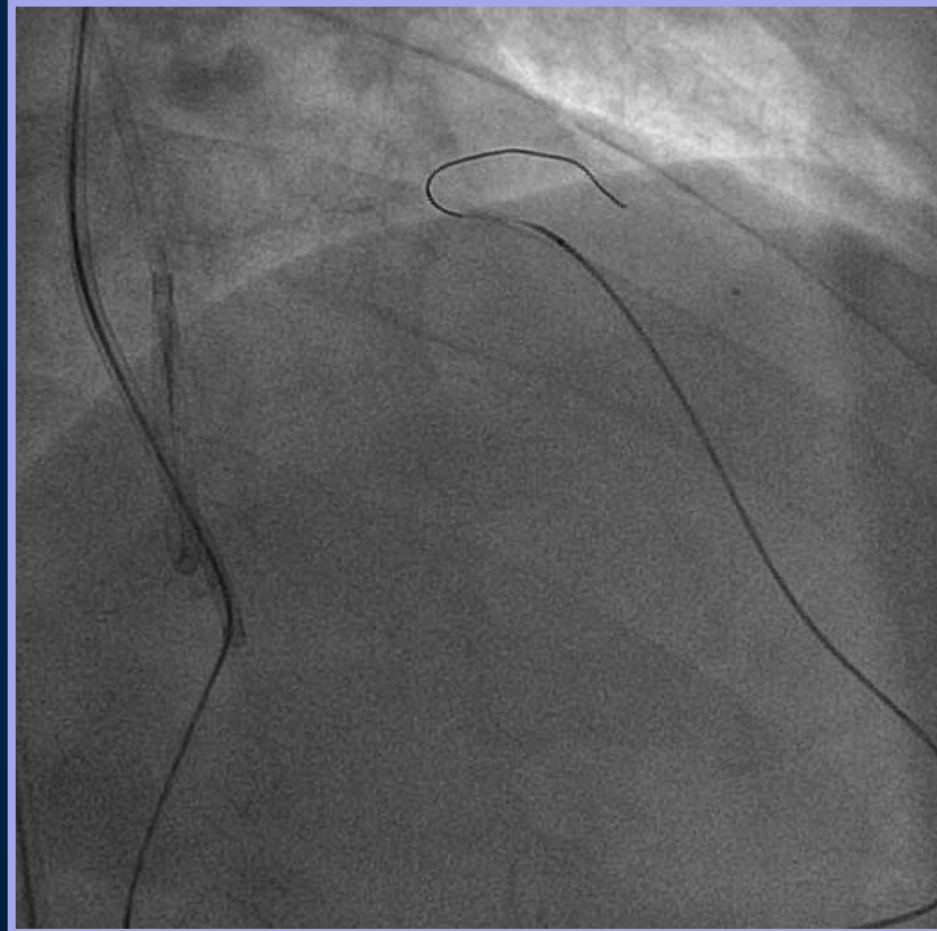


Percutaneous coronary intervention

Reference view

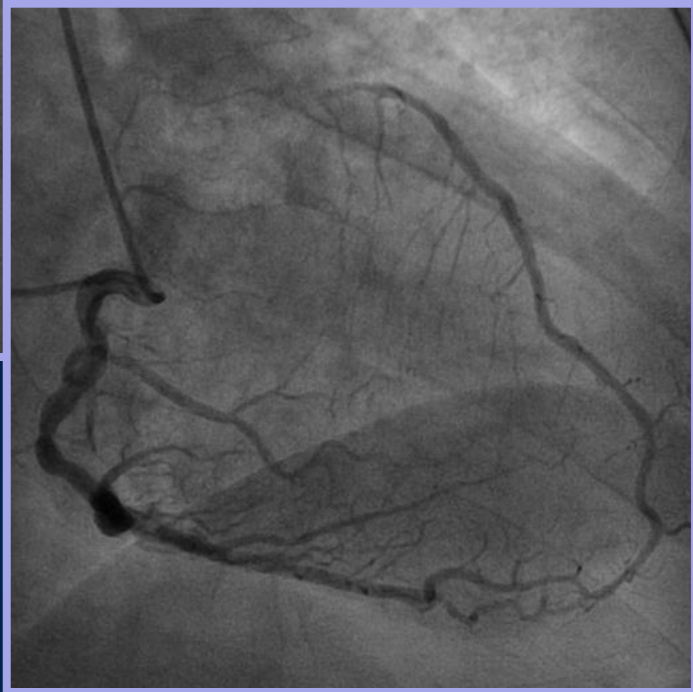


Micro-Angiogram

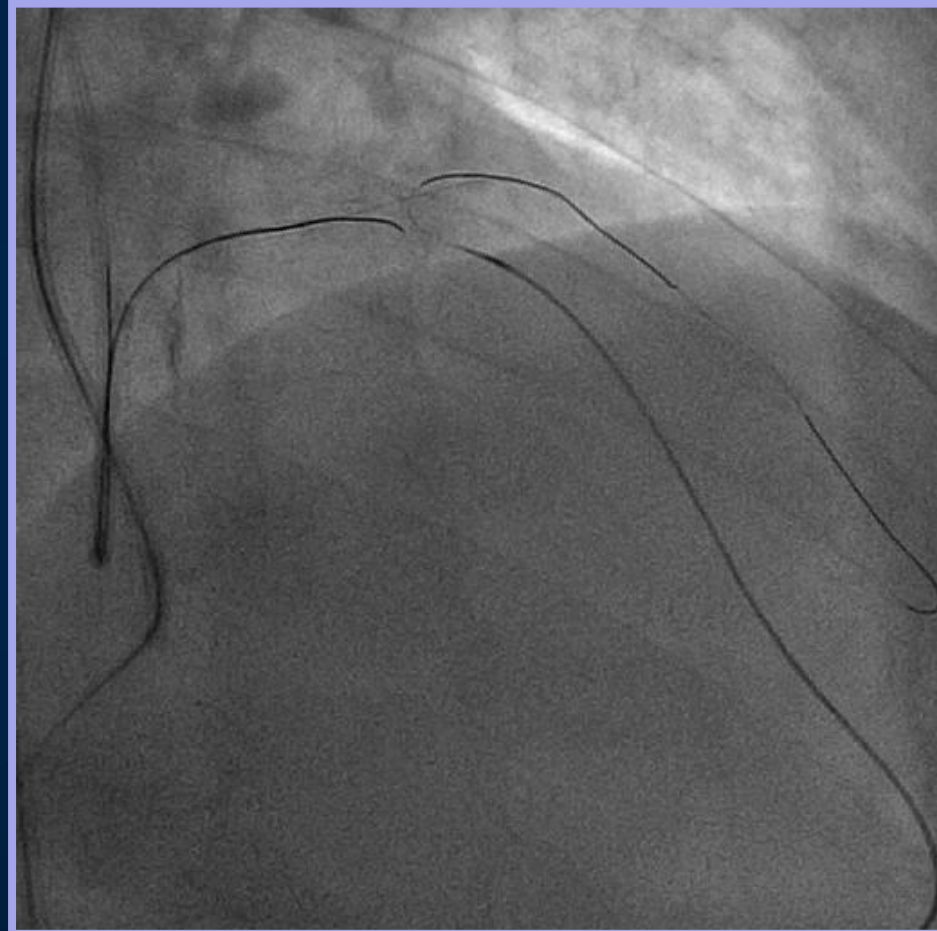


Percutaneous coronary intervention

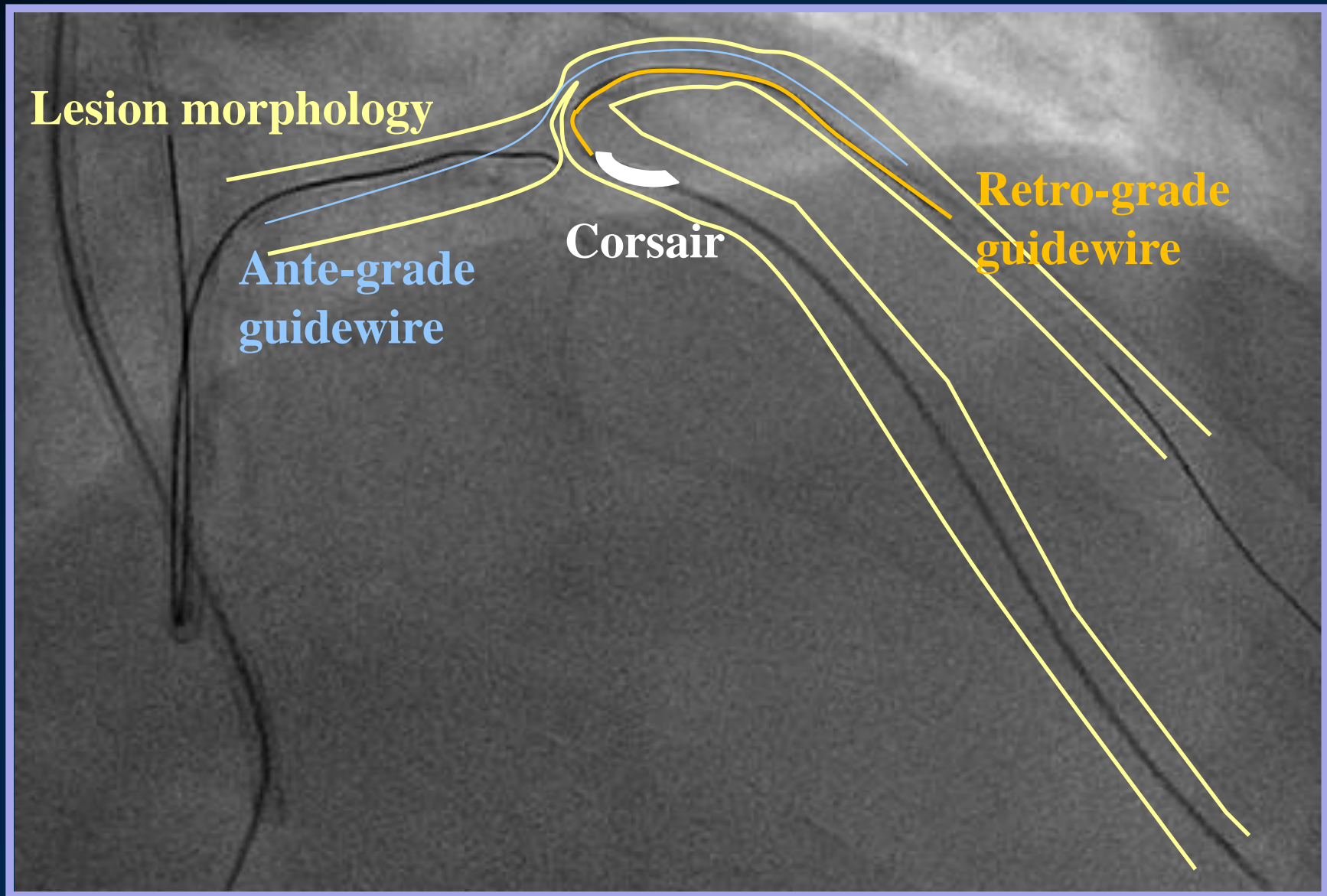
Initial RCA



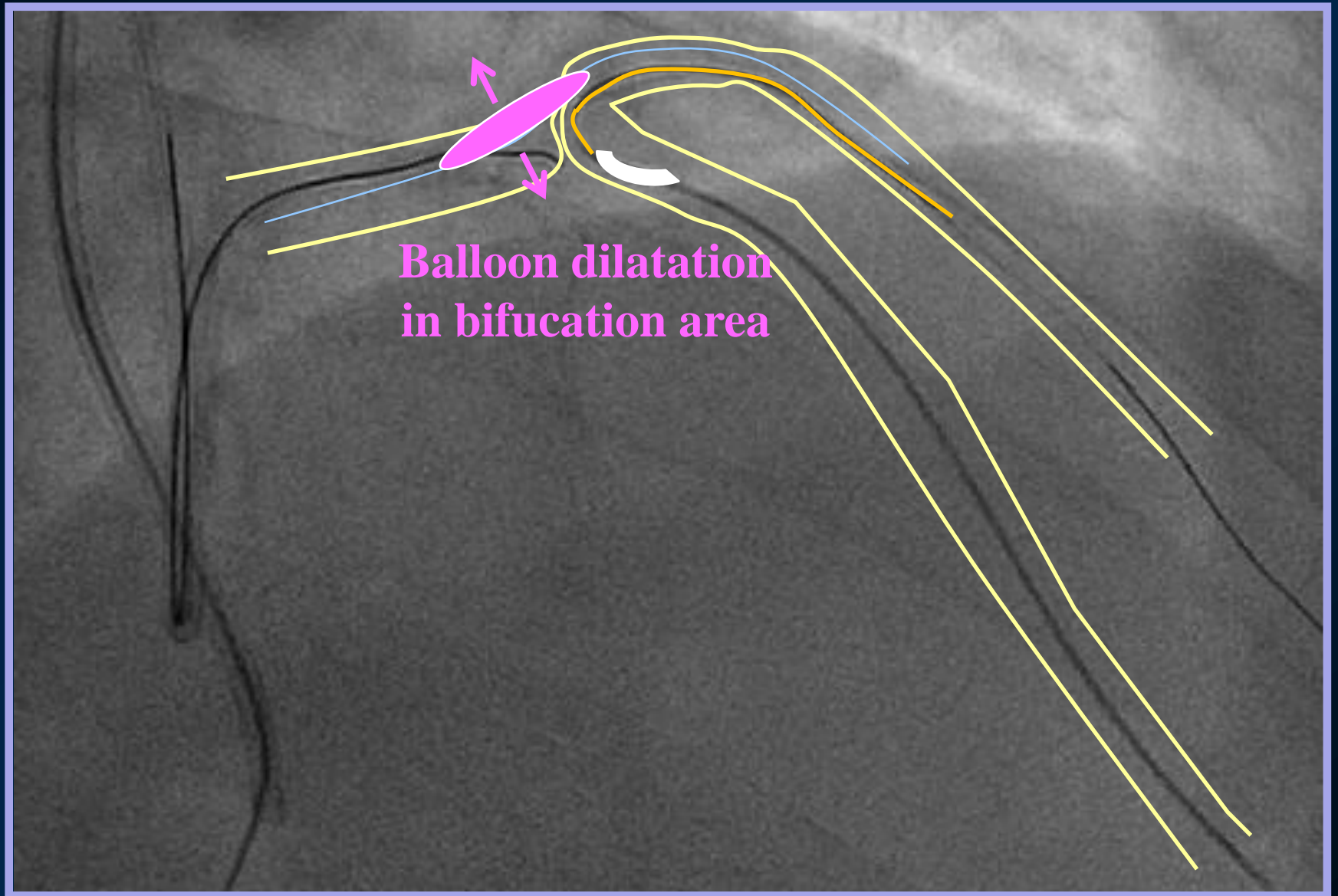
Ante-grade approach



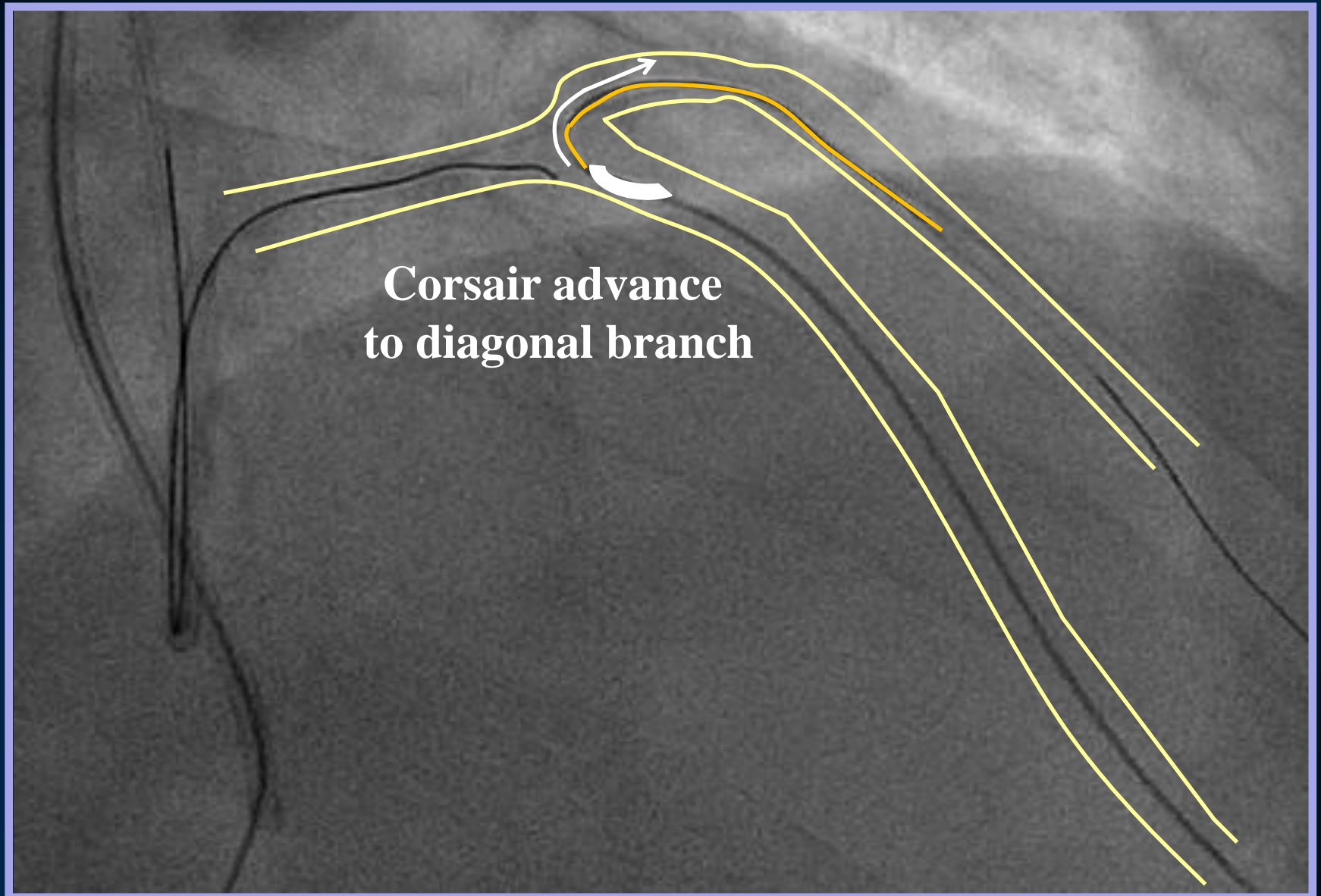
Percutaneous coronary intervention



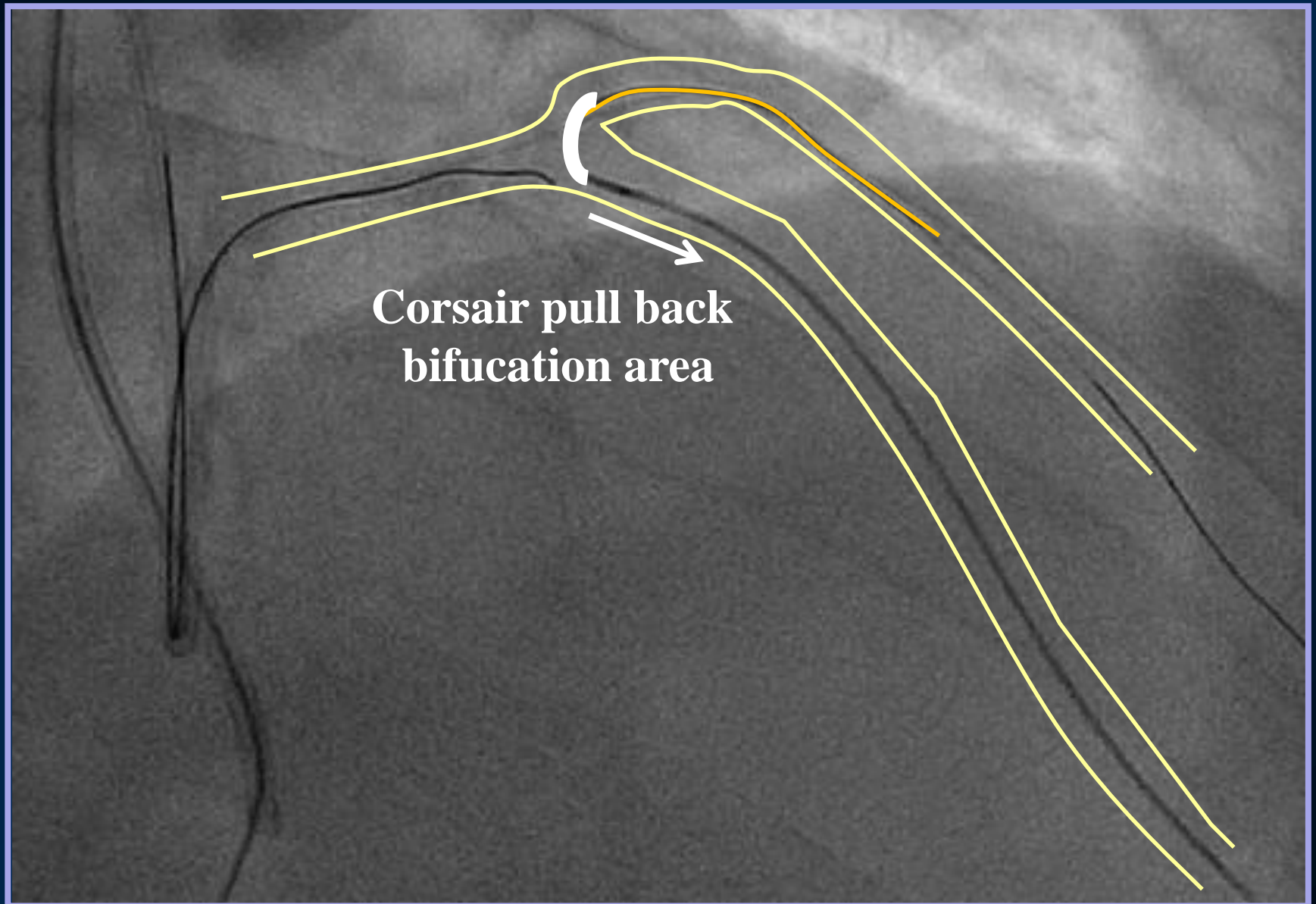
Percutaneous coronary intervention



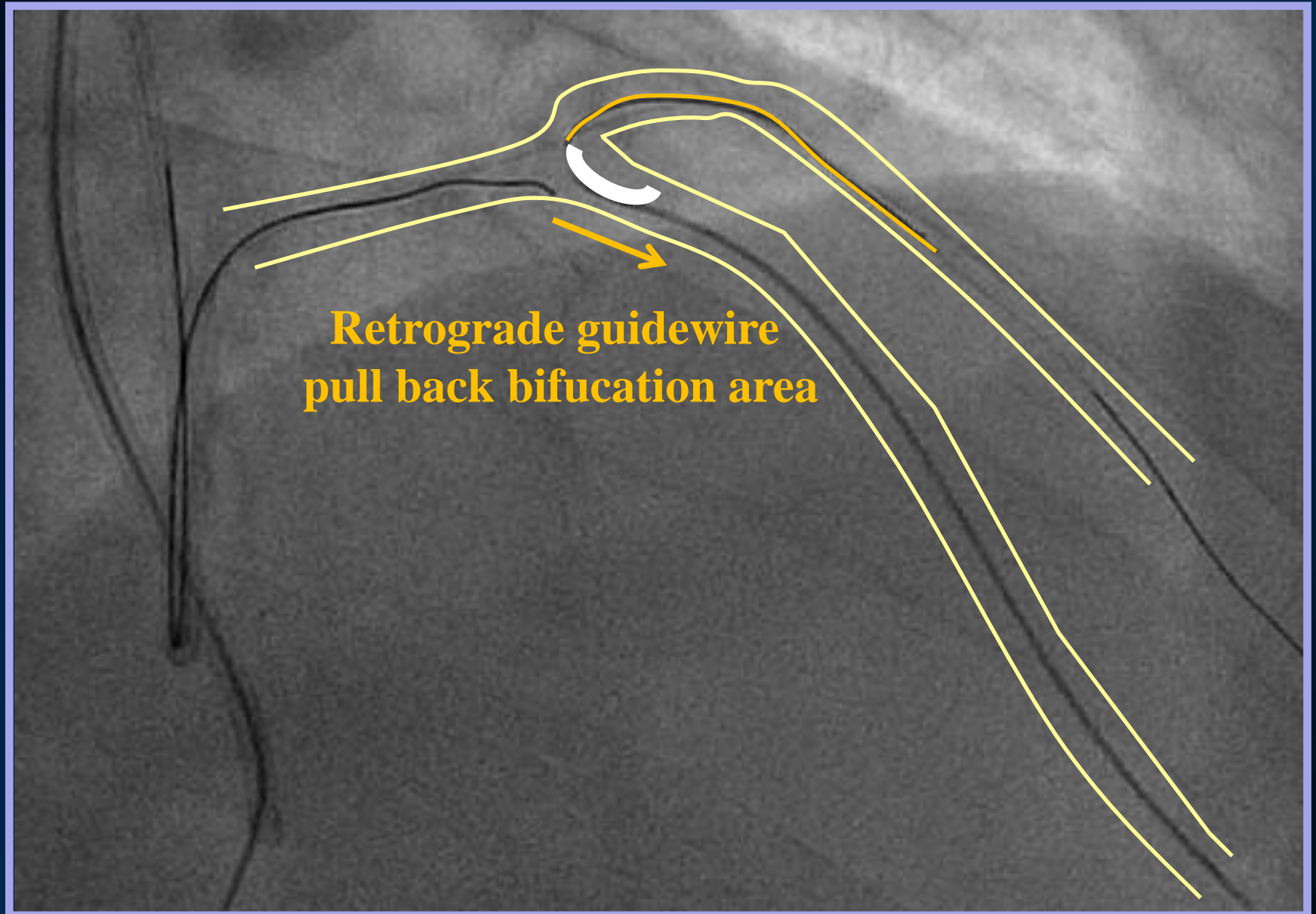
Percutaneous coronary intervention



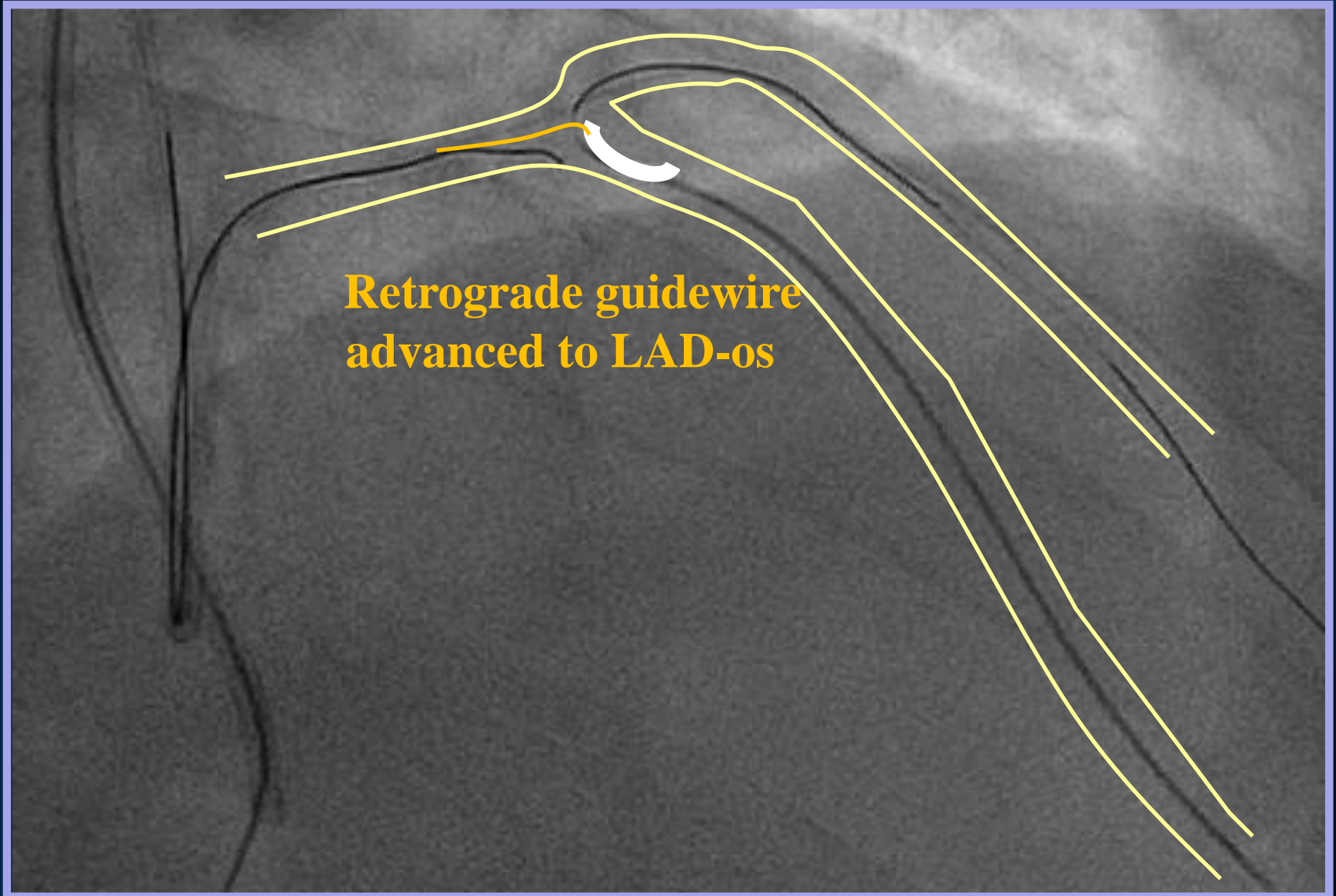
Percutaneous coronary intervention



Percutaneous coronary intervention



Percutaneous coronary intervention



Percutaneous coronary intervention

Balloon dilatation

in

Corsair deploy

in bi

Success retro grade wiring

Retro-grade guidewire

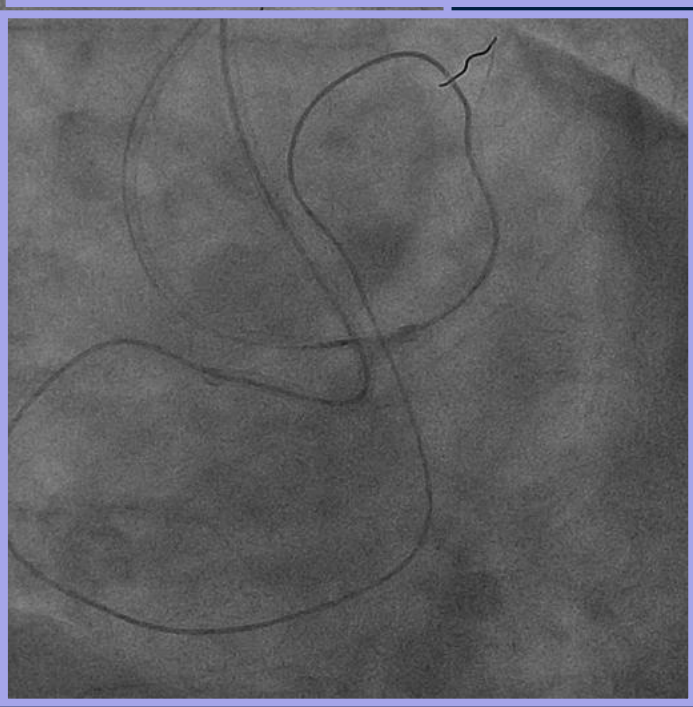
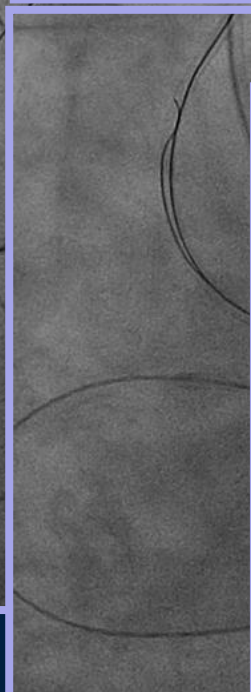
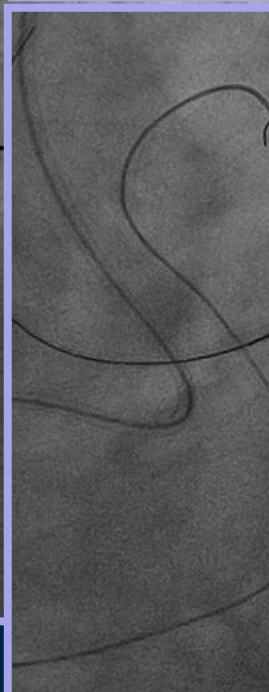
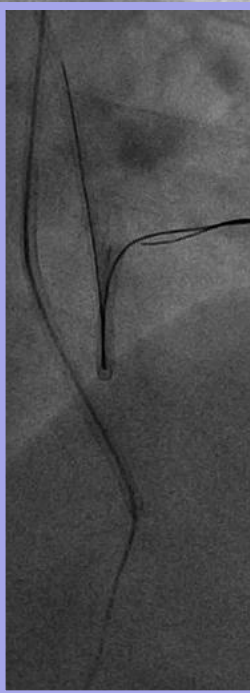
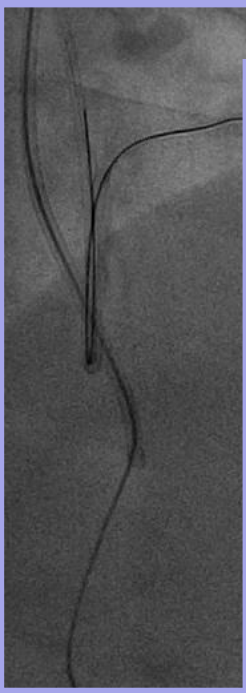
advances

Corsair microcather

advanced

Retrograde guidewire

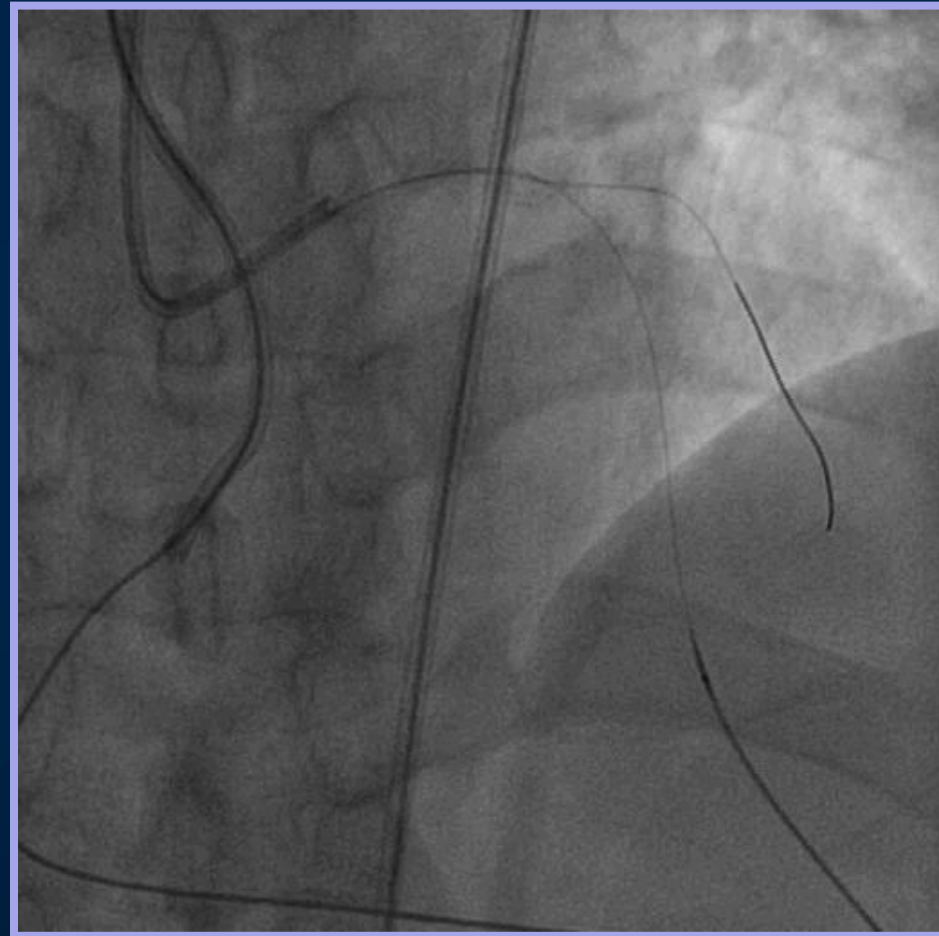
externalization



Percutaneous coronary intervention

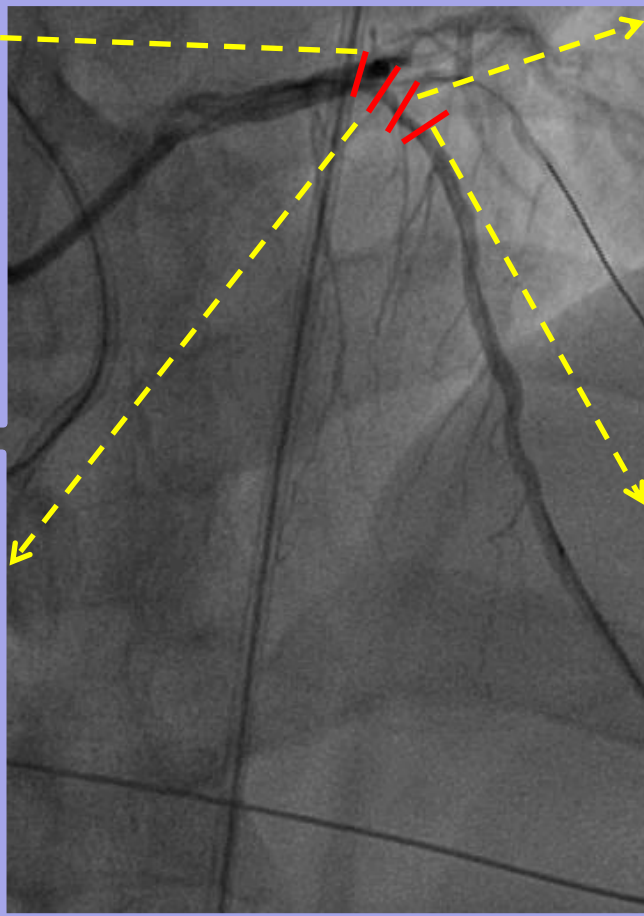
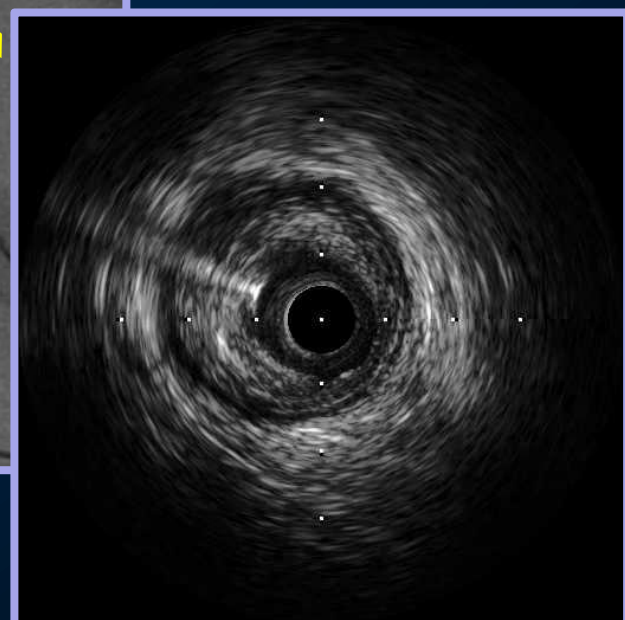
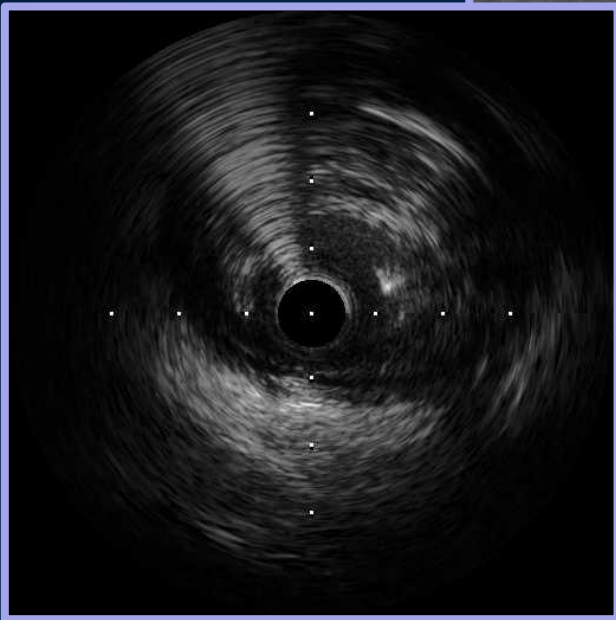
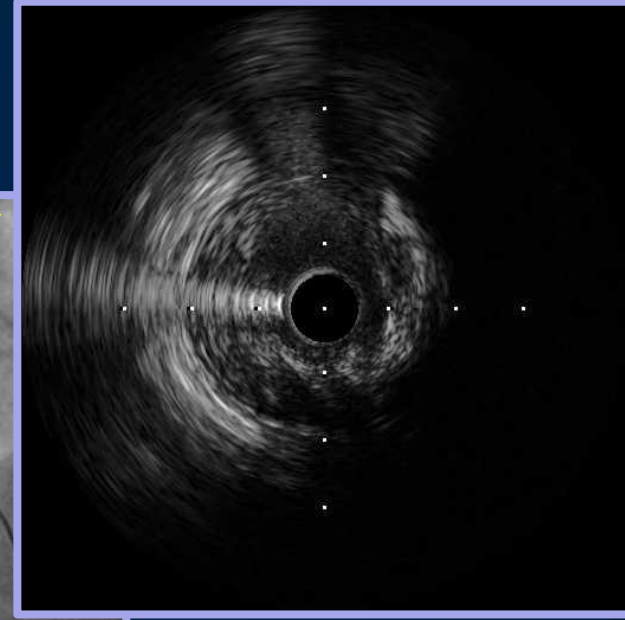
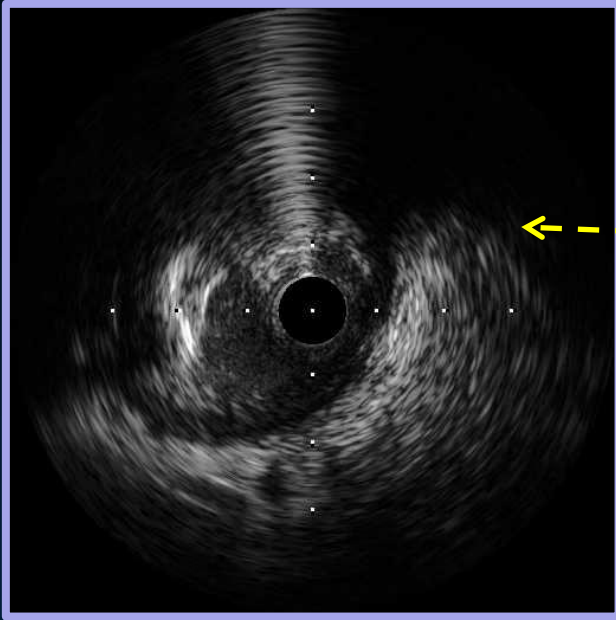
Pre-dilatation

After pre-dilatation



Percutaneous coronary intervention

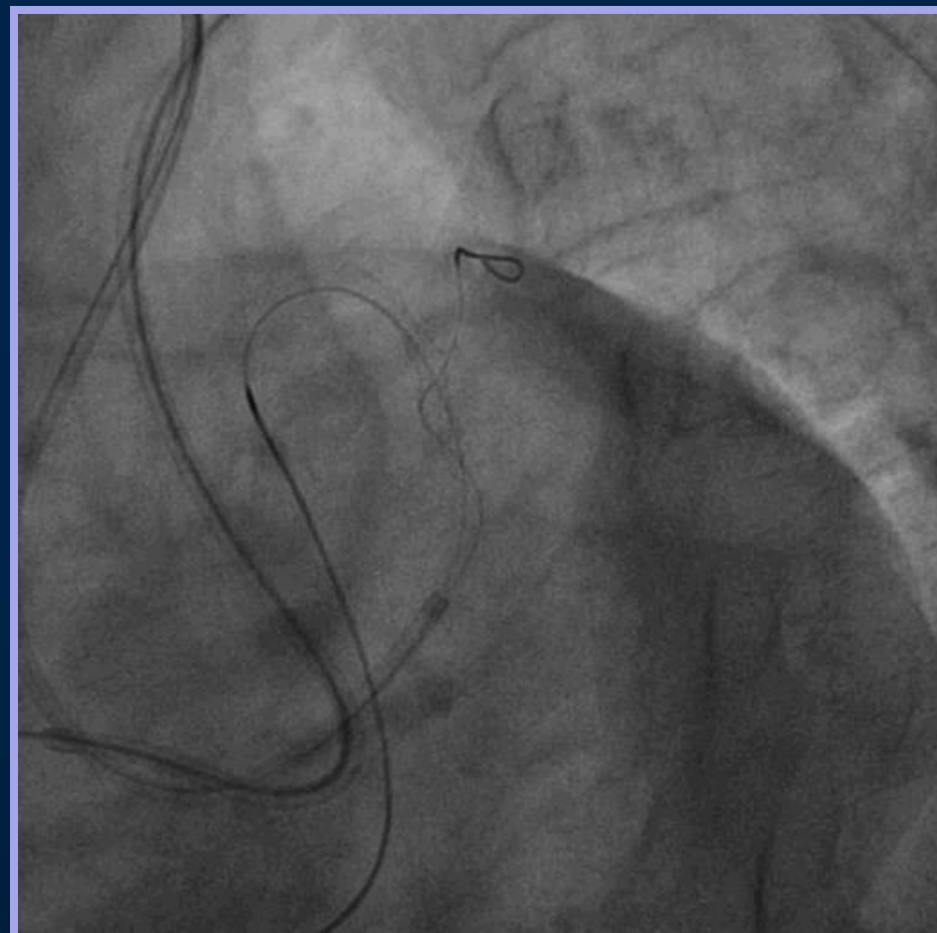
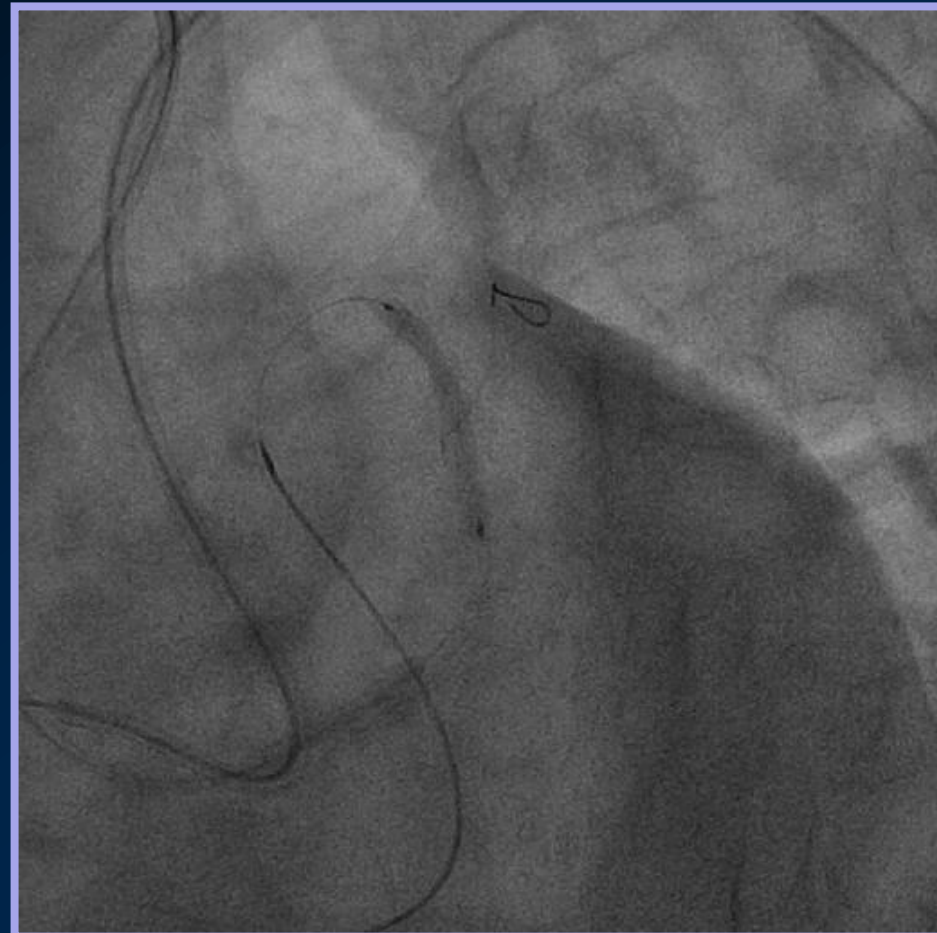
IVUS



Percutaneous coronary intervention

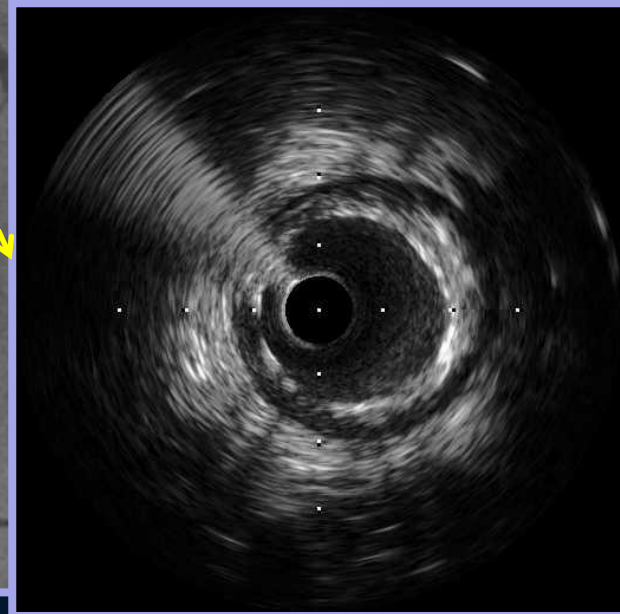
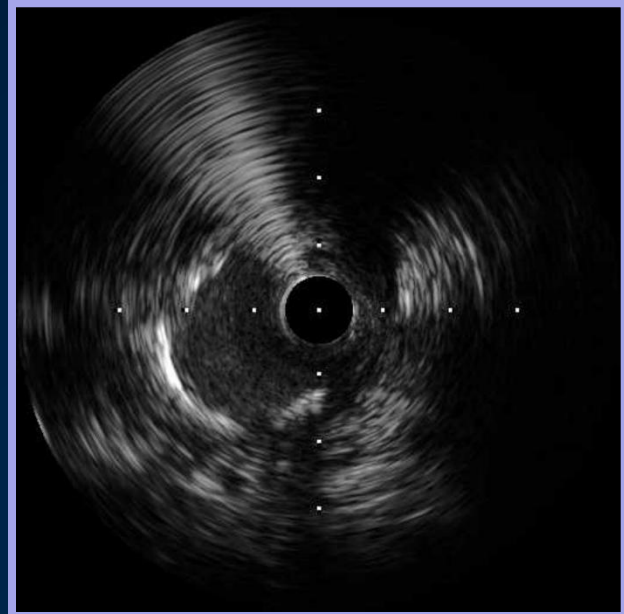
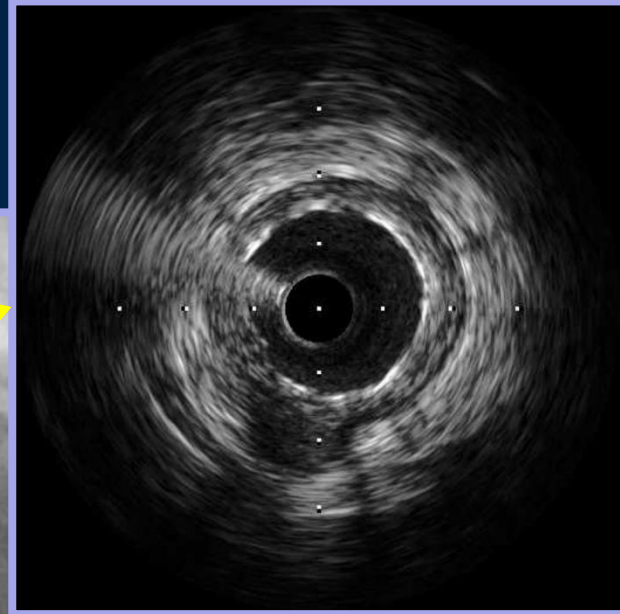
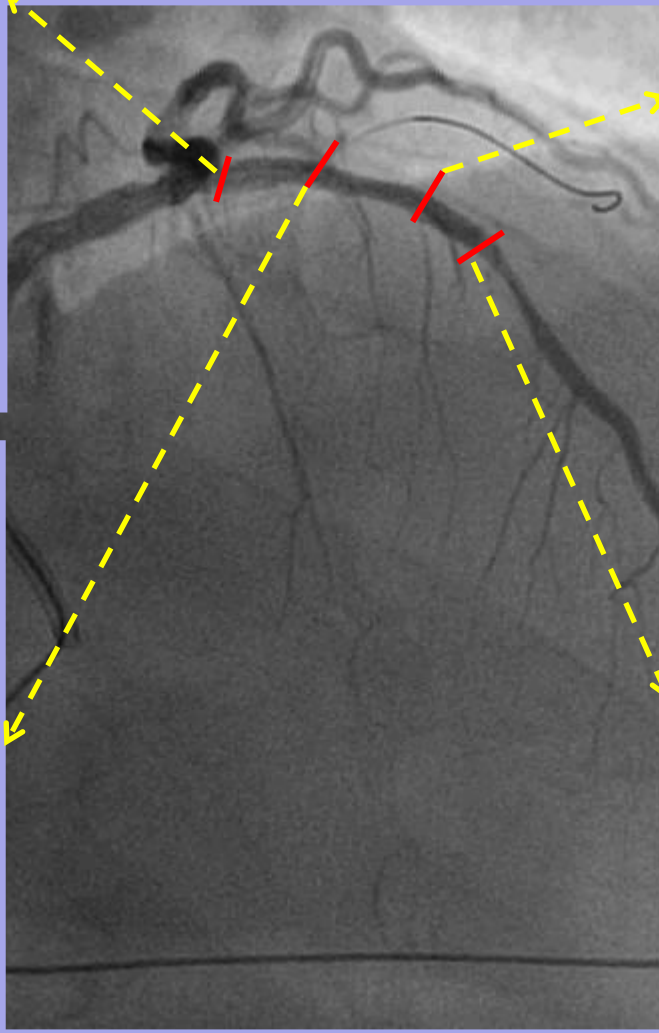
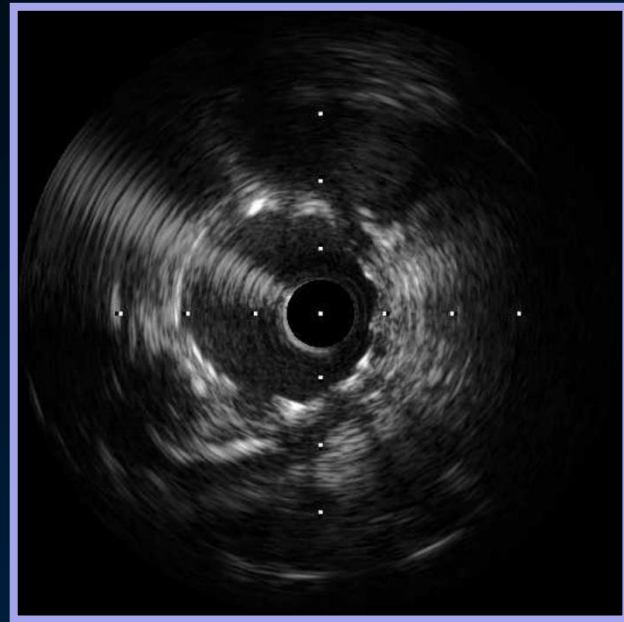
Xience Xpedition 3.25x38

After stenting



Percutaneous coronary intervention

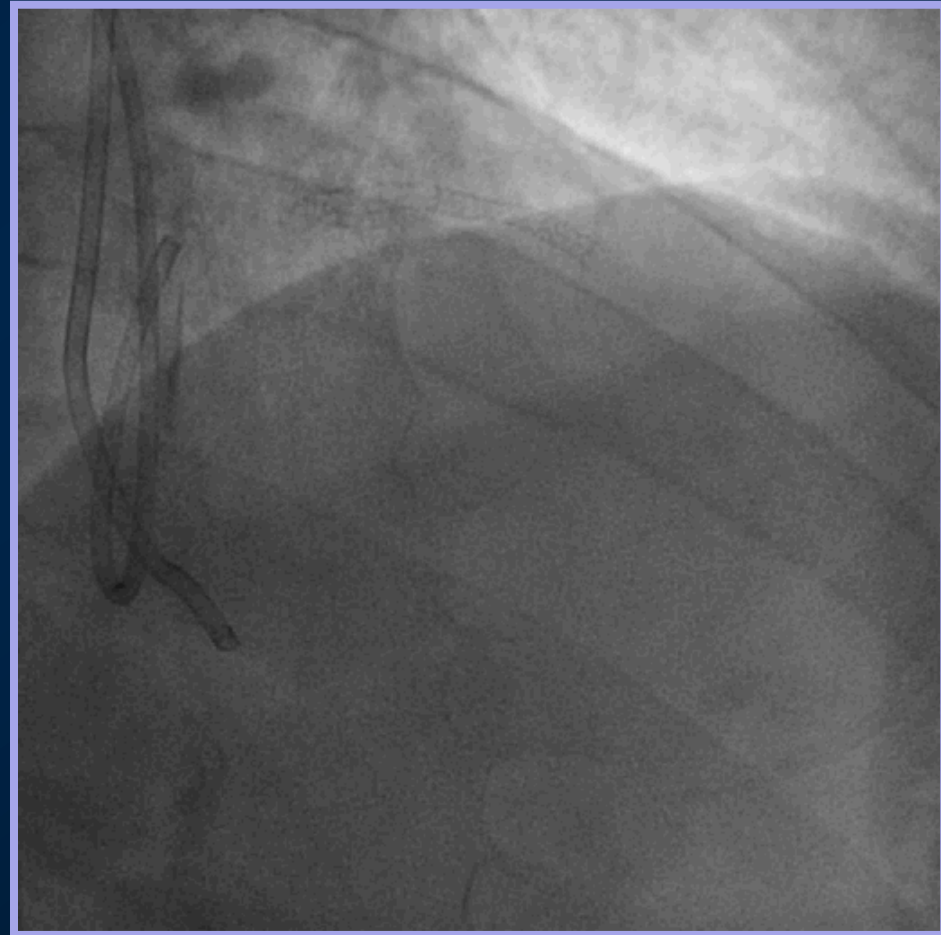
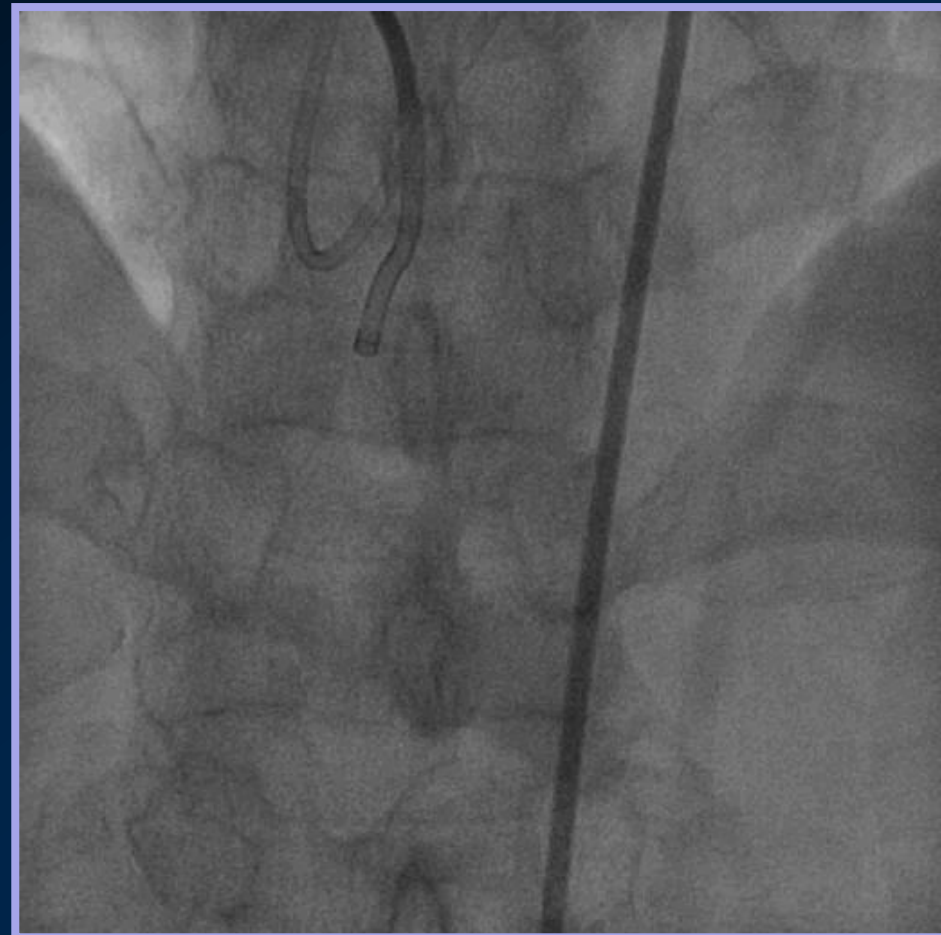
IVUS



Percutaneous coronary intervention

Final RCA

Final LAD



Thank you for your attention

Department of Cardiology

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