

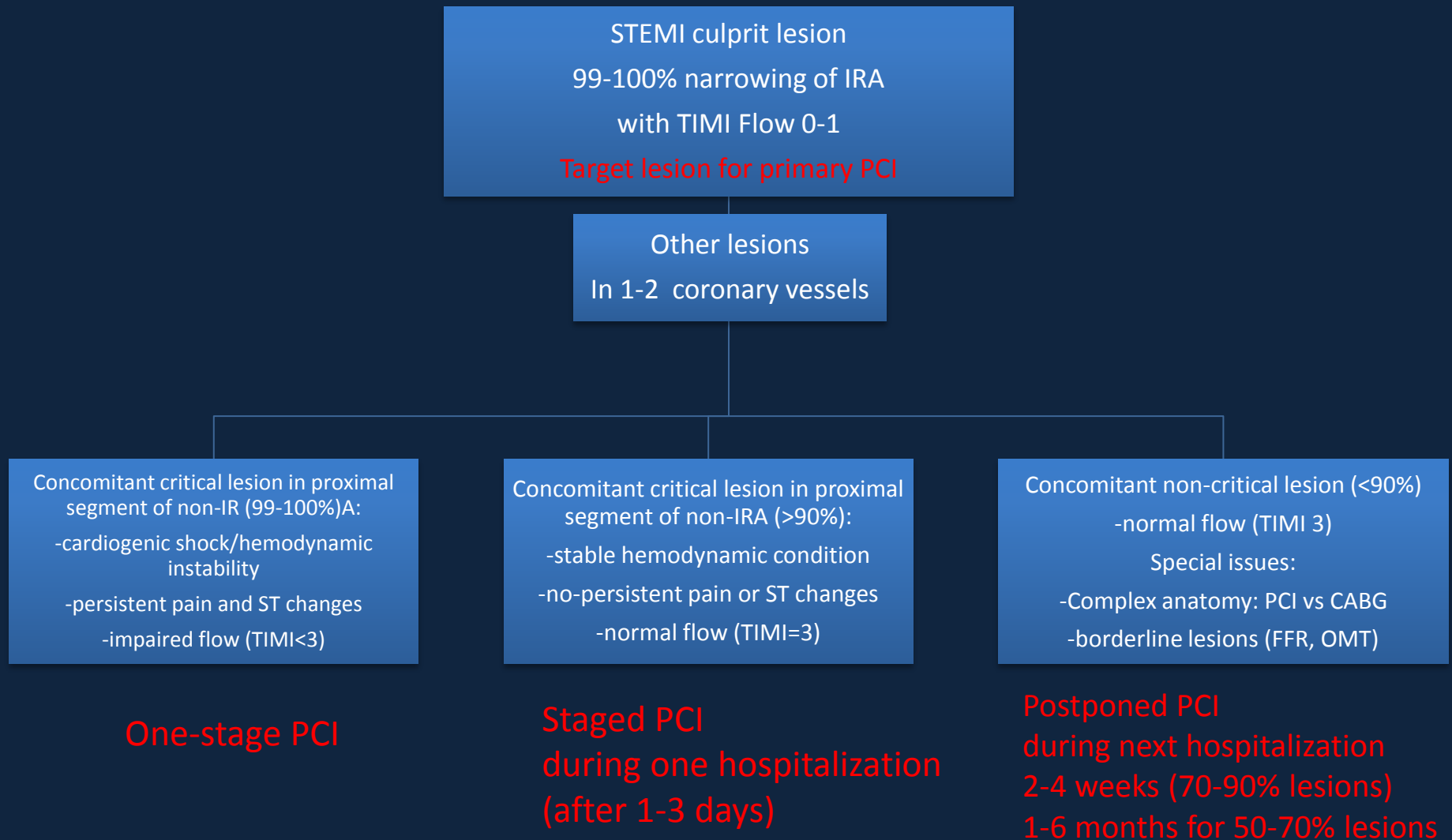
Multivessel PCI in high risk ACS Patients:



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TCT-AP, Seoul, South Korea 2014

Strategy for STEMI in patients with MVD



CASE: PF

- 64 year old male with 12 hour chest pain
- BP 90/50 mmHg, HR 100/min
- ECG:
 - SR 100/min, with periodic nsVT
 - ST elevation in V1-V4
 - ST depression and negative T wave in II, III, aVF leads
- UKG:
 - Akinesis of anterior wall and dyskinesis of LV apex
 - LV EF = 22%, LVESD/LVEDD = 77/65 mm
 - LA=52 mm
 - RVSP = 51 mmHg

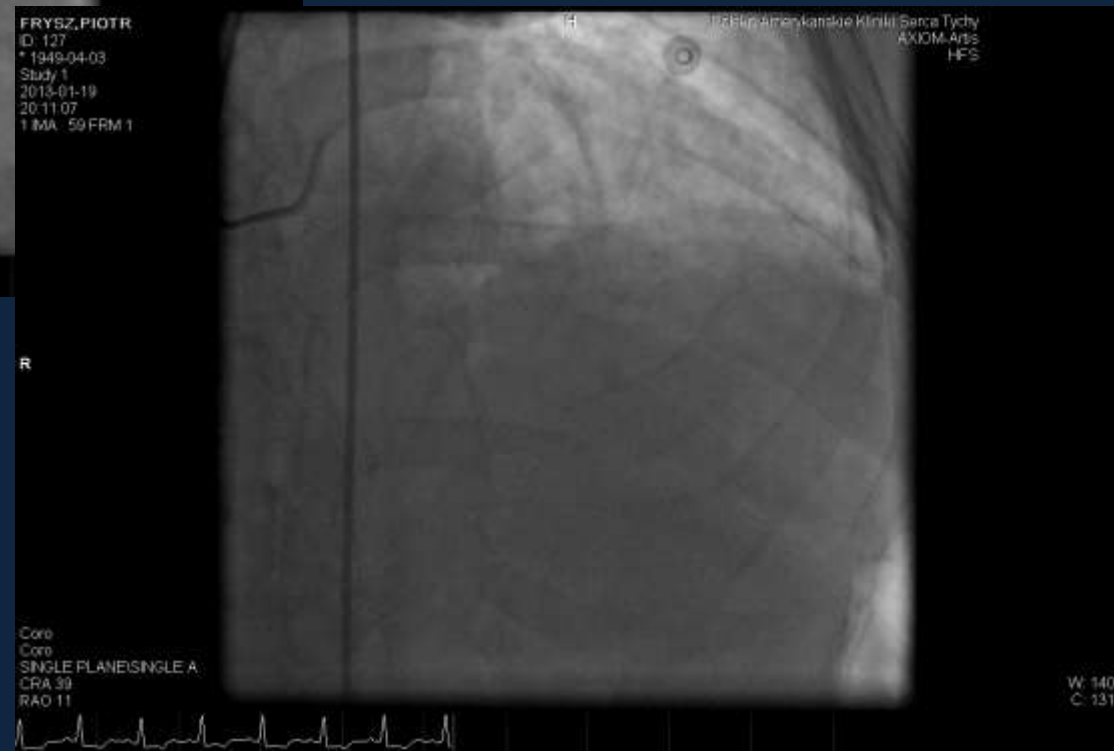
Coronary angiography: LCA



LM- short. Large, normal

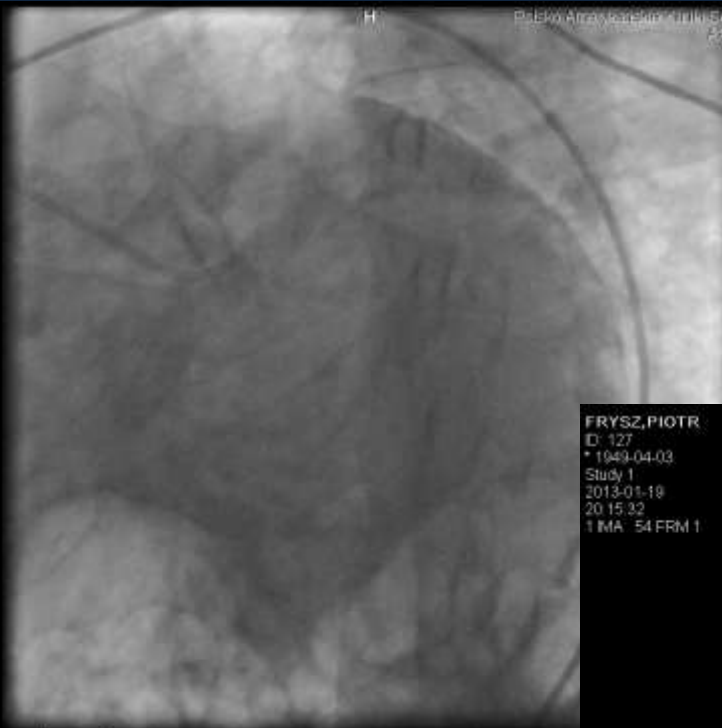
LAD – 99-100% in med seg, TIMIO-1

CX – dominant,
99% long lesion in med seg
TIMI 3, large PDA



Coronary angiography: LCA and RCA (LAO 60)

FRYSZ, PIOTR
ID: 127
* 1949-04-03
Study 1
2013-01-19
20:12:15
1 IMA 48 FRM 1

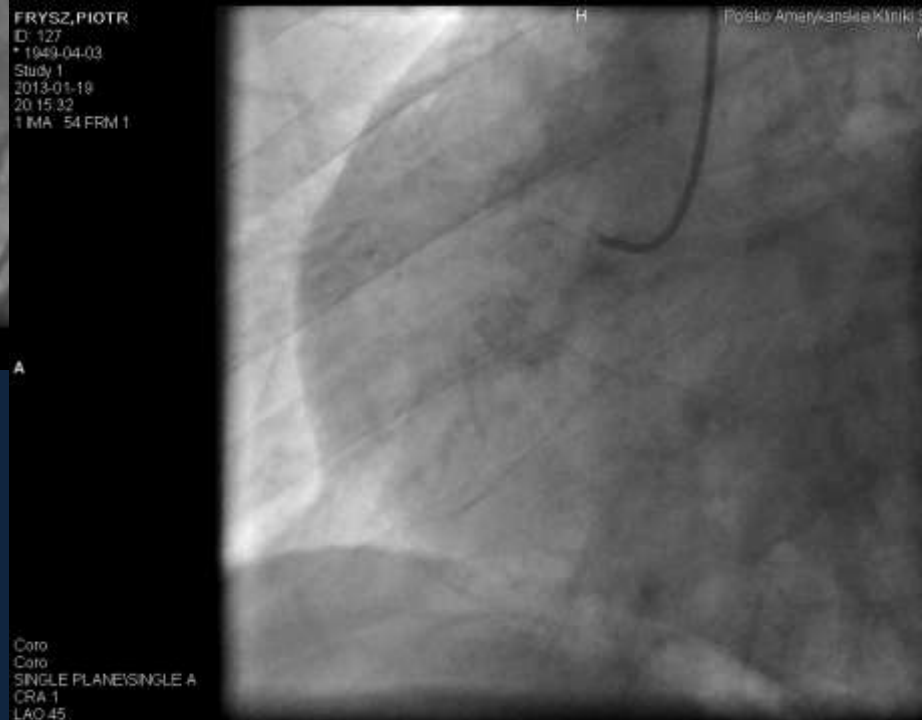


RCA: proximal occlusion.

Coro
Coro
SINGLE PLANE/SINGLE A
CAU 21
LAO 47



FRYSZ, PIOTR
ID: 127
* 1949-04-03
Study 1
2013-01-19
20:15:22
1 IMA 54 FRM 1



CX – dominant,
99% long lesion in med seg
TIMI 3, large PDA

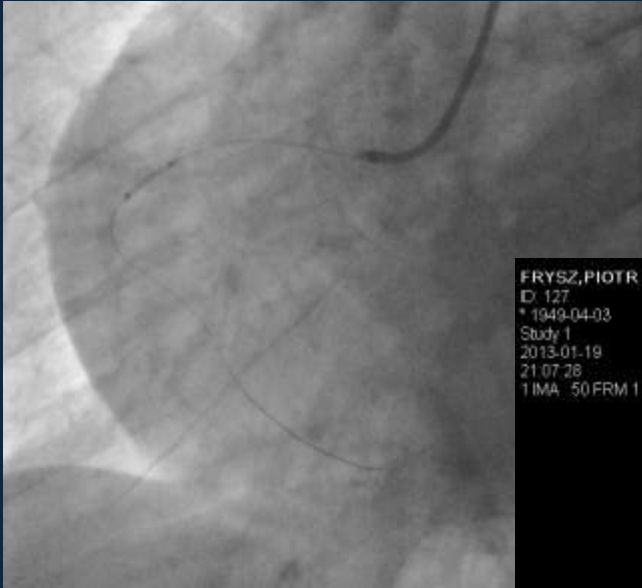
Coro
Coro
SINGLE PLANE/SINGLE A
CRA 1
LAO 45



PCI

- Dopamin i.v. + IABP (?), Cordarone i.v.
- PCI Cx (JL5.0, BMW): direct stenting
 - Co-Cr BMS Skylor 3.0x35mm (16atm)
 - No residual stenosis, TIMI flow 3
- PCI RCA (JR4.0, Pilot 50):
 - Recanalization with balloon inflation 1.5x10mm, 12atm,
 - Small RCA with TIMI 3, left without stenting (POBA).
- PCI LAD (JL5.0, Pilot 50):
 - Recanalization with the wire and balloon 1,5x10mm
 - Repeat inflation with the balloon 2,25x12mm, 14 atm
 - Stent implantation Xience 2.5x15mm, 14atm
 - No residual stenosis, TIMI 3

PCI RCA



FRYSZ, PIOTR
ID: 127
* 1949-04-03
Study 1
2013-01-19
21:07:26
1IMA 50FRM 1

H

Polsko Amerykańskie Kliniki Serca Tychy
AXIOM-Artis
HFS



R

Core
Core
SINGLE PLANE/SINGLE A
CALI 3
LAO 33

W: 140
C: 130

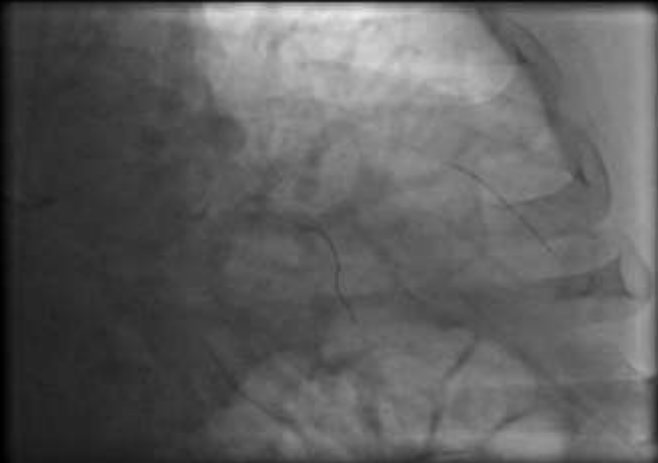


PCI: LAD

FRYSZ, PIOTR
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* 1949-04-03
Study 1
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H

Polsko Amerykańskie Kliniki Serca Tychy
A/OCM-Artis
HFS



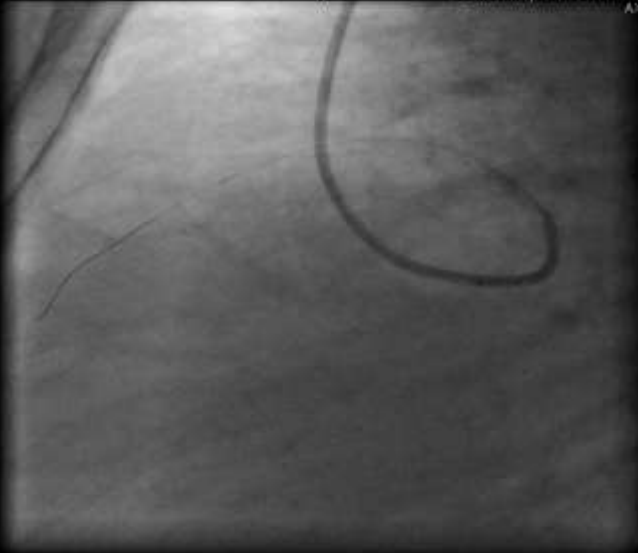
R

Coro
Coro
SINGLE PLANE/SINGLE A
CAU 29
RAO 21



H

Polsko Amerykańskie Kliniki Serca Tychy
A/OCM-Artis
HFS



W: 140
C: 130

W: 140
C: 130

FRYSZ, PIOTR
ID: 127
* 1949-04-03
Study 1
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H

Polsko Amerykańskie Kliniki Serca Tychy
A/OCM-Artis
HFS



R

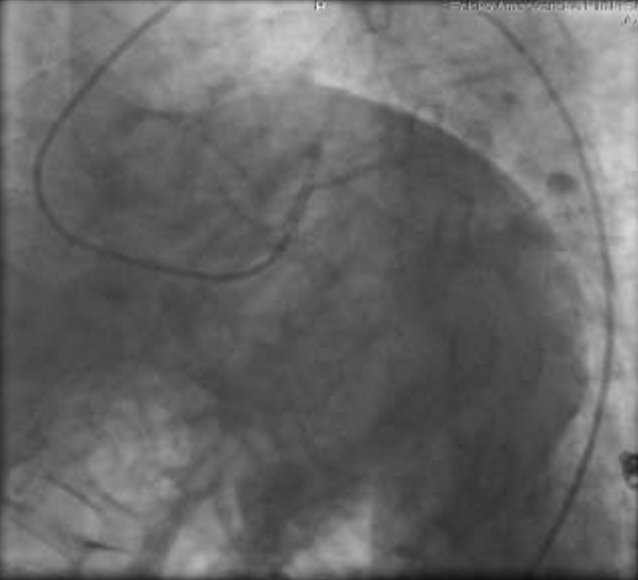
Coro
Coro
SINGLE PLANE/SINGLE A
CAU 19
RAO 20



FRYSZ, PIOTR
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* 1949-04-03
Study 1
2013-01-19
21:53:45
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H

Polsko Amerykańskie Kliniki Serca Tychy
A/OCM-Artis
HFS



A

Coro
Coro
SINGLE PLANE/SINGLE A
CAU 21
LAO 50



W: 140
C: 131

Follow-up angio 3 month later



Core
Core
SINGLE PLANE/SINGLE A
CAU 14
RAO 45

Core
Core
SINGLE PLANE/SINGLE A
CRA 39
RAO 12

W 146
C 131



Core
Core
SINGLE PLANE/SINGLE A
CAU 33
LAO 47

W 140
C 131

FRYSZ, PIOTR
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Study 1
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H

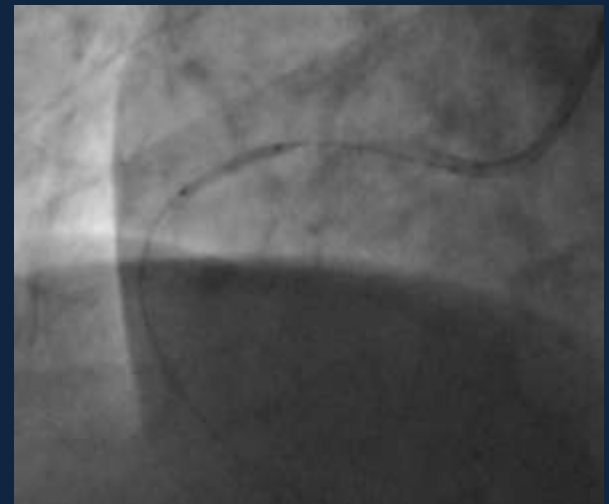
Polsko Amerykańskie Kliniki Serca Tychy
A/90M-Artis
HFS



R

Coro
Coro
SINGLE PLANE/SINGLE A
CRA 0
LAO 37

W: 146
C: 131



FRYSZ, PIOTR
ID: 512
* 1949-04-03
Study 1
2013-03-11
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H

Polsko Amerykańskie Kliniki Serca Tychy
A/90M-Artis
HFS

FRYSZ, PIOTR
ID: 512
* 1949-04-03
Study 1
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Polsko Amerykańskie Kliniki Serca Tychy
A/90M-Artis
HFS

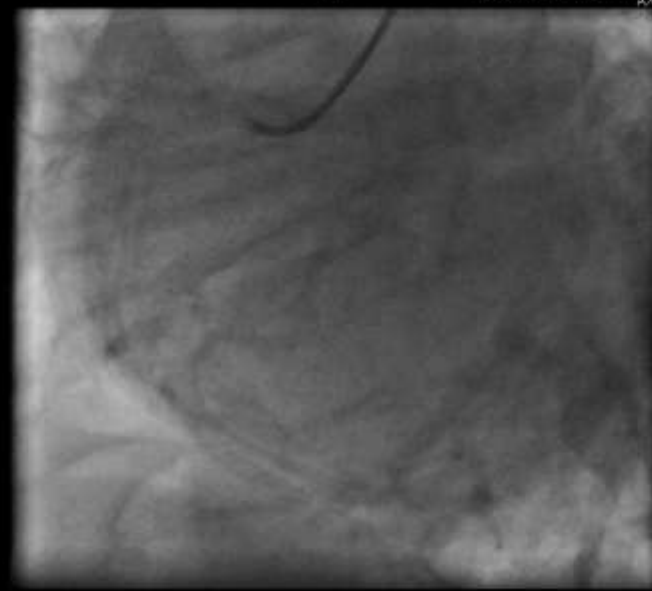


R

Coro
Coro
SINGLE PLANE/SINGLE A
CRA 11
LAO 38

A

Coro
Coro
SINGLE PLANE/SINGLE A
CAU 4
LAO 63



W: 140
C: 130



One-stage vs staged PCI for STEMI

- Comments:
 - PRAMI study:
 - Primary PCI of IRA (only) vs complete revascularization
 - No elective staged revascularisation in control group (!)
 - It is study reflecting UK real life: long waiting NHS list for elective PCI - in such scenerio one stage multivessel PCI is better than only pPCI to IRA (!)
 - Optimal strategy:
 - Rational selection of one-stage vs staged vs postponed multivessel PCI for STEM
 - No further study needed

Multivessel PCI in NSTEMI-ACS and Cardiogenic Shock



Patient M.D.

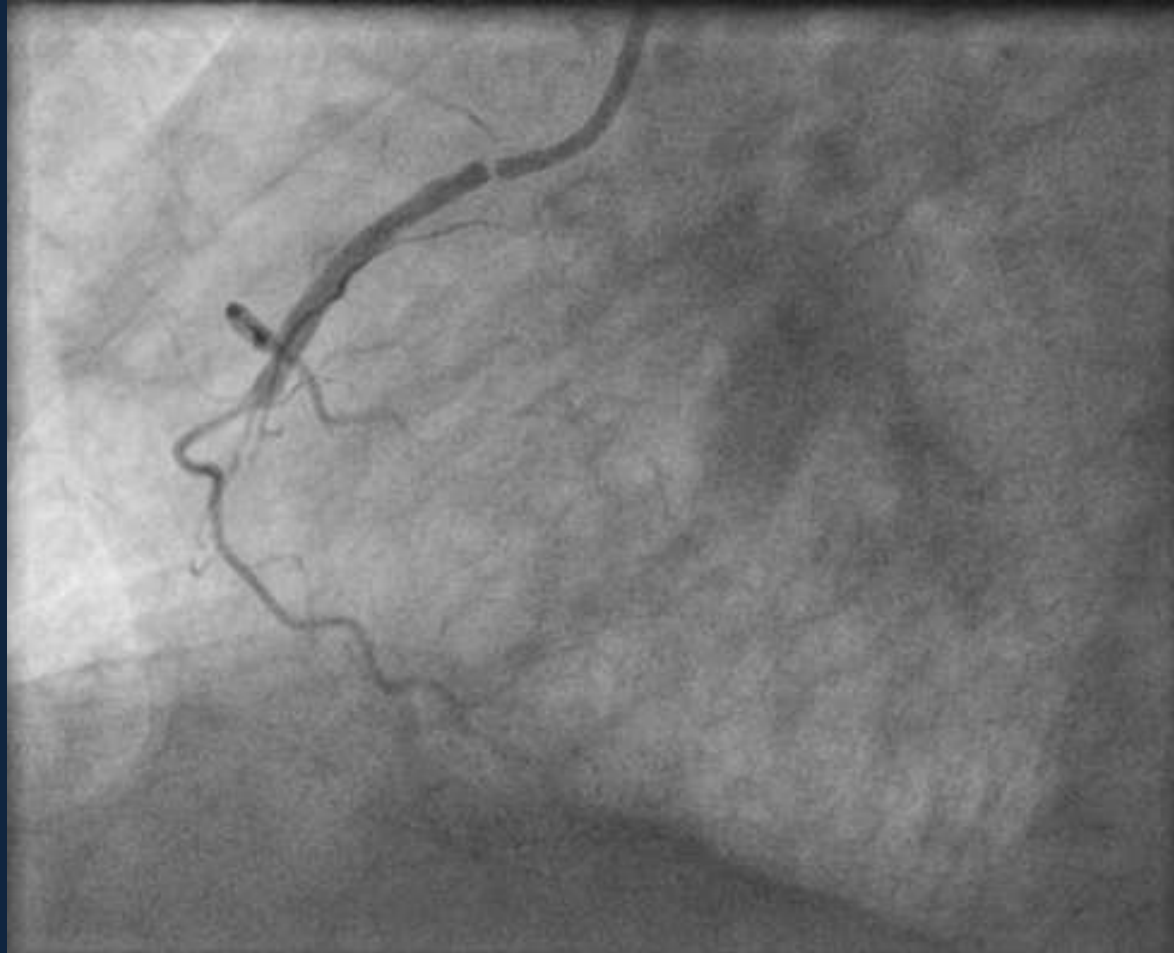
- Male, 82 y.o.
- Severe chest pain at rest from 2-3 hours
- Risk factors: IDDM t. II, hypertension, hypercholesterolemia, paroxysmal AF, smoker
- ECG: 4-5 mm ST-segment depression: I, aVL, II, aVf, V3-V6
- Echo – hypo/akinesis of anterior and lateral wall, IVS. EF: 35%
- CK-MB at admission: 218 microgram/L ,peak: 420 microgram/L
- Tnl at admission 5,2 microg\L ,max: >25ug/L
- TIMI Risk Score: 5 - 26% risk at 14 days of: all-cause mortality, new or recurrent MI, or severe recurrent ischemia requiring urgent revascularization.

Baseline Coronary Angiography

LCA

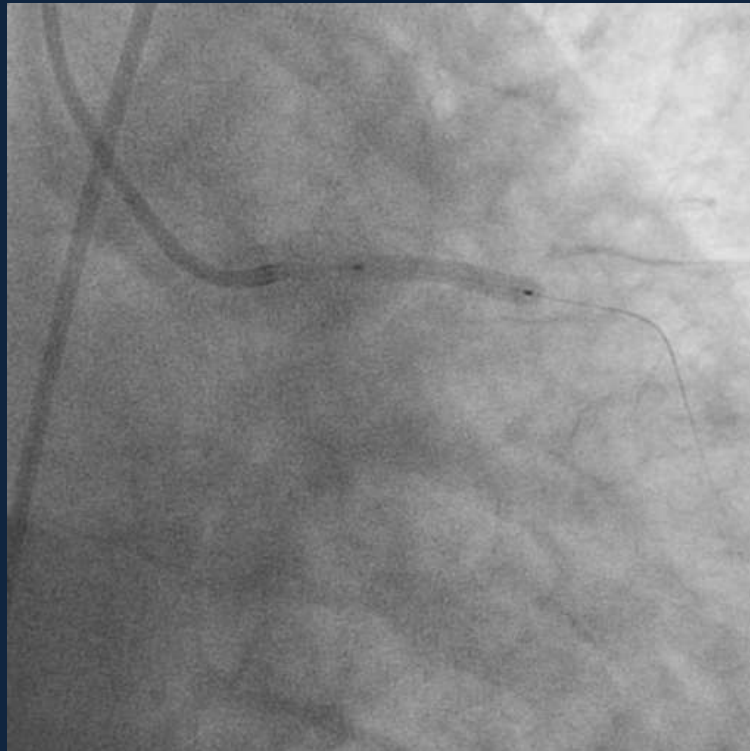


Baseline Coronary Angiography RCA - CTO



PCI LAD

- I. Femoral approach: Judkins Left 4.0, BMW
- II. Intracoronary GPI (Integrillin) infusion
- III. Predilation 2.5 x 12 mm x 12 atm
- IV. Stenting, SES (Alex, Balton) 3.0x18mm at 14 atm.

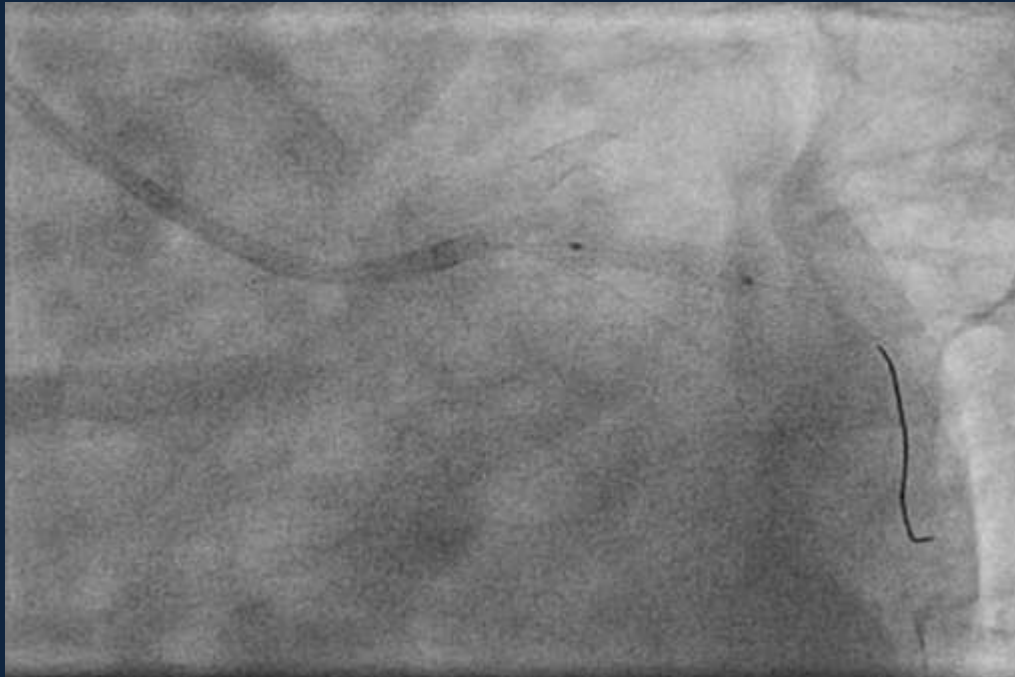


Result PCI LAD

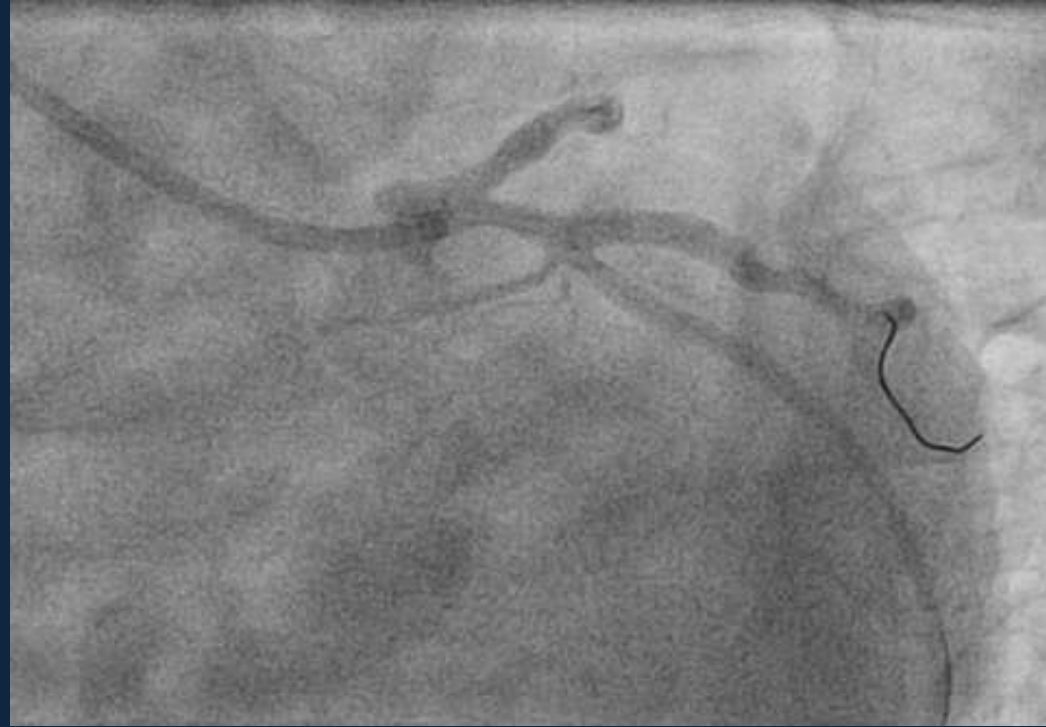


PCI LCx

1. JL, BMW ad OM and LCx
2. Predilation with 2.5 x 12 mm compliant balloon at 10 atm
3. Implantation of a BMS (Integrity, Medtronic) 3.0- x 15 mm at 12 atm



Results PCI LCx



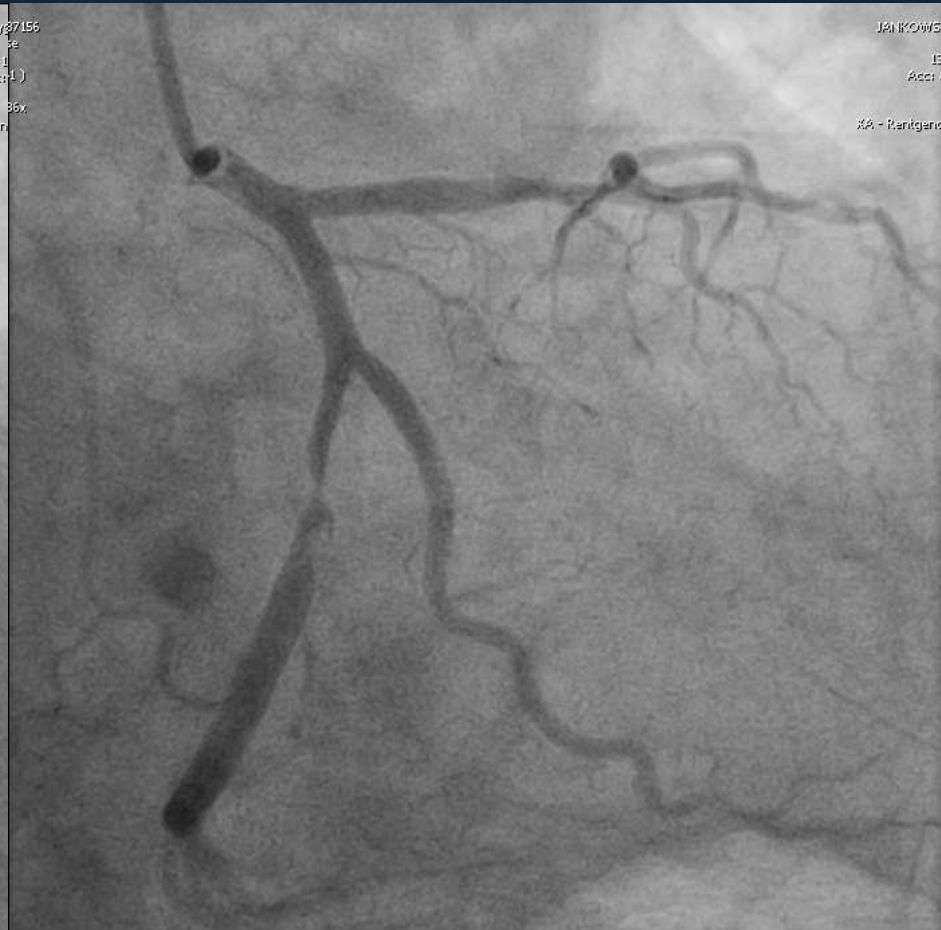
Clinical follow-up

- Hospitalization uneventful, patient stable
- ECG: Sinus rhythm, 70/min, 1 mm ST depressions V3-V4
- Echocardiography: LV EDD 48 mm, ESD: 34 mm, hypokinesia: IVS, anterior and lateral wall, IVS . EF: 45%
- Patient stable, asymptomatic, discharged home.
- II stage of revascularization within ostial RCA scheduled in 5 weeks.

Patient W.J.

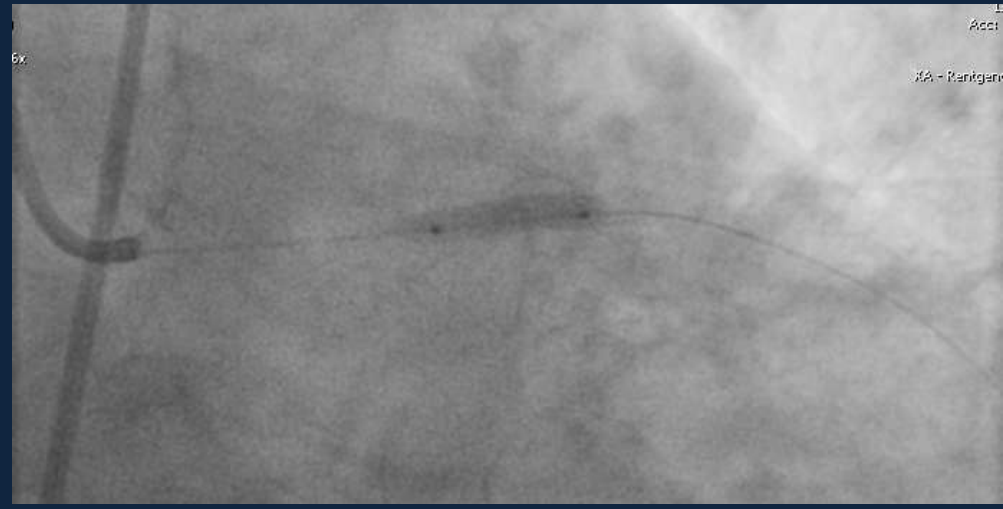
- Male, 53 years old, presented with cardiogenic shock after sudden cardiac arrest at home and CPR provided by wife and EMS with the return of spontaneous circulation,
- At admission patient unconscious, intubated, requiring inotropes infusions (Dopamine). BP: 80/60
- No known risk factors of CAD except positive family history of MI (father died at 40 y.o.)
- Teletransmission ECG: SR / 100 min, 4 mm ST elevations V2-V6
- Admission ECG: Sinus rhythm 100.min, 1,5 – 3 mm ST depressions I, aVL, and V2-V6
- Admission CK-MB: 7 microgram/L, cTnI: 0,084 (within normal limits)

Immediate CAG

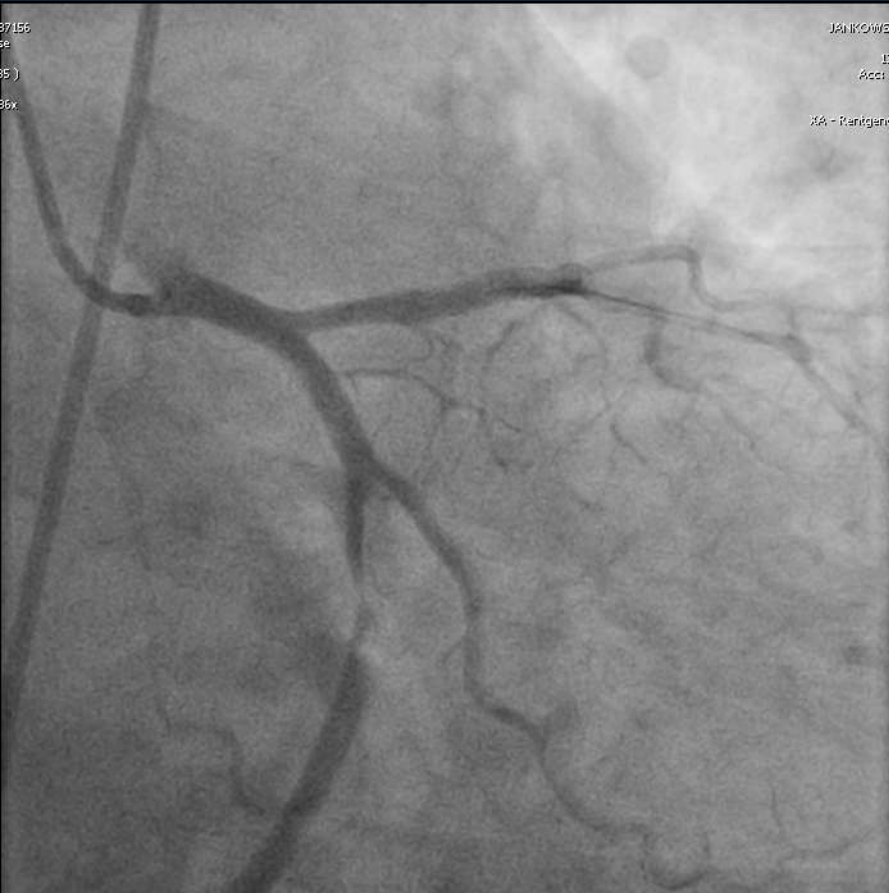


PCI LAD

- Femoral approach: JL 4.0, BMW
- Direct stenting with everolimus eluting stent (Xience V, Abbott) 3.0 x 15 mm at 12 atm, followed by BP pressure drop.
- Additional EES 3,0 x 15 mm Xience V implantation due to flow limiting, proximal edge dissection
- Postdilatation of the stent overlap

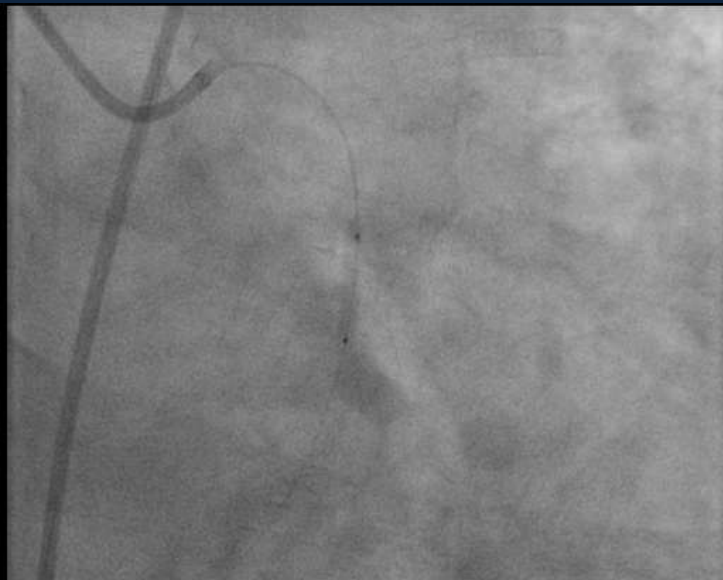


PCI LAD - result



PCI - LCX

- BMW ad OM and LCx
- Predilation with 2,5 x 15mm balloon at 14 atm
- BMS 3.5 x 30 mm (Integrity, Medtronic) at 14 atm



PCI – LCx – final result



Clinical follow - up

- Following PCI, patient unconscious, sedated, hemodynamically and respiratory stable with BP at 110/80 and low-dose dopamine infusion transferred to ICU.
- Discharge echocardiography: LV EDD 53 mm, ESD: 36 mm, IVS hypokinesis, EF: 40%
- Two month follow-up: patient unconscious, GCM 10, respiratory and hemodynamically stable, EF: 50%. Head CT: diffuse ischemic brain injury.