



Improving outcomes of high-risk unprotected distal left main intervention by pulsatile circulatory support system

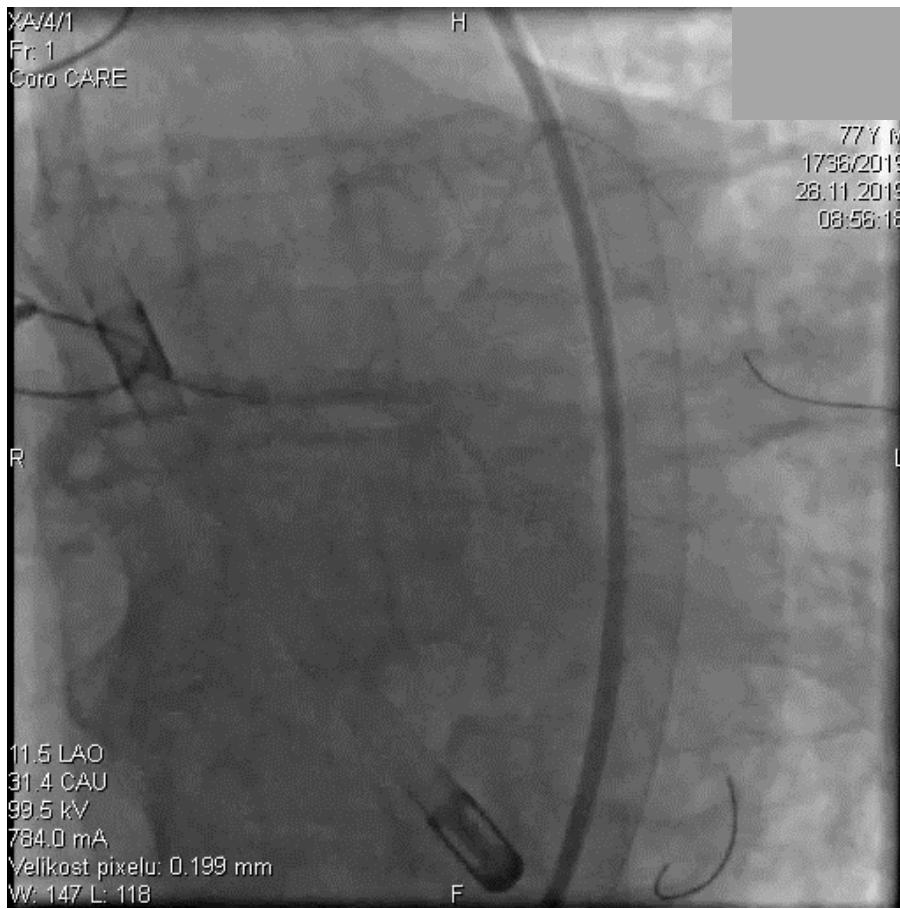
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Case Scenario

- 77 Year-old polymorbid male,
- with hypertension, hyperlipidemy, DM II, nefropathy, obesity, atrial flutter, after stroke, after pulmonary embolism
- NSTEMI anterolateral Dec 2018, after CABG (SVG-LAD, OM, PD) Dec 2018
- Dyspnoe, chest pain - NYHA III
- CT coronary angiography: all SVGs occluded, critical LM stenosis, RCA occluded
- Refused by cardiac surgeons
- Hemodynamic instability

Distal LM stenosis



**Critical 99% distal LM hazy bifurcation lesion,
Medina (1,1,1)**



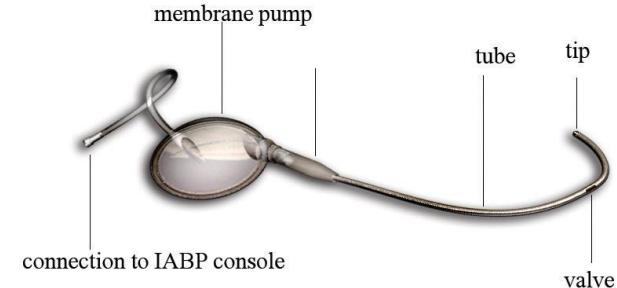
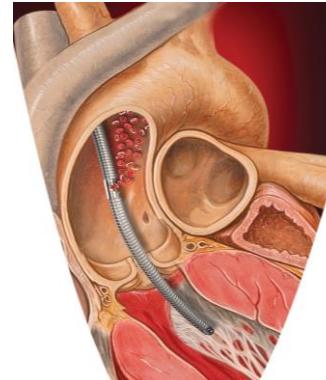
**PulseCath iVAC 2L inserted in LV
before the intervention**

Supports flow and pressure

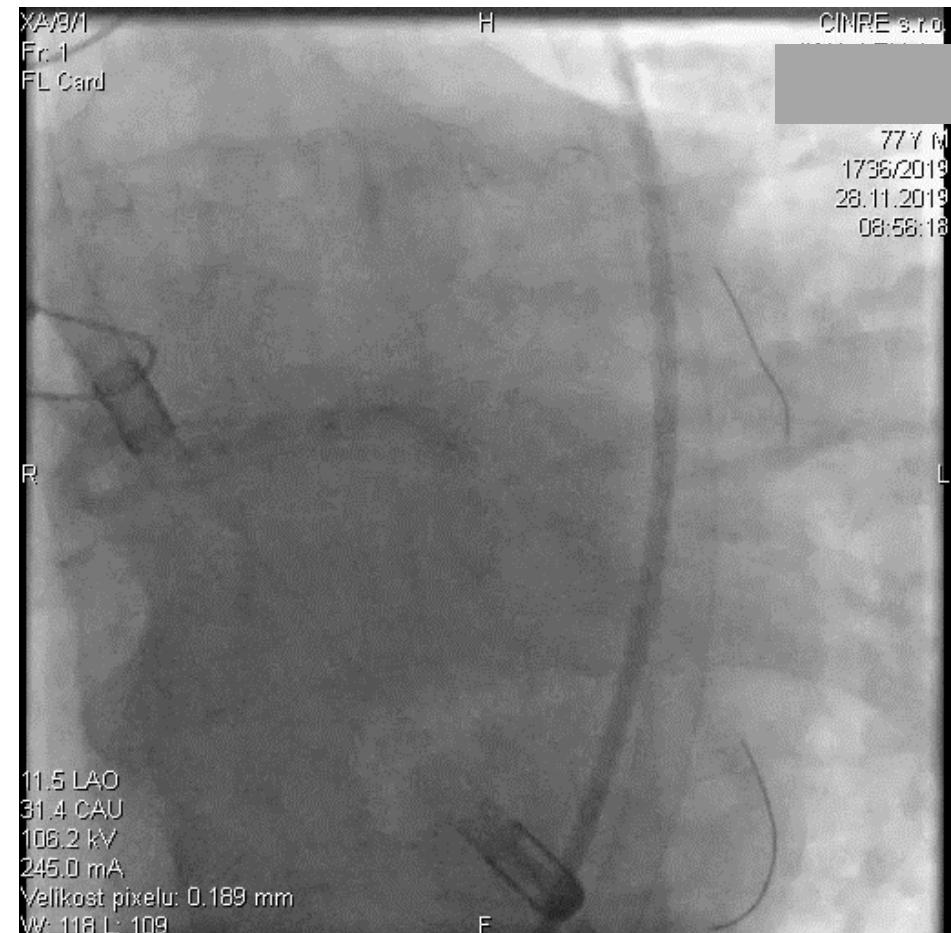
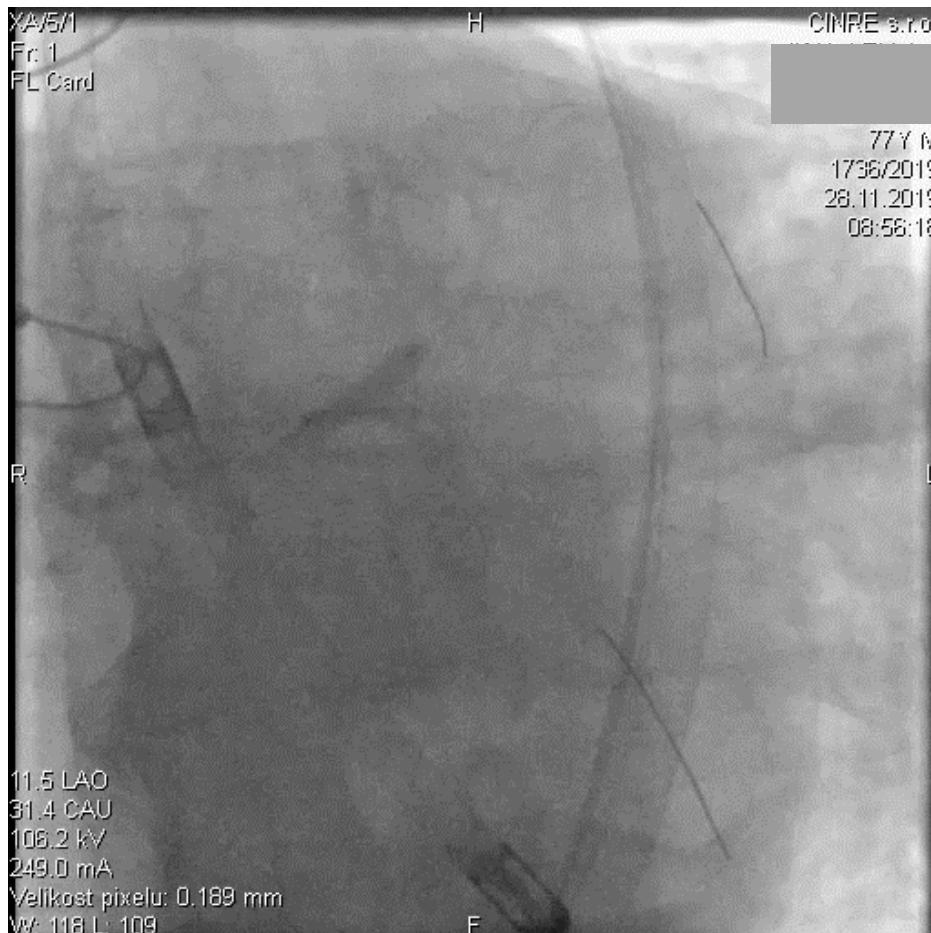
- ✓ Generating pulsatile blood flow up to 2 L/min, iVAC2L helps to decrease myocardium workload and maintain the coronary and end-organ perfusion.

How it works?

- ✓ The iVAC actively aspirates blood from the left ventricle during systole through the inlet tip.
- ✓ The membrane pump pushes the blood back in the ascending aorta creating a counterpulsation effect and an additional circulatory support up to 2 L/min
- ✓ Compatible with the standard available IABP cons^{1,2}

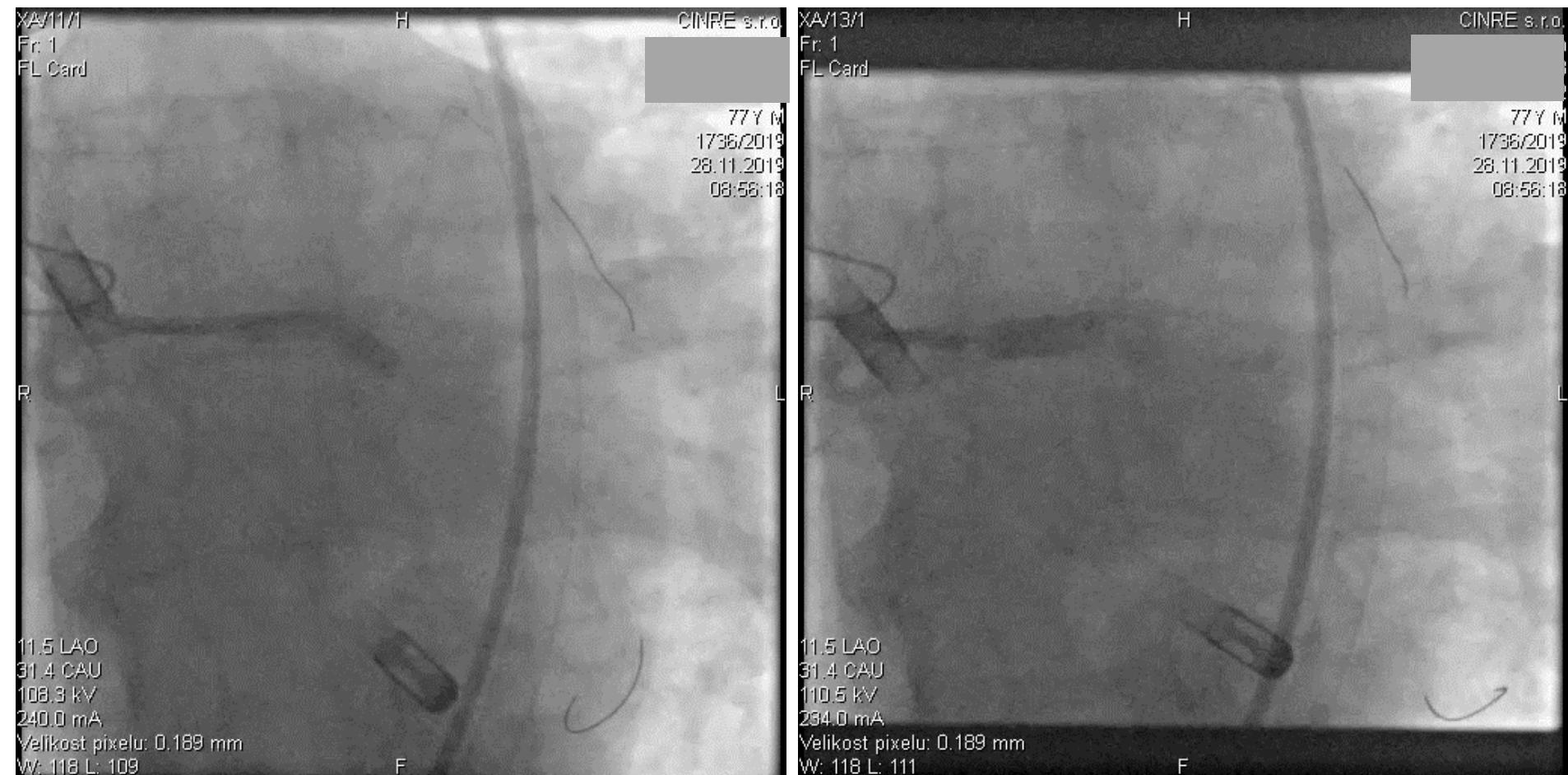


Repeated predilatations



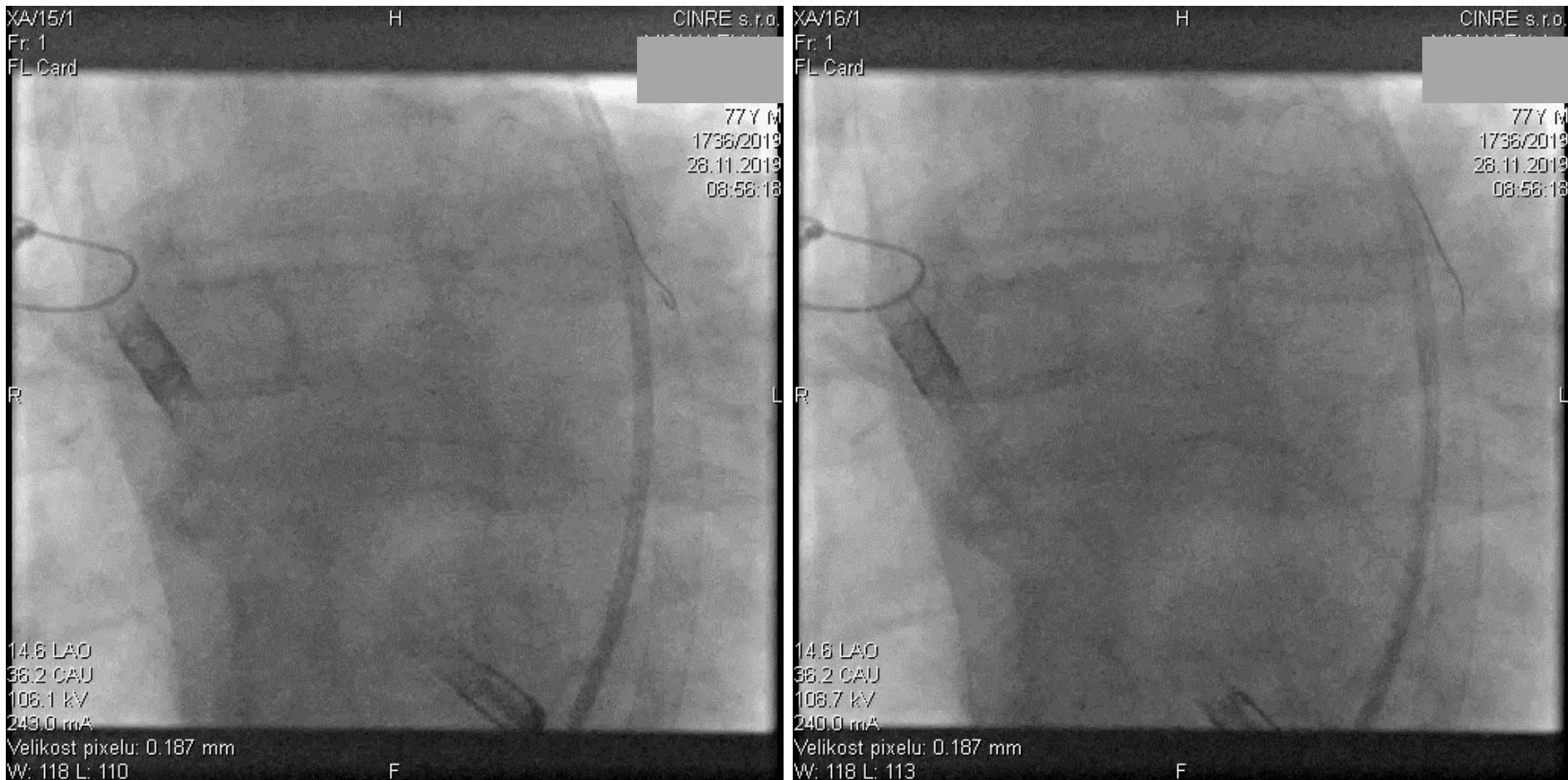
Cullote 2 DES technique

1- LCX-LM stent + POT



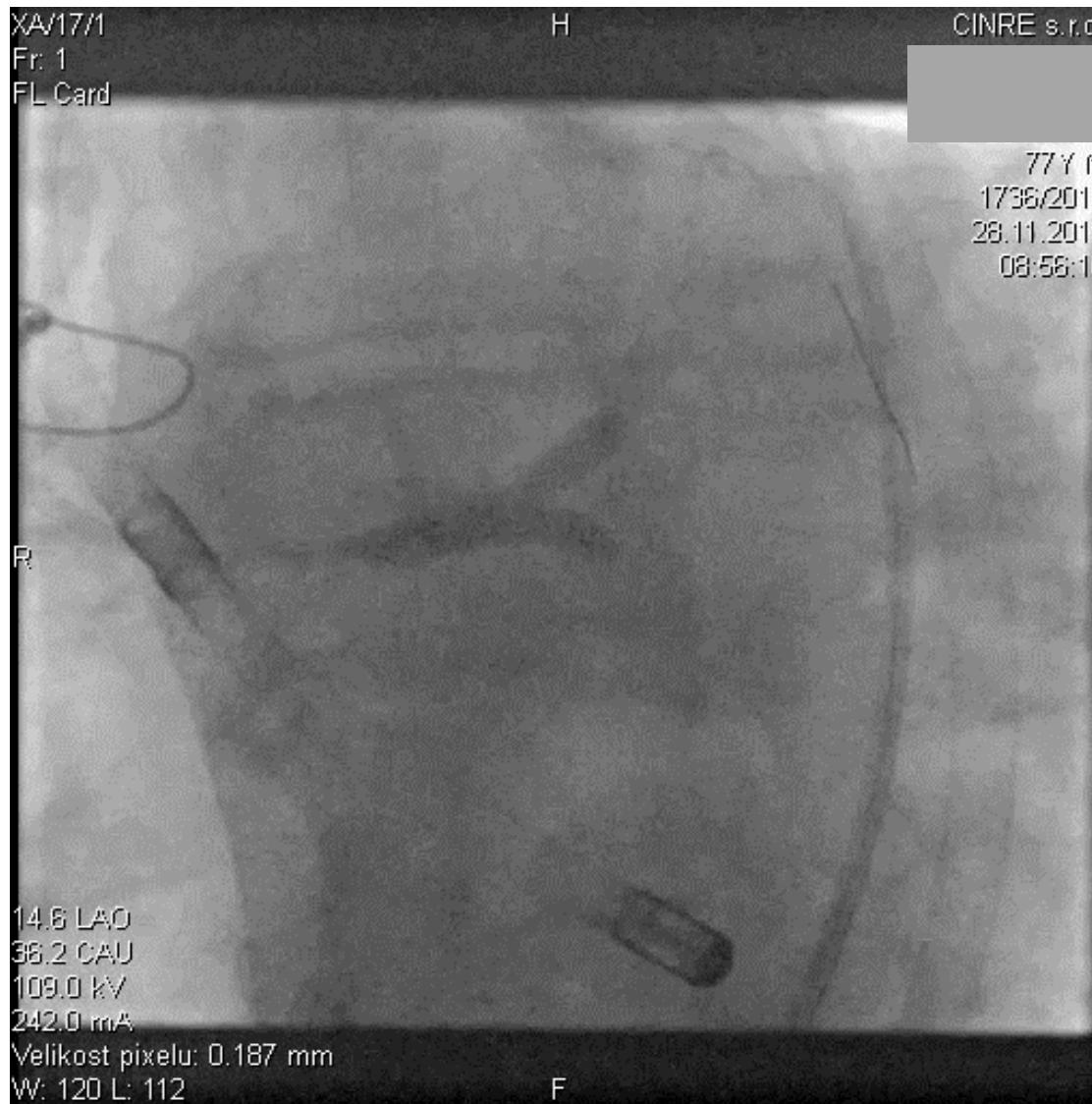
Cullote 2 DES technique

2- Sequential BD



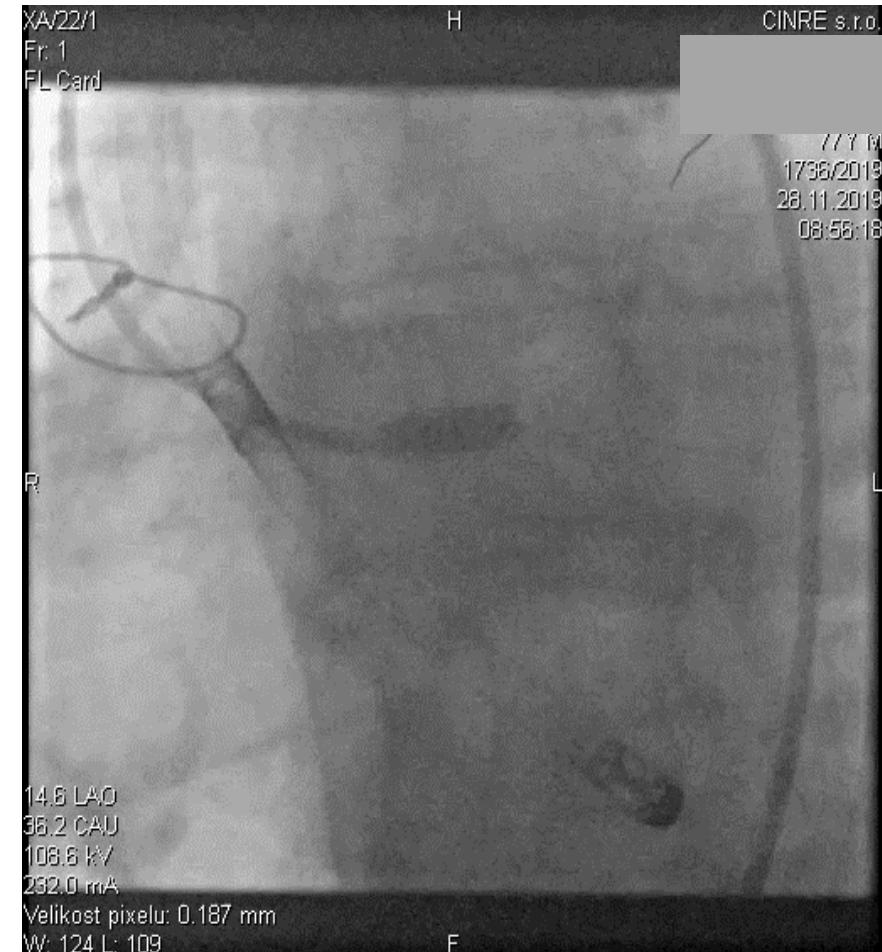
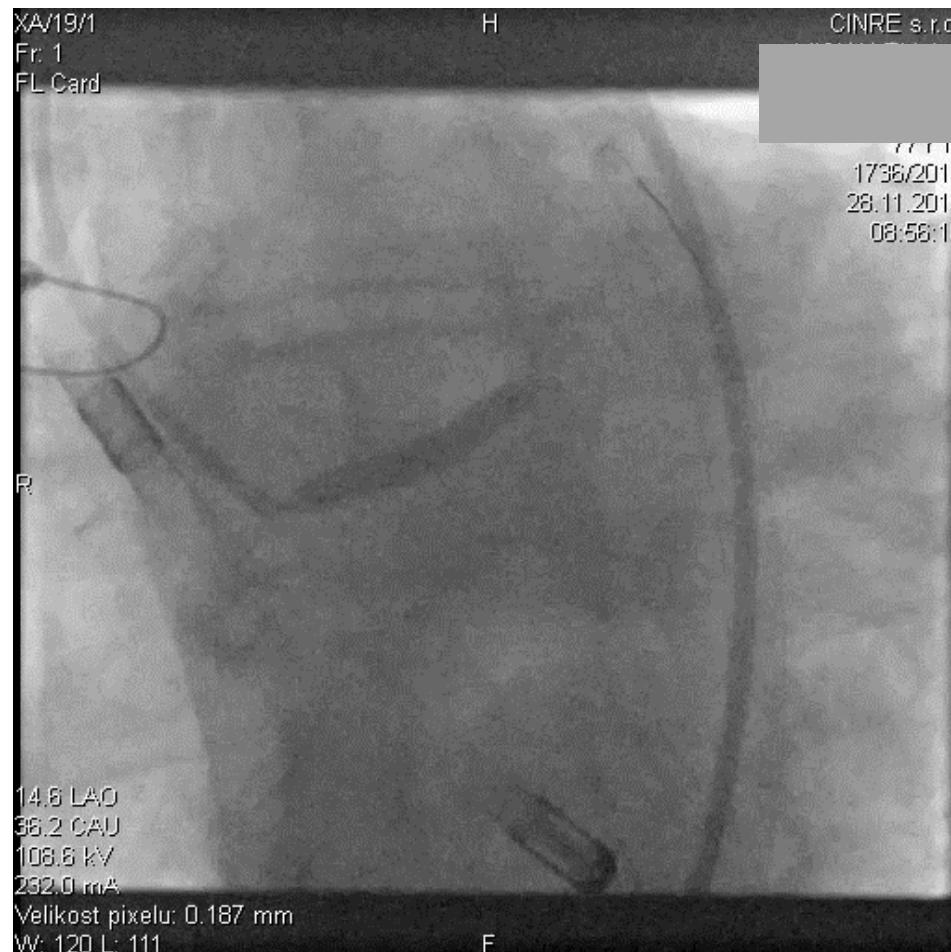
Cullote 2 DES technique

3- KBD



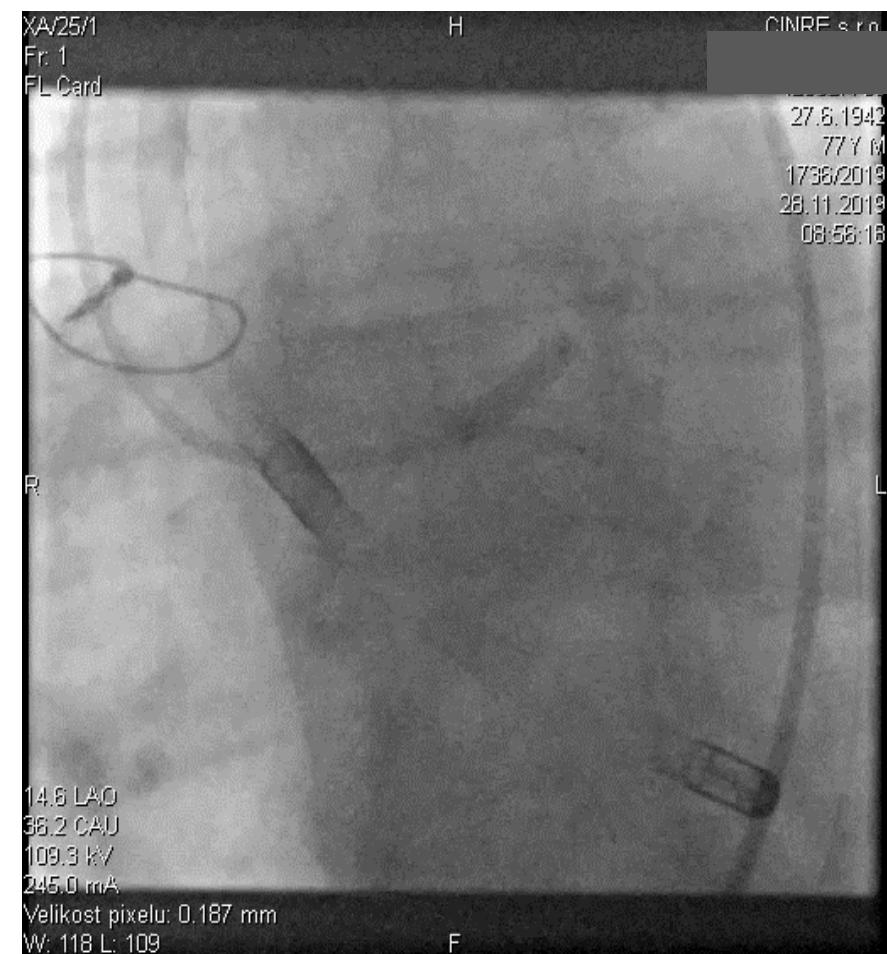
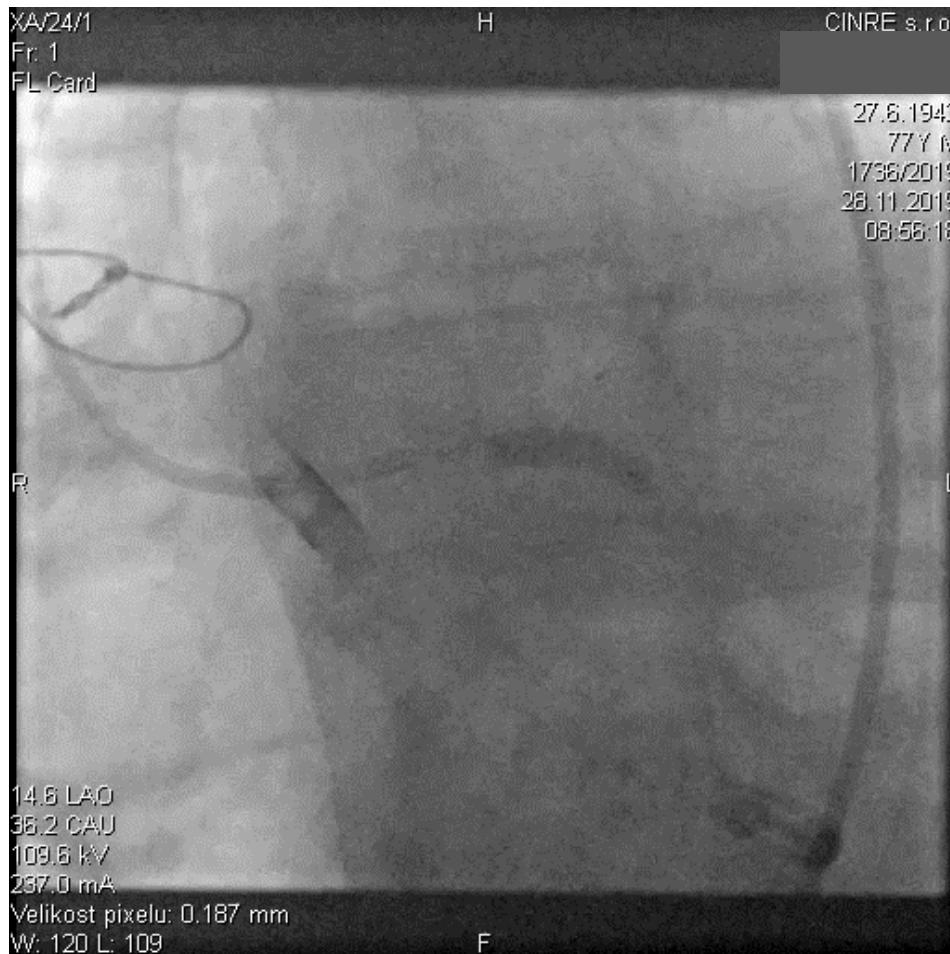
Cullote 2 DES technique

4- LAD-LM stent + POT



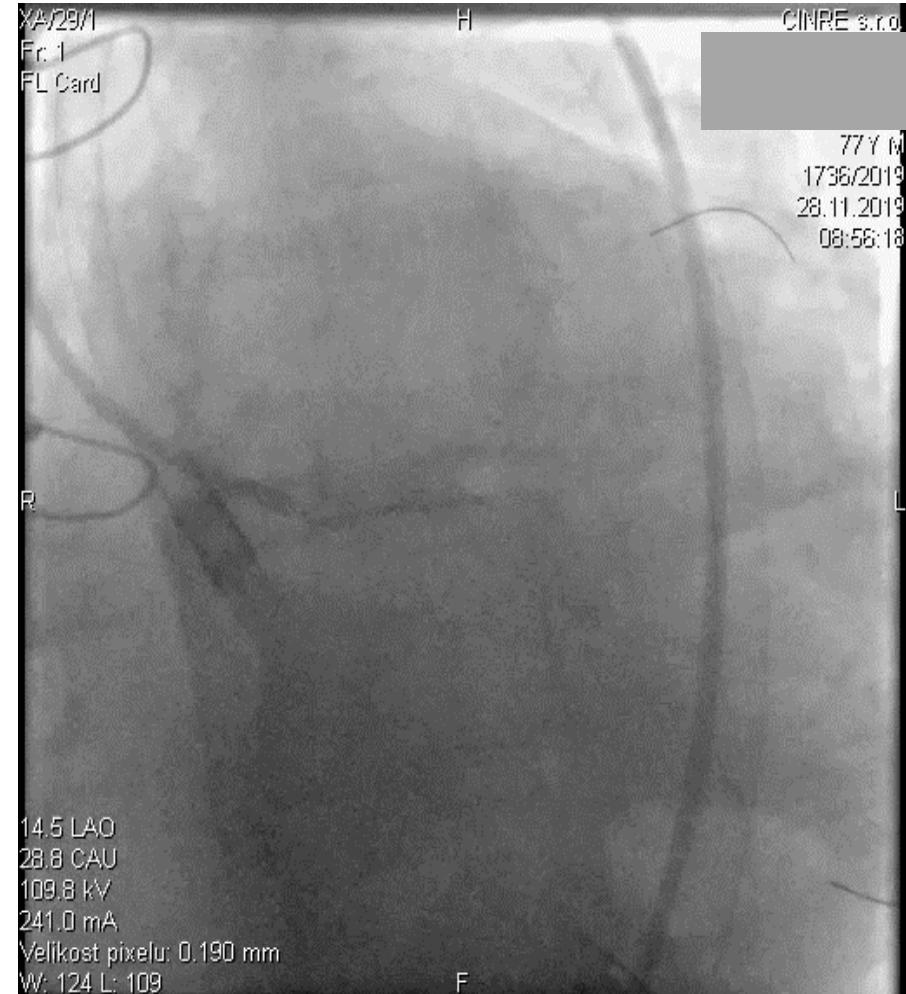
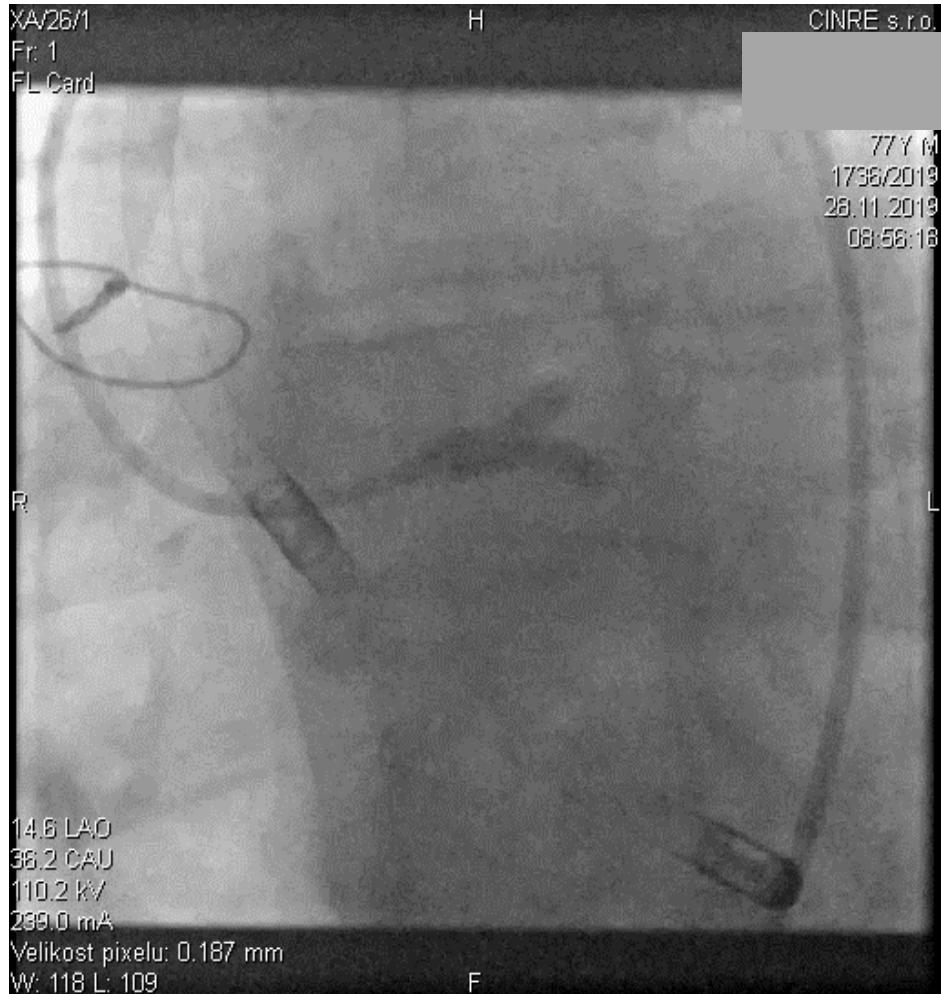
Cullote 2 DES technique

5- Sequential BD

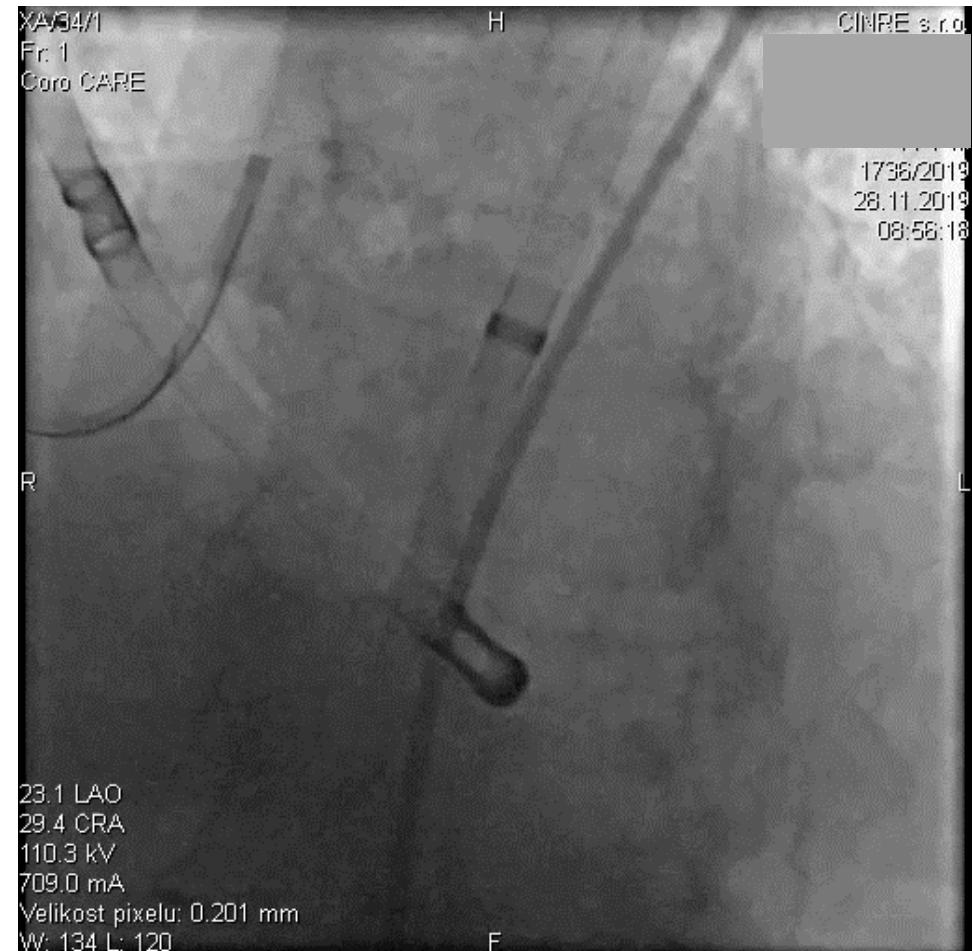


Cullote 2 DES technique

6- Kissing BD + POT



Final result



Pulsecath, maintained the stable hemodynamic
through out the procedure

Final comments

The PulseCath iVAC 2L:

- is feasible and safe,
- Provides adequate circulatory support for optimal high-risk PCIs
- Allows for complex stent techniques
- Successful weaning off the device immediately after the intervention